FROM CONUNDRUMS AND CONTRADICTIONS TO COHERENCE AND CONSISTENCY: DATA AND POLICIES FOR NIGERIA'S DEVELOPMENT

Address delivered by

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FROM CONUNDRUMS AND CONTRADICTIONS TO COHERENCE AND CONSISTENCY:

DATA AND POLICIES FOR NIGERIA'S DEVELOPMENT

Contents

1. ***Introduction*** 3
2. ***Isolating conundrums and contradictions in Nigeria's development experience*** 5
3. ***The conundrum of Old Glory***...5
4. ***The conundrum of One Talent***...7
5. ***Diagnosis: understanding the causes and consequences of conundrums*** 10
6. ***Growth, development and taxes*** 10
7. ***Towards coherence and consistency: innovations in data production for policymaking*** 12
8. ***Collaboration with the academia*** 13
9. ***Conclusion*** 14

1. Introduction

The Vice-Chancellor of the University of Lagos, *Prof. Oluwatoyin Ogundipe, FAS,*
Other Principal Officers of the University present*,*
The Chairman of the Occasion, *Prof. Michael O. A. Adejugbe,*
All Deans of Faculties present,
All Heads of Departments present,
Distinguished Members of Staff present,
Students,
Gentlemen of the Press,
Ladies and Gentlemen

1. Introduction

I am truly honored, indeed humbled, to have been asked to give the 2019 Economics Department, Annual Public Lecture of the University of Lagos, an institution recognized for facilitating insightful discussions on a wide array of national and global issues. I consider it a privilege not only because of my professional responsibility as Statistician-General of the Federation/CEO of the National Bureau of Statistics, but also because of the eminent speakers that have stood at this podium in the past. As a student of economics myself, it affords me the rare opportunity to interact with my community and in the process support the growing efforts to improve development outcomes in Nigeria which the University of Lagos is known for.

Indeed, the academic community, has been one of our most prominent stakeholders at the National Bureau of Statistics (NBS) whether with respect to our efforts at improving the quality of official statistics or promoting the dissemination and use of data for economic research, policy analysis and decision-making. Members of the academic community have led our methodology review teams and facilitated training sessions for staff. One hopes that government agencies working closely with the academic and research community for the overall good of the nation will be the rule rather than the exception, and I would once more like to thank your members who have worked and supported us over the years.

The Bureau's role as the custodian and authoritative source of all official statistics in Nigeria is widely known. What we may be less familiar with, however, is that NBS is itself a semi-academic institution with training and research functions. The Federal School of Statistics, for example, with its 3 campuses in Ibadan, Enugu and Kaduna, serves to train and build technical capacity in young statisticians, awarding them diploma certificates upon graduation. This duality of NBS' mandate - as a supporting institution for the policymaking machinery of government as well as an independent research-oriented organization that also grants diploma certificates–necessitates that its sphere of influence cuts across government at all levels as well as the academic research community. Yet, it has also been a major source of contradiction, indeed a conundrum, particularly for me as its chief executive over the past eight years. Very often, I have found myself trying to explain to both sides (government and the public) what I thought was very obvious.

It turns out, however, that what happens in the micro, also happens at the macro. When one surveys the national landscape, both in time and space, the conclusion is inevitable: Nigeria is a study in contrasts. Otherwise, how does one describe the sheer number of multiple socio-economic, geographical, demographic, political and even biophysical phenomena that appear as existential threats, despite the potential wealth of population, and other geographical, geological and geophysical advantages, and even the good fortune of history we have in Nigeria?

All the same, it is comforting to know that as daunting as these challenges look, they are not insurmountable. They, however, require that if we must address and resolve them, we must first understand their underlying causes. As Albert Einstein once said: "We cannot solve problems by using the same kind of thinking'' or the same kind of people we used ''when we created them". He also described insanity as doing the same thing in the same way over and over again and expecting different results. If we apply these statements by Albert Einstein to our challenges in Nigeria, our development challenges can be summed as 'doing the same thing, and thinking in the same way but expecting different results'. This is a major problem we have had in Nigeria for decades. Without a doubt, the necessary first step to address these issues is to come up with a different approach that is honest, thoughtful and well-informed.

Learning from successful countries is also a good step but I believe even this has its limitations and a strategy we might have overly depended on in Nigeria. I have served in government for over a decade, and when some form of committee is set up to solve a problem, somebody will almost always recommend a study tour to some other country where some solutions worked. While learning from more successful countries is a good thing, economic history teaches us that theories are built from observation of how a society works. As such, methodology, selection of indicators and policy prescriptions should be based on how each country works. Why then, should we assume that different countries at different levels of growth, development, awareness, technology and exposure all act the same way? Even within countries, should we assume that different regions or states operate identically? Could the huge degree of spatial inequality observed in Nigeria for example be explained by the fact that a national policy was introduced across the country which did not take into consideration the cultural and economic context and nuances of each region and thus introduced disparity in its implementation across the regions?

I think that when borrowing solutions internationally, the local context is key and as we very well know, the availability of good quality data is central to being well-informed and ensuring successful implementation of solutions.

So how can this be done?

In my discourse today, which I have titled "*From Contradictions and Conundrums to Coherence and Consistency: Data and Policies for Nigeria's Development"*, I have attempted to isolate and describe what I believe to be the most pertinent of these contrasts, contradictions and conundrums that litter our development landscape. At the same time, I provide some diagnosis of the underlying causes, and conclude with what I believe we can do differently. My overall objective is to show how data helps us to uncover truths that may not be so obvious from a cursory inspection. Data remains a necessity for any policy prescriptions – whether at federal, state or local government level – for achieving desirable development impacts. The level of attention, priority and preeminence accorded to data production and data-based policy decision-making, can be closely linked with the outcomes that we expect and/or experience.

2. *Isolating conundrums and contradictions in Nigeria's development experience*

For the purpose of our discussion, let us employ a working definition of "conundrums" and "contradictions". In the ordinary meaning of the word, a conundrum is "a confusing problem or question that is very difficult to solve". In other words, a puzzle. Likewise, the meaning of the word "contradictions" is literal: "a situation(s) in which inherent factors are inconsistent or contrary to one another". "Coherence" and "Consistency" are simply the opposite state of affairs to contradictions, and will be taken, for simplicity sake, to mean the same.

One may observe that the word "*difficult*" as contained in the definition of 'conundrum' does not mean "*impossible*". The difference between both, in my opinion, is the extent to which we understand the situation which, in turn, informs how we address it. The better our understanding, the higher the likelihood of finding a solution. Other than by divine revelation, the availability of data is an important evidentiary way by which serious societies have overcome their conundrums.

Nigeria faces quite a number of conundrums and contradictions, but I have identified two which I consider key and existential for now. These are the *conundrum of Old Glory*, and the *conundrum of One Talent*. Each is discussed in further detail in the following sections.

3. *The conundrum of Old Glory*

The first conundrum I would like to draw attention to is what I have termed as the conundrum of Old Glory. In its basic form, it involves the mismatch between available input and desired output. You cannot plant apple seeds and expect to eat orange fruits – though our international trade professors here might say this is possible if there was specialization and trade. But, in the absence of trade, what you put in is what you get out. The conundrum of Old Glory, however, traps all of us – government, ivory towers, and the larger society – in this fantasy of the economy's "old glory" and clichés of "bigness". We have often heard these terms: "most populous black nation on earth", "largest economy", "largest market on the continent", "large arable land", "if you plant anything anywhere, it will grow", "1 in 5 black people is etc …". In one sense, these sentiments are more nationalistic jingos than reasoned foundations for policy prescriptions. Let us consider, for instance, the advantages of being Africa's most populous country and largest economy. For one thing, we know that population dynamics change, and current estimates have not been based on actual or recent censuses. Moreover, without adequate plans to take advantage of the demographic dividend, it might end up being a brake on- rather than a boon for the economy. Nigeria's population is, for example, projected to become the 3rd largest in the world within three decades, whereas it was not even among the top 10 most populous in 1950.

Table 1: World population by country.

Rank	Country or area	Population in 1950 (millions)	Cumulated percentage	Rank	Country or area	Population in 2017 (millions)	Cumulated percentage
1.	China	554	21.9	1.	China	1 410	18.7
2.	India	376	36.7	2.	India	1 339	36.4
3.	United States of America	159	43.0	3.	United States of America	324	40.7
4.	Russian Federation	103	47.0	4.	Indonesia	264	44.2
5.	Japan	83	50.3	5.	Brazil	209	47.0
6.	Germany	70	53.0	6.	Pakistan	197	49.6
7.	Indonesia	70	55.8	7.	Nigeria	191	52.1
8.	Brazil	54	57.9	8.	Bangladesh	165	54.3
9.	United Kingdom	51	59.9	9.	Russian Federation	144	56.2
10.	Italy	47	61.7	10.	Mexico	129	57.9

Rank	Country or area	Population in 2050 (millions)	Cumulated percentage	Rank	Country or area	Population in 2100 (millions)	Cumulated percentage
1.	India	1 659	17.0	1.	India	1 517	13.6
2.	China	1 364	30.9	2.	China	1 021	22.7
3.	Nigeria	411	35.1	3.	Nigeria	794	29.8
4.	United States of America	390	39.1	4.	United States of America	447	33.8
5.	Indonesia	322	42.4	5.	Dem. Republic of the Congo	379	37.2
6.	Pakistan	307	45.6	6.	Pakistan	352	40.3
7.	Brazil	233	47.9	7.	Indonesia	306	43.1
8.	Bangladesh	202	50.0	8.	United Republic of Tanzania	304	45.8
9.	Dem. Republic of the Congo	197	52.0	9.	Ethiopia	250	48.0
10.	Ethiopia	191	54.0	10.	Uganda	214	49.9

Source: World Population Prospects (UN DESA, 2017)

Taking the projections, let us imagine the outcome if such an economy is unable to generate adequate jobs, to stimulate consumption demand which, in turn, boosts production and higher output: the sustainability and sustenance of such a country is very much in doubt. For example, labour force statistics as at Q3 2018 indicate that first time job seekers could wait up to four years before securing their first job, effectively wiping out their college investment. (This is something you students need to think about while you are still here. It used to be you worry about employment after graduation but it has become something you start planning for now.) As reported, out of the 9.8million unemployed doing absolutely nothing, as at Q3 2018, as much as 90% were seeking their very first jobs, indicating the high barriers to entering the workforce. Equipping the workforce in a large economy is therefore more urgent and important than just having a large population.

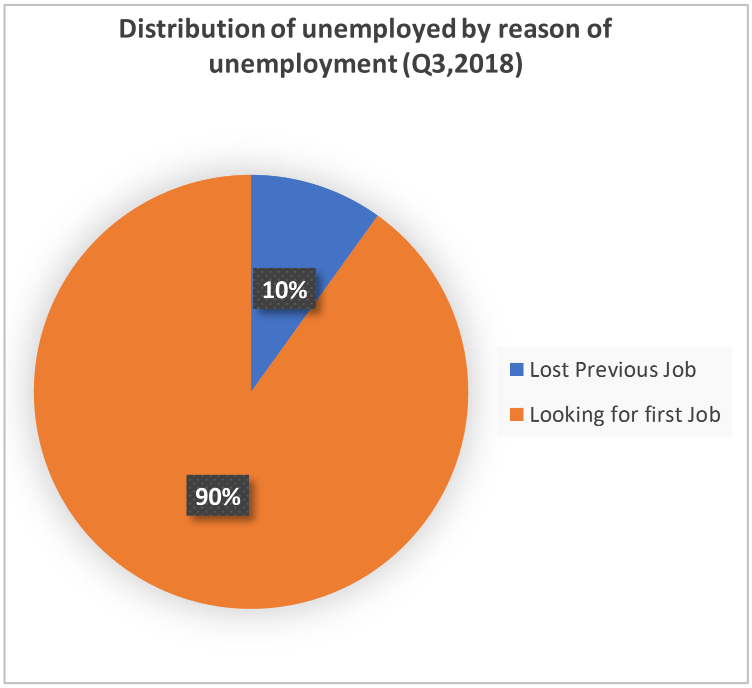

Figure 1: Reasons for being unemployed *Source: NBS, 2018*

A second limitation to relying on the old glory of population size is the threat posed by climate change. In fact, the increasing southward population migration, a possible consequence of a changing climate, necessitates a re-consideration of how land resources should best be deployed and allocated for optimal returns.

Yet, sentiments about old glory have, too often, had significant influences even on the policymaking machinery and decision-making processes. No serious economy thinks like this in the 21st century, where, even much smaller economies, landlocked countries, mineral-poor countries, recently war-torn countries have been able to leap-frog the development stages, from third world to first world.

Instead of relying on sentiments or ideology that sees population size as an advantage, the reality is that the Nigerian economy remains a largely monocultural economy that faces substantial risks unless it diversifies its economic structure and fiscal revenue sources - and very fast too. To elaborate more on this, let us think of the Nigerian economy as a house built on 3 pillars. We often divide the Nigerian economy into oil and non-oil but in reality, there are three parts.

First, is **An oil sector**, that contributes about 9% to the Nigerian economy today, but from which 80% of total Nigerian government revenue and 95% of foreign exchange is derived. This makes government revenue vulnerable to earnings instability. It also means imports and the attractiveness to foreign investors is dependent on this single commodity, which is relatively unimportant with respect to the whole economy but somehow still critical for growth and development;

i. **Second, we have an import-dependent, consumption-driven non-oil sector,** that relies on foreign exchange earnings from the oil sector and related capital inflows related to the fortunes of the oil sector, to finance the imports of intermediate/finished goods to meet domestic demand. This sector contributes 52% of the economy; and
ii. **Finally, we have an investment-driven non-oil sector,** that does not rely principally on the oil sector or on foreign exchange earnings. Instead, this third pillar harnesses local inputs of raw materials, intermediate goods and domestic labor as factors of production. This all-important pillar forms only about 39% of the Nigerian economy.

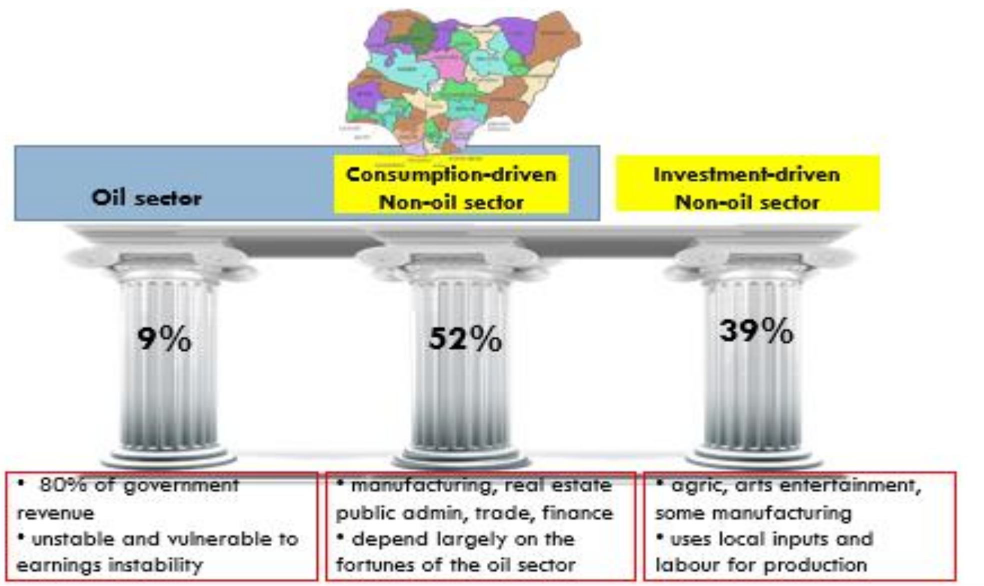

Figure 2: Structure of the Nigerian economy

This means that the Nigerian economy is 61% directly and indirectly dependent on oil., essentially building the house on one pillar supported by two shaky but more dominant pillars that are not within its control. The strength of those other two pillars (or 61% of our economy) depends on unpredictable international oil prices as well as stability in the Niger Delta. Obviously, as long the principal oil sector pillar remained firm, our house continued to stand. But once that pillar becomes unstable, shaken by developments in the global economy that are beyond our control, the house will be prone to collapse. This, in a nutshell, is the pragmatic assessment of the Nigerian economy.

This brings us to the next conundrum I would like to touch on, which I have termed the conundrum of One Talent.

4. The conundrum of One Talent

This, in my opinion, is the direct, inevitable consequence of the first discussed above. As some may already guess, the term is borrowed from the parable where a master gives out talents to his workers, but one of them decides to bury, rather than invest, his. The other workers, on the other hand, did invest theirs and when the master returned, he scolded the worker who buried his and gave his talent to the wiser ones. Among the many morals of the story, two lessons are relevant for economic policy: the need to diversify, as well as the wisdom of using what you have to get what you want.

Nigeria's reliance on oil as the dominant export, and the attendant difficulty of achieving rapid structural diversification, can be likened to the afore-mentioned parable. Not only have we made oil our 'one talent' – and literally, kept it in the ground - we do not seem to have utilized it well enough to achieve other development priorities. This is something many other oil producers have done, i.e using oil and oil receipts to create a situation where that same oil is no longer as important because there are even more strategic spin-off industries. The Nigerian economy, on the other hand, is still so sensitive to developments in the oil sector that irrespective of whether the price of crude oil rises or falls in the international market, there is a potential negative effect on the domestic economy. The same goes for production: a drop in domestic production would equally have a negative effect while a rise in production has been virtually impossible to achieve or sustain, for geopolitical and perhaps technological reasons.

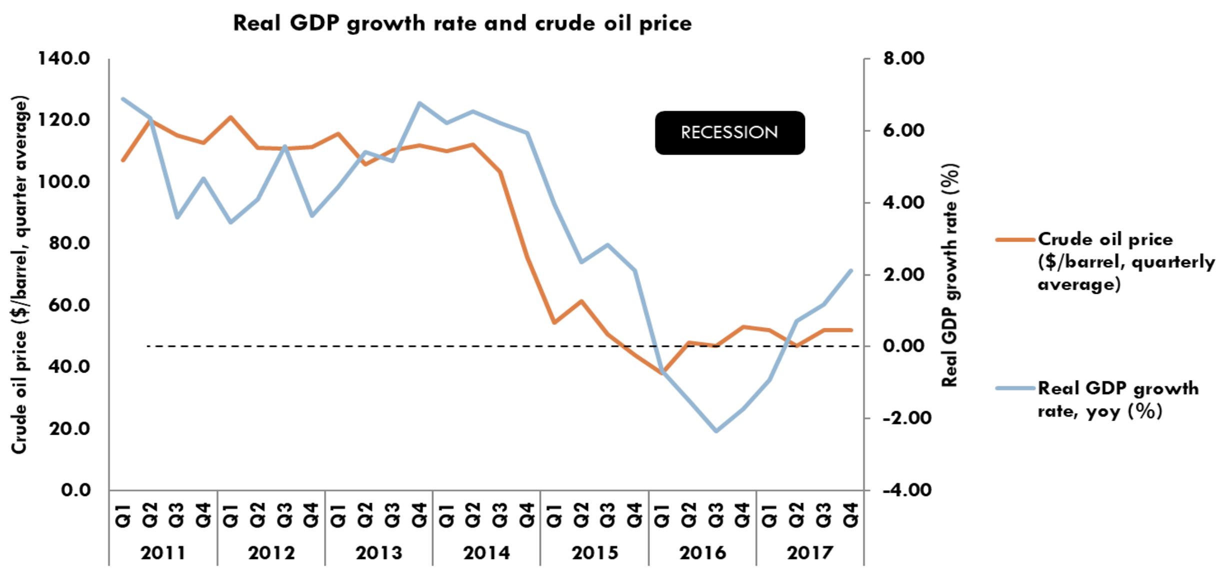

Figure 3: GDP growth and oil price trends

This, therefore, is the conundrum that we face: that our one talent may actually be more a liability than a blessing since, regardless of price or quantity (production) changes, the net value to the economy has tended to be non-positive. This conundrum played out vividly over the last decade when the price of oil rose sharply between 2012 and 2014 but fell between 2014 and 2016, resulting in Nigeria's recession of 2016-2017.

The Nigerian economy officially went into a recession in the second quarter of 2016 as we all know. The immediate driver of the recession was the drop in international oil prices, occurring simultaneously as massive losses in crude oil production due to the vandalism and insecurity in the oil producing region. This resulted in weaker exports, lower accretion to the foreign reserves, waning investor confidence as well as a rapid depreciation in the exchange rate. These developments, in turn, resulted in high cost of imports, rising costs of production (especially manufacturing) due to the acute scarcity of foreign exchange and pre-existing infrastructure challenges. Additionally, higher food and transport costs (due to rising inflation and increasing interest rates) further depressed real household disposable incomes which would have raised household consumption. In effect, the abundance of oil resource – or more precisely, the management of this resource - which is ordinarily expected to provide the necessary fiscal muscle for rapid growth and development, remains a potent source of macroeconomic instability. Figure 4 depicts the macroeconomic interactions associated with the recessionary period which arose primarily from developments in the oil sector.

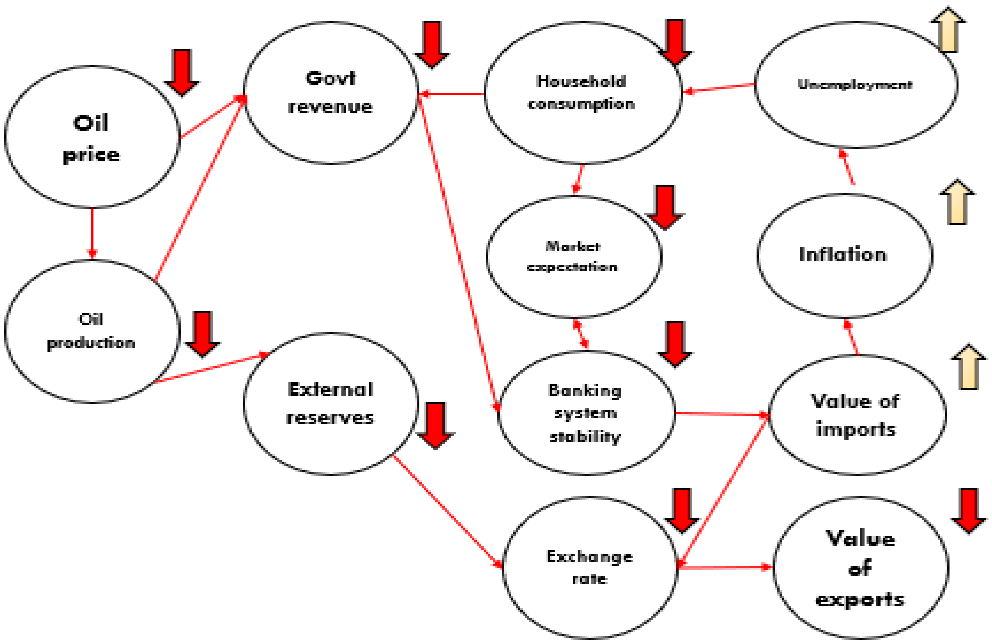

Figure 4: Tracing the effect of Nigeria's dependence on oil during 2016-2017 recession

Nevertheless, it is my contention, that if policymakers had paid closer attention to data even as far back as 2014, perhaps more could have been done to forestall the recession. For example, we were already observing declining foreign reserves from about \$47.3bn in Q1 2013 to \$36.6bn by mid-2014, while capital inflows slowed from \$20.9bn in 2013 to \$9.7bn by the end of Q2, 2014. Economic recessions or downturns do not occur overnight, just as people don't suddenly have a heart attack. The body would have been sending signals that something was not quite right, at least for a while, before it finally breaks down. In the same way, economic data showed the state of health of the economy long before the collapse. Just as one may be able to prevent, delay or manage the effects of a heart attack early enough (such as through lifestyle changes), we may also be able to minimize, delay or prevent an economic downturn depending on the insights provided by data and consequent steps taken.

5. Diagnosis: understanding the causes and consequences of conundrums

What could have been done differently during the boom years given this understanding?

Firstly, Wise spending and prudent investment of oil windfall, and diversification of public revenues. We know that oil and gas are non-renewable natural resources or wasting assets. As such, the revenues they provide will, someday, come to an end, either due to exhausted resources or when the world shifts more fully to alternative energy sources, as is happening already. As we are aware, Nigeria has previously witnessed booms in the oil and gas sector. Ideally, during periods of unusually high oil prices and robust oil production, prudent oil producing countries should do 4 things:

1. They pay off their debts and save for a rainy day
2. They invest in their domestic capacity to produce
3. They consume less imported and more locally made products and export the rest
4. They invest the windfall in infrastructure and on projects that will yield sustainable development.

But what did we do as a country? **Firstly, Nigeria did not save as we should have:** Between 2007 and 2015, saving in the excess crude account actually declined from $20 billion to less than $2 billion, even as recurrent expenditure continued to climb without any commensurate increase in capital for investment budgets. Assuming instead we had chosen to save the windfall, from my estimates, our foreign reserves could have risen to over $65 billion at the peak of the recession, rather than the $25-$28billion we had. Such savings would have also made it easier to fund some of the critical infrastructure projects which required counterpart commitments and keep manufacturing and other foreign exchange dependent sectors functioning.

Secondly, we did not significantly invest either: Gross capital formation, which is used to gauge the level of public and private investment remained more or less flat during the boom years from 2007 to 2015, indicating that Nigeria was not prioritizing investments in critical infrastructure. There was no substantial growth in investment to GDP ratio, despite the fact that revenues were rising. The performance of federal capital budget expenditure, for example, declined by one-third during the period from over N1 trillion in 2011 to about N370 billion in 2015. At the same time, joint venture cash calls, which constitutes government's contribution to developing future oil and gas resources, kept falling.

Instead, Nigeria continued to consume, especially imported goods and services. The allocation of foreign exchange to import refined petroleum and other fuels, pay school fees and medical bills abroad kept rising, while local manufacturing continued to depend heavily on imported, rather than, locally available raw materials. The consequence of relying on an unsustainable economic structure and ignoring insights from economic data has been learned the hard way.

6. Growth, development and taxes

I have spent considerable time to outline these two conundrums because I consider them foundational to explaining why the country is where it is today. However, there is another necessary condition that, I believe, goes along with the proposed solutions above. The issue of interest comes from understanding how growth can co-exist with a fairly high poverty rate at 62.6% (2010). I believe the issue here has been the rising level of income inequality. In other words, the distribution of Nigeria's wealth has grown increasingly unequal resulting in a situation where the top 30% of income earners accounted for 58% of consumption in 2016, compared to 55% in 2004. At the national level as well, Gini coefficient rose from 0.36 to 0.39 between 2004 and 2016.

It should be noted, however, that this is not necessarily a bad situation, nor is it unexpected in a rapidly expanding economy as we saw over the last decade or so. What has been unfortunate is the inability to achieve growth that is more inclusive and job-creating. Without sufficient job creation, the unemployment rate will continue to rise, and a faster rise in unemployment means anti-social and deviant behaviour will become more prevalent, raising the prospect of social conflict. This is already happening.

On the other hand, growth can be positively harnessed to promote human and economic development through the instrumentality of a well-designed and effective tax system. The goal of such a system is to ensure that public resources used up in the production process are compensated for, and (re-)deployed effectively and efficiently in providing future public services. The absence of such a system, either because it is inefficient in collection, or ineffective in deployment would respectively translate to significant untaxed economic activities, or inadequate domestic resource mobilization to finance public service delivery.

Under this situation, therefore, while growth can be accelerating, it needs to be complemented with a robust tax administration system in order to ensure that such growth translates to meaningful socio-economic and human development. In other words, we can have growth without development, but rarely can we have development without growth. Policies that promote growth and business expansion should, therefore, be encouraged not stifled. At the moment, Nigeria still has one of the lowest tax-to-GDP ratios and greater efforts is required to boost domestic revenue as well as diversify revenue sources (See Fig. 5).

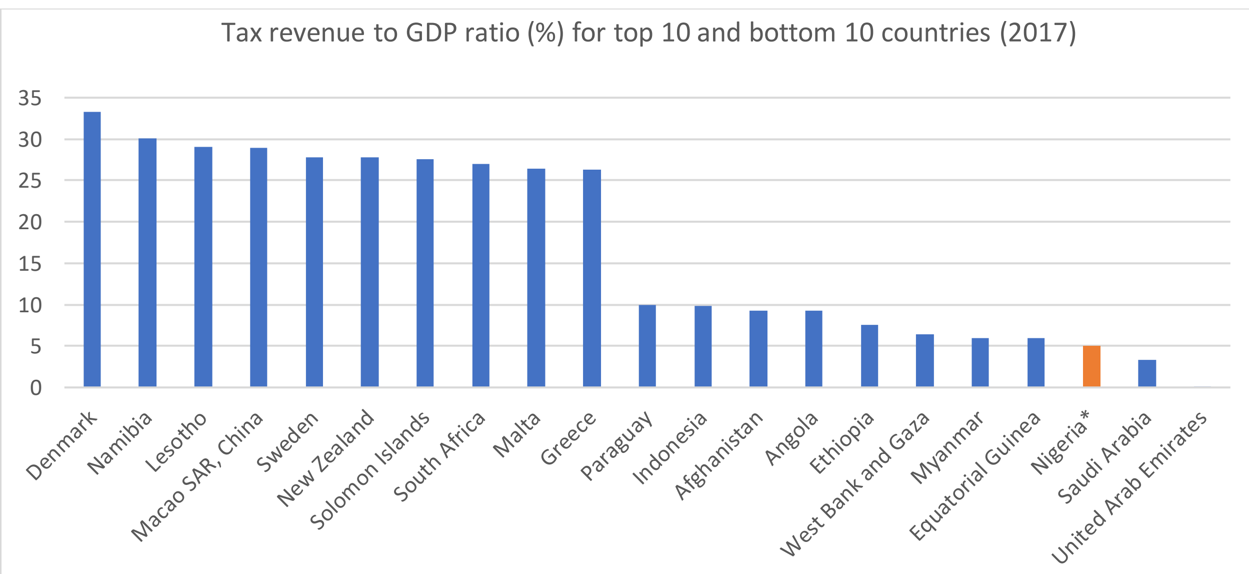

Figure 5: Tax to GDP ratio by country *Sources: World Development Indicators; NBS*

However, rather than raising tax rates and squeezing businesses and individuals that are already tax-compliant, a more effective strategy might be to broaden the tax base, increase the number of taxable entities, as well as improve administrative collection efficiency. To go along with this, there must be efficient spending of tax revenue. This will not only demonstrate accountability to the tax-paying citizenry but, hopefully, also encourage compliance on the part of tax-dodgers as well.

7. Towards coherence and consistency: innovations in data production for policymaking

As earlier noted, data is what improves our understanding of our current situation, and it is a fundamental requirement for the successful design or implementation of any solutions. This is where, I am happy to say, NBS comes in. In fact, this month marks five years since the release of the final revised estimates of the GDP/national accounts rebasing exercise. As I stated on several occasions at the time, the primary purpose of the exercise was not so much to determine what country had the largest economy on the continent; rather it was to ensure that the frameworks for computing the nation's GDP was consistent and coherent, given that the last exercise was undertaken over 20 years earlier and was no way compatible or representative of current economic realities. Thus, through that exercise, a new benchmark year of 2010 was established with the expectation that this base (reference) year would be updated every five years thereafter.

But even before that exercise, since 2011, NBS' data production system has been undergoing a total overhaul across all the major stages, from data collection to dissemination to advocacy for the purpose of improving the reliability of data products. High quality data represents an invaluable support structure to ensure coherence and consistency in the policy and decision-making process. I will highlight a few of these initiatives.

For instance, we have established collaboration arrangements to diversify our data sources with respect to administrative data collection. Valuable data is received on a quarterly basis from the Federal Inland Revenue Service, Securities and Exchange Commission, Central Bank of Nigeria, Joint Tax Board, Office of the Accountant General of the Federation (OAGF) and even from States' Accountants-General, amongst others. Notably, we are working to harmonize our methodological framework with the FIRS to ensure that, in the near future, tax collection data can be analyzed using the same classification of economic activity (ISIC Rev. 4) as NBS currently does. Similarly, on survey/censuses data, we now routinely deploy computer assisted personal interview (CAPI) devices to improve the speed, accuracy and reliability of data from field visits. This has helped to considerably save costs and scale-up data collection more quickly and effectively as the need arises. In addition, it has reduced errors and made truancy difficult. We are able to monitor who entered what data, when and where through the GPS features. We can also track how long it took to complete the survey interview, for purposes of enumerators' performance assessments. The result has been much higher quality field data and quicker data processing.

With respect to data processing, we have consolidated a number of surveys to reduce duplication and, over time, will de-emphasize surveys altogether while strengthening the system of administrative statistics. This has been a key strategy to ensure greater data quality and reduce costs of data production.

Data dissemination has seen a number of innovations as well. All our regular and special publications are provided free, online on our website [*www.nigerianstat.gov.ng]*, while the data is uploaded on the data portal, and ultimately archived in the National Data Archives (NADA). In addition to our mailing list, we provide our key reports to members of the Federal Executive Council, and regularly participate in high-level policy meetings at the MoF, EMIT, CBN etc.

We have a vibrant presence on social media (notably *Youtube, Facebook* and *Twitter*) to reach a wider, more youthful, tech-savvy citizenry. These efforts, in our opinion, foster transparency, make users aware of available data, and promotes its use in decision-making, whether as citizens, businesses or public servants. We have also started publishing infographics so that the most interesting aspects of our reports are made easily available. Furthermore, we have developed mobile-compatible applications (apps) available on iOS and Android platforms for mobile users and the NBS website remains the go-to source for all official statistics, available as data files as well as reports. These are just a few of our recent initiatives to improve data collection and dissemination despite the challenging operational environment.

One of my interesting discoveries since we started engaging users (especially via social media platforms) has been the limited understanding of how the economy works, common statistical concepts, their interpretation and usefulness even among the more educated users. It appears many do not sufficiently appreciate statistical methodologies or the purpose of particular indicators. Perhaps this is one area educational authorities can consider intervention. The citizenry is better off when they are able to weigh policy choices and make informed decisions about political and socio-economic issues. As part of our public interaction, we often invite the press to ask questions about our data and organize seminars for them on how to correctly report it. Moreover, we invite private individuals to join our data collection exercises as observers to monitor the process in line with our philosophy that the best way to deal with someone that doesn’t trust you is to open up completely and not hide anything so they can see for themselves. For us, the opportunity to get feedback from our users is an important culture that we try to feed into the data production process.

In this last section, before I conclude, I would like to speak on improving collaboration with members of the academia.

8. *Collaboration with the academia*

We have seen how data can help to understand macroeconomic relationships, improving quality of decisions by policymakers and promoting economic diversification. Ensuring the availability of relevant and high-quality data on all aspects of socio-economic life in Nigeria is at the heart of our work at NBS. In recent years, we have been able to achieve this by working closely with erudite members of the academia (some of who are present with us today). Permit me to highlight two quick examples here.

During the 2014 GDP rebasing exercise, which was aimed at improving the quality of the national account series, an elaborate plan of collaboration was launched involving multiple stakeholders in government, private enterprise, development partners, academia, and even representatives of political interest groups. At the end of the exercise, because several key stakeholders had been part of the process all along, including a team of 4 economics professors who served on a validation / review team, the results were more readily accepted both locally and internationally. Similarly, when NBS modified its unemployment rate computation methodology in 2015, the review committee was chaired by a member of the academic community. The involvement of the academic community in both projects allowed the Bureau to benefit from the perspectives of 'outsiders', as well as improve the credibility of the outcome. We look forward to building and strengthening such relationships in the future.

9. Conclusion

In conclusion, I would like re-state that the development challenges facing the country are not insurmountable; they are more or less the consequences of actions and policy choices taken at some point. The conundrums and contradictions identified here provide a framework for better understanding not only of current economic developments, but also the underlying causes as well as their likely future consequences. Importantly, we have seen that the availability and use of data helps not only to better understand these current developments, but also aids our ability to ensure that coherent and consistent strategies are selected to address them. Yet, the challenges that face data production also remain enormous even as our society continues to generate significantly larger amounts of data daily.

As a public good, governments will need to continually invest in the data generation infrastructure, just as they invest in physical and social infrastructure. Moreover, as the economy becomes more sophisticated over time, new tools, sources and methods are required to ensure that we are measuring what is important within our context - and doing so in the right way. Expanding the collaboration with the academic research community and the private sector will enable data producers to continually develop the necessary tools and improve data generation processes. Lastly, the supply of data is not likely to be sustainable in the absence of its demand. As such, the institutionalization of data-driven policy approaches can help provide the necessary impetus for the continued delivery of data that is accurate, relevant and timely. On its part, the National Bureau of Statistics remains committed to ideas that contribute to raising the bar on the quality and utility of Nigeria's official statistics. We look forward to receiving feedback from consumers of our data, and working more closely with our partners to fulfil this mission.