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Nigeria 2002- 2012: high economic growth rate, high incidence of poverty, why?

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NIGERIA 2002-2012: HIGH ECONOMIC GROWTH RATE, HIGH INCIDENCE OF POVERTY, WHY?

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1.0 INTRODUCTION

The recent report by the National Bureau of Statistics regarding the widening poverty level in Nigeria is damning not because this new level of poverty is the highest in history but because it is coming at a time when the average growth in the gross domestic product in the last 10 years has been impressive. The gross domestic product grew by 10.2 per cent in 2003. It peaked at 10.5 per cent in the ten year period while the average was 7.5 per cent. This growth numbers compare very favourably with the average growth rate of the GDP of developing countries and surpasses that recorded by the G7 countries by several percentage points. However, the measure of national wellbeing, the poverty indices reveals an image totally at variance with the outlook of the economy. The incidence of poverty has increased to 69 per cent in 2010 from 54.4 per cent 2004. Also, unemployment rose to 23.9 per cent in 2011 from 19.7 per cent in 2009. In the rural areas unemployment stood at 25.6 per cent while it was 17.1 per cent for urban areas. This is a serious dilemma and source of concern for policy makers and analysts who are always guided by the argument that the GDP, measured by the output or expenditure method must equal GDP measured using the income approach so that the growth in output exactly coincides with the growth in income levels which reduces poverty. How might this negative correlation be explained? It is common place to point to non-inclusive growth as the culprit because the drivers of growth might reside in particular sectors with little labour input so that the accruing income goes to a minute segment of the labour force leaving others poorer. Of course, tracing incomes to their beneficiaries and linking it to widening poverty would be more complicated than this one line argument but the main fact of the matter is that reducing poverty on a sustained basis will need a form of growth which will permit eligible citizens to participate in the economic growth process and benefit therefrom. This is inclusive growth.

So, the important issue is to set poverty reduction on a sustainable path. Inclusive growth dwells on this. It holds the growth of the economy as a precondition for poverty reduction. There is support for this view in Deininger and Squire (1998), White and Anderson (2001), Also, Kraay (2004) shows that growth in average incomes explains 70 percent of the variation in poverty reduction (as measured by the headcount ratio) in the short run, and as much as 97 percent in the long run. It is also required that growth must be sustained, encompass all sectors of the economy and provide opportunity for majority of the labour force to participate. It emphasizes productive employment but not direct redistribution of income. In sum, for an economy to be said to be inclusive, it must provide equal access to markets, factors of production and provide a conducive contractual environment to all economic agents.

How might poverty be reduced when the economy grows? We can become naively welfarist and argue that the few people whose incomes have risen with growth in GDP should contribute more in taxes and any other forms to government for redistribution and close the poverty gap. Actually, governments do have a role in bridging inequality and any number of models of redistribution is possible. It is even possible to suggest that governments should share the national budget amount, one off and equally, among citizens. This extreme position will certainly reduce poverty provided the budget amount accrues, all of them, on the day of distribution. This is not the case and even if it were to be the case, some people will squander theirs before the next distribution date and so still remain poor until the next distribution date. If direct distribution of incomes does not solve poverty permanently, what then should be done? There is need to develop policies that will gradually transform the structure of the economy to make growth inclusive, while maintaining high

** The views expressed in this paper are those of the author and do not represent the official position of the Central Bank of Nigeria or its Board of Directors.*

and steady growth of the economy.

The aim of this paper is in two folds. The first is to evaluate trends in economic growth in Nigeria and develop a simple model that explains why it is possible for high growth rate to be accompanied by increasing incidence of poverty as observed in the last decade. We have applied basic descriptive statistics for the analysis. After this introduction, the next section presents basic thoughts in literature about growth and employment as well as growth and poverty. Section III presents the trends in the growth of GDP and the structure of employment in Nigeria. Section IV solves the puzzle, high growth rate, high incidence of poverty. Section V suggests the roles which financial inclusion might play for effective monetary policy implementation. The last section concludes with recommendations.

2.0 Literature Review

2.1 Growth and Employment Nexus

Economists have adopted various models to explain and analyze the relationship between economic growth and employment. One prominent model is the Okun's law. Okun's law examines the relationship between a country's unemployment rate and the growth rate of its economy. In other words, Okun's law investigates how much of a country's gross domestic product (GDP) may be lost when the unemployment rate is above its natural rate. According to Okun's law output depends on the amount of labor used in the production process, as such there is a positive relationship between output and employment. Total employment on the other hand equals the labor force less the unemployed, as such a negative relationship exist between output and unemployment.

He further argued that, due to increases in the size of the labor force and in the level of productivity, real GDP growth close to the rate of growth of its potential is desirable in order to keep the unemployment rate steady. Therefore, the economy must exceed its growth potential if it is to reduce unemployment rate. Specifically, to realize a 1 percentage point drop in the unemployment rate within a year, real GDP must grow by about 2 percentage points more than the rate of growth of potential GDP over that period. For instance, if the potential rate of GDP growth is 2 per cent, Okun's law says that GDP must grow at about 4 per cent rate for that year to achieve a 1 percentage point reduction in the unemployment rate.

In an attempt to investigate the relationship between employment and growth in sub-Saharan African countries, Yogo (2008) found that employment challenges in sub-Saharan Africa were that of quality rather than quantity. According to him, the poor employment performances in Sub-Saharan Africa were not as a result of labour market rigidities, but that the observed increase in the number of working poor was as a result of weak economic growth over time.

Walterskirchen (1999) examined the relationship between economic growth, employment and unemployment in the European Union (EU) and found that the relationship between GDP growth and variations in unemployment rate could be explained under two scenarios viz: variations in employment and unemployment rates resulting from economic factors as well as those resulting from demographic factors and labour market dynamics. Employing time series analysis for individual EU countries and a panel data for the countries as a whole, he discovered the existence of a strong positive relationship between GDP growth and change in the level of employment.

Also, covering a ten year period from 1991-2001, Sawtelle (2007) estimated and compared the degree of responsiveness to changes in real GDP for each of fourteen industry sectors of the US. He went further to estimate for each sector and the aggregate economy two employment determination models, with one model relating employment to real GDP while the other related employment to other macroeconomic variables affecting employment. He concluded that since the demand for labour is a derived demand, the expansion of real GDP would generate increased derived demand for workers. The findings of Sawtelle (2007) supported those of Pandalino and Vivarelli (1997).

An International Labour Organization Report (1996) found that the elasticity of employment growth to GDP growth has not declined in industrialized economies as a whole. Individual country analysis, however, showed varied results with insignificant relationships found in the UK, Germany and Italy in the 1990s, thus suggesting a jobless growth due to country specific factors.

2.2 Growth and Poverty Nexus

Amis and Grant (2001) asserted that economic growth can reduce urban poverty through the generation of economic opportunities and employment. They however added that for this to be achieved, municipal governments must play a key role in the process.

Heshmati (2004) argued that although aggregate growth is both necessary and sufficient for reducing poverty, the issue is that benefits of growth is not usually equally distributed across different segments, sub groups, sectors and

regions of the society. He added that in analyzing the impact of economic growth on poverty reduction, the level and distributional impacts of growth on each of those strata's needs to be taken into account. He emphasized the need for diverse strategies towards bridging the growth-poverty gap. He concluded that Initial conditions, specific country structures and institutions all play vital roles in arriving at a nationwide solution to the problem of poverty.

Melamed et al (2011) also argued that two things must happen for growth to be able to reduce poverty through the mechanism of the labour market. First, the modifications that lead to economic growth and related shifts in the structure of the economy have to engender increased demand for labour and/or increase in the productivity of each worker. These then have to be translated into earnings by the prevailing labour market and political conditions of a particular country.

According to Hull (2009) growth in one or two sectors of the economy does not automatically translate into benefits for the poor, rather much will hinge on the profile of growth i.e., its employment or productivity-intensity, the sectorial location of the poor, and the flexibility of movement across sectors. He further added that for employment-intensive growth to translate into poverty reduction it must occur in the more productive sectors of the economy, while productivity-intensive growth should be adopted for the less productive sectors to ensure a decline in headcount poverty. He concluded that in-depth quantitative and qualitative country-specific analysis is required in order to identify constraints to job creation, productivity and mobility and to ensure that the poor are able to benefit from better job opportunities.

Dollar and Kraay (2002) noted that although the world economy grew well during the 1990s, there is intense debate over the extent to which the poor benefit from this growth. While some were convinced that growth is "a rising tide that lifts all boats", others believed that, in the 1990s, it was a case of the rich getting richer while the poor get poorer.

Ravallion and Chen (1997) (in Moser and Ichida, 2001) conducted a household expenditure survey for a group of 42 developing countries and found that for every 1 per cent increase in mean per capita income, there is a 3 per cent fall in the share of population that lives on US$1 per day. They however noted that while increase in per capita income leads to a reduction in absolute poverty, there is a strong variance across countries, indicating that country specific considerations are important in determining the impact of income per capita growth on poverty reduction.

Ali (2000) conducted a regional analysis on the impact of economic growth on poverty and discovered that the extent to which economic growth reduces poverty was stronger in all other regions of the world than in Africa. Based on this analysis, he concluded that the impact of economic growth on poverty reduction is stronger in middle and high income countries than in lower income countries.

3.0 Trends in the Growth of the Gross Domestic Product in Nigeria

As earlier noted, the growth rate of the real GDP in the last decade has been impressive. The economy grew by about 10.2 per cent in 2003 and peaked at about 10.5 per cent in 2004 before slowing to an average of about 6.2 per cent for 2007 and 2008. It is not a surprise that the growth rate of the GDP for 2008 was the lowest at 5.9 per cent in the 10 year period because the effect of the global economic and financial crisis struck the economy the hardest in the year. In 2009, the economy recovered from the shock and grew at an average of 7.5 per cent between 2009 and 2011.

Table 1: Gross Domestic Product at Constant Basic Prices* (N' Million)

SECTORS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Agriculture	190,133.40	203,409.87	216,208.47	231,463.61	248,598.96	266,477.18	283,175.43	299,823.86	317,281.65	335,391.92	348,490.00	
Growth rate (%)		6.98	6.29	7.06	7.40	7.19	6.27	5.88	5.82	5.71	3.91	6.25
Industry	123,553.53	149,878.71	156,486.83	159,161.43	155,165.53	151,699.09	146,519.59	149,486.50	158,190.46	160,974.44	162,990.00	
Growth rate (%)		21.31	4.41	1.71	(2.51)	(2.23)	(3.41)	2.02	5.82	1.76	1.25	3.01
(a) Crude Petroleum & Natural Gas	106,002.10	131,336.60	135,670.71	136,345.54	130,193.57	124,285.12	116,594.57	117,121.37	123,268.89	123,296.61	122,320.00	
Growth rate (%)		23.90	3.30	0.50	(4.51)	(4.54)	(6.19)	0.45	5.25	0.02	(0.79)	1.74
(b) Solid Minerals	1,112.07	1,172.48	1,379.34	1,510.84	1,666.09	1,878.47	2,118.26	2,374.20	2,660.94	2,966.52	3,370.00	
Growth rate (%)		5.43	17.64	9.53	10.28	12.75	12.77	12.08	12.08	11.48	13.60	11.76
(c) Manufacturing	16,439.36	17,369.63	19,436.78	21,305.05	23,305.87	25,535.50	27,806.76	29,990.92	32,260.63	34,711.31	37,300.00	
Growth rate (%)		5.66	11.90	9.61	9.39	9.57	8.89	7.85	7.57	7.60	7.46	8.55
Building & Construction	7,518.87	8,176.77	7,622.47	8,544.48	9,654.79	10,912.56	12,338.83	13,816.34	15,454.02	17,348.90	19,500.00	
Growth rate (%)		8.75	(6.78)	12.10	12.99	13.03	13.07	11.97	11.85	12.26	12.40	10.16
Wholesale & Retail Trade	47,108.79	49,822.26	68,082.83	77,283.06	89,075.20	102,616.11	117,002.89	130,438.75	145,074.31	161,511.11	177,050.00	
Growth rate (%)		5.76	36.65	13.51	15.26	15.20	14.02	11.48	11.22	11.33	9.62	14.41
Services	64,888.92	66,245.37	79,175.44	85,478.81	93,327.13	102,546.20	113,165.81	125,411.89	140,331.77	158,935.46	180,860.00	
Growth rate (%)		2.09	19.52	7.96	9.18	9.88	10.36	10.82	11.90	13.26	13.79	10.88
Average growth rate												8.35
Total GDP	433,203.51	477,532.98	527,576.04	561,931.39	595,821.61	634,251.14	672,202.55	718,977.33	776,332.21	834,000.82	888,892.99	
Growth rate (%)		10.23	10.48	6.51	6.03	6.45	5.98	6.96	7.98	7.43	6.58	

Fig 1: Total GDP Growth rate

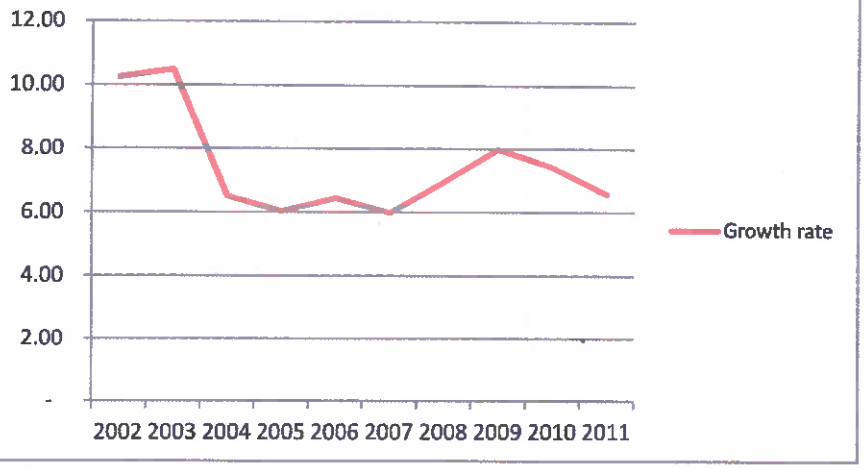


Fig 2: Agricultural Sector GDP Growth Rate

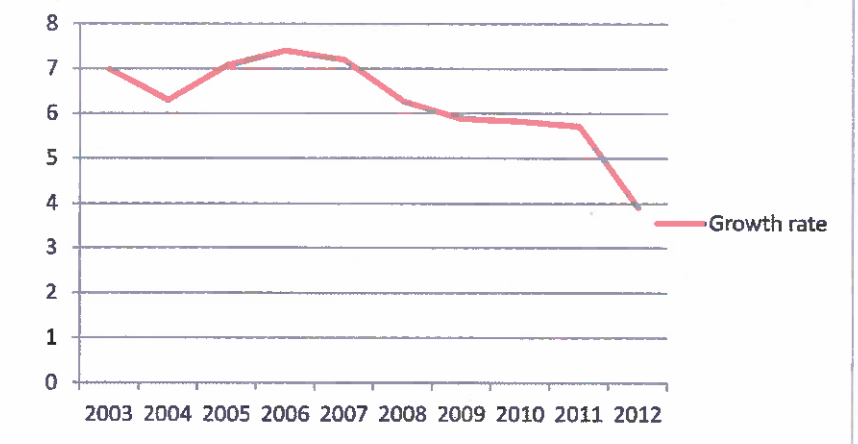
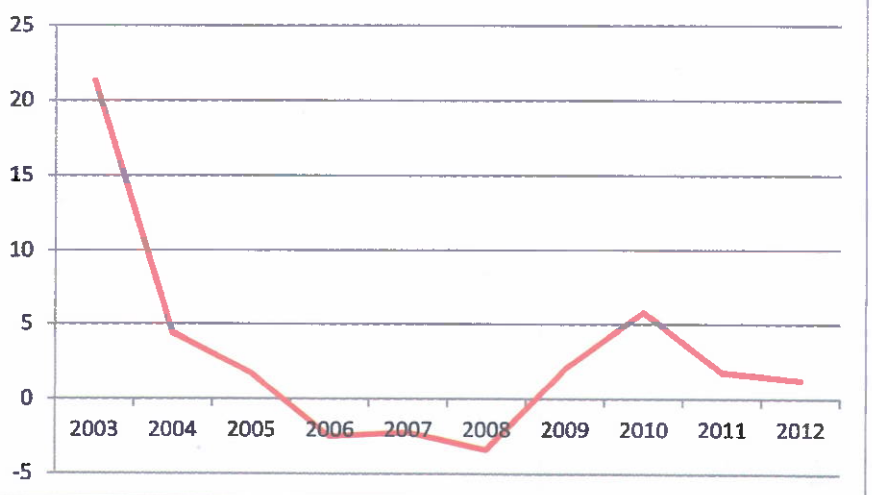


Fig 3: Industrial Sector GDP Growth Rate



Assessing the sectorial contribution to the growth in GDP, the agricultural sector grew 6.9 per cent in 2003. On average, the sector grew by an average of 7.2 per cent between 2005 and 2007. From 2008 to 2011, growth of the agricultural sector began to decline. It grew by 6.3 per cent, 5.9 per cent, 5.8 per cent and 5.7 per cent in 2008, 2009, 2010 and 2011, respectively. By 2012, the growth in the agricultural sector declined to 3.9 per cent.

The industrial sector grew 21.3 per cent in 2003. The growth rate dipped sharply to 1.7 per cent in 2005. Between 2006 and 2008, the sector recorded an average negative growth of 2.7 per cent. However, the sector recorded a positive growth of 2.0 per cent, 5.8 per cent, and 1.7 per cent, in 2009, 2010 and 2011, respectively. By 2012 the growth in the sector declined to 1.3 per cent.

Manufacturing which is a sub-sector of Industry grew by 5.7 per cent in 2003. The growth rate in the sector peaked at 11.9 per cent in 2004. The performance of the sector declined 2.3 percentage points in the following year and further declined steadily until 2011 when it grew by 7.6 per cent compared to 7.5 per cent the previous year. Growth in the sector declined marginally to 7.4 per cent in 2012.

The crude petroleum sub-sector grew significantly by 23.9 per cent in 2003. Although the sector maintained a positive growth, the rate of growth declined by 20.6 percentage points and 23.4 percentage points in 2004 and 2005, respectively. Between 2006 and 2008, growth in the sector turned negative, declining by an average of 5.1 per cent. By 2009, growth in the sector returned to the positive realm with a modest 0.5 per cent growth. In 2010, the performance of the sector improved significantly to 5.3 per cent. However, the performance of the sector was dismal in 2011

when it grew by 0.02 per cent. By 2012 growth in the sector was negative 0.8 per cent.

The growth in the solid mineral sub-sector improved from 5.4 per cent in 2003 to 17.6 per cent in 2004. In the following year, the growth declined almost by half relative to the level in 2004 before improving slightly to 10.3 per cent in 2006. Between 2007 and 2008, the sector grew on average by 12.8 per cent. From 2009 to 2011, the growth rate of the sector averaged 11.9 per cent before improving to 13.6 per cent in 2012.

From a growth rate of 8.7 per cent in 2003, the building and construction sector's performance fell sharply in 2004 when it recorded a negative growth rate of 6.8 per cent. However, growth in the sector rebounded and ranged from 12.1 per cent and 13.1 per cent between 2005 and 2008. Thereafter, it steadied at an average of 12.0 per cent for 2009 to 2011. There was a slight improvement in the growth rate of the sector to 12.4 per cent in 2012.

The wholesale and retail trade sector recorded the highest growth rate of 36.7 per cent in 2004. This was an increase of 30.89 percentage points above the growth rate recorded in 2003. In 2005, the growth rate of the sector fell sharply to 13.5 per cent. The performance of the sector improved modestly in 2006 to 2008, with an average growth rate of 14.8 per cent. Thereafter, growth declined to 11.5 per cent, 11.2 per cent and 11.3 per cent respectively, for 2009, 2010 and 2011. In 2012, the performance of the sector had further worsened when the growth rate declined to 9.6 per cent.

The services sector also grew astronomically in 2004 with a rate of 19.5 per cent. This was an increase of 17.4 per cent above the growth rate recorded in 2003. By 2005, the growth rate declined by more than half the rate it grew in 2004. It steadied at an average of 9.5 per cent in 2006 and 2007 before improving to an average of 9.6 per cent in 2008 and 2009. The sector recorded a steady growth rate above 10 per cent from 2010 closing at 13.8 per cent in 2012.

Fig 4: Building and Construction GDP Growth rate

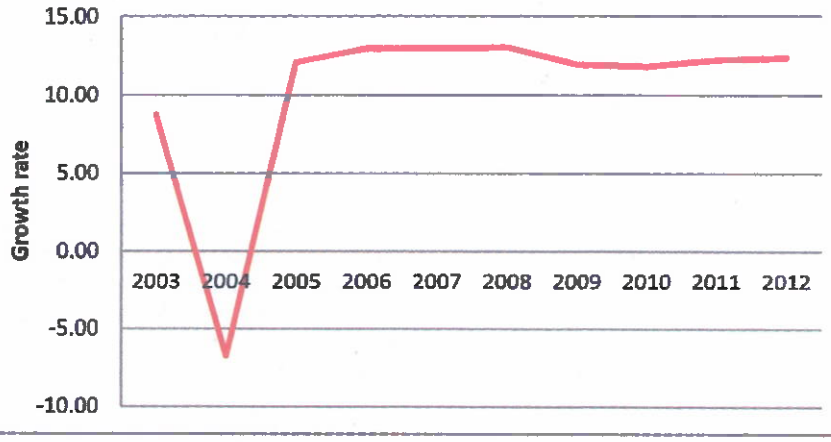


Fig 5: Wholesale and Retail Trade GDP Growth Rate

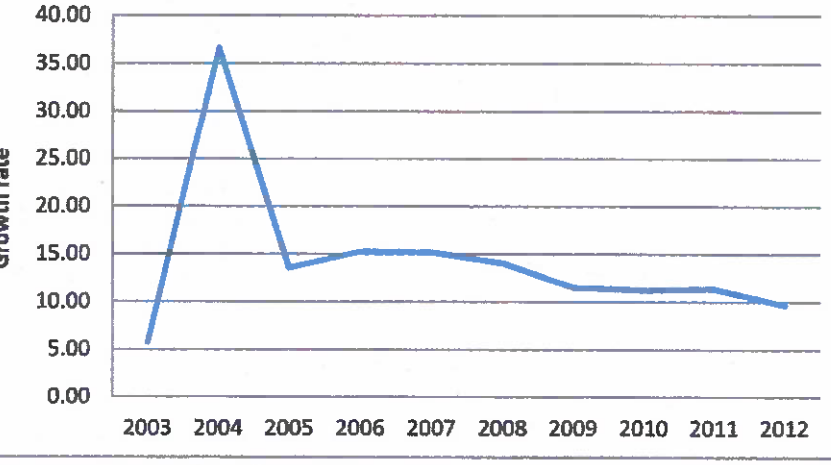
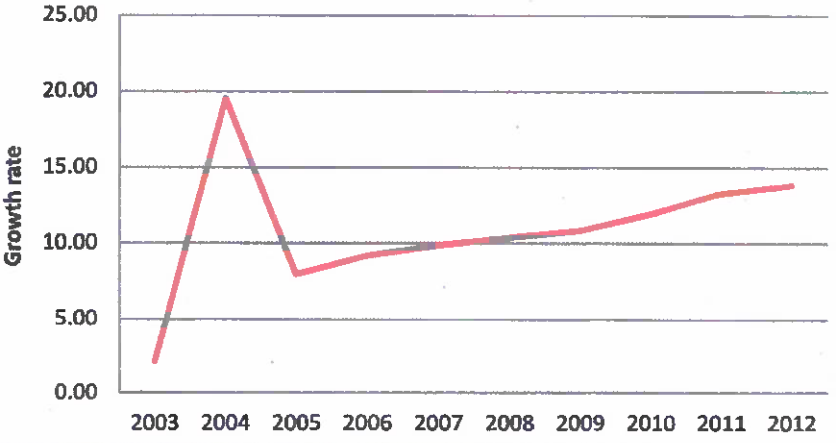


Fig 6: Services Sector GDP Growth Rate



4.0 Structure of Employment in Nigeria

The need for this section is informed by the commonsense of assuming that full employment for total workforce would help eradicate poverty. There is the additional assumption, not really, it is a statistical fact, that the gross domestic product is equivalent to total output of goods and services, is equal to the total income earned by all factors of production, and is equal to the total expenditure on all goods and services at any chosen uniform time. Thus, the level of employment in any sector determines the relative income earned by employees in the different sectors bearing in mind that the intensity of factor earnings varies from sector to sector and that the total income accruing to any sector is relative to its contribution to the total gross domestic product.

According to the National Bureau of Statistics, in 2010, 30.5 per cent of the total workforce was employed in Agriculture comprising crop and animal production, hunting and related service activities, forestry and logging and fishing and aquaculture. Wholesale and retail trade and repair of motor vehicles and motorcycles employ 24.9 per cent of the workforce in Nigeria. The manufacturing sector employs 11 per cent, construction 2.4 per cent, electricity 0.3 per cent, mining and quarrying 0.3 per cent, real estate 0.1 per cent and water supply, sewage, waste management and remediation activities 0.2 per cent. Putting together the contribution of the various sub-sectors under industry to total employment, the sector accounted for 14.3 per cent of total employment.

5.0 Solving The Puzzle: High Growth, High Poverty, why?

This section develops a simple index for measuring the extent of inclusion in the growth rate of GDP which is used with Nigeria data to explain why high incidence of poverty has accompanied the high economic growth rate between 2002 and 2012. The index is a function of four variable including sectorial GDP (Z) (of the Agriculture, Industry, Building and Construction, Wholesale and Retail Trade, and Services), total employment in each sector (E) , total GDP (Y), and total population (P). The formula for the index is given simply by the quotient of the ratio of sectorial GDP (Sgdp) to number of persons employed in the sector (Emp) and total GDP as a ratio of total population (Tp). That is,

((Z/E)/(Y/p)) ---------- (1)

Z/E is the sectorial per capita income (Agri, Industry etc)

Y/P is the per capita GDP. We call this model the Inclusive Growth Factor (IGF)

Equation 1, argues that growth will be considered inclusive and the incidence of poverty will decline if employees in all the sectors do not earn less (on net basis) than their initial share of the total per capita income over time as the economy grows.. It might turn out that employees in some sectors enjoy increased income with increasing growth of the GDP, while others in other sectors lose. To ascertain whether poverty incidence is increasing in the face of economic growth, we need to compare the average index over the period covered by the analysis with the base level index in the beginning year (in the case of this study, 2002). The computations are presented in table below. If the base level index is higher than the average index of any sector, the sector would have lost in earnings. But if the average index is higher for any sector then that sector would have gained in income over time. The net of gains and losses in all the sectors will indicate whether the incidence of poverty is increasing or decreasing. Specifically, if there is a net loss, then the incidence of poverty will increase even though the economy is growing. On the other hand, if there is a net gain, then the incidence of poverty will contract, and growth will be said to be inclusive.

Table 2: Gross Domestic Product at Constant Basic Prices* (N' Million)

	Agriculture	Industry	(a) Crude Petroleum & Natural Gas	(b) Solid Minerals	(c) Manufacturing	Building & Construction	Wholesale & Retail Trade	Services	TOTAL GDP
2002	190,133.40	123,553.53	106,002.10	1,112.07	16,439.36	7,518.87	47,108.79	64,888.92	**433,203.51**
2003	203,409.87	149,878.71	131,336.60	1,172.48	17,369.63	8,176.77	49,822.26	66,245.37	**477,532.98**
2004	216,208.47	156,486.83	135,670.71	1,379.34	19,436.78	7,622.47	68,082.83	79,175.44	**527,576.04**
2005	231,463.61	159,161.43	136,345.54	1,510.84	21,305.05	8,544.48	77,283.06	85,478.81	**561,931.39**
2006	248,598.96	155,165.53	130,193.57	1,666.09	23,305.87	9,654.79	89,075.20	93,327.13	**595,821.61**
2007	266,477.18	151,699.09	124,285.12	1,878.47	25,535.50	10,912.56	102,616.11	102,546.20	**634,251.14**
2008	283,175.43	146,519.59	116,594.57	2,118.26	27,806.76	12,338.83	117,002.89	113,165.81	**672,202.55**
2009	299,823.86	149,486.50	117,121.37	2,374.20	29,990.92	13,816.34	130,438.75	125,411.89	**718,977.33**
2010	317,281.65	158,190.46	123,268.89	2,660.94	32,260.63	15,454.02	145,074.31	140,331.77	**776,332.21**
2011	335,180.07	161,118.01	123,443.96	2,993.52	34,680.54	17,325.58	161,519.90	158,857.26	**834,000.82**
2012	348,490.80	162,985.26	122,316.48	3,368.34	37,300.44	19,504.62	177,049.69	180,862.62	**888,892.99**

Table 3: Agricultural Sector Inclusive Growth Factor

Year	Agriculture	Aemp	TOTAL GDP	TP	Tpercap	Agpercap	Scontr	IGF
2002	190,133.40	15.31	433,203.51	122.40	3,539.24	12,422.05		3.51
2003	203,409.87	15.78	477,532.98	126.20	3,783.94	12,889.29	3.95	3.41
2004	216,208.47	16.24	527,576.04	129.90	4,061.40	13,310.06	3.89	3.28
2005	231,463.61	17.32	561,931.39	138.50	4,057.27	13,364.39	2.89	3.29
2006	248,598.96	17.56	595,821.61	140.40	4,243.74	14,159.52	3.05	3.34
2007	266,477.18	18.12	634,251.14	144.90	4,377.16	14,706.45	3.00	3.36
2008	283,175.43	18.71	672,202.55	149.60	4,493.33	15,137.02	2.80	3.37
2009	299,823.86	19.30	718,977.33	154.30	4,659.61	15,538.77	2.50	3.33
2010	317,281.65	19.92	776,332.21	159.30	4,873.40	15,927.42	2.40	3.27
2011	335,180.07	20.56	834,000.82	164.40	5,073.00	16,303.94	2.30	3.21
2012	348,490.80	21.05	888,892.99	168.30	5,281.60	16,558.60	1.60	3.14
					4,403.97	**14,574.32**	**2.84**	**3.32**

Source: CBN Annual Report (various editions), NBS

Table 4: Industrial Sector Inclusive Growth Factor

Year	Industry	Iemp	TOTAL GDP	TP	Tpercap	INpercap	Secont	IGF
2002	123,553.53	5.97	433,203.51	122.40	3,539.24	20,689.16		5.85
2003	149,878.71	6.16	477,532.98	126.20	3,783.94	24,341.64	2.80	6.43
2004	156,486.83	6.34	527,576.04	129.90	4,061.40	24,690.95	1.73	6.08
2005	159,161.43	6.76	561,931.39	138.50	4,057.27	23,553.60	0.51	5.81
2006	155,165.53	6.85	595,821.61	140.40	4,243.74	22,651.52	-0.71	5.34
2007	151,699.09	7.07	634,251.14	144.90	4,377.16	21,457.73	-0.60	4.90
2008	146,519.59	7.30	672,202.55	149.60	4,493.33	20,073.97	-0.50	4.47
2009	149,486.50	7.53	718,977.33	154.30	4,659.61	19,856.62	0.40	4.26
2010	158,190.46	7.77	776,332.21	159.30	4,873.40	20,353.25	1.20	4.18
2011	161,118.01	8.02	834,000.82	164.40	5,073.00	20,086.83	0.30	3.96
2012	162,985.26	8.21	888,892.99	168.30	5,281.60	19,848.76	0.20	3.76
					4,403.97	**21,600.37**	**0.53**	**5.00**

Source: CBN Annual Report (various editions), NBS

Table 5: Building and Construction Sector Inclusive Growth Factor

Year	Building & Construction	Bcemp	TOTAL GDP	TP	Tpercap	Bcpercap	Secont	IGF
2002	7,518.87	1.25	433,203.51	122.40	3,539.24	5,993.04		1.69
2003	8,176.77	1.29	477,532.98	126.20	3,783.94	6,321.19	0.16	1.67
2004	7,622.47	1.33	527,576.04	129.90	4,061.40	5,724.83	0.14	1.41
2005	8,544.48	1.42	561,931.39	138.50	4,057.27	6,018.83	0.17	1.48
2006	9,654.79	1.44	595,821.61	140.40	4,243.74	6,708.91	0.20	1.58
2007	10,912.56	1.49	634,251.14	144.90	4,377.16	7,347.41	0.20	1.68
2008	12,338.83	1.53	672,202.55	149.60	4,493.33	8,046.71	0.20	1.79
2009	13,816.34	1.58	718,977.33	154.30	4,659.61	8,735.81	0.20	1.87
2010	15,454.02	1.63	776,332.21	159.30	4,873.40	9,464.59	0.20	1.94
2011	17,325.58	1.69	834,000.82	164.40	5,073.00	10,281.63	0.20	2.03
2012	19,504.62	1.73	888,892.99	168.30	5,281.60	11,306.53	0.30	2.14
					4,403.97	**7,813.59**	**0.20**	**1.75**

Source: CBN Annual Report (various editions), NBS

Table 6: Wholesale and Retail Trade Sector Inclusive Growth Factor

Year	Wholesale & Retail Trade	Wremp	TOTAL GDP	TP	Tpercap	Wrperap	Secont	IGF
2002	47,108.79	12.50	433,203.51	122.40	3,539.24	3,769.97		1.07
2003	49,822.26	12.88	477,532.98	126.20	3,783.94	3,867.06	0.97	1.02
2004	68,082.83	13.26	527,576.04	129.90	4,061.40	5,133.87	1.22	1.26
2005	77,283.06	14.14	561,931.39	138.50	4,057.27	5,465.77	1.74	1.35
2006	89,075.20	14.33	595,821.61	140.40	4,243.74	6,214.50	2.10	1.46
2007	102,616.11	14.79	634,251.14	144.90	4,377.16	6,936.88	2.30	1.58
2008	117,002.89	15.27	672,202.55	149.60	4,493.33	7,660.94	2.30	1.70
2009	130,438.75	15.75	718,977.33	154.30	4,659.61	8,280.52	2.00	1.78
2010	145,074.31	16.26	776,332.21	159.30	4,873.40	8,920.55	2.00	1.83
2011	161,519.90	16.78	834,000.82	164.40	5,073.00	9,623.68	2.10	1.90
2012	177,049.69	17.18	888,892.99	168.30	5,281.60	10,304.52	1.90	1.95
					4,403.97	**6,925.30**	**1.86**	**1.54**

Source: CBN Annual Report (various editions), NBS

Table 7: Services Sector Inclusive Growth Factor

Year	Services	Semp	TOTAL GDP	TP	Tpercap	Spercap	Secont	IGF
2002	64,888.92	16.06	433,203.51	122.40	3,539.24	4,040.69		1.14
2003	66,245.37	16.56	477,532.98	126.20	3,783.94	4,000.94	1.29	1.06
2004	79,175.44	17.04	527,576.04	129.90	4,061.40	4,645.66	1.42	1.14
2005	85,478.81	18.17	561,931.39	138.50	4,057.27	4,704.08	1.19	1.16
2006	93,327.13	18.42	595,821.61	140.40	4,243.74	5,066.49	1.40	1.19
2007	102,546.20	19.01	634,251.14	144.90	4,377.16	5,394.08	1.60	1.23
2008	113,165.81	19.63	672,202.55	149.60	4,493.33	5,765.67	1.70	1.28
2009	125,411.89	20.24	718,977.33	154.30	4,659.61	6,194.97	1.80	1.33
2010	140,331.77	20.90	776,332.21	159.30	4,873.40	6,714.39	2.10	1.38
2011	158,857.26	21.57	834,000.82	164.40	5,073.00	7,364.98	2.40	1.45
2012	180,862.62	22.08	888,892.99	168.30	5,281.60	8,190.89	2.60	1.55
					4,403.97	**5,643.89**	**1.75**	**1.27**

Source: CBN Annual Report (various editions), NBS

Definitions

- Aemp- Percentage Share of employment in the agricultural sector
- TP- total population (million)
- Tpercap- GDP per capita (given by Total GDP divided by Total Population)
- Agpercap- Agricultural sector GDP per capita (given by Agricultural GDP divided by Agricultural employment)
- Secont- Sectorial contribution
- IGF- Inclusive Growth Factor
- Iemp- Percentage Share of employment in the industrial sector
- INpercap- Industrial sector GDP per capita (given by Industrial GDP divided by Industrial employment)
- Bcemp- Percentage Share of employment in the building and construction sector
- Bcpercap- Building and construction sector GDP per capita (given by sectorial GDP divided by employment)
- Wremp- Percentage Share of employment in the wholesale and retail trade sector
- Wrpercap- Wholesale and retail sector GDP per capita (given by sectorial GDP divided by employment)
- Semp- Percentage Share of employment in the services sector
- Spercap- Services sector GDP per capita (given by sectorial GDP divided by employment)

From the summary table below, employees in the agricultural sector lost 5.5 per cent of their income in the period of analysis. The loss in the industrial sector was higher in the period at 36 per cent. However, the Building and Construction sector gained 3.6 per cent in the period over the level at inception. In the same vein the Wholesale and Retail Trade sector gained 41 per cent additional income. Lastly, the service sector gained additional 11.4 per cent in income. Cumulatively the loss in income by employees in the agricultural and industrial sectors was 17.2 per cent compared to the cumulative gain in income made by Building and construction, Wholesale and Retail Trade, and Services sectors of 4.7 per cent. This gives a net loss in earnings to all employees of 12.5 per cent. This result implies that growth has not been inclusive in Nigeria and that is why the incidence of poverty has widened even when economic growth in the last decade has been impressive.

The index above is a simple demonstration that economic growth can occur without closing the poverty gap or even with increasing incidence of poverty.

Table 8: Index of Inclusive Growth

	Agriculture	Industry	Building/Construction	Wholesale and Retail Trade	Services
Base Period	3.51	5.9	1.7	1.07	1.14
Average over time	3.32	3.8	1.75	1.54	1.27
Gain/Loss	0.19	2.1	0.06	0.44	0.13

This is the Marxian called non-inclusive growth. Thus, to make economic growth a useful tool for poverty alleviation, efforts should be made on the side of policy making to develop pro-poor programmes to enable all the economically active segment of the population to benefit from rapid economic growth. The observation about growth and poverty in Nigeria over the last ten years shows clearly that the real sector, mainly agriculture and industry which employ majority of the workforce have not benefitted commensurate from the rapid growth of the economy.

Some reasons may be adduced for this. One, productivity in the sectors might be lower than other sectors. For agriculture particularly, the lack of mechanized approach might be at the root of low productivity and therefore lower incomes in the sector. For industry, a host of reasons are possible contributions, but that of dearth of infrastructure tilts the intensity of resource use in favour of labour so that the increasing productivity accruing from adequate labour-capital combination is lacking.

6.0 Conclusion

In conclusion, the point that needs to be deduced from this paper is that contrary to widely held opinion that it is unthinkable that the Nigerian economy would have grown at the rate it did in the last decade and yet the incidence of poverty persisted, even grew higher, growth could actually occur without increasing employment or reducing poverty. This is possible if the economy were allowed to grow without a conscious effort to direct the direction of growth to the pro-poor path. So, it is important for policy makers to make concerted efforts to smoothen the path of growth and introduce policies that will make growth pro-poor. One of the most important pro-poor programmes is the one being currently pursued by the Central Bank of Nigeria, financial inclusion.

Financial inclusion strategies should form one of the core components of such developmental policies aimed at making growth inclusive to reduce poverty. It simply implies enabling access to financial resource and services for economic agents, especially, those on the lower wrung of the income ladder. Financial inclusion strategies aim at increasing the number of people with accounts in banks and other formal financial institutions- savings, current and credit. It also pursues the promotion of the use of formal payment media, including cheques, ATM cards, internet payments, mobile payments and others by the populace. There is evidence that people who are financially included tend to be more productive, consume more and invest more. (Asraf, et al 2010).

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