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Gross Domestic Product (GDP) rebasing and the impact on Nigeria's investment environment

Bismark J. Rewane
Financial Derivative Company

GROSS DOMESTIC PRODUCT REBASING AND THE IMPACT ON NIGERIA'S INVESTMENT ENVIRONMENT

BISMARK J. REWANE
Financial Derivative Company, Lagos

1. INTRODUCTION

Gross Domestic Product (GDP[1]) measures the size and activities in a country at a particular point in time. Many socio-economic indicators depends on its level; and its rate of change, corrected for price movement, is often used to evaluate the extent to which the activities and health of a country has improved over time.

Given its significance, it is important that its values are accurately captured. Therefore, countries continuously attempt incorporating economic dynamics such as evolutions of new sector, product, pricing, technology and consumer behavior into their GDP figures. In this process, GDP rebasing is critical. This may involve replacing the existing price and quantity structure used to measure GDP with a more recent price structure; updating weights used in aggregating individual quantities; and incorporating methodological and conceptual improvements.

It has been recommended by the UN Statistical Commission (UNSC) that countries rebase their GDP every five years. However, Nigeria had been using 1990 base year until recently that it rebased to 2010. The recent rebasing has attracted many contradictory views; especially now that it has contributed immensely to the country's achieving its goal of being one of the top 20 economies in the world by 2020 with a GDP of USD900bn.

The heightened attention it has attracted suggests a need for a more structured argument for the exercise and this paper is contributing to this. The paper looks at the impact of the rebasing on an important economic variable – investment. This is because investment is necessary for capital accumulation and economic growth. Specifically, this study examines the impact of GDP rebasing on Nigeria's investment environment.

In addition to this introduction section, section 2 considers GDP rebasing and the Nigerian case, section 3 is on the Nigerian Financial System Strategy (FSS) 2020, section 4 is on investment types, drivers and the Nigerian environment, section 5 offers some lessons for Nigeria and section 6 is the summary and conclusion.

2. GDP rebasing in Nigeria

The United Nations defined rebasing as "the process of replacing present price structure (base year) to compile volume measures of GDP with a new or more recent base year." GDP rebasing is usually carried out at an average interval of five (5) years in order to ensure that national accounts statistics present the most accurate reflection of the economy. When done, it usually incorporates new economic activities which have not been captured in the previous computational framework.

In April 2014, Nigeria rebased its GDP and changed its base year to 2010 from 1990. As a result, Nigeria is now regarded as a medium income economy. The rebasing exercise helped incorporate the informal sector into the national accounts and this showed a great increase in activities of the service sector of the Nigerian economy.

Table 1 shows that rebasing of Nigerian GDP has led to a change in total nominal GDP ranging from 59.5% (2010) and 89.22% (2013 forecast). Disaggregating these percentage changes further, table 2 depicts that the service sector is responsible for the majority of the changes documented from the rebasing exercise. Specifically, the service sector grew by about 240% between the 1990 base year values and that of 2010.

Table 1: Comparison between old and new GDP series

Total Nominal GDP	2010	2011	2012	2013f
Old Series (N'm)	33,984,754.13	37,409,860.61	40,544,099.94	42,396,765.71
New Series (N'm)	54,204,795.12	63,258,579.00	71,186,534.89	80,222,128.32
% Change	59.50	69.10	75.58	89.22

Source: NBS (2014)[2]

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[1]GDP is the market value of all final goods and services produced within a country in a given period.
[2]NBS (2014). Measuring better: frequently asked questions on the rebasing / re-benchmarking of Nigeria's Gross Domestic Product (GDP)

The rebasing has enabled the service sector in Nigeria to be better covered and it has shown that economic activities such as wholesale and retail trade, information and communication, real estate services, human health and social services, professional, scientific and technical services have gained importance in Nigeria. Besides, the service sector is expected to grow fastest and ahead of sectors such as industry and agriculture. Therefore, while Nigeria is becoming slightly more diversified, the country is heading towards a more service-oriented economy.

3. THE NIGERIAN FINANCIAL SYSTEM STRATEGY (FSS) 2020

Nigeria has the goal of becoming one of the top 20 economies in the world by 2020 with a GDP of USD900bn. Therefore, the FSS 2020 was developed to aid this goal. The vision of the strategy is to make Nigeria the safest and fastest-growing financial system amongst emerging economies. It is made to strengthen the Nigerian domestic financial markets; enhance their integration with external financial markets; and engineer Nigeria's evolution into an international financial centre (IFC). Some of the goals and recommendations of the strategy include:

- Integrate the informal financial sector into the formal financial sector;
- Enhance integration with external financial markets.
- Ensuring the progressive unification of trade and commercial laws amongst ECOWAS and African Union (AU) countries;
- Creating an environment that attracts global financial services firms and enables Nigerian financial institutions to export their products and services.
- Foster a culture of securities innovation and development; and encourage liquid and efficient secondary markets for trading in securities;
- Promote a strong knowledge-based capital market.
- Facilitate the development of a more robust, vibrant and deep money market;
- Increase the volume of debt instruments issued by corporations, relative to government treasury bills issued in the market;
- Create a sustained macroeconomic environment that will make exchange rate management to be predictable.
- Create business friendly environments for SMEs; and revolutionalise their access to finance
- Achieving Low and Sustainable Single Digit Inflation (Monetary Policy-Related);
- Promotion of financial sector soundness
- Create a legal and regulatory platform that supports electronic business transactions within the financial services industry, and enforces compliance with standards.

Table 2: Percentage Change in the GDP between the Old and New Series by Sectors

	2010	2011	2012	2013f
Agriculture	25.97	24.4	18.67	19.82
Industry	-10.65	6.31	15.6	34.46
Services	239.68	237.63	239.56	240.49
Total Nominal GDP	59.5	69.1	75.58	89.22

Source: NBS (2014)

In terms of performance so far, highest levels of achievement might have been recorded in the areas of predictable exchange rate, single digit inflation and financial (banking) soundness. At the other extreme end however, achievements in the areas of integrating informal financial sector, achieving a strong knowledge-based capital market and creating enabling environment and finance for SMEs can still be described as low. Also, in the other remaining areas, the levels of achievement can still be described as marginal and requiring much effort.

4. INVESTMENT – TYPES, DRIVERS AND THE NIGERIAN ENVIRONMENT

Investment is an asset or item purchased with the hope that it will generate income or appreciates in the future. In the economics, investment entails additions to the economy's capital stock. It involves the purchase of goods that are not consumed today but are used in the future to create wealth. It is the accumulation of newly produced physical entities, such as factories, machinery, buildings, and inventories. In finance however, investment is putting money into an asset with the expectation of capital appreciation, dividends, and/or interest earnings. This may include investment in bonds, shares, options and other financial assets.

Investment can also be classified into domestic and foreign investments. The components of domestic investments are private domestic investment and public domestic investment, the latter being investments by government and public enterprises on social and economic infrastructures, real estate and tangible assets. Equally, foreign investment can be foreign direct investment (FDI) or Foreign Portfolio Investment (FPI). While the former is investment in tangible assets by foreigners, the latter is their investments in shares, bonds, securities etc.

All these forms of investments are complementary and necessary for economic growth and development of a nation. Hence, countries and researchers pay attention to factors affecting them. Important[3] determinants of investments that have been found in both the theoretical and empirical literature include interest rates, growth in output, tax rate, development in the financial sector, trade openness and government debt.

Higher interest rate imply higher cost of capital and this tends to reduce domestic investment; however, it may also serve as an indication of return on the investments of foreigners thereby aiding foreign inflows. Increase in GDP is expected to increase domestic investment through what is known as the accelerator principle; it also encourages market-seeking FDI since higher GDP imply higher market size. Higher taxation discourages investment while development in the financial sector is expected to aid both financial and foreign portfolio investment. Further, economies that are more opened to external trade have also been found to enjoy higher foreign investment inflow. Conversely, government debt often crowds out private investment and reduces investment generally as high fisc al deficit increase the possibility of raising taxes.

Coming to investment in Nigeria, figure 1 shows that domestic investment has been moving closely with GDP[4] trend in Nigeria and it lies above both the foreign direct investment (FDI) and foreign portfolio investment (FPI). Also, the values of FDI have been above those of FPI until recently. However, while FPI appears to depict similar trend with GDP, there are periods when the movements in FDI deviates from those of GDP. These trends may have implications for the effect of rebasing on the types of investment attracted. This is because it is often preferable to attract FDI than FPI; as the latter is more volatile and can be distorting.

Beyond the mere quantity of investment and its drivers, it is also important to consider the entire investment environment in which firms operate in Nigeria. This can be defined as the environment in which firms of all types have opportunities and incentives to invest productively, create jobs and expand. This environment can be affected by macroeconomic, governance, infrastructure and some other micro factors such as human resources, access to finance, among others.

Several notable efforts have been made to address some of these indicators of investment environment; especially at the broad macroeconomic level. The results of these have manifested in a relatively more stable macroeconomic and financial environment. For instance, the country has been able to sustain its high growth rate for about a decade, inflation rate has been brought to single digit, wide fluctuations in exchange rate have been avoided so far and a stronger banking sector has evolved.

The above notwithstanding, achievements at the governance, infrastructure and other micro levels have been far less impressive. Problems in this area of Nigerian investment environment still include:

- Poor infrastructure
- Weak institutional framework,
- Extensive regulation, business registration and certification process
- Low disposable incomes of workers,
- Uncoordinated government policies among the three tiers of government
- Multiple taxation,
- Rent-seeking behavior, especially among public officials
- Barriers to entry and competition,

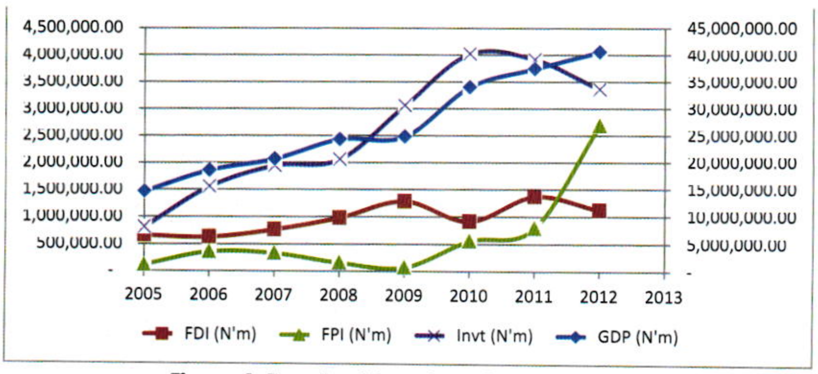

Figure 1: Trends of Investments and GDP in Nigeria

Source: CBN Statistical Bulletin, 2012

[3] There are many more determinants; but we have selected few that can be impacted upon by higher GDP value

[4] Note that while GDP is plotted along the right axis, other series are plotted on the left axis.

- Ineffective bankruptcy laws and procedures
- Weak corporate governance
- Poor access to finance
- Security challenges

All these constitute a drag in the competitiveness of Nigeria. For instance, table 3 shows that Nigeria ranks as number 120 out of 148 in the Global Competitiveness Index (GCI) of 2013/2014. It is also shown that the country has fallen from its 115 position of 2012/2013 ranking. Now that Nigeria has overtaken South Africa as the largest economy in Africa, it is important for the country to also employ strategies that will make it overtake South Africa' 53rd position in the GCI.

5. LESSONS FOR NIGERIA

In examining the impact of GDP rebasing on the Nigerian investment environment, it is important to evaluate how GDP rebasing will generally affect the determinants of investment and also analyze some stylized facts from countries that have also rebased their GDP. Among the effects of the rebasing are that Nigeria's GDP has increased in absolute term and some sectors have emerged as relatively important when considering their contributions to total output. Table 4 shows examples of some likely effects of rebasing.

Table 3: Nigeria's Ranking in the Global Competitiveness Index 2012-2014

Country/Economy	GCI 2013-2014 Rank	GCI 2012-2013 Rank	Change
Mauritius	45	54	9
South Africa	53	52	-1
Botswana	74	79	5
Kenya	96	106	10
Ghana	114	103	-11
Egypt	118	107	-11
Nigeria	**120**	**115**	**-5**

Source: The Global Competitiveness Index (World Economic Forum – WEF)

Table 4: Impact of rebasing on investment

SN	Factor	Impact of rebasing	Impact on Investment
1	Interest rates,	Rebasing has the tendency to increase money supply; thereby lowering interest rate	Lower interest rate implies increase in domestic investment; but may also lead to a reduction in foreign capital inflow
2	Output and its growth	Rebasing makes output level appear bigger	Market-seeking FDI will flow into Nigeria
3	Tax rate	Rebasing implies government needs to increase its tax revenue as tax/GDP ratio appears small	Increase taxation implies less investment. Except when tax revenue is efficiently invested in the development of infrastructures to
4	Financial development	In line with the country's FSS 2020, investment in financial infrastructure will boost the impact of rebasing on foreign capital inflows	When larger market attracts foreign investors, development in Nigeria's financial infrastructure will facilitate exchange and contribute positively to investment. However, rebasing implies that the size and depth of Nigerian financial market become smaller (ratios of money supply and market capitalisation to GDP will fall)
5	Trade openness	Rebasing will imply low openness as measured by (Export+Import)/GDP	If foreign investors look at this ratio, then low openness will discourage foreign investment
6	Government debt	Rebasing implies government debt is low; hence, government can borrow more.	Increased borrowing of government may crowd out private investment. It may also serve as incentives for foreigners to investment in sovereign bonds and hence encour age inflow of foreign capital.

Source: Author's compilation

The table suggests that rebasing can either be a blessing or a curse for investment; depending on how well it is managed. However, the fact that it may boost investment in the aggregate is reinforced because more attention is likely to be accorded to some investment opportunities that may present themselves as a result of the newly-emerging sub-sectors such as wholesale and retail trade, information and communication, real estate services, human health and social services, professional, scientific and technical services. The newly rebased figures may also influence government attention in some sector. This can lead to higher public investment provided attention to other sectors is not reduced. It will also be informative to consider some cross-country evidence on the status of investment in the post-rebasing period.

I. Uganda rebased its GDP in 2001: FDI inflows in Uganda went up from $151,486,150(2.6% of GDP) in 2001 to $1,721,169,095 (8.6% of GDP) in 2012. Gross capital formation grew from 19.3% of GDP in 2001 to 24.5% of GDP in 2012.
ii. Malaysia rebased its GDP in 2005: FDI inflows in Malaysia went from $3,924,786,634 (2.7% of GDP) in 2005 to $15,119,371,104 (5.22% of GDP) in 2011. Gross capital

formation remained relatively the same at about 23% of GDP through the period 2005 to 2011.

iii. Brazil rebased its GDP around 2005: FDI inflows went from $15,459,981,604 (1.8% of GDP) in 2005 to $71,538,657,409 (2.9% of GDP) in 2011. Gross capital formation went up from 16.2% of GDP to 19.7% of GDP within the period.

iv. Nicaragua rebased its GDP around 1998: FDI inflows fell in the years following the exercise. It went from $218,200,000 (4.7% of GDP) in 1998 to $150,200,000 (2.8% of GDP) by 2001. Gross capital formation also fell from 34.3% to 26.8% over the period.

The evidence above is mixed but there is a higher tendency for investment as a ratio of GDP to rise following the rebasing of a country's GDP. However, such investment rise is more likely to occur in foreign investment than domestic investment.

6. SUMMARY AND CONCLUSION

The recent rebasing of Nigeria GDP from 1990 to 2010 has pushed the country towards achieving its goal of being one of the top 20 economies in the world by 2020. It has also generated a lot of debate; especially on its appropriateness, timing and effect on welfare of Nigerians. This paper attempts to contribute to this debate by examining the impact of GDP rebasing on Nigeria's investment environment. It is shown that rebasing of Nigerian GDP has led to a change in total nominal GDP in a range above 60%. Majority of this increase is generated by the service sector; implying that Nigeria is heading towards a more service-oriented economy.

The investment environment in Nigeria is shaped by some macroeconomic, governance, infrastructure and other micro factors. While some successes have been recorded in the macroeconomic environment, much still have to be done to other factors as they grossly limit the competitiveness of the country. Theoretically, rebasing may boost investment in Nigeria; especially foreign investment. If new funds are channeled to the newly emerging service sector by domestic investors and if foreign investment is well integrated with domestic investment, then rebasing may also raise domestic investment. Evidence from countries that have rebased and the trends of investment data in Nigeria however suggest that rebasing will have higher impact on foreign portfolio investment than foreign direct investment and domestic investment.

The foregoing therefore suggests that rebasing has the tendency to exert a positive impact on investment but a deeper analysis will be required to isolate factors that can contribute to these impacts. This will be necessary so that Nigerian size can be converted to its benefits. Even though there are countries that have rebased and experienced higher foreign inflow, Nigeria has to work on improving its competitiveness and removing the identified problems to investment. It has to exploit the new opportunity presented in the service sector; but this has to be done without jettisoning its industrialization goal. This is because in the end, industrialisation is necessary for sustainable growth. More importantly is the growth in the manufacturing sector[6].

In addition to probable increase in investment in these sub-sectors, investments in labour-intensive industries will be high-yielding for the country and help solve its paradox of high growth and high unemployment. Also, the temptation to over-borrow should be guided against by the government as this is likely to crowd-out private investment and further shrink the already limited financing access that the country's small and medium scale industry obtain. Although both FDI and FPI are important, efforts should be made to attract more of the former as it is less volatile.

[5] The reader should note that these case studies are descriptive and may reflect the impacts of other phenomenon apart from rebasing

[6] The manufacturing sector has been found to possess high backward and forward linkages with the rest of the economy.