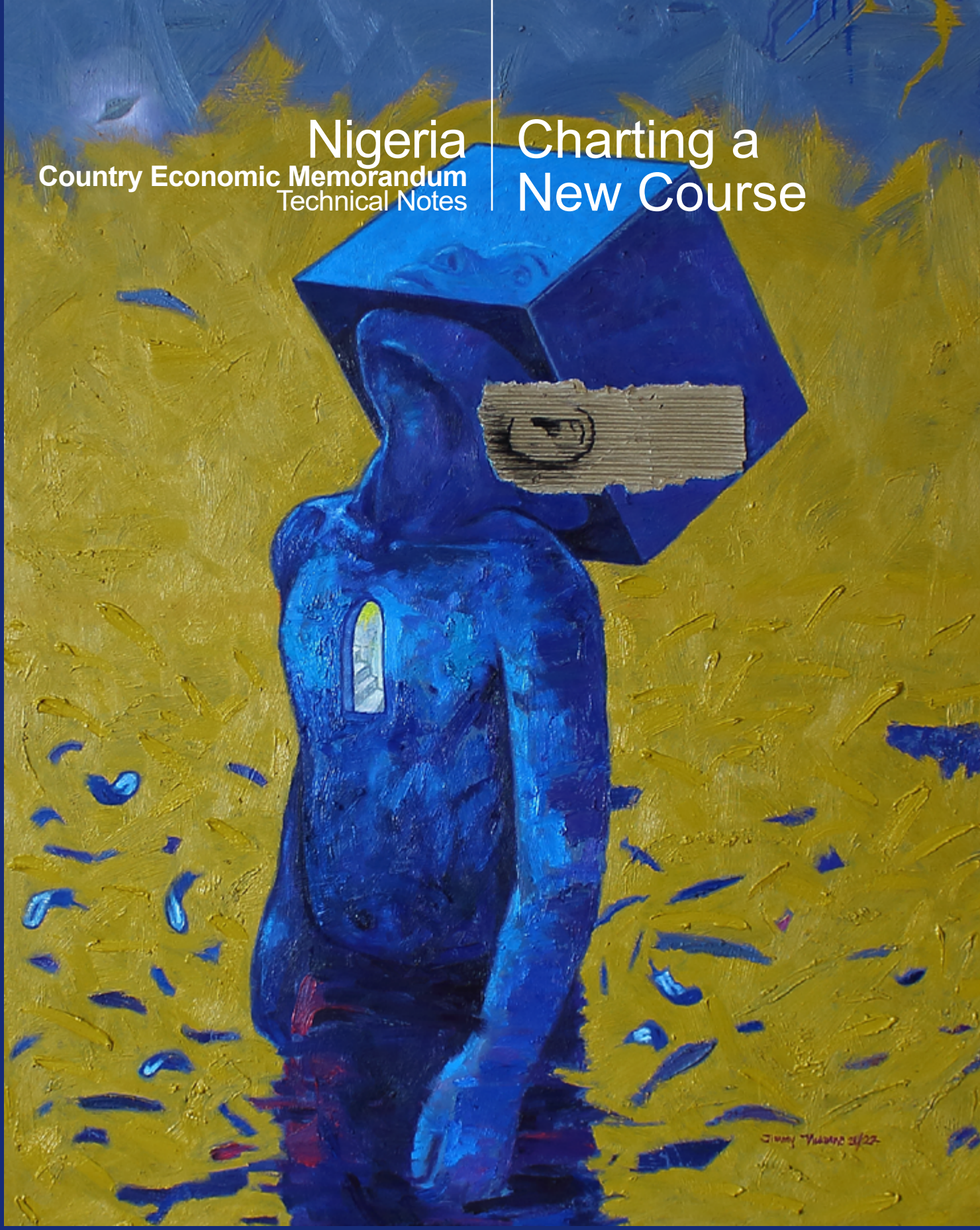
Nigeria
Country Economic Memorandum
Technical Notes

Charting a New Course



WORLD BANK GROUP

Nigeria Country Economic Memorandum: Charting a New Course

Technical Notes

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WORLD BANK GROUP

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Cover credits: "**Contact" by Jimmy Nwanne**. This painting refers to man's curiosity and inquiry about the source of life. It speaks about the possibility of life beyond the walls of our world and planet. If we have life outside our world, how do we access this dimension in order to communicate? To become, we have to enter different states of consciousness.

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Abbreviations and Acronyms

AfCFTA	African Continental Free Trade Area
AFR	Adolescent Fertility Rate
AFR	Adolescent Fertility Rate
ATC&C	Aggregate Technical, Commercial, and Collection
BPE	Bureau of Public Enterprises
BTI	Bertelsmann Stiftung's Transformation Index
CBN	Central Bank of Nigeria
CIT	Corporate Income Tax
COVID-19	Coronavirus Disease 2019
DDEI	Demographic Dividend Effort Index
DISCOs	Distribution Companies
ECOWAS	Economic Community of West African States
EMT	Electronic Money Transfer
FCCPA	Federal Competition and Consumer Protection Act
FCCPC	Federal Competition and Consumer Protection Commission
FDI	Foreign Direct Investment
FGN	Federal Government of Nigeria
FIRS	Federal Inland Revenue Service
FMARD	Federal Ministry of Agriculture
FMITI	Federal Ministry of Industry, Trade and Investment
FSP	Financial Strategy Paper
FX	Foreign Exchange
GDP	Gross Domestic Product
GENCOs	Generation Companies
GHG	Greenhouse Gas
GHS	General Household Survey
HHI	Herfindahl-Hirschman Index
HNWI	High-Net-Worth Individuals
ICT	Information and Communications Technology
ILO	International Labour Organization
IMF	International Monetary Fund
IMR	Infant Mortality Rate
LCDP	Least Cost Development Plan
LPM-LDM	Linear Probability Model and Linear Discriminant Model
LUC	Land Use Charges
MAN	Manufacturers Association of Nigeria
MDA	Ministry, Department, Agency
MFN	Most-Favored Nation
MNO	Mobile Network Operator
MVNO	Mobile Virtual Network Operator
MYTO	Multi-Year Tariff Order
NASC	National Agricultural Seed Council
NBET	Nigerian Bulk Electricity Trading Company
NBS	National Bureau of Statistics
NCC	Nigerian Communications Commission
NERC	Nigerian Electricity Regulatory Commission
NIPCAC	Nigeria Industrial Policy and Competitiveness Advisory Council
NIPSAS	Nigeria Industrial Policy and Competitiveness Advisory Council
NLPS	National Longitudinal Phone Survey
NPC	Nigerian Population Commission
NTM	Non-Tariff Measure
PEBEC	Presidential Enabling Business Environment Council
PIP	Performance Improvement Plan
PIT	Personal Income Tax
PPP	Public-Private Partnership
PSRP	Power Sector Recovery Programme
QI	Quality Infrastructure
R&D	Research and Development
RoW	Right of Way
SBT	Service Based Tariff
SMEs	Small and Medium Enterprises
SMP	Significant Market Power
SON	Standards Organization of Nigeria
SSA	Sub-Saharan Africa
TCN	Transmission Company of Nigeria
TES	Tax Expenditures Statement
TFP	Total Factor Productivity
TFR	Total Fertility Rate
U5MR	Under-Five Mortality Rate
VAT	Value Added Tax
WBES	World Bank Enterprise Survey
WBG	World Bank Group
WTO	World Trade Organization

Note 1: Igniting Economic Growth by Reforming Nigeria's Power Sector

Authors: **Yadviga Semikolenova, Arsh Sharma, and Anshul Rana**

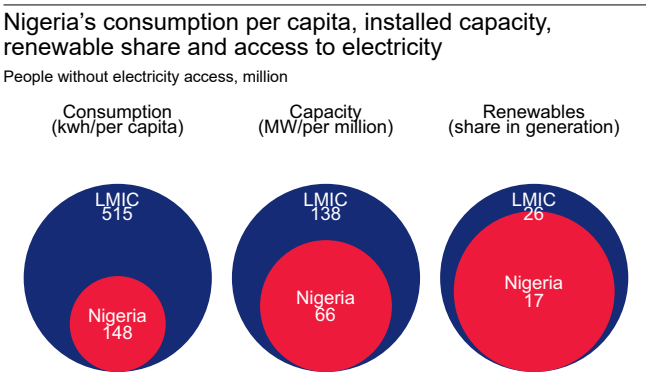
Note 1: Igniting Economic Growth by Reforming Nigeria's Power Sector

Summary: Electricity not only fuels productivity, but it is also a vital catalyst of social development including better health and education. According to the latest Tracking SDG7 report, 92 million Nigerians (45 percent of the population) have no access to electricity. Lack of reliable power stifles economic activity; in Nigeria, annual economic losses from lack of reliable power are estimated at 5 to 7 percent of GDP—at a cost of US$25 billion. The transition to a largely privately owned sector did not bring about the outcomes expected. Inefficiencies in the system, such as high aggregate technical, commercial and collection (ATC&C) losses (about 50 percent), combined with the irregularity in applying the tariff policy led to a breakdown of the electricity payment chain. In 2019 the tariff shortfall rose to ₦524 billion (~US$1.7 billion), which was more than the total Federal Government of Nigeria's (FGN) health budget. It was also fiscally unaffordable. The critical sector finances kicked the government into action with a series of interventions backed by the World Bank. The interventions have led to some impressive changes- annual electricity supplied to the grid has increased by 19 percent, the sector is at 96.4 percent cost recovery, new annual tariff shortfalls are expected to be reduced from ₦245 billion in 2021 to ₦124 billion by the end of 2022, and the sector is moving towards better payment discipline. However, to meet the twin government goals of universal access and net zero emissions while meeting the exponentially growing demand of an expanding economy, several policy interventions and infrastructure improvements need to be made.

1.1 The country that currently has the least access to electricity in the world needs a power sector capable of meeting demand as it grows

Nigeria's power sector problems have serious repercussions for economic growth. With 45 percent[1] of the population (92 million people) lacking access to grid electricity, Nigeria has the world's largest energy access deficit (FIGURE 1.1). Nationwide, for the poorest 40 percent of the population, access to grid electricity is only 31 percent[2]. Similar disparities exist between regions and between rural and urban areas. Even those who are connected to the grid cannot rely on the supply; they must deal with frequent outages. Firms cite lack of reliable power supply as one of the top constraints to their business.

FIGURE 1.1. Nigeria's unreliable, and for many inaccessible, power supply is a threat to economic growth



Source: Tracking SDG7, 2020 and Doing Business 2020, IEA and EIA.

With the electricity supply unreliable and insufficient, businesses and wealthy homes have

1 Tracking SDG7, 2022 report. Data is for 2020.

2 NBS survey data

turned to expensive gasoline-run generators. It is estimated that in Nigeria over 22 million gasoline and diesel generators ("gensets") power about 26 percent of all households and 30 percent of micro, small and medium enterprises (MSMEs); their net capacity is estimated to be eight times more than capacity available to the national grid[3]. Inhalation of smoke from gensets is linked to about 1,500 deaths annually[4], not to mention its impact on the country's total GHG emissions. The FGN plans to create a net zero emission economy by 2060[5] and, in the interim, has committed to reducing its GHG emission by 45 percent by 2030 primarily from the energy sector[6]. Replacing the gasoline generators with clean energy solutions such as solar, presents a big opportunity for meeting this target. In 2021 alone the FGN is estimated to have spend ₦1.4 trillion (US$3.4 billion)[7] on subsidizing gasoline consumption for genset consumption. On top of that, ordinary Nigerians spent an estimated ₦3.7 trillion (~US$12 billion) on purchase and operation of gensets[8]. Annual economic losses from the unreliable electricity supply are estimated at about ₦7–10 trillion (~US$25 billion) - 5–7 percent of the GDP[9], but the losses will be much higher if the economic impact of GHG emissions is taken into acount.

Firms that experience power outages are more exposed to sales losses compared to those that have continuous supply. Using the World Bank 2014 Enterprise Survey (WBES)[10] database for Nigeria one can estimate the impact of reliable electricity on firms' productivity. The database records a firm's perception of its power constraint as minor, moderate, major, and very severe obstacle. Analysis indicates that the firms with a sales loss tend to be the ones reporting electricity as a moderate to severe constraint and experiencing more power outages. As the perception of reliable access to electricity worsens, firms have a higher probability of suffering sale losses. A one-unit increase in the number of power outages increases the probability of sales loss by 0.001 percent. While this might look like a small number, in 2014 (the year the survey was conducted) an average Nigerian firm was experiencing 384 outages annually. The 2014–2020 period only got worse in terms of outages.

Unreliable electricity also has a negative effect on the ability of Nigerian firms to compete with their regional and global counterparts. Nigerian firms spend significant amounts to arrange for supplemental power usually through gasoline or diesel-powered generators. This results in increased production costs that reduces their profitability and their capacity to create jobs, lowers productivity and negatively impacts their competitiveness. The grid connected tariff in 2019 was about US$0.08/kwh, making Nigerian electricity one of the cheapest in Sub Sharan Africa, potentially boosting firm competitiveness. However, widespread outages mean that small and large commercial and industrial enterprises spend over US$0.40/kwh and US$0.46 respectively on electricity[11]. Such expenditures, without doubt, make electricity one of the largest components of a firm's cost structure especially in the services sector. Nigerian firms are spending 4 times of even the cost-reflective tariff of US$0.12/kwh[12] indicating that they probably have a much higher willingness to pay for reliable electricity than is generally perceived.

3 "Putting an End to Nigeria's Generator Crisis: The Path Forward", 2019. Access to Energy Institute.

4 *Ibid*.

5 Nigeria Energy Transition Plan unveiled at the COP26.

6 Nigeria's NDC Update submitted in May 2021.

7 Nigerian National Petroleum Corporation, 2021.

8 Access to Energy Institute, 2019.

9 FGN- Power Sector Recovery Program 2017-2021, Jan 2018- http://mypower.ng/wp-content/uploads/2018/02/PSRP-Master-Document-January-2018.pdf.

10 https://www.enterprisesurveys.org/en/data.

11 Based on WB team analysis of power sector in Lagos State.

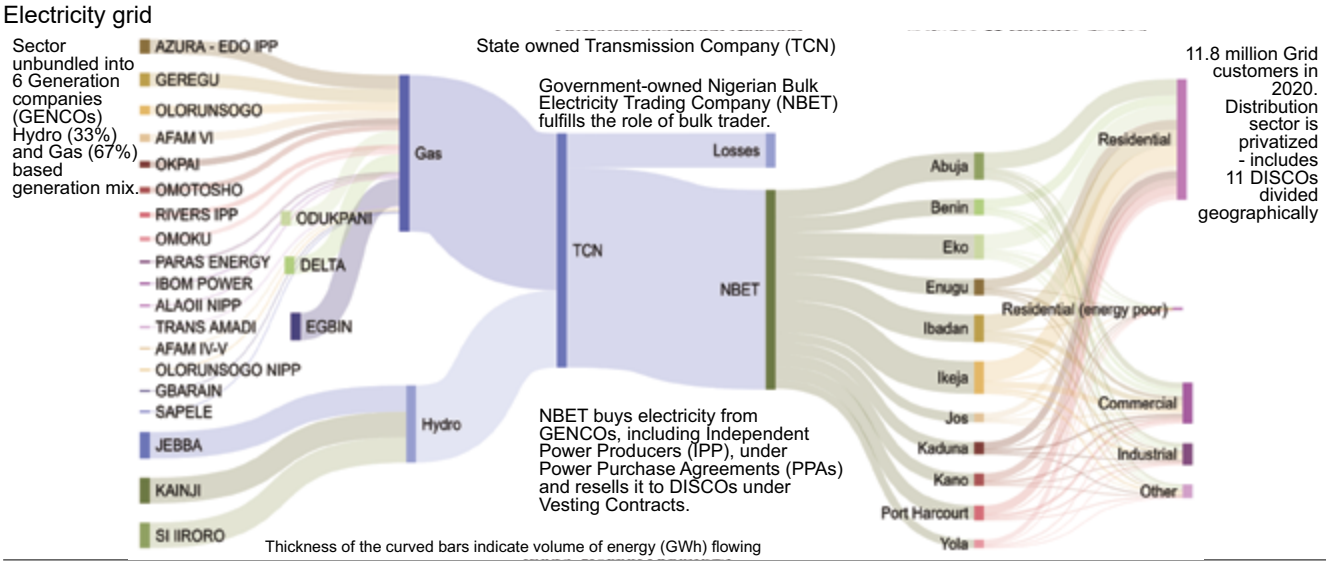
12 Exchange rate is assumed to be the official rate of - ₦422 (August 2022) and cost reflective tariff data is calculated from NERC models that put the cost reflective tariff at N52/kwh.

1.2 After privatization in 2013 and before 2021, tariff regulation and market contracts were not fully enforced and policy direction was inconsistent, creating a permanent crisis

Nigeria's power sector is unbundled and since 2013 has been largely privately owned, but the transition did not produce the expected results. After the Electric Power Sector Reform Act was passed in 2004, the sector was unbundled into six generation companies (GENCOs), eleven distribution companies (DISCOs), and the Transmission Company of Nigeria (TCN). By 2013 the DISCOs and GENCOs had all been privatized. Three of the five thermal GENCOs, which use natural gas as fuel, were sold in their entirety to new owners, and three hydro GENCOs were transferred to private operators through concession contracts. TCN is still a government-owned monopoly. In the current stage of market development, known as the Transitional Market,[13] the government-owned Nigerian Bulk Electricity Trading Company (NBET) fulfills the role of bulk trader. NBET buys electricity from GENCOs, including independent power producers (IPPs), and resells it to DISCOs. The transition from a publicly-owned to a largely privately-owned power sector did not bring the expected performance and service quality outcomes. Government ministries and agencies, the Nigeria Electricity Regulatory Commission (NERC), and the private sector have all fallen short of their expected contributions to the sector's turnaround.

Inconsistent application of tariff policy made sustainable electricity operations difficult. Although sector regulator NERC periodically issued Multi-Year Tariff Orders (MYTOs[14]) they were not actively enforced, until 2021, with frequent delays often due to external factors like litigation and political interference. This delay caused the financial situation of sector companies, especially DISCOs, to deteriorate and left NERC unable to enforce the contractual obligations of the privately-owned GENCOs and DISCOs. There is also a lack of clarity about how to reduce losses and meet the capital expenditure targets specified in the Performance Agreements between DISCOs and the Bureau of Public Enterprises (BPE), which are used to determine the tariff levels.

FIGURE 1.2. The power sector is unbundled and largely privately owned



Source: World Bank, 2020.

13 This is an intermediate step consisting of a bulk buyer (to interface between GENCOs and DISCOs) envisaged ass leading ultimately to a fully functioning willing-buyer (DISCO) and willing-seller (GENCO) with no intermediary.

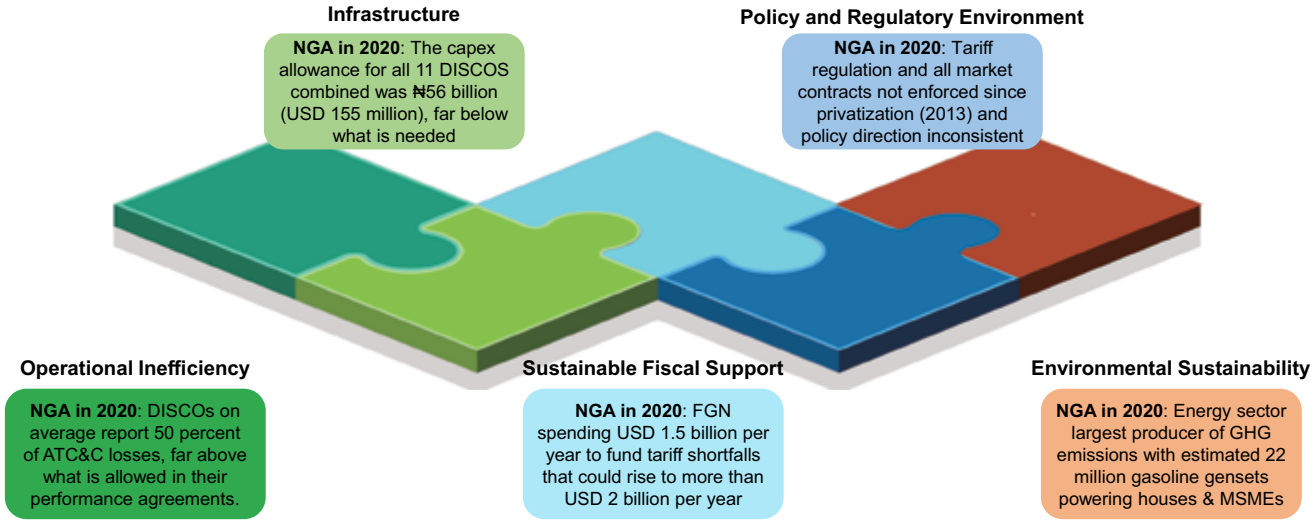
14 The MYTO methodology followed in Nigeria uses an incentive-based regulation that seeks to reward performance above certain benchmarks.

The distribution segment was struggling with exceptionally high losses and low collections. In 2020, 7 years after privatization, the sector's aggregate technical, commercial, and collection (ATC&C) losses were extremely high, with DISCOs reporting on average 50 percent, versus 26 percent allowed by NERC in the tariff policy. These high losses were exacerbated by inadequate metering of end-use customers and the failure of many ministries, departments, and agencies (MDAs) of federal, state and local governments to pay their electricity bills. The high losses, coupled with lack of payment discipline by DISCOs and inadequate contractual enforcement of those payments by NBET and NERC, resulted in low remittances to NBET by the DISCOs (BOX 1.1).

Lack of cost-reflective tariffs since 2012 and low remittances of DISCOs to NBET forced the FGN to intervene and cover the shortfall—a significant fiscal burden. The FGN is responsible for funding the tariff shortfalls, which are the difference between allowed and cost-reflective tariffs. In 2012–2019, the tariff shortfall

FIGURE 1.3. In 2020, the power sector had to deal with five different types of problems

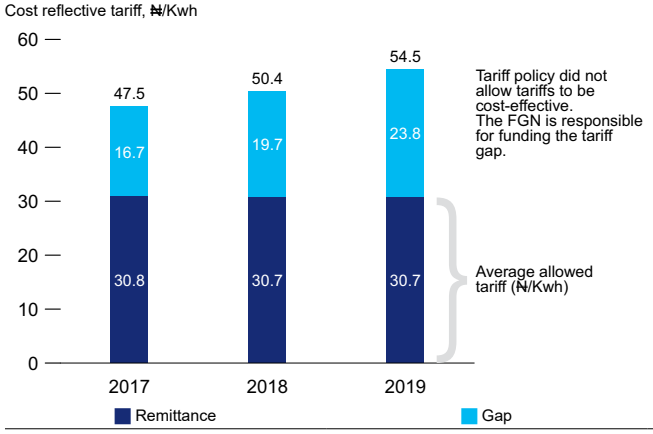
Comprehensive measures to move Nigeria's power sector forward sustainably are needed



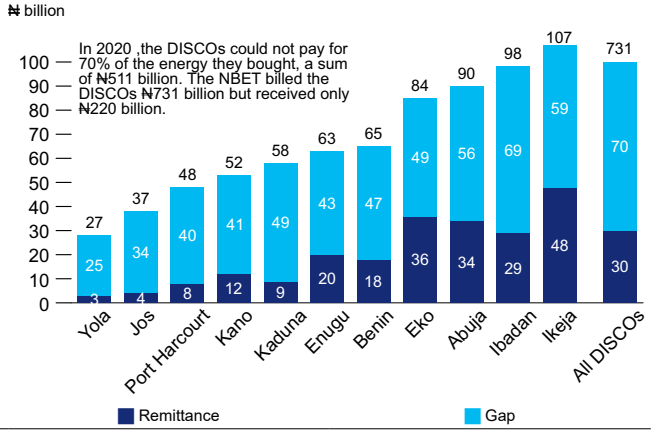
Source: Authors' own elaboration based on World Bank, 2020.

FIGURE 1.4. The FGN has had to step in to cover shortfalls and let the energy flow

Annual tariff shortfalls (difference between allowed and cost-reflective tariffs)



Remittance gap (Includes both tariff and nontariff shortfalls)



Source: Nigerian Electricity Supply Industry (NESI) data, NERC.

BOX 1.1. Understanding operational inefficiencies and their impact

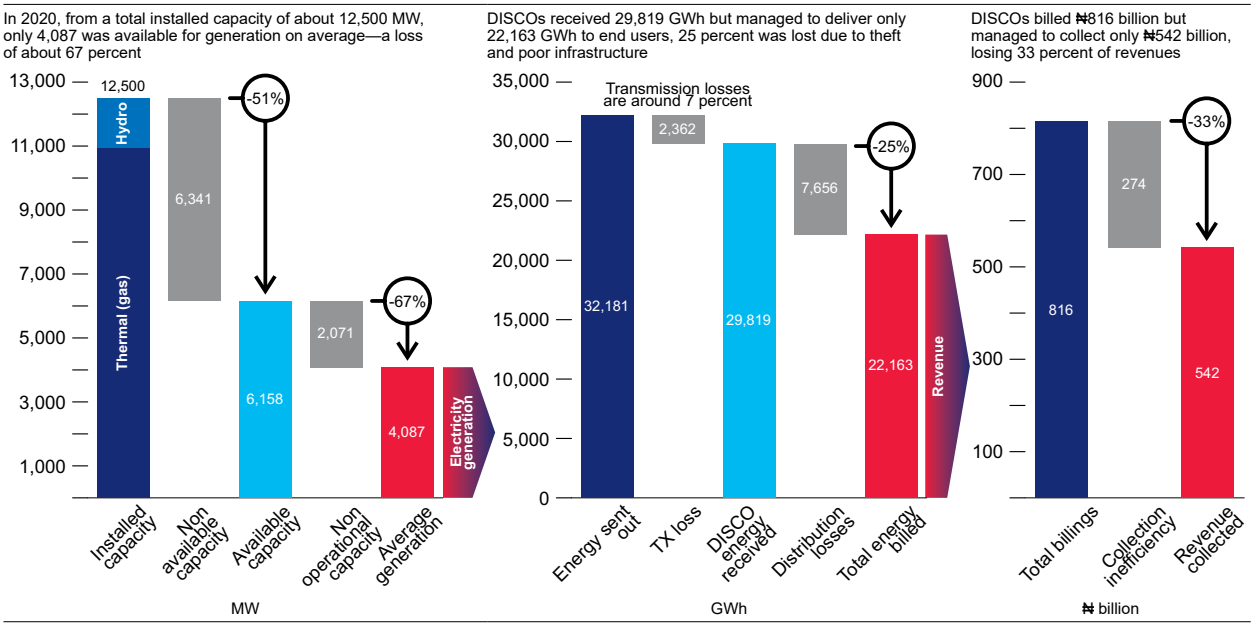
Operational inefficiencies in the sector could be numerous. To understand their extent and the impact they could have on sector finances, it is helpful to travel along the supply chain using 2020 data from NERC:

Generation: Nigeria has about 12,500 MW of installed capacity, dominated by natural gas (88 percent) with hydro making up the rest. However, just over 51 percent of this capacity was not available in 2020 due to maintenance and repair work. Of the 6,158 MW available during the year, an average of just 4,087 MW was actually used for generation, because of both insufficient gas supply, transmission and distribution constraints, and the inability of DISCOs to purchase power. As a result, in 2020 only 33 percent of installed capacity was used.

Transmission and Distribution: The 4,087 MW of generation capacity available was used to generate 32,181 gigawatt hours (GWh) of electricity. This was sent to DISCOs, which received just under 30,000 GWh—a transmission loss of 7 percent, about 3 percent above benchmarks. Distribution network losses are also quite high. The DISCOs delivered only 75 percent of the electricity they received, losing 7,656 GWh to poor infrastructure and theft. In all 32 percent of electricity is lost during transmission and distribution.

Retail: DISCOs could bill 22,163 GWh of electricity to their customers (60 percent of whom are not metered). This should have ideally generated ₦816 billion in revenue for the DISCOs, but they were unable to collect only 33 percent of these revenues leading to collection of only ₦542 billion in 2020. Thus, inefficiencies in the distribution sector contribute a significant portion of the 50 percent aggregated technical, commercial and collection (ATC&C) losses.

FIGURE B1.1. From generation to retail: Inefficiencies in Nigeria's power sector



Source: NESI data, NERC.

widened significantly because allowed tariffs stayed flat but cost-reflective tariffs shot up due to foreign exchange depreciation and domestic inflation. The cumulative shortfalls for 2015–19 were an estimated ₦1,678 billion (US$6.0 billion). To ensure that the GENCOs and gas suppliers received enough payments to continue generating electricity, since 2017 the FGN paid the sector a total of ₦1,301 billion (US$4.2 billion). In 2019 total annual FGN support reached ₦524 billion (US$1.7 billion), 0.4 percent of GDP—higher than the ₦428 billion budget for health and just 20 percent less than the ₦650 billion budgeted for education in the same year.

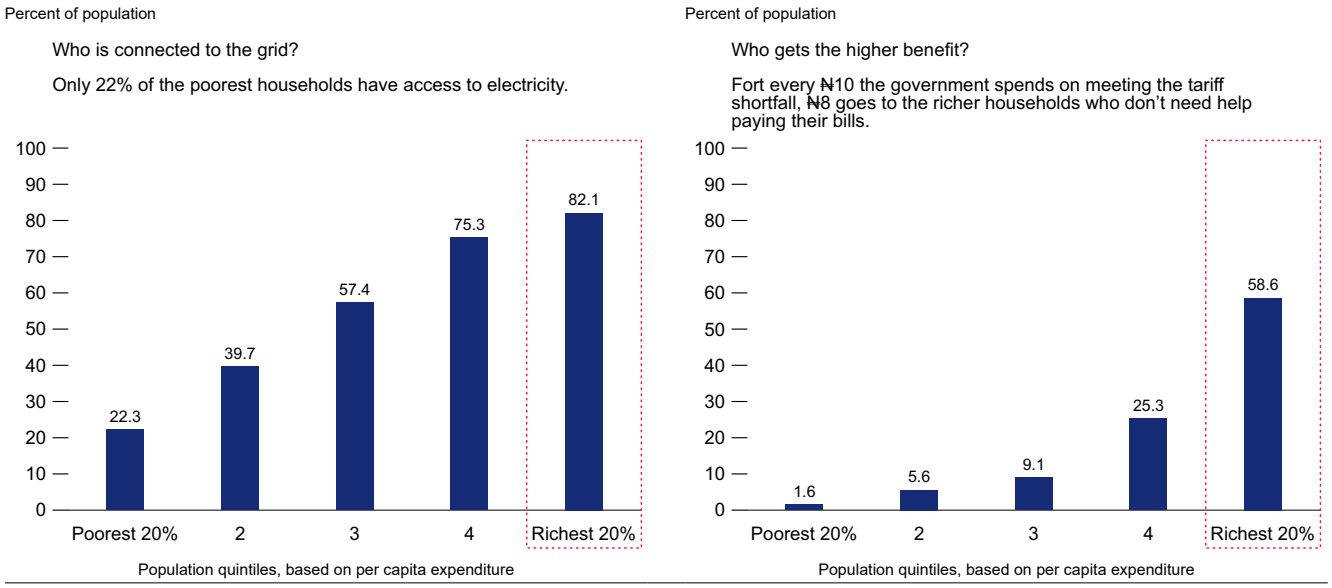
1.3 The government funding to the sector to cover the tariff shortfalls did not benefit the poor

The FGN wanted to keep electricity tariffs low to protect the economically disadvantaged, but most of the benefits went to the relatively wealthy. Before late 2020[15], every Nigerian who received electricity from a DISCO paid less[16] for electricity than the cost of supplying it. However, 80 percent of the spending on tariff shortfalls benefited the richest 40 percent of the population; only 8 percent benefited the bottom 40 percent, and of this less than 2 percent benefited the poorest 20 percent. In general, significant resources spent on funding tariff shortfalls from 2012-late 2020 disproportionately benefited the relatively wealthy who had access to the grid and used more electricity. Consequently, a big chunk of government support went to those who did not really need help with paying bills.

The need to turn the power sector around has long been recognized by all parties—the government, the electric supply industry, the private sector, and international partners—as one of Nigeria's most critical development priorities. It was recognized that the cost of inaction was very high. At the start of 2020, it was estimated that if the sector continued its current performance and tariffs stayed not only flat but far below cost-recovery, through 2023 the FGN would have had

FIGURE 1.5. Keeping tariffs low benefits the rich more than the poor

Distribution of government spending to meet the tariff shortfall



Source: World Bank, 2020.

15 Service-based tariffs were introduced on November 1, 2020 – see below.

16 This excludes the amount spent by consumers on gasoline, gensets, solar and other alternatives to augment the unreliable supply.

to provide another ₦3.082 trillion[17] (US$7.94 billion) in regressive subsidies that benefit mainly the wealthiest consumers. And this massive spending would not have bought any improvements in service quality. Apart from taking money away from other important social development efforts, the power sector itself would have continued being a serious barrier to economic growth and a threat to fiscal sustainability.

Important governance changes have been affected in the sector to enforce better payment discipline. Lack of payment discipline in the sector was a big concern at the beginning of the reforms. Historic shortfalls that still exist are financed sustainably through the FGN's PSRP Financing Plan developed annually. DISCOs were paying NBET, on average, only 29 percent of their invoice in 2019 causing a further cascade of payment breakdown in the system—NBET was able to pay on average only 26 percent of the GENCO invoices. Under the PSRP, the CBN established and operationalized a waterfall payment management system[18]—that prioritizes payments through an escrow account and assures minimum payments to all participants in the power sector value chain- to ensure that DISCOs were meeting their minimum remittance requirements to NBET and the Market Operator (MO). In 2021, DISCOs managed to pay 81 percent of the NBET invoices while the latter paid 71 percent of its GENCO invoices, showing an appreciable improvement[19]. There is enhanced monitoring of DISCO's monthly sales and revenues by NERC for accurate Minimum Remittance Order (MRO) adjustments to ensure they reflect the latest conditions. However, continued poor bill collection and operational inefficiencies, including excessive network losses continue to drive financial underperformance.

Efforts have also been made to improve reliability of electricity supply but the progress has been relatively slow. The poor financial situation of the DISCOs, coupled with their highly leveraged balance sheets, has severely constrained their ability to access commercial financing. In direct response to this liquidity challenge and to specifically address the ability of DISCOs to take in more power supply, the CBN is providing US$250 million for the rehabilitation of the transmission-distribution interfaces, and the Siemens Presidential Power Initiative (PPI) intends to bring an additional US$2 billion to the transmission and distribution sectors. Programs such as the National Mass Metering Program (NMMP) aim to increase metering significantly to help DISCOs increase their billing transparency and collection efficiency. As of March 2022, the metering programs have added 1.5mn connections[20] since 2019. Additionally, all DISCOs have developed Performance Improvement Plans (PIPs), aimed at improving the distribution infrastructure in each DISCO's franchise area for better service delivery, with NERC monitoring the progress on their implementation. Timely adherence to PIPs will improve the technical and financial performance, and the governance, of DISCOs, reducing ATC&C losses, increasing collection rates, and connecting more customers to the grid. This will eventually enable the sector to end FGN assistance and fill its investment needs by accessing private financing.

The FGN has also taken some critical actions to put the country on the path toward universal access. Both grid-extension and off-grid solutions will be needed to provide timely quality services to unserved and underserved households and businesses, especially as the country recovers from the impact of the COVID-19 pandemic. The Nigeria Electrification Project

17 This analysis/scenario assumes no action on part of FGN in addressing tariff shortfalls. In reality, FGN did move in 2020 to narrow tariff shortfalls.

18 The CBN waterfall payment mechanism is meant to be an effective payment securitization framework (especially in the absence of additional payment guarantees from Discos) to provide assurance for all market participants in the electricity value chain. It is based on the Escrowed NESI market funds and disbursed by CBN to market participants based on the balances on the Principal Collection Account of Discos and guided by the Discos' Account Administration and Payment Waterfall (DAAPW) which defines the payment priority levels. This is expected to provide visibility and certainty of market payments to market participants and gas suppliers, thereby envisaged to ensure certainty and stability in electricity supply and subsequently provide the route part towards administration of partial contract activation in NESI.

19 NERC 2021, Key Operational & Financial Data of NESI for January 2019 to September 2021.

20 NERC 2021, Key Operational & Financial Data of NESI for January 2019 to September 2021.

NEP which is World Bank funded which focus on underserved rural populations and rural institutions. The program has so far connected over 320,000 households and 2500 MSMEs. The Rural Electrification Agency (REA) has since established the Rural Electrification Fund. Additionally, the FGN launched the Solar Power Naija initiative in April 2021 which aims to roll out 5 million solar connections in communities that are not connected to the grid.

While PSRP has brought significant improvements in the sustainability and regulation of the sector, operational efficiency and reinforcement of infrastructures lag behind. Insufficient investment in transmission has curtailed the network's capacity to transport power, contributing to the fact that only 51 percent of the installed capacity is usable. While the situation improved in 2021 with the average electricity sent out to the grid reaching 4.1 GWh compared to 3.7GWh in 2019, this is still woefully short of the demand[21]. In 2022, the network has again seen several total collapses. Some of the bottlenecks affecting the ability of the transmission to evacuate available generation capacity is inadequate, aging and poorly maintained transmission network. Much of the grid is underused and the transmission capacity in high-demand areas is inadequate. At the same time mismatches between supply and demand can be addressed with integrated resource planning coordinated by the regulator. There is also a need to digitize the network as the Supervisory Control and Data Acquisition (SCADA) system monitors only a section of the 330KV transmission lines and substations.

The PSRP has had a transformative effect on the financial performance and viability of the power sector in Nigeria, but a lot more needs to be done to make the power sector drive the Nigerian economy forward. To get to a financially and fiscally sustainable power sector NERC will need to continue to undertake regular MYTO reviews and the government will need to continue preparing a Financial Plan for the sector. While tariff shortfalls have been almost eliminated, revenue (or Market) shortfalls are now the single biggest factor impacting the financial sustainability of the power sector. Reducing DISCO losses, currently at more than twice the allowed level under the MYTO regime, is critical to manage revenue shortfalls that are driving the sector's current financial issues. There is an urgent need to implement the DISCO and TCN PIPs for sector sustainability. The sector also needs to continue increasing overall accountability and transparency to build trust among various stakeholders by making more data publicly available. Achieving Nigeria's ambition to be a net zero economy will require putting in place enabling policy and regulatory environment as well as significant crowd-in of private investment. It will be critical for Nigeria to institutionalize sector planning and develop a Least Cost Power Development Plan (LCPDP) with a long-term horizon, shaped by the national context, to serve as the basis for prioritizing energy sector investments. Given the historical context of the private investment in the power sector, the FGN will have to demonstrate its ability to improve sector finances further and its willingness to adhere to contractual obligations with the private sector.

21 NERC 2021, Key Operational & Financial Data of NESI for January 2019 to September 2021.

Key Policy Options

Why Reforms Are Needed	*Which Reforms Are Critical*	*Status*	*What Impact these Reforms Could Have*
Strengthening the Policy and Regulatory Environment			
• One of the biggest challenges in the sector is inadequate enforcement of sector contracts. Delays in issuance of MYTOs on tariff reviews and effective application of their outcomes hurt the sector. Performance targets for DISCOs under current MYTOs fall short.	• Carry out an extraordinary tariff review for all DISCOs and issue new MYTOs to set the revenue requirements for these companies for 2022–25. *Who:* NERC	●	• DISCO payment discipline is strengthened and enforced. • Regulatory conditions are predictable and defined through 2025. • The investment climate improves.
	• Include in revenue requirements allowances for capital and operating expenditures and estimated total aggregated technical and commercial losses in supply, based on Performance Improvement Plans (PIPs) approved by the Regulator. *Who:* NERC	●	
	• Sector institutions fully commit to adhere effectively to sector contracts and regulations. *Who:* NERC, TCN, NBET, FGN	●	
	• Improve the investment climate, including economic procurement of generation capacity pursuant to a Least Cost Development Plan (LCDP) and clarification of the monetary and fiscal policies that provide incentives for private investments in the power sector. *Who:* FGN	●	
Achieving Fiscal and Financial Sustainability			
• The FGN cannot afford new tariff shortfalls annually. DISCOs do not pay up to 53 percent of their invoices to NBET.	• Move toward full cost recovery with tariff adjustments through new MYTOs, accompanied by measures to protect the poor and enforce payment discipline. *Who:* NERC	●	• Tariff shortfalls are fully funded and gradually reduced to zero. • The fiscal burden of the power sector on the FGN is reduced. • The financial situation of DISCOs improves as tariffs come to better reflect current conditions and the costs of efficient service delivery.
	• Implement the PSRP Financing Plan to fully fund new tariff shortfalls and clear historical arrears with sustainable sources of funds. *Who:* FGN (Federal Ministry of Finance, Budget and National Planning - Budget Office of the Federation)	●	
	• Develop a framework to monitor and account for market shortfalls so they can be reduced consistently. The market shortfalls need to be fully funded based on accountability framework. *Who:* FMFBNP	●	

● Implemented ● Under implementation ● Not implemented

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*	*Status*	*What Impact these Reforms Could Have*
Improving Operational Efficiency			
• Operational inefficiencies in the system result in massive financial as well as economic losses. There is an immediate need to ensure that the transmission and distribution networks receive at least the minimum level of supply that allows the grid stability and reduction of system outages.	Address constraints in the transmission and distribution segments and maintenance issues in generation. • Implement PIPs[22] approved by NERC in late April 2021, to be reflected in MYTOs of extraordinary review for 2022–25. *Who:* DISCOs	●	• Minimum supply necessary for grid stability is achieved. • The distribution network is increasingly reliable. • Operations in all business areas of DISCOs are efficient, transparent, and accountable. • Investor confidence increases as DISCOs emerge as credible commercial partners. • Sector credibility and investor confidence both increase.
	• Systematically oversee DISCO performance after MYTOs are issued, and adopt corrective action (including license revocation) when DISCOs fail to adhere to PIPs and deliver on MYTO provisions. *Who:* NERC	●	
	• Follow corporate governance and transparency best practices. *Who:* DISCOs	●	
	• Increase accountability and transparency: ‣ Timely publish financial statements of DISCOs audited according to International Financial Reporting Standards. *Who:* DISCOs	●	
	‣ Publish key operational and financial performance data of the sector every quarter *Who:* NERC	●	
	• Identify bottlenecks in the Disco-TCN interface and provide investment for critical projects *Who:* TCN	●	

● Implemented ● Under implementation ● Not implemented

22 DISCOs prepared PIPs based on guidelines issued by NERC in 2019 that could incorporate tools (information systems, revenue protection programs, etc.) to improve efficiency and enhance transparency and accountability in operations

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*	*Status*	*What Impact these Reforms Could Have*
Expand and Improve Infrastructure			
• Substandard infrastructure is a major factor in sector inefficiencies. There is an urgent need to improve and expand the network to improve the quality of supply. • Poor access to electricity severely impacts the economic prospects of all Nigerians. About 43 percent (85 million people) of the population has no access to electricity	Define technical and operational interventions required to turn-around operations. • Identify the capital investments required to do so in the PIPs. *Who:* DISCOs	●	• ATC&C losses are reduced from an unsustainable 50 percent. • Quality of service improves • Better collection increases revenues • Increase i transfer capacity of the transmission network. • Dispatch least-cost generation and enhance regional trade to optimize costs. • Increase access.
	• To close the metering gap, effectively implement programs for metering of customers. *Who:* DISCOs	●	
	• Tackle electricity theft and bill collection to reduce the critically high ATC&C losses. *Who:* DISCOs	●	
	• Upgrade, rehabilitate, and reinforce transmission lines. *Who:* TCN	●	
	• Prepare a comprehensive electrification master plan that looks at achieving the access goals while also pushing Nigeria towards its ambitious ETP targets. The plan should be based on long-term demand forecast and informed by the Integrated Resource Plan (IRP) as well as the low carbon Least Cost Power Development Plan. Adopt a dual strategy to expand access to electricity service that involves off-grid access solutions, such as mini grids and solar home systems *Who:* FGN, REA	●	
● Implemented ● Under implementation ● Not implemented			

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*	*Status*	*What Impact these Reforms Could Have*
Clean Energy Transition			
• Nigeria has ambitions to be a zero net emission economy by 2060. The energy sector is the largest contributor to GHG emissions. To achieve net zero ambition Nigeria needs to add 5GW of solar`	***Short and Medium Term*** • Create enabling regulatory and policy for unlocking Distributed Photovoltaic (DPV) solar market *Who:* NERC, FGN, State Governments, CBN, DFIs		• Renewables comprise a larger share of the generation mix and help achieve net zero emission ambition • GHG emissions from the power sector are reduced. • Generation and transmission expansion is done at a least cost basis.
	• Identify innovative-use cases and business models for scaling up DPV *Who:* Private sector, DFIs, FGN, state governments		
	Long Term • Build institutional capacity for long term planning in the sector. Prepare a Least Cost Power Development Plan (LCPDP) in accordance with FGN policies to systematize generation and transmission expansion *Who:* FGN, TCN, DISCOs		
	• Define enabling conditions for development of large-scale grid connected solar projects *Who:* NERC, FGN, DISCOs, GENCOs		
			

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Note 2: Integrating Nigeria through Better Trade Policies for Investment and Diversification

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Note 2: Integrating Nigeria through Better Trade Policies for Investment and Diversification

Summary: Trade and investment have been key drivers of global growth and poverty reduction over the past 30 years. The increased participation of firms in developing countries in regional and global value chains has contributed significantly to job and wealth creation. However, in Nigeria there is still widespread skepticism about the benefits of export-led growth and increased trade integration. Although economic diversification is a longstanding policy aim, Nigeria's efforts to achieve it have largely remained unsuccessful: oil still makes up over 90 percent of exports. Nigeria's trade policy has moved in a heavily protectionist direction, with an escalation of import restrictions through higher tariffs and levies, import bans, foreign exchange limitations, and border closures. Although these measures were intended to support the country's industrialization and security goals, they have had numerous unintended consequences. First, import restrictions result in high levels of tariff evasion, and thus a loss in revenue estimated at 0.4 percent of GDP, or US$1.8 billion, annually. Second, these policies also adversely affect poverty by raising consumer prices. Third, they inhibit the efficiency of domestic firms by raising the cost of their production inputs, thereby constraining their competitiveness and limiting their potential to export to regional and global markets. However, Nigeria should not miss this critical time to take advantage of the continental momentum behind greater integration, and to nurture the potential and dynamism of a growing number of highly innovative entrepreneurs and firms. A new approach to trade policy in Nigeria should focus on: (i) reviewing trade policy to safeguard revenues, reduce poverty and support domestic firms; (ii) reducing domestic and international trade and transport costs: and (iii) creating an appropriate policy and institutional infrastructure that supports Nigeria's trade and industrialization priorities.

2.1 Increasing and diversifying exports and FDI is central to advancing Nigeria's industrialization and development objectives

Increased trade and investment can play an essential role in fostering economic development and poverty reduction (Coulibaly et al., 2022). Trade has historically made a significant contribution to prosperity by supporting the creation of new, higher-paying jobs and increasing the efficiency of firms, as well as by providing consumers with cheaper and better products. Across countries, a 1-percentage-point increase in the trade-to-GDP ratio increases per-capita incomes by 0.5 percent (Feyrer, 2019). In the context of the COVID-19 pandemic, trade has played a crucial role in providing access to essential food and medical supplies, and in the production and distribution of vaccines. Trade remains vital to sustaining global economic recovery from the pandemic and limiting the negative impacts on jobs and poverty.

Nigeria's export performance is volatile and has showed a tendency to decline over recent years, given its continued overdependence on oil. Nigeria remains one of the world's least diversified countries. About 90 percent of exports are concentrated in oil, and the country's remaining exports are mostly basic agricultural goods that add little value (FIGURE 2.1).

The combined shocks from the oil price collapse and then the COVID-19 crisis in 2020 magnified the already high cyclicality and weak ability to create jobs of Nigeria's private sector. These shocks were further exacerbated by the 16-month-long closure of Nigeria's land borders, from August 2019 until their

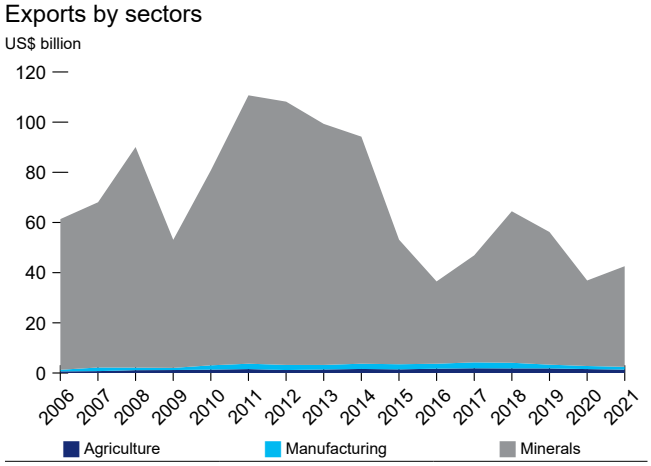
partial reopening in January 2021. Nigeria has yet to fully implement the protocols of the Economic Community of West African States (ECOWAS) Free Trade Area, although ongoing negotiations to participate in the African Continental Free Trade Area could open new opportunities for the private sector. Thus, there are significant potential gains to be made from gradual, ongoing efforts toward greater African integration.

Foreign direct investment (FDI) inflows have also been lagging comparators and have declined in recent years. Nigeria's FDI inflows as a share of GDP have fallen from over 2 percent a decade ago to less than 1 percent in recent years (FIGURE 2.2). Certain comparator countries, such as Ghana, have consistently seen FDI inflows in excess of 6 percent of GDP. FDI goes hand-in-hand with trade and is also a critical ingredient to economic growth, contributing to increased productivity, innovation, and technology transfer. FDI supports the diversification of the economy and helps domestic firms become more competitive and export more. Increasing participation in regional and global value chains by enabling access to intermediate goods, attracting strategic FDI, and building capabilities in key industries can help drive industrialization and support structural transformation of the economy.

For Nigeria to become more productive and support the integration of firms into regional and global value chains, significant reforms are needed. Successful integration into the regional and global economy depends on firms being able to count on four premises: (i) the existence of opportunities to enter and invest in new markets; (ii) access to efficient input markets abroad; (iii) the ability to compete on a level playing field; and (iv) the capacity to expand and thrive in global markets (Licettie et al., 2018). These conditions, laid out in FIGURE 2.3, can in turn benefit market and productivity dynamics through knowledge spillovers from FDI, reduced market distortions, the reallocation of resources toward more-productive firms, and incentives to invest in new technologies. The combination of these factors would result in better jobs and higher consumer welfare.

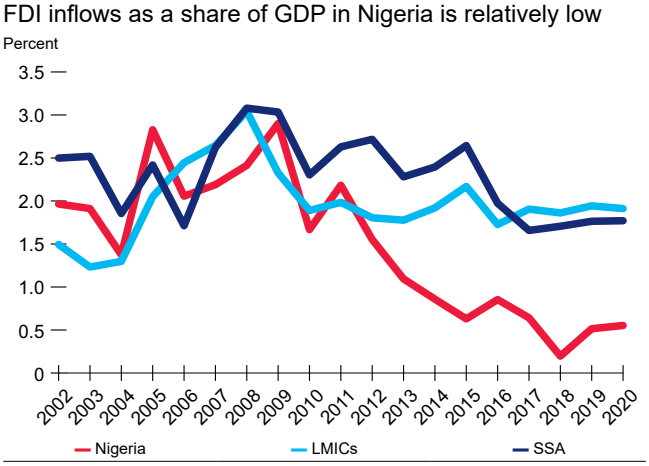
The recent growth trajectories of the processed food and creative services industries show the potential for Nigerian firms to become successful exporters. There have been significant increases in the production and export of packaged food products, driven in part by large-scale investments by international firms such as Olam. The creative industries—most notably film production—have been a source of dynamism,

FIGURE 2.1. Extractives exports have dominated over the past decades



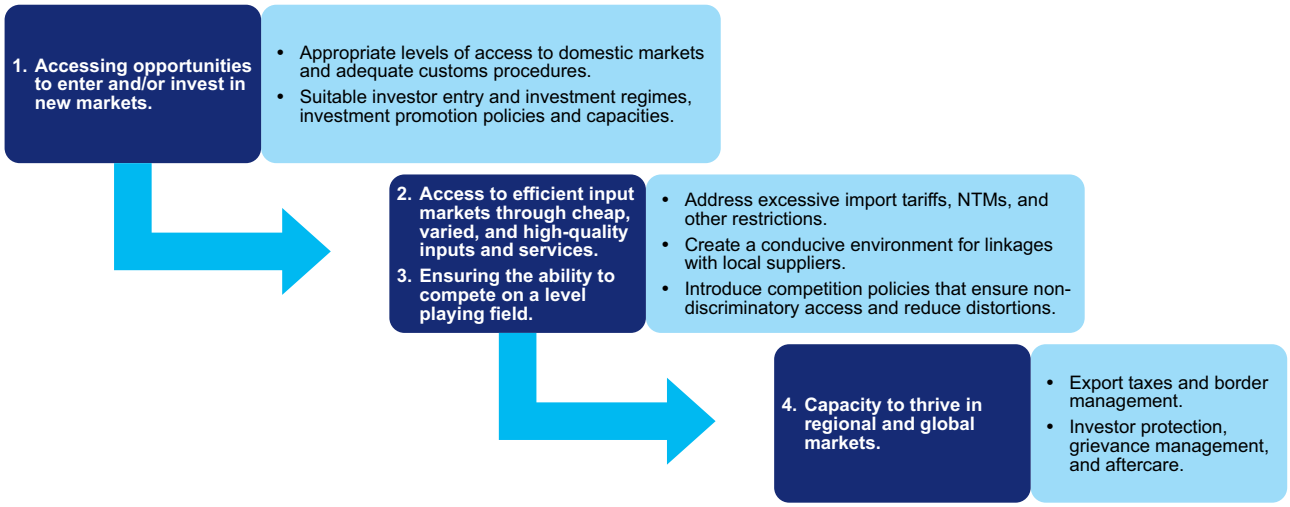
Source: World Bank calculations based on WITS.

FIGURE 2.2. FDI inflows as a share of GDP (percent) have been low and declining



Source: World Bank calculations based on WDI.

FIGURE 2.3. Essential conditions for increasing Nigeria's gains from more trade and investment



Source: Adapted from Licetti et al., 2018.

contributing 2.3 percent to Nigeria's GDP in 2021.[23] The creative industries can also help countries increase their capacity for more complex tasks related to intellectual property management and licensing.

Nigeria has ample room to harness the development potential of increased trade and investment, but its recent trade performance is limited by four features, together with import restrictions. Four characteristics limit Nigeria's trade performance. First, the country remains one of the world's least diversified economies. Second, Nigeria exports relatively little to the rest of Africa, as oil exports are primarily directed outside the continent. Third, FDI has been declining. Fourth, high trade and transport costs, and delays at borders and ports, are major impediments to export growth. The second major barrier to increased trade and investment are import restrictions, which undermine the country's wider development goals.

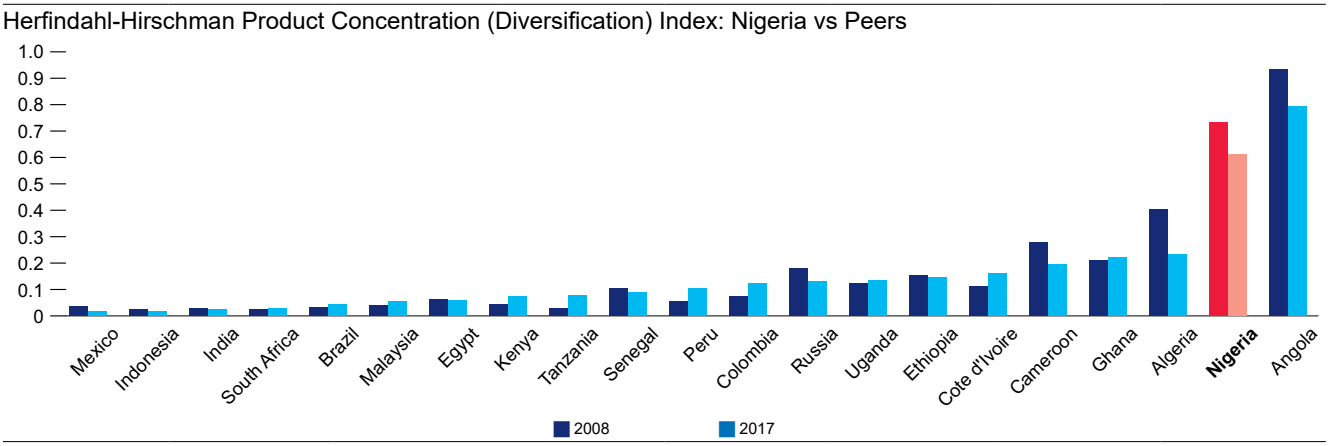
2.1.1 Nigeria remains one of the world's least diversified economies

Trade diversification has been a leading policy objective for the FGN since independence, but this goal has remained elusive. Nigeria is one of the world's least diversified economies, behind only Angola (FIGURE 2.4). The country's exports are concentrated in the highly capital-intensive oil sector, creating few direct jobs, while upstream and downstream linkages remain limited. In recent years, the combined share of agriculture and manufacturing exports has consistently remained under 15 percent. In part, this is because certain agricultural exports are not sold through formal channels, and thus do not contribute to recorded exports. Nonetheless, the level of concentration of Nigeria's exports far exceeds that of its comparators.[24] This is also reflected in Nigeria's export market share: while the country's global market share in oil was about 1.5 percent as of 2020 (a decline from 3 percent in 2010), its global share of non-oil exports was only 0.02 percent.

23 See article: https://www.premiumtimesng.com/news/more-news/455597-nollywood-contributes-2-3-to-nigerias-gdp-gbajabiamila.html.

24 A widely used measure of economic concentration or diversification is the Herfindahl-Hirschman Index (HHI), which measures how diversified or concentrated a country's exports or imports are. Countries with an HHI close to zero are most diversified, while those with an HHI score close to one have exports highly concentrated in one sector. Nigeria's exports are among the most concentrated relative to peers with an HHI of 0.79 in 2019. The HHI of the nearest comparator, Algeria, is 0.47 and the average value for SSA countries is 0.30.

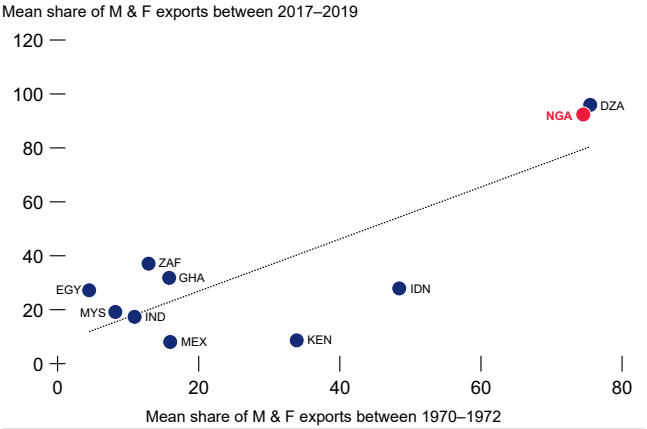
FIGURE 2.4. Nigeria has the least-diversified economy in the world apart from Angola



Source: Based on UN Comtrade (via WITS).

Moreover, the dominance of mineral and fuel exports has increased over the past 50 years. In the early 1970s, minerals and fuel comprised about 74.5 percent of Nigeria's exports, but in the three years leading up to the COVID-19 pandemic (2017–19) this share increased to 92.4 percent (FIGURE 2.5). Several of Nigeria's comparators, such as South Africa and Ghana, similarly saw a growing share of mineral and fuel exports relative to total exports over the past half century. However, Indonesia and Kenya—both major exporters of extractives—experienced a substantial decline of their shares thanks to the diversification of their export base.

FIGURE 2.5. The dominance of mineral and fuel exports became stronger recently and has not changed significantly since the early 1970s



Source: World Bank calculations based on WITS-Comtrade.

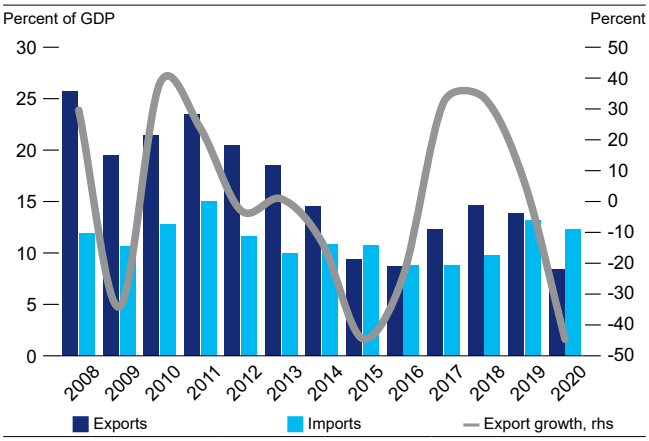
In countries with highly concentrated export baskets, especially in minerals and fuels, diversification tends to be associated with higher growth.[25] There is no magic formula for export diversification, but developing countries need to seize the momentum for domestic reforms and implement them with a high level of political support. Diversification is impeded by numerous factors, including high trade and transport costs, a restrictive trade policy environment, and numerous constraints to the overall investment climate. These in turn contribute to the very limited participation of Nigerian firms in regional and global value chains (GVCs). A recent IMF analysis (Yao and Liu, 2021) contrasts Nigeria's experience with that of three Asian countries—Indonesia, India, and Malaysia—that had a similar focus on import substitution during the second half of the 20th century, but were then able to diversify. All three countries trailed Nigeria in GDP per capita in 1980, but now far surpass it. Key drivers of change included economic crises that created a window of opportunity for reforms, which entailed a focus on education and knowledge accumulation, as well as the gradual reduction of trade and investment barriers.

25 Developing countries tend to diversify at the extensive margin (number of products exported) rather than the intensive margin (volume of exports), however export growth takes place at the intensive margin Oil-producing countries experience export growth, while they show a rising gap in export diversification between oil-producing countries and the rest of the world (Ross, 2019).

As export diversification has stagnated, so Nigeria's trade openness, as measured by the overall share of trade of goods and services relative to GDP, has remained low. Given the centrality of oil exports, export growth has been highly volatile and subject to variations in oil prices. Total exports declined between 2012 and 2016 as oil prices went down, then increased in the years leading up to the COVID-19 pandemic, again in parallel with oil prices (FIGURE 2.6). In terms of the overall share of trade to GDP, Nigeria lags most of its comparators, although it is on a similar level as countries such as Indonesia, India, and Egypt (FIGURE 2.7).

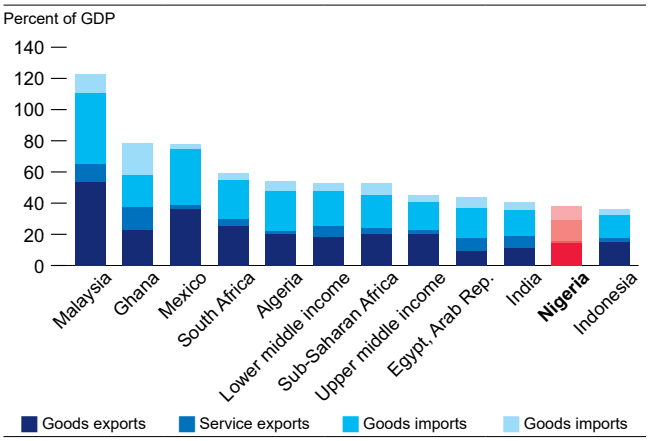
Nigeria's terms of trade are mainly driven by oil prices. However, the country's trade balance has remained relatively even: import volumes follow the trajectory of exports, resulting in a positive current account balance in most years (FIGURE 2.8)—although this does not reflect the large volume of informal imports that are smuggled in to evade import restrictions.[26] This dependence on oil exports also makes Nigeria vulnerable to price shocks. Following a dramatic 23.7 percent decline in Nigeria's terms of trade in 2016, due to collapses in the oil price and production, terms of trade started to improve slightly in 2017 and 2018, but continued to depress the value of the country's exports.

FIGURE 2.6. Trade openness has declined over the years



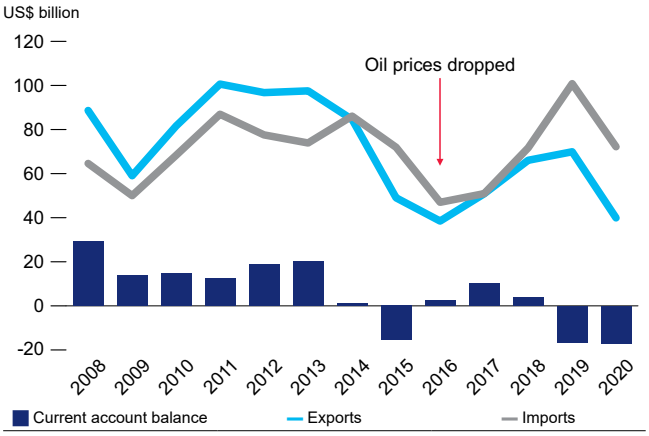
Source: World Bank calculations based on WDI.

FIGURE 2.7. Nigeria's trade as a share of GDP lagged most peer countries in 2019



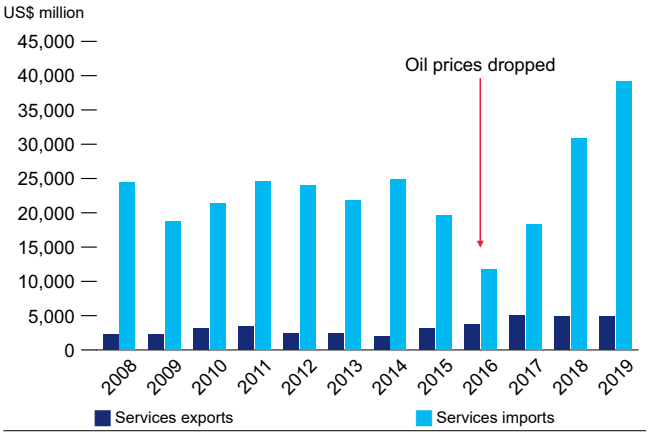
Source: World Bank calculations based on WDI.

FIGURE 2.8. Imports follow the (oil) export trajectory



Source: World Bank calculations based on IMF BoP.

FIGURE 2.9. Services exports have been increasing but significantly lag imports



Source: World Bank calculations based on UNCTAD.

26 On the export side, there are also large volumes of illegally exported oil that benefits from Nigeria's generous PMS subsidy (World Bank, 2021).

They then further declined in 2019 and 2020. In 2015, imports of goods and services were greater than exports for the first time since 2008. This happened again in 2020, as the oil price hit a new low.

Services exports contribute a small but growing share to total exports. While services exports remain low, they have increased significantly, more than doubling between 2008 and 2019 (FIGURE 2.9). In 2013, services exports made up 2.5 percent of total exports. By 2019 this share had increased threefold to 7.5 percent. However, services exports make up about 40 percent of total exports in certain comparator countries, such as Ghana and Egypt. In Ghana, this is driven in particular by services exports supporting the booming extractives sector (World Bank, 2022b).

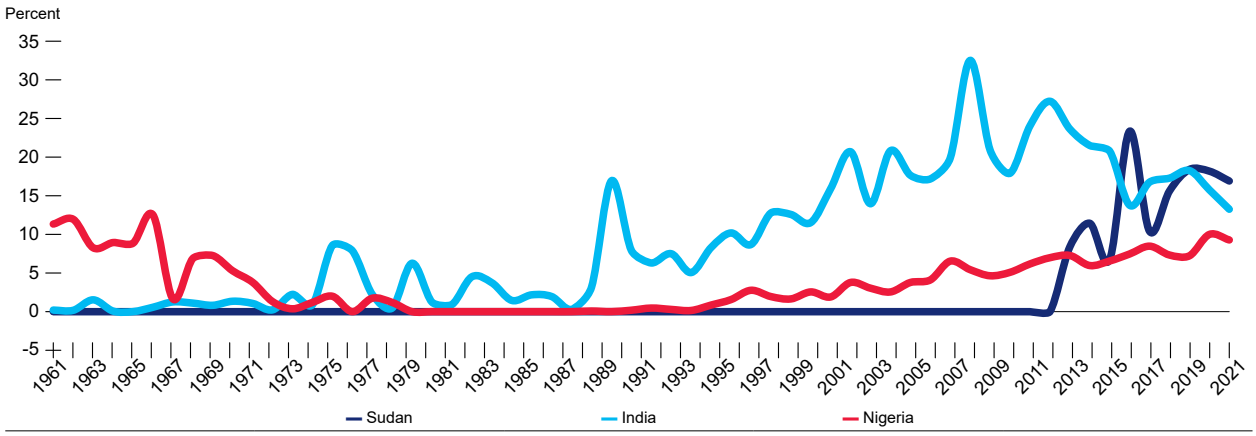
Nigeria imports far more services than it exports. In 2019, Nigeria's services imports were eight times its exports in terms of value. The bulk of services exports has been in travel and transport, while growth in services exports has been driven by travel and "other services", which includes financial services, entertainment, information and communication technologies (ICT) and other more complex, high-skill services.

Finally, although Nigeria's competitiveness has stalled over time, even in areas of comparative advantage, there are emerging sectors (in addition to services) with potential for growth and diversification, especially in agribusiness. Based on product fitness—a measure that captures a country's level of available endowments and productive knowledge (also known as capabilities)—Nigeria ranked 148th out of 169 countries in 2018, a drop of eight places since 2013 (IFC, 2020). However, capabilities are emerging in new downstream sectors with increased feasibility, including food preparations and packaged food products, petrochemicals, and steel. Sesame, for example, is a product with promising growth potential and numerous downstream uses to meet domestic demand, and eventually international demand as well (BOX 2.1).

BOX 2.1.The prospects of agricultural diversification through sesame

Recent World Bank studies (2022a) have highlighted the growth potential of the sesame value chain. However, there are significant barriers to growth. The study builds on interviews with leading firms and experts, as well as an analysis of the market potential of these products in Nigeria.

FIGURE B2.1. Nigeria's share of world's exports of sesame are growing



Box 2.1 continued

Sesame seeds are Nigeria's most-exported agricultural product, and the country is their third-largest exporter globally. However, Nigeria has the potential to double its exports of sesame seeds in the not-too-distant future. Northern Nigeria enjoys a comparative advantage for its production of high-quality, oil-rich seeds that are primarily exported to the demanding Japanese market, where they are processed into premium oil. Nigeria also exports "ready-to-eat" seeds to Europe and North America, as well as seeds for paste to the Middle East. The global market for sesame seed products is growing because of their nutritional and health benefits, compared with substitute products such as palm oil. This would also enable more than 300,000 poor farmers in the North to increase their sesame-related profits by more than 60 percent in five years thanks to increased exports.

Measures necessary to enhance the competitiveness of key agricultural value chains include:

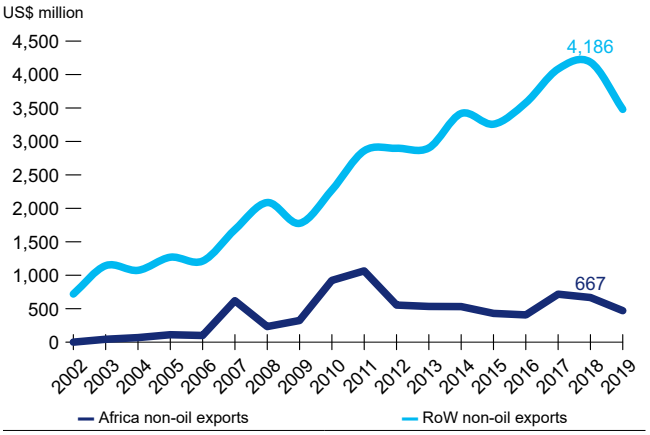
1. Building partnerships between seed institutes and leading firms to develop improved seeds.
2. Organizing extension services (including demonstration plots) to promote usage of fertilizers and seeds.
3. Creating Sanitary and Phytosanitary (SPS) certification capacity (as a public-private partnerships) for export crops.
4. States are to adopt safeguards to improve land allocation to large-scale farmers. This should entail model land leases with details of the acquisition process, as in Senegal and Ghana.
5. Addressing logistical issues in and around Lagos port causing 30-day delays, 8 percent extra cost, and 2 percent price discount on the export of sesame seeds.
6. Removing import duties on agricultural equipment (starting with export value chains such as sesame seeds).
7. Mitigating energy issues that add 2 percent in cost to processed products (sesame oil, cassava starch).
8. Removing foreign exchange (FX) restrictions on the import of fertilizers (starting with export crops such as sesame seeds) and committing to zero import tariffs on fertilizers (to avoid inverted tariffs).

2.1.2 Nigeria exports relatively little to the rest of Africa

Compared with other large African countries, Nigeria exports relatively little to the rest of the continent. Its recorded intra-regional exports as a share of total exports are less than 10 percent, while almost one-quarter of South Africa's exports remain in Africa (FIGURE 2.10). In addition, non-oil exports also remain at low levels and have declined since 2017 (FIGURE 2.11). Nigeria's share of intra-regional trade within ECOWAS has also been low (around 5 percent of Nigeria's total recorded exports in 2020). The main reason for this trend is that Nigeria's oil exports are primarily directed outside the continent. India, Spain, and the Netherlands are the most significant export destinations overall. However, considering exclusively non-oil exports, Ghana is the largest export destination, and a far larger share of Nigeria's exports goes to the ECOWAS region.

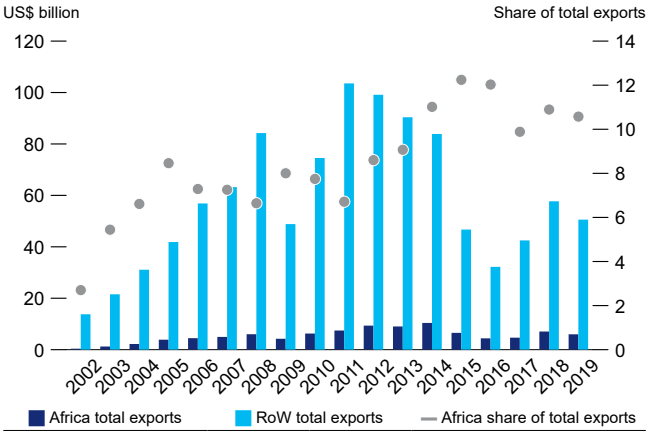
Nigeria has committed to significant policy and institutional reforms through the AfCFTA, but implementation will be key. Nigeria is embarking on an ambitious course toward greater integration and policy reforms. This is most evident through its active participation in the African Continental Free Trade Area (AfCFTA) negotiations, and its efforts to develop a domestic implementation plan. The AfCFTA's implementation—which will require substantial preparation and engagement across the federal and state governments, the private sector, and other stakeholders—holds significant potential for private sector-led growth through regional integration. Nigeria has also developed a new National Investment Policy,

FIGURE 2.10. Non-oil exports to Africa remain relatively low and have been in decline since 2017



Source: World Bank calculations based on WITS mirror exports.

FIGURE 2.11. Nigeria's oil and non-oil exports to Africa are less than 10 percent of total exports



Source: World Bank calculations based on WITS mirror exports.

and is in the process of developing a new Trade Strategy. Moreover, at the sub-national level, state governments across the country are implementing ambitious business environment reforms.

Nigeria signed the AfCFTA agreement in 2019 and ratified it in 2020. The country has been engaged in all relevant negotiations and conducted nation-wide stakeholder consultations,[27] leading to numerous institutional reforms.[28] Moreover, the AfCFTA negotiations have catalyzed new domestic initiatives that may help implementation.

Further continental integration can help enhance the competitiveness of Nigeria's manufacturing sector. By making manufacturing more competitive, Nigeria could leverage regional market integration to achieve economies of scale, lower costs, and boost its international competitiveness. Regional value chains can, in turn, provide a stepping-stone toward GVCs. Increased competitiveness from regional integration can lead to diversification of export products and markets, and support private sector-led growth. In parallel, it will incentivize domestic producers to increasingly compete with foreign firms. The vibrant entrepreneurial ecosystem in Nigeria[29] would benefit from being connected to technological and process innovations, know-how, diaspora mentorship, and research and development.

Despite fears about their impact, any short-term revenue losses suffered by Nigeria because of tariff liberalization under the AfCFTA will be small and distributed over a 10-year period (Arenas and Vnukova, 2019). Annual revenue losses, distributed over 10 years, would only account for a 0.236 annual percentage change in tariff revenues (or 0.148 percent of tax revenues) (TABLE 2.1). And based on the actual liberalization timeline, most of the revenue impact will only be felt after five years following the AfCFTA's implementation, when sensitive products will be liberalized. The effect of the AfCFTA on Nigeria's revenues will also be minimal because only 4.1 percent of the country's total imports come from Africa—one of the lowest shares on the continent. In the medium to longer term, increased GDP will generate larger fiscal revenues on increased economic activity thanks to the AfCFTA, which will likely outweigh any minor short-term revenue losses.

27 NOTN press-release: http://www.notn.gov.ng/post_action/64.

28 To coordinate the AfCFTA negotiations, in 2017 the FGN established the National Committee for the African Continental Free Trade Area (the AfCFTA National Committee) and the Nigerian Office for Trade Negotiations (NOTN), while the Enlarged National Focal Point on Trade (ENFP) facilitates stakeholder consultation and offers advice on trade policy. Inter-agency tensions have at times exacerbated negotiation challenges, as NOTN took over responsibilities previously held by the Department of Trade in the FMITI. In the case of the AfCFTA negotiations, it is widely agreed that stakeholder consultations could have been more extensive.

29 GEM: https://www.gemconsortium.org/country-profile/93.

TABLE 2.1. Estimated revenue losses under AfCFTA trade liberalization scenario[16]

	Percentage change, annually over 10 years
As percent of tariff revenues	-0.236
As percent of tax revenue	-0.148
As percent of total government revenue	-0.044

Source: Arenas and Vnukova, 2019.

In the long run, trade and welfare gains increase substantially in response to reforms introduced by trade agreements, such as trade facilitation, the elimination of non-tariff measures (NTMs), and services liberalization (Vanzetti et al., 2018). The small revenue impact from tariff liberalization is also likely to be compensated by additional tax revenues from increased economic activity. However, the FGN will need to support those workers who may lose out from adjustments deriving from increased openness.

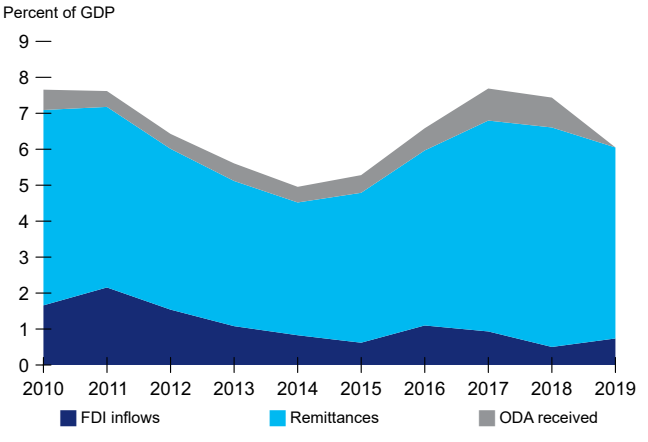
2.1.3 Foreign investment has been declining as business environment reforms tapered off

In light of weak domestic private sector investment, FDI is key to enabling Nigeria's economic growth and diversification. Not only can FDI help to close the foreign-exchange gap, but it can also enhance access to new technology, markets, managerial skills, inputs, and products. FDI in manufacturing and efficiency-seeking sectors can help promote export diversification, enable domestic firms to integrate into regional and global value chains, stimulate productivity, and make firms more likely to export.

Nigeria has experienced a steady decline in FDI over recent years. Nigeria's FDI inflows have been low and in decline since 2009, despite the country's sustained efforts to improve its business environment. Among external flows, FDI is now dwarfed by remittance inflows, and comparable to overseas development aid (FIGURE 2.12). Equity inflows account for the largest share of FDI inflows (FIGURE 2.13).

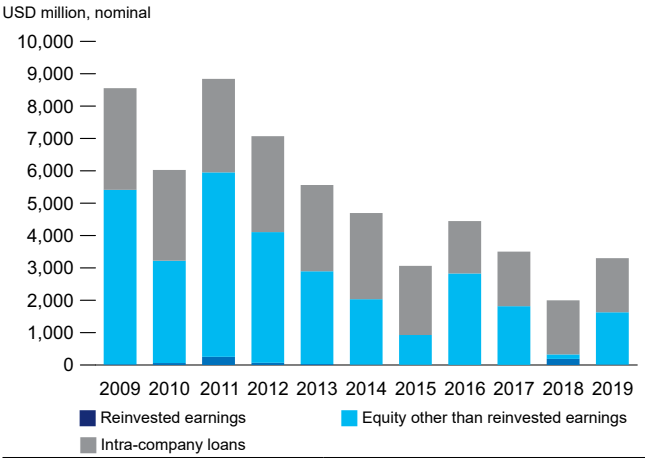
The overall decrease in FDI has been partly driven by the decline of inflows in primary sectors, particularly mining and oil and gas. In recent years, the largest share of Nigeria's FDI has gone to the services sector, potentially indicating greater diversification away from extractives. Between 2009 and 2019, FDI in services made up 50.3 percent of all inflows, followed by manufacturing (28.4 percent) and extractives (21.0 percent). Investment in natural resources is mostly driven by international commodity prices and typically

FIGURE 2.12. Remittances have become more significant as FDI has declined



Source: World Bank calculations based on WDI.

FIGURE 2.13. Equity holdings make up the largest share of inflows



Source: World Bank calculations based on WDI.

30 The scenario that has been agreed for liberalization under the AfCFTA: tariffs removed on 97 percent of lines that account for at least 90 percent of intra-regional imports (sensitive products).

undertaken by large multinational corporations, given the capital intensity of these sectors. In Nigeria, such investment represents a large share of gross capital formation, and its influence on exchange-rate volatility could greatly increase the risk that it poses to macroeconomic stability and economic growth (World Bank, 2017).

A key factor in this regard is continued concerns over the reliability of Nigeria's business environment. Nigeria was ranked 125th out of 138 countries on the World Economic Forum's latest Global Competitiveness Index, evidencing a downward trend on macroeconomic stability (Nigeria came 122nd, down 14 places from the previous year) and quality of institutions (125th, down seven places). There is an urgent need for increased economic activity and inclusive growth across all the states in Nigeria. The Presidential Enabling Business Environment Council (PEBEC)[31] has made efforts to cascade reforms to the state level through the set-up of a Subnational Technical Working Group under the Enabling Business Environment Secretariat, tasked with "developing a sub-national business environment survey report to showcase the relative attractiveness of all states and regions in the country."[32]

2.1.4 High trade costs create significant obstacles to private sector competitiveness

High trade costs, cumbersome customs procedures, and import prohibitions stifle the competitiveness of Nigerian firms, distort the market, and prevent firms from realizing gains from the integration into GVCs. However, without reforming the protectionist trade policy regime first, the benefits of tackling issues of trade facilitation could be limited (Raballand and Mjekiqi, 2009). If import prohibitions were to persist, they would continue to provide incentives for fraud and corruption at the borders, as well as for smuggling; thus, trade facilitation reforms would fail to have their intended impact. Therefore, import prohibitions should be removed before, or in parallel with, the introduction of trade facilitation reforms.

Trade restrictions and an unpredictable enforcement regime inhibit the competitiveness of the country's non-oil exports. Complex customs procedures are exacerbated by a lack of publicly available information about them, and by frequent harassment at the border. For example, the lack of publicly accessible information regarding the ECOWAS Trade Liberalization Scheme results in many traders ignoring their rights under the scheme. In a bid to meet revenue targets, customs officials often decline to recognize ECOWAS Certificates of Origin (Woolfrey et al., 2019). Other factors that inhibit export competitiveness include poor infrastructure, such as slow and inefficient port services, and the lack of internationally recognized Quality Infrastructure (QI) services, such as testing and certification.

Nigeria stands to gain from reforms that address high costs and delays at the border, which would position the country as a logistics hub for the region and a springboard into regional value chains. Nigeria has taken some steps to facilitate trade, but these are yet to be reflected in key rankings. For example, Nigeria's Logistics Performance Index ranking has deteriorated from 92nd in 2016 to 95th (out of 160) in 2018, leaving the country behind most of its peers except Angola (which came last in the ranking). Nigeria's performance comparatively lags in three categories: customs (145th), international shipment (118th), and logistics competence (100th).

31 The creation of the Presidential Enabling Business Environment Council (PEBEC) in 2016 played an important role in improving the business environment in Nigeria. The priority areas identified for reform included eight of the 10 Doing Business indicators, as well as two custom indicators: (i) the entry and exit of people, particularly at airports; and (ii) government transparency. Given the vast powers held by the states, strengthening governance at the state level is also key to achieving the country's development goals. The indicators are: starting a business, registering property, getting credit, enforcing contracts, trading across borders, getting electricity, dealing with construction permits, and paying taxes.

32 https://easeofdoingbusinessnigeria.com/states-fct/sub-nationals.

Trade facilitation reforms would benefit Nigeria's businesses and consumers, and also help tackle corruption.[33] Such reforms would allow better and faster access for businesses to production inputs from abroad, and support greater participation in GVCs, which require products to cross borders several times. Countries where inputs can be imported and exported in a quick and reliable manner are more attractive for FDI, and offer consumers lower prices, higher quality products, and a greater variety of goods. Trade facilitation reforms especially help small and medium enterprises (SMEs) to participate in trade, addressing unnecessary costs related to trade procedures. This would be of particular value to Nigeria's MSMEs, which account for 84 percent of the total labor force, 48.5 percent of nominal GDP, and about 7.3 percent of exports (World Bank, 2019). Finally, trade facilitation removes incentives and opportunities for border-related corruption, thus supporting good governance and integrity.

2.2 Import restrictions undermine the country's development goals

Nigeria's weak trade performance in recent years has been exacerbated by its highly restrictive trade regime. Nigeria implements both foreign-exchange (FX) restrictions on certain imports by the Central Bank of Nigeria (CBN), and outright import bans imposed by the Nigeria Customs Service for reasons of trade protection. In addition, Nigeria's tariffs are higher than those of its competitors, and the recent border closure has exacerbated the negative impact on trade. Such restrictions lead to trade evasion and result in lost import revenues, higher commodity prices for Nigerian firms, and higher prices of goods for Nigerian households.

Nigeria's restrictive and unpredictable trade policies increase smuggling, diminish revenues, hurt consumers, and raise production costs. The first section addresses the scope and scale of Nigeria's protectionist policies. The second section then assesses the impact of import restrictions on smuggling and revenue, while the third section assesses the impact on poverty and the fourth section looks at the impact on firms' production costs.

2.2.1 The scale and scope of Nigeria's protectionist policies have increased significantly

A central characteristic of Nigeria's trade regime in recent years has been the key role of macro-fiscal policy, especially as dictated by the CBN. While the Federal Ministry of Industry, Trade and Investment (FMITI) is mandated to formulate Nigeria's trade policy, the CBN has been intervening vigorously, and increasingly directing trade policy toward import substitution. Furthermore, the CBN's interventions go beyond its core mandate, and impose restrictive trade and industrial policies through direct lending schemes and FX restrictions on a targeted group of imports. Notably, in 2015 the CBN announced restrictions on access to FX for the import of some products that could be produced locally, to preserve foreign reserves and boost local industries. A few other products were added to this list in subsequent years. The effectiveness of these policies, in a country with highly porous borders, a large informal sector,[34] and an underdeveloped domestic supply chain, remains unevaluated and is likely limited.

In recent years, there has been a significant escalation in the scale and scope of import restrictions. Such restrictions are intended to support the development of domestic production and processing, especially for staple food items, but are also often the result of the successful lobbying of individual firms and industries. Notable restrictions include:

33 OECD, 2018.

34 The informal sector is estimated to account for 44 percent of Nigeria's economy (WTO, 2017).

- **FX restrictions:** In 2015, the CBN announced restrictions on access to foreign exchange for the import of certain products that could be produced locally, with the aim of both bolstering FX reserves and supporting domestic industries. However, as noted above, the resulting boost to domestic production has been modest.

- **Import bans:** The Nigeria Customs Service and the CBN have long imposed a prohibition to import certain products. The Nigeria Customs Service restrictions cover 23 "prohibited" products and 21 "absolutely prohibited" products. Import bans raise costs for domestic manufacturers that rely on imported inputs when domestic alternatives are less easily available or of inferior quality, and drive down the demand for manufactured goods. Import bans have also incentivized certain companies to move production to neighboring countries where they have easier access to foreign exchange (WTO, 2017).

- **Border closures:** Most significantly, the FGN announced on August 22, 2019, the partial closure of three border crossings with Benin and Cameroon, and the closure was extended to all land border crossings two weeks later. The closure was intended to address: (i) illegal exports of subsidized gasoline from Nigeria; (ii) imports of banned or illegally re-exported goods, especially through Benin; (iii) imports of goods competing with Nigerian priority industries, for which Nigeria imposes high tariff and non-tariff barriers;[35] and (iv) security concerns related to drugs, guns, and criminals entering the country. This closure coincided with a significant rise in inflation, especially for food products that are subject to import restrictions. Moreover, the closure only had a temporary effect in impeding the transit of illegal trade through Benin into Nigeria.[36] The closure ended, at least partially, 16 months later, in January 2021. Available data suggest that the border closure had significant but short-lived consequences in reducing the scale of smuggling.[37] Although recent information about informal trade is very limited, a 2014 CBN survey found that the largest shares of unrecorded trade came from Niger (76 percent), Cameroon (15.5 percent), and Benin (8.5 percent).[38]

- **High tariffs:** Nigeria's tariff regime is highly restrictive. Statutory tariffs (the sum of import duties, levies, and excise taxes) are above the global median for raw materials (43rd percentile) and near or in the top 10 percent of countries globally for capital, intermediates, and consumption goods (7th, 11th, and 9th percentile, respectively). The overall structure is also highly complex with numerous ad-hoc and opaque exemptions that further complicate compliance for importing firms (FIGURE 2.14). In 2016, Nigeria's weighted average tariff for most-favored-nation (MFN) trade partners was 11.25 percent—significantly lower than at the beginning of the century, when it was around 25 percent, but double the Sub-Saharan African (SSA) average, 5.5 times higher than in Indonesia, and nine times higher than in Mexico.

- **An anti-export bias in tariffs:** Nigeria's system of import duties and levies reduces the incentives to export. Nigeria has a cascading scheme in place for import duties and levies—i.e., products upstream in the supply chain (raw materials/ intermediates) face lower tariffs and duties than final consumer products (FIGURE 2.14). Most countries impose some level

35 There has been a particular focus on achieving self-sufficiency in rice production, in part by halting illegal imports from Benin. Import tariffs and levies for most rice imports total 70 percent, and since 2015, the FGN has barred access to the CBN's FX window to finance imports of rice, along with 42 other goods.

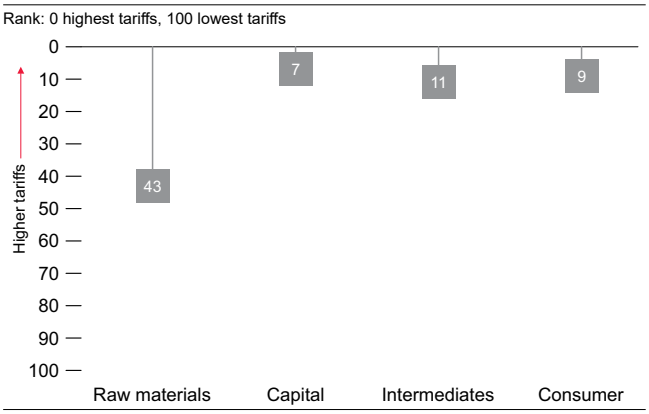
36 This is supported by interviews with border officials who claim that the closure resulted in the creation of new smuggling routes. For example, in the case of rice, Benin's imports from Nigeria declined by 84 percent from July 2019 to January 2020, but recovered to pre-closure levels by August 2020, five months before a partial reopening of the borders.

37 Although these measures have likely supported certain domestic industries, there is strong evidence that these policies have had negative impacts on poverty reduction, competitiveness, and revenue generation.

38 CBN, 2016.

of cascading in their tariff schedule to protect final consumer industries, which tend to be associated with higher value addition.

FIGURE 2.14. Nigeria's tariffs are among the highest in the world, especially for capital, intermediate and consumer goods



Source: Own elaboration based on Nigeria's customs data and UN Trains data.
Note: The variable plotted is Nigeria's normalized ranking (0 highest tariffs, 100 lowest) within 170 countries with data.[39]

- **However, tariff cascading is not innocuous:** it distorts relative prices, potentially impacting production efficiency, and Nigeria's cascading is particularly 'steep' compared with other countries. This strategy has created a bias against exporting because domestic producers focus more on exploiting the protected domestic market rather than on exporting.

- **Non-tariff measures:** Numerous policies and regulations, also known as non-tariff measures (NTMs), add costs to exports and imports. While in some cases NTMs ensure product quality and address public safety concerns, often they exist primarily to protect importers from competition. Currently, almost 4,000 products are affected by at least one NTM (equivalent to 86 percent of traded products and 95 percent of value added). A notable and pervasive NTM was pre-shipment inspection, which required inspecting goods before they arrived. Although officially abolished in 2019, it has merely been replaced by more onerous procedures upon arrival (IMF, 2021).

2.2.2 Import restrictions encourage smuggling and reduce revenues

One of the areas where Nigeria's trade restrictions have had the most impact is in customs evasion. Import bans, in combination with unpredictable enforcement and cumbersome customs procedures, result in large volumes of smuggling. Recent World Bank analysis (Artuc et al., 2022a) provides crude estimates of tariff evasion (i.e., the illegal and intentional non-payment of tariffs), and how it has changed with the introduction of FX restrictions, based on mirror statistics analysis. This analysis spots "evasion gaps", which result from discrepancies between trade flows reported by countries that export to Nigeria, and imports reported by Nigerian customs authorities. Average evasion gaps in Nigeria are three times as high as in low-income countries. Key results from this analysis include:

- **As tariffs go up, evasion increases:** Tariff evasion is higher for goods subject to higher tariffs and import restrictions (FIGURE 2.15). The average evasion gap[40] for a product that is subject to above-median tariffs is about 28 percent, compared with the average evasion gap in low-income countries of just 9 percent (Jean and Mitaritonna, 2010).

39 To construct the graph, we obtain from UN Trains the simple average tariff for each broad economic category per country; for Nigeria we construct it using customs data. We then classify these categories into raw materials, intermediates, capital goods, consumer goods and others. We then calculate the simple average of the BEC categories that correspond to each product group.

40 Evasion gaps are the result of discrepancies in trade flows reported by countries exporting to Nigeria (mirror imports) and imports reported by Nigerian customs authorities (direct imports reported by Nigeria). To measure potential evasion, discrepancies in trade flows reported by countries exporting to Nigeria and imports reported by Nigerian customs authorities are exploited following Fisman and Wei (2004) using HS6-source country year "trade gaps". The "trade gap" is defined here as the difference between exports to Nigeria reported by source countries and imports reported into Nigeria for each product and year. A correlation between tariffs and trade gaps (defined here as the difference between exports to Nigeria reported by source countries and imports reported into Nigeria at the HS6-country-year level), suggests tariff evasion. For example, importers may choose to misclassify goods subject to high tariffs as goods subject to lower tariffs, a practice that is especially common for differentiated products. Alternatively, importers may choose to declare lower prices than those actually paid and submit falsified invoices.

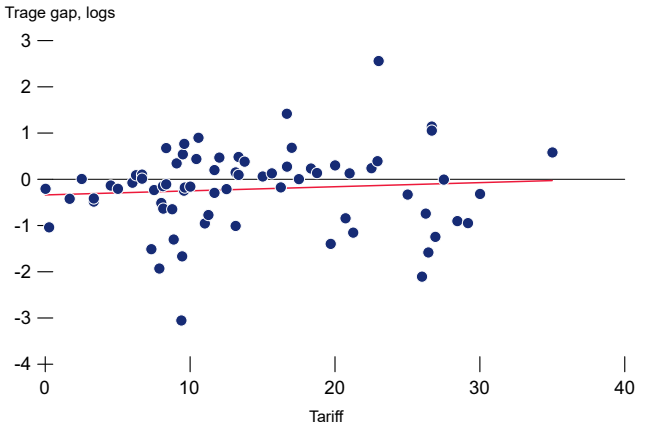
- **Import and FX bans foster evasion:** Evasion gaps are on average significantly higher for products whose import is banned and for those subject to FX restrictions, suggesting that protectionism induces evasion (FIGURE 2.16). Evasion is also highly responsive to tariffs: a 10-percentage-point increase in tariffs leads to an increase in evasion of 1.38 percentage points.

Nigeria lost US$1.8 billion annually between 2010 and 2019 due to tariff evasion arising from protectionist measures. This is a conservative estimate and is equivalent to 0.4 percent of GDP and 6.6 percent of current overall tax revenues.[41] Based on this estimate, overall tariff revenues would have been roughly 45 percent higher each year in the absence of evasion.[42]

Foreign exchange bans imposed in 2015 led to a substantial drop in reported imports, which fell by more than two-thirds. However, exports to Nigeria of the same products as recorded by trade partners fell substantially less, roughly halving over the same period. While part of the fall in reported imports may have been driven by slumping growth in Nigeria at that time, the above mentioned discrepancy attests to an uptick in tariff evasion, which increased by roughly 20 to 30 percent. FIGURE 2.17 presents an event study analysis of how reported imports, mirror imports, and evasion responded to the introduction of FX bans in 2015.

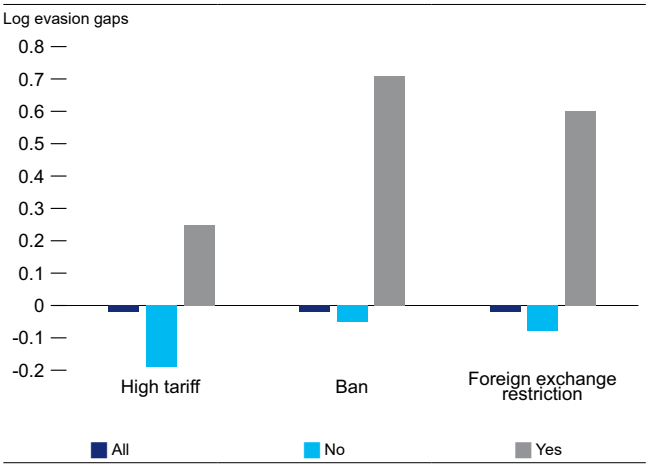
The revenue impact of FX bans alone between 2015 and 2019 was about US$1.4 billion, or about US$275 million annually (FIGURE 2.18). This estimate considers revenue that would have been collected from the formally recorded trade that disappeared because of the introduction of the FX ban. This estimate and those mentioned above are based on preliminary data, and therefore to be interpreted with caution; nevertheless, it is clear that Nigeria's restrictive trade policies cause substantial evasion.

FIGURE 2.15. As tariffs increase, evasion increases too[43]



Source: Authors' own calculations using COMTRADE.

FIGURE 2.16. Evasion and protectionism[44]



Source: Authors' own calculations using COMTRADE.

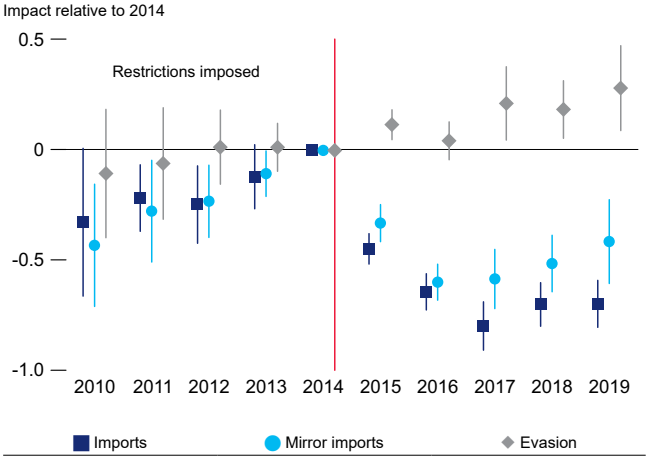
41 GDP in 2020 was US$432.8 billion and the tax-to-GDP ratio was 6.1 percent.

42 This calculation does not take into consideration the impact of evasion on trade flows (e.g., stricter enforcement of tariffs might reduce trade flows).

43 The graph shows a binned scatterplot of the relationship between log evasion gaps, defined as log exports to Nigeria reported by source country minus log imports recorded in Nigeria, versus tariffs over the period 2010–19. Observations are grouped into equally sized bins.

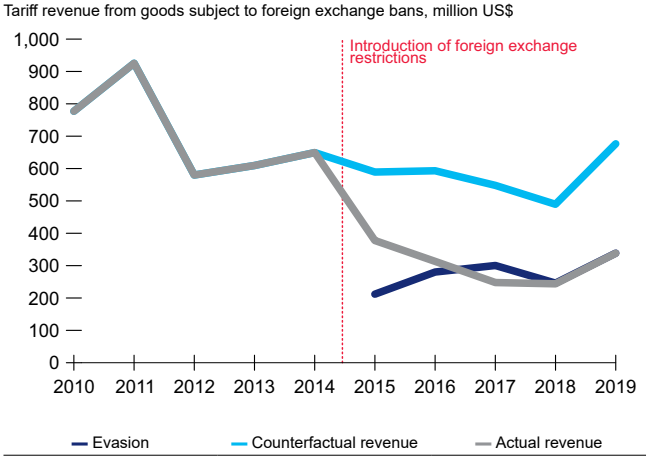
44 The graph shows average log evasion gaps, defined as log exports to Nigeria reported by source country minus log imports recorded in Nigeria, for different categories of goods. "High tariffs" are defined as tariffs in excess of 10 percent (the median). "Ban" denotes that the import of goods into Nigeria is prohibited. "Foreign Exchange Restriction" indicates goods for whose import foreign currency cannot be obtained. Sample period: 2010–19.

FIGURE 2.17. Impact of FX restrictions on revenues



Source: Authors' own calculations using COMTRADE.

FIGURE 2.18. Without tariff evasion, Nigeria's revenues would be significantly higher[45]



Source: Authors' own calculations using COMTRADE.

2.2.3 Import restrictions are pushing millions of Nigerians into poverty

The effects of trade policies go beyond revenues and extend to distributional impacts on household welfare, especially through consumption and jobs. Trade can contribute to poverty reduction, although its impact depends on where people live, their occupations and income. In turn, reforms in trade policy—as in all other areas of policy—create winners and losers. This occurs through two key channels. First, trade policies determine the prices that households pay for the goods that they buy. Second, trade policies influence households' income-generating activities.[46] Changing prices alters the incomes of households that produce those goods, while international competition may alter the mix of jobs available in the economy (Engel et al., 2021). Estimating the importance of these channels relies on microdata on consumption, incomes, and jobs (Atkin et al., 2020).

Previous work has shown that Nigeria's import prohibitions are strongly linked to increases in poverty (Cadot et al., 2012; Dabalen and Nguyen, 2018). Further work carried out by Artuc et al. (2022b) seeks to establish the impact of various trade restrictions in place in Nigeria on domestic prices and household welfare.[47] The estimated coefficients for tariffs and FX restrictions are positive and statistically significant. The magnitude of the impact is also notable: a 10 percent reduction in tariffs would bring prices down by 8.88 percent.

45 The graph depicts the evolution of tariff revenue of goods subject to foreign exchange bans (introduced in 2015). The dotted line "counterfactual revenue" depicts the estimated revenue that would have been collected had foreign exchange bans not been introduced. The red line "Evasion" denotes the tariff evasion induced by the introduction of foreign exchange restrictions. Sample period: 2010–19.

46 There are also indirect effects. For example, trade can alter the mix of jobs—and the earnings from those jobs—available in the economy through its impact on private investment, and by exposing domestic firms to international competition. Trade policy may also indirectly influence household welfare because tariffs are a source of government revenue, which could determine spending on health, education, and social protection, and may be reduced as trade is liberalized.

47 To link trade barriers and prices, the authors use detailed CPI prices for Nigeria for the period 2015–17. Monthly data on prices for 724 products across all Nigerian states, in both urban and rural areas, is available. Prices then vary at the state-month-area-product level. We combine this price data with information on trade restrictions including tariffs, levies, FX restrictions, and import bans. The regression model is:

$$log(p_{its}) = \beta_1 Tariff_{it} + \beta_2 levy_{it} + \beta_3 forexit + \beta_4 ban_{it} + \lambda_i + \lambda_t + \lambda_s + \varepsilon_{its}$$

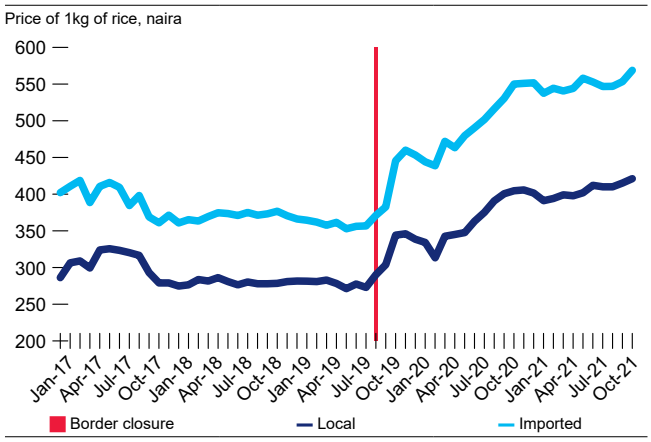
where i indexes products, t, time, and s, states. λ_i, λ_t, and λ_s are the corresponding product, time, and state fixed effects. We also include fixed effects for rural/urban areas. Fixed effects are included sequentially. In all specifications, we include product fixed effects. In doing so, at this stage, the variables levies and bans drop from the regression. Levies are omitted because all products have the same levy across the period, so there is no within variation to exploit. Similarly, there is no variation in bans during 2015–17.

Distortionary trade policies can decrease overall purchasing power and, in turn, increase poverty.[48] The 2019 border closure, for example, coincided with a significant rise in inflation (FIGURE 2.19), including for domestically produced goods. In principle, households' exposure to protectionist price shocks depends on the specific goods that they buy; but it is apparent that buying local goods, which poorer Nigerians might do more, offers little insulation against such price shocks. Indeed, when Nigeria's land borders were closed in 2019, the prices of both imported and local varieties of rice increased. Since international and domestic markets are so integrated, it is hard to escape the price increases and purchasing power drops from protectionist policies.

The price increases recorded between mid-2019 and 2020 following the border closure meant that households needed to spend around 1.8 percent more to maintain the same level of welfare. Although welfare losses during this time were not fully attributable to the border closure, they could have increased poverty by around 1.1 percentage points. This is estimated by calculating the "compensating variation", i.e., the amount of money needed to maintain household welfare at the same level while prices rise (FIGURE 2.20).[49]

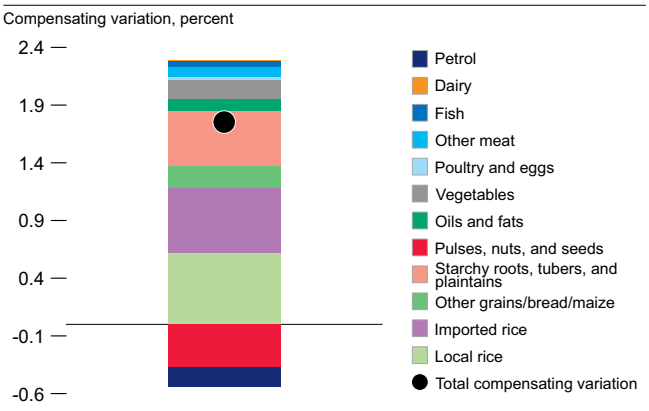
Import bans caused the prices of affected goods to increase by as much as 37.5 percent.[50] Conversely, the removal of FX restrictions would lead to sizeable price reductions (Artuc et al., 2022b). This is in line with previous findings in the literature: Treichel et al. (2012) estimated that replacing import bans with tariff duties would result in a 9.4-percent increase in household real income for all income groups, and a 10-percent increase for the first (poorest) quartile of the income distribution. This is because import prohibitions hurt poorer households relatively more. The largest welfare gains for households across all income groups would come from eliminating the import ban on household supplies, followed by that on textiles and clothing. More recently, Dabelan and Nga (2018) estimated that eliminating import bans would reduce national poverty rates by as much as 2.6 percentage points.

FIGURE 2.19. The price of both imported and domestic rice increased after the border closure



Source: 2018/19 NLSS (for consumption data), NBS (for price data), and World Bank estimates.
Note: Figure shows price movements for the goods labelled "Rice local sold loose" and "Rice, imported high quality sold loose" in NBS price data.

FIGURE 2.20. Changes in welfare and poverty linked to price changes after the border closure



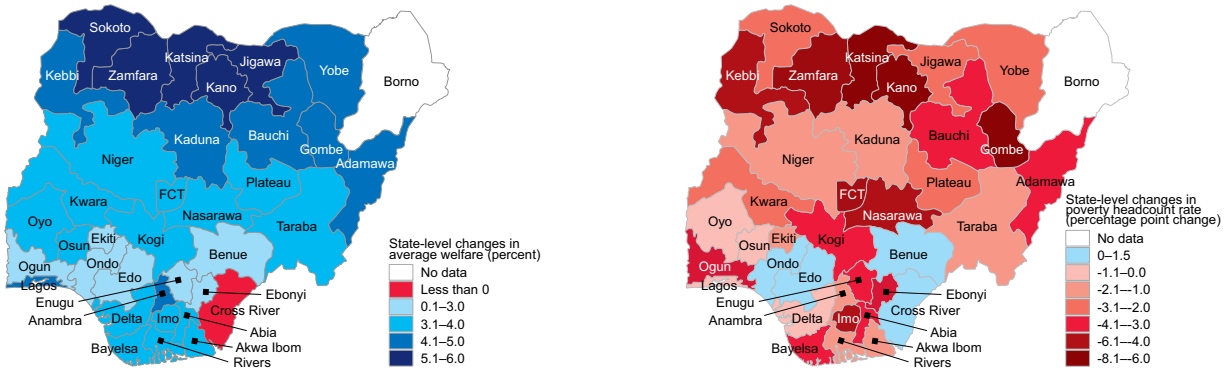
Source: 2018/19 NLSS (for consumption data), NBS (for price data), and World Bank estimates.
Note: Estimates exclude Borno. Welfare losses calculated for purchased goods only; own-produced items are excluded from the calculations.

48 is section in part draws on the World Bank's (2022a) Nigeria Poverty Assessment.

49 This can be calculated by multiplying the change in price for each good—from NBS price data—by the share of the consumption basket devoted to purchasing that good—taken from the 2018/19 NLSS. In previous analysis, including the Nigeria Development Updates from June 2020 and June 2021 (see World Bank 2020 and World Bank, 2021), purchased food and own-produced food were not separated out. However, here the analysis focuses on purchased food only. This is because only purchases would be exposed to price shocks.

50 Preliminary World Bank estimates.

FIGURE 2.21. The impact of liberalizing trade would vary by state depending on what households consume and produce



Source: 2018/19 NLSS (for consumption data), NBS (for price data), Humanitarian Data Exchange (for map shape files), and World Bank estimates.
Note: Estimates exclude Borno. Poverty calculated using Nigeria's national poverty line. Income and poverty changes were calculated using the HIT model, in which 2018/19 NLSS data were incorporated. Income captured by households' consumption, a measure of their welfare. NBS price data from 2015 to 2017 and information on previous trade policies were used to estimate the pass-through from trade policies to prices.

Reductions in tariffs and levies are likely to lead to increased welfare. According to an analysis of the household impacts of tariffs, fully liberalizing trade would increase household income—the amount of goods households can buy in Nigerian naira terms—on average, by 3.8 percent and reduce the share of people living in poverty by 2.3 percentage points.[51] This is because liberalizing trade would lower prices, and the resulting gains in purchasing power outweigh any income losses for households producing the goods that end up being cheaper.

Even without full liberalization, targeted reductions to trade barriers for key consumer goods would make a major difference. If trade levies (i.e., taxes on imports that are additional to tariffs) on rice, sugar and wheat were reduced by 50 percent, overall welfare would increase by 0.8 percentage points and extreme poverty could decrease by 0.4 percentage points (FIGURE 2.21). However, these results vary from state to state, with some northern states seeing the largest total reduction in poverty. In Benue and Kebbi, on the other hand, poverty would increase slightly as gains in terms of consumer expenditure would not exceed losses for producers.

2.2.4 Import restrictions increase production costs for firms

The current import tax scheme results in high production costs and high levels of protection for domestic industries. High taxes on intermediates and capital goods translate into high production costs for domestic industries. This occurs either through a direct increase in the cost of imported production inputs, or through an increase in the market power of domestic producers of intermediates, who face less foreign competition and can charge higher prices for their products. Similarly, high taxes on consumption goods protect the domestic industries that produce those goods from foreign competition by increasing the cost of imported varieties. Although the current tariff schedule grants some protection to most industries, industrial sectors such as food processing, textiles, and motor vehicles benefit the most, while commodity producers (minerals, raw milk, sugar cane, bovine meat) benefit the least.

The average industry in Nigeria pays 13.7 percent more for its inputs than what it would have paid in the absence of tariffs and other related taxes (Ganz,

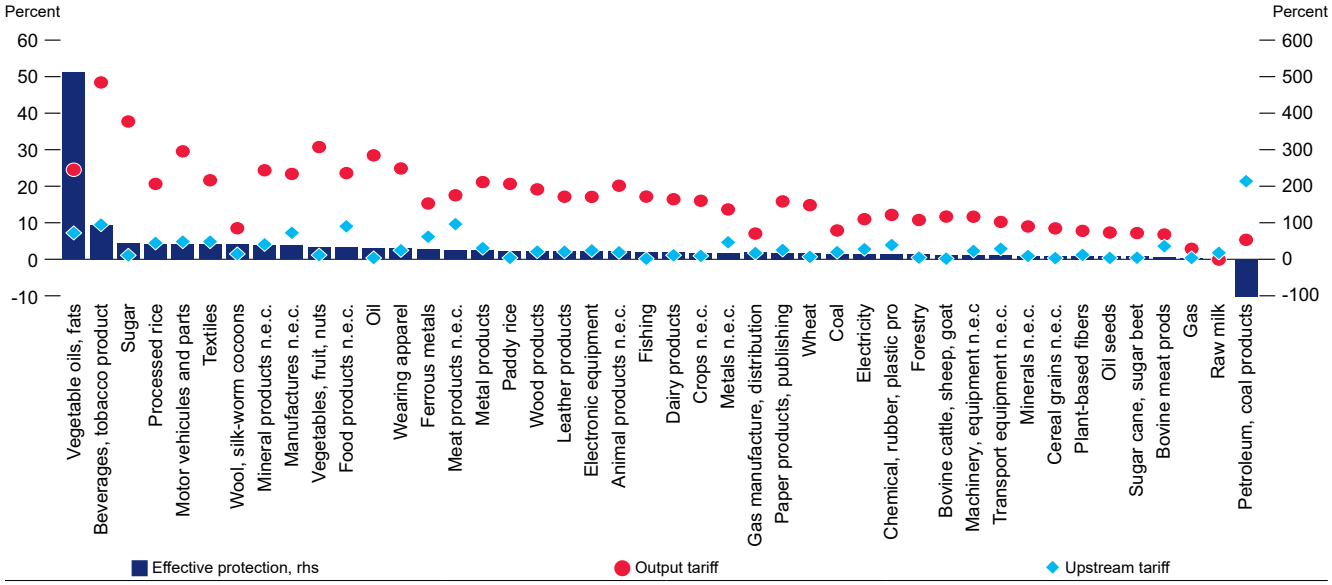
51 New analysis using the "household impacts of tariffs" tool looks at the value of what households produce as well as what they consume. The analysis considers what would happen if trade were fully liberalized in Nigeria: while this is unlikely, at least in the short run, it remains a useful benchmark for assessing trade policy.

2021).[52] The total output of an industry can be divided into three parts: (i) the intermediate consumption of commodities (goods); (ii) the intermediate consumption of services; and (iii) the value added. This offers three ways to measure how much higher production costs are due to the existence of import taxes in Nigeria: (i) as a share of total output; (ii) as a share of intermediate consumption of both goods and services; or (iii) as a share of the intermediate consumption of goods. The average increase in total output costs (i.e., the upstream tariff) across industries is 3.2 percent; the average increase in the cost of all intermediates is 8.2 percent; and, lastly, the average increase in the total cost of goods used as intermediates is 13.7 percent (FIGURE 2.22). Higher production costs in turn make it difficult for Nigerian firms to compete against producers based in countries that levy lower tariffs on inputs.

Trade policy reforms that reduce tariffs on upstream sectors can help firms become more competitive and better integrated into GVCs. In modern production processes, firms rely on imported inputs to produce finished goods. These inputs are manufactured in multiple locations, and cross borders many times before they are assembled into a final product. For example, a mobile phone manufacturer will require as inputs a circuit board, keyboard and display produced by upstream manufacturers in other countries. Tariffs on these inputs would increase their cost, which would be passed on to the cost of the mobile phone. Tariffs can, in turn, affect the competitiveness of firms in two ways: they increase the prices of imported inputs necessary for completing their products, and they reduce the incentives for firms to export by making the

FIGURE 2.22. Import taxes and restrictions result in higher production costs and domestic industry protection[53]

Output tariffs, upstream tariffs, and effective protection in Nigeria, by industry



Source: Ganz (2021) based on ASYCUDA and NICIS data and the upstream tariff simulator (UTAS) simulator.

52 This analysis draws on two tools developed by the World Bank: the Tariff Reform Impact Simulation Tool, which allows for the estimation of the impact of tariff reform on fiscal revenue; and the Upstream Tariff Simulator (UTAS), which allows us for the estimation of the impact of tariff reform on production costs and effective protection.

53 Industries are classified according to global trade analysis project and ranked by effective protection. Inputs for UTAS: Nigeria's effective import duties (all collected import taxes, excluding VAT, as a percentage of imports) and 2006 global trade analysis project input-output table for Nigeria, using the homogeneous goods framework (perfect substitutability between imported and domestic varieties). For more details, see UTAS. Effective protection is defined as the difference between the output tariff and the upstream tariff, divided by the share of value added in the industry's output.

domestic market artificially more attractive (via effective protection) than the unprotected export market.

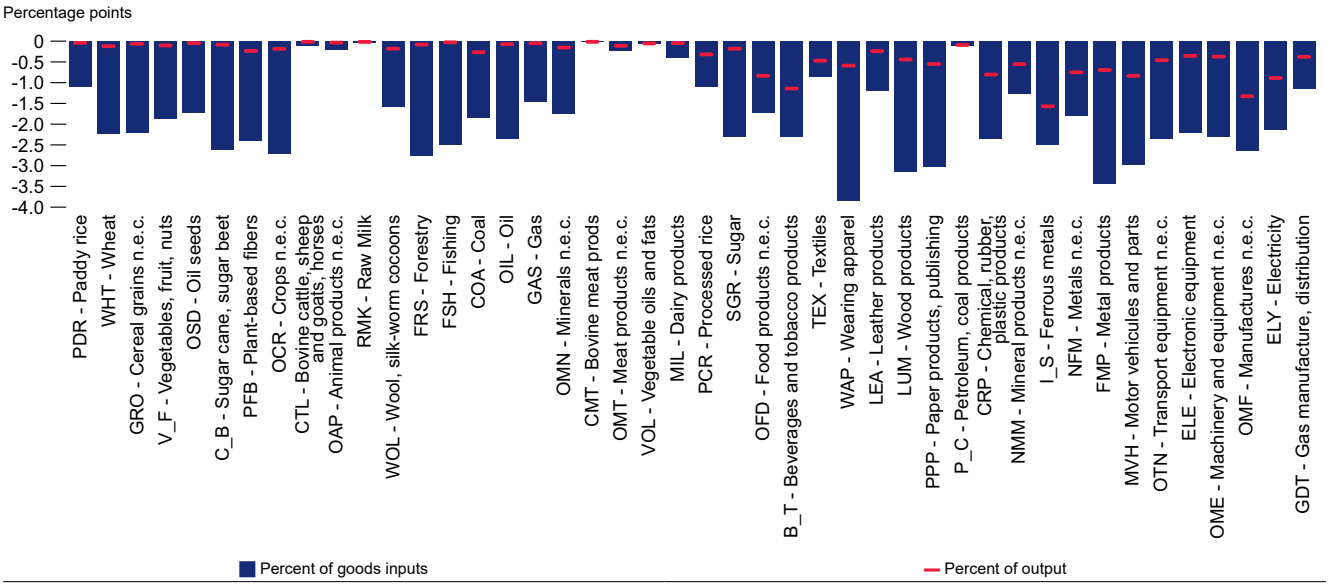
The FGN could reform its tariffs to reduce production costs, while still preserving fiscal revenue. While Nigeria is somewhat constrained in the setting of tariffs by the five bands in the ECOWAS Common External Tariff (i.e., 0, 5, 10, 20 and 35 percent), it still has some flexibility of where to set tariffs within the tariff band structure and how high to set levies beyond these tariffs. We consider a hypothetical scenario in which Nigeria sets effectively collected import duties (tax collected as a share of imports) on consumer goods at 17 percent (a flat collection rate almost 3 percentage points below the current average statutory tariff), while cutting import duties on intermediates by 50 percent. This would require removing numerous exemptions on consumer goods while cutting the tariff for intermediates. Tariff revenue collection would increase slightly, but most of that increase is compensated by a reduction in VAT collection associated with slightly fewer imports. Overall, the proposed change implies a 0.5-percent increase in total revenues. However, this reform would reduce the production costs of most industries (FIGURE 2.23). The upstream tariff as a percentage of total output falls on average 0.3 percent across industries, and 1.8 percent for goods used as production inputs. While this is just an example, it highlights that there is not necessarily a trade-off between tariff reforms that support the competitiveness of local industries and revenue collection.

2.3 Finding the right balance: how industrial and trade policy can contribute to Nigeria's development aims

Further continental integration can help enhance the competitiveness of Nigeria's manufacturing sector. By making manufacturing more competitive, Nigeria could leverage regional market integration to achieve economies of scale, lower costs, and increase its broader international competitiveness. Regional value chains can, in turn, offer a stepping-stone toward GVCs. Increased competitiveness from regional integration can lead to greater diversification of export products and markets,

FIGURE 2.23. Nigeria could reform its tariff schedule to reduce production costs while increasing revenues

Impact of tariff schedule reform removing exemptions on consumer goods and reducing tariffs on intermediate goods on upstream tariff, by industry



Source: Ganz (2021) based on ASYCUDA and NICIS data and the UTAS simulator.

and incentivize domestic producers to compete with foreign firms. The vibrant entrepreneurial ecosystem in Nigeria would benefit from being connected to technological and process innovations, know-how, diaspora mentorship, and research and development (R&D). This could include supporting existing networks of R&D institutions to foster innovation.

Trade offers a vital, but often untapped, pathway to poverty reduction. Through its effects on investment, technology transfer, and competition, trade can help growth, boosting job creation, increasing domestic value added, and reducing the price of goods that Nigerians buy. All such effects may contribute to reducing poverty. However, the benefits from trade are not automatic. There is a need for careful sequencing, broad consultation, and finding a way to maximize the gains from trade while taking proactive measures to support the adjustment process. This includes understanding how to facilitate labor mobility, as well as the importance of complementary policies such as business environment reforms and supporting skills development. The following policy options provide an overview of the way forward.

Nigeria's transition toward a more diversified, productive, and inclusive economy will require strong implementation. Three actions need to be taken. First, current macroeconomic and trade policies are not conducive to diversification and would benefit from adopting a less heavy-handed, interventionist approach. In particular, there is an urgent need for significant trade policy reforms to address import restrictions that shield some incumbents from competition but hurt consumers and most firms, while constraining government revenues. Second, high domestic and international transport costs and weak trade facilitation infrastructure create significant operational obstacles for businesses both behind and at the border. Third, it will be essential to strengthen the institutional and policy infrastructure to support reforms and their implementation. Addressing these issues will help define Nigeria's future as either an economic and political leader in Africa or a large but stagnating economy that continues to 'muddle through'.

Key Policy Options

Why Reforms Are Needed	*Which Reforms Are Critical*		*What Impact These Reforms Could Have*
	Short-Medium Term (6–18 months)	*Medium-Long Term (18–36 months)*	
Reform trade policy to safeguard revenues, reduce poverty and support producers			
• **Nigeria urgently needs to reform its restrictive trade policy that negatively impacts poverty, revenue, and domestic competitiveness of firms**	• Facilitate imports of staple foods and medicines by removing them from the list of import bans, and applying tariffs that reflect the ECOWAS Common External Tariff. • Review FX restrictions and import bans on non-food goods, and assess the implication of alternative policies such as replacing them with high tariffs. • Review tariffs to reduce the costs of key inputs for domestic producers.	• Following the review of existing FX restrictions and import bans, replace them with tariffs. • Reform tariff schedule to reduce input costs, including by reducing the number of duties and charges on imports.	• Positive impact on tariff revenues and lower levels of smuggling • Prices for many key products would be lower, allowing consumers to increase their consumption and reduce poverty • Cheaper intermediate inputs for many industries would foster substantial growth and job creation in these sectors

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*		*What Impact These Reforms Could Have*
	Short-Medium Term (6–18 months)	*Medium-Long Term (18–36 months)*	
Reform trade policy to safeguard revenues, reduce poverty and support producers			
• **Nigeria will stand to gain from regional integration and the implementation of the AfCFTA at the federal and subnational levels**	• Improve awareness and consultation process around AfCFTA, and advance the implementation of a National AfCFTA Strategy. • Assess compliance and implementation of the AfCFTA at the federal and state levels, and continue negotiations on trade in services.	• Strengthen Nigeria's trade policy management, agencies' implementation capacity and performance surveillance. • Develop a time-bound program to promote the productivity and competitiveness of domestic manufacturing firms to support their transition to a more liberalized trade policy environment under the AfCFTA.	• Stronger awareness of trade opportunities through the AfCFTA • Improve the competitiveness of the manufacturing sector
Reducing international trade and transport costs			
• **Nigeria will benefit from reforms aimed at eliminating high trade costs and improving participation in regional value chains by minimizing distortions resulting from NTMs**	• Identify and publicize trade-related fees and levies that can impede domestic exporters' competitiveness and limit their market access. • Advance the simplification and harmonization of documents, streamline and automate procedures, and improve governance, impartiality of decision-making, and availability of information. • Streamline import documentation requirements and enhance the transparency and efficiency of customs procedures, speeding up clearance time. • Review NTMs and the status of the implementation of the WTO TFA. • Ensure the implementation of ECOWAS SIGMAT (a regional transit module to exchange transit information between ECOWAS customs clearance systems). • Address bottlenecks such as port processes and transportation costs.	• Review and eliminate trade-related fees such as haulage fees, and publish fees for domestic and international trade. • Expedite implementation of reforms required for Nigeria's full alignment with the WTO TFA (high- and medium-priority measures) under the AfCFTA. • Introduce National Single Window. • Put in place a Trusted Trader Program that makes processes easier and smoother for pre-approved businesses. • Establish database for NTMs and review periodically with private sector consultations. • Improve trade logistics and transport regulations, and soft/hard infrastructure. • Continue to expand the capacity of ports.	• Transparency and elimination of trade-related fees at the state and federal levels • Lower trade costs for businesses and increased participation in regional value chains • Improved trade facilitation would provide an expanded platform for Nigerian manufacturers and service providers to connect with regional and continental value chains. • Improved transit information among ECOWAS members • Periodical review of NTMs and trade-related bottlenecks, and improved compliance with the WTO TFA

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*		*What Impact These Reforms Could Have*
	Short-Medium Term (6–18 months)	*Medium-Long Term (18–36 months)*	
Creating an appropriate institutional infrastructure to support implementation			
• **Nigeria lacks a strong institutional framework that enables the formulation and implementation of trade policy** • **Nigeria's approach is based on an outdated policy framework and relies on numerous ad-hoc decisions**	• Complete the ongoing trade policy review by clarifying roles and responsibilities in trade policy formulation, and creating an institutional environment that promotes domestic business competitiveness, export diversification, and growth. • Review the institutional architecture around Nigeria's trade policy, and identify bottlenecks that can improve trade policy formulation and independence. • Review and update the trade policy legal framework, including by reviewing, updating or eliminating outdated laws, and establishing a more effective monitoring framework to evaluate the impact of trade policy.	• Implement the new trade policy that supports export diversification and competitiveness. • Improve trade policy implementation through strong institutions. • Establish an implementation roadmap to ensure coordination at the federal and subnational levels, among ministries and private sector organizations through consultation processes. • Clearly delineate the role of different institutions in the trade policy process, and improve coordination.	• A more predictable trade policy with fewer ad-hoc exemptions could increase investment and production efficiency, as well as support trade diversification and competitiveness • Independence on trade policy and lower risk of ad-hoc import restrictions • Coordination among ministries will create a favorable environment for export diversification and competitiveness by reducing the institutional bottlenecks related to trade policy formation

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Note 3: Investing in Adolescent Girls to Defuse Nigeria's Demographic Time Bomb

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Note 3: Investing in Adolescent Girls to Defuse Nigeria's Demographic Time Bomb

Summary: As Nigeria enters a period of rapid expansion of the working-age population, there is a window of opportunity to benefit from the "demographic dividend", a period during which the share of those who are working starts to outnumber the share of young and old dependents, and the increase in labor supply boosts economic growth. However, Nigeria's transition into this window of demographic opportunity has been sluggish. Nigeria's persistently high fertility rates, especially in the Northern regions of the country, among adolescent girls, among the poor, and among those with low education attainment, threaten to derail the demographic transition in the country. Poverty, low prevalence and demand for modern contraception, and a lack of quality secondary schools and job market opportunities all contribute to high rates of teenage pregnancy, early marriage, and low educational attainment among Nigeria's adolescent girls. To realize the demographic dividend, Nigeria must kickstart the stalled demographic transition process and ensure that the children of today have the means to grow into healthy and productive adults. On these fronts, Nigeria's performance thus far fares poorly compared with its structural and aspirational peers. Policy recommendations center around the need for Nigeria to focus its efforts and resources on ensuring that Nigeria's adolescent girls remain in school longer, and are provided opportunities and services to enable their school-to-work transition.

3.1 Introduction and Context

Nigeria's demographic transition has stalled, prolonging its placement as a "pre-dividend" country with the decline in fertility rates lagging other countries and regions.[54] Nigeria accounts for 20 percent of the population of SSA and is projected to be the third-most-populous country in the world by 2040, with over 400 million inhabitants. Nigeria's population structure, however, continues to be heavily skewed toward young dependents because of high fertility rates. FIGURE 3.1 (Panel A) plots the rate of decline in Total Fertility Rate (TFR)[55] over the past two decades among countries on the African continent and provides three categories: (i) countries where TFR decline has been less than 0.05 per year are categorized as having a "stalled" transition; (ii) countries where TFR decline has been between 0.05 and 0.1 per year are categorized as "early transition"; and (iii) countries where TFR decline has been more than 0.1 per year are categorized as "transition".[56] Nigeria is one of only four countries in Africa with TFR of above 5 and the pace of decline of TFR of less than 0.05 per year along with Niger, the Republic of Congo, and the Gambia. Most other countries with stalled demographic transition have TFR below 3 and mostly lie in Northern Africa (Egypt, Morocco, Libya, Algeria, and Tunisia) and Southern Africa (South Africa, Botswana, and Eswatini).

Nigeria's potential for reaping a demographic dividend is grim owing to persistently high fertility rates. Between 2020 and 2050, Nigeria's working-

54 A country is classified to be in a *pre-dividend* typology when the working-age population is projected to grow within the next 15 years, and when the total fertility rate is above four. *Early dividend* countries follow a similar definition; except they have a total fertility rate below four. *The demographic dividend*, which is in essence an economic surplus, is triggered when, owing to the fast decline of fertility, the working-age population becomes relatively larger and the dependency ratio for young people becomes more favorable.

55 The World Health Organization defines the TFR as the average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman.

56 A decline of TFR of 0.05 per year roughly corresponds to the decline in TFR by one child every 20 years.

age population is projected to increase by 132 million. This represents 20 percent of the expected increase in the working-age population across all of SSA and is second only to India in terms of countries expected to see the largest growth in their working-age population by 2050. Advancements in medical sciences and public health have ensured rapid decline in child mortality rates in Nigeria and SSA. However, the decline in fertility rates has not kept pace with the kind of decline seen in child mortality. Nigeria's TFR has failed to decline substantially over the past five decades. FIGURE 3.1 (Panel C) shows that TFR in Nigeria has declined only 0.7 of a percentage point in the past 30 years, from 6.0 in 1990 to 5.3 in 2018. As might be expected, the TFR is higher in rural areas than in urban areas, but the TFR has only declined by 0.5 of a percentage point in urban areas compared with 0.4 of a percentage point in rural areas in the past 30 years. Comparing Nigeria's trends in TFR with other regions and countries around the globe, FIGURE 3.1(Panel D) shows that the decline in TFR in Nigeria has been sluggish over the past 50 years, lagging the decline in TFR in SSA and other regions across the globe. In comparison, South Africa's TFR declined from 6.0 in 1960 to 2.4 in 2019.

Fertility rates in Nigeria are the highest in the North, among women in the poorest quintile, and among women with no secondary education. FIGURE 3.2 shows the TFR disaggregated by urban/rural, zones, education level of mother giving birth, and wealth quintile. The North-West region in Nigeria has a TFR of 6.6, which corresponds to the second-highest fertility rate among any country in the world, behind only Niger. On average, the state with the lowest TFR is Lagos with 3.4 and the state with the highest fertility rate is Katsina with 7.3. Similarly, TFR among women with no education (6.7) is almost twice the TFR among women who have completed secondary education (3.4), and the TFR among women in the poorest quintile (6.7) is 2.9 percentage points higher than TFR among women in the richest quintile (3.8).

This stall in demographic transition dims Nigeria's prospect for a demographic dividend in the near future. The demographic transition is where the necessary conditions to capture a demographic dividend are created because of declines in child mortality and fertility (see BOX 3.1) and the increase in the share of working-age population compared with the number of dependents. FIGURE 3.1 (Panel B) plots the ratio of the projected working-age population (15–64) to the projected population of young dependents (0–14) in Nigeria and peer countries between 2020 and 2050.[57,58] It shows that in 2050, for every young dependent, Nigeria will only have 1.5 members in the working-age population, compared with 2.1 in Ghana, 2.6 in Pakistan, 3.4 in Indonesia and 4.2 in Bangladesh. In other words, comparator countries will have a higher share of economically active members contributing to the economy than Nigeria.

Adolescent girls are a crucial demographic group that holds the key to fast-tracking Nigeria's demographic transition. There are several reasons why addressing the needs of Nigeria's adolescent girls and empowering them presents Nigeria with the best window of opportunity to harness a demographic dividend. **First**, adolescents in the age group of 10–19 constituted an estimated 23 percent of Nigeria's population in 2020 and will continue to represent more than 20 percent of the population by 2050.[59] **Second**, and similar to TFR, Nigeria's Adolescent Fertility Rate (AFR) of 104 births per 1,000 women aged 15–19 is very high compared with its income level (FIGURE 3.3 Panel B), and substantially higher than the average in the Northern regions of the country.[60]

57 Structural and aspirational peers are identified in the World Bank Systematic Country Diagnostics for Nigeria (2019). Available at: https://openknowledge.worldbank.org/handle/10986/33347.

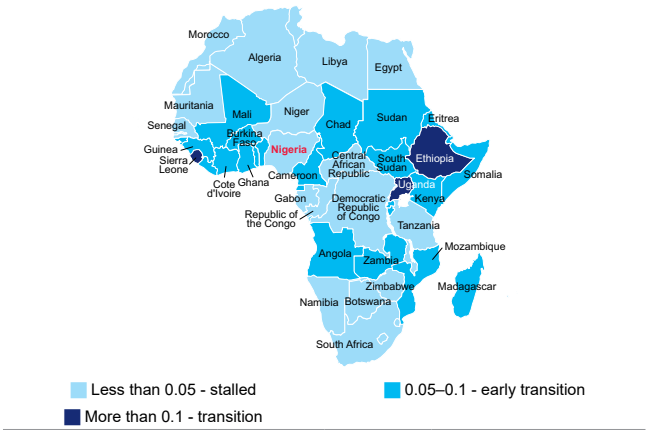
58 Population projections are estimated using the "medium" variant scenario in the World Population Prospects data. Available at: https://population.un.org/wpp/.

59 Population projections are estimated using the "medium" variant scenario in the World Population Prospects data. Available at: https://population.un.org/wpp/.

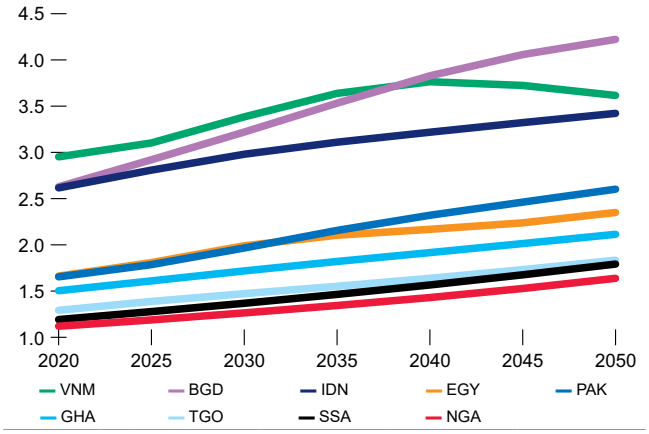
60 The World Health Organization defines the AFR as the annual number of births to women aged 15–19 years per 1,000 women in that age group. It is also referred to as the age-specific fertility rate for women aged 15–19.

FIGURE 3.1. Nigeria's stalled demographic transition

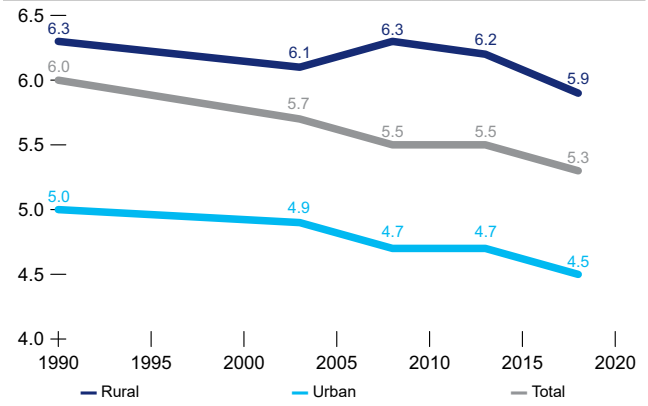
Panel A: Rate of TFR decline over the past two decades



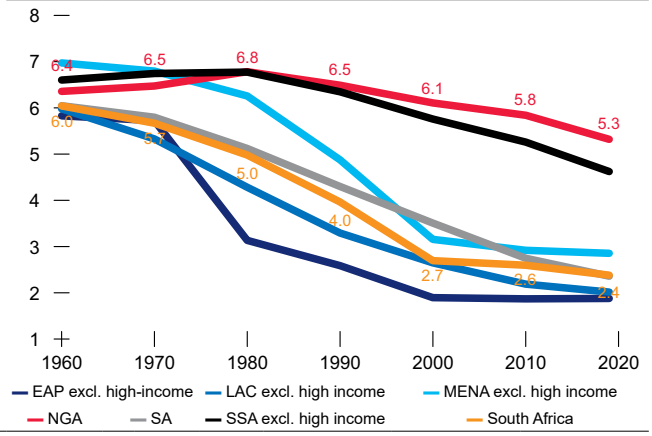
Panel B: Ratio of working age population (15–64) to young dependents (0–14), Nigeria and peer countries, 2020–50



Panel C: Nigeria's TFR, rural and urban areas, 1990–2020



Panel D: Rate of TFR decline, Nigeria and comparator regions and countries, 1990–2020

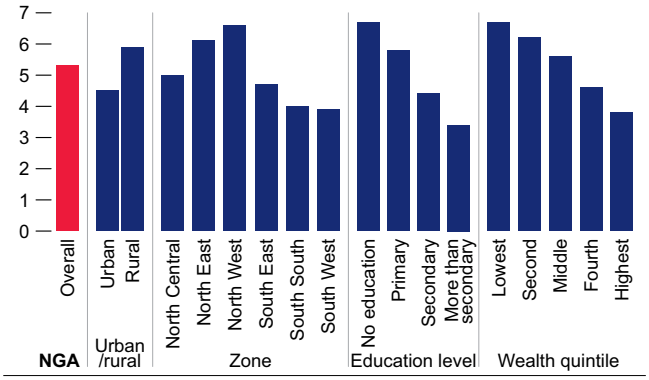


Source: World Bank calculations using data from the World Development Indicators (Panel A; Panel C; and Panel D) and UN World Population Prospects (2019) (Panel B).

In fact, the AFR for four of Nigeria's Northern States (Bauchi, Jigawa, Zamfara, and Katsina) is higher than the country with the highest AFR (Niger has an AFR of 180). Nigeria's AFR has failed to decline below 100 over the past 50 years and the pace of decline lags that of SSA and peer countries. It is also worth noting that Nigeria recorded increases in the birth rates by girls aged 10–14 years between 2007 and 2017 (United Nations, 2020). **Third**, and most importantly, interventions that help adolescent girls reach their full potential by increasing their education levels and skills and delaying childbearing and early marriage have the potential to create a virtuous cycle that improves adolescent and child health, and paves the way for women empowerment, ultimately leading to higher economic growth (Canning et al., 2015).

FIGURE 3.2. The TFR in Nigeria is highest in the North, among females with no education, and among the lower wealth quintiles

TFR in Nigeria, 2018, national and disaggregates



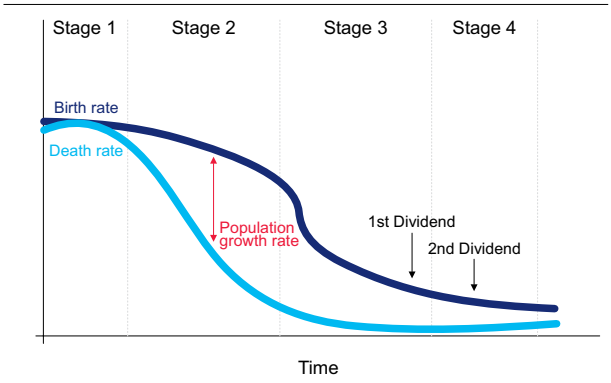
Source: Nigeria Demographic and Health Survey (NDHS), 2018. Total fertility rate for the 3 years preceding the survey among women between the ages of 15–49.

BOX 3.1. What is the demographic dividend and why is it important for accelerated economic growth and development?

A demographic dividend is the economic benefit accrued by a country when it undergoes a rapid decline in child mortality rate followed by a rapid decline in birth rate, resulting in smaller and healthier families, and a youth population empowered and ready to enter the labor market. FIGURE B3.1 shows the four distinct stages of the demographic transition in relation to the birth and death rates in a country.

- The first stage starts and ends with high birth and death rates.
- Death rates start to decline in the second stage owing to advancements in public health and medical sciences aiding in both child survival and adult longevity, while the birth rates continue to remain high.
- The third stage sees a decline in birth rates owing to a decline in child marriage and early pregnancy, and a more widespread use of family planning measures. The first demographic dividend is realized toward the end of the third stage when both birth and death rates reach low levels, resulting in smaller families and increased public and private per capita investment in health, education, and other forms of human capital, and an economic surplus due to an increase in labor supply.
- In the fourth stage of the transition, a possible second dividend could result from continued savings from the bulge cohort resulting in productive investments in the economy.

FIGURE B3.1. The four stages of demographic transition



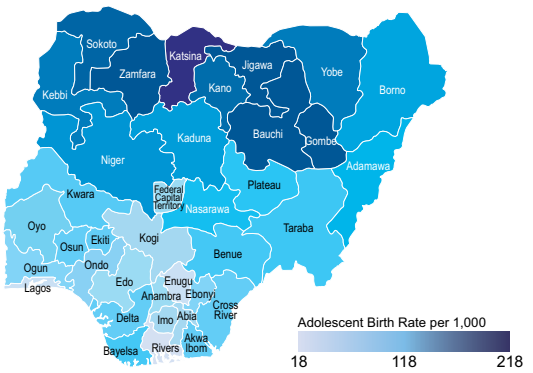
Recent simulations show that a sustained reduction in fertility is associated with higher economic growth. There are various recent examples of empirical work that seek to estimate the impact of reduced fertility on economic growth in Nigeria. For example, a 2017 World Bank simulation analysis finds that a one-child difference in Nigeria's fertility rates by 2050 can lead to a 29 percent increase in real GDP per capita, growing from US$2,777 (constant US$) in 2015 to US$9,362 by 2050 (World Bank, 2017). An earlier simulation analysis by Ashraf et al. (2013) finds similar results and conclude that a decline in TFR of 0.5, phased in over a period of 15 years and relative to a baseline of declining fertility will raise output per capita by 5.6 percent at a horizon of 20 years, and by 11.9 percent at a horizon of 50 years (Ashraf et al. 2013). Karra et al. (2017) add new channels to the effects identified by Ashraf et al. (2013) by incorporating four previously ignored channels: (i) the effect of fertility on savings; (ii) a feedback from education to fertility; (iii) the effect of fertility on health; and (iv) the effect of a more realistic three-sector model with market imperfections. This finds that lowering the total fertility rate by one child per woman almost doubles income per capita by 2060, which is twice the size of the effect found by Ashraf et al. (2013). Drawing on previous research, the World Bank's 2015 report "Africa's Demographic Transition: Dividend or Disaster" identified four features of the third stage of the demographic transition favorable for economic growth: (i) rising share of the working-age population; (ii) increasing physical capital per worker; (iii) rising Total Factor Productivity (TFP); and

Box 3.1 continued

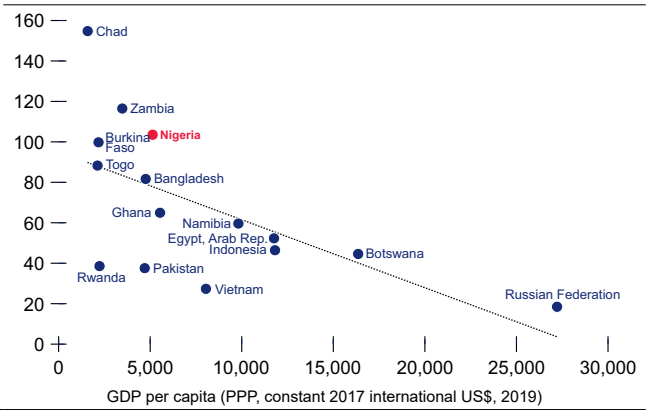
(iv) rising human capital per worker due to rising education. In seminal empirical work seeking to establish causal linkages between demographic change and economic growth in Asia between 1965 and 1990, Bloom and Williamson (1998) find that the overall rate of population growth had little effect on economic growth, but that changes in life expectancy, age structure, and population density have had a significant impact on economic growth rates.

FIGURE 3.3. Nigeria's adolescent fertility rate is significantly higher in the Northern States and is high compared with its income level

Panel A. Age-specific fertility rate for women age 15–19, by State



Panel B. Adolescent fertility rate (2019)



Source: World Bank calculations using data from World Development Indicators.

Realizing the importance of accelerating the sluggish demographic transition in Nigeria, the Nigerian Population Commission (NPC) devised and launched its first Demographic Dividend Effort Index (DDEI) report in 2020, which measures progress and takes stock of recommendations in different sectors.[61] The DDEI consists of six pillars across which Nigeria scores an overall score of 5.4 out of 10, which translates into a moderate level of effort toward cultivating and harnessing the demographic dividend agenda. The DDEI further disaggregates these scores based on sectoral performances and shows that Nigeria devotes a moderately high level of effort to government and economic institutions and the education sector; a moderate level of effort in the family planning and maternal and child health sectors; and moderately low levels of efforts in the labor market and women's empowerment sectors. Overall, the DDEI proposes that achieving progress will require multi-dimensional, multisectoral collaboration to ensure that all aspects of Nigerian society move forward together.

This note shows that Nigeria needs to direct its resources and strategic focus toward adolescent girls to achieve the objective of a high DDEI score, ultimately translating into the harnessing of the demographic dividend agenda. Demographic transition is a necessary precursor to realizing the demographic dividend. Nigeria is currently in a pre-dividend stage with high levels of fertility and must prioritize investments in the well-being of adolescent girls to turn the window of demographic opportunity into a demographic dividend. Prioritizing investment in adolescent girls and women and providing them with opportunities in the labor market will ensure that the next generation of young adults is healthier, better educated, and more able to contribute to economic growth and development.

61 Available at: https://demographicdividend.org/ddeffortindex/.

3.2 Constraints to Demographic Transition through the Lens of Nigeria's Adolescent Girls

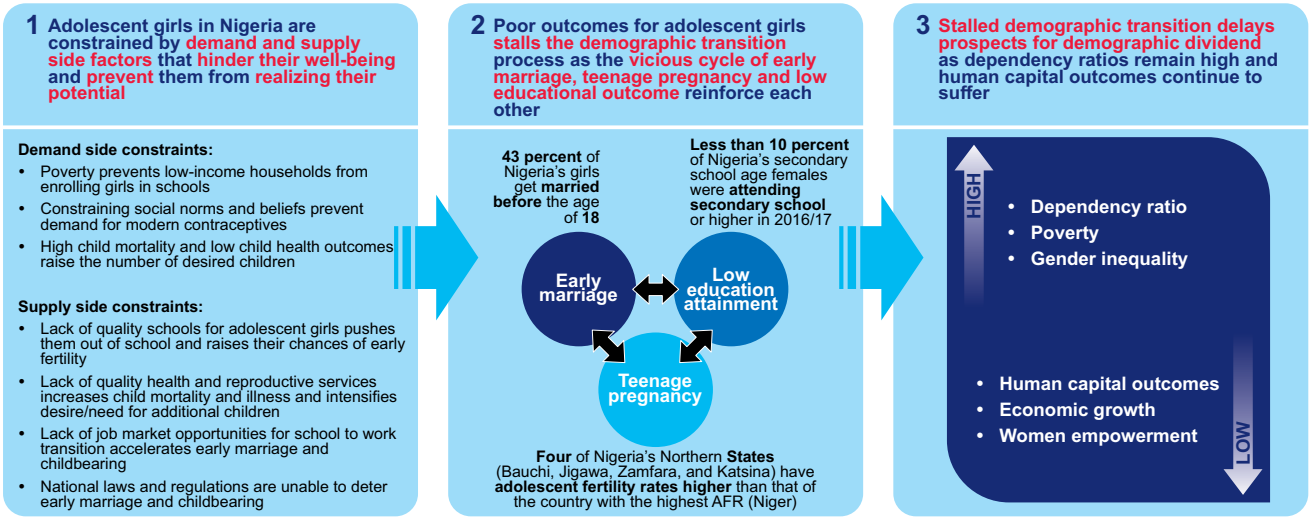
Adolescent girls are viewed as a key demographic group to target to break the intergenerational transmission of poverty in developing countries (Levine et al., 2008). Preceding analysis from Nigeria supports this view. With adolescents likely to be the second-largest demographic group after young children for the foreseeable future, policies that help adolescent girls realize their potential by reducing early marriage and childbearing, and improving their education and skills to enter the labor force successfully, will eventually help Nigeria kickstart its stalled demographic transition process. Under demand-side factors, three constraints are assessed: (i) economic deprivation and poverty; (ii) constraining social norms that curtail demand for family planning; and (iii) low child health outcomes raising the need for more children. Similarly, under supply-side factors, four constraints are assessed: (i) the lack of access to quality secondary schools; (ii) inequity in access to quality health and reproductive services; (iii) the lack of opportunities in the labor market; and (iv) insufficient national laws and regulations. The linkages of demand- and supply-side constraints to adolescent well-being and early marriage, teenage pregnancy, and low educational attainment are established with recent data, where available.

3.2.1 Demand-Side Constraints

A high poverty rate is one of the strongest determinants for early marriage and high fertility rates among adolescent girls. Prevalence of early marriage and teenage pregnancy in Nigeria is much higher in the lower wealth quintiles. FIGURE 3.5 (Panel A) shows that, compared with 68 percent of women aged 20–49 who got married before the age of 18 in the poorest quintile, only 17 percent of women in the richest quintile got married before the age of 18 in 2016/17. Similarly, compared with almost 200 births per 1,000 women aged 15–19 in the poorest quintile, Nigeria reported 35 births per 1,000 women aged 15–19 in the richest quintile.

A high poverty rate also constrains demand for adolescent girls' education. Of all the Nigerians living below the national poverty line in 2018/19, around 76 percent lived in the North-Central, North-West, and North-East regions (World Bank, IFC and MIGA,

FIGURE 3.4. Adolescent well-being, demographic transition, and its consequences for potential demographic dividend in Nigeria

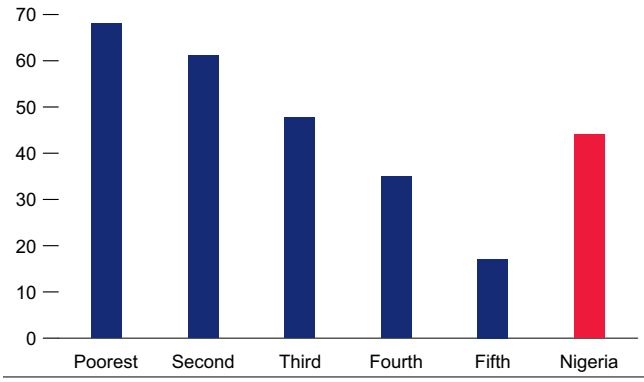


Adopted from: Bergstrom, K. and Ozler, B., 2021. Improving the Well-Being of Adolescent Girls in Developing Countries.

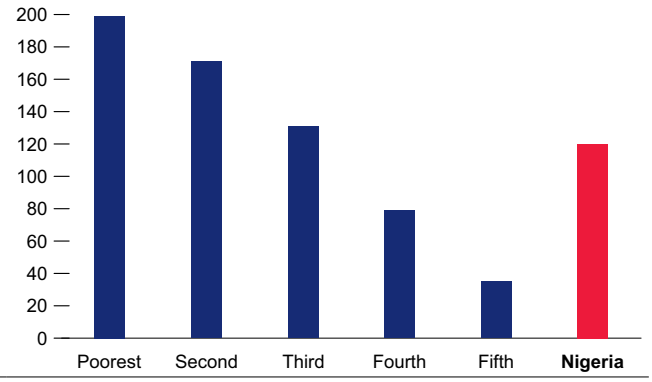
2020). Female educational attainment—one of the strongest predictors for fertility rates—is much lower among females in the North compared with females in the South (FIGURE 3.6, Panel A). In 2016/17, the percentage of Nigerian girls of secondary school age attending school was just 9.3 percent in the poorest wealth quintile compared with 80.6 percent in the richest quintile, a staggering gap of 70 percentage points (FIGURE 3.6, Panel B). For poor households and their families, it is difficult to cover the direct and indirect costs of schooling. Though the Nigeria's Universal Basic Education Program aims to provide nine years of free, compulsory, and universal primary education for all children, the three years of senior secondary education are not free. In 2015, around 18 percent of Nigerian girls aged 6–16 who were out of school reported the monetary cost of schooling as being one of the main constraints.[62] Another constraint identified by families for not sending their daughters to school was losing a key income earner who is critical to meeting their basic family needs, as girls are often more involved in generating family income in rural areas.

FIGURE 3.5. Early marriage and teenage pregnancy rates in Nigeria in 2016/17, by wealth quintile

Panel A. Marriage before age of 18, by wealth quintile



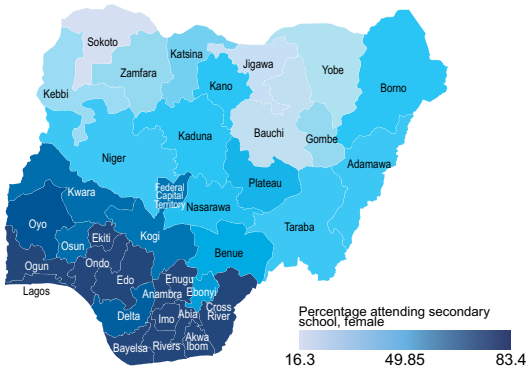
Panel B. Adolescent fertility rate, by wealth quintile



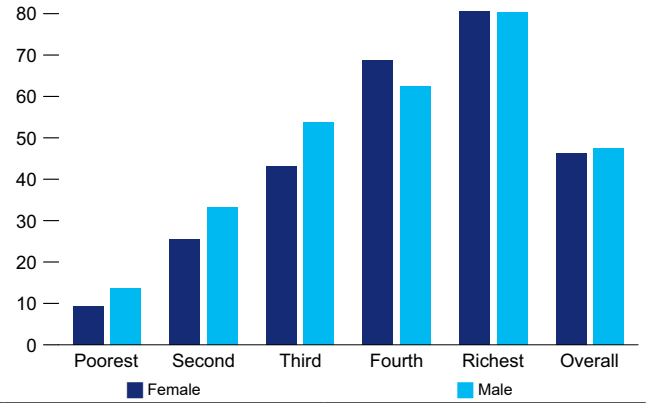
Source: UNICEF, Multi-Indicator Cluster Survey (MICS) 2016/17.

FIGURE 3.6. Percentage of Nigerian secondary school children age attending secondary school or higher, by location and wealth quintile, 2016/17

Panel A. Percentage of female children of secondary school age attending secondary school or higher (adjusted net attendance ratio), Nigeria, 2016–17



Panel B. Percentage of female and male children of secondary school age attending secondary school or higher (adjusted net attendance ratio), Nigeria, 2016–17, by wealth quintile



Source: UNICEF, Multi-Indicator Cluster Survey (MICS) 2016/17.

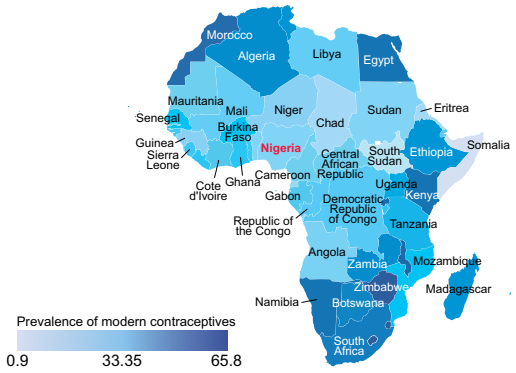
62 2015 Nigeria National Education Data Survey (NEDS). Available at: https://shared.rti.org/content/2015-nigeria-national-education-data-survey-neds.

Compared with the regional average, or structural and aspirational peers, the use of modern contraceptive methods for family planning in Nigeria is low. FIGURE 3.7 (Panel A) shows that only 12 percent of Nigerian women aged 15–49, who were married in 2018, use modern contraceptive methods for family planning, lagging the regional average in SSA (27.5 percent) and considerably behind some of its aspirational peers, such as South Africa (54 percent).[63] The percentage of Nigerian women using modern contraceptive methods has remained largely the same over the past decade, increasing from 10 percent in 2008 to 12 percent in 2018. Compared with the national average, and similar to trends in TFR, there is substantial variation across geo-political Zones and States in the use of modern contraceptive methods. For example, 24 percent of married Nigerian women aged 15–49 in the South-West use modern contraceptive methods compared with 6 percent in the North-West (FIGURE 3.7, Panel B). It is, however, important to note that even in the South, the modern contraceptive prevalence among married women ranges between 13 and 24 percent, which is lower than the national averages in Burkina Faso, Ghana, and Senegal, and lower than averages for low-income countries (29 percent).

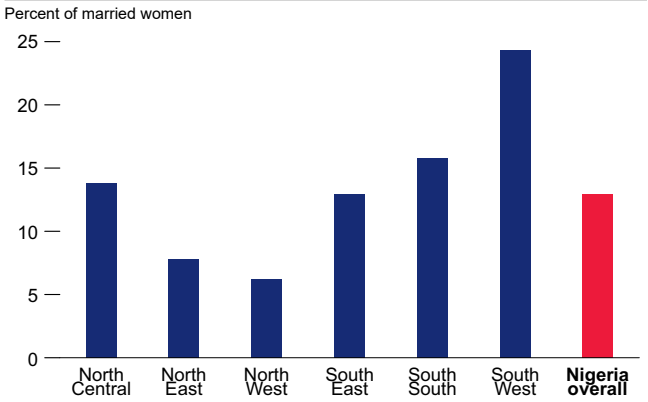
Demand for family planning is especially low for adolescents between the ages of 15 and 19. FIGURE 3.8 (Panel A) shows the trends in wanted and unwanted fertility in Nigeria between 1990 and 2018, and shows that the gap between actual and wanted fertility is very small, reflecting both a desire for large families and relative realization of desired family size. Similar to the use of modern contraceptive methods, there is national variation in demand for family planning. Fifty percent of married women who have more than secondary education demand family planning services compared with 20 percent of married women with no education (FIGURE 3.8, Panel B). Total demand for family planning is 15 percent among married adolescents between the ages of 15 and 19. According to the NDHS, the ideal number of children among adolescents in Nigeria in 2018 is 5.5, higher than the current national TFR of 5.3. For Nigeria to make improvements to its stalled demographic transition process, it is important to address the prevailing social norms that limit demand for family planning services.

FIGURE 3.7. Nigeria has very low prevalence of modern contraceptives nationally and especially in the North East and North West

Panel A. Countries in Africa by contraceptive prevalence, any modern method (percent of married women ages 15–49), last available year



Panel B. Contraceptive prevalence, any modern method (percent of married women ages 15–49), by zones, 2018

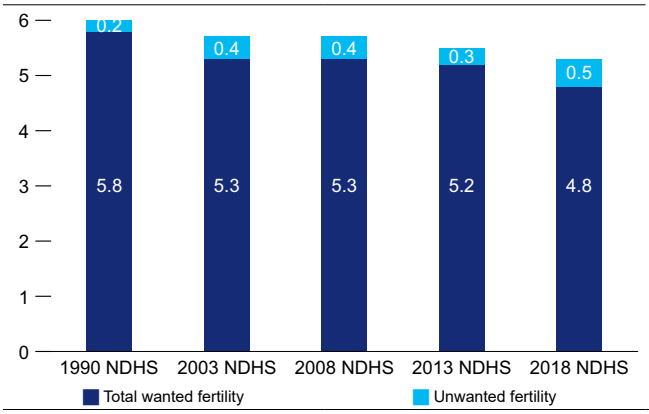


Source: World Bank calculations based on World Development Indicators (Panel A) and Nigeria Demographic and Health Surveys (NDHS), 2018 (Panel B).

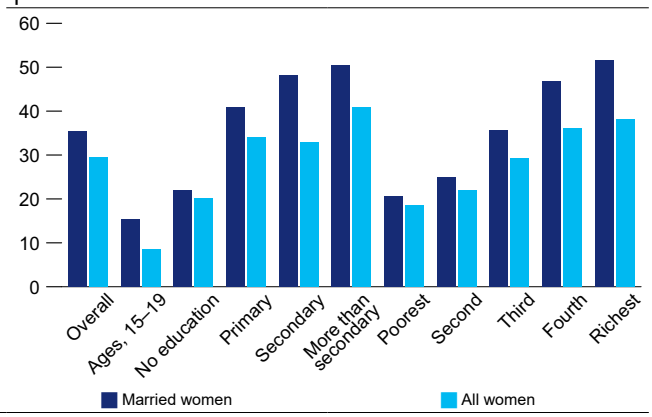
63 DHS, most recent available year is 2018 for Nigeria, 2017 for SSA, and 2016 for South Africa. Available at: https://data.worldbank.org/indicator/SP.DYN.CONM.ZS?most_recent_value_desc=false.

FIGURE 3.8. Most fertility in Nigeria is wanted fertility with low demand for family planning, especially among adolescents

Panel A. Trends in total wanted fertility and unwanted fertility, 1990–2018, Nigeria



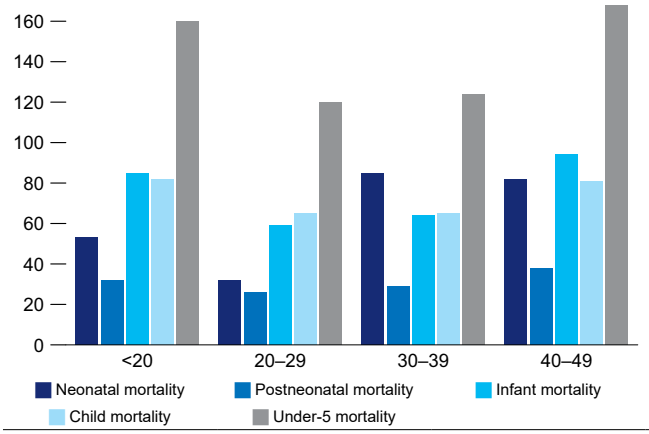
Panel B. Total demand for family planning (met and unmet) of women aged 15–49, by education level and wealth quintile



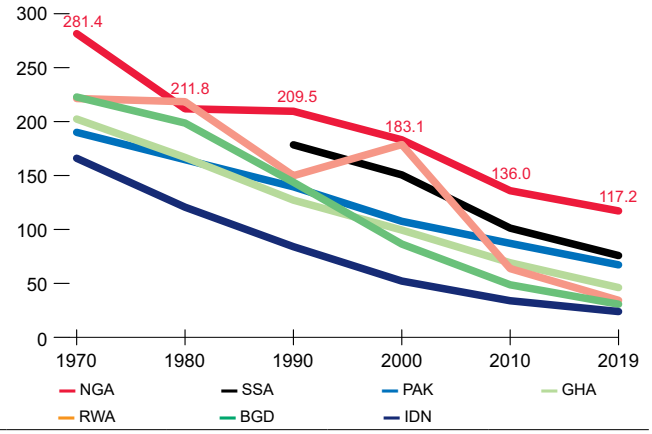
Source: Nigeria Demographic and Health Surveys (NDHS), 2018.

FIGURE 3.9. Nigeria has the highest U5MR in the world despite seeing rapid decline in the past 50 years, largely due to the high prevalence of childbearing among adolescents

Panel A. Neonatal, infant, child, and U5MR by type and mother's age at birth, Nigeria, 2018



Panel B. U5MR (per 1,000 live births), Nigeria and comparator countries/region



Source: World Bank calculations based on Nigeria Demographic and Health Surveys (NDHS), 2018 (Panel A) and World Development Indicators (Panel B).

While there has been progress on reducing the infant mortality rate (IMR) and the under-five mortality rate (U5MR), Nigeria is still among the countries with the highest IMR and U5MR rates, causing women to have more children in the hope that more of them will survive beyond childhood. Nigeria's U5MR declined from 183 per 1,000 live births in 2000 to 117 per 1,000 live births in 2019. Nonetheless, Nigeria has the worst U5MR of any country in the world. In the North-West, U5MR is 187 per 1,000 live births, higher than the national average in 2000.

The risk of neonatal, post-neonatal, infant, child, and U5MR is substantially higher for adolescent mothers. U5MR in 2018 was 160 per 1,000 live births among adolescent mothers compared with 120 among women aged 20–29 and 124 among women aged 30–39. Similarly, the IMR—defined as the number of deaths of children under one year of age and expressed per 1,000 live births—was substantially higher at 85 among births by adolescents compared with 59 among the 20–29 age group and 64 among the 30–39 age group. In developing countries such as Nigeria, wanted fertility

often depends on infant and child mortality rates, as families consider the need for additional children to replace potential losses. Therefore, when a country decreases its infant and child mortality rates, it can trigger a fertility decline as more children survive into adulthood (Conley et al., 2007). Not only are women who begin childbearing early more likely to have more children throughout their lives, but early childbearing also poses a greater risk of death, disease, and illness for the mother and their children, constraining their ability to contribute to society.

More than one-third of Nigeria's children under 5 are stunted, severely denting their hopes of realizing their full potential in the future. In 2018, close to 37 percent of children between the ages of 6 and 59 months in Nigeria were stunted, or too short for their age.[64] The prevalence of stunting widely varies across geopolitical zones. In the North-West, the prevalence of stunting is 57 percent, or 20 percentage points more than the national average. In contrast, the prevalence of stunting is 18 percent in the South-East, less than half of the national average. These findings show a high degree of correlation between the status of women in the North where there is high prevalence of early marriage and teenage pregnancy, and the low level of educational attainment among girls. With two out of every five children under the age of 5 stunted, Nigeria's prospects for achieving its demographic dividend in the near term look even more distant, as studies consistently show that stunting during early years of life is associated with lower educational attainment, productivity, and wages during adulthood (McGovern et al., 2017).

3.2.2 Supply-Side Constraints

Close to one in four (23 percent) of primary schools in Nigeria's North do not have a junior or senior secondary school within 4–5 km in their communities compared with 5 percent of primary schools in Southern Nigeria. The expansion of secondary school infrastructure has not kept pace with the rapid growth in primary enrolment, or the rising transition rates to secondary schools.[65] Nationally, there is an acute shortage of secondary schools with only 30,579 junior secondary schools and 21,688 senior secondary schools compared with 131,000 primary schools, implying a ratio of about 4.3 primary schools for every junior secondary school and 6.1 primary schools for every senior secondary school.[66] The lack of secondary schools is significantly greater in the North, with an average of eight primary schools for every secondary school.

The COVID-19 pandemic has further affected access to schooling among Nigeria's adolescents, with girls in Nigeria's North most likely not to return once schools had reopened. A recent World Bank study found that the recent wave of lockdown measures implemented in response to the COVID-19 pandemic reduced children's school attendance after the reopening of schools (Dessy et al., 2020). Children aged 12–18 were less likely to return compared with children in the earlier age-group. More strikingly, when lockdown measures were interacted with the gender of the respondent and the geopolitical zone, estimation results show that COVID-19 lockdown measures disproportionately reduce girls' school attendance probabilities in the North-West zone.

Adolescent mothers are less likely to give birth in the presence of skilled providers and often cite distance to health facilities and a lack of providers as barriers

64 Nigeria Demographic and Health Surveys (NDHS), 2018.

65 Nigeria's education system follows a 6-3-3-4 structure where a potential student going through the structure would spend six years in primary school, three years in junior secondary school, three years in senior secondary school, and four years in a tertiary institution. More available at: https://unesdoc.unesco.org/ark:/48223/pf0000149503.

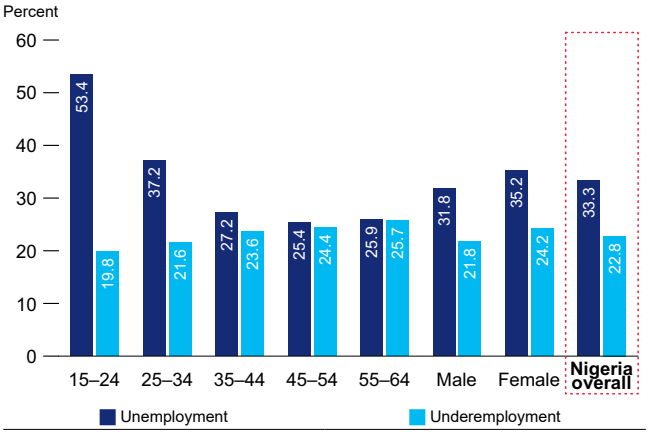
66 Recent school level data at the senior secondary level are not available. The information on the number of senior secondary schools comes from the 2015/16 EMIS school census, which shows 21,688 senior secondary schools nationally..

to accessing health services. Between 2008 and 2018, the percentage of Nigerian women giving birth in the presence of a skilled birth attendant increased from 39 to 43 percent. Despite this improvement, fewer than two in five newborns delivered in Nigeria in 2018 were born in a health facility.[67] In the past five years preceding the survey in 2018, only 31 percent of adolescent mothers delivered in the presence of skilled birth attendants compared with 46 percent in the 20–34 age group and 43 percent in the 35–49 age group,[68] significantly increasing the risk of death and illness for both the child and the mother. In a study of utilization of skilled birth attendance of 400 women in Northern Nigeria, a lack of health-care providers and a lack of supplies and equipment were found to be major barriers to accessing skilled birth attendance along with poverty (Adewemimo et al., 2014).

Adolescents and young girls in Nigeria face limited labor market opportunities in their school-to-work transition. According to the National Bureau of Statistics (NBS), Nigeria's youth aged 15–24 faced unemployment rates of 53 percent at the end of 2020 (FIGURE 3.10).[69] Both unemployment and underemployment rates were also higher for women. When women do work, they consistently earn less than men: their hourly wages are 22 percent lower than men's, women farmers produce 30 percent lower agricultural outputs on the plots they manage than men, and their businesses earn profits that are 66 percent lower than male-owned businesses (World Bank, 2022). Recent research shows that unemployment can accelerate the transition to motherhood for women (Andersen and Özcan, 2021). In Nigeria, about 65 percent of working women in households with children under 5 worked fewer than 40 hours per week, compared with 57 percent of working women in households without children under 5 (World Bank, 2021).

FIGURE 3.10. Nigeria's youth faced unemployment rate of 53 percent at the end of 2020

Unemployment and Underemployment rates, by age-group and gender, Q4 2020



Source: National Bureau of Statistics (NBS).

Not only do poor labor market outcomes discourage young women from participating in the labor market and increase their likelihood of having more children, but they also detract from their contribution to the economy, reducing the prospects for a demographic dividend. Poor female labor market outcomes and high fertility rates reinforce each other. Higher women's labor force participation, especially when combined with secondary education completion, is associated with lower fertility rates, while higher fertility rates tend to decrease women's work rates (Bloom et al., 2009). Higher earnings for women in the labor force have the potential to further decrease fertility by increasing the opportunity cost of each additional child. It is therefore critical to promote policies that enable young women in Nigeria to gainfully participate in the labor market by: (i) ensuring that girls remain in school and transition into adulthood with the skills they need to be productive; and (ii) addressing the main constraints to women's earnings and labor force participation.

67 Nigeria Demographic and Health Surveys (NDHS), 2018.

68 *Ibid.*

69 NBS defines unemployment rates as the percentage of the labor force population who could not find at least 20 hours of work in the reference period.

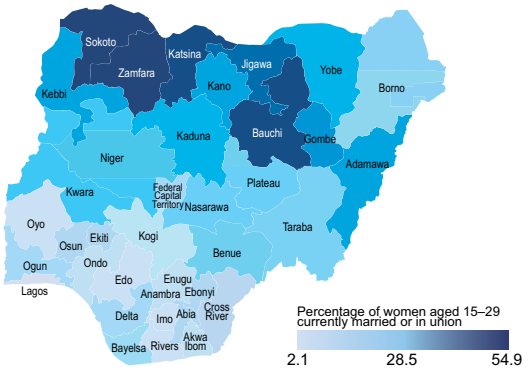
Despite the existence of national laws and the ratification of relevant international and African treaties, child marriage continues to plague Nigerian society with little decline in some states. Nigeria established the Child Right Act in 2003 to bestow the same human rights afforded to Nigerian citizens by the 1999 Constitution to its children. Part III of the Child Rights Act includes protection from child marriage, as well as the punishments for the act to the adult parties involved. However, only 26 out of Nigeria's 36 states have so far adopted the Act, while 10 Northern states—where child marriage rates continue to be high—have yet to adopt the Act (Human Rights Watch, 2021). Even in some of the Northern states that have adopted the act, the age of majority[70] has been omitted from the Act, making it inadequate to protect children from forced marriages.

As a consequence, Nigeria has one of the highest rates of child marriage in the world, with around 44 percent of Nigerian women currently aged between 20 and 49 married before the age of 18.[71] FIGURE 3.11 (Panel A) shows that Sokoto, Zamfara, Katsina, Bauchi, and Jigawa have the highest prevalence of early marriage, with more than 40 percent of girls currently aged between 15 and 19 already married or in union in 2016/17. Compared with its aspirational and structural peer countries, the prevalence of early marriage in Nigeria is higher than what is predicted by its income level (FIGURE 3.11, Panel B). Even more worryingly, the MICS 2016/17 data also show that around 16 percent of Nigerian girls and women currently aged 15–19 were married before the age of 15. It is estimated that child marriage costs Nigeria about US$7.6 billion in lost earnings and productivity every year (World Bank, 2018).

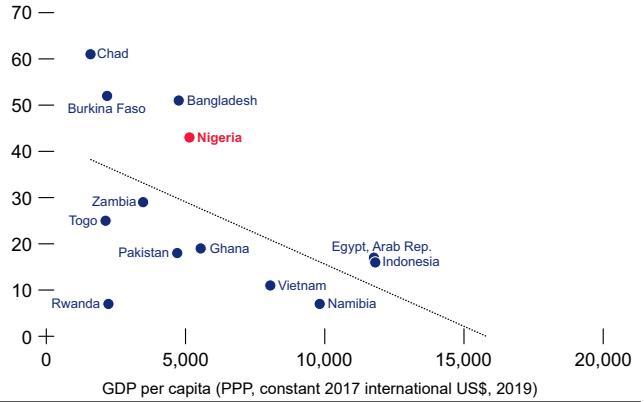
The inability of Nigeria's law and regulations to prevent child marriage also stems from the incongruity between different parts of the Constitution. While the Child Rights Act of 2003 stipulates the minimum age of marriage to be 18, the Constitution on the other hand says that "any woman who is married shall be deemed to be of full age" (CNN, 2019). Efforts to remove this loophole have so far met with stiff opposition in the Nigerian senate, as lawmakers and religious leaders in the Northern states often cite Islam's lack of any age requirement for betrothal as a justification for early marriage (Human Rights Watch, 2021).

FIGURE 3.11. Nigeria has some of the highest prevalence of early marriage in the world with the practice of early marriage rampant in many of Nigeria's Northern states

Panel A. Percentage of women aged 15–19 currently married or in union, by State, 2016/17



Panel B. Percentage of females aged 20–24 married before the age of 18



Source: UNICEF, Multi-Indicator Cluster Survey (MICS) 2016/17, and World Development Indicators.

70 Age of majority is defined as a threshold for adulthood for a minor to become an adult and assume legal responsibility.

71 UNICEF, Multi-Indicator Cluster Survey (MICS) 2016/17.

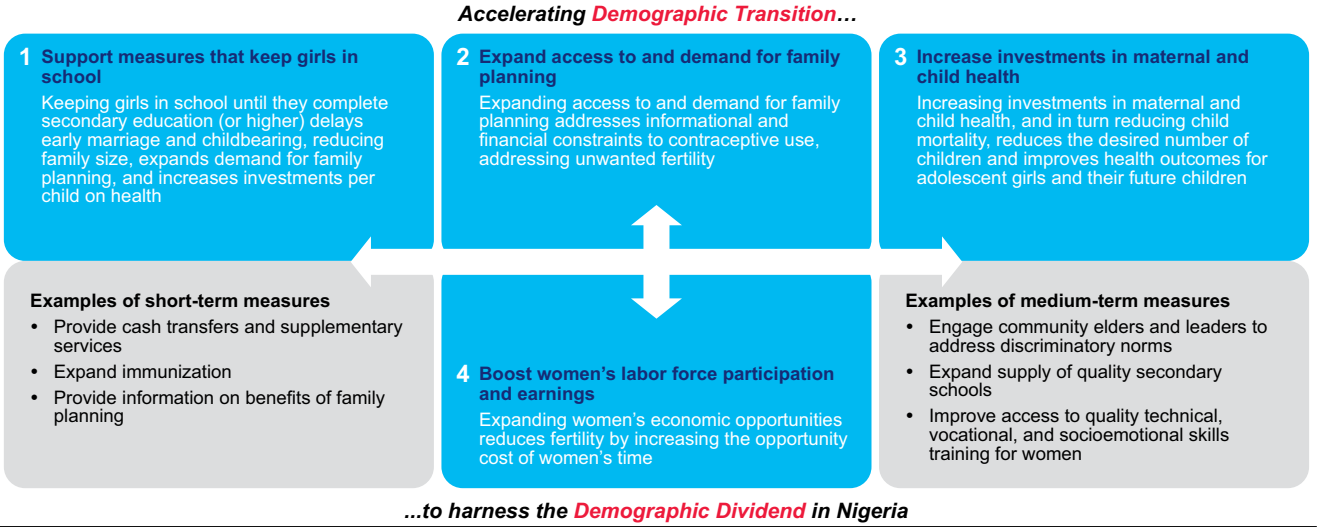
3.3 Policy Measures to Accelerate the Demographic Transition to Harness the Demographic Dividend

To accelerate Nigeria's sluggish demographic transition and to realize the demographic dividend, this note proposes policy recommendations around four complementary pillars. Together, the four pillars of policy recommendations aim to achieve two key objectives to take advantage of the demographic window of opportunity in the near term. First, the policy measures will help Nigeria to accelerate the demographic transition by reducing high fertility and child mortality rates, causing a shift in the age structure. Second, the measures will allow Nigerian youth, particularly Nigerian girls, to contribute more effectively to Nigeria's economy as they are equipped with the necessary skills and capabilities to participate in society. The four pillars are presented below (in summary). FIGURE 3.12 illustrates the mutually reinforcing nature of these policy actions and how targeting support to adolescent girls can accelerate progress across all four pillars. The key policy options table highlights the need for the policies proposed, the short- and medium-term actions to support the policies, and the likely impact the policy measures will have.

Policy Message 1: Support measures that help keep girls in school to delay marriage/pregnancy and improve learning outcomes

There is an urgent need to expand access to secondary schools in Nigeria and make secondary education free for poor households that find it hard to cover the direct and indirect costs of secondary schooling. Although the Nigeria's Universal Basic Education Program aims to provide nine years of free, compulsory, and universal primary education for all children, the three years of senior secondary education are not free. For poor families, sending their daughters to school means losing a key income earner who is critical to meeting basic family needs, as girls are often more involved in generating income for the family in rural areas. To keep girls in school will require removing the direct cost of schooling and incentivizing parents for the lost income. In terms of school access, the lack of secondary schools is significantly greater in the North, with average of eight primary schools for every secondary school. For girls to transit or complete secondary school, the FGN must provide the necessary infrastructure to create safe learning spaces in their communities.

FIGURE 3.12. Targeting adolescent girls with holistic support is critical to reducing fertility and accelerating the demographic transition in Nigeria



Note: World Bank illustration.

Policy Message 2: Expand access to and demand for family planning

Nigeria needs to implement strategies that improve access to, and increase the demand for, family planning services. There is need to prioritize improvement in demand for family planning—with current unmet need for family planning low across the country—by focusing on both inter-personal and societal behaviors and norms, and engaging with women's groups and community, religious and traditional leaders. Other policies identified are the need to provide information on the pros and cons of different methods, and the targeting of family planning vouchers to adolescent girls.

Policy Message 3: Increase investments in multi-sectoral interventions that improve maternal and child health outcomes

Increasing fiscal resources available for health and social protection programs that have demonstrated evidence in reducing child mortality rates and stunting, and improving maternal mortality rates, will lower the need for more children. In 2019, Nigeria's low public expenditure on education and health reflects its current standing as the country with the 6th lowest Human Capital Index in the world (World Bank, 2020b). There is a need to reduce the high IMR and U5MR, and to increase the utilization of maternal health services, especially among adolescent girls. Concomitantly, there is a need to expand interventions that reduce childhood stunting, as stunting during the early years of life is strongly associated with lower productivity and earnings during adulthood. Despite the FGN launching several new safety net programs in recent years, social protection coverage remains low, even if well targeted. Social protection measures that improve the demand for utilizing human capital services and health measures that provide cost-effective preventive interventions to substantially reduce the U5MR must be prioritized.[72]

Policy Message 4: Support programs and interventions that address constraints to women's labor force participation and increase their earnings

Nigeria needs to prioritize interventions that address constraints to women's economic empowerment, including helping the school-to-work transition for adolescent girls. There is growing global evidence that shows that ensuring economic opportunities for women is an important entry point for reducing high fertility and early childbearing, and ensuring better education, health, and nutrition outcomes for children. Measures that provide adolescent girls with a comprehensive set of vocational, socio-emotional, and technical tools to navigate the labor market seem to hold the most promise.

72 These include including maternal tetanus toxoid vaccination, exclusive breastfeeding, clean cord care, kangaroo mother care, immunizations, vitamin A supplementation, prevention of mother-to-child transmission of HIV, and expansion of the use of insecticide-treated mosquito nets.

Key Policy Options

Why Reforms Are Needed	*Which Reforms Are Critical*		*What Impact These Reforms Could Have*
	Short-Medium Term (6–18 months)	*Medium-Long Term (18–36 months)*	
Policy Message 1: Support measures that keep girls in school.			
• **Less than 10 percent of secondary school age girls attend secondary schools in the lowest wealth quintile compared to 80 percent in the richest quintile** • **Close to one in four (23 percent) of primary schools in Nigeria's North do not have a junior or senior secondary school within 4–5 km in their communities compared to 5 percent of primary schools in Southern Nigeria**	• Provide safe learning spaces to adolescent girls, in which they meet inside or outside of school to socialize and receive vocational and life skills training (including on sexual and reproductive health), such as in the World Bank supported Adolescent Girls Initiative for Learning and Empowerment project. • Expand construction of community secondary schools and / or expansion of primary schools to include junior and senior secondary schools and the renovation of existing secondary schools to provide conducive learning environment in the Northern Zones of the country.	• Advocate for reforms, including the enaction of a law for free and compulsory 12 years of education for girls in Nigeria. • Implement social and behavior change communication including community-level dialogue, campaigns at the federal, state, and community levels to change discriminatory social norms to increase demand for girls' education and reduce the prevalence of child marriage through. • Encourage 10 remaining States who are yet to adopt the Child Rights Act of 2003 to increase and enforce the minimum age of marriage of 18 for girls.	• Decreases in fertility and increased use of contraception. A multi-faceted program for girls in Uganda, (Empowerment and Livelihoods for Adolescent Girls – ELA) combining clubs with vocational and life-skills trainings led to decreases in fertility and increased use of contraception (Bandiera et al., 2013). • Increase in school enrolment. Bergstrom and Ozler review evidence on school construction and find that school construction can lead to very large gains in educational attainment in areas where schools are far away. The also find promising impact on reduced/delayed fertility (Bergstrom and Ozler, 2021).

Key Policy Options (contniued)

Why Reforms Are Needed	*Which Reforms Are Critical*		*What Impact These Reforms Could Have*
	Short-Medium Term (6–18 months)	*Medium-Long Term (18–36 months)*	
Policy Message 2: Expand access to and demand for family planning.			
• **Total demand for family planning in Nigeria is 15 percent among married adolescents between the ages of 15 and 19** • **Prevalence of modern contraceptive method for women aged 15–49 is just 12 percent**	• Provide vouchers to adolescent girls to access family planning services. • Provide information on the benefits of delaying, spacing, and limiting births, and on the pros and cons of different types of family planning methods, especially in the North.	• Engage community leaders in the North and women's groups to address societal norms and behaviors leading to low uptake of family planning services.	• Increased demand for family planning services. A family planning (FP) program in India that offered women voucher to seek care and services with their peers, found it increases visits to a FP clinic for FP and reproductive health services (Anukriti, Herrera-Almanza and Karra, 2021). • Increased use of family planning measures. In Kenya, a 45-minute information session delivered by an outside facilitator with a focused message on the heightened risk of HIV faced by girls having sex with older partners was effective at reducing unprotected sex and consequently pregnancy among adolescent girls (Dupas, 2011).
Policy Message 3: Increase investments in multi-sectoral interventions that improve maternal and child health outcomes.			
• **Nigeria has the third-highest infant mortality rate and the highest U5MR mortality rate in the world** • **Close to 37 percent of Nigerian children between 6 and 59 months are stunted**	• Expand immunization and vitamin-A supplementation in lagging areas. • Expand and provide unconditional cash transfers to pregnant women during their pregnancy and until the child reached age 2.	• Supplement the delivery of cash transfers with advice and counselling on nutrition and health.	• Reduction in childhood stunting. The Child Development Grant Program (CDGP), a multi-faceted program that provided cash transfers with information to extreme poor households lead to large and sustained improvements in children's anthropometric and health outcomes, including an 8 percent reduction in stunting four years post-intervention (Carneiro et al., 2020).

Key Policy Options (contniued)

Why Reforms Are Needed	*Which Reforms Are Critical*		*What Impact These Reforms Could Have*
	Short-Medium Term (6–18 months)	*Medium-Long Term (18–36 months)*	
Policy Message 4: Support programs and interventions that address constraints to young women's labor force participation and increase their earnings.			
• **Adolescents and young girls in Nigeria face limited labor market opportunities in their school to work transition. In 2020, the unemployment rate among youth was 20 percent** • **A significant portion of young Nigerian women are unable to make the school-to-work transition: boys and girls are equally likely to either attend school or work until the age of 14, after which women's participation drops**	• Provide labor market interventions targeting women and youth with comprehensive job facilitation support by providing vocational and socioemotional skills training. • Support adolescent girls' by providing mentorship programs and removing specific constraints to participation in labor market programs, such as transportation costs or free childcare. • Deliver comprehensive productive packages to ultra-poor women that combines grant, training, and linkages to markets and services. • Establish vocational and STEM programs to help girls build skills and to easily access the labor market.	• Encourage women to get involved in male-dominated occupations/ sectors by broadening the range of programs offered in technical colleges aimed at digital jobs and trades with good employment prospect for women, integrating socio-emotional skills training in the curriculum, supporting the recruitment of female teachers and instructors, and improving facilities in technical colleges to make them more attractive to females. • Sustained policy engagement to promote reforms boosting women's labor force participation, including enacting a law against gender-based discrimination in work and laws around parenthood, as well as lifting mobility restrictions and restrictions on sectors of work.	• Increase in productivity among women farmers. A psychology-based training called Personal Initiative led to increased profits for women entrepreneurs in Togo and to increases in area cultivated, input use and adoption of cash crops among women farmers in Mozambique (Campos et al., 2018). • Increased participation of women in male-dominated sectors. The Nigeria Business Process Outsourcing Youth Employment project provided information and communications technology training which significantly increased the likelihood of women working in those sectors, especially those who were initially biased against associating women with professional attributes (Croke et al., 2017).

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Note 4: Options for Nigeria to Mobilize Domestic Revenues Without Hurting Investment

Authors: **Rajul Awasthi and Elijah Kimani**

Note 4: Options for Nigeria to Mobilize Domestic Revenues Without Hurting Investment

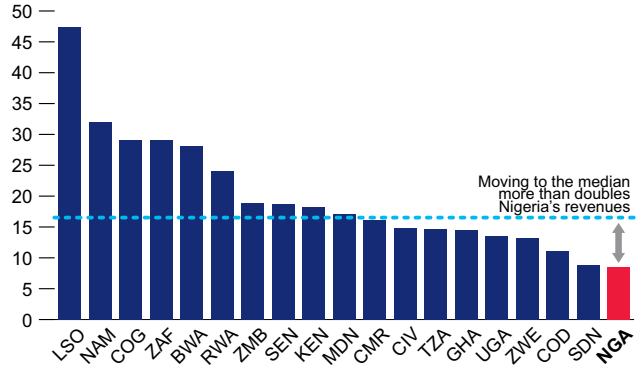
Summary: Nigeria is Africa's largest economy but it has the lowest non-oil tax-to-GDP ratio on the continent, at just 6 percent as of 2019. Tax revenues are necessary to ensure essential services, provide security to citizens, help tackle hunger and poverty, and deliver critical health and education services. The COVID-19-related economic slowdown, coupled with the plunge in oil prices in 2020, brought into sharp focus the need to increase non-oil revenue. In addition, Nigeria's inability to take advantage of favorable oil prices in 2022 given the continued subsidizing of petrol means that the FGN urgently needs to find ways to boost non-oil revenues. Given that the economy is still recovering from the COVID-19 downturn, policy and administrative measures that are carefully calibrated to grow revenues without negatively impacting investment are called for. While ruling out any rate increases in traditional ad valorem taxes such as the value-added tax (VAT) to foster economic recovery, there is an opportunity to fully implement the already existing tax policies and reform tax administration to seal compliance gaps. There is potential for harvesting revenue-yielding sources such as increasing "sin taxes", charging fees for electronic money transfers, rationalizing tax expenditures, removing loopholes in tax laws, and improving tax compliance by reinforcing revenue administration. As Nigeria tries to "build back better" after the COVID-19 crisis, the approach to revenue mobilization needs to be more strategic: not just taxing more but taxing better; not just how much to collect, but how to collect, what to collect, and from whom.

4.1 Africa's biggest economy also has Africa's lowest tax-to-GDP ratio: Nigeria must mobilize far more revenue if it is to capitalize on its immense economic potential

To achieve sustainable and inclusive growth, build a resilient economy, and achieve the aspirations of its people, Nigeria must address its perennially low revenue mobilization. Its 2021 non-oil tax-to-GDP

FIGURE 4.1. Nigeria's revenue collection is the lowest among SSA peers

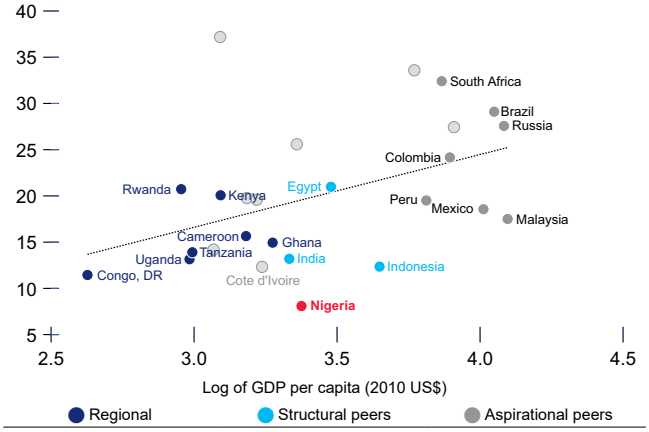
Total revenue compared with SSA peers, percent of GDP



Source: Federal Inland Revenue Service (FIRS) and IMF Revenue Statistics.

FIGURE 4.2. Nigeria's high revenue potential stands out among global peers

Revenue as a share of GDP, percent



Source: FIRS and IMF Revenue Statistics.

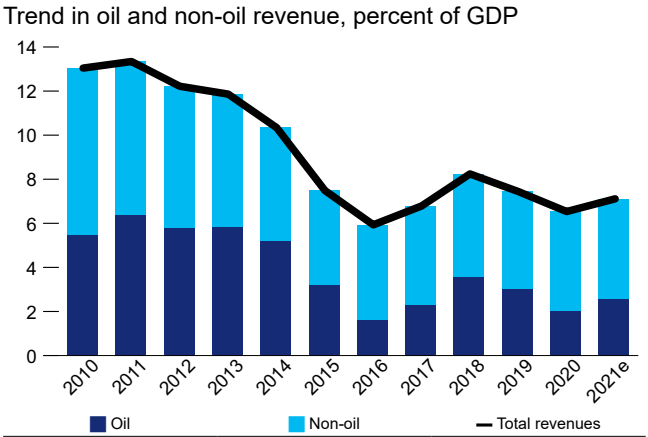
ratio of 6 percent was about one-third of the SSA regional average. This is the product of many years of overreliance on resource revenues from oil and gas, a strategy that is no longer viable due to the volatility of oil demand and prices, and the inefficiencies in the oil sector. Low revenue collection has perpetuated a vicious cycle of under-investment, low human development, and low incomes.

The COVID-19 pandemic added more pressure on already subdued domestic revenue and pushed Nigeria further into deficit. In addition to the drop in oil and gas revenue, as economic activity slowed down and, in some cases, stalled, the pandemic also had an adverse impact on other revenue streams. Households consumed less, and corporate profits fell, reducing VAT collections and corporate income tax (CIT)—two of the largest sources of non-oil revenue. The pandemic also reduced the scope for tax administration enforcement actions, and minimal use of automation in tax administration precluded any leveraging of technology to improve compliance.

While the pandemic brought many challenges, it also provided a rare opportunity to make changes that could give revenues a major boost in the long run. Further pressure on oil prices and diminished demand in the wake of the COVID-19 pandemic forced the FGN to seek alternative sources of revenue that are easy to tap into at minimal disruption to the economy. The frequency of global crises is only likely to increase, and the lessons learned from the COVID-19 crisis should be internalized in developing revenue mobilization strategies. In addition, the reality of Nigeria's limitations when responding to global fluctuations in oil production necessitates pivoting to more predictable revenue sources. The revenue streams suggested below and administrative reforms to seal compliance gaps are likely to be sticky beyond the pandemic and any subsequent crisis.

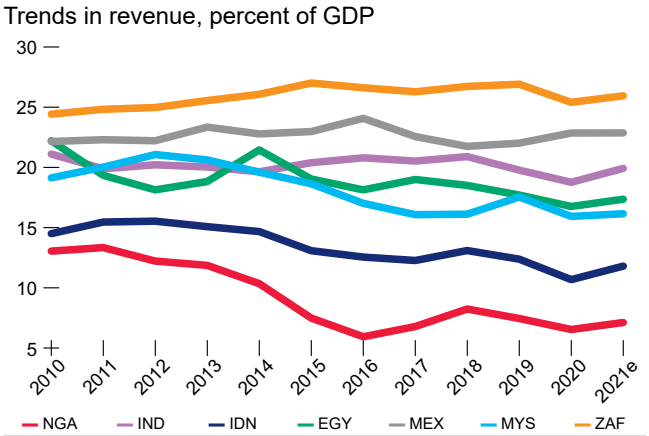
As the economy slowly recovers, avenues for accelerating disaster risk management should be limited to those that do not jeopardize investment, growth, or jobs. While Nigeria's economy performed better than expected in 2020, it nonetheless suffered the deepest recession in almost four decades. This was subsequently followed by moderate growth in 2021 as the economy slowly recovered, culminating in a late rally largely driven by a spike in global oil prices. Due to the precarious nature of the global economic recovery, revenue-raising policies and administrative actions must be carefully chosen so as not to undermine an already weak growth recovery path for Nigeria.

FIGURE 4.3. Driven by crises, general government revenue continues to fall



Source: OAGF.

FIGURE 4.4. The revenue gap between Nigeria and its peers continues to widen



Source: World Bank MFMod.

4.2 The economy has adequate space for administrative and policy reforms that do not negatively impact investment and growth

The World Bank estimates that Nigeria's non-oil revenue potential is more than twice what it currently collects. With the right reforms, Nigeria should be able to achieve a tax-to-GDP ratio comparable to regional peers such as Ghana and Uganda at 12 percent, and Kenya at 15 percent. The FGN has already taken major steps to reform the VAT regime and has prepared a medium-term expenditure framework and fiscal strategy paper (FSP) for 2022–24. There is now an opportunity to build on this momentum, especially given the urgent need to marshal resources to support economic recovery. Given the complex political economy and the administrative and legal constraints that apply in Nigeria, a sequenced reform approach is likely to achieve the best outcome.

4.3 Excise tax can help lower the cost of environmental pollution, improve health prospects, and boost tax revenue by up to 1 percent of GDP

Although the effective rates have increased marginally over the past five years, at 0.06 percent of GDP Nigeria's excise taxes are among the world's lowest. While the primary purpose of an excise tax is to internalize the social costs of harmful goods such as alcohol and tobacco, their revenue contribution can also be important. Nigeria does not subject liquid fuel to tax, which is unfortunate since excise taxes could capture the cost burden of fuel on the environment, and this revenue source is inherently stable because demand for fuel is inelastic. Similarly, Nigeria fares poorly in the administration of health taxes, having among the lowest excise taxes on alcohol and tobacco globally. The recent addition of a ₦10 per liter excise duty on non-alcoholic, carbonated and sweetened beverages in the Finance Act of 2021 points to some appetite for marginal change, but the level of ambition is still low, and the change is estimated to only raise ₦33 billion in 2023.

Enhancing the excise regime offers an immediate opportunity for revenue increases; an appropriate excise rate on beer alone could raise up to ₦600 billion. The FGN has indicated a commitment to increasing specific excise tax on cigarettes from ₦2.9 to ₦4.2 per stick on top of the ad valorem rate of 20 percent. While this is commendable, it is still marginal in impact both for health and revenue mobilization. The effective tax rates for both alcohol and tobacco are less than half the median of Nigeria's African peers. To effectively tap into this revenue source, Nigeria could retain the current ad valorem excise rates but significantly raise the specific components to better target individual products. World Bank estimates show that retaining the current rates and gradually increasing the specific duty component to achieve tax incidence consistent with regional peers will generate additional revenue of ₦955 billion in the first year. Specific excise rates are also preferable because they are simpler to administer and less vulnerable to avoidance through undervaluation.

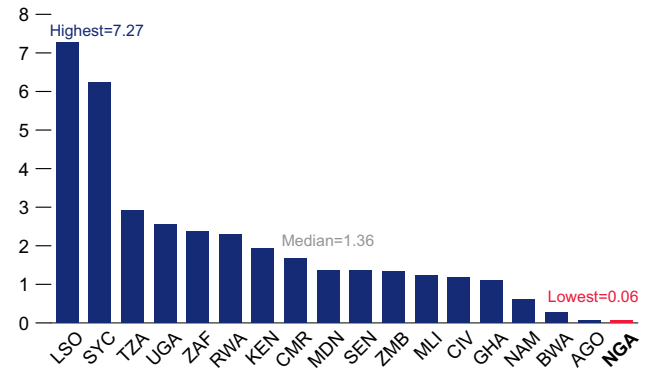
4.4 The electronic money transfer (EMT) levy is a stable revenue source with potential to raise up to N220 billion in 2022

The EMT levy, introduced in the Finance Act 2020, which amended the Stamp Duty Act, taps into growth in electronic funds transfer in Nigeria and can be administered at low cost. The EMT levy regulation has been cleared and signed by the Minister of Finance affirming a singular and one-off charge of ₦50.00 on any electronic receipt or electronic transfer of ₦10,000 or more. Since the levy is new and wide in scope and may face interpretation problems, the Federal Inland Revenue Service (FIRS), which is the designated administrator, should endeavor to facilitate compliance by banks. Enforcement of some elements of the charge,

FIGURE 4.5. Sequenced reforms will best mobilize revenue

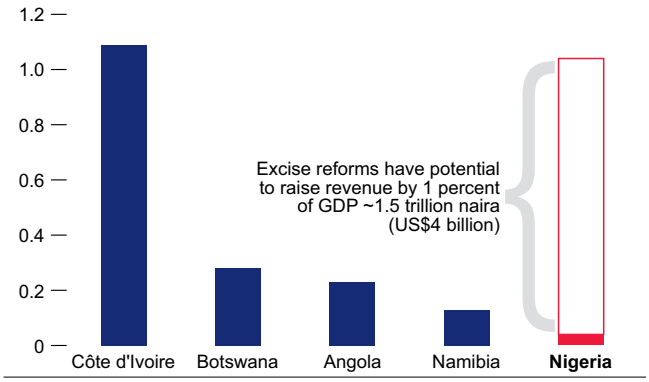
Immediate	Medium Term	Long Term
Enhance excise rates on "sin goods" and establishing ecise on petrol and diesel at a token rate. **Implement the Electronic Money Transfer levy.** This revenue source is sustainable and is likely to grow in coming years. **Improve overall tax compliance** with focus on VAT. Complemented by measures to enhance the efficiency of FIRS through ICT capacity, HR management and training of staff, organizational reforms and process improvements.	**Rationlize tax expenditure:** Nigeria offers a wide range of tax concessions that cover a range of taxes, with the largest impact being in CIT and VAT. Nigeria does have a legislative framework in place for measurement and grant of tax expenditures (the Fiscal Responsibility Act, 2007), which can be leveraged to rationalize ineffective tax incentives. **Reforms key tax statutes at the Federal level,** i.e. the Corporate Income Tax Act (CITA) and the Value Added Tax Act (VATA), including plugging loopholes, rationalization of the treatment of expenditures (CITA) and credits (VATA), and development of anti-fragmentation rules.	**Improve revenue from cross border transactions and other international tax measures.** These range from improvement of personal income tax from undisclosed overseas deposits and illicit financial flows through better use of information gained under exchange of information, to VAT on online transactions, and CIT from accurate application of transfer pricing rules. **Enhance Internally Generated Revenues (IGR).** Efforts are needed to improve States' collection of PIT and other taxes such as the property tax.

FIGURE 4.6. Nigeria's excise tax revenue is among the lowest in SSA



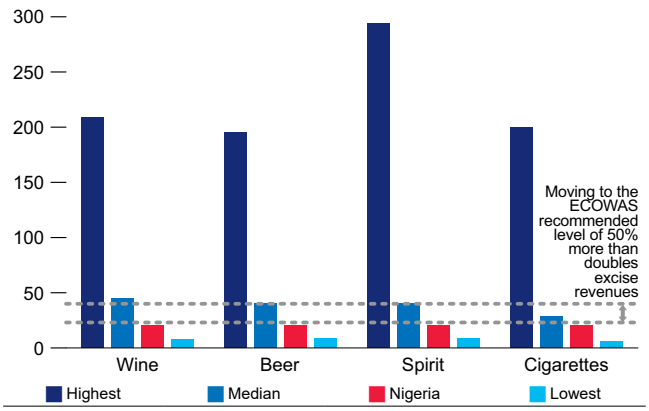
Source: IMF world revenue longitudinal data.

FIGURE 4.7. Marginal improvement has consequential revenue implications



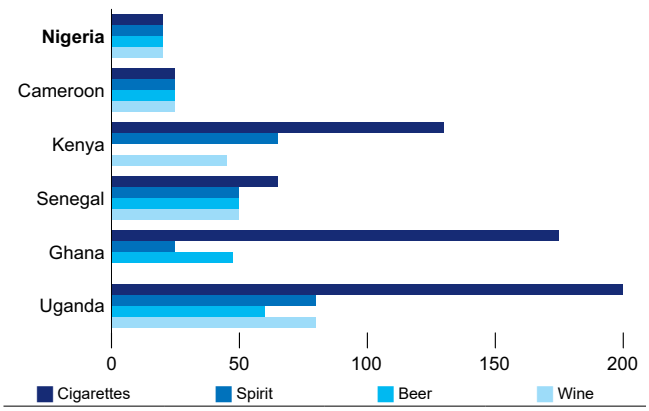
Source: IMF world revenue longitudinal data.

FIGURE 4.8. There is ample space to raise excise rates for alcohol and cigarettes



Source: PwC worldwide tax summaries.

FIGURE 4.9. Nigeria's excise rates are lower than those of its peers



Source: PwC worldwide tax summaries.

such as inter-bank transfers, especially where the bank is both the sending and receiving institution, could be challenging in view of possible resistance from the banks and could be sub-optimal for overall tax compliance. In addition, the rollout of this levy could distort behavior by incentivizing cash transactions. Despite the teething challenges, the EMT levy promises to be a significant source of revenue if well implemented.

4.5 Reforms of corporate income tax (CIT) can seal loopholes without raising the tax burden on compliant corporations, potentially raising revenue by 0.7 percent of GDP

In the current environment, in which raising CIT rates could suppress fragile economic recovery, targeting compliance and rationalization of tax expenditures provides an avenue for CIT-related growth: (i) An anti-fragmentation rule could be included in the Corporate Income Tax Act to prevent medium and large companies from fragmenting business activity into multiple companies to take advantage of the exemption for small companies with turnover of less than ₦25 million. (ii) The definition of "dividends" should be revised to include "disguised" dividends to prevent companies from funneling corporate profits to shareholders without paying tax. In the medium term, a technical diagnostic review of the Corporate Income Tax Act will be necessary to identify loopholes and technical deficiencies in current law and to rationalize costly tax incentives. Nevertheless, some progress has been made through the Finance Act 2021, which now provides for amendment of the Capital Gains Tax Act, removing exemptions on capital gains on the sale of stocks greater than ₦100 million in a 12-month period. In addition, the clause allowing for exemption of income from interest on corporate bonds has been allowed to sunset in January 2022.

4.6 VAT reforms introduced in the Finance Act 2019 can raise 0.4 percent of GDP in revenue, and another 1.4 percent could come from better compliance

While further raising of VAT rates may not be viable in the short term due to prevailing concerns on the fragility of the global economy burdened by high inflation, a supply-chain crisis, and food shortages, broadening the VAT base and improving compliance would significantly raise VAT revenue. The Finance Act 2020 introduced VAT taxation of cross-border business-to-consumer digital supplies to align with the CIT digital tax introduced in Finance Act 2019. Proper application of this provision would significantly boost VAT revenues and open up room for future revenue growth as cross-border consumption of digital products continues to grow. In addition, a general anti-avoidance rule should be introduced in the Value Added Tax Act with adequate regulations among them covering anti-fragmentation to prevent splitting of business operations into small companies in order to fall below the VAT filing threshold introduced in the Finance Act 2019.

In the medium term, the current 7.5 percent VAT rate—one of the lowest in SSA—can be raised to international levels of 10–15 percent. The limited input tax credit mechanism means that Nigerian VAT operates more like a turnover tax applying at all levels of production and distribution, with more than ₦800 billion in input tax credit denials. This distorts production efficiency and effectively leads to lower revenue collection. The mechanism should be reviewed and reformed, with the long-term goal of a broad-based VAT regime with a single rate and a comprehensive input tax credit mechanism. This would be the most efficient way to collect VAT revenue.

4.7 In the medium term, tax concessions should be rationalized to reduce market distortions

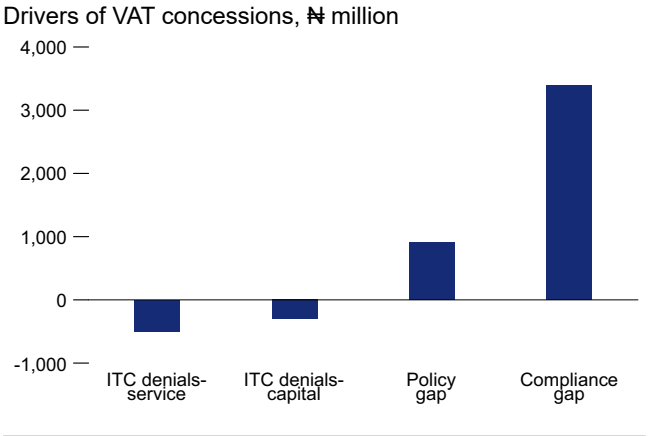
How governments deploy tax expenditures is critical, especially in the current economic context. Selective and targeted use of concessions can provide a lifeline for struggling entities, especially those hit hardest by the COVID-19 pandemic and the associated economic downturn. Rationalization could also greatly ease perennial revenue losses by closing loopholes in order to foster healthy market competition between corporations. The Nigerian tax system includes many concessionary measures intended to achieve various policy goals, but that can only come at the cost of lower tax revenues. These tax expenditures influence choices and create incentives for persons and businesses to alter economic behavior. For more efficient use of tax expenditures, the policy objectives for underlying individual tax expenditures must be clearly defined and the associated costs monitored. To achieve this, the FGN must endeavor to publish accurate tax expenditure statements to allow for scrutiny by the public to ascertain who gets tax concessions.

There has been progress: in 2021, the FGN published a Tax Expenditures Statement (TES) accompanying the Medium-Term Expenditure Framework, with the only previous publication happening in 2020. The TES can supplement the FGN's Annual Budget by providing data for analyzing the cost, benefit, and effectiveness of individual tax expenditures in achieving policy goals. Ultimately, the TES will allow for greater transparency, and will also inform discussion of the equity and efficiency of the tax system. The 2021 TES has already highlighted the excessively large policy and compliance gaps. According to the TES estimates, total revenues forgone in 2020 were ₦5.8 trillion. VAT revenue forgone were valued at ₦4.3 trillion, CIT at ₦457 billion, petroleum profit taxes at ₦307 billion and customs at ₦780 billion.

4.8 Improving tax administration by sealing compliance gaps can bridge the revenue gap caused by low economic activity in the wake of a global economic downturn

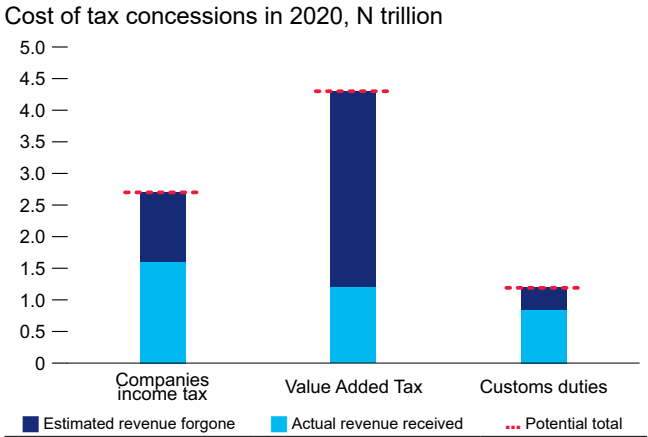
A central lesson from the COVID-19 pandemic has been that it is critical for revenue administration authorities to maintain operations and business continuity during a crisis. Achieving this not only depends on the availability of reliable ICT platforms but also on good processes to enhance decision-making in a rapidly changing environment. Nigeria's revenue

FIGURE 4.10. Bridging compliance gaps would greatly enhance VAT receipts



Source: Nigeria Budget office medium-term expenditure framework 2022–2024.

FIGURE 4.11. Reviewing tax expenditures alone can double current revenues



Source: Nigeria Budget office medium-term expenditure framework 2022–2024.

agencies—FIRS and the Nigeria Customs Service—are working to accelerate the move to digital revenue administration. The goal is to provide taxpayer-friendly, world-class online services, characterized by efficient, paperless operations, and enhanced by ICT-enabled enforcement to optimize revenue. With a spike in global inflation, a looming global food shortage, and a war in Eastern Europe all coming right on the back of a global epidemic, revenue agencies must be prepared for frequent disruption in operations, and this can be achieved by putting in place robust technical and decision-making processes.

With critical operations in place, investment in VAT compliance is likely to provide the best returns. A 2019 World Bank analysis of the VAT gap in 2019 found it to be as wide as ₦3.1 trillion. A subsequent analysis by the budget office in 2021 puts the VAT tax gap at ₦4.3 trillion. It estimated that ₦900 billion was due to policy gaps, such as exemptions set out in legislation, and ₦3.4 trillion attributable to a compliance gap. The 2020 increase in the VAT rate from 5.0 to 7.5 percent has significantly widened the VAT compliance gap, which is likely understated given rising inflation. Gains from improved compliance can allow the FGN to sustain critical spending without overburdening taxpayers during economic downturns.

4.9 Adopting a digital transformation strategy for an ICT-driven FIRS and enhancing its organizational efficiency will allow FIRS to weather future crises better

Done well, digital transformation of FIRS operations may be a positive outcome of the pandemic. After a significant drop in revenue collection since the onset of the COVID-19 pandemic, FIRS is fast-tracking a digital transformation strategy to establish a strong ICT backbone for the tax authority in anticipation of future disruptions. The three-year Strategy (2021–23) intends to align IT priorities to FIRS business needs, highlight areas to be supported for stable operations in future, identify application and IT service development priorities, and provide a framework for the continuous improvement of IT service delivery within FIRS and a roadmap to achieve its objectives. First among these measures is to have medium to large taxpayers file all their CIT and VAT taxes electronically using the TaxPro Max platform. The uptake among large taxpayers is at 96 percent, while the overall uptake stands at less than 40 percent. Higher uptake among medium taxpayers would result in significant compliance gains.

While physical infrastructure, such as ICT equipment, is important, equally critical is organizational efficiency. Currently, efficiency is obstructed by overlapping management structures, the lack of standard operating procedures, and inconsistent work processes. These challenges can be resolved in large part by redesigning the organization, improving and digitalizing business processes, standardizing work procedures, and building capacity and otherwise improving human resources management. Staff should be trained and regularly retrained to improve both efficiency and retention. Over the long term, appropriate human resources policies, planning, and processes need to be put in place, supported by robust monitoring and evaluation. Reforms underway should be periodically evaluated, using standard tools such as the World Bank Group's DIAMOND assessment methodology.

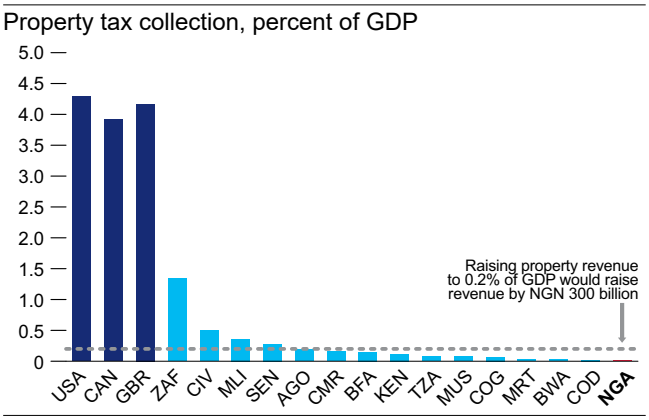
4.10 Reforms to state tax administration can supplement federal revenue collection efforts, internally generated revenue (IGR) being the third-largest source of non-oil revenue after VAT and CIT

A significant part of the fiscal challenge in Nigeria stems from the distribution of tax administration between the federal and state levels. While there are political and constitutional constraints on what taxes can be collected, it is still possible to make improvements that can materially affect the amount of revenue

collected. Of note is the revenue potential from personal income tax (PIT) and property taxes.

The PIT collected by states is low due to tax evasion; certain classes of taxpayers escape the PIT net entirely. A major problem is underreporting by high-net-worth individuals (HNWIs) and unincorporated business. There is also a large informal sector, with many small-scale traders and businesses that do not report income. While enforcement should be conducted in all these areas, resources would be best used in pursuit of high-potential areas such as taxing HNWIs. Income data may be limited but it is possible to estimate HNWI income based on third-party sources of information, such as property cadasters, land use charge records, and other third-party sources, such as financial intermediaries and shareholder registers. Foreign income can be identified from the Automatic Exchange of Information data available through international initiatives.

FIGURE 4.12. Nigeria collects less in property tax revenue than its SSA peers



Source: IMF, Government Financial Statistics and World Bank estimate for Nigeria.

In addition to PIT, recurrent immovable property tax is a stable source of revenue for subnational and local governments all over the world. In advanced countries such as the United States, Canada, and the United Kingdom, as much as 3 percent of national GDP annually is collected through this tax instrument. This tax generates significant revenues in some SSA countries, notably South Africa, where it generates more than 1 percent of national GDP. Based on information collected from Nigerian states, total property tax revenue is estimated at 0.01 percent of national GDP, with most collecting less than ₦400 per capita.

Significant revenue can be generated from land use charges (LUC) to complement state internally generated revenue (IGR). This can be done by broadening the tax base, creating a database of properties and LUC payers within a geographic information system, improving the information on taxable properties, revising the assessment basis for the LUC, reviewing the current tariff structure, strengthening supporting legislation, and simplifying tax compliance. However, several factors make reforming this revenue source daunting.

9. **Incomplete or inaccurate records on potential taxpayers and insufficient information on properties do not support effective property taxation.** In several states tax administration is carried out using manual approaches, paper-based property files, maps, and other legal documents. Lack of a computerized database of properties severely impedes tax administration and does not allow states to leverage the efficiencies of technology. A few states (notably Kaduna, Edo, Nasarawa, and Lagos) have set up geographic information system administration agencies to help them identify property records.

10. **In transfer deeds, property values are often not accurately stated, in part to reduce stamp duty liability, in part due to lack of laws to enforce honest disclosure.** Because property values are under-reported, the properties are under-taxed. Where states prescribe valuation of properties, the assessment methods for the LUC are not able to capture market values because market data are not reliable. Several states have therefore resorted to setting low, flat rates per property, even when the revenue collected is relatively small.

11. **Some states lack the legislation necessary to support the LUC levy.** In others, the legislation is not fully compliant with the Constitution. Where there is legislation, it is poorly enforced, lowering collection rates.

12. **Cumbersome compliance requirements necessitate several visits to banks and government offices.** Because LUC revenue is low, it should be possible to make payments via mobile money and other non-traditional mechanisms, especially when taxpayers do not have bank accounts.

Key Policy Options

Why Reforms Are Needed	*Which Reforms Are Critical*			*What Impact These Reforms Could Have*
	Reforms that can be carried out in 1–6 months	*Reforms that can be carried out within 18 months*	*Structural initiatives and institutional reforms that can put on a firm footing in the next 3 years*	
Non-oil revenues have been stagnant due to a sub-optimal VAT system, extensive use of tax incentives, lack of effective enforcement, and the high costs of tax compliance.	• Reform excise tax rates. • Launch VAT compliance improvement initiatives such as VAT lottery and VAT education visits programs. • Craft the Digital Transformation Strategy for ICT in FIRS, laying the foundation for a tech-driven, efficient tax administration. • Build capacity in the audit and taxation of large business.	• Fully implement VAT and CIT compliance programs. • Make desk audits more effective. • Review the CIT Law; bring international tax rules into line with global best practice, with an emphasis on the practical. • Rationalize ineffective tax incentives. • Improve how Customs administers VAT, duty, and excises.	• Build the capacity of federal tax and customs administration to improve compliance. • Establish a modern, digital ICT-based tax administration that uses Big Data effectively and is powered by risk engines to ensure smart enforcement.	• Tax policy and administration reforms can help increase Nigeria's tax-to-GDP ratio in the medium term by 3 percent, thus helping to reduce the fiscal deficit, and increase fiscal space for investments in human capital and the infrastructure needed to connect farmers and firms to markets and youth to jobs. • Advance health and environment policy goals by capturing more of the negative externalities of consumption of harm goods. • Increase non-oil revenues from excise, EMT levy, VAT, incentives, and international tax reforms.
	Adopt a **public engagement strategy** that links revenue mobilization to increased investment in infrastructure and human capital.		Enhance FIRS efficiency by supporting reforms to the structure of the organization, ensuring that management approaches and standard operating procedures are consistent and, supported by effective human resources management.	

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*			*What Impact These Reforms Could Have*
	Reforms that can be carried out in 1–6 months	*Reforms that can be carried out within 18 months*	*Structural initiatives and institutional reforms that can put on a firm footing in the next 3 years*	
	• Improve state level PIT and improve state-Federal cooperation in tax administration.	• Introduce a well-designed, progressive and properly administered property tax • expand electronic tax payments and stop cash payments;	• Establish consolidated state revenue accounts as part of state TSAs.	• State IGR reforms would: provide taxpayer clarity and reduce double-taxation; reduce leakages from IGR sitting in individual ministries, departments, and agencies (MDA) accounts; induce more efficient land use and provide revenue to states and local governments.
Tax design is impeding business growth by:(i) increasing working capital requirements; and (ii) the high cost of compliance, with no simplification measures yet available for small business, which makes the tax policy regressive.		• Streamline the VAT, eliminating unnecessary frictions that impinge on productivity, and avoiding tax cascading. • Ensure prompt VAT refunds, after putting in place strong controls. • Establish a valuation database of high-value urban properties for the LUC.	• Record and harmonize IGR policies and administration across states and minimize double taxation in terms of federal policies.	• More post-tax profits available for investment. • Lower compliance costs for SMEs that give them an incentive to become formalized. • Paperless operations, equipped with sharp, ICT-enabled risk-based enforcement. • High working capital requirements obviated.
Inefficient Customs Administration reduces trade and tax collection	• Improve Nigeria Customs Service administration of border entries and reduce processing times. • Simplify tax assessment and payment mechanisms as part of ICT development in FIRS.		• Modernize the FIRS and Nigeria Customs Service to create a taxpayer-friendly organization providing world-class online services.	• Improved tax morale because of more clarity about taxes by reducing double taxation incidents, negative experiences with tax officials, and lack of how taxes are used.

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*			*What Impact These Reforms Could Have*
	Reforms that can be carried out in 1–6 months	*Reforms that can be carried out within 18 months*	*Structural initiatives and institutional reforms that can put on a firm footing in the next 3 years*	
Shadow economy is estimated at over 50%.	• Focus on HNWIs for PIT enforcement. • Introduce well-designed simplified PIT regimes for SMEs; SMEs operating as companies are exempted from CIT.	• Pilot internal cooperation with one state IRS (Lagos) to strengthen PIT, CIT and VAT enforcement.	• Successfully embed a Compliance Risk Management system based on objective risk criteria.	• The demonstration effect of HNWIs being subject to taxation will improve voluntary compliance and widen the tax base.

Note 5: Strengthening Competition in Nigeria to Unlock Growth Opportunities

Authors: **Ryan Chia Kuo, Sara Nyman, and Rodrigo Barajas**

Note 5: Strengthening Competition in Nigeria to Unlock Growth Opportunities

Summary: The degree of competition is perceived as weak in Nigeria when compared with its peers. While the country has made significant progress in passing a competition law, its policy approach to competition still needs strengthening. Several key markets exhibit a high degree of concentration and poor market outcomes, such as high prices or low access, reflecting barriers to entry and to the expansion of smaller firms. Boosting product market competition in Nigeria is critical for enabling a more efficient allocation of resources and productivity growth, and making staple products more affordable to increase consumer welfare. To achieve competitive markets, Nigeria must put in place a sound and holistic approach to competition that encompasses enforcement of the competition law and the design of pro-competition government interventions. On enforcement, Nigeria has taken important steps forward in establishing competition policy frameworks. Nevertheless, there remains room to further strengthen the legal framework, including closing select exemptions to the law. In addition, institutional improvements related to independence and, especially, capacity building of the competition authority are needed. With respect to government interventions, reviewing Nigeria's general stance toward industrial policy is critical: various policies have introduced market distortions via local content rules, import restrictions, restrictions on foreign companies, implementation of privatization processes in a manner that creates market power, and biased standard-setting processes, among other issues. There is also scope for sector-specific policies and regulation to better embed competition principles. For example, in the ICT sector, Nigeria would benefit from a pro-competition framework for broadband rollout. An infrastructure-sharing regulation would improve networks and coverage, while policies to improve efficiency in spectrum use and MVNO participation can foster market entry and incentivize investments in the quality of mobile services. Pro-competition licensing and equal access to Right of Way could also help foster entry and investment in the fixed broadband market. Finally, an independent regulator that works together with the competition authority could help mitigate competition risks in the ICT sector. Nigeria's digital financial services market could also benefit from pro-competition regulations: the FGN could explore easing challenges for third parties in accessing MNOs' communication channels to make bank transactions for digital financial services. If designed and conducted under non-discriminatory conditions, Nigeria's framework for Open Banking could also pave the way for new fintech to create innovative financial products.

5.1 Background and Context

5.1.1 Reforms that intensify competitive pressures or promote effective competition in key sectors of Nigeria's economy can be crucial to achieving productivity gains and, ultimately, economic growth.

There is significant evidence of the economic benefits of greater product market competition (or even the threat of competition) on both the supply side of the market (producers) and on the demand side (consumers). Theoretical and empirical work suggests that opening domestic markets to greater competition can enhance allocative, productive, and dynamic efficiencies of firms and hence aggregate productivity. First, in a well-functioning economy, competition leads to a reallocation of resources from low to high productivity firms (Arnold et al., 2011), where less productive firms either shrink or exit the market. Second, competition induces existing firms to become more efficient to survive. (Aghion and Howitt, 2006;

Blundell et al., 1999; Conway et al., 2006; Nickell, 1996). Greater competition incentivizes firms to make more efficient use of resources and to dynamically improve efficiency by adapting production processes or upgrading quality to achieve higher markups.[73] Effective competition also induces positive changes in business practices, for example, reduced managerial and non-managerial slack (Bloom et al., 2012; Bloom, Sadun and Van Reenen; 2012; Bloom et al., 2015). Larger productivity growth derived from more competitive markets has been seen in several developing countries. For example, recent evidence from South Africa's manufacturing sector finds that firms that face greater competition have higher productivity growth (Dauda et al., 2019). Similar evidence, drawing on sectoral data for the manufacturing sector, has been found for Argentina (Licetti et al., 2018), Brazil (Reis et al., 2018), Jordan and Morocco (Sekkat, 2009, Moldova (World Bank, 2019c), and Tunisia (World Bank, 2014). In addition to increasing incentives for process innovation, promoting competition encourages product innovation aimed at "escaping competition" (Aghion and Griffith, 2005; Acemoglu et al., 2007; Bassanini and Ernst, 2002; Bloom et al., 2011). In an environment where policies are not designed to encourage competition, firms often seek to leverage political dynamics and connections to gain market share through regulatory advantage, instead of seeking profits through innovation and efficiency. Third, competition in input (upstream) markets, such as transportation, energy, and telecommunications, is a key driver of competitiveness and growth in downstream sectors—the users of these inputs (Barone and Cingano, 2011).[74] Sustainable growth through the expansion of markets and productivity cascades into increased prosperity and opportunities, allowing consumers to access a wide variety of well-priced quality products, increasing welfare and providing sustainable opportunities for job creation (World Bank, 2017).

These mechanisms mean that competition policy contributes to economic diversification by facilitating efficient resource allocation across products, firms, and economic activities. Policies promoting and safeguarding competition induce firms to make more efficient use of resources by producing cost-effectively and dynamically by adapting processes or upgrading quality. They also enhance the reallocation of resources to firms that are most able to achieve these gains in the long run. This has positive spillover effects on the rest of the economy, and through backward and forward linkages may help relax some technological constraints and facilitate both domestic and export diversification. In practice, many markets in developing countries—especially those that are important inputs for new products, such as fertilizer, cement, and telecommunications markets—are characterized by entry barriers and anticompetitive behavior, thereby hindering economic diversification. There are real world examples of competition policy reforms that have had tangible impacts on diversification. In Kenya, competition policy reform was central to the emergence of mobile banking services. The entrance of Mobile Virtual Network Operators (MVNOs) into the banking industry led to the introduction of new banking products and helped entry of new small businesses. In Honduras, competition policy reform promoted entry of new firms in agricultural input markets (fertilizers and pesticides). The reform eliminated discretionary procedures and reduced the registration time from three years to 90 days. Since the reform, 300 new products were registered, and the price of some pesticides fell by 9 percent (WBG, 2017).

Competition can also help boost employment in Nigeria, either directly or through the effect of productivity gains of firms. Evidence suggests that competition policies can boost jobs. Competition stimulates firms' willingness to invest and their demand

73 As an example of this channel, Carlin et al. (2004) show, using a dataset of about 4,000 firms in 24 transition countries, that firms facing between one and three competitors saw real sales grow by almost 11 percent on average over three years, while monopolists suffered from a 1 percent decline in real sales. Similarly, Nickell (1996) found that a 10 percent increase in price markups resulted on average in a 1.3–1.6 percent loss in TFP growth.

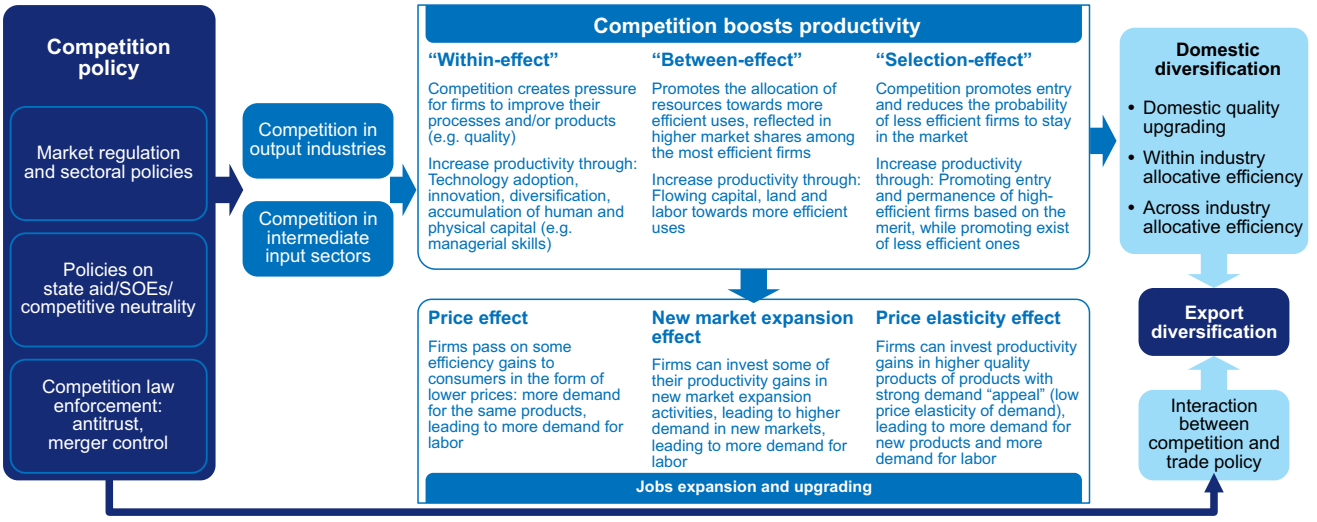
74 Barone and Cingano (2011) show that in OECD countries, pro-competition reforms in input services sectors (telecommunication, transport, energy and professional services) increase value added, productivity and export growth of downstream service-intensive sectors.

for labor (Blanchard, and Giavazzi, 2003; Griffith and Harrison, 2004). In addition, competition stimulates firms' willingness to pay higher wages to their workers (Brambilla et al., 2016) and reduces the gender wage gap (Ashenfelter and Hannan, 1986; Belfield and Heywood, 2006) and the level of informality in an economy Anand and Khera, 2016; Charlot et al., 2015). Competition policies and laws also boost investment (Alesina et al., 2005) and ensure that firms can interact on a level playing field. In South Africa, research found that lower product market competition has a significant negative effect on employment growth, and wage growth in manufacturing industries (Dauda et al., 2019). FIGURE 5.1 outlines these mechanisms.

5.1.2 Competition and competition policy are perceived as weak in Nigeria compared with peers

Nigeria's fundamental conditions to support a market-based economy where markets reward competitive businesses are perceived to be below the average of peer countries.[75] The strength of market-based competition and competition policy in particular are perceived to be low in Nigeria, according to the Bertelsmann Stiftung's Transformation Index (BTI)[76] (FIGURE 5.2), being the second-worst performer in terms of competition policy. In addition, businesses perceive competition-related business risks in Nigeria to be relatively high compared with its peers, with vested interests and cronyism being the most prominent risk components according to the Economic Intelligence Unit 2021 survey (FIGURE 5.3).

FIGURE 5.1. Impact of competition policy in productivity, jobs, and diversification

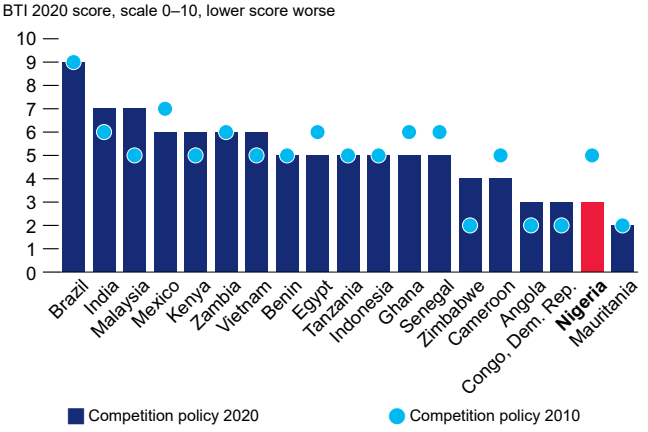


Source: Elaboration based on: WBG (2017), Syverson (2011), Cusolito and Maloney (2018), and Dauda (2020).

75 Based on peer countries used in the Nigeria SCD.

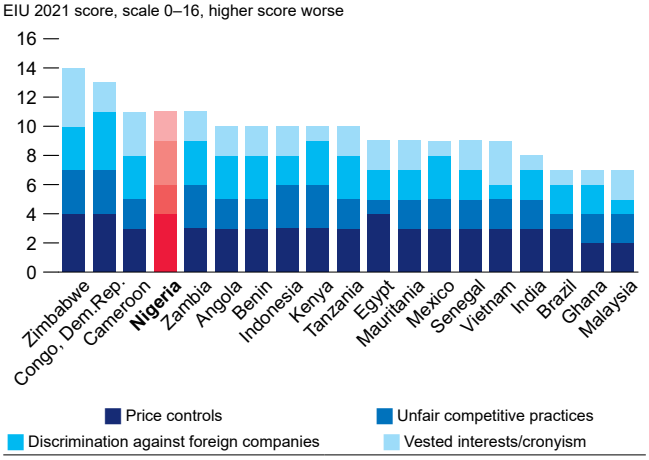
76 The indicators of the Bertelsmann Stiftung's Transformation Index (BTI) answer the following questions based on expert judgment: (i) to what level have the fundamentals of market-based competition developed (including the low importance of administered pricing, currency convertibility, no significant entry and exit barriers in product and factor markets, freedom to launch and withdraw investments, and no discrimination based on ownership (state/private, foreign/local) and size, (ii) to what extent do safeguards exist to prevent the development of economic monopolies and cartels, and to what extent are they enforced (including the existence of antitrust or competition laws and enforcement)?; and (iii) to what extent has foreign trade been liberalized (including conditions, tariff and non-tariff measures for market access, import licensing and customs valuation, export subsidies and "countervailing duties" on allegedly subsidized imports, import quotas and export limitations, contingency trade barriers [anti-dumping procedures, "safeguards"—restrictions of imports to protect a specific domestic industry from serious injury], replacement of non-tariff with tariff measures, and information on the country's participation in the WTO)?

FIGURE 5.2. Nigeria scores below peers in terms of the degree of market-based competition and competition policy



Source: Bertelsmann Stiftung's Transformation Index BTI, 2020 (the responses reflect the situation in the country at the end of January 2019).
Note: The BTI is a perception indicator based on in-depth assessments of countries and is managed by the Bertelsmann Stiftung.

FIGURE 5.3. Business risks related to weak competition policies are perceived to be relatively higher in Nigeria compared with peers



Source: Economist Intelligence Unit.
Note: Highest risk per area=4. Maximum total level of risk=16.

5.1.3 There is scope for improvement in the extent of market concentration in Nigeria, which could reflect barriers to entry and expansion

Nigerian manufacturing markets appear to consist of a relatively high number of players compared with its peers; however, several key markets show a high degree of concentration reflecting in part the existence of barriers to entry and the expansion of smaller firms. WBES data indicate a relatively high proportion of enterprises reporting operating in a market with six or more players (potentially reflecting the relatively large size of the Nigerian economy compared with some peer countries), but there is also a disproportionate percentage of monopolies among countries with unconcentrated markets (FIGURE 5.4). While in most comparable countries the percentage of firms that perceive themselves as monopolies has gone down, in Nigeria the numbers have not changed. At the same time, Nigeria falls in the mid-range of peers in terms of the extent of market dominance as reported by the Global Competitiveness Report of the World Economic Forum. Nigeria is ranked below several of its regional peers such as Ghana, Benin, and Egypt, and also below Indonesia, India, Vietnam, and Malaysia, and no progress was made in the period from 2010 to 2019 (FIGURE 5.5).

Meanwhile, several key markets show a relatively high degree of concentration, including flour-milling, sugar-milling, ammonia fertilizer production, brewing, cement production, and mobile telecoms services.

As FIGURE 5.6 shows, of nine markets with available market share data, all had Herfindahl-Hirschman Index (HHI) scores higher than 2,500, the threshold for a market to be considered a highly concentrated sector.[77] Sugar-milling, brewing, cement and fertilizer markets exhibit high levels of concentration with HHI between 4,600 and 6,000. Market structure provides only one aspect of market dynamics, however, and it is important to also look at whether Nigeria's policy and regulatory framework is supportive of competition, entry, and expansion of firms in the longer term.

77 Based on the HHI, the concentration levels are classified as follows: (i) Unconcentrated Markets: HHI below 1,500; (ii) Moderately Concentrated Markets: HHI between 1,500 and 2,500; and (iii) Highly Concentrated Markets: HHI above 2,500 (Horizontal Merger Guidelines 2010; U.S. Department of Justice and Federal Trade Commission).

FIGURE 5.4. Manufacturing sector markets appear to be relatively unconcentrated in Nigeria but there is a disproportionate percentage of monopolies

Percentage of respondents by number of perceived competitors in market

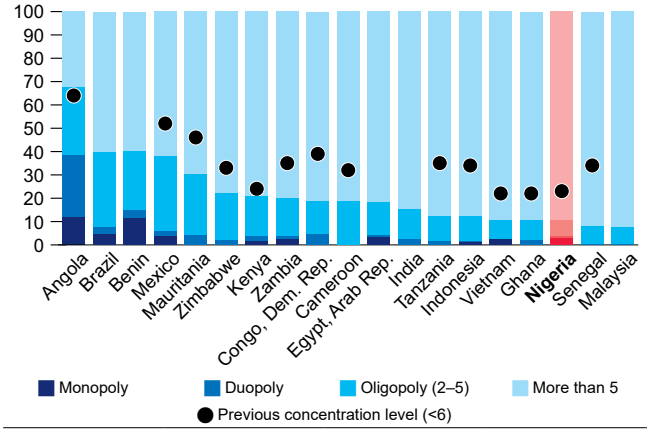
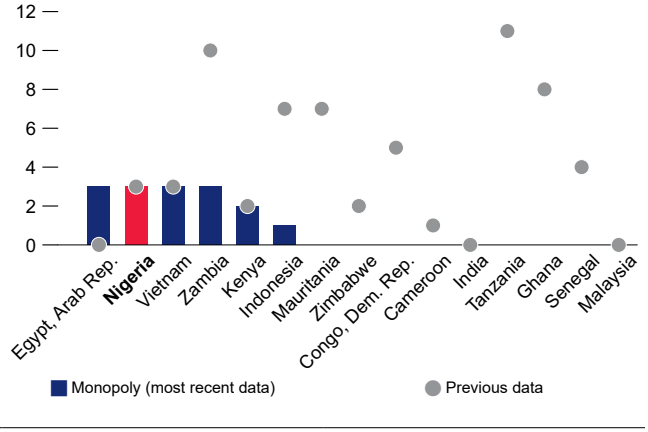


FIGURE 5.5. Percentage of respondents that perceive themselves to be monopolies

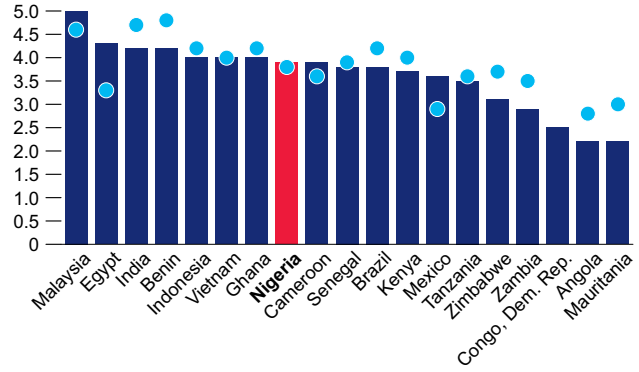
Percentage of respondents that perceive themselves to be monopolies



Source: World Bank Enterprise Survey and the authors' elaboration based on World Bank Enterprise Survey data for various years, latest data available.
Note: The shares reflect the percentage of responding establishments that answered "None", "One", "2–5" or "More than 5" to the question "For fiscal year [indicated in parenthesis], for the main market in which this establishment sold its main product, how many competitors did this establishment's main product/product line face?", respectively. For example, "None" was coded as "Monopoly" and "One" as "Duopoly". Exclusions: Establishments with no answers to the question and establishments whose main market for its main product line is international.

FIGURE 5.6. Nigeria is outperformed by several peers in terms of the extent of market dominance in markets

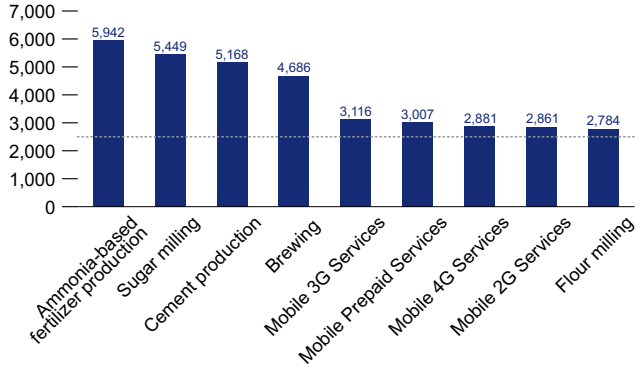
Extent of market dominance (1-7, best)



Source: World Economic Forum's Global Competitiveness Report and World Economic Forum, 2010 and 2019.

FIGURE 5.7. Concentration levels in selected manufacturing and services sectors of Nigeria's economy fall above the 2,500 threshold, considered to be "highly concentrated"

Market concentration index



Source: World Economic Forum's Global Competitiveness Report and World Economic Forum, 2010 and 2019.
Note: These HHIs do not include import amounts which can apply competitive pressure to domestic industries.
Source: Sugar and Flour data as of 2016 https://journalissues.org/wp-content/uploads/2016/06/Ofonyelu.pdf; fertilizer data as of 2015, IFDC database; cement data as of 2015/16, Cement database; mobile services data as of Q2 2021, GSMA intelligence); brewing data as of 2018 http://www.unitedcapitalplcgroup.com/wp-content/uploads/2018/08/INTBREW-Coverage-Initiation-Report1.pdf.

5.1.4 The potential impact of boosting competition

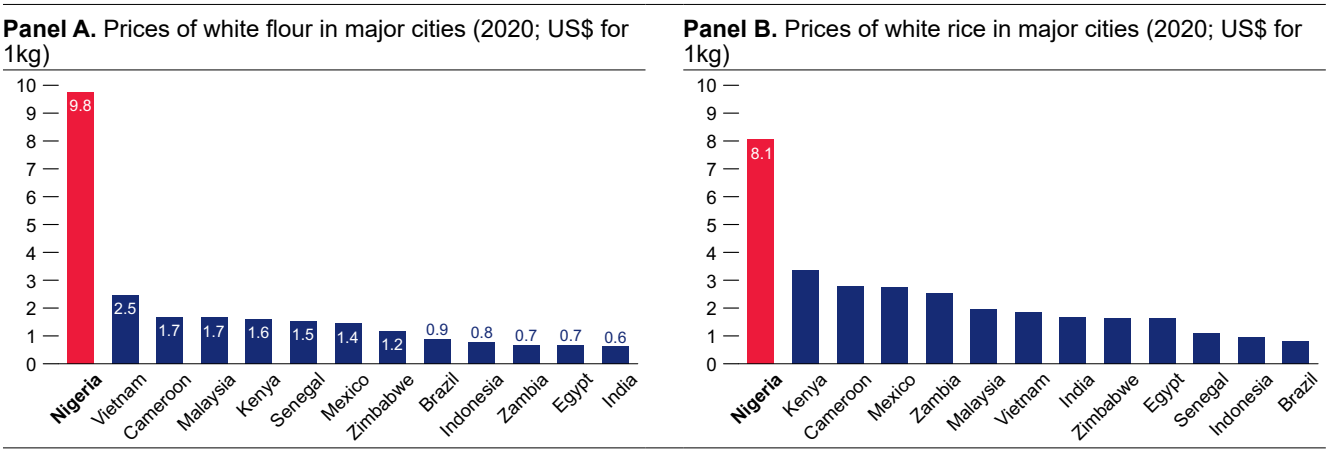
Removing restrictions to competition and strengthening the competition law and policy frameworks could improve the business climate, create new markets, and boost both growth and welfare. Tackling restrictive product market regulations in Nigeria's professional services segments could result in an increase of GDP growth by at least 0.2 of a percentage point (World Bank, 2016). The impact would be even larger if fundamental reforms were implemented in other services segments with higher spillovers across the economy, such as electricity, telecommunications, and transport. Improvements in upstream markets would allow firms to reduce operational costs and expand investment opportunities.

The elimination of market restrictions would make private investment more socially impactful. Boosting competition in basic goods markets could make staple products more affordable, boosting consumer welfare, particularly for households at the bottom of the income distribution that consume disproportionately more of such goods. Available retail price data for 41 food items provide preliminary evidence that retail prices are generally higher in Lagos than in other major cities in the rest of the world, even when controlling for GDP per capita, import costs, the status of logistics, and local tax rates (notable exceptions are red meat, pork, fish, and white bread; see TABLE 5.1). This potentially reflects weak competition in these product markets. Prices of this basket of goods are, on average, about 14 to 18 percent higher than in other economies around the world (TABLE 5.2 in Annex 5.1). Prices of basic goods such as flour and rice are disproportionately higher in Lagos than in cities in peer countries (FIGURE 5.7)

5.1.5 Nigeria must develop a sound and holistic approach to competition encompassing three key pillars

The objective of competition policy is not to increase the number of firms in a market or to eliminate market power to achieve a theoretical state of perfect competition. Competition must look to create the right incentives for firms to improve their economic performance relative to their actual and potential rivals and, in so doing, allow markets to work more efficiently for the benefit of consumers and drive sustainable economic growth.

FIGURE 5.8. Constraints to competition may be contributing to higher prices in Nigeria relative to other countries



Source: Economist Intelligence Unit (EIU).
Notes: Cities: Lagos, Nigeria; Hanoi and Ho Chi Minh City, Vietnam; Douala, Cameroon; Kuala Lumpur, Malaysia; Nairobi, Kenya; Dakar, Senegal; Mexico City, Mexico; Harare, Zimbabwe; Rio de Janeiro and Sao Paolo, Brazil; Jakarta, Indonesia; Lusaka, Zambia; Cairo, Egypt; New Delhi and Mumbai, India.

TABLE 5.1. Prices in Nigeria (Lagos) are higher than in other in other countries worldwide for a basket of basic goods

Product	More expensive	Less expensive	Product	More expensive	Less expensive
Apples	Yes ***		Mineral Water	Yes *	
Bacon	Yes ***		Mushrooms	Yes ***	
Bananas	Yes ***		Olive oil		Not significant
Beef		Yes ***	Onions	Yes ***	
Butter	Yes ***		Oranges	Yes ***	
Carrots	Yes ***		Peaches (canned)	Yes ***	
Cheese (Imported)	Yes ***		Peanut or corn oil	Yes ***	
Chicken	Yes ***		Peas (canned)	Yes ***	
Coca-Cola	Yes ***		Pork		Yes ***
Cocoa	Yes *		Potatoes	Yes ***	
Coffee	Yes ***		Sliced pineapples (canned)	Yes ***	
Cornflakes		Not significant	Spaghetti		Yes ***
Drinking chocolate	Yes ***		Tea bags		Yes ***
Eggs	Yes ***		Tomatoes	Yes ***	
Fish		Yes ***	Tonic water		Not significant
Ham		Yes ***	White bread		Yes**
Lamb		Yes ***	White flour	Yes ***	
Lemon	Yes **		White rice	Yes ***	
Lettuce	Yes ***		White sugar	Yes ***	
Margarine	Yes ***		Yoghurt	Not significant	
Milk (Pasteurized)	Yes ***				

Notes: Results are from an OLS regression using 2010–20 data from the Economist Intelligence Unit (EIU). The dependent variable is the logarithm of market prices (current international $/kg) of the following products: apples (1 kg), bananas (1 kg), beef (fillet, ground, roast, 1 kg), butter (500g), carrots (1 kg), chicken (fresh, frozen 1 kg), cornflakes (375g), eggs (12), flour white (1 kg), fresh fish (1 kg), lettuce (1 head), milk (pasteurized, 1 liter), mineral water (1 liter), mushrooms (1 kg), onions (1 kg), oranges (1 kg), peanut oil (1 liter), potatoes (2 kg), spaghetti (1 kg), sugar white (1 kg), tomatoes (1 kg), tonic water (200 ml), white bread (1 kg), white rice (1 kg) and yoghurt (150g). Standard errors clustered at the country level are in parentheses. ***, **, and * indicate significance at 1 percent, 5 percent, and 10 percent. Results shown use exchange rates provided by the Economist Intelligence Unit. The results are robust to using exchange rates from the World Bank World Development Indicators (WDIs). The variables GDP, tariff, and logistics performance are from the World Bank's WDIs, cost of import is from the Trading Across Border dataset, aggregated LPI is from https://lpi.worldbank.org/, and corporate and standard indirect tax rates are from KPMG, Deloitte, and other web sources. The sample includes 97 cities from the following 89 countries: Algeria, Argentina, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Brazil, Brunei Darussalam, Bulgaria, Cameroon, Canada, Chile, China, Colombia, Costa Rica, the Czech Republic, Côte d'Ivoire, Denmark, Ecuador, Egypt, Arab Rep., Finland, France, Germany, Greece, Guatemala, Hong Kong SAR, China, Hungary, Iceland, India, Indonesia, Iran, Islamic Rep., Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, Rep of Korea, Kuwait, Libya, Luxembourg, Malaysia, Mexico, Morocco, Nepal, the Netherlands, New Caledonia, New Zealand, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, Qatar, Romania, the Russian Federation, Saudi Arabia, Senegal, Serbia, Singapore, the Slovak Republic, South Africa, Spain, Sri Lanka, Sweden, Switzerland, the Syrian Arab Republic, Taiwan, China, Thailand, Tunisia, Turkey, Ukraine, the United Arab Emirates, the United Kingdom, the United States, Uruguay, Uzbekistan, Vietnam, Zambia, and Zimbabwe. For robustness, a parallel analysis was performed using Numbeo price data for a similar list of products in Nigeria, obtaining similar results.

To achieve competitive markets, Nigeria must put in place a sound and holistic approach to competition that encompasses both enforcement of the competition law and the design of pro-competition government interventions. This entails a set of policies and laws that ensures that competition in the marketplace is not restricted in such a way as to reduce economic welfare (Motta, 2004). Anticompetitive outcomes can result from either: (i) anticompetitive firm behavior (cartels, abuse of dominance or anticompetitive mergers); or (ii) from government interventions in markets that restrict entry, increase the costs of competing, or create an unlevel playing field. This implies that, while competition policy must include sound competition law enforcement, it must also go beyond this. In practical terms, a holistic competition policy framework encompasses three pillars: Pillar 1 entails opening markets to entry and rivalry through pro-competition sector regulation; Pillar 2 involves policies to ensure competitive neutrality and promoting a level playing field across the economy; and Pillar 3 relates to the enforcement of antitrust laws that are typically rules

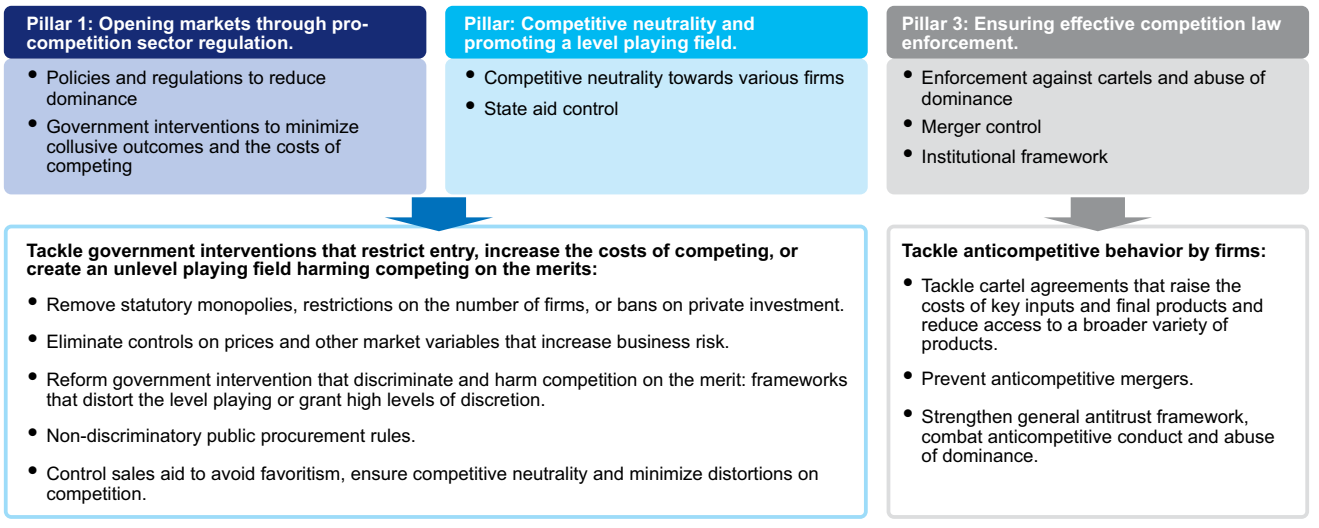
against the abuse of dominance and anticompetitive agreements, and merger control. Therefore, the first two pillars address government interventions that may restrict entry, increase the costs of competing, or create an unlevel playing field, while Pillar 3 focuses on the behavior of businesses (FIGURE 5.9).

Pillars 1 and 2 require pro-competition principles to be embedded into Nigeria's policies and regulations, both at the sectoral level and also economy-wide. Regulations should be designed to achieve public policy objectives while minimizing the extent to which they hinder competition. In some sectors that have natural monopoly characteristics, regulations that are set with the explicit objective of increasing entry or the degree of rivalry in a market may need to be put in place (the ICT and digital financial services sectors are key examples that are covered in Section 5.3). Pillars 1 and 2 also require bringing a competition perspective when conducting regulatory impact assessments of procedures, regulations, or policies to understand their impact on competition and to identify alternatives that are more pro-competition. Integrating competition policy with other policies and introducing competition principles can make those broader policies more effective.

Nigeria's industrial and trade policies are frequently deployed by policy makers to shape market outcomes and protect certain industries, which is likely to lead to unintended market distortions in the medium term. It is thus particularly important that these policies start to incorporate competitive neutrality principles to level the playing field between firms and prevent some firms from receiving undue advantages. Studies have found that sectoral industrial policies (e.g., subsidies, tax holidays) have a larger impact on productivity growth when targeted at competitive sectors or when they are allocated to maintain or increase competition, for example, by inducing entry or encouraging younger enterprises (Aghion et al., 2015). This way, industrial policy can be designed to enhance competition in a sector and to serve the dual role of increasing consumer surplus and growth. Trade policy is another key tool that policy makers can use to enhance competition and welfare (see Technical Note 3). Section 5.2.2 provides a brief discussion on industrial policies in Nigeria.

Competition enforcement in Nigeria (Pillar 3), on the other hand, will rely on the recently enacted Federal Competition and Consumer Protection Act (FCCPA)[78] and the recently created Federal Competition and Consumer Protection Commission

FIGURE 5.9. A holistic competition policy framework encompasses three pillars



78 Passed in January 2019.

(FCCPC) to enforce the law. The FCCPC should monitor and punish anticompetitive behavior by firms and review mergers to prevent those that could potentially harm competition. At the same time, competition enforcement must complement economic market regulation. It must pursue advocacy efforts, analyzing the effect on competition of proposed government interventions, and providing opinions on their unintended impacts on market functioning and proposing potential alternatives to minimize market distortions. The FCCPC, being a new competition authority, may find it effective to focus on these advocacy efforts in the early stages of its development while it develops its enforcement capacity (see Section 5.2.1 for a discussion on competition law and enforcement capacity in Nigeria).

It is important to note that there is a strong link between Pillars 1 and 2, and Pillar 3. First, government policies that result in concentrated market structures and the dominance of certain firms raise the risk of anticompetitive firm practices. Second, some anticompetitive government regulations can directly facilitate anticompetitive practices, for example, by making it easier to collude. Thus, Nigeria's enforcement framework is key to tackling behaviors facilitated by a legacy of distortive policies. But it is equally important for Nigeria's government policies to be designed to minimize the risk of anticompetitive conduct by firms.

5.2 Economy-wide government interventions that affect competition and the performance of Nigerian markets

5.2.1 Nigeria has recently passed its competition law and established its competition authority but there is some way to go to build the regulations, tools, and capacity required to tackle anticompetitive conduct by firms, prevent anticompetitive mergers, and advocate for pro-competition policies with other government agencies

Nigeria has taken important steps forward in establishing competition policy frameworks to tackle anticompetitive behavior and promote competition in markets. Until recently, laws regulating competition had only existed in individual sectors of the economy, for example, in telecoms and aviation, while merger review was dealt with through the Investments and Securities Act 2007. Nevertheless, after a legislative process that faced opposition from agencies that currently hold a mandate on competition, as well as from certain major private sector players, in January 2019 the FCCPA was passed.[79] The Act covers key aspects of a competition regulatory framework by prohibiting anticompetitive practices (cartels, other anticompetitive agreements, and abuses of dominance), it creates a regime that can prohibit anticompetitive mergers, and it creates an independent institution for enforcement of the law (consisting of a Commission and a Tribunal).[80] Although having a competition law and authority is an important step forward, competition regulation must also include secondary regulations and guidelines that clarify and solidify how the law will be applied by the FCCPC.

79 One of the factors driving the adoption of the FCCPA appears to have been anticipation of the AfCFTA, which was due to include a regional competition policy protocol. The delay in passing the Act was in part due to opposition of certain sector regulators that were uncomfortable with the concurrent mandate that would be held by the FCCPC. This highlights that international cooperation can improve prospects for reform, but when considering the political economy of reform it is important to consider incentives of other government bodies and not just the private sector.

80 Federal Competition and Consumer Protection Act, Part II and Part VII, available at: https://www.fccpc.gov.ng/guidelines/documents/.

There are some relevant gaps remaining in the competition law framework

Secondary regulations and guidelines on mergers have been published bringing more certainty and clarity to enforcement regarding merger review. In September 2019, the Notice of Threshold for Merger Notification was published, establishing firm's turnover-based thresholds to evaluate if a merger is deemed notifiable and subject to review before being implemented. The FCCPC has also issued Merger Review Regulations with ancillary instruments to govern the notification and review of mergers and merger review guidelines, which describe the Commission's general approach to administering the Act's merger review process. These are important steps in establishing a clearer and solid enforcement framework for merger review in Nigeria. This will help reduce delays and uncertainties for firms wishing to undertake such transactions. Nevertheless, there are still some opportunities to improve the secondary regulations. Current thresholds established in Nigeria provide for a combined threshold "or" (that is, in the alternative) an individual threshold for the undertaking to be acquired only, which could lead to overenforcement and undue burden on the FCCPC, since the Commission would need to review mergers that are not likely to lessen competition in which a large enterprise that itself exceeds a threshold makes a de minimis acquisition of a much smaller enterprise.

In addition, relative to the size of Nigeria's economy, the proposed combined local turnover threshold of ₦1 billion appears to be extremely low. Increasing the merger threshold amounts would help reduce the potential burden on the Commission derived from merger review, especially as they are capacity constrained due to being a young authority (see below). This would also avoid discouraging transactions, especially those of small magnitude, due to not imposing additional administrative burden on businesses. This issue notwithstanding, the merger regulations in Nigeria should look to include special provisions to deal with mergers in nascent markets, such as digital markets. This would ensure that potentially harmful transactions are caught, where the turnover of the target may not be significant, yet it could still have significant market power. Defining thresholds in terms of assets has the advantage that it could pick up cases where a firm is not generating significant turnover but has significant assets in terms of data or intellectual property.

Key secondary regulations and guidance such as market definition guidelines, regulations on restrictive agreements and trade practices, and regulations on abuse of dominance that were missing have been developed with inputs from the World Bank Group. These complementary guidelines and regulations were adopted in early 2022 and will help increase the predictability and clarity of the framework for competition enforcement in Nigeria. It is important to notice that these regulations contemplate a special focus on digital markets, which will continue to be highly relevant in the coming years, and which need tailored provisions to address specificities that may affect conventional substantive assessments of anticompetitive practices. The implementation of the new provisions on anticompetitive agreements and abuse of dominance will also require capacity building of the FCCPC, as well as enhancing awareness of private sector stakeholders to increase compliance. Other clarifications that are still needed are a detailed explanation on leniency policy and procedures for leniency applications, requirements, and a process for engaging in settlements, details on investigation tools of the FCCPC, including: complaints; inspections (with and without notice); requests for information; witness interviews; and internal procedural guidelines of the FCCPC.

Some provisions in the law go against good practice

Against good practice, there are provisions for price regulations in the Competition Act. These should be removed, or provisions should be put in place that limit the use of incentives to specific situations with a clear rationale. The FCCPC will also need to define and

clarify how public interest provisions in the law (e.g., employment considerations) will be used to prevent these provisions from being used in a way that would reduce the law's effectiveness. Additional guidelines on how dominance will be assessed by the FCCPC are needed to bring clarity to firms and reduce uncertainty regarding the conduct that these firms might undertake in markets in Nigeria.

Moreover, the law currently provides for some exemptions for professional services that should be reconsidered. There will be a need to harmonize the Public Procurement Act 2007 and the FCCPA (e.g., the Public Procurement Act expressly excludes public officers from the application of collusion and bid-rigging offences, which the FCCPA does not) and ensure cooperation between the agencies to ensure anticompetitive practices in the public procurement arena are effectively curtailed. Finally, the FCCPC holds concurrent jurisdiction on ex post competition matters with sector regulators. As such, it will be necessary to develop details of how the agencies will work together, particularly in the areas of aviation, telecoms, and power.[81]

The Financial Institutions Act published in November 2020 also exempts the financial sector from the provisions of the FCCPA except for merger review. This means the competition authority will not be able to enforce competition law when it comes to activities performed by licensed banks or other financial institutions licensed by the CBN.[82] The Financial Institutions Act establishes that banks and other financial institutions must comply with competition standards and obligations established in extant regulations and that the CBN has the power to issue regulations, guidelines and policies to promote competition in the sector but the competition law itself does not apply.[83] The CBN must be well-capacitated in competition issues to ensure that competition is adequately regulated in the financial sector.

Institutional factors related to independence and capacity building and efficiency are needed to strengthen enforcement of the competition law in Nigeria

Successful implementation of the competition law in Nigeria will rest on the new FCCPC being able to operate independently of political influence and having sufficient capacity, tools and resources to operate efficiently. The FCCPC has been formed from the former Consumer Protection Commission, but it currently lacks sufficient staff to implement its competition mandate. Capacity will be needed to implement tools to combat anticompetitive behavior effectively (e.g., the ability to conduct raids, to summon parties, to enter into settlements, and to implement a leniency policy). There has also been some concern over the degree of independence that the FCCPC will enjoy from the FMITI and safeguards against political appointees being put into decision-making positions will be key.

What makes a competition authority independent and efficient? Independence is the ability to make sound technical decisions independent of any bias arising from undue influence from external parties (both public and private) and internal conflicts of interest. Efficiency is the ability to identify and resource the most relevant and demanding issues according to each authority's policy goals and allocate resources accordingly in a timely manner. As empirical evidence has found, achieving independence and efficiency of the FCCPC can

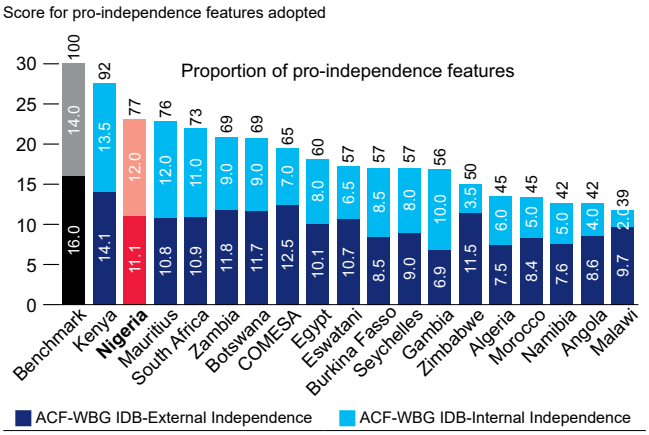
81 This has been an area of contention for regulators in discussions around the Financial Institutions Act and was a key reason for the delay in its enactment.

82 Section 65 of the Banks and other Financial Institutions Act 2020. Available at: https://www.cbn.gov.ng/out/2021/ccd/bofia%202020.pdf.

83 Section 30 of the Banks and other Financial Institutions Act 2020. Available at: https://www.cbn.gov.ng/out/2021/ccd/bofia%202020.pdf.

boost productivity in Nigerian markets (Voigt, 2009; Buccirossi et al., 2013).[84] As well as helping the FCCPC to implement the law against firms, independence is important to ensure the FCCPC can act as an impartial voice in the policy arena that can provide sound evidence to ensure that industrial (and other) policies do not place an undue burden on consumers and the economy. The law explicitly empowers the FCCPC to opine on the competition impact of government policies, so it is well positioned to place this role as long as it is not hijacked by vested interests. Various institutional design tools can be used to promote independence and efficiency.

FIGURE 5.10. ACF-WBG IBCA – Independence indicator



Source: ACF-WBG IDB Cameroon, Congo, and Tunisia are not calculated because more than 10% of the ACF-WBG IDB variables were missing.

Level of internal and external independence of competition authority vs benchmark and peers

Nigeria's competition authority and law perform relatively well on independence features compared with African peers, but several good practice independence features are still missing[85] (FIGURE 5.10). For example, there is scope to reduce the risk of undue interference from external stakeholders (government and the private sector) in the decision-making of the authority by strengthening protocols for the engagement of officials responsible for investigation, prosecution and adjudication of both practices and mergers. Granting key officials in the FCCPC with fixed terms could provide them with job stability that mitigates external pressure, particularly from other government entities. Although fixed terms exist for adjudicators in Nigeria, this feature could be extended to heads of prosecution. Kenya, Malawi, and Mauritius, to mention a few, have already adopted this rule. External independence of the FCCPC could also be enhanced by establishing cooling-off periods that prevent key officials from taking conflicting positions immediately after leaving their roles with the authority, commonly with the private sector. The FCCPC currently does not impose cooling-off periods for prosecutors or adjudicators. Imposing cooling-off periods would mitigate risks of capture or undue use of confidential information. Kenya and the Common Market for Eastern and Southern Africa (COMESA) already implement such a rule. Finally, the authority's financing methods can also impact independence from political influence, with allocations directly from National Assembly (where power is more dispersed) generally holding less risk for influence than through allocation by a minister or the President. The FCCPC's funding could combine National Assembly approvals with revenues collected from the private sector through service charges for merger review to diversify funding sources (Kovacic and Hyman, 2012; Jenny, 2016). In Africa, COMESA's Competition Commission and South

84 Using a dataset on 97 countries, Voigt (2009) estimates the effect of the quality of competition law and its enforcing institutions on productivity and finds a positive relationship between the two variables. The result remains valid even if developing countries are analysed separately. Buccirossi et al. (2013) found a positive and significant relationship between the quality of institutional and enforcement features of competition policy and TFP growth for 22 industries in 12 OECD countries.

85 Based on the ACF-WBG Institutional Benchmark of Competition Authorities (IBCA) Nigeria performs well with respect to its peers in Africa when it comes to independent policy implementation but remains considerably below the good practice benchmark. Nevertheless, in terms of efficiency of competition law enforcement, Nigeria is second to last among its regional peers. Factors considered to measure independence are: Mechanisms and criteria for the appointment and removal of personnel of competition authority; budget allocation and financing of competition authority; influence of government in prosecution efforts and decisions; actors responsible for merger reviews; separation of powers between adjudicatory, prosecutorial, and decision-making instances, among others.

Africa are examples of jurisdictions that charge fees for merger reviews, thus contributing significantly to their respective budgets. The FCCPC recently increased the fees to be paid for merger notifications, which (when applied judiciously) can help in lowering the FCCPC's dependence on government budget for its operation.[86]

The fact that the executive branch of government has the right to intervene in investigations beyond its right to petition/complaint undermines the FCCPC's investigative independence in anticompetitive practice cases, mergers, and advocacy efforts. It would be important to ensure the presence of clear rules of engagement for cases where ministers do intervene (for example, objective criteria, transparency, due process, along with checks and balances). In the United Kingdom, for example, the Secretary of State can intervene in public interest mergers following specific circumstances, as defined by the legislation (for example, national security, plurality of the media, and the stability of the UK financial system in cases where business deals meet merger thresholds).[87] Developing mechanisms to guarantee both structural and financial independence from the executive branch, including securing diversified sources of budget can help the FCCPC to achieve complete independence from the FGN. Examples of African jurisdictions with both financial and structural independence from the executive branch include Mauritius and Botswana.

In terms of internal independence, Nigeria scores at the benchmark level in almost all dimensions but has room of improvement. Internal independence relates to how institutional design can mitigate conflicts of interest within the Commission, particularly between its different functions such as prosecution and adjudication, focusing on aspects of separation of powers. One shortcoming of the FCCPC in this respect is that the adjudicator is financed partly by the sanctions it imposes. This can generate conflicts of interest in decision-making.

Efficiency of the Nigerian competition authority in resolving anticompetitive practice cases, mergers and advocacy efforts

Efficiency[88] of the FCCPC is low relative to its regional peers. While the FCCPC already uses some pro-efficiency mechanisms, such as agency-wide performance indicators and agency-wide screening practices to allocate resources, it lacks staff performance indicators for merger reviews and anticompetitive practices. The use of well-designed performance indicators can create incentives for good staff performance. However, jurisdictions should be cautious about the types of performance indicators that they implement to avoid introducing bias into the investigative and decision-making process by linking performance to the type of decision made in a case, for example, the sanctions and restrictions imposed. In addition, while it does have screening practices for complexity to allocate resources in mergers, it does not have these for anticompetitive cases. Implementing strategies capable of assessing the content, relevance, and resource needs, could inform better prioritization in enforcement efforts against anticompetitive practices. In addition, the FCCPC does not implement independent budget allocation for its various mandates. This creates a risk that demand-driven non-antitrust mandates, such as consumer complaints, or even antitrust mandates, such as merger filings, could disproportionately drain resources that would otherwise be available for ex officio strategic activities, such as the identification and sanctioning of anticompetitive practices and competition advocacy. The authorities in Mauritius, Egypt and Zambia are examples of agencies in comparator countries that do perform budget allocation by mandate.

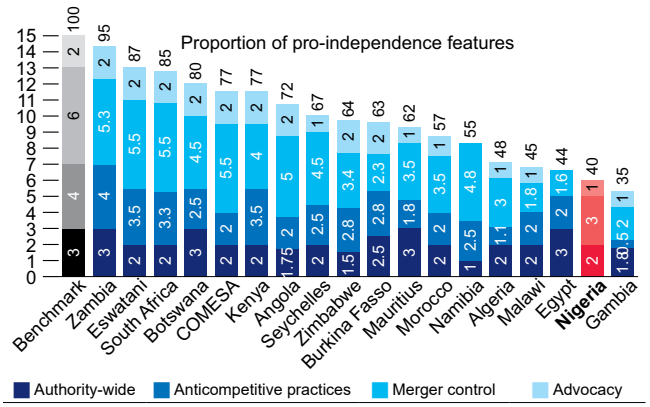
86 The Federal Competition and Consumer Protection Act, 2018 Merger Review (Amended) Regulations, 2021.

87 Recently, as a response to the COVID-19 pandemic, public health-related mergers have also become part of public interest initiatives. See the Order by the Secretary of State, The Enterprise Act 2002 (Specification of Additional Section 58 Consideration), Order 2020 No. 267. There is also a possibility to intervene in cases that fail to meet merger thresholds for a narrow set of circumstances (for example, involving the military). See Competition and Markets Authority, "Mergers—the CMA's Jurisdiction and Procedure: CMA2." 2014.

88 Efficiency considers factors such as: total staff and budget; criteria for case assignment to prosecutors; screening procedures for case/mergers to allocate resources for their investigation; dedicated personnel; number of cases/mergers handled and decided, length of investigations, budget available for case prosecution, among others.

The FCCPC lacks staff specialization in investigation and prosecution of anticompetitive practices, merger review, and in advocacy efforts. As a nascent competition authority, capacity building of the FCCPC's personnel and its specialization will be fundamental to increasing its efficiency. Competition authorities in peer countries such as Kenya, Egypt, and Mauritius have specialized staff members for the investigation and prosecution of anticompetitive practices. Zambia and South Africa have specialized staff for anticompetitive practices and for mergers. The FCCPC also lacks the legal capacity to settle cases at either the prosecution or the adjudication phases of an anticompetitive enforcement case. The same happens in terms of the legal capacity of the FCCPC to negotiate remedies during either the analysis or the adjudication phases of a merger review. These capacities are part of competition authorities' legislation in Angola, Zambia and South Africa. The use of settlements could save time and financial resources required for efficient enforcement. Having this possibility could improve the FCCPC's efficiency, reduce its burden and increase its capacity to handle a larger number of cases.

FIGURE 5.11. ACF-WBG IBCA, results of the efficiency indicator



Source: ACF-WBG IDB Cameroon, Congo, and Tunisia are not calculated because more than 10% of the ACF-WBG IDB variables were missing.

5.2.2 Industrial policies across the economy have introduced competition distortions to markets in Nigeria due to protectionism and influence of large players

Industrial policy, principally due to its protectionist stance, has introduced market distortions into Nigerian markets

Beyond competition law enforcement, Nigeria would benefit from reviewing its industrial policies across the economy to minimize competition distortions. Nigeria's approach to industrial policy has had a strong focus on import substitution strategies, including several policies that create an unlevel playing field between domestic and foreign firms, inhibit investment, and that can raise prices for households and downstream firms. These include:

- **Local content rules** exist in a number of sectors. The most far-reaching requirements have been in oil and gas.[89] But other important sectors have also included local content targets for firms. Guidelines for the ICT sector, for example, set out a target of 50 percent local content and all ICT companies are required to be registered as Nigerian entities with predominantly Nigerian representation.[90] In 2020 and 2021, a Nigerian Local Content Development and Enforcement Commission Bill was under discussion in the National Assembly. This Bill seeks to expand the comprehensive frameworks and schemes for national content requirements that were previously applicable to oil and gas to other areas of the Nigerian economy, particularly to the solid minerals mining, construction, power, manufacturing and health sectors.[91] Executive Order 003 also requires all ministries, departments and agencies to grant preference to local manufacturers of goods

89 Nigerian Oil and Gas Industry Content Development Act of 2010.

90 Guidelines for Nigerian Content Development in the ICT sector, NITDA, 2013. https://www.pwc.co.za/en/assets/pdf/nigeria-ict-local-content-guidelines-alert.pdf

91 Proposed Nigerian Local Content Development and Enforcement Commission Bill. Available at: https://placbillstrack.org/upload/HB621.pdf; KPMG 2021, "Commentaries on the Nigerian Local Content Development and Enforcement Commission Bill 2020". https://assets.kpmg/content/dam/kpmg/ng/pdf/tax/commentaries-on-the-nigerian-local-content-development-and-enforcement-commission-bill-2020.pdf

and service providers in their procurement of goods and services.[92] This directive also states that at least 40 percent of expenditure for the procurement of a number[93] of items must be on locally manufactured goods. This Executive Order gives local suppliers up to 30 percent price advantage in tender processes and has been particularly enforced in support of the cotton, garment and textile industry. Technical requirements in public tender documents typically refer to standards of the Standards Organization of Nigeria, which in some cases are designed specifically with the aim of increasing local content in public procurement as per Executive Order 003.

- **Import bans, quotas, and high effective duty rates on imports into strategic sectors** are imposed to boost the competitiveness of local industries. Import bans are in place in Nigeria for 26 groups of items (including food and household items, bagged cement, and certain medications),[94] which raise the cost of living, particularly for the poorest[95] and reduce government revenues.[96] There is also a list of around 40 items that are ineligible for foreign exchange, which acts as a de facto import restriction (including on foods such as rice, vegetable oils, and tomatoes, and manufactured goods such as soap, textiles, cement, NPK fertilizer, etc.).[97] In agriculture, wheat, sugar, rice, tomato paste, and salt have effective rates of 85, 75, 70, 50 and 70 percent, respectively.[98] In manufacturing, there is 70 percent duty on automotive imports and imports of vehicles are restricted to one per vehicle manufactured in Nigeria.[99] Such trade restrictions are viewed as a "quick fix" for issues facing an industry and are not typically time-bound to limit the protections provided.

- **Restrictions on foreign companies entering the market without first incorporating a Nigerian company** are contained in provisions in the law governing the corporate sector (Companies & Allied Matters Act 2020).[100] Foreign firms may apply for an exemption of this rule but only if they are "invited to Nigeria by or with the approval of the FGN to execute any specified individual project."[101] The granting of exemptions to certain foreign companies on a case-by-case basis might create an unlevel playing field in Nigerian markets.

Nigeria's protectionist stance and its use of trade barriers as part of its industrial policy was one reason for its recent hesitation in joining the AfCFTA. This was despite a recent report by the Nigerian Office for Trade Negotiation noting that Nigeria would be one of the top three beneficiaries on the continent from the elimination of tariffs and the reduction of NTBs between African states. It is also widely considered that Nigeria's decision to close all of its land borders to trade in August 2019 was a reaction to the potential threat of import competition posed by the AfCFTA.[102] Nigeria

92 https://interior.gov.ng/index.php/84-press-release/267-executive-order-003-will-boost-the-economy-dambazau.

93 These products are: uniforms and footwear, food and beverages, furniture and fittings, stationery, motor vehicles, pharmaceuticals, construction materials, and information technology. https://interior.gov.ng/index.php/84-press-release/267-executive-order-003-will-boost-the-economy-dambazau.

94 Import Prohibition List https://trade.gov.ng/tariff/prohibitionList_Import.do.

95 It is estimated that four million Nigerians could leave poverty if such bans were lifted and replaced by tariffs set at a level applied to similar products. See Africa Trade Policy Notes, March 2012 – Import Bans in Nigeria Increase Poverty.

96 https://www.export.gov/article?id=Nigeria-Prohibited-and-Restricted-Imports.

97 https://www.cbn.gov.ng/out/2015/ted/ted.fem.fpc.gen.01.011.pdf.

98 https://www.export.gov/article?id=Nigeria-Market-Overview; https://www.export.gov/article?id=Nigeria-Import-Tariffs.

99 *Ibid*.

100 Companies & Allied Matters Act 2020, Chapter 3-Foreign Companies, available at: https://www.cac.gov.ng/wp-content/uploads/2020/12/CAMA-NOTE-BOOK-FULL-VERSION.pdf?__cf_chl_managed_tk__=pmd_VECC8Tj.isXseky7btoeWKComOZly7k6MVmCFtnPYs4-1631802423-0-gqNtZGzNAvujcnBszRGR.

101 Companies & Allied Matters Act 2020, Chapter 3-Foreign Companies, Para. 80., available at: https://www.cac.gov.ng/wp-content/uploads/2020/12/CAMA-NOTE-BOOK-FULL-VERSION.pdf?__cf_chl_managed_tk__=pmd_VECC8Tj.isXseky7btoeWKComOZly7k6MVmCFtnPYs4-1631802423-0-gqNtZGzNAvujcnBszRGR.

102 The FGN states that the border closure was intended to stop illegal smuggling, including of agricultural products such as rice.

did eventually ratify the AfCFTA at the end of 2020, although some of its borders remain closed.[103] It is worth noting that three firms were granted ad hoc exemptions to the border closure, including Dangote and BUA, leading to claims of unfair preferential treatment from other firms.[104] Such advantages targeted at specific, usually larger firms are frequently cited as a concern of smaller firms and is the subject of discussion in the following sub-section.

Large incumbent players in several sectors of Nigeria's economy exercise significant influence on the design of industrial policy and regulation affecting competition in markets

Certain large players appear to exercise significant influence over the way Nigeria designs its industrial, trade and investment policies, placing these firms at an advantage over those that do not have the same level of access to government, protecting the market position of larger players to the detriment of consumers. Nigeria's key plan for industrialization, the "Nigeria Industrial Revolution Plan", launched in 2014 has been implemented by the Nigeria Industrial Policy and Competitiveness Advisory Council (NIPCAC).[105] The NIPCAC, established in 2017, is chaired by the Vice President but runs on a public-private model with Aliko Dangote chairing the private sector group. Other private sector members appear to be mainly made up of some of the largest firms. NIPCAC has played a key role in advocating for protections and incentives for industry, including several measures that could distort the level playing field if not carefully designed, including tariff measures or import bans in sectors of focus, lower tariffs on inputs (this can favor large firms since they are not automatic and smaller firms often lack the knowledge or capacity to request exemptions from the Ministry of Finance), tax incentives/benefits,[106] or direct government financing (such as subsidized loans from the CBN to specific players or industries). The Manufacturers Association of Nigeria (MAN)—also chaired by a representative of Dangote—is also a strong advocate for trade protection measures to consolidate backward industrial policy. MAN also had significant input on negotiations for the AfCFTA, stating that it would negatively affect the manufacturing sector (African Review, 2018; Business Day, 2020).

In addition, the standards-setting process also appears to be driven partly by requests from private sector players, leaving it open to influence from larger players. Standard-setting disputes have occurred in sectors such as cement, in which a new standard that favored the dominant player in the market was set and competitors filed a suit to challenge the Standards Organization of Nigeria (SON) order.[107] SON appears to be aware of issues relating to standards-setting processes being driven by large players and has revised the process for standard-setting by posting proposed standards online in an attempt to achieve inputs from a broader range of smaller firms and stakeholders.[108]

103 https://nannews.ng/reps-shut-down-motion-to-reopen-borders/.

104 https://www.bloomberg.com/news/articles/2020-11-09/nigeria-exempts-dangote-cement-from-land-border-closure.

105 NIPCAC focuses on the following priority areas:
1. Infrastructure – Broadband, Power and Roads
2. Finance
3. Trade and market access
4. Policy and regulation
5. Technology
6. Skills

106 As an example, NIPCAC recently achieved the signing of a tax incentive for Road Infrastructure Development where the first recipients have included several members of NIPCAC.

107 Lafarge Cement alleged that the directives favor Dangote which created the wrong impression that the 32.5 grade cement produced by Lafarge is not suitable for buildings, only suitable for plastering. Lafarge alleged that the new standards are a way to allow Dangote to monopolize the market. https://www.worldcement.com/africa-middle-east/02062014/son_restricts_32_5_grade_cement_to_plastering_work_285/; https://guardian.ng/property/c25-property/committal-proceeding-trails-lafarge-son-cement-classification-controversy/.

108 https://son.gov.ng/standards-development.

Various forms of state aid to firms—such as subsidized financing and investment incentives—are sometimes designed in a way that benefit certain connected or large players. While national tax policy explicitly states that tax-based incentive schemes "should not promote monopoly such as entry barriers or otherwise prevent competition", potential distortions to the level playing field are not explicitly considered in incentive design, nor is additionality. "Special incentives" are available for strategic or major investors and are negotiated case-by-case.[109] These do not appear to be publicly available. The Pioneer Status Incentive,[110] designed and managed by the Nigerian Investment Promotion Commission, has seen reports of abuse and double-dipping by firms,[111] which led to restructuring of the scheme in recent years to improve transparency, including publishing the names of recipients, publishing new application guidelines, and the delegation of some approval powers from the FMITI to the Nigerian Investment Promotion Commission.[112] Going forward, further reforms on showing impact and examining opportunity costs of the incentives would be valuable. However, complaints that the scheme excludes certain firms remain. For example, the minimum tangible assets required for eligibility have been raised significantly (to N100 million or around US$280,000),[113] which may disadvantage SMEs and tech companies (that typically have more intangible assets). Privatization and PPPs could be conducted with greater consideration of the impacts on competition in Nigerian markets.

The FGN maintains holdings in several enterprises in several markets, including manufacturing, and insurance and aviation handling, but privatization efforts continue. The presence of firms with state holdings can hold risks for competition where they receive regulatory or financial advantages not available to the private sector. In those markets, state participation can crowd out the private sector and distort prices on the basis of subsidies received from the state, with the state-owned enterprise having little incentive to become more efficient. Indeed, it is believed that several enterprises that have been earmarked for privatization by the Bureau of Public Enterprises have been loss-making.[114] In agricultural input markets, there are claims that public sector institutions, such as the Agricultural Development Projects, have crowded out private sector players by offering subsidized seed.[115]

Significant privatization efforts have taken place under the Public Enterprises (Privatization and Commercialization) Act of 1999, spearheaded by the Bureau of Public Enterprises, which has led to an increase in FDI flows to Nigeria.[116] As these efforts continue,[117] it is important that privatization schemes are carefully designed to ensure competition in selecting a buyer, and to complement the process with parallel regulatory efforts to improve the level playing field. This is particularly important given that, in the past, privatization was seen as a conduit for cronyism, with public assets sold cheaply to politically connected persons.

Politically connected business elites have pushed privatization efforts in Nigeria during times of external shocks and pressures. In some cases, this has

109 https://pwcnigeria.typepad.com/files/nipcfirs_compendium-of-investment-incentives-in-nigeria_nov2017.pdf.

110 A tax holiday which grants companies full income tax relief to profits made from engaging in eligible activities for an initial period of three years, extendable for one or two additional years.

111 Dangote Cement, for example, was widely considered to have staggered investments in order to extend the period of the tax holiday received.

112 https://pwcnigeria.typepad.com/tax_matters_nigeria/2019/04/nipc-has-published-reports-of-pioneer-status-incentives.html.

113 Application Guidelines for Pioneer Status Incentive, available at: https://nipc.gov.ng/wp-content/uploads/2020/08/Pioneer-Status-Application-for-Guidelines-Final.pdf?

114 https://www.von.gov.ng/bpe-to-sell-shares-of-privatised-state-owned-companies/.

115 http://documents.worldbank.org/curated/en/909651468193779954/pdf/949650WP0P12860Country0Study0R20ST.pdf.

116 Over 140 public enterprises have been reformed and/or privatized in various sectors of the Nigerian economy. (Bureau of Public Enterprises Presentation, 2019). More recently, the Bureau of Public Enterprises has disclosed plans to sell off 10 SOEs through Initial Public Offerings over 2019 with the aim of funding the national budget. Affected sectors include aviation, insurance, energy and minting and printing.

117 https://bpe.gov.ng/category/transactions/on-going-transactions/.

led to the favoring of certain players over others and the creation of private firms with considerable market power. One of the most well-known examples of this was the sale of a state-owned cement plant along with limestone quarries to Dangote in 2000 (Usman, 2020). Privatization without considering mechanisms to induce competition in newly liberalized markets can defeat its purpose of enhancing efficiencies and growth. Efforts such as the telecommunications sector liberalization in the early 2000s were more successful in establishing liberalized markets, since the regulatory environment was set more clearly to enhance competition. Pro-competition policy and regulation are fundamental to avoid entrenching the market power of incumbents and enhance the positive effect that privatization brings to growth and development (see Section 5.3).

Nigeria's privatization and commercialization program is now refocusing toward public-private partnerships (PPPs), including water resources, railways, airports, and roads, and it will become particularly important for the PPP framework to be conducive to competitive and transparent procedures. Addressing some of the following issues in the PPP framework could help to channel more private investment into infrastructure:[118]

- The PPP framework is complex and there is no unifying PPP Law. Instead, the framework consists of several different documents including: the Infrastructure Concession Regulatory Commission Act 2005, the National Policy on Public Private Partnerships 2009 (N4P); the Public Procurement Act 2007; Fiscal Responsibility Act Nigeria 2007; and the Public Enterprises (Privatization and Commercialization) Act 1998.[119] There are also overlaps with applicable sectoral laws, which can cause confusion.[120] Meanwhile, a number of states have developed state-specific laws and frameworks pertaining to PPPs.

- While the Infrastructure Concession Regulatory Commission acts as the agency that regulates PPP procurement, it lacks the capacity to compel public agencies to respect the terms of PPP contractual agreements. In practice, the FGN has in the past reneged on or canceled several high-profile projects, for example, the Lagos Ibadan Expressway Bi-Court Highway Services Project, the Lekki-Epe Toll Concession Road, and the Nigeria Air project.[121]

- Open tendering is the default procedure available for PPP projects. However, the Infrastructure Concession Regulatory Commission Act provides that competitive bidding may not be necessary where there is a sole bidder or where only one player meets the pre-qualification requirements. For example, if only one project proponent meets pre-qualification requirements, then the procuring authority may undertake direct negotiation. Lack of transparency in the selection process in PPPs has been a concern. For example, the 2019 selection process for the PPP project to create the Single Window and E-Customs system generated some controversy due to allegations around a lack of due process. In particular, it has been argued that there were no tenders or advertisement before the selection process.[122]

- Market assessments prior to tendering a PPP are important to ensure that tender qualification criteria and procedures are correctly set to competition. Although the Public Procurement Act contains some provisions requiring market assessments before procuring, market assessments are reportedly not done in practice when identifying and preparing a PPP.

118 Drawing partly from: Procuring Infrastructure Public-Private Partnerships 2018 In Nigeria https://bpp.worldbank.org/content/dam/documents/bpp/nigeria.pdf.

119 https://bpp.worldbank.org/content/dam/documents/bpp/nigeria.pdf.

120 The Utilities Charges Commission Act, the National Inland Waterways Act 1997 and the Highways Act 1971.

121 This is despite the fact that the Infrastructure Concession Regulatory Commission Act provides that no agreement reached in respect of the Act will be arbitrarily suspended, stopped, cancelled or changed.

122 https://www.thisdaylive.com/index.php/2021/06/11/whither-e-customs-project/.

- Transparency and the level playing field could be enhanced by publishing tender documents online (currently this is not mandatory), developing standardized PPP model contracts (currently these do not exist), obliging the procuring authority to publish the PPP contract once awarded, and developing an obligation to include the grounds for the selection of the winning bid in the notification of the result of the PPP procurement process.

- Renegotiation of PPP contracts is possible under current laws with the approval of the procuring authorities. A sound framework may include more expressly regulated limits on renegotiation.

- There is currently no standstill period after the contract award and before the signing of the contract to allow unsuccessful bidders to challenge the award decision.

5.3 Sector-specific barriers to competitive market dynamics: Examples from ICT and digital financial sectors

Nigeria's telecommunications sector was subject to a liberalization process in the early 2000s that successfully created the largest mobile market in Africa. The sector was opened to private firms and three players entered the market, helping the sector's growth in terms of service penetration, contribution to GDP and government revenue (Usman, 2020). This process helped Nigeria to catch up with neighboring countries in terms of telecommunications network development. Telecommunication liberalization has increased employment, total revenue accruing to the government in the form of tax and other charges from the telecom sector, and local and foreign direct investment into the country (Akinyomi and Tasie, 2011). Nevertheless, further deepening pro-competition reforms can help to continue the initial success of the liberalization process of the telecommunications sector.

In this section, the ICT and digital sectors are discussed as an example of where government policies or regulations that promote competition would help open the market to greater investment, spurring greater innovation and more pro-growth market dynamics.

5.3.1 In the ICT sector, Nigeria would benefit from a pro-competition framework and regulation for broadband rollout

Greater competition in broadband services could help increase coverage and deployment of higher bandwidth services and bring prices of data services down. Nigeria's fixed broadband penetration is relatively low compared with peers (WBG, 2019). The national backbone is focused on major urban areas and intercity routes, while last-mile connectivity in Nigeria is largely through mobile networks with relatively low investments made in fixed infrastructure within the past two decades.[123] Even with 3G mobile networks, most areas of Nigeria are being served by only one mobile network operator (MNO), while 4G remains scant beyond the largest urban centers.[124] Looking at concentration at a national level, while the Herfindahl-Hirschman Index (HHI) in Nigeria's mobile market is below many of its peers it is above the threshold considered to signify a highly concentrated market. The largest two operators in Nigeria, MTN and Globacom, account for more than 70 percent of the 3G and 4G market. High concentration can lead to lower coverage and quality, as well as higher prices. Indeed, coverage of 4G services is relatively low in Nigeria when compared with its peers and so is its market penetration. In addition, mean mobile download speeds in Nigeria are

123 According to the National Broadband Plan 2020–2025, Nigeria's last-mile Fiber to the Tower connection rate is lower than other African countries. National Broadband Plan 2020–2025. Available at: https://www.ncc.gov.ng/accessible/documents/880-nigerian-national-broadband-plan-2020-2025/file.

124 National Broadband Plan 2020–2025. Available at: https://www.ncc.gov.ng/accessible/documents/880-nigerian-national-broadband-plan-2020-2025/file.

FIGURE 5.12. Herfindahl-Hirschman Index in Nigeria's mobile markets

Market Concentration (HHI >2500 considered highly concentrated)

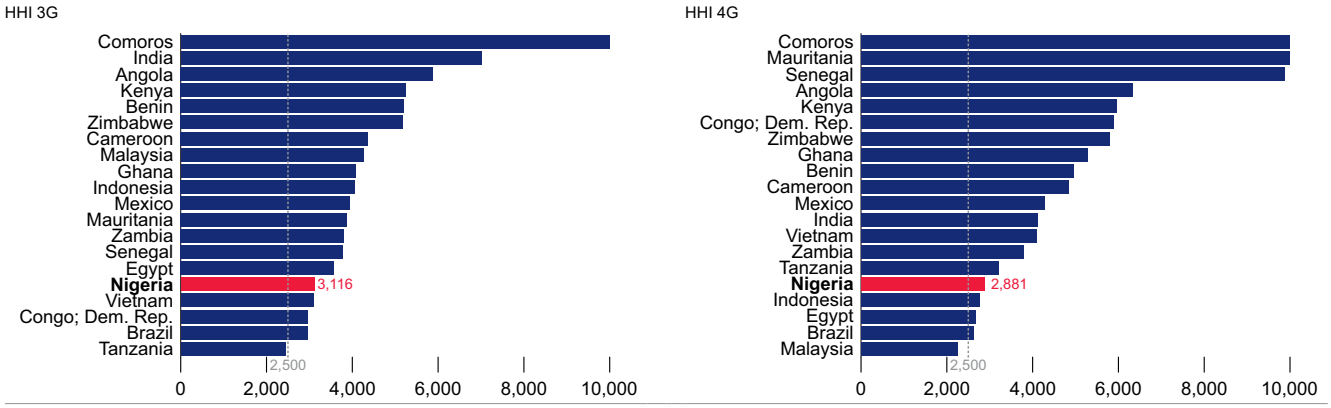
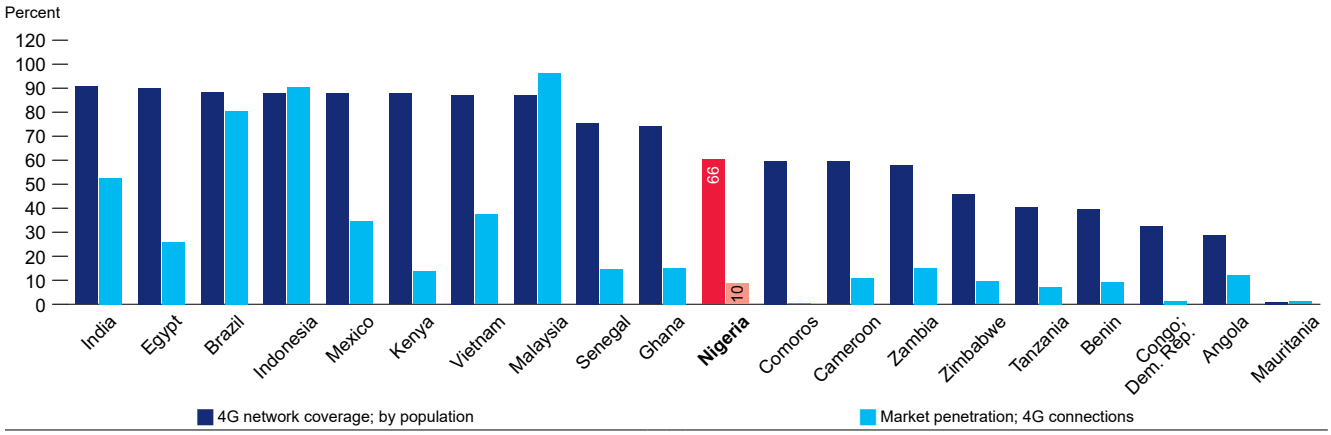


FIGURE 5.13. Network coverage (by population) and market penetration

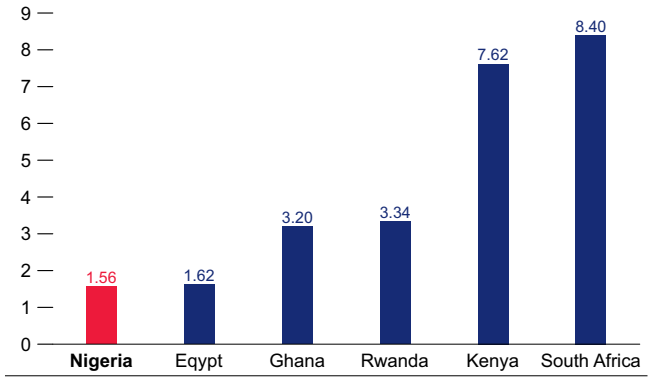
Network coverage and market penetration



Source: GSMA Intelligence https://data.gsmaintelligence.com/data/operator-metrics.

FIGURE 5.14. Mean mobile internet download speed

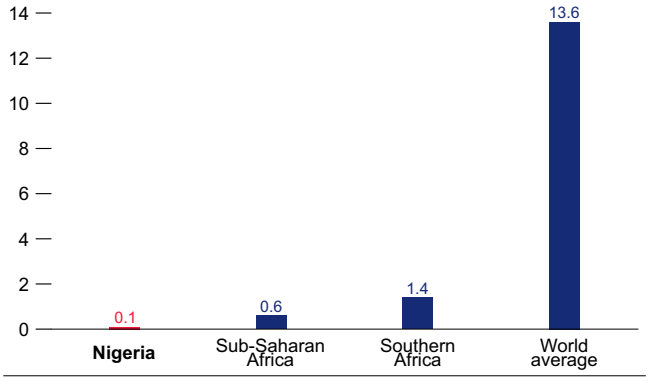
Mobile internet download speed (2019, Mbps)



Source: Nigeria National Broadband Plan 2020–2025.

FIGURE 5.15. Number of fixed broadband subscribers

Fixed broadband subscribers (2017; per 100 people)



Source: Nigeria National Broadband Plan 2020–2025.

very low compared with peer countries such as South Africa, Rwanda, Kenya and Ghana. The number of fixed broadband subscribers is considerably lower compared with the world average and below peer countries in Africa. Meanwhile, prices of 1GB of data in Nigeria are higher than in countries such as Egypt, Rwanda, and India.[125] Additional competition in ICT markets could help increase coverage and bring prices of ICT services down. Outlined below are several (non-exhaustive) examples of policy and regulatory factors that may be hindering entry, investment, and competitive market dynamics in ICT markets in Nigeria.

Pro-competition licensing for infrastructure providers and equal access to Right of Way could help foster investment in the rollout of broadband networks

In an effort to stimulate infrastructure investment, the Nigerian Communications Commission (NCC) has tendered a single license to roll out backbone fiber in each of seven designated regional zones. These networks would be regulated on an open access basis to mitigate competition issues arising from the local bottlenecks created by this form of licensing. However, to date, these regional license tenders have not led to significant investment and there may therefore be a need to review policies for the development of a backbone network. These could include providing firms with a conducive environment to invest in areas that are commercially viable and providing access to well-designed subsidies to invest in areas where rollout is currently not commercially viable. On the latter point, subsidies available for infrastructure rollout under the National Broadband Plan and the Universal Service Provision Fund could explicitly consider competitive neutrality principles, which would safeguard against distortions from the advantages provided to subsidy recipients. On the former point, addressing challenges faced by firms on obtaining Right of Way could help to ease new entry across regions.

Granting of Right of Way (RoW) should be transparent and standardized across states to provide fiber investors with certainty and incentivize entry to help reach underserved zones. Investors have faced issues with being granted RoW to lay fiber in state-owned land due to lack of legislation on RoW. A number of state governors have refused the approval of RoW to, or demanded high fees from, telecoms operators deploying infrastructure in their states, until the NCC intervened on behalf of operators. In 2018, IHS, one of the firms granted an infrastructure service provider license, returned the license to the NCC over difficulties in securing RoW approval to deploy infrastructure in the North Central zone.[126] In this regard, one positive step forward in the rollout was an agreement between state governors on a harmonized RoW charge. However, this remains an informal agreement, and only some states have followed it in practice, and may benefit from being formally regulated to increase certainty.[127] In addition, the National Broadband Plan targets agreement with state governors on a standardized RoW fee across all states, which would be a valuable step forward.

Infrastructure-sharing can also play an important role in improving networks and their coverage, especially in rural areas, as it lowers the risk and costs of investing in network expansion. Nonetheless, adequate competition safeguards for infrastructure-sharing should be put in place to diminish competition risks, such as exchange of sensitive information between competitors, or collusion at the retail level.[128] The NCC could develop a framework for infrastructure-sharing (passive: mast, sites, cabinet, power, conditioning; and active: spectrum), which balances the efficiencies and

125 National Broadband Plan 2020–2025. Available at: https://www.ncc.gov.ng/accessible/documents/880-nigerian-national-broadband-plan-2020-2025/file.

126 Reis, Jose Guilherme, Mariana Iootty, Jose E. Signoret, Tanja K. Goodwin, Martha M. Licetti, Alice Duhaut, and Somik V. Lall. 2018. "Trade Liberalization and Integration of Domestic Output Markets in Brazil." Policy Research Working Paper 8600, World Bank, Washington, DC.

127 Sekkat, Khalid. 2009. "Does Competition Improve Productivity in Developing Countries?" Journal of Economic Policy Reform 12 (2): 145–62.

128 GSMA, Enabling Rural Coverage Regulatory and policy recommendations to foster mobile broadband coverage in developing countries (2018).

the anticompetitive effects that could emerge from such agreements. This framework should consider: (i) the degree of cooperation/autonomy between the parties to the agreement, which is also a function of the passive or active nature of the infrastructure; (ii) the parties' market power; (iii) the duration of the agreement; and (iv) the characteristics of the area covered in terms of scope and density.[129]

There is scope to further promote market contestability in broadband services through regulation of wholesale services

Market contestability in the retail supply of broadband services requires either access to infrastructure or the ability to resell services (e.g., through mobile virtual network operators). Fiber network providers that are identified as having a dominant position should be subject to regulation of their wholesale services to ensure that third-party providers of broadband services (such as internet service providers) are able to interconnect with them on fair, reasonable, and non-discriminatory terms. The NCC has made moves to identify dominant operators in order to regulate access to their networks and this would be a positive step forward to allow for greater services competition. In mobile telecommunications markets, at the present time MVNOs are not allowed in Nigeria, cutting off a potentially important source of competition in the market. In 2017, the NCC published a request for proposals for the development of a licensing framework for MVNOs and a draft of a license framework for the establishment of MVNOs has been produced by the NCC.[130] However, discussions on its implementation are ongoing[131] and regulation on the matter is yet to be enacted (Vanguard, 2021). The implementation of MVNOs' entry to the market can be achieved either by permitting voluntary agreements between operators or by obliging operators with significant market power (SMP) to host MVNOs. Wholesale offers to MVNOs must be transparent and non-discriminatory. This then requires that MNOs have accounting unbundling between their infrastructure activities and services provision. In addition, a "margin squeeze"[132] test that can be easily controlled by the NCC and/or competition agency ex post should be put in place.

Regulation to improve efficiency in spectrum use in Nigeria can foster market entry and incentivize investments in network coverage and quality increases in mobile services

High spectrum charges and prices have been one of the causes for delayed deployment of 4G[133] networks, affecting access to ICT services. A high burden from spectrum license costs can affect operators' investment

129 Some regulators have sought to increase rural coverage beyond what could be achieved in normal circumstances by allowing roaming and/or spectrum sharing in rural areas. France provides an interesting example. In the 800MHz (2011) and 700MHz (2015) auctions, the French regulator ARCEP attached a condition to the licenses mandating licensees to share spectrum when deploying services to a number of named highly rural areas. Operators were free to decide how they shared spectrum and the requirement was limited to the named areas that were included as part of the more general that coverage obligation. Mandatory sharing reduced the cost of rolling out networks in rural areas and enabled more stretching coverage obligations than otherwise. There was a risk that spectrum sharing could have led to increased cooperation between operators and reduced competitive intensity. However, the limited scope of the requirement mitigated these risks and there has been intense price competition in the French mobile market over the past five years. There are other examples of support for rural spectrum sharing to promote coverage. The Hungarian regulator approved a spectrum sharing agreement for 800MHz spectrum in 2015lv to promote rural coverage. The German regulator, BNetzA, proposed that operators voluntarily agree roaming in rural areas for 5G, in the context of the auction of 2 GHz and 3.6 GHz spectrum scheduled for 2019.

130 NCC. "First Draft Document. LICENSE FRAMEWORK FOR THE ESTABLISHMENT OF MOBILE VIRTUAL NETWORK OPERATORS IN NIGERIA"https://www.ncc.gov.ng/documents/941-draft-mvno-licence-framework/file.

131 https://technologytimes.ng/mvno-nigeria-open-for-new-mobile-operators/; https://www.lexology.com/library/detail.aspx?g=c0b274b5-2e23-42e2-940f-f69bf168bb76

132 A "margin squeeze" takes place when a vertically integrated dominant company sets a relatively high price for its competitors to access an upstream input it controls, while setting a relatively low price for its own activities downstream. This pricing policy "squeezes the margins" of the dominant firm competitors, who are prevented from trading profitably downstream, and may ultimately lead to their exclusion from the downstream market where they compete with the dominant firm.

133 National Broadband Plan 2020–2025. Available at: https://www.ncc.gov.ng/accessible/documents/880-nigerian-national-broadband-plan-2020-2025/file; GSMA. 2017. Effective Spectrum Pricing: Supporting better quality and more affordable mobile services.

in network, coverage and quality of the services offered. Globally, high spectrum prices are usually linked to lower upload and download speeds.[134] In addition, high spectrum prices can leave spectrum unsold, which can result in further scarcity. In 2016, high reservation prices in Nigeria played a role in limiting bidder participation: MTN was the only bidder to meet the reserve price in the 2.6GHz auction in six lots out of 14. The remaining eight lots (80MHz in total) were left unused.[135] The FGN should look to balance the objective of raising revenue with delivering greater consumer welfare in spectrum auctions by designing tenders with reserve prices that go according to market reality and not exclusively to maximize revenues. Further considerations for the pro-competition management of spectrum in Nigeria are outlined in BOX 5.1.

BOX 5.1. Regulation to foster efficient use of Nigeria's spectrum can help increase competition and quality of service

Access to spectrum and policies around its management are a key determinant of competition dynamics and efficiency in mobile services markets. Radio spectrum is an essential but scarce resource for the development of mobile telecommunications and the digital economy. In light of its scarcity, competitive spectrum auctions are crucial to ensure that spectrum is awarded to the operators that can create the highest value from it. However, if a careful market study confirms that competition in wireless markets would become more effective if preferential access is given to a smaller operator or a new entrant, the NCC could consider the adoption of auction conditions or 'price concessions' such as spectrum set-asides, caps, or band plans to encourage such an outcome. These are measures that hinder the aggregation of spectrum rights by incumbents to the benefit of newcomers or smaller players and have been used successfully in a number of other countries globally to encourage competition in mobile markets. Moreover, to ensure that spectrum continues to be efficiently used over time, it is important that telecommunications laws also allow for market-based mechanisms, such as spectrum trading. Spectrum trading can help prevent operators from hoarding or inefficiently using the spectrum they hold. While spectrum trading has been allowed in Nigeria since 2018, there appears to be no practice in this regard. This could be due to the high commissions and fees that have to be paid to the NCC (between 40 and 60 percent on net proceeds of the spectrum trading transaction plus an administrative fee of 1 percent of the gross proceeds of the transaction). In addition, spectrum trading is not allowed unless the seller has held the spectrum for a minimum of two years and has achieved at least 25 percent of the rollout obligation specified in the spectrum license. In the review process of the spectrum sharing guidelines that started at the end of 2020, the NCC has proposed to lower the holding time of spectrum to one year, but has maintained the 25 percent minimum rollout condition and has increased the commission for on net proceeds of the spectrum trading transaction to 70 percent.

Where market-based mechanisms such as spectrum trading do not function well, it is important that regulators are equipped with adequate tools to tackle spectrum hoarding. Use-it-or-lose-it clauses could be used as a last resort to tackle hoarding (for example, where an operator acquires spectrum with the purpose of foreclosing competitors or with no real intention to use it for network deployment). While Nigerian legislation does establish use-it-or-lose-it conditions, these seem to not have been enforced in practice. There have been

134 GSMA. 2017. Effective Spectrum Pricing: Supporting better quality and more affordable mobile services.

135 GSMA. 2018. "Spectrum pricing in developing countries. Evidence to support better and more affordable mobile services". Available at: https://www.gsma.com/latinamerica/wp-content/uploads/2018/07/Spectrum-pricing-developing-countries.pdf.

Box 5.1 continued

cases where spectrum might have been inefficiently used for a long time and where use-it-or-lose-it rules were not enforced. In 2013, Bitflux successfully bid for 30MHz of 2.3GHz spectrum. However, it took over four years to effectively start rolling-out its network and only in Lagos. This precluded other players from participating in the market and affected increases in service coverage.

Overall, greater consistency of the framework governing spectrum rights (e.g., in terms of duration, renewal and attached conditions) can support a level playing field and investor certainty. In Nigeria there is heterogeneity with regards to the duration of spectrum rights, as this is decided on a case-by-case basis where the duration of the rights is set forth in each individual license. In addition, the conditions and terms for renewal are also set on a case-by-case basis. Lack of consistency in licensing conditions opens doors for differentiating among market players which can unlevel the playing field. It is also worth noting that no licenses for multiple technologies are awarded in Nigeria. Licensees receive a license only to operate a specific technology of mobile broadband provision. This goes against best practice of technology neutrality and can halt rapid efficient technological updates and innovation (from 3G to 4G to 5G).

An independent regulator that works together with the competition authority can help mitigate competition risks in the ICT sector

Telecommunications markets feature industry characteristics that make the sector more prone to market concentration and potential anticompetitive practices. For this reason, it is important to have a strong ex ante regulatory framework in place that promotes facilities and services-based competition, as well as an effective competition law enforcement both ex ante (through merger control), and ex post (prohibiting abuses of dominance and anticompetitive agreements). To deal with possible anticompetitive issues derived from market concentration, the NCC caries out assessments of SMP in the telecommunications markets and can impose remedies. Nevertheless, further capacity may be required to ensure remedies are adequately designed.[136] In addition, the NCC does not have clear rules governing the periodicity of relevant market analysis,[137] which can therefore result in the regulation of markets based on outdated data, and in the under-regulation of operators that are active in markets that have not been assessed yet.

The memorandum of understanding (MoU)[138] that has been signed between the FCCPC and the NCC in relation to consumer protection should be expanded to collaboration to ensure competition in telecommunications markets to better address any competition issues. The FCCPC is currently in the process of developing such an MoU with the NCC. Collaboration between the two institutions should look

136 For example, when NCC determined that Globalcom and MTN had joint dominance in the upstream segment of mobile markets, the regulator imposed price caps for wholesale services and a price floor for retail services. Imposing minimum retail prices for data services raises prices for consumers. (Streamsowers & Köhn - Chukwuyere E Izuogu, Otome Okolo and Tamuno Atekebo, "In brief: telecoms regulation in Nigeria". Available at: https://www.lexology.com/library/detail.aspx?g=38c795ed-1569-48a7-be94-d73f5c047d1c). On the other hand, some positive remedies have been imposed. For example, when NCC determined that MTN held SMP for the mobile voice segment it imposed obligations on MTN in terms of accounting separation between levels in its vertical structure, collapse of on-net and off-net retail tariff, and a determination of the pricing principle to address the rates charged for on-net and off-net calls for all operators in the mobile voice market. These remedies were in line with an objective of maintaining competition in the market.

137 In 2020, the NCC imposed mandatory accounting separation obligation on Airtel, EMTS, Globalcom, MTN (MNOs); Mainone Cable (submarine cable operator); and IHS (infrastructure sharing provider). This determination did not define any market. NCC seems to be looking to identify and prevent discrimination or other practices that lessen competition such as cross-subsidization and margin squeezes, by imposing the accounting separation.

138 https://www.fccpc.gov.ng/about/alliances/.

to allow them to share information, best practices, staff, conduct research and organize joint advocacy efforts. It will also be important that the competition authority analyzes regulatory proposals or remedies in the telecommunications sector to provide recommendations to make these more pro-competitive.

Independence safeguards for the NCC could be strengthened further to ensure consistent and independent implementation of the regulatory framework. The NCC today is still dependent of the executive branch of government in Nigeria. For example, the President designates the Commission's Board members and annual budget requirements must go through the President before being reviewed by the National Assembly.[139]

5.3.2 Regulatory issues for competition in digital services: the example of digital financial services

Digital financial services is a sector in which pro-competition regulations are required to boost competition in Nigeria.

Until recently in Nigeria, regulatory issues blocked telecom companies from fully operating financial services, which limited innovation and competition in the banking market. In 2019, after a 2018 reform, MTN, the largest telecommunications operator in Nigeria, was given a license to operate as a payment service banking provider allowing it to compete directly with banks (Techcabal, 2019). This is positive given that the CBN previously required MNOs to provide mobile money only in partnership with banks. Nevertheless, in 2021, the CBN issued a new regulatory regime for Mobile Money Services, which explicitly excludes MNOs. Only banks and non-banks, excluding subsidiaries of a telecommunications company, are authorized to act as Mobile Money Operators.[140] This is likely to dampen competition from non-traditional financial players and could limit innovation. In addition, the level playing field would be affected if only one MNO is licensed as a payment service provider. Clarification on licensing types, which entities are allowed to obtain them, and what kinds of services can be provided with them will be fundamental to foster market entry, service quality and, importantly, financial inclusion through innovation in Nigeria.

To open the market for digital financial services further, challenges for third parties accessing MNOs' Unstructured Supplementary Service Data (USSD)/ SMS channels to make bank transactions for digital financial services would need to be addressed. These challenges include:

- Third parties claim that current MNO pricing of their USSD/SMS channels leads to margin squeeze.
- MNOs will not commit to quality of service, which is problematic since MNOs bill for failed transactions.
- MNOs can access the data of third-party providers since USSD is transferred in clear text.
- While MTN is now subject to regulation from the CBN to provide access to its USSD/SMS channels to third parties on non-discriminatory terms, enforcement of the provision has not yet been seen.

Nigeria has published a framework for Open Banking that will give access on customer transaction data to third parties, which can pave the way for fintech firms and non-financial sector players to create innovative financial products. Currently, fintech firms such as Paga and OPay are reaching unattended sectors of Nigeria's population with an offering of payment services through agent banking networks. Nevertheless, they need to undergo several different integrations with Nigerian traditional banks before launching at agent locations. This delays their entry to markets. To alleviate these issues and promote innovation, in February 2021

139 Nigerian Communications Act, 2003. Available at: https://ncc.gov.ng/accessible/documents/128-nigerian-communications-act-2003/file.

140 CBN. "Regulatory Framework for Mobile Money Services in Nigeria". Available at: https://www.cbn.gov.ng/out/2015/bpsd/regulatory%20framework%20for%20mobile%20money%20services%20in%20nigeria.pdf.

the CBN published a regulatory framework for Open Banking.[141] The objective of these regulations is to create a common standard for fintech firms, traditional banks and non-financial players looking to enter the market to share data between themselves through an Open Application Program Interface with a common standard to which all players have access. It will be important that the standard and the following implementation of Open Banking in Nigeria is done under non-discriminatory conditions.

Finally, the CBN has published a framework for regulatory sandbox operations in the financial sector aimed at fostering new and more flexible ways of engaging with the financial industry.[142] A regulatory sandbox allows firms to perform tests of new, innovative products, services, or business models in a controlled environment, with CBN regulatory oversight, subject to appropriate conditions and safeguards. This would help fintech firms and other non-banking players to develop and introduce new products in the Nigerian market even when they do not fall under one of the categories established in the current regulations and licenses. Nevertheless, the current framework should be clarified further with additional guidelines and regulations. It will be especially important to:[143]

- **Provide clear incentives for fintech firms to participate in the sandbox.** The current framework does not specify if successful sandbox participants will be fast tracked in the granting of an approval or license to provide services.

- **Ensure coordination with other regulators to reduce regulatory conflicts for sandbox participants.** In June 2021, the Securities and Exchange Commission (SEC) launched a circular on its Regulatory Incubation Program, which will work as a regulatory sandbox for fintech firms operating or seeking to operate in the Nigerian capital market.[144] The NCC has also announced its intention to introduce sandboxes for innovative business models and services in the digital economy (Techpoint, 2020).

141 https://www.cbn.gov.ng/Out/2021/PSMD/Circular%20on%20the%20Regulatory%20Framework%20on%20Open%20Banking%20in%20Nigeria.pdf.

142 https://www.cbn.gov.ng/out/2021/ccd/framework%20for%20regulatory%20sandbox%20operations.pdf.

143 Pavestones, "FinTech regulatory update – the Central Bank of Nigeria regulatory sandbox". Available at: https://pavestoneslegal.com/FinTech-regulatory-update-the-central-bank-of-nigeria-regulatory-sandbox/.

144 SEC. Circular on the SEC Regulatory Incubation Program. Available at: https://sec.gov.ng/circular-on-the-sec-regulatory-incubation-program/.

Nigeria's positive steps and remaining gaps in establishing a holistic competition policy framework

	Opening markets through pro-competition sector regulation (Example of ICT and digital financial services)	*Competitive neutrality and promoting a level playing field*	*Ensuring effective competition law enforcement*
Positive Steps	*ICT* • Provisions for spectrum trading are in place. • Use-it-or-lose-it clauses in place. • NCC caries out assessments of Significant Market Power (SMP) in the telecommunications markets and can impose remedies. *Digital financial services* • Initiation of an Open Banking framework. • Regulatory sandbox for fintech.	• Privatization of SOEs in the past and plans to continue with them.	• Enactment of the FCCPA and establishment of FCCPC. • Good overall level of independence of FCCPC, especially internally.
Examples of remaining gaps	*ICT* • MVNOs are not allowed in mobile markets. • Lack of consistency in licensing conditions in telecommunications sector. • Lack of infrastructure sharing framework. • Reserve prices in spectrum auctions are too high and are not set according to the market. • Spectrum trading inhibited by high commissions and minimum holding times of spectrum. • No enforcement of use-it-or-lose-it clauses for spectrum holding. • Granting of Right of Way is not transparent nor standardized. *Digital financial services* • No clear incentives to participate in fintech sandbox. • Possible overlap with sandboxes from other regulators.	• Protectionist stance in industrial policy: ‣ Local content rules in several sectors. ‣ Import bans, quotas, and high effective duty rates on imports. ‣ Restrictions to foreign companies entering the market. • Large, dominant players exercise significant influence on the design of industrial policy and regulation. • State aid benefitting connected large players. • Privatization and PPPs lack considerations of impacts on competition and could be more transparent.	• Thresholds for merger review could lead to overenforcement and undue burden on the FCCPC. • Provisions of price regulation and exemptions in the FCCPA go against good practice. • Guidelines and secondary regulation still pending. • Space to increase external independence of the FCCPC. • Room of improvement in capacity and efficiency of FCCPC processes • Carve out of specific sectors from the competition law can risk lack of sound enforcement of competition rules. • Space to increase independence of other regulators such as NCC.

Key Policy Options

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
Economy-wide policy to increase competition and enhance performance of Nigerian markets.		
• **Recent enacting of competition law and establishment of competition authority but there is some way to go to ensure a solid regulatory framework on competition policy enforcement.**	• Address gaps in competition law framework (*Who*: FCCPC): ‣ Increase merger thresholds, change to a "combined and individual threshold" and include special provisions to define thresholds in terms of assets for mergers in nascent markets. ‣ Finalize key secondary regulations and guidance such as market definition guidelines. ‣ Enact leniency policy regulations and provide guidelines. • Develop collaboration agreements and guidelines on how FCCP will work with sector regulators on ex-post competition matters. (*Who*: FCCPC) • Remove provisions for price regulations and exemptions for professional services in the Competition Act. (*Who*: National Assembly/FCCPC) • Ensure CBN is well-capacitated in competition issues. Otherwise, reassess exemptions of the applicability of the FCCPA to the financial sector. (*Who*: CBN)	• Reduce overenforcement and undue burdens on the FCCPC and give it the ability to deal with mergers that have the highest degree of potential harm to competition. • Increase the predictability and clarity of the framework for competition enforcement in Nigeria giving higher certainty to firms and deter anticompetitive behavior. • Reduce potential unnecessary distortions to the markets.
• **Need to build the regulation, tools, and capacity required to tackle anticompetitive firm conduct, prevent anticompetitive mergers, and advocate for pro-competition policies.**	• Guarantee FCCPC internal and external independence (*Who*: National Assembly/FCCPC): ‣ Give the FCCPC complete budgetary independence. ‣ Executive brand of government should not intervene in investigations. ‣ Adjudicator should not be financed by the sanctions it imposes. ‣ Fixed terms and cooling-off periods for adjudicators and prosecutors should be implemented. • Increase efficiency of the FCCPC (*Who*: FCCPC) ‣ Increase human resources with specialization in investigation and prosecution of anticompetitive practices and merger reviews. ‣ Implement independent budget allocation for its various mandates. ‣ Introduce screening practices for complexity in anticompetitive practice cases. ‣ Give the FCCPC the legal capacity to introduce remedies.	• FCCPC can make sound technical decisions independent of any bias arising from undue influence from external parties (both public and private) and internal conflicts of interest. • Improve the FCCPC's efficiency, reduce its burden and increase its capacity to handle a larger number of cases.

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
• **Industrial policies have introduced competition distortions to markets due to protectionism and influence of large players.**	• Reduce or eliminate local content requirements in markets in Nigeria. • Revise and reduce as much as possible import bans, quotas, and effective duty rates on imports. • Remove restrictions on foreign companies entering the market without first incorporating in Nigeria. • Reduce influence of largest market players in industrial policy decisions. • Make state aid to firms available to all players in the markets without benefitting certain players over others. • Publish transparent, objective eligibility criteria for incentive schemes (including the Pioneer Status Incentive) and increase transparency in administration and results. • Reduce or eliminate preferences for Nigerian firms in government procurement.	• Create level playing fields between domestic and foreign firms, incentivize investment, and reduce prices for households and downstream firms through competition.
• **Privatization and PPPs have not been conducted with consideration of the impacts on competition in Nigerian markets.**	• Consider impacts on competition of privatization and PPPs. ‣ Design privatization schemes carefully to ensure competition in selecting a buyer. ‣ Complement privatization process with parallel regulatory efforts to improve the level playing field. ‣ Enact a unified PPP Law and eliminate overlaps with sectoral laws. ‣ Conduct market assessments prior to tendering to ensure that tender qualification criteria and procedures are correctly set to competition. ‣ Enhance transparency of PPPs processes by publishing tender documents and contracts awarded. ‣ Introduce a sound framework for limits on renegotiation of PPP contracts.	• Privatization and PPP frameworks to be conducive to competitive and transparent procedures that do not affect level playing field of markets.

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
Nigeria would benefit from a pro-competition framework and regulation for broadband roll out.		

• **Nigeria's fixed broadband penetration is relatively low. Need to improve both backbone and last mile fiber networks.**	• Consider the effects on competition when awarding licensing and subsidies looking to increase the roll out of fiber.
	  ‣ Review policies for the development of a backbone network, including providing firms with a conducive environment to invest in areas that are commercially viable.
	  ‣ Avoid giving zonal licenses for roll out of fiber that create monopolies/bottlenecks in areas where roll out is commercially viable and competition could exist.
	  ‣ Explicitly consider competitive neutrality principles in the assignment of subsidies for roll out under the National Broadband Plan and the Universal Service Provision Fund.
	• Develop a framework for infrastructure sharing which balances the efficiencies and the anticompetitive effects that could emerge from such agreements.
	• Formally enact transparent and standardized Right of Way legislation.
	• Ensure sound regulation of wholesale networks of dominant network providers to ensure that third party service providers are able to interconnect with them on fair, reasonable, and non-discriminatory terms.
	Who: NCC
		• Increase broadband roll out without unnecessarily affecting competition in markets.
		• Give investors certainty in their venture to lay fiber throughout the country and incentivize competition to reach underserved zones.

• **Scope to boost mobile market contestability, address the low rollout of 4G technology, and reduce prices of mobile services.**	• Promote market contestability and infrastructure sharing in Nigeria's mobile telecommunications sector.
	  ‣ Develop a framework for infrastructure sharing.
	  ‣ Allow entry of MVNOs to the market.
	  ‣ Design spectrum tenders with reserve prices that are set according to market reality.
	• Make spectrum licensing conditions consistent and avoid establishing them on a case-by-case basis.
	• Review spectrum trading regulations to increase its adoption.
	• Enforce use-it-or-lose-it clauses when spectrum hoarding is detected.
	• Consider the adoption of 'price concessions' such as spectrum set-asides, caps, or band plans.
	• Avoid imposing additional distortions to the markets such as minimum retail prices.
	Who: NCC
		• Promote market entry, infrastructure sharing and an efficient use of spectrum, for the development of ICT sectors and digital economy markets.
		• Increase competition, quality of service and can catalyze productivity and economic development.

Key Policy Options (continued)

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
• **Telecommunications markets feature industry characteristics that make the sector more prone to market concentration and potential anticompetitive practices.**	• Strengthen regulatory and enforcement capacity of the NCC ‣ Establish clear rules governing the periodicity of relevant market analysis (*Who*: NCC) ‣ Strengthen collaboration between the NCC and the FCCPC allowing them to share information, best practices, staff, conduct research and organize joint advocacy efforts. (*Who*: NCC/FCCPC) ‣ Implement independence safeguards for the NCC. (*Who*: National Assembly/NCC)	• Mitigate competition risks in the ICT sector.
Developing competitive digital financial services in Nigeria		
• **Need to promote entry of more players into the FinTech sector and allow for regulatory flexibility to promote innovation.**	• Clarify licensing types, who is allowed to obtain them, and what kinds of services can be provided with them. • Allow licensing to any eligible player and not unlevel playing field by favoring certain firms over others in obtaining licenses. • Develop a common standard for an Application Program Interface for Open Banking and implement Open Banking under non-discriminatory conditions • Provide clarity on incentives for FinTech firms to participate in regulatory sandbox. • Provide access to sandbox under no discriminatory conditions. • Avoid duplicities and overlapping in regulatory sandboxes in fintech. *Who*: CBN	• Smooth market entries and increase competition, service quality and, importantly, financial inclusion through innovation.

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Annex 5.1

TABLE 5.2. Price comparisons analysis: Lagos, Nigeria vs. cities in all other countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Nigeria	-0.100*** (0.030)	0.156*** (0.053)	0.168*** (0.050)	0.174*** (0.051)	0.158*** (0.054)	0.157** (0.060)	0.181*** (0.052)	0.143** (0.058)
Log of GDP per capita PPP (2011 international $)		0.160*** (0.026)	0.138*** (0.030)	0.134*** (0.031)	0.124*** (0.032)	0.125*** (0.030)	0.048 (0.042)	0.026 (0.046)
Log of cost of import			-0.118** (0.053)	-0.117** (0.055)	-0.102* (0.056)	-0.099* (0.055)		
Tariff rate, applied				-0.002 (0.007)	-0.005 (0.007)	-0.005 (0.007)	-0.003 (0.006)	-0.004 (0.006)
Corporate tax rate (%)					0.005* (0.003)		0.002 (0.002)	
Indirect tax rate (standard, %)						-0.002 (0.003)		-0.004 (0.003)
Log of Aggregated LPI score							0.701*** (0.227)	0.793*** (0.220)
No. of observations	75427	75427	75427	74868	68014	68014	68014	68014
R-squared	0.802	0.818	0.820	0.820	0.822	0.821	0.824	0.825
Product fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Results are from an OLS regression using 2010–20 data from the Economist Intelligence Unit (EIU). The dependent variable is the logarithm of market prices (current international $/kg) of the following products: Apples (1 kg), Bananas (1 kg), Beef (fillet, ground, roast, 1 kg), Butter(500g), Carrots (1 kg), Chicken (fresh, frozen 1 kg), Cornflakes (375g), Eggs (12), Flour white (1 kg), Fresh fish (1 kg), Lettuce (1 head), Milk (pasteurized, 1 litre), Mineral water (1 litre), Mushrooms (1 kg), Onions (1 kg), Oranges (1 kg), Peanut Oil (1 litre), Potatoes (2 kg), Spaghetti (1 kg), Sugar white (1 kg), Tomatoes (1 kg), Tonic water (200 ml), White bread (1 kg), White rice (1 kg) and Yoghurt (150g). Results shown use exchange rates provided by the Economist Intelligence Unit. The results are robust to using exchange rates from the World Bank WDIs). The variables GDP, tariff, and logistics performance are from the World Bank's World Development Indicators (WDI), cost of import is from the Trading Across Border dataset, aggregated LPI is from https://lpi.worldbank.org/, and corporate and standard indirect tax rates are from KPMG, Deloitte, and other web sources. Standard errors clustered at the country level are in parentheses. ***, **, and * indicate significance at 1 percent, 5 percent, and 10 percent. The sample includes 97 cities from the following 89 countries: Algeria, Argentina, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Brazil, Brunei Darussalam, Bulgaria, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Czech Republic, Cote d'Ivoire, Denmark, Ecuador, Egypt, Arab Rep., Finland, France, Germany, Greece, Guatemala, Hong Kong SAR, China, Hungary, Iceland, India, Indonesia, Iran, Islamic Rep., Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, the Rep. of Korea, Kuwait, Libya, Luxembourg, Malaysia, Mexico, Morocco, Nepal, the Netherlands, New Caledonia, New Zealand, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, Qatar, Romania, the Russian Federation, Saudi Arabia, Senegal, Serbia, Singapore, the Slovak Republic, South Africa, Spain, Sri Lanka, Sweden, Switzerland, the Syrian Arab Republic, Taiwan, China, Thailand, Tunisia, Turkey, Ukraine, the United Arab Emirates, the United Kingdom, the United States, Uruguay, Uzbekistan, Vietnam, Zambia, and Zimbabwe. For robustness, a parallel analysis was performed using Numbeo price data for a similar list of products in Nigeria, obtaining similar results.

Note 6: Good Jobs for a New Generation: Delivering Quality Jobs for Young Nigerians After COVID-19

Authors: **Christina Jenq, Jonathan Lain, and Tara Vishwanath**

Note 6: Good Jobs for a New Generation: Delivering Quality Jobs for Young Nigerians After COVID-19[131]

Summary

- The COVID-19 crisis has underlined weaknesses in Nigeria's labor market, but the country can leverage the crisis to protect human capital and foster good jobs for its young population.
- Before the COVID-19 pandemic, Nigeria's youth already faced a daunting jobs challenge: even without the pandemic, about 30.8 million Nigerian youth aged 15–29 (about 54.3 percent of the 56.7 million people in that age group) were projected to have entered the labor market in 2021.
- Widespread informality and precarity in Nigeria's labor market had not improved in the decade before the COVID-19 crisis. From 2010 to 2019, the share of working-age Nigerians with jobs in household agriculture increased from 25.6 to 35.9 percent. Precarious jobs offer less reliable pathways out of poverty.
- To inform a new generation of labor-market policies, this brief provides evidence on how Nigeria's youth have responded to two recent economic shocks: the 2016 oil-price recession and the ongoing COVID-19 crisis.
- Youth responded to both crises by leaving school earlier to enter the labor market, thus increasing overall labor supply. Rising labor supply amid chronic job shortages has further widened precarity and informality in Nigeria's labor market.
- Compared with the 2016 oil-price recession, the COVID-19 pandemic's negative labor-market effects are more concentrated among women and the poor.
- Two economic crises in close succession have diminished—and are still diminishing—Nigeria's human capital stock, notably through declines in educational attainment. Continued underinvestment in human capital may keep Nigeria from harnessing the economic potential of its young population through two main channels: by weakening workforce productivity and slowing any fertility transition.
- Evidence in this brief supports three directions for policy action to deliver good jobs and prepare young Nigerians to fill them: invest in human capital; boost job creation; and help enterprises grow.
- Reversing education losses from the COVID-19 pandemic, particularly among girls, is a top priority. Options include adding more hours to the school day, repeating the missed school period, and delivering lessons during school holidays. Monitoring education results is vital to ensure that losses are recouped.
- Priorities to support job creation include promoting economic diversification away from oil and redirecting public spending toward productivity-enhancing infrastructure and pro-poor social protection.
- Policies that loosen enterprise credit constraints and develop infrastructure can boost firms' productivity, profits, and job creation. For example, cash grants administered through a national business competition have shown large positive effects on firms' survival, profitability, and hiring.
- Nigeria's young population embodies the nation's promise. Ensuring good jobs for youth will enable the country to seize its demographic dividend. This is vital to drive future inclusive growth and poverty reduction.

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Recent crises have threatened the welfare and livelihoods of households across Nigeria. Against a backdrop of ongoing conflict and climate shocks, the Nigerian economy was hit hard by the oil-price recession in 2016 and the ongoing COVID-19 crisis. The labor market is the main vehicle through which these large economic shocks affect households and individuals. It is also the main vehicle through which poverty can be alleviated. Therefore, understanding the make-up of the Nigerian labor market—and how it responded during these crises—is crucial for policy makers.

This technical note combines insights from two main sources to analyze labor market dynamics and identify policy solutions during this critical juncture for Nigeria. These are Nigeria's General Household Survey (GHS), collected four times between 2010 and 2019, and the monthly Nigeria COVID-19 National Longitudinal Phone Survey (NLPS), collected throughout the COVID-19 crisis. The surveys are described in BOX 6.1. This note analyzes data from these two surveys to assess how Nigerian workers fared during two shocks that occurred in close succession—the oil-price recession and the COVID-19 crisis—how these shocks differed in their labor-market impacts, and what this means for future policy.

Given Nigeria's large and growing youth population, this note pays particular attention to young people. Exploiting the country's "demographic dividend" will be vital for fostering inclusive growth and driving poverty reduction.

6.1 A job-market crisis before the crisis

Even before the COVID-19 pandemic, ensuring that there were enough jobs[146] for Nigeria's youth was already an urgent concern. Assuming that the *share* of young people working remained the same as just before the COVID-19 crisis, about 30.8 million Nigerian youth aged 15–29[147] were projected to need jobs in

BOX 6.1. Data sources

While several surveys collect data on labor-market outcomes in Nigeria, this policy brief primarily relies on the Nigeria General Household Survey-Panel (GHS) and the COVID-19 National Longitudinal Phone Survey (NLPS).

Two main reasons explain this choice. First, the GHS was implemented four times during the period 2010–19, which straddles the 2016 oil-price recession, and contains modules suitable for analyzing labor-market dynamics. The panel (longitudinal) nature of the sample also allows rigorous analysis of labor market transitions. Second, the households surveyed in the NLPS are a subset of the GHS households, so that data at the household and individual levels from the GHS and NLPS can be linked longitudinally. With the ability to link individuals across data sources, this brief can analyze changes in labor-market outcomes before and during the COVID-19 crisis for the same set of households and individuals. More information on the GHS and NLPS is provided in Annex 6.1.

Other data sources, such as Nigeria's labor force survey, do not collect their data in a continuous or regular manner, making it difficult to consider changes over time, especially given the extent of seasonality in agricultural activities.

146 Key definitions, including what counts as a job, are taken from World Bank (2015) and outlined in Annex 6.1.

147 In this brief, unless otherwise specified, the terms "youth" and "young people" refers to those aged 15–29 years.

2021.[148] If anything, the scale of the jobs challenge could be even larger following the COVID-19 crisis: as Section 6.3 demonstrates, economic crises can lead a larger share of young Nigerians seeking work rather than remaining in school. Absent any reforms or large structural changes—and thus assuming that the shares of young people engaged in different jobs also remained the same—around 15.1 million youth (about half) would be engaged in household agriculture and about 9.9 million would be engaged in non-farm household enterprises, with just 3.0 million holding wage jobs.[149] By 2030, the estimated number of youth needing jobs will increase to 40.2 million, with 19.7 million engaging in household agriculture, 13.0 million engaging in non-farm household enterprises, and only 3.9 million holding wage jobs.

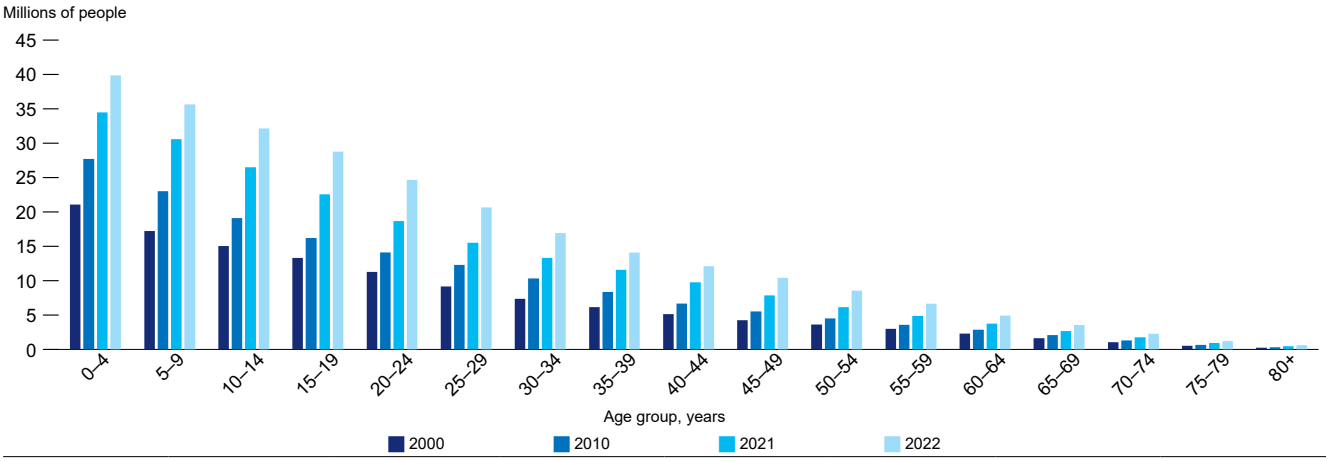
6.1.1 Nigeria's young demographics

The sheer scale of Nigeria's youth jobs challenge is a natural consequence of the country's very young population structure. Over two-thirds of Nigerians are under the age of 30 (FIGURE 6.1). Moreover, this young population structure has remained largely unchanged since at least 2000 and is projected to persist through 2030 with even greater absolute population size. As the absolute population size has increased while the age structure has remained unchanged, greater numbers of youth are entering the labor market compared with previous decades.[150] The mechanical rise in the number of young jobseekers will continue if the share of youth seeking work does not change.

Young people comprise a large share of the population across SSA, but the size and persistence of Nigeria's youth bulge sets it apart from other countries. Young people make up a much larger share of the working-age[151] population in SSA as a whole compared with

FIGURE 6.1. A "youth bulge" that is not going away

Nigeria population estimates, 2000–30



Source: World Bank DataBank (for population estimates and projections) and World Bank estimates.

148 These calculations take the projected population estimates from the World Bank DataBank—which suggest there were around 56.7 million 15–29-year-olds in Nigeria in 2021, and the shares of 15–29-year-olds who are working and engaged in different types of jobs according to the 2018/19 GHS (FIGURE 6.3). It is assumed that the shares of young people working and engaged in different types of jobs remain the same while the population increases.

149 The number of young people projected to work as trainees or apprentices is not reported.

150 Alternative data from the U.S. Census International Database, reported in FIGURE 6.3 in Annex 6.3, suggest that about 7 in 10 Nigerians are under age 30 and that the country's population structure has remained largely unchanged since 2000, in line, with World Bank DataBank's estimates. Using those population numbers gives an estimate of 33.2 million youth aged 15–29 needing jobs in 2021.

151 Working age encompasses people aged 15 to 64 years old.

any other region in the world (Fox and Gandhi, 2021). However, this masks important variations within SSA. Given declining fertility rates, the youth share of the working-age population has already peaked and is steadily dropping in key regional comparators such as Ethiopia, Ghana, and Kenya. Thus, with the share of young people in the population projected to remain fairly constant in Nigeria (as FIGURE 6.1 demonstrates), the country's demographic challenge is starker than many of its neighbors.

The ongoing COVID-19 crisis could intensify this jobs challenge, as these estimates of job shortages most likely represent a lower bound. This note provides evidence that youth increase their rates of working in response to negative economic shocks. This, in turn, would further increase the number of young Nigerians seeking jobs.

6.2 A long-standing pattern of informal and precarious work

Most jobs in Nigeria are informal and precarious, and do not allow individuals to make enough income to rise above and stay out of poverty. Indeed, even before the COVID-19 crisis, about four in 10 Nigerians lived below the national poverty line, and a further one in four were vulnerable to falling into poverty (World Bank, 2020). This section provides descriptive evidence on Nigeria's labor market prior to the COVID-19 crisis, which emphasizes the informal and precarious nature of most people's jobs and the longstanding nature of this challenge. BOX 6.2 explains how this section follows the International Labour Organization (ILO) definitions of informality and precarity, describing how these characteristics can be measured using the GHS and NLPS data available for Nigeria.

6.2.1 Many people working – but not in good jobs

Before the COVID-19 crisis, more than two-thirds of Nigeria's working-age population was working. Averaged across the two agricultural seasons,[152] about 69.6 percent of the working-age population was working in 2018/19 (FIGURE 6.2) This relatively high participation rate reflects the prevalence of subsistence work in agriculture or non-farm enterprises, combined with the fact that most people lack access to private or public safety nets and therefore cannot afford to be unemployed. This is consistent with evidence from across SSA (Fox and Gandhi, 2021). However, there were some important differences across different segments of the population. Unsurprisingly, working rates were lower among youth; many young people had not transitioned fully from school to work. The share of people working also had an inverted-U-shaped relationship with education, being higher among those with primary education than both those with less than primary education *and* those with at least secondary education. Finally, the share of men who were working—about 75.8 percent—was significantly higher than the share of women who were working—about 63.7 percent. Notwithstanding these differences, looking at working rates alone does not give adequate information on the state of the labor market. Additional data, such as job characteristics and hours worked, provide crucial evidence on whether jobs are precarious or productive—that is, whether they afford an opportunity to lift people out of poverty.

Pre-COVID-19 data on job types show that most Nigerian workers were engaged in farm or non-farm household enterprises. Some 57.4 percent of working-age Nigerians were primarily engaged in non-farm household enterprises or household agriculture in 2018/19 (FIGURE 6.3). As these types of jobs are

152 Since agriculture plays a large role in the Nigerian labor market and is highly seasonal, GHS data were collected during two agricultural seasons for each of the survey's four waves. One set of data is gathered during the "post-planting" period, roughly July–September, and one during the "post-harvest" period, roughly January–February of the next calendar year. To simplify the analysis, this brief will typically average labor market outcomes of the post-planting and post-harvest visits for each wave.

BOX 6.2. Defining precarious work in Nigeria

The International Labour Organization (ILO) defines precarious work as possessing the following characteristics: (i) low paid, especially if associated with earnings that are at or below the poverty level and volatile; (ii) insecure, with uncertainty regarding the number of hours of work available, or regarding the continuity of employment, or regarding the risk of job loss; (iii) minimal worker control, such that the worker, either individually or collectively, has no say about their working conditions, wages, or the pace of work; and (iv) unprotected, meaning that the work is not protected by law or collective agreements with respect to occupational safety and health, social protection, discrimination, or other rights normally provided to workers in an employment relationship (ILO, 2016). Another way to describe a precarious work situation is one in which a worker bears the risks associated with the job, rather than the enterprise or firm that is hiring the worker.

In the Nigerian context, this definition of precarious work has significant overlap with informal work; household enterprises are typically informal, and the work is thus unprotected by law or collective agreements. Annex 6.1 discusses the definition of informal work in Nigeria in more detail. The main proxies of precarity used in this brief—which are all available in the GHS and NLPS—are: job type, job sector, and hours worked.

Job type: The major job types measured in the GHS and NLPS include work in household agriculture, work in household non-farm enterprises, work as a trainee or apprentice, and wage work. Household agriculture and non-farm household enterprises may be more precarious, as they are small scale and unprotected. A range of evidence on agriculture in Nigeria suggests that farms are not commercialized or well linked to markets and access to key inputs may be constrained (Oseni and Winters 2009, FAO 2018, Ecker and Hatzenbuehler 2021). In contrast, wage employment jobs tend to offer lower earnings risk, even if they have informal contractual arrangements, and at least potential opportunities for better working conditions, such as paid overtime, paid leave, and social insurance (Fox and Gandhi 2021). Wage jobs may also provide the foundations for *careers* requiring a longer-term commitment to the labor market and offering advancement opportunities (Goldin 2006).

Job sector: Information on job sector may also help characterize precariousness. For example, seasonality can render agricultural incomes insecure, while non-farm enterprises engaged in retail and trading—or commerce—may be more likely to be small scale with their owners bearing the risks associated with their business activities.

Hours worked: Work that is insecure, volatile, and unprotected—common in household agriculture and non-farm household enterprises—often does not provide enough hours of work to enable the worker to earn enough income. Direct evidence on productivity and earnings, which can be compared across different job types and sectors, is not available in the GHS or NLPS. However, it is possible to verify which job types and sectors are associated with lower household *consumption*, and hence a greater chance of being in poverty. Jobs offering less opportunity to escape poverty are likely to be more precarious.

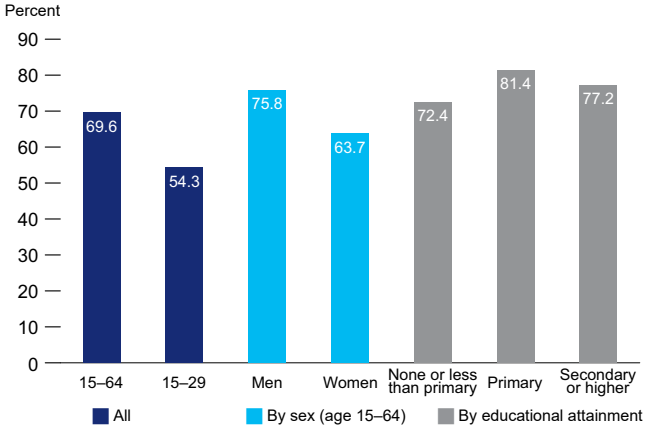
typically small scale, unprotected, and potentially subject to seasonality, they may be more precarious (BOX 6.2). Just 9.8 percent of the working-age population was engaged in wage work. This mirrors evidence from across SSA: while wage work may offer greater income security, in-work benefits, and potentially opportunities for building a more long-term and stable career, it remains rare across the region (Fox and Gandhi, 2021).

There were important differences in job types across gender and education levels. Men were more likely to be working in household agriculture and wage work, while women were more likely to be engaged in non-farm household enterprises in 2018/19 (FIGURE 6.3). In addition, less-educated Nigerians were more likely to work in household agriculture or non-farm household enterprises, while more educated Nigerians were far more likely to be doing wage work.

Young people were especially likely to engage in household agriculture and non-farm household enterprise jobs. Whereas 9.8 percent of the working-age population (14.1 percent of those who were working) engaged in wage work, just 5.3 percent of the youth population (9.7 percent of those who were working) were engaged in wage work in 2018/19 (FIGURE 6.3) On average, working youth were also over-represented in household agriculture and were less likely than the full working-age population to engage in non-farm household enterprises. Nonetheless, this masks important gender differences among young people. Working youth's overrepresentation in household agriculture was mainly driven by young men: 56.1 percent of young men who were working were engaged in household agriculture, compared with 39.9 percent of young women who were working. Conversely, young women who were working were about as likely as the full working-age population to engage in non-farm household enterprises: 40.8 percent of young women who were working were in non-farm household enterprises compared with 25.5 percent of young men who were working (and 39.0 percent of all workers).

FIGURE 6.2. High working rates before the COVID-19 crisis

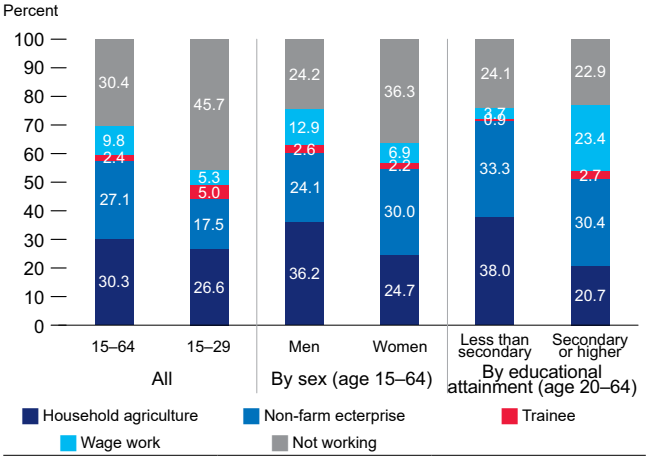
Share of people working in different population groups, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

FIGURE 6.3. High prevalence of work in household farms and non-farm household enterprises across population groups

Primary job type in different population groups, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. Estimates averaged across post-planting and post-harvest visits. Education sub-groups focus on cohorts aged 20–64, because almost all secondary education, if ever completed, is completed before age 20. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

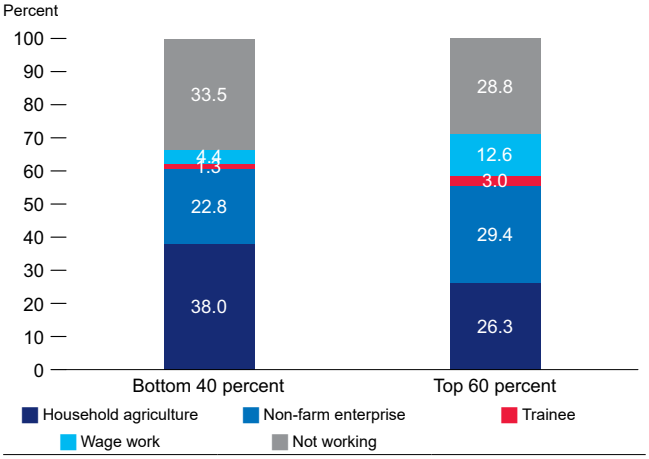
Comparing across the consumption distribution reinforces the notion that work in household enterprises, especially household farms, may be more precarious. Individuals from households in the bottom 40 percent of the consumption distribution were much more likely than those in the top 60 percent of the consumption distribution to be working in household agriculture in 2018/19 (FIGURE 6.4).[153] By contrast, individuals in the top 60 percent were more than three times as likely as those in the bottom 40 percent to hold wage jobs. While not a direct measure of productivity and earnings, these consumption data suggest that jobs in household enterprises are less able to generate the incomes required to lift households out of poverty.

The precarity of agriculture also resonates with other direct evidence on farming in Nigeria. Agricultural commercialization remained rare in the decade before the COVID-19 crisis: despite being relatively well-diversified among different food crops, only around 5 percent of farm households cultivated any cash crops (Ecker and Hatzenbuehler 2021). In addition, only around one-quarter of Nigerian farms sell their agricultural products, on average (FAO 2018). Constraints on access to key inputs, such as seeds and fertilizers, may limit agricultural productivity (Oseni and Winters 2009). This, in turn, would constrain household agriculture's capacity to lift households out of poverty.

Work in small-scale enterprises remained prevalent and, if anything, became more widespread in the 10 years prior to the COVID-19 crisis. Typically, structural transformation would decrease the share of workers engaged in agriculture over time. However, tracing the evolution of job types between 2010 and 2019, the share of working-age Nigerians engaged in

FIGURE 6.4. Household agriculture was more prevalent among poorer households, while wage work was more prevalent among richer households

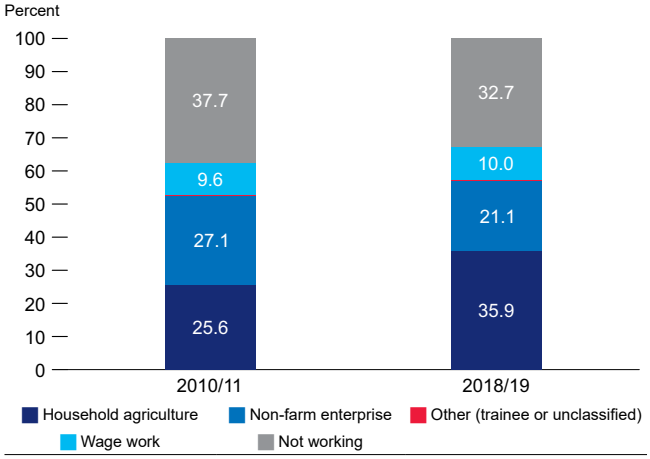
Primary job type for the working-age population by consumption decile, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. Estimates averaged across post-planting and post-harvest visits. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

FIGURE 6.5. The prevalence of precarious work did not improve in the decade before the COVID-19 crisis

Primary job type for the working-age population, 2010–2019



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used to classify working individuals into job type which prioritizes wage work, then household agriculture, then non-farm household enterprises, and trainees in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

153 In Nigeria, the bottom 40 percent of the consumption distribution captures mostly those who live below the national poverty line. See NBS (2020) for further details.

household agriculture actually *increased*, from 25.6 to 35.9 percent (FIGURE 6.5). Over the same period, the share of Nigerians engaged in wage work remained virtually the same, hovering at around 10 percent.

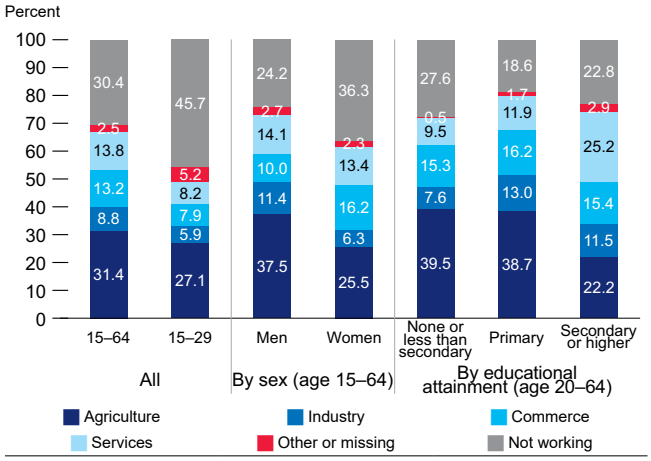
6.2.2 A preponderance of jobs in precarious sectors

Agriculture, services, and commerce are the main sectors in which people work. Among the working-age population, almost nine out of 10 working individuals had primary jobs in agriculture (which comprises not just household agriculture but also any wage workers or other activities linked to agriculture), commerce (retail and trading activities), or services (FIGURE 6.6). About 45.1 percent of jobs were in agriculture, 19.0 percent of jobs were in commerce, and 19.8 percent of jobs were in services. Among working youth, an even higher share worked in agriculture. There were also substantial gender differences: men were more likely to be engaged in agriculture, while women were more likely to be engaged in commerce. In addition, individuals with higher levels of education were less likely to work in agriculture or commerce, engaging instead in industry and other services sector activities.

Individuals from poorer households were substantially more likely to engage in agriculture, suggesting that such work is more precarious. In line with the results on job type, a much larger share of Nigerians in the bottom 40 percent of the consumption distribution worked in the agriculture sector compared with the top 60 percent of the consumption distribution (39.0 vs 27.4 percent, FIGURE 6.7). This, in turn, means the share of people engaged in industry, commerce, and services was squeezed lower for those in the bottom 40 percent of the consumption distribution compared with the top 60 percent.

FIGURE 6.6. High shares of jobs were in agriculture, commerce, and services

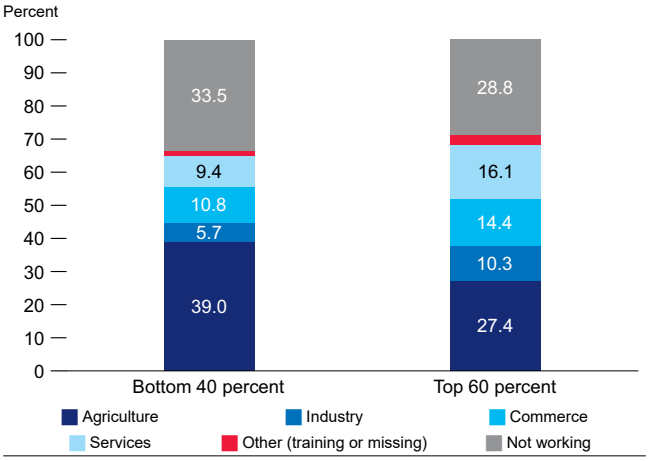
Primary sector of work in different population groups, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. Estimates averaged across post-planting and post-harvest visits. Education sub-groups focus on cohorts aged 20–64, because almost all secondary education, if ever completed, is completed before age 20. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education. Industry includes mining, manufacturing, utilities, construction, postal/transport; services include professional and technical activities, public administration, education, health and personal services.

FIGURE 6.7. Work in the agriculture sector was concentrated among poorer households

Primary sector of work for the working-age population by consumption decile, 2018/19

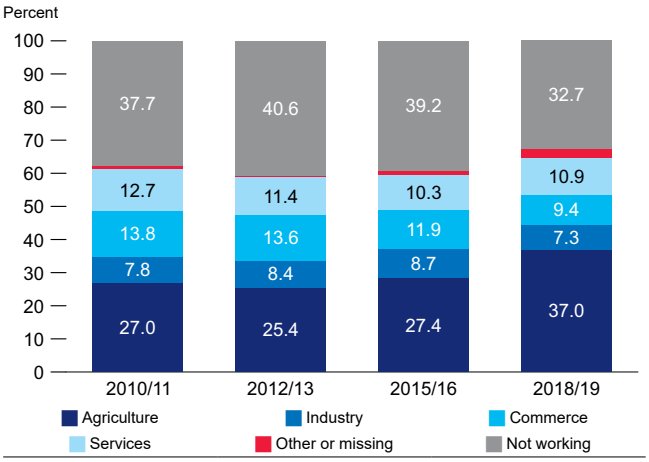


Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. Other or missing includes individuals who are identified as being in a sector explicitly named "other" and working individuals with missing information on sector of work. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19. Industry includes mining, manufacturing, utilities, construction, postal/transport; services include professional and technical activities, public administration, education, health and personal services.

The share of working-age Nigerians engaged in agriculture increased over the decade prior to the pandemic. The share of workers engaged in agriculture rose from 27.0 to 37.0 percent between 2010/11 and 2018/19, while the shares working in industry and services decreased (FIGURE 6.8). This provides further evidence that structural transformation has been in reverse in Nigeria, and it shows that informality and precarity in the labor market has proliferated. The role of the two crises—the 2016 oil-price recession and the ongoing COVID-19 crisis—in shaping these changes in the labor market will be explored in more detail in Section 6.4.

FIGURE 6.8. Structural transformation in reverse, 2010–19: more workers in agriculture, fewer in services and industry

Primary sector of work for the working-age population, 2010–19



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. Other or missing includes individuals who are identified as being in a sector explicitly named "other" and working individuals with missing information on sector of work. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19. Industry includes mining, manufacturing, utilities, construction, postal/transport; services include professional and technical activities, public administration, education, health and personal services.

6.2.3 Many workers were underemployed

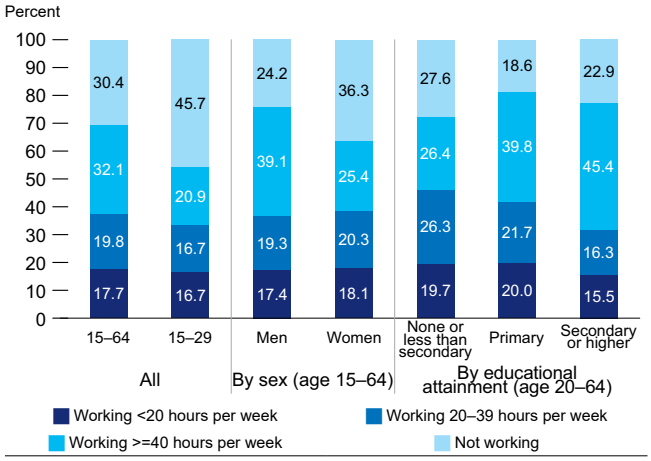
Pre-pandemic, a large share of working individuals worked fewer than 40 hours per week; this share was higher among youth, women, and those with lower levels of education. Among working-age individuals, a significant portion—some 37.5 percent—were working fewer than 40 hours per week in 2018/19 (FIGURE 6.9). Since nearly one-third of the working-age population is not working, this means that more than half of those who were working worked fewer than 40 hours per week. Certain sub-groups were more likely to work fewer than 40 hours per week. Concentrating on those who work, groups relatively more likely to be working under 40 hours per week included: younger people, women, and those with lower levels of education. About 60 percent of working youth and working women worked fewer than 40 hours per week, a significantly larger share than among non-youth and men. The fact that working women worked fewer hours than working men may partly reflect the challenge of juggling work and household responsibilities.[154] Similarly, 63.6 percent of working individuals with less than primary education were working fewer than 40 hours per week, a larger relative share than among people with higher educational attainment.[155] Nonetheless, even among those with secondary attainment or greater, a full 41.2 percent of working individuals still worked under 40 hours per week. Insofar as jobs in which fewer hours are worked are more precarious, these patterns suggest that youth, women, and the less-educated were more likely to be in precarious working situations. This is consistent with the information on job types and sectors showing more widespread precarity among these sub-groups.

154 Early marriage, which is widespread, especially in rural areas, and family formation play a crucial role in determining women's labor market outcomes in Nigeria (Johansson de Silva 2016). This is apparent even in the 2019/19 GHS data on hours worked: about 64.6 percent of working women in households with children under 5 worked fewer than 40 hours per week, compared with 56.5 percent of working women in households without children under 5. For working men, by contrast, there was very little difference between those in households with and without children under 5 in terms of whether they worked fewer than 40 hours per week. Nevertheless, regardless of whether children under 5 were present in the household, working women were still more likely to work fewer hours than working men.

155 The breakdowns by education focus on those aged 20–64 years, because by age 20, most individuals who would ever finish secondary education would have finished.

FIGURE 6.9. Youth, women, and those with lower educational attainment were more likely to work fewer than 40 hours per week

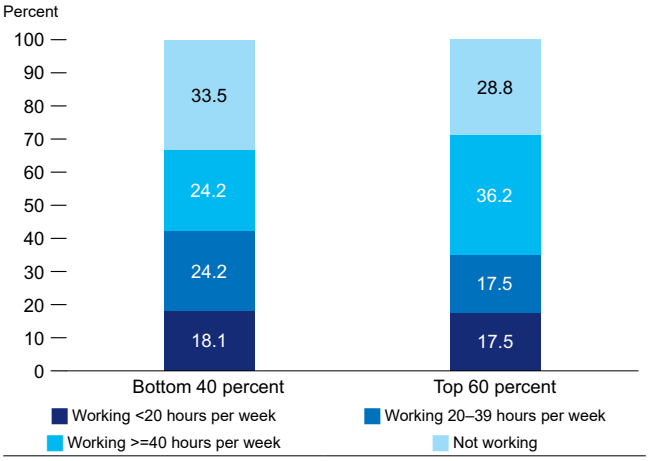
Distribution of hours worked in different population groups, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. Education sub-groups focus on cohorts aged 20–64, because almost all secondary education, if ever completed, is completed before age 20. The sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

FIGURE 6.10. More underemployment for poorer Nigerians

Distribution of hours worked among the working-age population by consumption decile, 2018/19



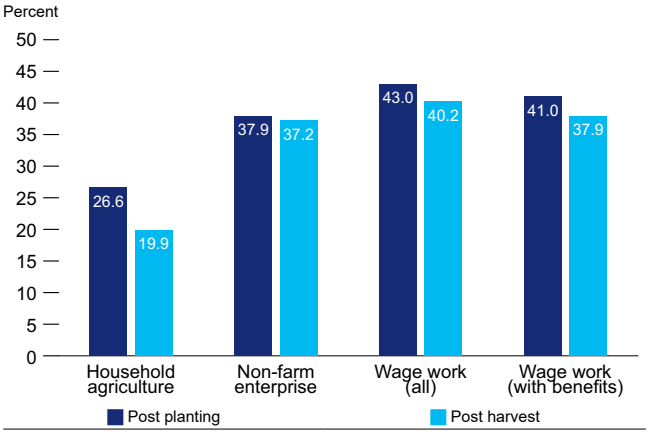
Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. The sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

People from poorer households were more likely to be underemployed, suggesting that working fewer hours is a marker of labor market precarity. Around 42.3 percent of people from households in the bottom 40 percent of the consumption distribution worked fewer than 40 hours per week, compared with 35 percent of those from the top 60 percent (FIGURE 6.10). Of those who were actually working, this means that about 63.6 percent from the bottom 40 percent of the consumption distribution worked *fewer* than 40 hours a week, compared with 49.2 percent of those in the top 60 percent.

People working in more formal jobs generally worked longer hours.[156] FIGURE 6.11 shows that individuals working in wage work worked more hours per week on average in 2018/19 than those working in household agriculture or non-farm household enterprises. If these additional hours are adequately remunerated, this further suggests that wage work may be less precarious

FIGURE 6.11. Wage work often meant more work hours per week than household agriculture or non-farm household enterprises

Average hours worked per week among workers aged 15–64 by primary job type, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Chart focuses only on those individuals who report working only one job type. Wage work with benefits is defined here as wage work jobs that offer a pension or health insurance. The sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

156 For simplicity, these comparisons focus only on individuals working one type of job. FIGURE 6.38 in Annex 6.3 shows that about 35.6 percent of the working population aged 15–64 worked more than one job type. Nevertheless, individuals with multiple different types of job tend to work more hours, as FIGURE 6.39 in Annex 6.3 shows.

than work in farm and non-farm household enterprises (Fox and Gandhi 2021). However, those wage workers with in-work benefits, namely pensions and health insurance, worked fewer hours than those in wage work without benefits. This suggests that the relationship between job formality and precarity, and the number of hours worked, is not always straightforward.

6.2.4 Even wage jobs often lacked certain markers of formality, especially for younger workers

Only a small share of wage workers had jobs with in-work benefits; this share was even smaller among young wage workers. Just 36.1 percent of wage workers in the working-age population as a whole had jobs with a pension or health insurance, and this share was even smaller for young people, at just 8.1 percent of wage jobs (FIGURE 6.12). A much larger share of wage workers had written contracts (64.7 percent), but they were far from ubiquitous. Interestingly, in-work benefits appeared to be more widespread for wage-employed women than wage-employed men. However, this is likely related to sample selection, as the share of working-age women in wage employment in the first place is around half the share of working-age men (FIGURE 6.13).

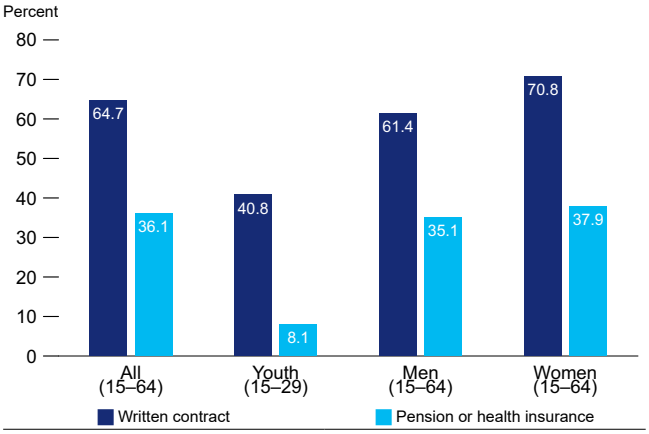
6.2.5 Non-farm enterprises were typically very small scale

Pre-COVID data show that non-farm household enterprises in Nigeria were almost all very small, suggesting that their activities were both low productivity and precarious. About 86.3 percent of Nigeria's non-farm household enterprises did not hire any employees from outside the household, instead relying on the unpaid labor of household members (FIGURE 6.13). Among the few enterprises that did engage outside workers, most hired only one or two. Moreover, enterprises from poor households were even less likely to have external employees; this suggests that small-scale enterprises are less able to generate the earnings required to lift people out of poverty.

Non-farm household enterprises engaged in commerce were especially likely to be small scale.

FIGURE 6.12. In-work benefits were less prevalent for younger wage workers

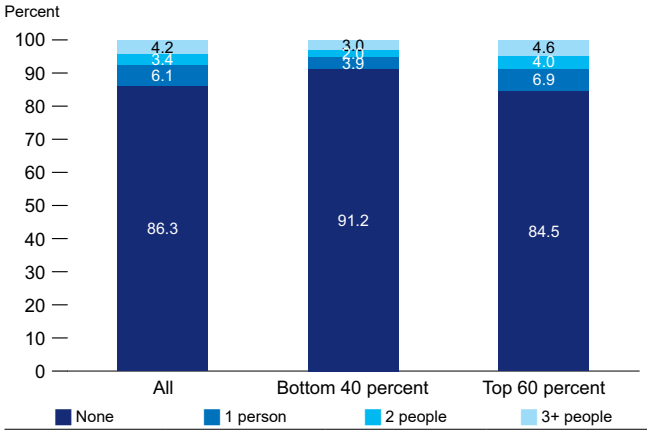
Share of wage workers with in-work benefits in different population groups, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. The sample consists of individuals who hold any type of wage job.

FIGURE 6.13. Most non-farm household enterprises are small scale, with no external employees, especially in poor households

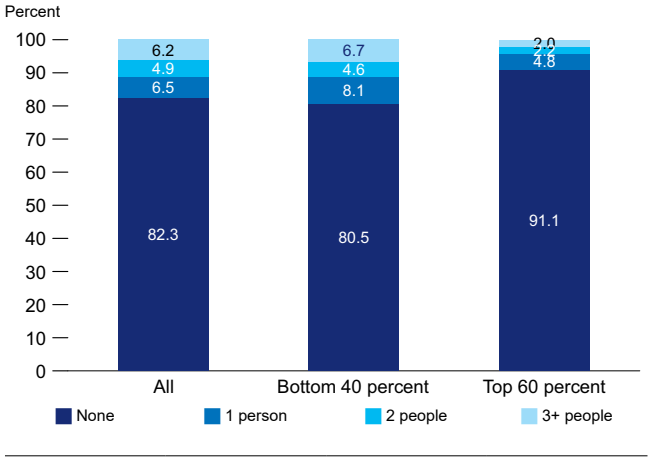
Number of employees from outside the household in households' primary non-farm enterprise by decile of the consumption distribution, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits.

FIGURE 6.14. Non-farm enterprises that engaged in commerce were smaller scale, on average, than those engaged in industry and services

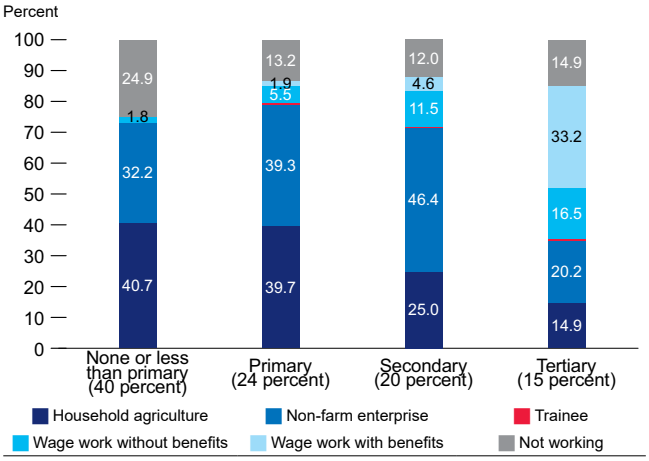
Number of employees from outside the household in households' primary non-farm enterprise by sector, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. Less than 2 percent of non-farm enterprises engaged in agricultural activities, so these are not shown. Industry includes mining, manufacturing, utilities, construction, postal/transport; services include professional and technical activities, public administration, education, health and personal services.

FIGURE 6.15. Low labor-market returns to secondary education

Detailed primary job type for 30–64-year-olds by educational attainment, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: The percentage shown for each educational category indicates the proportion of the sample of 30–64-year-olds who were in that category. Age is restricted to over 30 years in this particular sample, unlike other samples, to capture individuals that could have finished tertiary education. Estimates focus on primary job, defined as the job in which the individual worked the most hours. Estimates averaged across post-planting and post-harvest visits. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

Around 91.1 percent of commerce enterprises[157] did not employ anyone outside the household compared with 82.3 percent in industry and 80.5 percent in services (FIGURE 6.14). This suggests that these types of commerce activities may be particularly precarious.

6.2.6 Education did not guarantee a pathway out of precarity

Acquiring an education does not assure people a wage job, namely those jobs that are associated with less labor market precarity

The share holding a wage job was just 16.1 percent in 2018/19 for those with secondary education, but was 49.7 percent for those who had completed tertiary education (FIGURE 6.15). For all lower educational categories, the share holding a wage job was even lower. Perhaps more notable, even among Nigerians who had completed tertiary education, 41.2 percent of those working were still not working in wage jobs, and not all wage jobs had benefits such as pensions or health insurance. This is also consistent with the finding that more-educated Nigerians were spending longer periods unemployed and searching for a job.[158] This suggests that, prior to the COVID-19 crisis, Nigeria already faced a shortage of high-quality jobs, and that the jobs landscape was not adjusting to any increase in human capital associated with rising educational attainment.

157 Around 49.5 percent of non-farm enterprises were engaged in commerce in 2018/19. Of these, 9.6 percent were in "wholesale and retail trade and repair of motor vehicles", 2.9 percent were in "wholesale trade, except of motor vehicles", and 87.5 percent were in "retail trade, except of motor vehicles."

158 While higher unemployment rates among the more highly-educated may seem counter-intuitive, evidence from other countries and in this brief shows that being able to not work and take the time to search is a relative luxury; when households are hit by economic shocks, they tend to work more. Thus, to the extent that more highly-educated people come from richer households, they can spend more time not working to search for better jobs.

6.3 Leaving school, seeking work: risky trade-offs for youth in crisis times

Since precarious jobs are widespread, as shown in Section 6.2, many Nigerian households are vulnerable to economic shocks. This section shows how people have responded to the two recent shocks—Nigeria's 2016 oil-price recession and the ongoing COVID-19 crisis. The analysis focuses in particular on the trade-off that young people face during an economic downturn; specifically, between entering the labor market early versus staying in school. Learning about labor-market responses after the 2016 oil-price recession can offer policy insights for the current COVID-19 crisis.

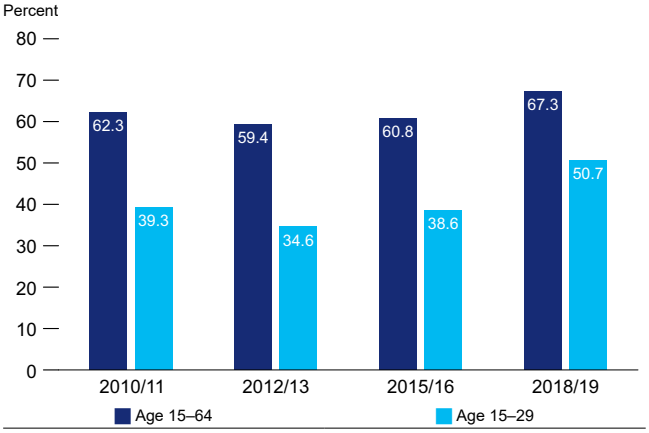
6.3.1 Following the 2016 oil-price shock, many young Nigerians cut their schooling short

Overall, the share of working-age Nigerians who were working increased in response to the country's 2016 recession, especially among young people. The proportion of Nigeria's working-age population that was working increased from 60.8 percent in 2015/16 to 67.3 percent in 2018/19 (FIGURE 6.16). This post-recession increase in working rates was even more pronounced for young people: from 2015/16 to 2018/19, youth working rates increased from 38.6 to 50.7 percent, a surge of 12.1 percentage points.

The rise in working rates among young people following the 2016 oil-price recession corresponded to less time in school, accelerated labor-market entry, and hence lower attainment of secondary education. While secondary educational attainment among 20–25-year-olds increased from 2010/11 to 2015/16, it dropped substantially between 2015/16 and 2018/19

FIGURE 6.16. Working rates increased after the 2016 oil-price recession, particularly among youth

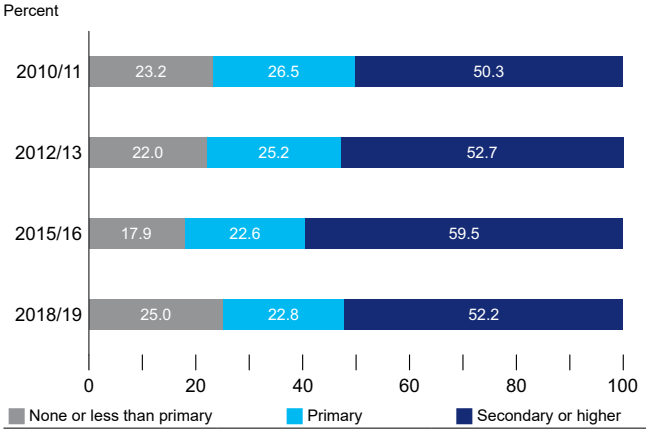
Share of people working by age group, 2010–19



Source: GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. In this figure, trainees and unclassified individuals are classified as working so that the share of people not working is consistent with previous figures. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

FIGURE 6.17. Stocks of human capital among young people declined after 2015/16

Educational attainment among 20–25-year-olds, 2010–19



Source: GHS and World Bank estimates.
Notes: "None or less than primary" refers to individuals who have not fully attained primary education. "Primary" refers to attainment of at least full primary education but not full secondary education. "Secondary or higher" refers to attainment of senior secondary completion or higher. Chart focuses on those aged 20–25 years because almost all Nigerians who complete secondary education do so before age 20. Estimates averaged across post-planting and post-harvest visits.

(FIGURE 6.17).[159] Focusing on this age range provides an accurate picture of secondary educational attainment among young people, since almost all Nigerians who complete secondary education do so by age 20.[160] This result appears to be independent of ongoing conflict shocks, which may have been occurring at the time and could also have contributed to declining educational attainment. When zones that typically experience more violence and conflict are excluded from the analysis, the decline in secondary educational attainment rates among 20–25-year-olds between 2015/16 and 2018/19 is, if anything, slightly larger (FIGURE 6.40).

That the share of 20–25-year-olds with less than primary education rose following the 2016 oil-price recession is likely the result of the sharp decline in primary enrolment that took place in the late 2000s. The drop in secondary attainment among 20–25-year-olds between 2015/16 and 2018/19 was accompanied by a 6.4-percentage-point increase in the share with less than primary education, with the share that had attained primary education (but less than secondary) rising much more modestly, by 1.4 percentage points. On the face of it, this is somewhat puzzling; if individuals paused their secondary education around the time of the 2016 oil-price recession, they should still have attained primary education. The sharp rise in the share of 20–25-year-olds with less than primary education can, however, be explained by events prior to the 2016 oil-price recession. Those who were aged 20–25 in 2018/19 would be making constrained decisions around primary school completion 10 (or more) years earlier, when they were aged 10–15. Given the patterns shown in FIGURE 6.17, it is therefore unsurprising that primary school enrolment dropped sharply around 2008 according to UNESCO Institute for Statistics data. Specifically, the net primary school enrolment rate fell from 70.3 to 63.4 percent between 2007 and 2008.[161] Thus, the drop in secondary school attainment among 20–25-year-olds following the 2016 oil-price recession was accompanied by the legacy of patterns in primary schooling in the late 2000s.

Following the 2016 oil-price recession, secondary school graduates were more likely to seek work than continue their education. Whereas from 2010 to 2016 the share of 20–25-year-old secondary school graduates who were still in education increased from about 30.9 to 39.0 percent, this share subsequently contracted significantly, dropping to 12.6 percent in 2018/19 (FIGURE 6.18). Meanwhile, the share of recent secondary school graduates working in household enterprises—both agricultural and non-farm enterprises—hovered at between 29.1 and 31.3 percent during the 2010–16 period, but increased to 48.0 percent in 2018/19. Similarly, the share of 20–25-year-olds engaged in wage work, which had been stable at 6–7 percent, increased to 10.8 percent in 2018/19.

Transitions from school into work for all young people began increasing around the time of the 2016 oil-price recession. FIGURE 6.19 shows the probabilities associated with transitioning from school into different working situations. For each time period shown, a panel of individuals is created, focusing on the sub-sample of 15–29-year-olds who were in school in the first period. The probability of moving from schooling into household agriculture increased from 2.8 percent for the 2010–12 period to 7.1 percent for the 2015–18 period. Flows from schooling into non-farm household enterprises also increased. The pattern of individuals' responding to the 2016 oil-price recession by reducing schooling is consistent with the observed

159 FIGURE 6.17 suggests that the 2016 recession had an immediate impact on school dropout, but this took time to feed through fully to attainment. For example, if 16-year-olds are pushed out of education by a shock, this will not be reflected in the attainment rates of 20–25-year-olds until four years later.

160 Additional calculations from the 2018/19 GHS show that virtually all of those who ever complete secondary or higher education complete their secondary education between the ages of 15 and 20.

161 See https://data.worldbank.org/indicator/SE.PRM.NENR?locations=NG for UNESCO Institute for Statistics data. Similar patterns emerge looking at the Nigeria Demographic and Health Survey data for 2003, 2008, and 2013 (see https://www.statcompiler.com/en/). The GHS data on which the remainder of the report rely cannot be extended before 2010/11.

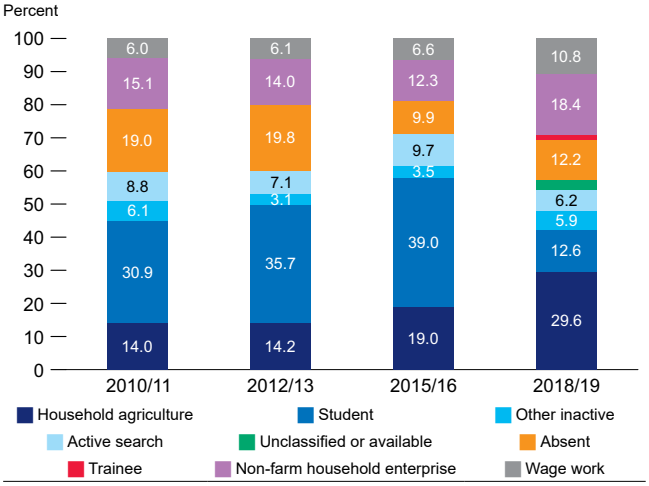
drop in educational attainment among 20–25-year-olds, as most young people complete secondary school around ages 15–18.

Together, the previous three figures illustrate the difficult trade-off between education and work facing Nigerian households during times of economic crisis. In the face of a negative economic shock, compounded by rising food and commodity prices, credit-constrained households may not have the resources to continue allowing children and youth to go to school. Not only might there be direct costs associated with going to school, such as school fees, learning materials, and uniforms, but also households often face an opportunity cost, since children in full-time education will not be able to spend as much time helping the household earn income through supporting household agricultural and non-farm enterprise activities. As discussed below, this observed decline in schooling has long-term implications for Nigeria's structural transformation and inclusive growth.

"Counterfactual" analysis suggests that young people's switch into work at the expense of education stems primarily from the 2016 oil-price recession, rather than from other changes that took place between 2015 and 2019. One concern with the preceding analysis is that other factors, including demographics and migration, may have changed independently of—but at the same time as—the oil-price recession, so the effects on the trade-off between working and schooling are not a product of the recession per se. However, using detailed individual-level information from the GHS makes it possible to control for these other changes to isolate the impact of the recession. This analysis, which is described in Annex 6.2, indicates that

FIGURE 6.18. Secondary-school graduates after the oil recession: less likely to continue their education, more likely to work in household enterprises

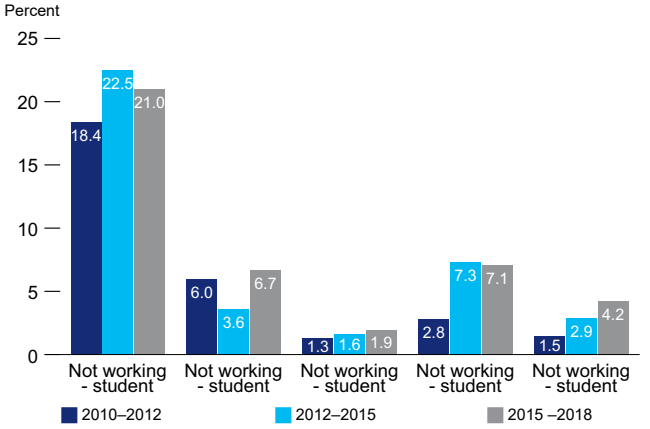
Labor market status of 20–25-year-olds with secondary education, 2010–19



Source: GHS and World Bank estimates.
Notes: Chart focuses on those aged 20–25 years because almost all Nigerians who complete secondary education do so before age 20. Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. "Available" individuals are those who indicate they are available for work but are not working, not searching, not absent, and not inactive. "Unclassified" individuals are those who remain unclassified after a hierarchical classification of job status. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

FIGURE 6.19. Tough trade-offs between school and work: rising transition rates from school to the labor market after 2015/16

Work status of 15–29-year-olds that started as students in the previous period, 2010–18



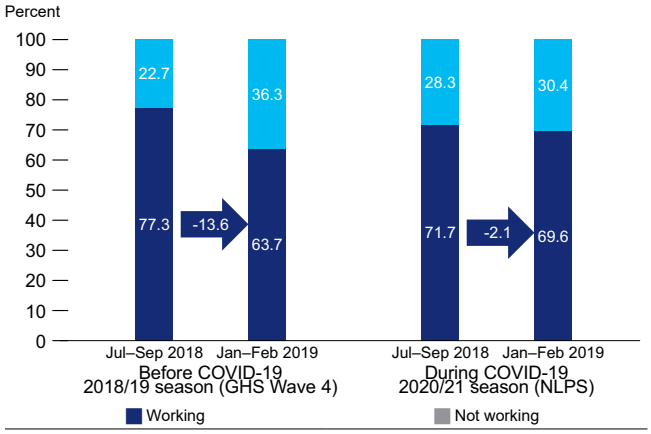
Source: GHS and World Bank estimates.
Notes: Estimates calculated using data from post-planting visit only. The sample for each time period consists of the subset of individuals aged 15–29 who are in school at the beginning of the period. This figure compares the probability of transitioning from student status to different working situations by the next wave.

changes in observable individual characteristics, and any other unobserved characteristics that are correlated with such observed characteristics, cannot explain the large changes in education and labor market outcomes for a particular youth cohort of 20–25-year-olds.

This "counterfactual" analysis therefore suggests that it was indeed the oil-price recession that pushed Nigerians out of school and into precarious work. In line with FIGURE 6.17, the counterfactual analysis suggests that the oil-price recession led to around an 8-percentage-point drop in the share of 20–25-year-olds reaching secondary educational attainment between 2015/16 and 2018/19. The counterfactual analysis also suggests that the oil-price recession increased the labor force participation rate of 20–25-year-olds in 2018/19 by as much as 20 percentage points. This reinforces the difficult trade-off between education and work facing Nigerian youth during times of economic crisis.

FIGURE 6.20. Higher working rates during the 2021 post-harvest season, amid COVID-19

Working situation of the working-age population, 2018–21



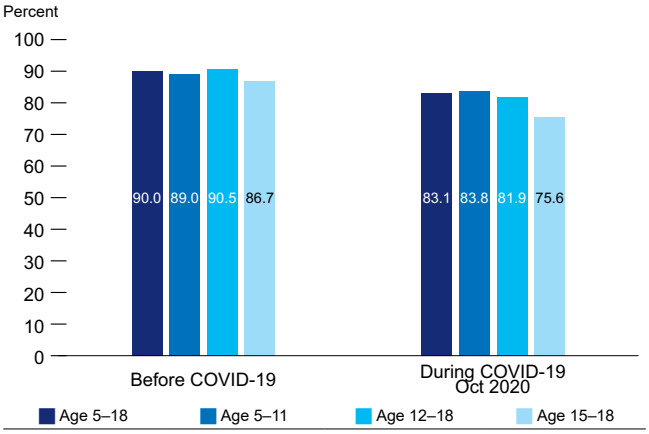
Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: The sample is a panel of individuals observed across the relevant 2018/19 GHS visits and NLPS rounds.

6.3.2 Higher working rates and withdrawal from education during the COVID-19 crisis

More recent data show large increases in working rates during the COVID-19 crisis. This can be seen by comparing how the share of people working evolved in two agricultural cycles; one before the COVID-19 pandemic and one after the pandemic hit.[162] Each agricultural cycle consists of a "post-planting" season around July–September—when demand for agricultural labor would typically be higher—and a "post-harvest" season in January–February—when demand for agricultural labor would typically be lower. In the 2018/19 agricultural cycle, before the COVID-19 pandemic, working rates sharply decreased, from 77.3 percent in July–September 2018 to 63.7 percent in January–February 2019, a decline of some 13.6 percentage points (FIGURE 6.20). However,

FIGURE 6.21. An overall drop in school rates, largest among older children

Share of children in school among sub-sample of children whose schools were operating in October 2020 and who were not experiencing shocks directly related to the COVID-19 crisis



Source: Excerpt from Table 2 in Dessy et al. (2021), based on GHS and NLPS.
Notes: As per Dessy et al. (2021), individuals who attributed non-attendance in October 2020 to (1) their schools still being closed, (2) still being on holiday, (3) being afraid of contracting COVID-19, and (4) waiting for admission were excluded from the sample. Individuals are classified as attending school before COVID-19 if: (1) the respondent attended school at any time during the 2019/20 school year; (2) the respondent attended classes on-site or remotely since schools reopened; or (3) at the time of the survey the respondent attended school during the 2020/21 academic year.

162 The two surveys had different modalities: the GHS was an in-person survey, while the NLPS was conducted over the phone. As such, within-survey changes are compared where possible, rather than directly comparing estimates from the two different surveys.

in the 2020/21 cycle, working rates only fell by about 2.1 percentage points, from about 71.7 percent in September 2020 to about 69.6 percent in January 2021. This seasonal decline is much lower than the corresponding pre-COVID-19 decline, suggesting elevated working rates during the 2021 post-harvest period.

The increase in working rates following the COVID-19 crisis coincides with a decrease in the share of children going to school, particularly older children. Among a sub-sample of eligible students whose schools were operating in October 2020 and who were not experiencing shocks not directly related to the COVID-19 crisis, the share of children going to school was still significantly lower in October 2020—even after many of Nigeria's COVID-19 lockdown restrictions were relaxed—compared with January–February 2019 (FIGURE 6.21, excerpt from Dessy et al. (2021)). While there is no way to directly measure the extent to which this decline stems from regular seasonal changes in schooling rates, as the data come from different months it is notable that the drop in schooling rates is concentrated among older children, particularly in the 15–18 age group. Since schooling is not compulsory for this age group, it may be that older children did not return to school so that they could contribute to earning income for the household.

6.3.3 What do higher working rates tell us?

Higher working rates might seem like good news, as they could imply more income, but they can also reflect a last-ditch coping mechanism for households during a crisis. In the Nigerian labor market, increasing working rates are likely to represent a coping mechanism to deal with negative shocks to household income, rather than a response to improving job conditions. Indeed, most Nigerians lack access to private or public safety nets, so they cannot afford to be unemployed or to spend long periods searching for good jobs. Instead, they largely engage in household agriculture and non-farm household enterprise activities, which may be precarious and informal; these jobs were widespread even before the oil-price recession and the COVID-19 crisis. The opportunity cost of higher working rates is particularly salient for the youth—instead of going to school and accumulating human capital, young people are forced to enter the labor market to cope with negative economic shocks to their household. To further explore this issue, the next section analyzes how precarity—proxied by job types and sectors of work—evolved during the oil-price recession and the COVID-19 crisis.

6.4 Growing labor-market precarity, especially among youth

Section 6.2 presented evidence pointing to the widespread precarity of jobs before the COVID-19 crisis, and Section 6.3 showed that working rates increased in response to both the 2016 oil-price recession and the ongoing COVID-19 crisis at the expense of continued schooling for the youth population. This section, Section 6.4, demonstrates that the increase in labor supply—and hence working rates—corresponds to an increase in the already widespread precarity of jobs, which provides supporting evidence for an increase in labor supply driving the increase in working rates, rather than an increase in the demand for labor. Insofar as agriculture becomes a more important source of jobs, this means that any progress on structural transformation in the Nigerian labor market could be reversed.

6.4.1 Expanding precarity and informality after the 2016 oil-price shock

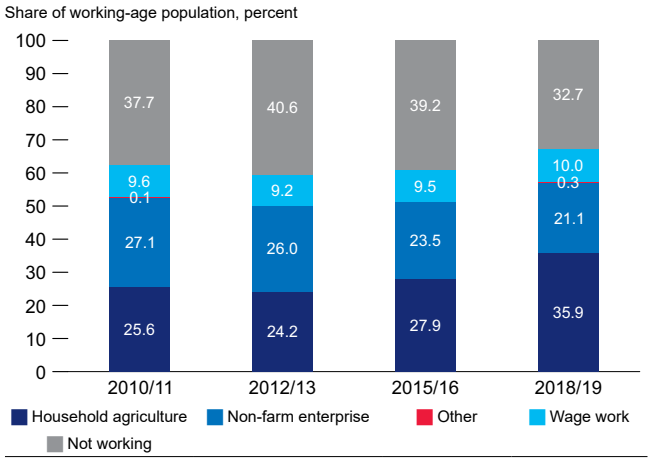
The share of Nigerians working in agriculture began increasing in 2015/16 and has continued to expand. Between 2010/11 and 2012/13, the share of Nigerians working in household agriculture was stable, even slightly decreasing from 25.6 to 24.2 percent (FIGURE

6.22). By 2015/16, the proportion had risen slightly, to 27.9 percent. Between 2015/16 and 2018/19, however—following the oil-price recession—the share of Nigerians working in household agriculture jumped to 35.9 percent. Similar results emerge when looking at the labor market's sectoral composition, with the share of workers engaged in agriculture rising at the expense of industry and commerce between 2015/16 and 2018/19 (FIGURE 6.23). This resonates with the macroeconomic data from this period, which demonstrate that the 2016 oil-price recession affected real GDP growth in industry and services significantly more than agriculture (World Bank, 2021).

The workers turning to agriculture following the 2016 oil-price recession were not only new labor market entrants; they also flowed in from other activities, demonstrating "churning" in the labor market. By taking advantage of the longitudinal nature of the GHS, it is possible to trace how individuals transitioned between different labor market situations between 2010 and 2019. Focusing on the post-planting data, around 23.4 percent of those engaged in non-farm enterprises in 2015/16 and 11.6 percent of wage workers had switched into household agriculture by 2018/19 (see the transition matrices in Annex 6.4).[163] This flow was significantly higher than in previous years: about 8.8 percent of those engaged in non-farm enterprises in 2010/11 and 8.7 percent of wage workers had switched into household agriculture by 2012/13. Thus, labor market churning appeared to intensify following the 2016 oil-price recession: this could reflect individuals seeking income-generating opportunities to cope with the economic shock, even if not in the activities to which they were best suited.

FIGURE 6.22. The share of Nigerians engaged in household agriculture jumped after the 2016 oil-price recession

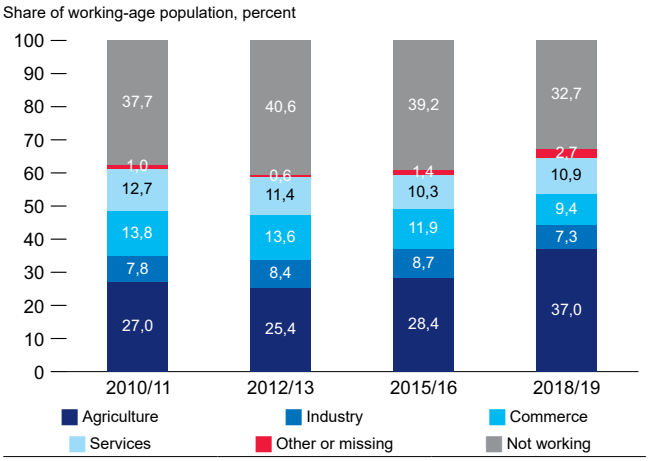
Primary job type for the working-age population, 2010–19



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

FIGURE 6.23. In a reversal of structural transformation trends, the share of working individuals in the agricultural sector increased after the 2016 oil-price recession

Primary sector of work for the working-age population, 2010–19



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. Other or missing includes individuals who are identified as being in a sector explicitly named "other" and working individuals with missing information on sector of work. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19. Industry includes mining, manufacturing, utilities, construction, postal/transport industries; services include professional and technical activities, public administration, education, health, and personal services.

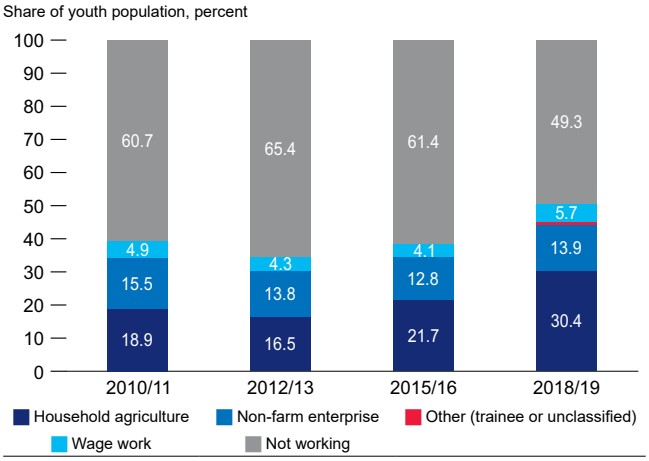
163 Similar results emerge when using the post-harvest data to construct the transition matrices.

6.4.2 Rising precarity and informality for young people after the 2016 recession

The relative increase in the share of youth working in household agriculture was even larger than for the general working-age population. Between 2010/11 and 2012/13, the share of youth engaged in household agriculture dropped from 18.9 to 16.5 percent (FIGURE 6.24). However, by 2015/16, the share of youth working in household agriculture had increased to 21.7 percent, and by 2018/19—following the oil-price recession—it had jumped to 30.4 percent. In relative terms, this represents a larger increase than for the full working-age population, as the share of young people engaged in household agriculture was lower to begin with.

FIGURE 6.24. Among youth, increases in working rates after the 2016 recession were also concentrated in household agriculture

Primary job type among the youth population, 2010–19



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

6.4.3 Expanding wage work?

The share of Nigerians engaged in wage work actually increased slightly following the oil-price recession, especially among young people. Between 2015/16 and 2018/19, the share of working-age Nigerians doing wage work—which appears to be less precarious than other job types, all other things equal—increased slightly, from 9.5 to 10.0 percent (FIGURE 6.25). Over the same period, the share of the youth population engaged in wage work rose from 4.1 to 5.7 percent. However, this says nothing about the quality of the additional wage jobs.

While increases in the share of people engaged in wage work, however slight, might look like progress, measures of in-work benefits among wage workers tell a different story. The share of wage workers with written contracts or pension or health insurance decreased between 2015/16 and 2018/19 (FIGURE 6.26). Moreover, the drop in the prevalence of in-work benefits was larger among youth wage workers, for whom the share with written contracts fell from 54.9 to 40.7 percent, and the share with pensions or health insurance fell from 14.9 to 9.6 percent.

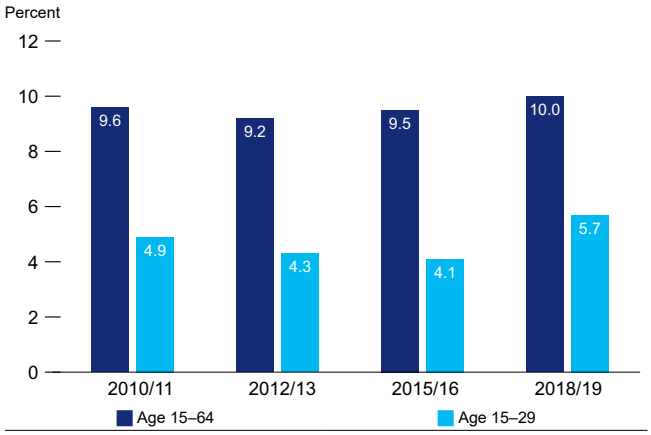
6.4.4 Post-COVID-19 crisis, a new pattern of even greater precarity?

Many Nigerians have turned to non-farm household enterprises engaged in services and commerce to cope with the effects of the COVID-19 crisis. Once again, this can be seen by comparing how the share of people working in different sectors evolved in two agricultural cycles, before and after the pandemic struck. Before the pandemic, comparing people's job types between July–September 2018 and January–February 2019, the share of working-age Nigerians engaged in non-farm household enterprises rose by 3.2 percentage points. Then, after the pandemic began, between September 2020 and February 2021, this share rose by 8.0 percentage points (FIGURE 6.27). Turning to sectoral shares, between July–September 2018 and January–February 2019, the share of working-age people engaged in services decreased by about 2.6 percentage points. However, between September 2020 and February 2021, this share increased by 2.5 percentage points (FIGURE 6.28). Between July–September 2018 and

January–February 2019, the share of working-age people engaged in commerce rose by 2.8 percentage points, but between September 2020 and February 2021 the share increased much more, by around 6.7 percentage points. These patterns therefore differ from the changes in job type and economic sector observed after the 2016 oil-price recession, when more people engaged in agriculture at the expense of services.

FIGURE 6.25. Large increases in wage work among youth

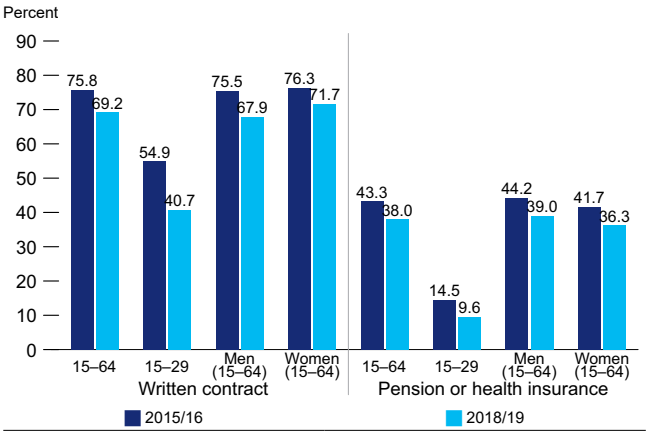
Share of people working in wage jobs by age group, 2010–19



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19

FIGURE 6.26. In-work benefits for wage workers became less prevalent after the 2016 recession

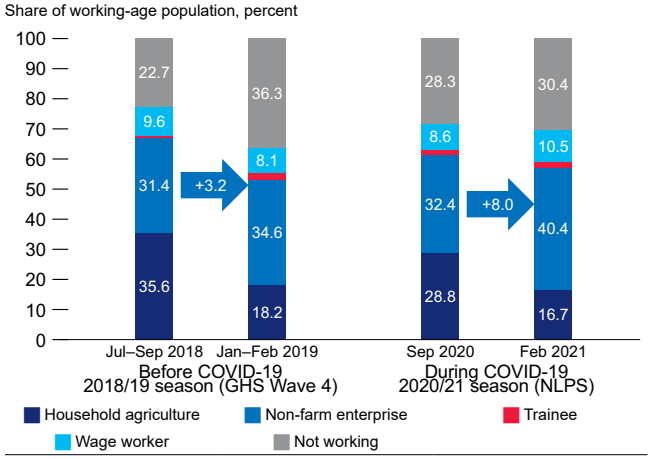
Share of wage workers with in-work benefits in different population groups, 2015–19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. The sample consists of individuals who hold any type of wage job.

FIGURE 6.27. Rising participation in non-farm household enterprises during the COVID-19 crisis

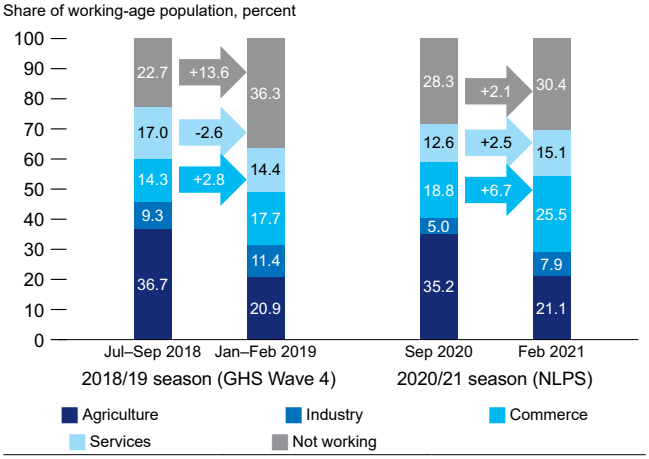
Primary job type of the working-age population, 2018–21



Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. The sample is a panel of individuals observed across the relevant 2018/19 GHS and NLPS rounds.

FIGURE 6.28. Sectoral shifts amid COVID-19: a jump in services and commerce

Primary job type of the working-age population, 2018–21

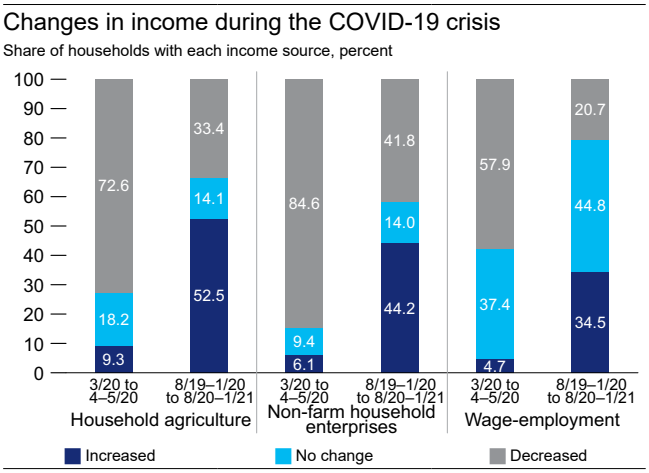


Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. The sample is a panel of individuals observed across the relevant 2018/19 GHS visits and NLPS rounds with non-missing information on sector. In this figure, industry includes mining, manufacturing, utilities, construction, postal/transport industries and professional, while services include public administration, education, health, personal services, and business services.

Non-farm enterprise incomes appear to be most threatened by the COVID-19 crisis, so the expansion of these jobs could mark a new form of labor market precarity

With the onset of the pandemic there was widespread stress on all income sources. Nonetheless, by January 2021, incomes from several sources had begun to recover for many households: between August 2019–January 2020 and August 2020–January 2021, agricultural incomes had increased or stayed the same for 66.6 percent of agricultural households, while wage incomes had increased or stayed the same for 79.3 percent of households with wage-employed members (FIGURE 6.29). However, over the same period, non-farm enterprise incomes had still decreased for 41.8 percent of households with non-farm enterprises. As such, growth in these jobs during the COVID-19 crisis does not seem to represent improved income and productivity from this sector, suggesting no progress toward structural transformation. Instead, individuals are seeking non-farm enterprise work to boost household incomes—potentially in vain, given that such work appears to be less lucrative—to try and cope with the effects of the COVID-19 crisis.

FIGURE 6.29. Incomes from non-farm household enterprises remained the most precarious as the COVID-19 crisis continued



Source: NLPS and World Bank estimates.
Notes: Estimates capture the share of households with each income source in the starting period, that is, in March 2020 and in August 2019–January 2020.

While the share of people working increased during the oil-price recession and the COVID-19 crisis, this appears to be because Nigerians were taking on more precarious work; yet this begs the question of who was most affected. In both crises, more individuals were "pushed" into the labor force and increased their labor supply to cope with the economic shocks; there is little evidence that more job creation or better wages and benefits—an indication of increased demand for labor—"pulled" workers into the labor force. If such an increase in the demand for labor existed, the number of people in wage jobs would be expanding without a decrease in job quality, and non-farm enterprise income would be more stable. The analysis above suggests that the crises have particularly exacerbated job precarity among Nigeria's young people, although youth are not the only population sub-group disproportionately impacted. To further explore these dynamics, Section 6.5 considers wealth and gender differences in the response to Nigeria's recent economic shocks.

6.5 Differential impacts of economic crises on the poor and on women and girls

This section examines how the labor-market and education effects of the 2016 oil-price recession and the COVID-19 crisis differed for Nigerians from poor and non-poor households, and for women and girls compared with men and boys. The analysis builds on and refines the broader picture presented in Sections 6.2, 6.3, and 6.4.

6.5.1 Labor-market impacts of the 2016 oil-price crisis were largest among non-poor households

The impact of the 2016 oil-price recession on the share of people working, especially on the share working in household agriculture, was larger for Nigerians in the top 60 percent of the consumption

distribution. Between 2015/16 and 2018/19, the share of working-age people in the bottom 40 percent of the consumption distribution who were working increased from 62.0 to 65.6 percent, with the share engaged in household agriculture rising from 38.1 to 42.8 percent (FIGURE 6.30). Over the same period, the share of working-age people in the top 60 percent of the consumption distribution who were working increased from 59.9 to 68.1 percent, with the share engaged in household agriculture rising substantially, from 21.3 to 32.0 percent.

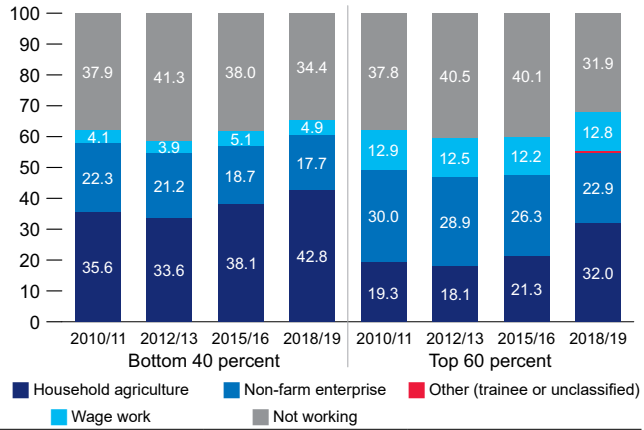
The differential impacts of the oil-price recession across the consumption distribution were even starker for young people, especially those in the top 20 percent. Between 2015/16 and 2018/19, the share of young Nigerians in the bottom 40 percent of the consumption distribution who were working rose from 45.2 to 53.4 percent (FIGURE 6.31). For young people in the top 20 percent of the consumption distribution, the corresponding share increased more steeply, from 27.6 to 44.2 percent. Once again, this increase was starkest when focusing on the share of people working in household agriculture. Indeed, the share of young Nigerians in the top 20 percent who worked in household agriculture almost doubled between 2015/16 and 2018/19. The trade-off between working versus continuing education may have been sharper for young people from richer households; meanwhile, young people from poorer households were not planning to continue education even before the 2016 oil-price recession occurred, resulting in less change in their labor market participation.

The shares of women and men who were working, especially in household agriculture, both increased by comparable amounts following the 2016 oil-price recession. The share of women who were working increased from 56.4 to 61.8 percent between 2015/16 and 2018/19, with the share engaged in household agriculture rising from 20.7 to 29.7 percent (FIGURE 6.32) Increased engagement in household agriculture

FIGURE 6.30. After the oil-price recession, working rates increased most among non-poor Nigerians

Primary job type for the working-age population by consumption decile, 2010–19

Share of working-age population, percent

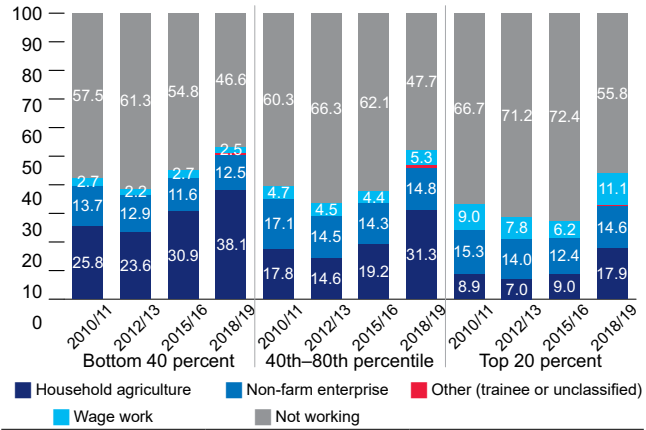


Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

FIGURE 6.31. Young people from non-poor households increased their working rates most after the 2016 oil-price recession

Primary job type for the youth population by consumption decile, 2010–19

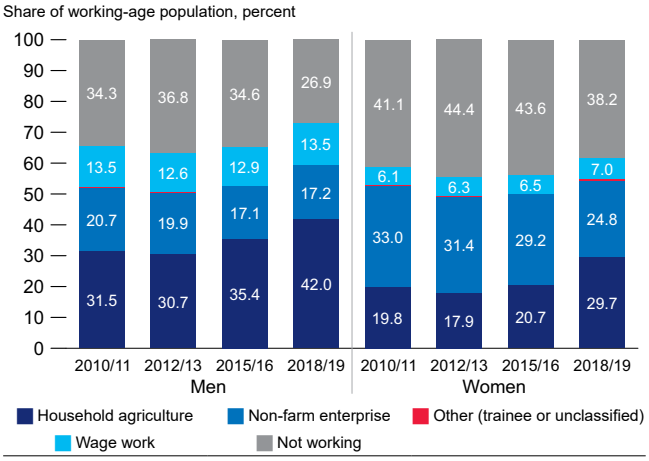
Share of youth population, percent



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

FIGURE 6.32. The share of both women and men working, especially in household agriculture, increased after the 2016 oil-price recession

Primary job type for the working-age population by sex, 2010–19



Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Estimates averaged across post-planting and post-harvest visits. The "other" categories include trainees from the alternative hierarchical definition and working individuals who are not classified in the alternative definition. Sample restricted to individuals with non-missing observations of working status, age, sex, and education across all waves of the GHS, so results differ from figures focusing only on 2018/19.

came at the expense of non-farm household enterprises, with the share of women working in non-farm household enterprises dropping from 29.2 to 24.8 percent over the same period. The share of men who were working rose from 65.4 to 73.1 percent between 2015/16 and 2018/19, with the share engaged in household agriculture increasing from 35.4 to 42.0 percent.[164] However, there was no analogous drop in the share of men working in non-farm household enterprises.

6.5.2 A pandemic of inequality: COVID-19 is disproportionately affecting labor-market outcomes for the poor and for women

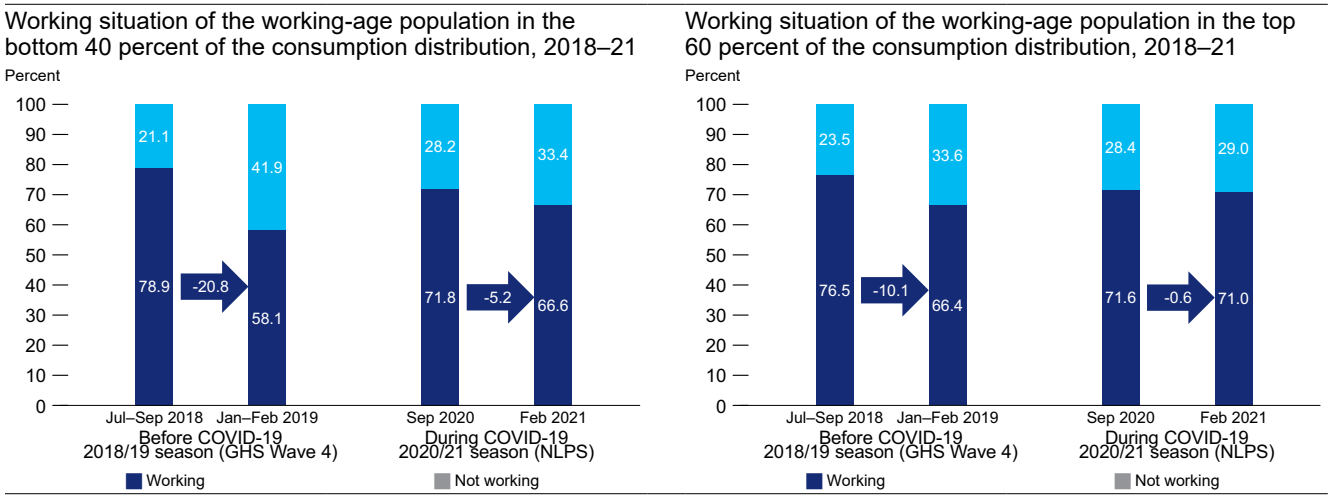
Changes in working situations during the COVID-19 crisis differ across the consumption distribution. The season-adjusted increase in working rates was larger among the poorest households. Comparing agriculture cycles before and during the COVID-19 crisis demonstrates this effect. Between July–September 2018 and January–February 2019, the share of people in the bottom 40 percent of the consumption distribution who were working dropped by 20.8 percentage points, while between September 2020 and February 2021, the decline was just 5.2 percentage points (FIGURE 6.33). For those in the top 60 percent of the consumption distribution, the share of people who were working dropped by a far more modest 10.1 percentage points between July–September 2018 and January–February 2019, and by around 0.6 of a percentage point between September 2020 and February 2021. As such, the absolute magnitude of the seasonal contraction in the share of people working narrowed far more sharply among Nigerians in the bottom 40 percent of the consumption distribution than among those in the top 60 percent.[165] These patterns may arise because widespread price increases observed through the COVID-19 crisis (FIGURE 6.41 in Annex 6.3) could affect poorer households more, forcing members of poorer households to work more in order to cope.

Unlike the 2016 oil-price recession, the COVID-19 crisis affected the working status of women more than men. It appears that the elevated working rates observed in February 2021 were disproportionately

164 Similar gender patterns were observed, even more starkly, when focusing only on young people. The share of young women who were working rose from 34.9 to 45.7 percent between 2015/16 and 2018/19, with the share engaged in household agriculture rising from 14.4 to 23.4 percent. Over the same period, the share of young men who were working rose from 42.1 to 55.5 percent, with the share engaged in household agriculture rising from 28.5 to 37.1 percent.

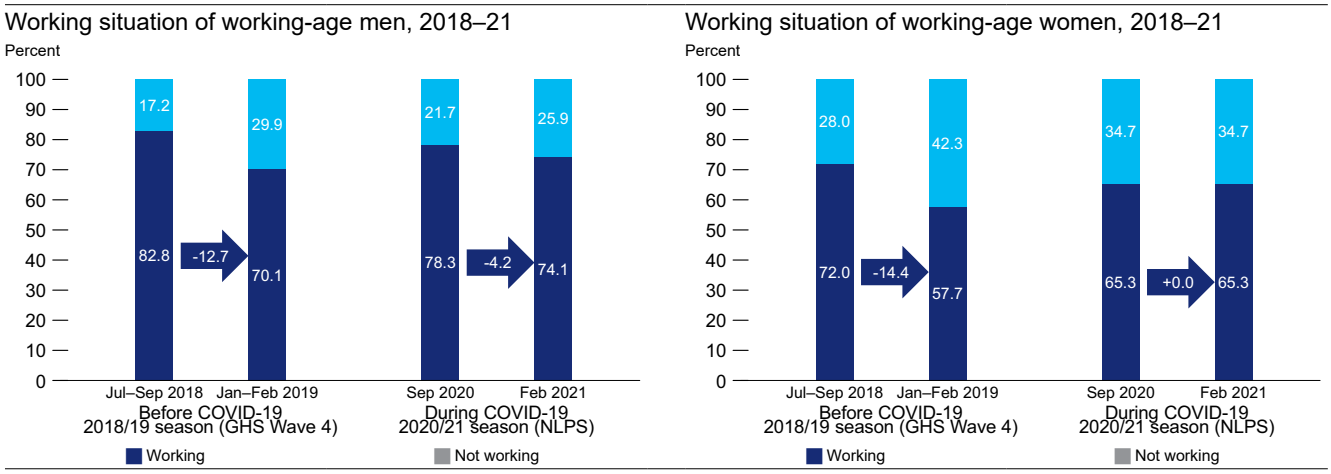
165 Nevertheless, in relative terms, the seasonal contraction in the share of people working was actually larger among non-poor households. The seasonal contraction in the share of poor individuals who were working between September 2020 and February 2021 was about one quarter of the contraction between July–September 2018 and January–February 2019. However, the seasonal contraction in the share of non-poor individuals who were working between September 2020 and February 2021 was about one-tenth of the contraction between July–September 2018 and January–February 2019.

FIGURE 6.33. Poorer Nigerians increased their labor supply more during the COVID-19 crisis



Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: The sample is a panel of individuals observed across the relevant 2018/19 GHS visits and NLPS rounds.

FIGURE 6.34. Women increased their seasonally-adjusted working rates more than men as the COVID-19 crisis continued



Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: The sample is a panel of individuals observed across the relevant 2018/19 GHS visits and NLPS rounds.

concentrated among women. The share of men who were working decreased by 12.7 percentage points between September–July 2018 and January–February 2019, and by 4.2 percentage points between September 2020 and February 2021 (FIGURE 6.34). The share of women who were working decreased by 14.3 percentage points between September–July 2018 and January–February 2019, prior to the COVID-19 crisis, but there was virtually *no decrease* in women's working rates between September 2020 and February 2021. These gender differences are even starker than those observed for the 2016 oil-price recession (FIGURE 6.32). The relatively larger labor supply response among women during the COVID-19 crisis is reminiscent of an "added worker effect," whereby households increase their overall labor market participation to cope with economic shocks. That this type of added worker effect was not observed in the 2016 oil-price recession marks an important difference between the two crises. However, the data from 2018/19 may have been collected too long after the oil-price recession first hit to capture these impacts fully.

In contrast to the 2016 oil-price recession, women were much more likely to enter non-farm-enterprise work during the current crisis (FIGURE 6.35). The figure shows the seasonal shifts in type of work for women and men for seasonal cycles before and during the COVID-19 crisis. Between July–September 2018 and January–February 2019, the share of women engaged in non-farm household enterprises actually fell by 6.1 percentage points, but between September 2020 and February 2021, the share *increased* by 7.7 percentage points. For men, by contrast, the share engaged in non-farm enterprises increased by 13.1 percentage points between July–September 2018 and January–February 2019 and also increased by 8.4 percentage points between September 2020 and February 2021. Thus, in seasonally-adjusted terms, women's participation in non-farm household enterprises has been elevated during the COVID-19 crisis. This is consistent with the larger shifts toward commerce and services seen for women (FIGURE 6.42 in Annex 6.3). Thus, overall, women have been driving much of the shift toward non-farm household enterprises in commerce and services witnessed during the COVID-19 crisis. Given the previous results showing the decline of income from non-farm enterprises, this suggests that women are entering even more precarious jobs.

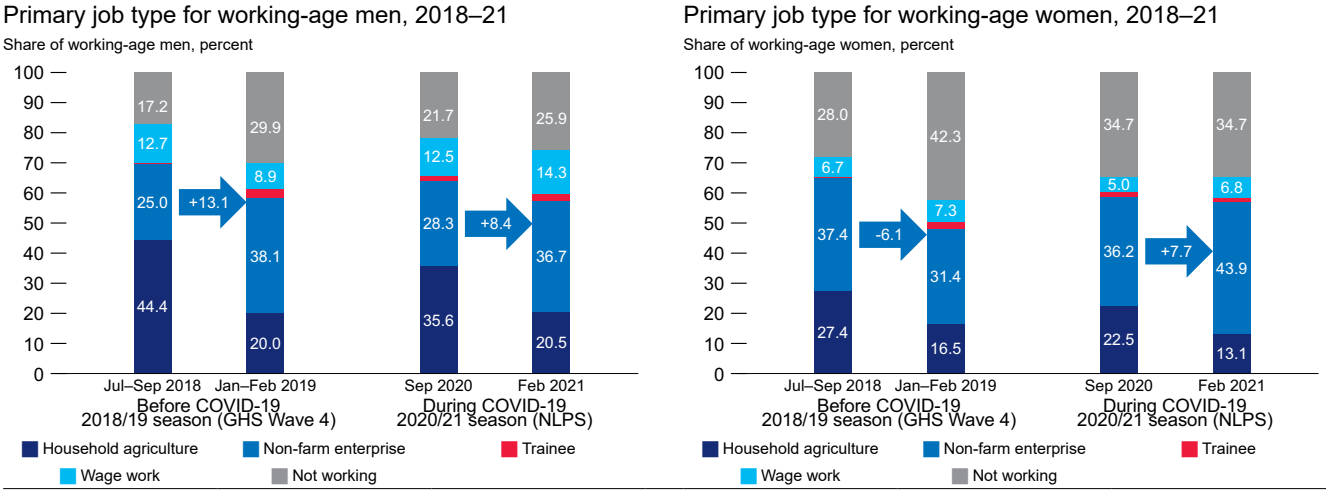
6.5.3 In some regions, girls and young women have been less likely to return to education during the COVID-19 crisis

Higher female working rates could be linked to the declines in schooling rates among girls and young women in some parts of Nigeria during the COVID-19 crisis. FIGURE 6.36 shows Dessy et al.'s (2021) estimates of the zone-specific gender difference in return-to-school rates among those aged 5–18 after schools re-opened. While there is no *overall* gender difference in return-to-school rates, females in the North West zone were more likely to return to school. This is especially true for those aged 12–18 years. As discussed in Dessy et al. (2021), this could indicate that the increase in school-leaving among older girls is linked to child marriage, as early female marriage is more prevalent in the North West zone.

6.5.4 Risks for Nigeria's economic future - and a window to respond

These uneven effects have implications for Nigeria's future growth prospects. Nigeria's human capital stock has suffered negative shocks from two economic

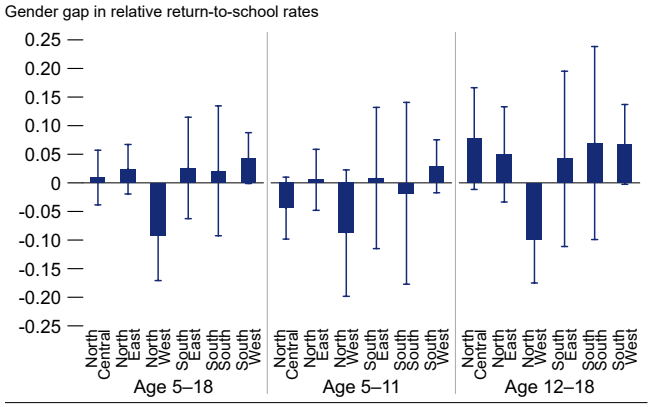
FIGURE 6.35. Women have been entering non-farm household enterprises during the COVID-19 crisis



Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. The sample is a panel of individuals observed across the relevant 2018/19 GHS and NLPS rounds.

FIGURE 6.36. Return to schooling after COVID-19: divergences by gender, age, and zone

Gender gap in the relative return-to-school rates after the start of the COVID-19 crisis, by age and zone



Source: Excerpted from Table 5 in Dessy et al. (2021), based on GHS and NLPS.
Notes: This figure gives estimates of the gender gap in relative return-to-school rates after the COVID-19 crisis began. A positive value indicates that boys are relatively less likely than girls to return to school. A negative value indicates that girls are relatively less likely than boys to return to school. The 95 percent confidence intervals are included. The figure indicates that the decrease in return to schooling is relatively larger among specific sub-groups (girls age 5–18 in the North West zone and boys age 12–18 in the South West zone).

crises in close succession, with evidence of a decline in educational attainment in response to both crises. From the 2016 oil-price recession, the evidence suggests that the drop in educational attainment was concentrated among wealthier individuals with more resources. Meanwhile, from the latest data on rates of return to school following the COVID-19 pandemic, the decreases in return-to-school seem to be concentrated among females in an early-marriage-prone region and among males in the wealthier urban zone of Nigeria.

Several mechanisms may now complicate Nigeria's economic growth and structural transformation. First, an aggregate decrease in the stock of human capital will slow growth, as greater human capital increases productivity. Second, any uneven effects that induce greater inequality in the stock of human capital could slow economic growth even further (Galor and Moav, 2004). Third, underinvestment in human capital may lead to lower education for women and girls, which—when combined with an ongoing shortage of productive jobs—could hinder a fertility transition by encouraging earlier fertility. Specifically, the negative economic shocks from these crises might lead poorer and more economically stressed households to encourage young women to head into early marriage, at the expense of education, as a coping strategy. Girls and young women who leave school earlier are in general at higher risk of earlier fertility (Amin, Ahmed, et al. 2016, 2018). Thus, economic crises could slow the fertility transition and dilute future gains from economic growth.

6.6 Taking action for good jobs: policy options

This section provides three broad areas of policy guidance, based on the analysis presented above: investing in human capital; reforms to boost job creation; and helping enterprise grow.

6.6.1 Investing in human capital

Nigeria's investment in its human capital has long been insufficient, and two successive crises may further impede progress. According to the 2020 Human Capital Index, a child born in Nigeria that year will grow up to achieve just 36.1 percent of the productivity she could have attained, if she had enjoyed full health and education; this is lower than the averages for SSA and for all lower middle-income countries (World Bank 2020). Nigeria has also lost about half a year in learning-adjusted years of schooling due to the COVID-19 crisis (Azevedo, et al. 2020, UNESCO 2021). These patterns are even more concerning, given the evidence presented above that households struggling to cope with income shocks have responded to recent economic crises by prioritizing work over education for young people.

Underinvestment in human capital may prevent Nigeria from exploiting its demographic dividend through two main channels: by limiting productivity and by increasing fertility. Without tailored, high-quality education, Nigeria's workers may lack the skills

needed to prosper in the labor market, notwithstanding the current lack of wage jobs. However, making the most of the country's demographic dividend is not just about matching good workers with good jobs. Nigeria also needs a fertility transition, so that the proceeds of growth and any good jobs created will be shared around among fewer people. This is far less likely with children—and especially girls—out of school.

Reversing education losses suffered during the COVID-19 crisis presents the most immediate priority. Schools were shut down across Nigeria during 2020 (AllSchool 2020). Since remote learning methods may have limited applicability in Nigeria, especially for poorer households (Siwatu et al., 2020), recouping the learning lost during the COVID-19 crisis will require safe and appropriate ways to bolster in-person schooling. Nigerian households themselves favor adding more hours to the school day, repeating the missed school period, and delivering lessons during the typical school holidays (Siwatu et al., 2020). "Low tech" approaches that seek to engage parents and teachers—through mobile phones, where appropriate—could also support learning given the ongoing uncertainty around whether schools will be able to stay open (Carvalho et al. 2020). Monitoring progress on schooling during the upcoming school year will be essential to ensure that losses incurred when schools were closed are effectively regained.

6.6.2 Reforms to boost job creation

While essential, human capital investment alone is not enough. Prior to the COVID-19 crisis, Nigerians with tertiary education were by far the most likely to hold wage jobs. However, even tertiary education did not guarantee such a job, while returns to primary and secondary education were even lower in terms of boosting people's chances of securing a wage job; most Nigerians engaged in farm and non-farm enterprise activities, offering less chance of escaping poverty. This not only means that any investments in education could be wasted but may also discourage future generations from investing in human capital. Indeed, this note has shown how the recent economic shocks that Nigerians faced led to youth dropping out of school earlier.

Reforms are needed to ensure that good jobs are available for young Nigerians so that education pays off. Structural transformation has proved slow and was even reversed by the 2016 oil-price recession, when the share of workers in agriculture increased. While the COVID-19 crisis instead appears to have spurred additional engagement in non-farm enterprises in commerce and services, incomes from these jobs appear to be precarious too. Among the key priorities to support job creation will be promoting diversification of the economy away from oil, which has represented more than 80 percent of Nigeria's total exports every year since the 1970s. Broader macroeconomic reforms to exchange rate policy, trade, and fiscal policy—including redirecting spending toward infrastructure and pro-poor social protection policies—may also support growth and help spark job creation.[166]

6.6.3 Helping enterprises grow

Waiting for wage jobs to be widely available will take a long time, so alleviating constraints on growth for Nigeria's small enterprises will be crucial in the short and medium term. Even with reforms, it may take years or decades before wage jobs—especially those with job security and in-work benefits—are widely available in Nigeria: "informal will be normal" (Fox and Gandhi 2021). Policies to support farm and non-farm enterprises will therefore be essential: these could provide employment not only for their owners but also for employees from other households if they can become more productive and grow. For farms, research that develops more resilient and productive crop and livestock varieties, as well as public investment to support storage, transport, and market access could help boost agricultural productivity (Beegle and

166 See World Bank (2021) for further details on the macroeconomic reform agenda.

Christiaensen 2019). This is especially important, given current low levels of commercialization of agriculture in Nigeria and lack of access to key inputs (Oseni and Winters 2009, FAO 2018, Ecker and Hatzenbuehler 2021). For non-farm enterprises, recent analysis suggests that cash grants—administered through a national business competition—have large positive effects on firms' survival, profitability, and firms' size (McKenzie, 2017). As such, policies that loosen firms' credit constraints would improve firm productivity, profits, and job creation, even among small enterprises. This could complement policies that build the infrastructure and markets on which small businesses rely (Filmer and Fox 2014).

New data will help policy makers understand how to boost firm growth and invigorate the demand side of the labor market. In particular, Nigeria's establishment census and sample surveys will provide detailed information on the activities in which Nigerian firms engage and the constraints on their growth. This, in turn, may help design initiatives to support firms and create more productive jobs.

The labor data agenda could also benefit from more regularity and a different focus for Nigeria's labor force survey. In recent years, the main analysis stemming from Nigeria's labor force survey has typically focused on measuring unemployment; the share of the labor force that is not working but is actively searching and available for work. However, in countries such as Nigeria, where wage jobs are scarce and social protection is limited, unemployment may not be the best metric to ascertain the state of the labor market. As this technical note demonstrates, information on the job types and the sectors in which Nigerians engage, as well as other markers of job quality, provide policy makers with clearer guidance. This type of detailed information is already collected in Nigeria's labor force survey, so it just remains to ensure that such data are gathered *regularly* and that these important indicators are analyzed and widely disseminated.

6.6.4 Getting the most from Nigeria's demographic dividend

Policy action in the three areas described will be critical in lifting Nigeria to a demographic-dividend success story. Nigeria's young population embodies the nation's promise. To deliver on that promise requires bold action now. The evidence distilled in this brief provides directions for policy-making to accelerate skills investment and job creation for Nigeria's youth. The approaches described have the power to bolster human capital, boost quality job creation, and improve returns to education, notably in terms of female labor force participation. These measures will help advance both Nigeria's economic transformation and the fertility transition that the country needs. Two economic shocks in rapid succession have tested the nation's endurance. But Nigeria's leaders can harness the crisis as an opportunity to drive new gains in human capital and labor-market transformation. Ensuring good jobs for youth will enable Nigeria to seize the demographic dividend of its young population and lay strong foundations for future inclusive growth.

Annex 6.1 Definitions and data sources

Annex 6.1.1 What is a job in Nigeria?

When discussing jobs, this report *directly* adopts the definitions used in a previous report studying Nigeria's labor market (World Bank 2015).

A **job** is defined here as a work activity that is remunerated in cash or in kind, and does not violate human rights (World Bank 2012). The definition includes labor activities that generate income for the household, even if income cannot be assigned specifically to individual household members, such as for household farming or household nonfarm enterprises. It includes goods produced for final consumption of the household (food from the family plot, for example), but excludes services consumed by the household itself (such as looking after children, cooking, fetching water, and so on). It does not include employment that goes against fundamental rights (ILO 1998). Forced labor, or child labor, is not a job.

A **productive job** is a broad term used to indicate a higher "quality" job with a greater capacity for productivity and higher earnings. Productivity generally refers to the value-added each worker generates. From the perspective of poverty reduction, productive jobs can be considered employment opportunities that generate income to bring people out of poverty and contribute to productivity growth in the economy.

The **working-age population** encompasses the adult population between 15 and 64 years of age.

The **youth** refers to those aged between 15 and 29 years.

The **labor force** includes the employed and unemployed.

The **working share**, or the **employed**, are those who reported, in the relevant survey, having worked for pay or for profit for at least one hour in the previous week.

Wage workers are those who work for someone else in exchange for a salary, daily wage, or "per-task" pay.

To be **self-employed** is to work for oneself, making income from the profits of one's activity. Since the distinction can be blurred in a household between self-employment and unpaid, contributing family workers, the report considers as self-employed *all* workers reporting to be employers, own-account, or contributing family workers in a household enterprise.

Unemployment is defined according to the approach established by the ILO and includes those who do not hold a job but are actively looking for one. **Unemployment rates** are the share of unemployed people in the active population. The ILO's definition of unemployment is widely seen as problematic in developing country settings—where access to social protection is low—in revealing the share of people who are not working but want to work. It is seen as more applicable to high-income settings where the vast majority of work entails wage/salaried jobs for which active search is necessary.

The **inactive** are those who do not work and who are not looking for work.

Annex 6.1.2 Informal work in Nigeria

In general, "informal" work is work that is neither taxed nor monitored or regulated by any form of government, especially in terms of labor law regulating employment relationships. More precise definitions of informal work have been given by the ILO and other organizations (ILO 2017). Such organizations typically define informal employment to include: own-account workers and employers in their own informal-sector enterprises; contributing family workers; members of informal

producers' cooperatives; and employees holding informal jobs.

In the context of Nigeria, informal workers correspond to the self-employed (own-account workers, unpaid family workers, or employers) who work in enterprises, whether in agriculture or non-agriculture, that are not registered with the authorities. Since subsistence farming is prevalent, and most non-farm household enterprises are home-based, small-scale activities, informality tends to result from the small-scale nature of the activities rather than from an active choice to avoid working within the legal framework. Around 96 percent of the self-employed working on their own farm and 84 percent of the self-employed in the non-farm sector are not registered with the authorities (World Bank 2015).

This definition of informal work also closely coincides with the characterization of precarious work presented in BOX 6.2.

Annex 6.1.3 Background and description of the Nigeria General Household Survey (GHS) Panel

Nigeria's General Household Survey (GHS) Panel, collected by Nigeria's National Bureau of Statistics (NBS) in collaboration with the World Bank, is one on the main data sources used for this brief. The GHS-Panel contains core labor indicators that are generally captured in a way consistent with international standards.

The GHS-Panel consists of four waves collected in 2010/2011, 2012/2013, 2015/2016, and 2018/19. The data are longitudinal, making it possible to track the labor market outcomes of the same individuals and households over time.

To account for the fact that agricultural employment in Nigeria is highly seasonal, GHS data were collected during two visits to the same household in each wave. A "post-planting" visit was carried out, usually between July and September, and a "post-harvest" visit was carried out, usually between January and February of the following calendar year. The labor market indicators for each wave presented in this brief often correspond to averages across the post-planting and post-harvest visits.

The GHS-Panel data are representative at the national, zone, and urban-rural level.

Annex 6.1.4 Background and description of the Nigeria COVID-19 National Longitudinal Phone Survey (NLPS)

The Nigeria COVID-19 National Longitudinal Phone Survey (NLPS) is a monthly survey implemented by NBS in collaboration with the World Bank, which was initiated in early 2020 to monitor the impacts of the COVID-19 crisis. The survey is conducted over the phone with a subset of respondents from the GHS: this sampling approach makes it possible to trace the same individuals and households before and during the COVID-19 crisis. The survey covers important topics including knowledge and concerns about the pandemic, access to food and other basic needs, and crucially the labor market.

Since the NLPS is drawn from a subset of individuals and households captured by the GHS, it is possible to construct sample weights that produce nationally-representative estimates of key labor market indicators. Excluding households with no access to a mobile phone or who could not be interviewed despite several call attempts could introduce bias. However, drawing on the extensive set of variables available in the 2018/19 GHS alongside publicly-available phone survey weights makes it possible to correct this potential source of bias.

Annex 6.2 Estimating the impact of the 2016 oil recession on working and schooling for young Nigerians

Demographic, regional, or time trends unrelated to the oil recession might also influence the large changes in schooling rates and labor market outcomes for Nigerians between 2015 and 2019. Depending on the nature of these other "confounding" factors, the actual impact of the oil recession might be larger or smaller than the impact that can be inferred from simply inspecting time trends and comparing the 2015/16 GHS with the 2018/19 GHS.

Constructing a more rigorous "counterfactual"—that is, an alternative scenario in which the oil recession never occurred—can address these concerns. Comparing youth education and labor market outcomes in this counterfactual with what *actually* happened can deliver a more robust estimate of the impact of the oil recession. This annex develops a detailed counterfactual of the education and labor market outcomes of 20–25-year-olds that accounts for possible shifts in individual-level characteristics that might also explain the sudden change in outcomes before and after the oil recession.

This approach attempts to control for any potential differences in *observable* individual characteristics of the new cohorts—that is, those before and those after the recession hit—such as differences in family resources or regional shocks unrelated to the oil recession (such as climate or conflict shocks). In so doing, the approach also controls for other *unobserved* potential confounders that are closely correlated with these observable characteristics.

For the treatment effects presented below, counterfactual outcomes for the relevant sample of individuals in 2018/19 are created by estimating a model for the outcome of interest using information from the waves of the GHS before the impact of the oil recession could be measured. Thus, for the outcomes modeled here—secondary educational attainment and active labor market status of 20–25-year-olds—the *first three waves* of the GHS are used to estimate the model. Active labor market status refers to both those who are working and those who are available and searching for work.

This model is then used to predict the counterfactual probability of attaining secondary education or being active in the labor market—that is, the probability of each outcome if the oil recession had not occurred—for each individual in the relevant 2018/19 sample. The "treatment effect" for each individual is simply the difference between the actual realized outcome and the predicted outcome from the counterfactual model. Then "Average Treatment Effects" (ATEs) are calculated by averaging individual treatment effects across the relevant sample. The standard errors of the ATEs are calculated using bootstrap simulations.

To model the counterfactual for each outcome, a set of "proximate causal" factors are chosen that are both available in the data and thought to be important for that outcome. The proximate causal factors of gender, zone, urban-rural, and father's education are included in the model. Zone and urban-rural are also interacted with time period, to help control for regional shocks in climate and conflict that might further influence the labor and educational outcomes of interest. A linear time trend is included to reflect secular trends in the outcome over time.

For this modeling exercise, causal factors are added sequentially in a simple linear model (with no interactions) and 10-fold cross-validation is used to evaluate the predictive performance of the model. A model is considered "better" at predicting "out of sample" if the variance of the R-squared statistics is lower, holding constant the mean of the R-squared. Similarly, a model is preferred if the mean R-squared is higher, holding constant the variance of the R-squared

statistics. For each outcome, the "best" model, using these criteria, is highlighted in gray in the tables below.

Results from a modified LASSO approach are also included to see how the estimates might change if the covariates are chosen simply to maximize prediction accuracy. In this exercise, the LASSO is implemented on the full set of interactions of the causal factors chosen from the "best" model described above, and the mean and standard deviation of the generated pseudo R-squared are reported. In general, the LASSO estimates suffer from weaker out of sample prediction ability. In both tables below, the LASSO model has both greater prediction ability but weaker stability of out of sample fit, illustrating the usual bias-variance trade off prediction models.

To examine whether the estimates are robust to different functional form assumptions, the predictions are calculated using both a linear probability model (LPM) and a linear discriminant model (LPM-LDM) transformation that constrains predictions to be within the range of 0 to 1. The <predict_ldm> package in Stata was used to calculate the LPM-LDM transformation.

TABLE 6.1 reports the estimated treatment effects of the different models described above for the outcome of secondary educational attainment. The sample is people aged 20–25 years, as almost all Nigerians that complete secondary education do so by age. Column 5 shows the ATE using the predictions from the LPM, while Column 7 shows the ATE using predictions from the LPM-LDM.

These results suggest that the oil recession decreased the share of 20–25-year-old Nigerians who had attained secondary education in 2018/19 by around 8 percentage points. This is close to the change in secondary educational attainment observed by simply inspecting the time trend and comparing the 2015/16 and 2018/19 GHS data. Models 4 and 6 are selected as the "best" models through comparing the mean and standard deviation of the R-squared calculations from the 10-fold cross validations (Columns 9 and 10). However, comparing the ATEs across all the models reported in Columns 5 and 7 shows that the estimates do not vary widely, ranging from 6 to 8 percentage points. The LASSO model—which includes a full set of interactions of all the variables present in Model 6—also produces similar estimates of the ATE. The stability of these estimates provides some reassurance that omitted variable bias is not substantially affecting the estimates (Altonji, Elder and Taber 2005).

TABLE 6.1. Impact of the 2016 oil recession on secondary educational attainment of 20–25-year-olds in 2018/19, Average Treatment Effects (ATEs) from counterfactual model predictions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Model	*Model Covariates*	*Rsq*	*AdjRsq*	*LPM*		*LPM-LDM*		*KFV R2 Mn*	*KFV R2 SD*
				ATE	*SE*	*ATE*	*SE*		
1	t	0.219	0.215	-0.072	0.010	-0.073	0.010	0.181	0.023
2	t × Urb-Rur	0.255	0.251	-0.060	0.009	-0.061	0.009	0.217	0.026
3	t × Urb-Rur × Gender	0.281	0.276	-0.062	0.009	-0.062	0.009	0.237	0.036
4	t × Urb-Rur × Gender × FatherEduc	**0.278**	**0.273**	**-0.076**	0.009	**-0.081**	0.009	**0.240**	**0.019**
5	t × Urb-Rur × Gender × FatherEduc; t × Zone	0.280	0.274	-0.076	0.010	-0.079	0.010	0.239	0.023
6	t × Urb-Rur × Gender × FatherEduc; t × Zone × Urb/Rur	**0.294**	**0.287**	**-0.074**	0.009	**-0.079**	0.009	**0.243**	**0.025**
LASSO	61 covariates (not shown)	—	0.292	-0.081	0.010	-0.077	0.010	0.273	0.180

Source: GHS and World Bank estimates.
Notes: t is a linear time trend. Columns 5 and 6 give ATE estimates and their standard errors for a linear probability model; Columns 7 and 8 give ATE estimates and their standard errors for linear discriminant model transformation.

TABLE 6.2. Impact of the 2016 oil recession on active labor market status of 20–25-year-olds in 2018/19 post-planting Season, Average Treatment Effects (ATEs) from counterfactual model predictions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Model	*Model Covariates*	*Rsq*	*AdjRsq*	*LPM*		*LPM-LDM*		*KFV R2 Mn*	*KFV R2 SD*
				ATE	*SE*	*ATE*	*SE*		
1	t	0.0333	0.0311	0.2355	0.0103	0.2182	0.0108	0.0297	0.0133
2	t; Zone	0.0550	0.0522	0.2222	0.0095	0.1985	0.0098	0.0502	0.0130
3	t; Zone × Urb-Rur	0.0531	0.0496	0.2190	0.0101	0.1986	0.0109	0.0507	0.0158
4	t; Zone × gender	0.0624	0.0590	0.2130	0.0097	0.1910	0.0100	0.0562	0.0164
5	t; Zone × HH Size	**0.0774**	**0.0714**	**0.2040**	**0.0193**	**0.2000**	**0.0193**	**0.0616**	**0.0183**
LASSO	63 covariates (not shown)	—	0.1191	0.1940	0.0174	0.1980	0.0174	0.0983	0.2171

Source: GHS and World Bank estimates.
Notes: t is a linear time trend. Columns 5 and 6 give ATE estimates and their standard errors for a linear probability model; Columns 7 and 8 give ATE estimates and their standard errors for linear discriminant model transformation.

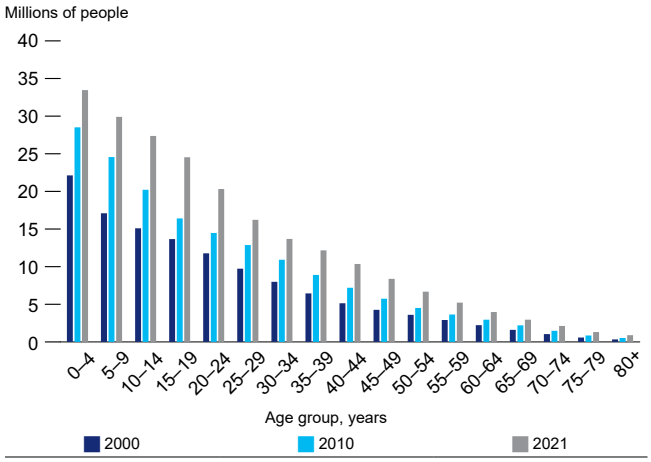
TABLE 6.2 reports the results of a similar exercise for the outcome of active labor market status of 20–25-year-olds. For parsimony, the models reported in this table only use the post-planting visit of each GHS wave. Once again, Column 5 shows the ATE using the predictions from the LPM, while Column 7 shows the ATE using predictions from the LPM-LDM.

The results suggest that the oil recession increased the likelihood that 20–25-year-old Nigerians were active in the labor market in 2018/19 by about 20 percentage points. Model 5 is selected as the "best" model because of its high mean R-squared. However, once again, the estimates are all relatively stable, ranging from 19 to 24 percentage points across the LPM and LPM-LDM approaches. These results are consistent with the decline in secondary educational attainment; an individual aged 20–25 years who is not in school is likely to be working or looking for work. While not reported in TABLE 6.2, conducting a similar exercise using the post-harvest visit for each GHS suggests that the oil recession increased the likelihood that 20–25-year-olds were active in the labor market in 2018/19 by about 6 percentage points.

Annex 6.3 Additional figures

FIGURE 6.37. Nigerian population, U.S. Census International Bureau estimates

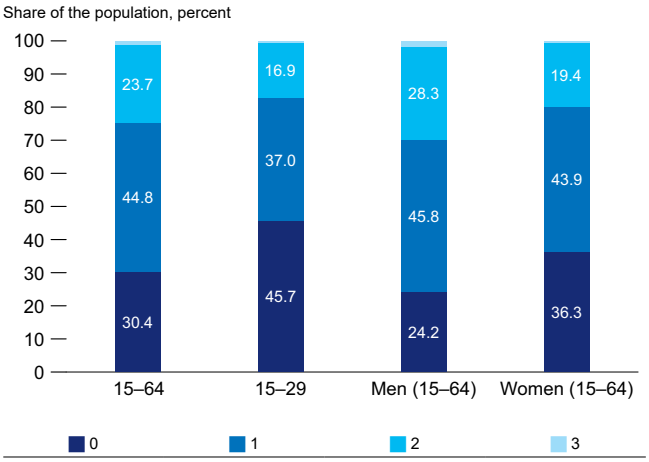
Nigeria population estimates, 2000–21



Source: U.S. Census Bureau, International Database and World Bank estimates.
Notes: 2021 figures are estimates calculated by the U.S. Census. See U.S. Census Bureau International database for details.

FIGURE 6.38. Number of job types per individual, 2018/19

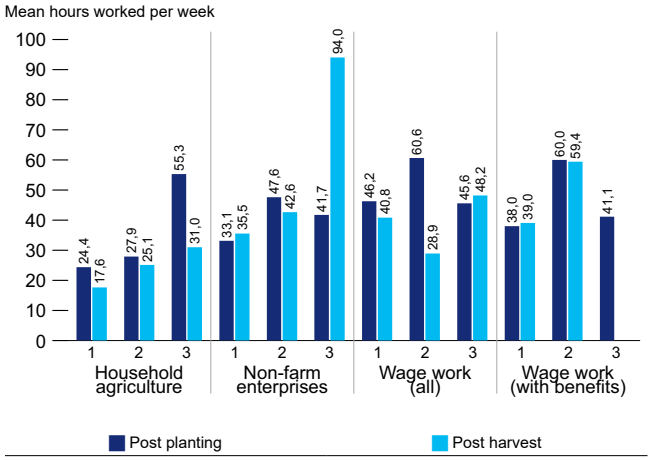
Number of jobs for different population groups, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Estimates averaged across post-planting and post-harvest visits. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education.

FIGURE 6.39. Average hours per week, by primary job type and number of job types

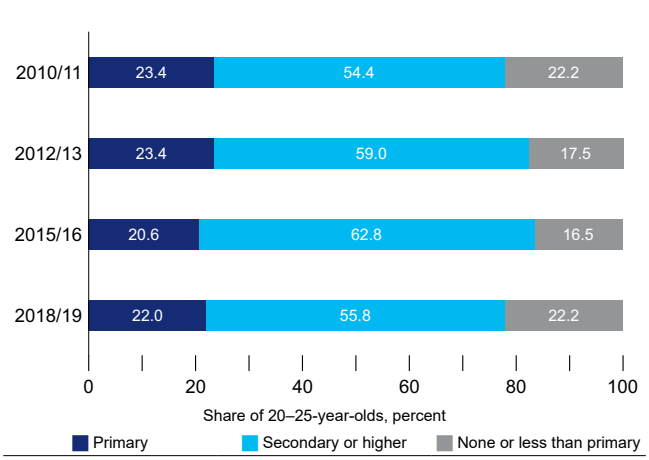
Average hours worked per week among workers aged 15–64 by primary job type and number of jobs, 2018/19



Source: 2018/19 GHS and World Bank estimates.
Notes: Wage work with benefits is defined here as wage work jobs that offer a pension or health insurance. Sample for this figure (and all figures with only 2018/19 data) is limited to those in the specified age range with non-missing information on sex, age, and education

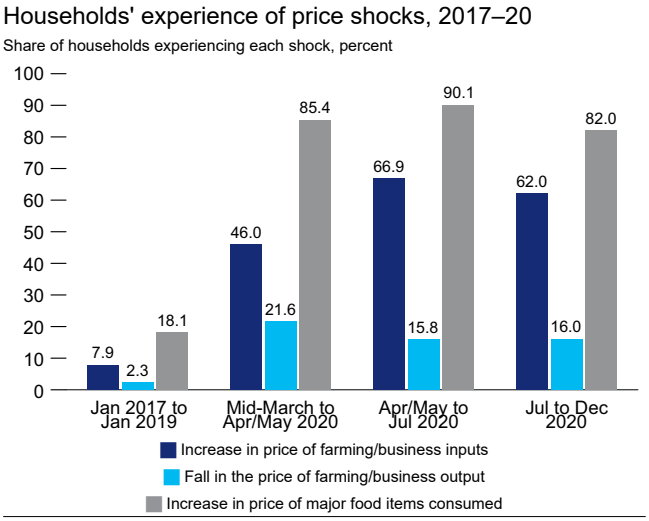
FIGURE 6.40. Educational attainment, people aged 20–25, excluding North East and North Central zones

Educational attainment among 20–25-year-olds excluding the North East and North Central zones, 2010–19



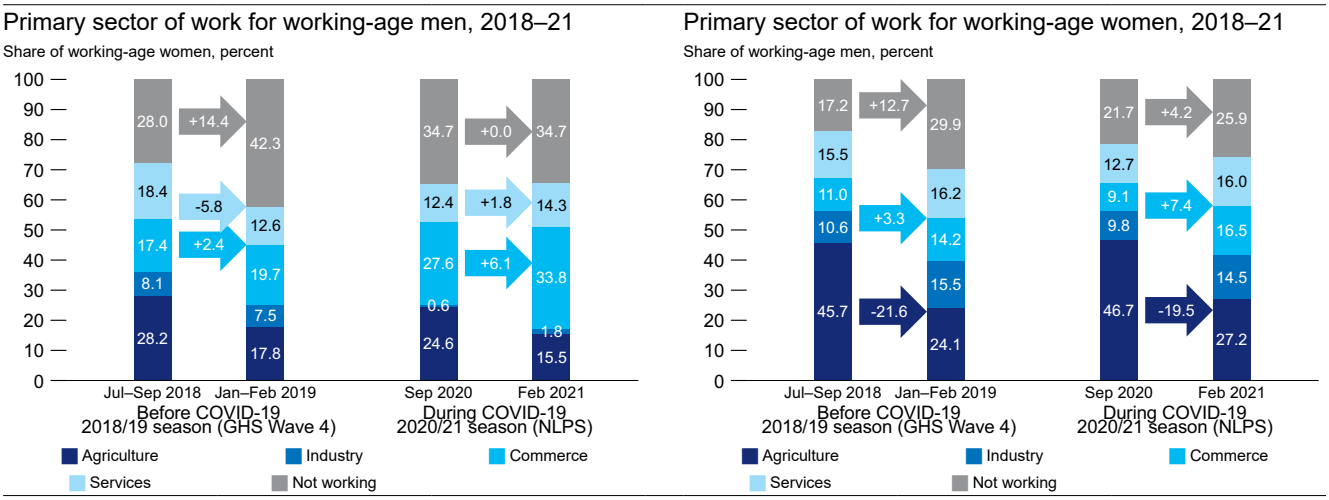
Source: GHS and World Bank estimates.
Notes: "None or less than primary" refers to individuals who have not fully attained primary education. "Primary" refers to attainment of at least full primary education but not full secondary education. "Secondary or higher" refers to attainment of senior secondary completion or higher. Chart focuses on those aged 20–25 years because almost all Nigerians who complete secondary education do so before age 20. Estimates averaged across post-planting and post-harvest visits.

FIGURE 6.41. Prevalence of price shocks experienced by Nigerian households



Source: GHS, NLPS, and World Bank estimates.

FIGURE 6.42. Shift in the share of people engaged in different sectors before and during the COVID-19 crisis, by gender



Source: 2018/19 GHS, NLPS, and World Bank estimates.
Notes: Estimates focus on primary job, defined as the job in which the individual worked the most hours. The sample is a panel of individuals observed across the relevant 2018/19 GHS visits and NLPS rounds with non-missing information on sector. In this figure, industry includes mining, manufacturing, utilities, construction, postal/transport industries and professional, while services include public administration, education, health, personal services, and business services.

Annex 6.4 Additional tables

TABLE 6.3. Transition matrix for job type, post-planting visit, 2010/11 to 2012/13

		2012/13				
		Not working	*Wage work*	*Household agriculture*	*Non-farm household enterprise*	*Total*
2010/11	Not working	22.5	1.8	3.6	4.2	32.2
	Wage work	1.4	5.9	0.8	0.9	9.0
	Household agriculture	5.6	0.8	21.6	3.6	31.6
	Non-farm household enterprise	5.3	0.8	2.4	18.7	27.2
	Total	34.8	9.3	28.4	27.4	100.0

Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Trainees and working individuals who cannot be classified by the hierarchical definition of primary job are excluded. Sample focuses on those individuals with non-missing job type in 2010/11 and 2012/13.

TABLE 6.4. Transition matrix for job type, post-planting visit, 2012/13 to 2015/16

		2015/16				
		Not working	*Wage work*	*Household agriculture*	*Non-farm household enterprise*	*Total*
2012/13	Not working	21.9	1.9	6.1	6.2	36.1
	Wage work	1.3	6.1	0.7	1.1	9.1
	Household agriculture	3.1	0.8	23.0	1.5	28.3
	Non-farm household enterprise	3.9	1.1	5.4	16.1	26.5
	Total	30.2	9.8	35.1	24.9	100.0

Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Trainees and working individuals who cannot be classified by the hierarchical definition of primary job are excluded. Sample focuses on those individuals with non-missing job type in 2012/13 and 2015/16.

TABLE 6.5. Transition matrix for job type, post-planting visit, 2015/16 to 2018/19

		2018/19				
		Not working	*Wage work*	*Household agriculture*	*Non-farm household enterprise*	*Total*
2015/16	Not working	16.1	1.7	6.7	6.2	30.7
	Wage work	1.4	7.0	1.2	1.0	10.6
	Household agriculture	3.2	1.5	25.4	2.1	32.3
	Non-farm household enterprise	5.0	1.6	6.2	13.6	26.4
	Total	25.7	11.8	39.5	22.9	100.0

Source: GHS and World Bank estimates.
Notes: Since information on hours worked is not available in earlier GHS waves, an alternative hierarchical definition of the primary job is used, which prioritizes wage work, then household agriculture, then non-farm household enterprises, in that order. Trainees and working individuals who cannot be classified by the hierarchical definition of primary job are excluded. Sample focuses on those individuals with non-missing job type in 2015/16 and 2018/19.

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Note 7: Modernizing Nigeria's Agribusiness to Boost Domestic Value Added

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Note 7: Modernizing Nigeria's Agribusiness to Boost Domestic Value Added

Summary: The agribusiness sector is central to the diversification of Nigeria's economy. Agribusiness, which includes all farms and firms involved in producing, harvesting, packing, processing, preserving, distributing, marketing, and disposing of food and non-food agricultural products, has the potential to build an economy that can generate inclusive growth, create jobs, and reduce poverty. Policy reforms are needed to improve the quality (and quantity) of various public goods and services, and to catalyze private sector investments in agricultural value chains—input supply, primary production, post-harvest management, trading, and logistics, etc. There is need for coordinated investments to reduce fragmentation and establish stronger linkages between the pre-upstream, upstream, and downstream segments. This fragmentation has led to the prevalence of spot-market transactions where farmers look for buyers after producing a commodity, as opposed to farmers coordinating production decisions on quality and quantity with buyers. While trade restrictions have generally increased domestic production, they have had a limited impact on long-term competitiveness, which relies on productivity growth and improved quality.

7.1 Agribusiness for Economic Diversification and Jobs

The agribusiness sector is central to diversification of Nigeria's economy. Nigeria's oil dependence limits the ability of the economy to absorb external shocks, and generates growth that is non-inclusive and with little impact on job creation (FIGURE 7.1). Diversification of the economy from oil to non-oil productive sectors, such as agribusiness, can build an economy that can generate inclusive growth, create jobs, and reduce poverty. Agribusiness includes all farms and firms involved in producing, harvesting, packing, processing, preserving, distributing, marketing, and disposing of food and non-food agricultural products. These activities could be classified into the following categories: agriculture,[167] processing,[168] trade and transport,[169] food services,[170] hotels,[171] and inputs.[172] The agribusiness sector features prominently in policy dialog around diversification for several reasons. First, the largest segment of agribusiness—agriculture[173]—has been the sector most resilient to economic shocks[174] (FIGURE 7.2). The resilience of agriculture not only protects the livelihoods of the poor and vulnerable during tough economic times, but also provides a foundation for recovery of off-farm agribusiness segments, such as processing, trade and transportation, food services, etc. Second, the agribusiness sector has enormous unexploited potential to drive inclusive recovery and create more and better jobs (FIGURE 7.3).

167 The processing segment includes the part of the manufacturing sector GDP that involves processing, value addition and preservation of food and non-food agricultural products.

168 The agriculture segment of agribusiness includes all of the classical agriculture sector GDP—the primary production of all crops, livestock, forestry, and fishing.

169 The trade and transport segment includes the part of the services sector GDP that entails transportation, storage, logistics and trading for agricultural commodities and products between farms, firms, and final consumers.

170 The food services segment is the part of the classical services sector GDP that involves the preparation and sale of food outside the home.

171 The hotels segment includes the part of the hotels and accommodation GDP that is associated with food.

172 The inputs segment includes all GDP generated during domestic production of the inputs used by farmers and processors, excluding the inputs produced by the above five segments.

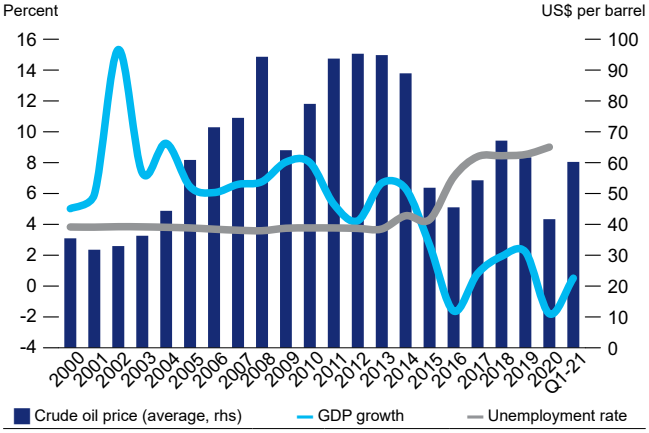
173 Agriculture accounts for about 61 percent of agribusiness GDP.

174 Agriculture was the only sector spared from negative growth during the 2016 oil-price recession and the sector least affected by the COVID-19 crisis.

Agribusiness provides perhaps the best opportunities to drive inclusive recovery from the 2020 recession while generating more and better jobs. This conclusion is based on analysis of the growth, jobs, and labor productivity outcomes during 2009–18 (FIGURE 7.4). The outcomes of this decade are highly instructive, as this period was marked by pre-recession volatility, the oil-price recession of 2016, and post-recession recovery—similar to the current economic situation and the near-term challenges facing Nigeria going forward. During this period, the off-farm agribusiness sector outperformed the overall economy in GDP growth, job creation and labor productivity growth. In particular, GDP in the off-farm agribusiness segments grew on average by 5.3 percent annually compared with 3.7 percent economy-wide, jobs in off-farm agribusiness grew on average by 3.5 percent annually compared with 2.5 percent economy-wide and labor productivity (GDP per worker) in off-farm agribusiness grew on average by 1.8 percent annually compared with 1.2 percent economy-wide wide. Similarly, primary agriculture outperformed the overall economy in terms of GDP growth (4.3 vs 3.7 percent) and the creation of better jobs as labor productivity grew by 2.8 percent compared with 1.2 percent economy-wide average. The processing segment and primary agriculture led all agribusiness segments in the creation of better jobs.

FIGURE 7.1. More than a decade of strong economic growth (2000–14) did not reduce the unemployment rate

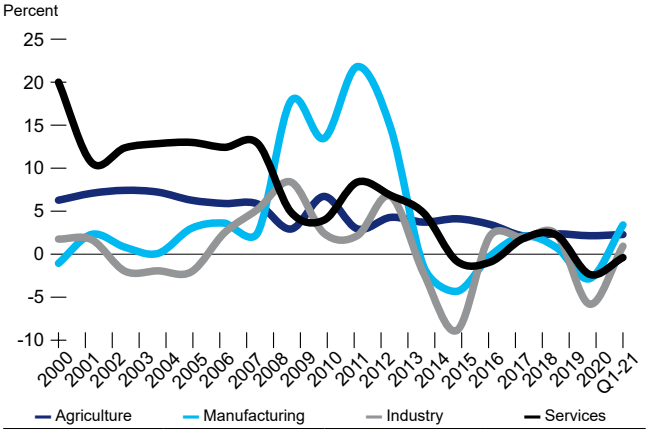
GDP growth and crude oil prices



Source: Mghenyi, E. et al., 2021.

FIGURE 7.2. Agriculture is the most resilient sector, protecting livelihoods and jobs during tough economic times

Sectoral GDP growth

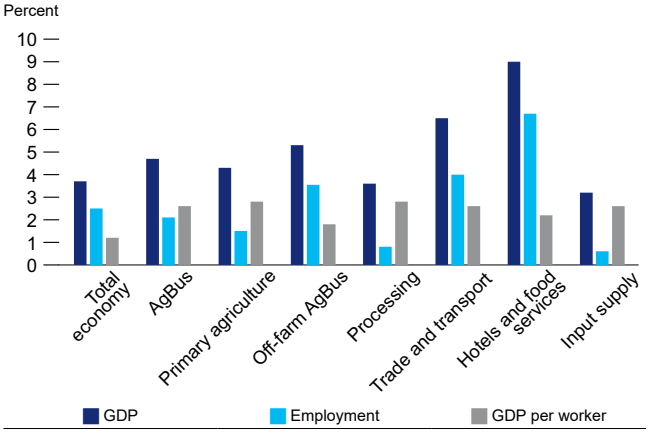


Source: Mghenyi, E. et al., 2021.

Notwithstanding the relatively solid historical performance, the potential of the agribusiness sector to drive inclusive recovery remains untapped. Unlocking the potential will require addressing several critical policy reforms and investment priorities. Policy reforms are needed to improve the quality (and quantity) of various public goods and services, and to catalyze private sector investments in agricultural

FIGURE 7.3. Nigeria's agribusiness segments grew faster and created more and better jobs than the overall economy did, 2009–18

GDP growth, employment growth and GDP per worker growth



Source: Mghenyi, E. et al., 2021.

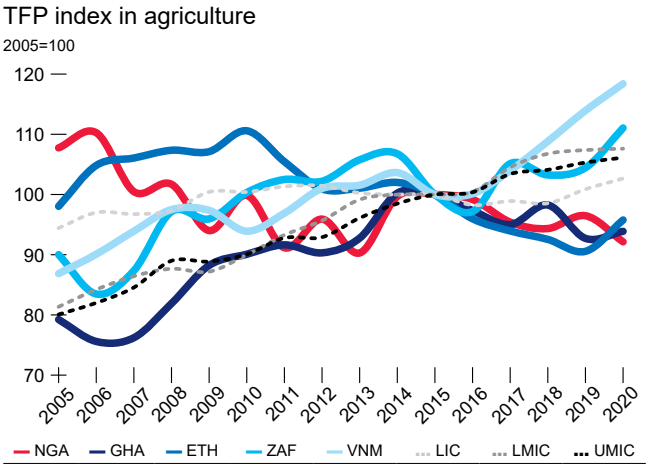
value chains—input supply, primary production, post-harvest management, trading, and logistics, etc. A major problem in agricultural value chains is the lack of coordination between pre-upstream input supply, upstream primary production, and downstream post-harvest management, value addition, trading, etc. There is a need for coordinated investments to reduce fragmentation and establish stronger linkages between the pre-upstream, upstream, and downstream segments. Overall, a policy reforms and investments strategy for agribusiness should aim at:

- Raising agricultural productivity in a sustainable manner by accelerating a whole range of climate adaptation strategies that build resilience to agroclimatic shocks. Increased agriculture productivity will reduce costs to downstream off-farm agribusiness segments and enhance food security.
- Increasing smallholder farmers' access to credit for long-term investments and short-term working capital, including through digital technologies and effective tools for price risk management.
- Effective coordination of investments in agribusiness value chains using approaches that co-locate investments with critical infrastructure.
- Conducive macroeconomic, trade and sectoral policies.

7.2 Raising agriculture productivity sustainably by accelerating the development and dissemination of adaptation strategies that build resilience to agroclimatic shocks

Agriculture productivity has barely changed in Nigeria for decades (FIGURE 7.4). The problem of persisting low productivity is being compounded by the effects of climate change, which include heat stress, droughts, shorter rainy seasons, and increased frequency and intensity of heavy rainfall events. Climate change impacts are being felt strongly in the Northern parts of the country where the effects of rising temperatures and lower rainfall are most acutely manifested. Persistent water shortages will continue to exacerbate land degradation, desertification, and habitat loss. Meanwhile, the South will increasingly experience unpredictable rainfall patterns, shorter cropping season, floods, leaching, and decreased soil fertility. Seasonal variability in rainfall has affected groundwater recharge and the availability of surface water for irrigation and other economic activities. Climate-smart strategies to adapt agriculture to these effects are well-defined and cost far less than inaction. For SSA as a whole, the cost of inaction on climate adaptation of agriculture and food systems is about US$201 billion annually compared with the US$15 billion annual cost of adaptation (Vermeulen et al., 2021).

FIGURE 7.4. The average Nigerian farmer is a smallholder who relies on rain-fed agriculture with little irrigation



Source: International Agricultural Productivity database (U.S. Department of Agriculture Economic Research Service) accessed December 2020, https://www.ers.usda.gov/data-products/international-agricultural-productivity/.

Perhaps the foremost climate-smart action involves research and extension to develop and disseminate improved technologies (crop varieties, livestock breeds, management practices, etc.) that are more productive and resilient to agroclimatic changes. The availability and proper adoption of climate-smart agricultural technologies would enable technical change (farmers reaching a new production frontier) and technical efficiency change (progress toward existing production frontier). Nigeria needs to invest more in

agricultural R&D and farmer extension and advisory services. Recent data show that Nigeria's investment in agricultural research as a share of agricultural GDP fell from an already low 0.39 percent in 2008 to 0.22 percent in 2017 (Beintema et al., 2017). In comparison, the share in Ghana is 0.99 percent and in South Africa it is 2.79 percent

Climate risk information and risk management services can help farmers and other actors take actions to prepare for seasonal weather variability and longer-term climate trends, including adjusting the timing of land preparation and planting, and selecting varieties with shorter maturity periods. The key climate information services include seasonal weather forecasts for farmers and early warning systems that can help anticipate and manage natural disasters, pest outbreaks and yield failures. Other climate-smart adaptation strategies include: (i) sustainable water management at farm and catchment levels through efficient irrigation systems; (ii) restoration of degraded landscapes and sustainable land and soil management to improve the productive capacity of land; (iii) improvements in livestock systems such as transitioning from pastoral systems that are notorious for poor environmental management toward intensive systems with better feeding to reduce emissions and improved breeding for high-feed conversion; and (iv) the provision and maintenance of adaptive climate-resilient agricultural infrastructure (Vermeulen et al., 2021).

Policy reforms in the agriculture enabling environment are critical to complement the climate-smart strategies. In particular, reforms on seed development and fertilizer quality control are critical to increase the supply of these inputs and enforce quality standards for certified and truthfully labeled seed in the market. Although the regulatory environment for these inputs has improved since the passage of the National Agricultural Seed Council Act 2019 and the Fertilizer Quality (Control) Act 2019, there is much unfinished business in the implementation of these reforms. For example, the full implementation of the National Seed Council Act 2019 would recognize and protect intellectual property rights in seed development, catalyze private sector investment in seed development and multiplication, and enforce seed quality standards and appropriate labeling. The key reforms actions for fertilizer quality control and seed development and quality control are summarized in the section titled "Key Policy Options".

The weak regulatory environment has resulted to inadequate supplies of quality seeds and fertilizers, leading to low and imbalanced use of these inputs by the farmers. For example, recent data indicate that there is imbalanced use of fertilizer and improved seeds across Nigeria except in the North Central. The imbalanced use of these inputs suggests technical inefficiency in most parts of the country. Significantly more farmers use inorganic fertilizers than improved seeds in the North

TABLE 7.1. Imbalanced use of improved seeds and inorganic fertilizers suggests technical inefficiency among many farmers in Nigeria

Percent, unless otherwise states.	Share using inorganic fertilizer	Share using organic fertilizer	Share using pesticide	Share using herbicides	Share using improved seeds	Share using animal traction	Share using household labor	Share using hired labor	Share using exchange labor
NC	31.6	10.9	9.2	69.3	32	16.3	97.9	70.0	42.2
NE	45.2	23.3	24.3	57.1	72	41.5	99.3	70.4	47.1
NW	69.1	59.8	21.4	23.4	9.7	43.7	98.2	81.8	38.7
SE	29.5	14.7	4.7	12.4	9.7	0.0	99.0	78.8	21.3
SS	5.6	2.1	1.0	20.0	21.0	0.0	99.1	58.2	27.8
SW	1.8	0.4	23.9	29.7	8.3	0.0	98.5	76.6	20.1
Nigeria average	35.4	23.1	13.1	34.7	10.1	19.5	98.6	72.8	34.2

Source: Nigeria General Household Survey, Panel 2018–19, Wave 4.
Note: NC= North Central; NE= North East; NW= North West; SE= South East; SS= South South and SW= South West.

West and the South East, whereas more farmers use improved seeds than inorganic fertilizers in the North East, South South and South East (TABLE 7.1). Overall, less than 10 percent of farmers used improved seeds and inorganic fertilizers together in 2018–19, which is relatively low compared with Ethiopia and Kenya, where about 40 and 30 percent of farmers, respectively, used improved seed and inorganic fertilizer together (Sheahan and Barret, 2014). The low usage of improved seeds and fertilizers appears to be driven by supply-side constraints, as recent estimates suggest that the supply of open pollinated varieties and hybrid seeds from the formal sector was 47 percent of potential demand in Nigeria (Setimela et al., 2009).

7.3 Increasing smallholder farmers' access to credit for long-term investments and short-term working capital

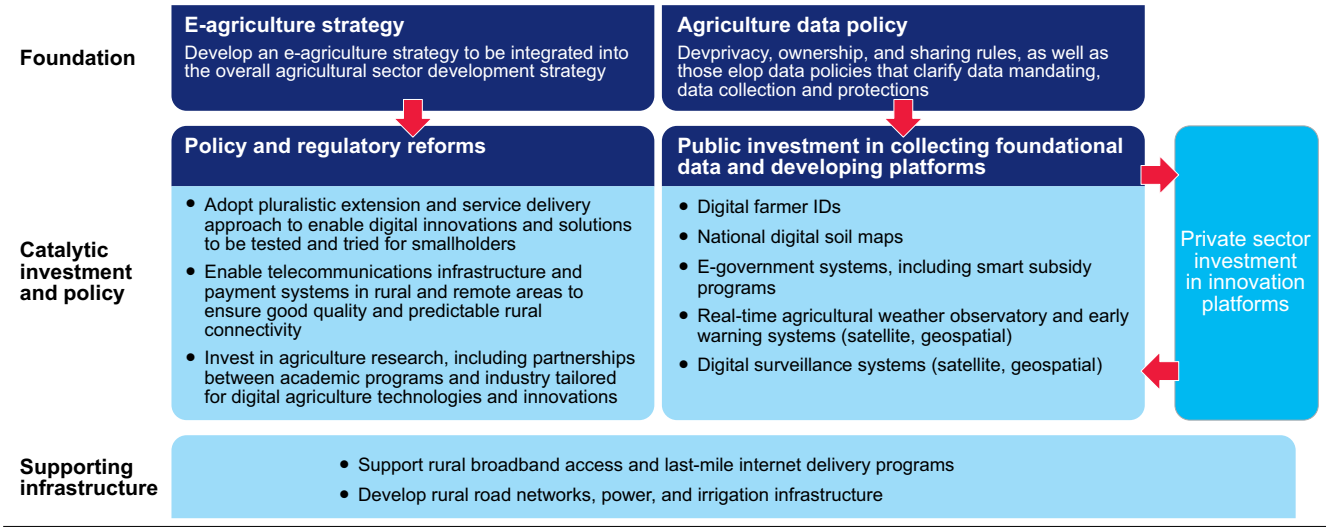
Smallholder farmers have weak access to credit for various reasons. The commercial lending sector tends to consider smallholder agriculture too risky, primarily because lenders face challenges in distinguishing between good and bad borrowers. Furthermore, lenders incur significant costs in processing a large number of relatively small loans to smallholder farmers. Smallholders have weak land rights and face difficulties using land as collateral for commercial credit. They are less likely than medium- and large-scale farmers to have their lands formally registered, primarily because most smallholders acquire land through inheritance, and the land is often subdivided among siblings without passage of full rights. In addition, smallholders tend to demand small and high-frequency loans that do not match the financial products available. Agribusiness SMEs also struggle to access credit and to invest in productive assets, capacities, and technologies that increase competitiveness and growth.

There is enormous scope for disruption of the financial sector through fintech, mobile money, and innovations that deepen financial inclusion, provide high-frequency loans, and generate information on creditworthiness of farmers and return on investments in specific value chains. Recent advances in fintech and mobile money (for example, M-PESA in Kenya) have enabled smallholders and informal enterprisers across sectors to access small and high-frequency loans with repayment terms that match their cashflow profiles. In addition, fintech and mobile money applications have proved effective in generating credit records for smallholders, and this information can be harnessed by traditional banks to identify good risks among smallholder farmers.

Governments can support digital agriculture through various types of foundational public investments, and policy and regulatory reforms. Technology firms are working around the clock to develop and introduce new digital technologies, platforms, and products in Africa. However, these innovations will benefit only those economies that embrace digitization, invest in the required infrastructure, and introduce effective regulations. The main areas for public interventions include policies that lay the foundations for innovation and the scaling-out of digital technologies, the expansion of supporting rural broadband and supporting infrastructure, and the collection and digitization of plot-level data on farmers (FIGURE 7.5). Nigeria is already among the leading adopters of digital technologies in agriculture, ranking third behind Kenya and South Africa in 2018 in terms of the number of scalable disruptive agri-tech hubs (Kim et al., 2020), and second behind South Africa in 2018 in terms of the number of technology incubators and accelerators (Bayen, 2018).

Coordinated value-chain financing and warehouse receipt systems have enormous potential to address the short-term working capital financing needs of farmers, while also improving access to markets. The Babban Gona model provides a proven example of coordinated value-chain financing that has effectively link smallholder farmers to input suppliers and output markets, while also providing financial services and building capacity of farmer organizations (see BOX

FIGURE 7.5. Public investments to support expansion of digital technologies in agriculture



Source: Kim et al., 2020.

BOX 7.1. The Babban Gona model in Nigeria

Babban Gona works with growth-oriented smallholder farmers and provides them a private sector channel for cost-effective delivery of enhanced agricultural technologies and end-to-end services that optimize yields and labor productivity, while simultaneously improving market access. In particular, the model provides smallholder farmers with: (i) financial services—de-risking members of farmer groups to access cost-effective financing; (ii) agricultural input services—timely provision of quality inputs at competitive prices to increase productivity and product quality, while minimizing impacts on the environment; (iii) training and development—strengthening of farmer organizations; and (iv) market access—access to market services, good warehousing practices, and increased profits. Among other goals, Babba Gona aims to reach 1 million farmers by 2025 and increase their incomes fourfold.

Source: Based on Babban Gona's Our Model web page, https://babbangona.com/our-model/.

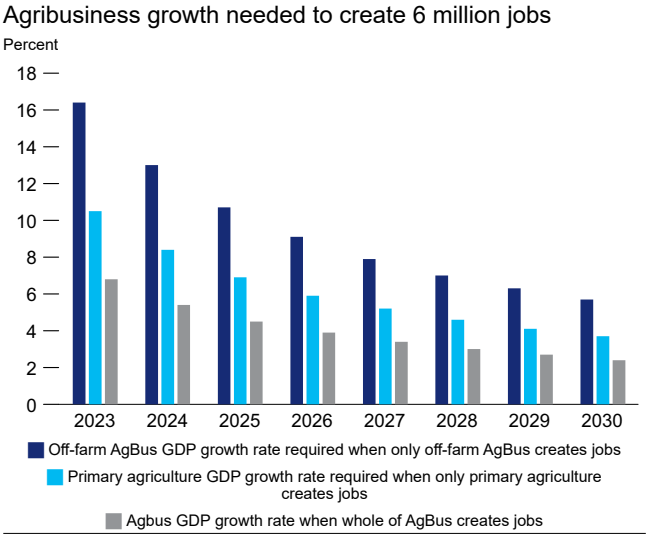
7.1). The model operates in northern parts of Nigeria and could be scaled out to other value chains around the country. Warehouse receipt systems have hardly been implemented in Nigeria due to lack of clarity on the proper regulatory framework needed to support such systems. A typical warehouse receipt system would enable farmers and traders to access finance by liquidating part of the value of their non-perishable commodities while searching for better prices. In addition to clarifying the regulatory framework, the proper functioning of warehouse receipt systems requires certain physical investments and institutions. The required physical investments, institutions and services relate to warehousing infrastructure, collateral management, registration of warehouse receipts in the collateral registry, a grading system for commodities in storage, banking and financial services, and capacity building services, especially for farmers and their organizations.

7.4 Effective coordination of investments in agribusiness value chains using approaches that co-locate investments with critical infrastructure

One of the foremost challenges constraining growth of agribusiness value chains in Nigeria is the lack of coordination between pre-upstream inputs supply, upstream primary agriculture, and downstream off-farm agribusinesses. This fragmentation has led to the prevalence of spot-market transactions where farmers look for buyers after producing a commodity, as opposed to farmers coordinating production decisions on quality and quantity with buyers. Fragmentation has also led to high levels of food loss and waste, and enormous costs from food-borne diseases.[175] Improving coordination will require addressing the challenges faced by downstream off-farm segments such as processors and exporters in building and organizing supply chains that involve smallholder farmers. The main challenges, at least from the perspective of downstream agribusinesses, include: (i) the variable quality of production and low productivity due to weak access to improved technology of production and quality inputs; (ii) weak access to credit and risk-sharing services, especially by smallholder farmers, which has led to investments in assets with poor returns; (iii) high ex-post transaction costs for contract enforcement; and (iv) ineffective farmer organizations that cannot effectively monitor their smallholder farmers or incentivize them to invest in the appropriate technology to produce the quality desired by remunerative markets.

Coordinated investments in agribusiness value chains can generate shared growth in the on-farm and off-farm segments and create jobs faster than when either segment grows alone. Creation of jobs remains a key priority of the FGN and features prominently in recent government policy documents. The most recent policy documents emphasizing job creation are the Economic Recovery and Growth Plan 2017–2020 and Delivering on the Government's Priorities 2019–2023.[176] The latter sets a specific target to create 6 million jobs in the agribusiness sector between 2019 and 2023. Projections based on economic data before the onset of the COVID-19 pandemic indicate that the agribusiness sector was on track to create 6 million jobs by the middle of 2027, with the on-farm segment (agriculture) contributing most of the jobs (about 3.4 million) and the off-farm segments contributing 2.2 million jobs. The growth burden to create 6 million jobs is lower when both on-farm and off-farm segments grow in tandem and higher if either segment stagnates (FIGURE 7.6). In particular, the whole of the agribusiness sector needs to grow by 5.4 percent annually to create 6 million jobs by 2024. On the other hand, if left alone to achieve the jobs target, the on-farm segment will have to grow by 8.4 percent annually through 2024 to create 6 million jobs. The off-farm segment will have to grow even faster—by 13 percent annually—to create the 6 million jobs by 2024 on its own.

FIGURE 7.6. The whole of agribusiness needs to grow concurrently to create 6 million jobs faster



Source: Mghenyi, E. et al. 2021.

175 Foodborne diseases cost Nigeria more than US$6 billion in 2016, ranking behind China, India, and Indonesia in terms of economic losses originating from foodborne diseases (Jaffee, S. et al., 2019).

176 In addition, the Economic Sustainability Plan 2020, which was prepared to organize the FGN's response to the COVID-19 pandemic, adopted a short-term agenda to create "millions of jobs" over a 12-month period through a Mass Agricultural Programme.

Future opportunities in off-farm agribusiness segments will increasingly be in processing, input supply and food services. Currently, the trading and transportation segment is the largest in off-farm agribusiness and this segment can continue to grow with increased urbanization and commercialization of agriculture. However, the processing, input supply and food services segments will have more potential for growth as the sector transforms. Realizing this growth and jobs potential will require: (i) better coordination of agribusiness value chains to reduce fragmentation, as opposed to vertical integration of processors into large-scale primary production; (ii) the provision of infrastructure services (especially roads and energy) in clusters where agribusinesses are located; and (iii) diversifying production toward higher-value farm products such as cash crops and livestock products, and toward agricultural inputs such as animal feeds and fertilizers. Two broad approaches could be considered: (i) greenfield investments that involve large amounts of capital injections by anchor agribusinesses that are largely new entrants in the domestic market; and (ii) brownfield investments that build off of existing agribusiness SMEs that are already established in the sector but with ambitions to expand and grow. The main advantage of working through brownfield SMEs is that they would already be having relationships that can be expanded at relatively lower cost and have experience in the operating environment. The main advantage of working through greenfield investors is that they provide the opportunity to operationalize bold initiatives that co-locate private agribusiness investments with public infrastructure such as roads and energy. Either of these approaches could suit certain contexts and specific value chains.

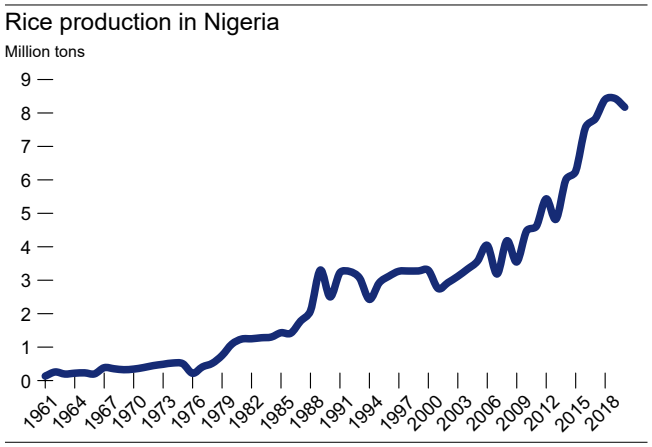
Land reforms should discourage vertical integration of processors into large-scale primary production, as that often leads to physical and economic displacement of smallholder farmers from value chains. Examples abound of cases where states have allocated large tracts of land to processors at the expense of local farmers that use the same land for various purposes, including farming, often leading to conflicts that foreclose any collaboration between farmers and the agribusinesses. The Framework for Responsible and Inclusive Land Intensive Agricultural Investments[177] provides authorities with a solid approach to guide land administration in a manner that would maximize the role of land in development, while effectively mitigating the risks of land-based investments. This framework would provide many benefits that include: (i) providing an enabling environment to mitigate conflicts arising from competing claims on land, thus improving investor confidence; (ii) enabling complementary investments on land in growth clusters (e.g., agribusiness, roads, waste management, educational institutions) and observes laid down environmental and social safeguards; (iii) protecting the rights and economic opportunities of local communities to ensure that they benefit optimally from large-scale investments, thus enhancing shared prosperity and broad-based welfare gains from land-based investments; (iv) ensuring the participation of all stakeholders in decision-making around land acquisition and utilization, and empowering the communities to participate in their own development; (v) establishing mechanisms for accountability of government institutions by providing toolkits and checklists to formalize the decision process on land acquisition and allocation; and (vi) providing mechanisms for effective mitigation of potential environmental and social risks associated with land-intensive investments.

7.5 Conducive Macroeconomic, Trade, and Sectoral Policies

The performance of agribusiness value chains is mediated through a complex set of foundational and competitiveness factors that ultimately determine productivity, competitiveness, and coordination arrangements. Foundational factors relate to the macroeconomic environment, trade policies, sector development policies, and institutions (World Bank, 2019). These factors determine the incentive structure for farmers and agribusinesses to invest and compete in domestic and external markets. They also determine the

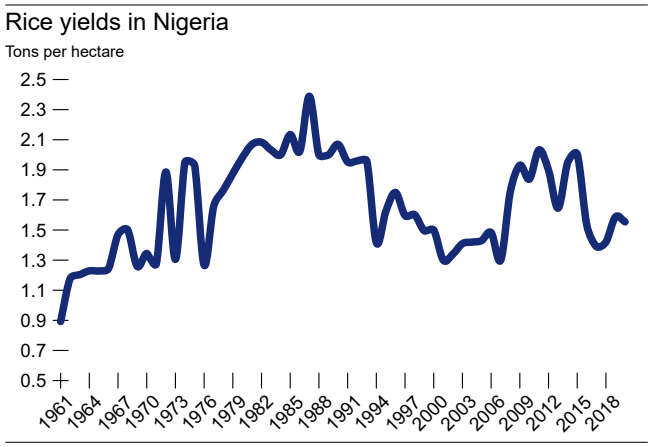
177 Kaduna and Ogun States are implementing the Framework for Responsible and Inclusive Land Intensive Agricultural Investments through World Bank financed projects – Kaduna State Economic Transformation Program-for-Results and Ogun State Economic Transformation Project.

FIGURE 7.7. Rice production in Nigeria responded to the trade restrictions



Source: Mghenyi, E. et al., 2021.

FIGURE 7.8. Rice yields in Nigeria have stagnated despite the trade restrictions



Source: Mghenyi, E. et al., 2021.

approaches used by actors to organize investments and transactions. The various segments of the agribusiness sector—inputs suppliers, farmers, processors, food services, and so on—rely on public institutions to deliver the necessary amounts of public goods and services to catalyze private investments. Competitiveness factors operate within the foundational factors to ultimately determine productivity and competitiveness. Competitiveness factors include access to improved technology of production, finance, skills of workers, and markets. Many agriculture value chains are not competitive in the domestic market and this has prompted the FGN to intervene through measures aiming to severely limit access of the domestic market by GVCs.

While trade restrictions have generally increased domestic production, they have had limited impacts on long-term competitiveness, which relies on productivity growth and improved quality. For example, Nigeria had for many years been one of the world's largest rice importers. Growth in rice imports started to increase rapidly in 1995 and this prompted trade policy responses to reduce the import bill, beginning with the introduction of import tariffs in 1995. The tariffs have been revised several times over the years. Import tariffs increased from 50 to 150 percent between 1995 and 2008, were reduced to 30 to 50 percent between 2008 and 2012, and then raised again to 110 percent in 2013. A major shift in import policy occurred in 2016 when the FGN banned rice imports, in addition to the 110 percent import tariffs (Abbas, Agada and Kolade, 2016). Rice import volumes have decreased tremendously following the trade restrictions. Meanwhile, rice production grew steadily by more than 12 percent between 2010 and 2016 but growth has decelerated significantly in recent years.

The supply response to rice trade restrictions was driven by expansion of area under cultivation, but yields barely improved, which clearly demonstrates that increasing the competitiveness of rice sector will require investments to develop high-yielding varieties and improve quality attributes of local rice (taste, aroma, texture, etc.). The supply response was driven by cultivated rice area, which increased from 6.74 percent in 2010–14 to 10.63 percent in 2015–16. However, this expansion in area under cultivation could not be sustained and there was negative growth of -5.23 percent in cultivated area in 2017–18. Rice production has decelerated significantly since 2016. Clearly, the supply response from import restrictions has waned out and it is becoming clear that rice trade policy alone will not improve competitiveness in the domestic market. Furthermore, the increased production alone will not meet the demand until the quality attributes of local rice improves to match imported rice quality.

Key Policy Options

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
Increase private sector investments in seed development and multiplication, increase the supply of improved seeds, and remove poor quality seeds from the market.		
• **Agriculture productivity has barely changed in Nigeria for decades and appears to be trapped in a low-productivity equilibrium, save for a few value chains.** • **The effects of climate change are exacerbating the problem of persisting low agricultural productivity.** • **Farmers need to access seeds that are high-yielding and resilient to the effects of climate change in order to sustainably increase productivity.**	• The National Agricultural Seed Council (NASC) to develop and publicize written procedures and guidelines for the private sector to access germplasm from public sources for carrying out research to generate early generation seeds and for seed multiplication *(currently no guidelines are available, but two seed companies have accessed germplasm)*. • The NASC and private sector seed companies to jointly develop and implement business models for PPP in the production of early generation seed to alleviate the persistent problem of inadequate supplies *(various PPP options are currently being considered)*. • NASC to develop and roll out protocols for decentralizing seed quality assurance through third parties, such as private seed inspectors and laboratories *(currently only cassava is covered on a pilot basis)*. • NASC to finalize and roll out the implementation of regulations, SOPs, and build technical capacity to recognize and protect breeder's intellectual property rights, consistent with the Plant Variety Protection (PVP) Bill, beginning with conducting Distinctiveness, Stability and Uniformity tests required to grant property rights. • NASC to assess the efficiency, transparency and cost-effectiveness of its variety release system and update the system to ensure consistency with international best practice. • The Federal Ministry of Agriculture (FMARD) and NASC to finalize and roll out implementation of SOPs for seed inspectors to carry out the duties and obligations specified in the National Agricultural Seeds Council Act 2019.	• Increased private sector participation in seed development, multiplication, and marketing to farmers • Removal of low-quality and fake seeds from the market • Increased availability of quality seeds, including imported seeds • Increased crop productivity and production

Key Policy Options (contuned)

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
Increase the supply of fertilizers, enable farmers to access blended fertilizers that address specific plot-level soil nutrient deficiencies, and remove poor quality fertilizers from the market		
• **Fertilizer use rates in Nigeria are lower than recommended rates for nearly all crops, primarily because farmers cannot access fertilizers.** • **The supply gap has led to imbalanced use of fertilizers with improved seeds, a major source of technical inefficiency and low productivity**	• The FMARD has established digital platform for fertilizer companies (manufacturers, blenders, and agro-dealers) to apply for registration, provide feedback and capture activities of field inspectors. The platform could be expanded with modules that enable sensitization and education of these stakeholders on the fertilizer reforms – as well as feedback mechanisms. • Integrate the feedback and information generated from the digital platforms with extension services to provide continuous communications campaigns targeted to farmers and farmer organizations on effective quality control of fertilizers, the concept of plot specific fertilization based on small area soil testing, and the opportunities available with fertilizer blending to meet plot specific nutrient requirements. • Finalize and disseminate the SOPs for fertilizer testing so that testing protocols are harmonized between the Reference lab in the country and private sector labs, to ensure comparability of results especially in cases where litigation is involved. • The FMARD to develop SOPs for fertilizer inspectors to carry out the duties and obligations specified in the National Fertilizer Quality (Control) Act 2019, including inspections of premises handling fertilizers and taking of official samples for analysis. • The FMARD to develop regulations that require fertilizer manufacturers and blenders to put satisfactory security features on product packages to enable tracing the source of adulteration.	• Increased private sector importation and marketing of fertilizers • Improved fertilizer availability, especially to smallholder farmers • Improved quality of fertilizers in the market • Increased crop productivity and production
Accelerate climate change adaptation strategies to sustainably increase agricultural productivity and mitigate environmental degradation		
• **The effects of climate are worsening low agricultural productivity and causing environmental degradation**	• Transitioning livestock production away from pastoral systems that are notorious for poor environmental management toward more intensive systems with better feeding to reduce emissions and improved breeding for high-feed conversion. • Strengthening irrigation water management at farm and catchment levels to enhance water user efficiency. • Strengthening climate risk information and risk management services such as seasonal weather forecasts for farmers, early warning systems that can help anticipate and manage natural disasters, pest outbreaks and yield failures, and crop and livestock insurance.	• Reduced environmental degradation and increased crop and livestock productivity • Increased capacity of farmers to prepare for seasonal weather variability and longer-term climate trends, including adjusting the timing of land preparation and planting, selecting varieties with shorter maturity periods, etc.

Key Policy Options (contuned)

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
Improve smallholders' farmers capacity to vertically coordinate with buyers and participate in remunerative value chains		
• **Smallholder production is characterized by variable quality of production and low productivity due to weak access to improved technology of production and quality inputs** • **Farmer organizations tend to be weak**	• Federal and state agriculture ministries to build effective farmer organizations that can effectively monitor their smallholders' farmers to meet obligations with buyers, incentivize them to invest in appropriate technology to produce the quality desired by remunerative markets, and transition farmers from livelihoods-oriented farming systems to growth-oriented agribusiness production. • State governments to adopt land reforms that discourage vertical integration of processors into large-scale primary production as that often leads to physical and economic displacement of smallholder farmers from value chains. The Framework for Responsible and Inclusive Land Intensive Agricultural Investments is an option that can provide many benefits to state governments, farmers, and off-farm agribusinesses.	• Increased farmer access to large buyers in remunerative value chains • Reduced transaction costs for contract enforcement • Reduced postharvest loss and waste
Increase farmers access to credit and risk-sharing services		
• **Farmers have weak access to credit for long-term investments and short-term working capital** • **Weak access to credit and risk-sharing services has led to farmers investing in assets with poor returns**	• Gazetting of rules developed by the Securities and Exchange Commission (SEC) to provide the regulatory environment for warehouse receipts. • SEC to provide guidelines for certification of warehouses based on existing rules and regulations, in a manner that is credible and based on the independent assessment of reliable evaluators of assets, usually by private sector agencies. • The CBN to facilitate admission of warehouse receipts in the collateral registry so that the financial instrument could be registered in a designated, reliable, easy-to-register, and easy-to-search registry. • Commodity exchanges and state agriculture ministries to facilitate capacity building of farmers organizations to understand how to use the warehouse receipt instruments, their rights and obligations, grades and standards for commodities, proper post-harvest handling before warehousing, etc. • Federal and state government agencies to lay the foundations for fintech in agriculture by expanding rural broadband and supporting digitization of plot-level data on farming.	• Increased farmers access to credit, through fintech solutions, warehouse receipts, etc. • Increased investments by the private sector in warehousing and improved standards of collateral management and quality of facilities • Improved price discovery, especially for farmers who they tend to have less market information

Key Policy Options (contuned)

Why Reforms Are Needed	*Which Reforms Are Critical*	*What Impact These Reforms Could Have*
Commitment to long-term trade openness for agricultural commodities and inputs, beginning with implementation of the AfCFTA		
Why?	• Federal government to reduce import tariffs and technical barriers to trade for agricultural commodities as per the AfCFTA framework. • To facilitate trade in seeds, the Seed Registration and Release Subcommittee should develop and publicize: (i) the testing requirements for varieties imported for seed production and (ii) the requirements for seeds imported for commercialization; distinguishing between ECOWAS countries versus outside the ECOWAS region. The advisory is needed due to lack of a functional and verifiable seed catalogue system in ECOWAS region. • Federal ministry responsible for trade to establish electronic phytosanitary system to streamline export procedures and issue phytosanitary certificates on site. • Reduce the time and cost of obtaining mandatory, agriculture-specific, per-shipment export documents. • Rationalize fees on exports levied by the Nigeria Export Levy and the Nigeria Export Supervision Scheme to avoid double taxation and remove bureaucratic hurdles for obtaining support from the Nigerian Export Promotion Council.	• Increased farmers access to quality inputs such as imported seeds and animal breeds • Increased exports of agricultural commodities from Nigeria • Improved service delivery and confidence of actors in export value chains

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