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THE PERFORMANCE OF NIGERIAN STOCK EXCHANGE SECTORAL INDICES: JANUARY 2009 - DECEMBER 2010

- BY ALVAN E. IKOKU, PH.D AND GEORGE OKORIE

IMPACT OF BANKING SECTOR REFORMS ON THE NIGERIAN CAPITAL MARKET (EQUITIES)

- BY PETER ADEGBENGA ADEKUNLE

THE POLITICAL ECONOMY OF CURRENCY RE-DENOMINATION BY COUNTRIES

- BY PETER NWAOBA

THE ROLE OF ECONOMIC COMMUNITY OF WEST AFRICAN STATES (ECOWAS) IN PROMOTING BORDERLESS TRADE IN WEST AFRICA

- BY ADAM, JAMES AKPERAN, PhD AND SANNI, GANIYU KAYODE

ANALYSIS OF REVENUE GENERATION AS A TOOL FOR SOCIO-ECONOMIC AND INFRASTRUCTURAL DEVELOPMENT IN NIGERIA

- BY OBIECHINA, M. E

OIL AND GAS MANAGEMENT IN NIGERIA: LESSONS FOR GHANA

- BY MRS. OMOLARA.O. AKANJI

PETROLUEM INDUSTRY LINKAGES AND NIGERIA'S ECONOMIC DEVELOPMENT

- BY NWOLISA CHINYERE UGONWA AND UGOJI CHINYELU NWAKAEGO

BEHIND THE SCENE

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CONTENTS PAGE

THE PERFORMANCE OF NIGERIAN STOCK EXCHANGE SECTORAL INDICES: JANUARY 2009 DECEMBER 2010*

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1.0 INTRODUCTION

Stock market indices are used as a general measure of the performance of stock markets in terms of price appreciation or depreciation. These indices are important economic indicators, as they gauge the health and, very often, can predict the future direction of economic activity. In addition to the Nigerian Stock Exchange's (NSE) All-Share Index, the Central Bank of Nigeria (CBN) regularly analyzes movements in the most prominent stock indices in seventeen other nations in Africa, North America, South America, Europe and Asia. Besides movements in the overall indices, investors and policymakers are also attuned to the performance of the different sectors of the economy which are represented by sectoral indices. For example, the Standard and Poor's 500, an index of 500 large capitalization equities in the United States, is made up of ten sectorsEnergy, Materials, Industrial, Consumer Discretionary, Consumer Staples, Health Care, Financials, Information Technology, Telecommunications Services, and Utilities. While the overall SandP 500 index had a nominal return of 15.06 per cent in 2010, the best-performing sector was Consumer Discretionary, with a return of 27.66 per cent whereas the worst-performing sector was Health Care, with a return of 2.90 per cent (Standard and Poor's, 2011). Similarly, the most prominent stock index in the U.K., the FTSE 100, comprises ten sectorsOil and Gas, Basic Materials, Industrials, Consumer Goods, Health Care, Consumer Services, Telecommunications, Utilities, Financials and Technology (Financial Times London Stock Exchange, 2011).

In an effort to enhance trading and performance measurement among the different sectors of the Nigerian equity market, the NSE launched five sectoral indices, namely, the NSE 30 Index[†]; the NSE Banking Index; the NSE Insurance Index; the NSE Food/Beverage Index and the NSE Oil/Gas Index, in January 2009. The indices were based on a number of criteria, including market capitalization[‡] and liquidity.

The paper reviews the performance of the sectoral indices during the first twenty-four months of their existence, i.e., between their inception in January 2009 and December 2010. We seek to examine not only the raw performance of the indices but also their risk-adjusted performance. The results of the analysis will facilitate the allocation of capital by institutional as well as individual investors in the Nigerian equity market.

The rest of the paper is organized as follows. Section 2 discusses the transformation of the indices and their correlation. In section 3, we examine the nominal performance of the sectoral indices while section 4 discusses their risk-adjusted performance. Section 5 concludes the paper.

2.0 TRANSFORMATION AND CORRELATION OF THE INDICES

Interestingly, the indices started at values other than 100, which made them difficult to compare. At inception on January 30, 2009, the NSE 30 index had a value of 563.4; the NSE Banking index had a value of 297.78; the NSE Insurance index had a value of 515.38; the NSE Oil and Gas index had a value of 624.91 and the NSE Food and Beverage index had a value of 355.94. In order to facilitate the analysis, the indices were transformed by rebasing them to have a common starting value of 100 in January 2009. Equation 1 shows the methodology adopted to rebase the indices:

$$RI_t \quad \frac{I_t}{I_0} \quad 100 \qquad (1)$$

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†This index is made up of the thirty most capitalized stocks on the Nigerian Stock Exchange.

‡As at the end of September, 2010 the four sectors accounted for 64.0 percent of NSE equity market capitalization.

where:
RI_t = rebased index value at the end of period t
I_t = original index value at the end of period t
I_0 = original index value at period 0 (i.e., the starting value)

Performance tracking is considerably enhanced with the rebased indices as they all start with a common value and their performance over time can be easily monitored, as shown in Figure 1. It is pertinent to mention the relationship among the indices before discussing their relative performance. Table 1 shows the correlation coefficients of the indices, computed with weekly data. With respect to co-movement with All Share Index (ASI), the highest correlation coefficient of 0.8860 was between the ASI and the NSE Banking index, while the lowest was between the ASI and the NSE Insurance index, at -0.2097. Among the sectoral indices, the highest correlation coefficient of 0.9208 was between the NSE 30 index and the NSE Food and Beverage index; the lowest, at -0.8298, was between the NSE Food and Beverage and NSE Insurance indices. Thus, a high correlation was observed between indices representing sectors or aggregations which constitute a high proportion of overall market capitalization (such as Banking and the NSE 30) and the ASI. The NSE Insurance index had negative or low correlation with the other indices.

Table 1: Correlation Coefficients of NSE Sectoral Indices, Jan. 2009 Dec. 2010

	ASI	NSE 30	NSE BANKING	NSE FOOD & BEVERAGE	NSE INSURANCE	NSE OIL & GAS
ASI	1.0000					
NSE 30	0.7229	1.0000				
NSE BANKING	0.8860	0.5050	1.0000			
NSE FOOD & BEVERAGE	0.5990	0.9208	0.2968	1.0000		
NSE INSURANCE	-0.2097	-0.8166	0.0120	-0.8298	1.0000	
NSE OIL & GAS	0.4196	-0.0183	0.2053	0.1271	0.3370	1.0000

Source: Authors' computations.

3.0 NOMINAL PERFORMANCE

Nominal returns measure the change in the monetary value of an investment. Although investors should be concerned about the purchasing power of the returns on their investments, most financial obligations are paid in nominal terms. Moreover, most performance comparisons in the business press accessible to investors are made in nominal terms. As such, nominal returns are important for investors and are the first stage in performance analyses.

Table 2 shows that, in nominal terms, the NSE Food and Beverage index had the best performance during the January 2009 - December 2010 period, rising by 116.6 per cent in total, or a weekly average return of 0.82 per cent. At the other ends of the performance spectrum, the NSE Insurance index declined by 69.9 per cent or a weekly average return of minus 1.25 per cent between January 2009 and December 2010. The NSE Banking and NSE All-Share indices posted returns at the middle of the two extremes, rising by 33.2 per cent and 14.0 per cent or a weekly average return of 0.30 per cent and 0.14 per cent, respectively. As such, the Food and Beverage, NSE 30 and Banking indices performed better than the overall market (as measured by the All-Share index) while the Oil and Gas and Insurance indices performed worse than the overall market.

Table 2: Nominal Performance of NSE Sectoral Indices, Jan. 2009 Dec. 2010

Index	Index Level at End of Jan 2009*	Index Level at End of Dec 2010	% Change	Avg. Weekly Returns**	Rank
NSE Food/Beverage	100.00	216.64	116.6%	0.82%	1
NSE 30	100.00	190.07	90.1%	0.68%	2
NSE Banking	100.00	133.23	33.2%	0.30%	3
NSE All-Share Index	**100.00**	**114.03**	**14.0%**	**0.14%**	**4**
NSE Oil and Gas	100.00	54.22	-45.8%	-0.64%	5
NSE Insurance	100.00	30.15	-69.9%	-1.25%	6

* Reindexed to a base of 100 for all stock indices.
**Geometric (i.e., compound) average.

Figure 1 shows the nominal performance of the sectoral indices in relative terms, again a common starting value of 100 in January 2009. Stock market prices tend to rise over time, though in a volatile manner. The NSE Food and Beverage and NSE 30 indices had risen the most in nominal terms, but it had also suffered significant volatility.

4.0 RISK-ADJUSTED PERFORMANCE

Successful investors take cognizance of the risk associated with returns. High returns are generally associated with high risk. As such, an analysis of stock market performance which does not account for risk is at best incomplete and potentially misleading. In order to properly compare performance, we must adjust the nominal returns of the sectoral indices for risk.

4.1 Coefficient of Variation

Following Ikoku (2009) we first measure risk-adjusted performance using the coefficient of variation (CV) of returns.§ The CV measures risk per unit of return by dividing the standard deviation of returns by the mean (i.e., average) of the returns; see, for example, Reilly and Brown (2006). In equation form:

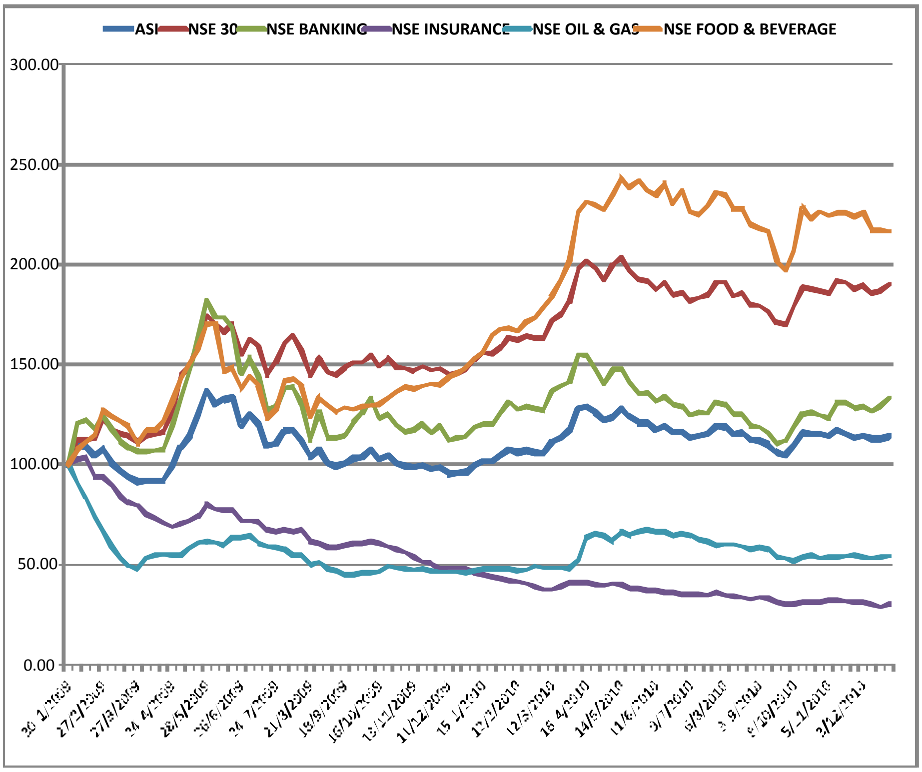
Coefficient of Variation = Standard Deviation / Mean (2)

Because CV measures risk per unit of return, the lower the CV of an index, the better its performance. Table 3 shows the risk-adjusted performance of the sectoral indices. The CVs range from minus 7.09 for the NSE Oil and Gas index to 27.71 for the NSE ASI index. The NSE Food and Beverage index had the best performance among the 5-sector indices during the review period. This was followed by the NSE 30 index. Interestingly, the use of CV did not alter the performance ranking of the indices.

4.2 Sharpe Ratios

Investors are concerned about whether a portfolio's returns are due to smart investment decisions or as a result of excessive risk. Investment opportunities are deemed worthy if

Figure 1: Nominal Performance of Sectoral Indices, Jan. 2009 Dec. 2010*



Source: Authors' computations.
* Reindexed to a base of 100 for all stock indices

Table 3: Risk-Adjusted Performance (Coefficient of Variation) of NSE Sectoral Indices, Jan. 2009 Dec. 2010

Index	Standard Deviation of Returns	Avg. Weekly Returns*	Coefficient of Variation	Rank
NSE Food/Beverage	4.49%	0.82%	5.48	1
NSE 30	3.96%	0.68%	5.82	2
NSE Banking	5.59%	0.30%	18.63	3
NSE All-Share Index	**3.88%**	**0.14%**	**27.71**	**4**
NSE Oil and Gas	4.54%	-0.64%	-7.09	5
NSE Insurance	2.94%	-1.25%	-2.35	6

*Geometric (i.e., compound) average.

higher returns do not come with too much additional risk. The Sharpe ratio (also known as the Sharpe reward-to-variability ratio) is a measure of excess return per unit of risk; it is often used to evaluate the performance of portfolios in the asset management industry. The ratio helps to make the performance of one portfolio comparable to that of another portfolio by making an adjustment for risk. The greater a portfolio's Sharpe ratio, the better its risk adjusted performance. As such, the Sharpe ratio is easier to interpret than the CV.

The computation of the Sharpe ratio (designated) is shown in equation 3:

$$S_i \quad \frac{R_i \quad RFR}{_i} \qquad (3)$$

§CV is superior to standard deviation because standard deviation is affected by the size of the units being measured. This problem is resolved by dividing standard deviation by the mean of the units to derive a scale-free metric.

Table 4: Risk Adjusted Performance (Sharpe Ratios) of NSE Sectoral Indices, January 2009 - December 2010

Index	Avg. Weekly Returns*	Avg. Weekly Yield on 10-Year Bonds	Standard Deviation of Returns	Sharpe Ratios	Rank
NSE Food/Beverage	0.82%	0.160%	4.49%	0.147	1
NSE 30	0.68%	0.160%	3.96%	0.131	2
NSE Banking	0.30%	0.160%	5.59%	0.025	3
NSE All-Share Index	**0.14%**	**0.160%**	**3.88%**	**-0.005**	**4**
NSE Oil and Gas	-0.64%	0.160%	4.54%	-0.176	5
NSE Insurance	-1.25%	0.160%	2.94%	-0.480	6

*Geometric (i.e., compound) average.

where:

R_i = the average rate of return for Portfolio i during a specified time period.

RFR = the average rate of return on risk-free assets during the same time period‡‡.

i = the standard deviation of the rate of return for portfolio *i* during the time period.

As seen in Table 4, the Sharpe ratios for the indices mirror their CVs in terms of performance ranking. The NSE Food and Beverage index, with a ratio of 0.147 still performed better than the indices including the aggregate portfolio, i.e., NSE All-Share index, during the review period. This was followed by the NSE 30 index with a ratio of 0.131. The NSE Insurance index with a ratio of minus 0.480 had the worst performance, followed by the NSE Oil and Gas index.

One advantage of the Sharpe ratio over the CV is that it compares the returns on a risky asset to those of an alternative "risk-free" asset. It is interesting to note that, between January 2009 and December 2010, only the NSE Food and Beverage, NSE 30 and NSE Banking indices had higher returns than 10-year Federal Government of Nigeria (FGN) bonds. The average weekly returns on the benchmark 10-year FGN bonds, at a modest 0.160 per cent, were 1.14 times higher than the 0.14 per cent posted by the overall stock market during the period under review.

5.0 CONCLUSION

This analysis compares the performance of the sectoral indices introduced by the NSE in January 2009. The indices were ranked according to their nominal and risk-adjusted performance. It was found that the NSE Food and Beverage index, followed by the NSE 30 index had the best nominal and risk adjusted returns, while the NSE Insurance index, followed by the NSE Oil and Gas index had the worst returns. The NSE Banking and NSE ASI indices were in the middle of these extremes.

Given that consumer prices rose by 26.6 per cent over the 24-month period, only the NSE Food and Beverage, NSE 30 and NSE ASI indices had positive inflation-adjusted returns. The Banking index had a positive nominal return of 33.2 per cent during the period under review. However, when this return is adjusted for inflation, the Banking index's performance becomes a moderate 6.6 per cent.

Considering that the data covered significant periods of bear market episodes due to the global financial and economic crises, the performance of the Food/Beverage sector did not come as a surprise. Although most stock market sectors decline during a recession, certain industries such as consumer staples and health-care stocks usually decline less than the average. This is why they are considered "defensive" stocks.

The outcomes of this analysis address the ability of these stock indices to function as wealth preservation and enhancement vehicles. Following the results, our recommendation is that investors should continue to diversify among

**This ratio was developed in 1966 by William F. Sharpe, who won the 1990 Nobel Prize in Economics.
††Risk-free in this context refers to assets, such as treasury bonds, which are deemed to have essentially no default risk. Treasury bonds have other types of risk such as interest rate risk, liquidity risk and inflation risk. See Ikoku (2010) for a discussion of the risks associated with investing in treasury bonds.
‡‡The average rate of return used in the analysis is the average weekly yield on 10-Year FGN bonds.

equities, especially by investing in sectors with better risk-adjusted performance. The NSE Insurance index may have turned in the worst performance among the indices but its negative or low correlation with the other indices suggests that investors could use insurance stocks to reduce the risk of their portfolio without doing undue damage to returns. In addition, investors should consider FGN bonds as long as their returns are higher than the rate of inflation.

The prospects for these indices remain bright, as the Nigerian Stock Exchange (NSE) is working with Bloomberg to co-brand them, which will enhance their profile and thereby give institutions the confidence to create products based on these indices, knowing that they will be accessible to a global investor base. The NSE should encourage the creation of exchange traded funds (ETFs) representing the sectoral indices in order to facilitate portfolio management by investors.

Because the four sectoral indices accounted for only 51 per cent of market capitalization in December 2010, the NSE should create more sectoral indices in order to offer a better coverage of the Nigerian equity market. An obvious candidate is the building materials sector, which accounted for 30 per cent of market capitalization in December 2010, but was not included in any of the sectoral indices.

In the final analysis, since the dataset largely covered the peak periods of the global financial and economic crises which had an adverse impact on stock performance globally (the NSE ASI dropped by 33.8 per cent in 2009, having dropped by 45.8 per cent in 2008), this study can be extended to cover periods after the global financial and economic crises. This paper could form a basis for performance analyses in the post-crises period.

REFERENCES

Financial Times London Stock Exchange, 2011, “FTSE 100 Index,” www.ftse.com.

Ikoku, A. E. 2009, “How do Nigerian Stocks Compare to Other African Equities? Pre-Crisis Evidence from 1997-2006” Central Bank of Nigeria Bullion, Vol. 33. No. 4.

Ikoku, A. E. 2010, “The Interest Rate Risk and Valuation of Federal Government of Nigeria Bonds” Monetary Policy Department Working Paper, Central Bank of Nigeria, October.

Nigerian Stock Exchange, Daily Official List, January 2009 December 2010.

Reilly, F. K. and K. C. Brown, 2006, Investment Analysis and Portfolio Management, Thomson South-Western, Eighth Edition,

Standard and Poor's, 2011, “SandP Sector Indices,” www.standardandpoors.com.

IMPACT OF BANKING SECTOR REFORMS ON THE NIGERIAN CAPITAL MARKET (EQUITIES)*

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ABSTRACT

Following the outcome of the Special Joint Examination by the Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC), ten banks were indicted, out of which two were asked to recapitalize, while the Chief Executive Officers (CEOs) and Directors of the remaining eight were removed by CBN based on mismanagement and poor corporate governance. In order to protect the investors as well as prevent unprecedented dumping of the shares of the listed seven banks, two weeks of full suspension was imposed on trading of their shares on the stock market at various times. This paper attempts to determine the impact of the suspended seven banks on the banking sector shares, as well as, establish the relationship between equities total market capitalization and banking sector and non-banking sectors capitalization. Year 2010 provided the needed recovery of the stocks market with the establishment of Asset Management Corporation of Nigeria (AMCON) which will help stimulate the recovery of the financial system and ultimately, provide liquidity to the banks by buying their non-performing loans and recapitalizing the intervened banks, among other things. The paper also recommends ways of encouraging the listing of additional companies in other sectors so as to reduce the dominance of banks in the stocks market. Using data sourced from Nigerian Stock Exchange (NSE), the study adopts descriptive statistics in analyzing the data.

1.0 INTRODUCTION

In order to strengthen the competitiveness and operational capabilities of banks in Nigeria with a view to enhancing global and public confidence in the Nigerian banking system and the economy in general, the Central Bank of Nigeria commenced a banking sector reform in July 2004. A key element of the reform was a prescribed minimum capital base of N25.0 billion for each bank. The monetary authority also encouraged strategic mergers and acquisitions among the then existing 89 banks, which ultimately resulted in 25 consolidated banks with the least capitalized bank at the prescribed minimum capital base. The number of banks further dropped to 24 as a result of self-induced merger between two of the 25 banks. The impact of the reform made the Nigerian banking industry to emerge as one of the most dynamic and competitive industries in the country and in particular, improved the performance of their shares on the Nigerian Stock Exchange (NSE).

Prior to the reform, the industry was highly skewed, with many banks having very small and undiversified capital. With a much higher capital base, Nigerian banks were expected to play an important role in economic development, including increased financial intermediation support to the private sector.

Post-consolidation period for Nigerian banks, however, came with its own challenges. There were issues of corporate governance, shallow risk assessment capacity and deterioration of assets quality, among others. Consequently, the monetary authorities conducted a special examination in July 2009, which was jointly undertaken by the Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC) to ascertain the state of affairs of the Nigerian banks. The examination was intended to review, evaluate and determine the quality of all the banks portfolios. It focused attention on the banks asset quality, liquidity and corporate governance. Following the outcome of the two batches of the exercise, ten banks out of the twenty-four banks were indicted. Two out of the ten were directed to recapitalize, while the Chief Executive Officers (CEOs) and Directors of the remaining eight were removed by the CBN based on mismanagement and corporate governance issues.

Given the concerns over the shares of the affected banks on the NSE, a tripartite agreement between the CBN, Securities and Exchange Commission (SEC) and NSE was taken with a view to protecting investors and prevent unprecedented dumping of the shares of the seven affected banks that were listed on the Exchange. In that regards, two weeks of full suspension was imposed on trading of the shares of the first five banks namely: Afribank Nigeria Plc, Oceanic Bank International Plc, FinBank Plc, Intercontinental Bank Plc and Union Bank of Nigeria Plc on Monday, August 17, 2009; while Bank PHB and Spring Bank Plc were suspended on October 5, 2009 for one week, following the release of the second batch of the examination report and new CEOs were appointed for the banks by CBN.

The objective of this paper is to determine the relationship between equities market, banking and non-banking sectors' capitalization. The essence is to determine the impact of the suspended seven banks on: the banking sector shares and the non-banking sectors of the stock market as well as recommend ways of reducing the dominance of banks in the stocks market.

The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

For ease of exposition, the paper is structured into six parts. While part one is the introduction, the literature review is presented in section two. The methodology of data analysis is discussed in section three. The analyses of the results are presented in section four, section five proffers way forward while section six concludes with policy recommendations.

2.0 LITERATURE REVIEW

This chapter discusses issues on Banking Sector Reform, The Global Financial Crisis and Implications on the Nigeria Banking System, Recent Banking Reforms, Nigerian Capital Market Reform and other issues relating to capital market.

2.1 Banking Sector Reform

According to Oni (2009), reforms have been a regular feature of the Nigerian banking industry. They have been introduced either in response to challenges posed by developments within the economy or those from outside the economy such as the imminence of system distress, deregulation, liberalization and globalization. Recently, Nigeria had experienced two major banking reforms, the first one in July, 2004 and the ongoing reform that started in June, 2009.

Okonjo and Osafo (2007) elaborated that Nigerian banking sector prior to July, 2004 was weak and fragmented, often financing short-term arbitrage opportunities rather than productive private investments. The authors reiterated further that the roots of the financial sector weakness may be traced to its poorly managed liberalization during the structural adjustment programme (SAP) of the 1980s. The financial system was repressed before the SAP largely because of the imposition of interest rate ceilings that resulted in negative real interest rates. Initial attempts at financial liberalization, however, yielded poor results. Supervision remained weak and there was evidence that many banks had bad balance sheets. Many of them conducted only limited lending to the private sector, while engaging predominantly in more lucrative short-term arbitrage foreign exchange "roundtripping" activities. Consolidation and improved supervision of the sector were, therefore, needed to strengthen the financial sector.

In order to strengthen the banking sector and improve availability of credit to the private sector, a bank consolidation exercise was rolled out in July 6, 2004. The minimum capital base of all deposit money banks was raised from N2.0 billion to N25.0 billion effective December, 2005. Banks failing to meet the new requirements were expected to merge or else have their licenses revoked. Implementation of the consolidation exercise triggered various mergers/acquisitions and reduced the number of deposit money banks in Nigeria from 89 to 25. Moreover, in the process of meeting the new capital requirements, banks raised an equivalent of about $3.0 billion from the domestic capital market and attracted about $652.0 million of Foreign Direct Investment (FDI) into the Nigerian banking sector (Okonjo and Osafo (2007).

Abolo (2009) pointed out a number of outcomes of the consolidation exercise which include;

The ownership of banks became broad-based with the exception of the foreign-owned banks and Government ownership of banks (direct and indirect) that was limited to 10.0 per cent.

More than seven banks had Tier 1 capital in excess of USD1.0 billion by the end of 2008; 11 banks had market capitalization ranging between USD1.0 billion and USD5.3 billion; 16 banks were in the top 1,000 in the world; 5 Nigerian banks also ranked among the top 10 African banks as at May 2009.

Expansion into non-bank financial services such as insurance, asset management and mortgages.

2.1.1 The Global Financial Crisis and Implications on the Nigeria Banking System

The first stage of the global financial crisis started with "liquidity constraints," when conduits and aggregators of securitized products and financial institutions faced difficulties in raising funds in the United State of America (USA). The second stage was the time of "credit contraction." In this stage, financial institutions in the USA tightened their credit standards and their lending attitudes, and this exerted strong downward pressure on the economy. Most recently, a third stage has emerged. In this stage, delinquency rates of not only sub-prime-related products, but also commercial real estate loans and consumer loans have been rising, reflecting the sluggishness in the U.S. economy. As a result, financial institutions' asset quality deteriorated with further adverse impact on the economy. The U.S. economic growth remained sluggish for some time, since it was unforeseeable at that time when and how the negative feedback loop will diminish. In Europe, economic growth is slowing further. In Asia, although Chinese and Indian economies have continued to post relatively high growth, some of the other Asian economies are showing deceleration in exports and signs of slowing domestic demand. Most of these institutions had in their books a very huge loss, arising from the deteriorated quality of assets accumulated without being sure of the fundamentals of those assets in the market. In addition, the affected institutions in the US and Europe were not adhering to prudential regulations guiding the operations of the mortgage industry, hence the abrupt collapse of the sub-sector.

However, the situation in the US had partial negative effect on some Nigerian banks because of their trading relationship with some of these banks in the US. Following the successful conclusion of the first phase of the consolidation in the Nigerian banking industry, some Nigerian banks were given the opportunity of managing the nation's external reserves by partnering with their foreign correspondent banks in the US and Europe. It is therefore expected that if any of these correspondent banks is affected by the global financial crisis, the corresponding local bank will be equally affected.

Furthermore, the Nigerian capital market has been bearish since the inception of the global financial crisis. Specifically, since the beginning of second quarter, 2008, the capital market recorded downward trend in its major indicators. Market capitalization (equities only) fell, from N12.0 trillion in first quarter 2008, to N11.2 trillion by end of the second quarter 2008 and further to N10.0 trillion at end-September, 2008 and down to N7.0 trillion at end-December 2009. Combined efforts by the Federal Government, CBN, SEC and NSE to make the market rebound had started producing the desired results, leading to appreciation of share prices, especially banking stocks. The banking sector market capitalization had declined from an all-time high of N7.2 trillion in February, 2008 to not more than N5.0 trillion by December, 2009. The development is not likely to abate as even high net worth local investors are still skeptical of the market.

Apart from its impact on the financial sector, the Nigerian economy as a whole took considerable pounding from the global crisis. As a matter of fact, the US economy constitutes more than 20.0 per cent of the global domestic product (GDP) and consumes more than 20.0 per cent of the global oil supply. With the US economy contracting, there was considerable drop in demand for oil, which impacted negatively on prices.

Besides, the global credit crunch restricted the flow of foreign investment into the Nigerian economy. In this circumstance, foreign investors consider a lot of factors before they can stake in their money. With the worsening and decaying infrastructure as well as the heightening insecurity in the country, Nigeria found it extremely difficult to compete for scarce foreign investment inflow along with more stable emerging markets backed by dependable infrastructure begging for foreign investment.

2.1.2 Recent Banking Reforms

As a result of the global financial crisis which adversely affected the Nigerian economy, in particular the capital market and oil and gas sector, it was observed by the regulators that some Nigerian banks had huge concentration of exposure to these two sectors. In addition, there were observed general weaknesses in risk management practices, poor corporate governance practices and signs of illiquidity. It therefore became compelling to ascertain the true financial health of the Nigerian banks in the public interest.

In July, 2009, a special joint examination by CBN and NDIC was set up to review, evaluate and determine the quality of all the banks portfolios. The focus of the special examination was asset quality, liquidity and corporate governance. The outcome of the special examination necessitated pragmatic actions, which included the strict implementation of the code of corporate governance with zero tolerance to false reporting, institution of common year end, need for the recapitalization of some banks and massive recoveries of sticky loans facilities. Following the outcome of the two batches of the examination exercise, ten out of 24 banks were indicted. Two out of the ten were asked to recapitalize, while the Chief Executive Officers (CEOs) and Directors of the remaining eight were removed by CBN based on mismanagement and corporate governance issues.

With the conclusion of the bank examination exercise, CBN came to the end of the first phase of the process of restoring financial sector stability. Ongoing actions were expected to focus on building capacity within the regulatory regime; fast-tracking the implementation of risk-based, consolidated and cross border supervision frameworks; easing the flow of credit, particularly to the real sector of the economy; improving governance structures and practices in the financial services sector; repeal of universal banking regime which requires banks to divest from all non-banking business and the establishment of the Assets Management Corporation (AMCON), which was expected to take over the non-performing assets of banks and in the long-run improving confidence in the economy in general.

2.2 Nigerian Capital Market Reform

The ongoing reforms in the banking sector were also designed to reposition the Nigerian capital market for effectiveness and restore investors' confidence, rather than cripple listed companies on the Exchange. For effective regulation of the market, Securities and Exchange Commission (SEC) applied various regulatory/supervisory tools such as registration of market facilities, operators and securities to be traded in the market, monitoring/inspection, investigation, enforcement and rule making.

2.2.1 Industry/Sector Market Players

The key market players in the Nigerian capital market include: Ministry of Finance; CBN; The Nigerian Stock Exchange; Abuja Securities and Commodity Exchange; Issuing Houses; Underwriters; Registrars; Rating Agencies; Capital Market Consultants; Fund Managers; Portfolio Managers; Investment Advisers; Stockbrokers/Dealers Central Securities Clearing System/Depository; Market Makers; Commodity Brokers; Stockbrokers and Warehouse Operators.

2.2.2 The Roles of Nigerian Capital Market

The Research and Market Development of SEC, elaborate the roles of Nigerian Capital Market in Nigerian financial sector stability and development. The importance of the capital market as a barometer of economic performance can be inferred from daily news reporting. Media organisations report daily the performance of the capital market aggregates (especially the stock market index) and individual stocks. The reporting of the performance of different markets across the globe indicates the relative competitiveness of the underlying economies and stocks. This becomes even more interesting when a particular stock is dual-listed. It provides opportunities for companies to borrow funds needed for long-term investment purposes and provide avenue for the marketing of shares and other securities in order to raise fresh funds for expansion of operations, leading to increase in output/productivity. In addition, requirements are provided to enable foreign businesses offer their shares to the market. In other words, the public has the opportunity to invest and participate in the ownership of foreign business. This ultimately encourages inflow of foreign capital when foreign companies or investors invest in domestic securities. Government is offered the opportunities to finance projects aimed at providing essential amenities for socio-economic development and employed the capital market to carry out its privatization exercise by offering its shareholdings in state-owned enterprises to members of the public through the stock exchange.

Overall, the Nigerian capital market ensures an efficient and effective distribution of scarce finance resources for optimal benefit to the economy. It provides employment opportunities for the ever growing labour force and encourages transparency and good accounting/management practices, by ensuring that companies disclose relevant and adequate information to enable potential investors and shareholders make well informed decisions. It also creates an avenue for the populace to participate in the corporate sector of the economy and share in its wealth through ownership of securities. It provides the needed seed money for venture capital development which could serve as a vehicle for industrial development.

2.2.3 Industry Issues

Key issues and challenges includes: technology and market infrastructure; illiquidity; cost of transactions; lack of integration of securities settlement; ownership and operational control; international participation; banking/capital market financing; operational capacity; regulatory framework; investor protection; legal framework; development of the bond market; enhanced corporate governance; market research and innovative instruments and ratings culture, among others.

During the FSS 2020 (2008) conference, financial stakeholders and analyst discussed extensively on the net effects of the challenges highlighted above, which limit the capacity of the Nigerian capital market to attain the dream of becoming a leading financial hub for capital formation in Africa. The situation has limited the sector from contributing maximally to the economic growth and development of the nation. Issues like liquidity and cost directly impact on the issuance of securities and the secondary trading in such securities as well as in attracting foreign investments. Having a multiple settlement system is inimical to the development of the market, as a functional integration of these systems would guarantee standardization of services. The lack of investors' confidence would lead to an erosion of value and the market would not reach its apex of value creation.

2.2.4 Recent Developments in the Nigerian Capital Market

Activities in the capital market increased tremendously following the release of the 13-point banking sector reform agenda by the Central Bank of Nigeria on July 6, 2004 which required the banks in the country to achieve a minimum shareholders fund of N25.0 billion by end-December 2005. Many of the banks resorted to the equity market to raise funds to meet this requirement. Nigerian capital market has been bearish since the inception of the global financial crisis. Specifically, since the beginning of second quarter, 2008, the capital market recorded downward trend in its major indicators. Market capitalization (equities only) fell, from N12.0 trillion in first quarter 2008, to N11.2 trillion by end of the second quarter 2008.

This decline in market indicators caused the Federal Government of Nigeria (FGN) and all the major stakeholders in the Nigerian Capital market to meet in August, 2008 in order to appraise the market and map out ways to stem the sliding fortunes of the Nigerian equity market. The major decisions of the meeting and the proposed measures were as follows:

The Central Bank of Nigeria (CBN) should take appropriate measures to ensure adequate Liquidity within the capital market.

Commercial banks advised to restructure existing facilities to aid operations of licensed stockbrokers, institutional and individual investors on longer repayment terms.

The Securities and Exchange Commission (SEC), the Nigerian Stock Exchange (NSE), and all Capital Market operators agreed jointly to reduce the burden on investors by cutting fees significantly. The NSE had decided to cut its fees by 50.0 per cent effective August 27, 2008.

The stakeholders resolved to set up a Presidential Advisory Team on the Nigerian Capital Market. The Presidential Advisory Team on the Capital Market would continue to meet regularly to articulate and implement medium to long-term measures that are necessary for the healthy growth and development of the Capital Market.

The Office of the Attorney General of the Federation should issue an exemption to the provisions of the relevant sections of the Companies and Allied Matters Act, 1990, to permit quoted companies to buy back up to 20.0 per cent of their shares.

The NSE should review its trading rules and regulations. In the interim, it had taken the following steps: One per cent maximum downward limit on daily price movement would be allowed while the current five per cent limit on upward movement would be retained.

The SEC and NSE would also take administrative actions to stem the rate of new listings until the market stabilizes.

Having gone through the steps for delisting, the stock exchange will de-list all the moribund companies earlier advertised.

To establish a Capital Market Stabilisation Fund as an intervention instrument to curb spate of bearish trading in the market.

The experience of 2008 and 2009 crashes of the Nigerian Capital Market has been unprecedented in its historic evolution since 1960. Its market capitalization nose-dived from an all time high of N12.0 trillion (equities only) in February 2008 to not more than N5.2 (equities only) trillion by December, 2009. Besides, the All-Share Index (a measure of the magnitude and direction of general price movement) also plummeted from 66,000 basis points to less than 21,000 points in the same period. The stock prices experienced a downward movement regime (with more than 60. 0 per cent of the quoted securities on constant offer) on a continuous basis. Consequently, many of the quoted stocks lacked liquidity as their holders were trapped, not being able to convert them to cash to meet their domestic and other investment needs. On the other hand, fresh investors were cautious as a result of the uncertainties surrounding the markets.

Olisaemeka (2009) enumerated a number of factors that have been blamed for declining state of affairs as global phenomenon, pull-out of foreign investors, lack of infrastructure and high production costs, impact of commercial banks, avalanche of private placement offers and structural deficiencies of the Nigerian Capital Market as well as regulatory inconsistencies and pronouncements.

Many foreign investors that already had troubles in their home economies pulled out of the Nigerian stock market leading to the dumping of shares beyond the ability of domestic investors to contain. Consequently, supply of equities, overwhelmed demand, leading to price fall. Available statistics showed that purchase by foreign investors during 2008 was in excess of N150.2 billion, representing 6.3 percent of the aggregate turnover and a decline when compared with the N256.0 billion recorded in 2007. Concurrently, total sales by foreign investors during the year were in excess of N556.93 billion, culminating in a net outflow of about N406.8 billion. However, 2010 recorded modest global economic recovery despite the equity price declines and the additional risks in investing in emerging markets as foreign investors continued to demonstrate confidence in the economy during the year. Some of the erstwhile foreign investors are returning, while new investors seek opportunities considering the key attributes of high returns, liquidity and safety of investments. Available statistics showed that purchases by foreign investors during 2010 stood at N381.34 billion, representing 48.0 percent of the aggregate turnover. This was an increase when compared with the N202.48 billion recorded in 2009. Concurrently, total sales (outflow) during the year was about N194.63 billion, culminating in a net inflow in excess of N186.71 billion, an increase over the preceding year's net inflow of N33.4 billion. The cost of doing business in Nigeria is high. Basic infrastructures like good roads, power supply are lacking, leading to high cost of doing business. Many quoted and unquoted companies like Dunlop Nigeria Plc and Michelin Nigeria have closed down shops. Most of the textile industries have also stopped production, leading to the crash of their share prices.

Following the recapitalization of banks to a minimum of N25.0 billion, almost all banks utilized and accessed the capital market to raise funds. Within two years, many of the banks besieged the capital market more than once, raising funds through mega offers in a single tranche. Through, enticing marketing strategies, the banks succeeded in their various offers. The primary market seemed to experience a boom, as many investors dumped their shares in the secondary market, in favour of the primary market offers achieved through bewitching marketing efforts of banks. A total of N2.2 trillion was raised through various public offers dominated by the banks in 2008. Much of this came through disposal of shares in the secondary market.

A number of private companies did private placement of their shares at lower prices, while they sought or intended to seek quotation of their shares at higher values on the Nigerian Stock Exchange, thus making such private placements very attractive. This lured investors to dispose or dump their shares in the secondary market, purchase the private placements and dispose of same immediately after their listing on the Stock Exchange at higher prices. The regulating body, the Investment and Securities Act, 2007, does not place private companies under their control. Thus, so much liquidity was sucked from the Nigerian capital market in favour of private placements of private companies, many of which remained unquoted till date, leading to the crash of the Nigerian capital market.

There appears to be some inadequacies of the Nigerian capital market, especially the absence of market makers. As at third week of January 2009, the Nigerian Securities and Exchange Commission (SEC) had licensed five market makers, but the Nigerian Stock Exchange was yet to also license them due to avoidable administrative bottlenecks. Thus, there were no functional market makers that could provide exit windows for investors who wished to check out.

The apex regulator of the Nigerian stock market, the Securities and Exchange Commission, prior to the crash of the market had alleged publicly that stock market prices were being manipulated and it announced that it was probing some quoted companies. Following the publication, investors became afraid, thus provoking panic selling of stocks among investors. This contributed to the crash of the market in 2008.

2.2.5 Industry Challenges

The recent market meltdown led to loss of depositors/shareholders funds with the banks. It is estimated that banks were exposed to the capital market in excess of N1.0 trillion through losses in the value of securities for which margin facilities were granted to investors in Nigeria. This significantly increased the quantum of banks non-performing assets. The market meltdown also induced massive withdrawal of foreign investments from the Nigerian financial system, damping the remaining source of hope for possible market recovery.

On a positive note, the Nigerian capital market meltdown compelled investment diversification, especially real estate and government bonds. Investors now scamper for safety rather than high returns at the expense of possible huge or near total losses, which equity investment symbolizes - where the investor either enjoys too much or suffers too much. The way out from the market meltdown as diagnosed by Olisaemaka (2009) was that, only physical injection of funds can change the direction of the market. With the present liquidity crunch and investors loss of confidence, it is not reasonable to expect salvation from individual and institutional investors. A strong government bail-out as obtained in USA, Russia, Britain and Singapore, is the magic wand needed to be waived in the four corners of the market.

2.2.6 Global/Regional Trends

Globally, capital markets are becoming increasingly dynamic with series of innovations in infrastructures, products and services. Consolidation of exchanges is the approach undertaken by older and more established exchanges to remain competitive. Therefore, the development of the capital market must be seen in the context of regional integration of markets. The Ghanaian and Nigerian SECs have collaborated on a number of issues through the instrumentality of the bilateral Memorandum of Understanding (MoU) signed in year 2002. Within the Anglophone West Africa, the Nigerian and Ghanaian Exchanges are the leading stock exchanges. Several other exchanges are being established to trade specific securities like commodities futures and exchange traded funds. New products such assets-backed and mortgage-backed securities, real estate investment scheme, ethical and Islamic capital market products as well as hedge funds are being introduced to deepen the various markets.

The quality of service delivery has also been enhanced through the automation of processes: the introduction of electronic filing, e-trading, remote trading, e-bonus, e-dividend, shelf-registration and electronic issuance of securities; linkages of Central Securities Depositories (CSD); increase in corporate restructuring, mergers and acquisitions; introduction of risk-based supervision and convergence of international financial reporting standard; international cooperation and information sharing between jurisdictions through the instrumentality of the International Organisation of Securities

Table I: All Share Index of some Selected Stock Exchanges

COUNTRY	INDEX	CODE	END YEAR, 2008 (1)	END YEAR, 2009 (2)	% Change Between (1) & (2)
NIGERIA	ASI	.LAGLG	31,450.78	20,561.15	-34.62
GHANA	GHI	.GHAGH	10,461.43	5,355.92	-48.80
KENYA	NAIROBI INDEX	.NSE20	3,347.99	3,187.60	-4.79
US	S&P 500	.NDX	1,199.17	1,822.52	51.98
RUSSIA	MICEX INDEX	.MCX	628.38	1,355.56	115.72
GERMANY	SE XETRA DAX	.GDAXI	4,718.58	5,866.06	24.32
JAPAN	NIKKEI 225	.N225	8,636.02	10,250.95	18.70
CHINA	SHANGHAI SE A	.SSEA	2,014.80	3,339.11	65.73
INDIAN	BSE SENSEX	.BSEDX30	1,663.47	2,992.26 (DEC.30)	79.88

Source: Reuters

Commissions (IOSCO); and Multilateral Memorandum of Understanding (MMoU). In contrast, European and Asian countries had recorded tremendous recovery in their share prices after the global crisis (Table I).

3.0 DATA ANALYSIS AND METHODOLOGY

3.1 Sources of Data

The data used for this study were sourced from Nigerian Stock Exchange (NSE) comprising: Equities Total Market Capitalization, Sectoral Market Capitalization, Companies' Market Capitalization and All-Share Index.

3.2 Data Analysis Methodology

The analysis focused more on the impact of the first five suspended banks, ostensibly because the other two banks did not make significant impact on the market during the suspension period. The Nigerian Stock Exchange (NSE) recorded its end-month pick market indicators of Total Market Capitalization (TMC) and All Share Index (ASI) on February 28, 2008; hence the study adopted the trading day as the base period for all the analyses.

Descriptive statistics was employed for this study. This includes graphical analysis to explain the behavioral pattern of the variables under consideration. Pearson correlation coefficient (r) was used to determine the degree of association among the variables. In addition, the coefficient of variation was used to assess the degree of volatility (risk) of the variables. The NSE All-Share Index was rebased to obtain the CBN Index, ostensibly for ease of analysis.

3.3 Compilation of Major Capital Market Statistics

3.3.1 Market Capitalization (MC) of the Stock Exchange

Market Capitalization is a function of market price and volume of paid-up capital of listed companies. For individual company, the market capitalization is the product of market price and number of outstanding shares i.e. Number of Outstanding Shares multiplied by Market Price. The sum total of market capitalization for all listed equities on an Exchange gives the aggregate equity market capitalization of a stock market. Equity market capitalization is perhaps the most important criterion in assessing the size of a capital market. For individual quoted companies, the size of market capitalization is an indicator of the market value (i.e. investor's perception or assessment) of the company. Thus, market capitalization does fluctuate with movements in the market price of company equity and changes in outstanding shares. For instance, an increase in the outstanding shares of company with market price either held constant or increased would enhance the market capitalization of a company. Generally, the aggregate market capitalization of a stock market would show an upward trend in a bullish market, while the converse would happen in a bearish market situation.

3.3.2 All-Share Index (ASI)

A stock market index is a listing of stocks and a statistic reflecting the composite value of its components. It is a measure of the magnitude and direction of general price movement. The All-Share Index of the Nigeria Stock exchange is one such index and is an indicator designed by the regulator to show the investor the following:

- Price movements of quoted stocks
- Summary measure of the behavior of the stock market as it indicates changes in the aggregate market value or the value of some selected stocks.
- The relationship between the prices of individual stocks and the improvements in the stock market, which helps in stock tracking and equity portfolio construction.
- The relationship between stock prices and other economic and financial variables such as money supply, industrial production, consumer price index, corporate profits, lending and deposit rates.

All Share Index formula

$$\frac{\sum_i P_{it} Q_{it}}{\sum_i P_{io} Q_{io}} x\ 100$$

P_{it} = Price of stock i at day t
P_{io} = Price of stock i at base period
Q_{it} = Outstanding shares of i at day t
Q_{io} = Outstanding shares of stock i at base period
Base period = January 1984 (Value = 100)

Note: The NSE All-Share Index is made up of all equities quoted on the Exchange.

Most indicators and ratios in the capital market are aimed at showing the market and financial performances of the stock exchange and firms, respectively, with the resulting benefits to the shareholders and investors. Some of these indicators and ratios are; Volume of Share Traded, Value of Stock Traded, Liquidity or Stock Turnover Ratio, Earnings Per Share (EPS), Price-Earnings Ratio (P/E), Earning Yield, Dividend Per Share (DPS), Dividend Pay-out Ratio (DPR), Earnings Retention Ratio (ERR), Dividend Yield, Dividend Cover and other useful ratios.

3.4 Definitions of Statistical Tools

3.4.1 Pearson Correlation Coefficient (r)

This is an important measure of association between two variables. The larger (r), ignoring sign, the stronger the linear association between the two variables and the more accurately you can predict one variable from knowledge of the other variable. The sign of the correlation implies the "direction" of the association. A positive correlation is a direct relationship where as the amount of one variable increases, the amount of second variable also increases. In a negative correlation, as the amount of one variable goes up, the levels of another variable go down.

3.4.2 Coefficient of Variation (CV)

This a statistical measure of the dispersion of data points in a data series around the mean. The coefficient of variation represents the ratio of the standard deviation to the mean, and it is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other. In the investing world, the coefficient of variation allows you to determine how much volatility (risk) you are assuming in comparison to the amount of return you can expect from your investment. Hence, the lower the ratio of standard deviation to mean return the better your risk-return tradeoff.

4.0 ANALYSIS OF RESULTS

4.1 Correlation Analysis (CA)

The CA was applied to analyze the banking sector intervention in 2009 in relation to Stocks Market recovery in 2010. The correlation coefficient is estimated using data from Nigerian Stock Exchange (NSE) to determine the correlation between Equities Total Market Capitalization (ETMC) and Banking Sector Capitalization (BSC) as well as ETMC and Non-Banking Sectors Capitalization (NBSC). NBS Sectors comprise 33 sectors (see appendix II for list of the sectors).

The correlation coefficient (r) of 96.4 per cent between Equities Total Market Capitalization (ETMC) and Banking Sector Capitalization (BSC) shows a high degree of association between the two variables. However, Non-Banking Sectors which constitutes the remaining 33 sectors has about 87.6 per cent influences on the ETMC. This goes to show that banking sector alone exerts about 8.8 percentage points more influence on the ETMC than the Non-Banking Sectors that constitute 33 different sectors. However, even within the banking sector, the influence of the first 5 intervened banks on the total banking sector capitalization had been significant as it influenced about 97.3 per cent of the movements in the total banking sector capitalization. This, when compared with the 97.7 per cent of the other banks, represent only a marginal increase of 0.3 percentage point (Tables 2 and 3).

The investors' pessimism that was widespread after two consecutive years of losses in mid-2008 and 2009 gradually gave way to cautious optimism as the various confidence building measures initiated by the regulatory authorities such as: the removal and prosecution of bad CEOs; review of the universal banking model; and the integration of the financial sector with the real economy; zero tolerance for market infractions and compliance with post-listing requirements and the establishment of Asset Management Corporation of Nigeria (AMCON), begins to yield results.

4.2 Coefficient of Variation Analysis

The Coefficient of Variation Analysis (CV) is being used to analysed the pre-intervention/reform period of 2008 as well as the intervention/reform period of 2009 and the post-intervention banking reform of 2010. The CV computed for both the MC and Indices data revealed the same pattern of result. The degree of volatility of Equity Total Market Capitalization (ETMC), Banking Sector Capitalization (BSC), Non-Banking Sectors Capitalization (NBSC), Other Banks Capitalization (OBC) and Intervened Banks Capitalization (IBC) were shown by their levels of risk (Tables 2 and 3). The relative volatility of NBSC was the least at 25.7 per cent when compared to other sectors. IBC have the highest level of volatility at 93.6

per cent when compared with others, signifying the vulnerability of the suspended banks.

The Banking Sector Capitalization (BSC) level of volatility at 49.3 per cent was higher than the Equities Total Market Capitalization (ETMC) at 34.6 per cent, this showed the vulnerability of the Banking sector when compared with the ETMC. The impact of the five intervened banks was highly reflected in the other banking sector capitalization (37.6 per cent) during the suspension period as investors' preference changed immediately to Non-Banking Sectors. This ultimately reduced the dominance of banking sector share prices in favour of Non-Banking sectors as the market movers (Fig 1).

Transaction on the Nigeria Stock Exchange has been driven by the activities in the Banking Sector up to August 2009. However, dominance of Non-Banking sectors was prominent post-August 2009, especially during the suspension period of the intervened banks (Table 2 and 3). It was quite revealing that the Banking Sector was yet to return to its domineering position even when the suspension on trading in the shares of the intervened banks was lifted (Fig 2).

Extending the analysis to December 31, 2010, it was obvious that the share prices of Non-Banking sectors had not trended down. This justifies the conclusion that more companies should be listed on the Non-Banking Sectors in order to dilute the dominance of the banking sector. Also, the daily trading revealed that investors have began to give preference to non-banking stocks due to the high volatility experienced in the banking sector. In addition, since the suspension on the intervened banks was lifted August 31, 2009, their shares have not trended along with other banks as their prices continue to depreciate when compared with the market performances of the non-intervened banks (Fig. 2).

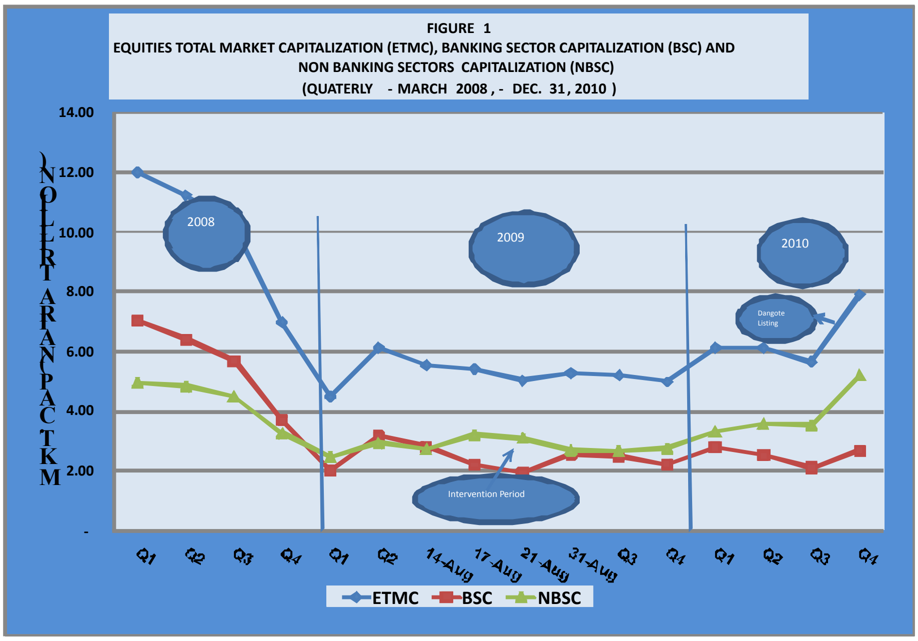
TABLE 2
MARKET CAPITALIZATION (Billion Naira) Equities Only

	PERIOD	EQUITIES TOTAL MARKET CAP. (ETMC)	BANKING SECTOR MKT. CAP (BSC)	NON-BANKING SECTORS MKT. CAP. (NBSC)	INTERVENED BANKS MKT. CAP (IBC)	OTHER BANKS MKT. CAP (OBC)
	MARCH , 2008	12,001.45	7,041.42	4,960.02	1,928.28	5,113.15
	JUNE, 2008	11,241.52	6,398.63	4,842.89	1,756.75	4,641.88
	SEPT, 2008	10,199.87	5,714.55	4,485.32	1,683.90	4,030.65
	DEC., 2008	6,984.61	3,711.92	3,272.68	845.97	2,865.95
	MARCH, 2009	4,489.68	2,017.22	2,472.47	466.10	1,551.12
	JUNE, 2009	6,125.26	3,179.64	2,945.62	658.06	2,521.57
Trading day preceding the suspension of the intervened 5 banks (Friday)	AUG. 14, 2009	5,554.13	2,827.87	2,726.26	492.45	2,335.42
Suspension of the 5 banks (Monday)	AUG. 17, 2009	5,423.87	2,214.75	3,209.12		2,214.75
Suspension of the 5 banks (Friday)	AUG. 21, 2009	5,037.14	1,941.51	3,095.00		1,941.51
Intervened 5 Banks suspension listed trading day	AUG. 31, 2009	5,274.40	2,575.94	2,698.46	436.44	2,139.50
	SEPT., 2009	5,192.40	2,529.73	2,662.67	337.39	2,192.34
	DEC., 2009	4,989.39	2,238.32	2,749.73	196.17	2,042.15
	MAR., 2010	6,124.98	2,810.59	3,314.39	215.40	2,595.19
	JUNE, 2010	6,118.50	2,546.82	3,571.68	176.36	2,370.46
	SEPT., 2010	5,648.28	2,115.50	3,532.77	122.47	1,993.04
	DEC., 2010	7,913.75	2,710.17	5,203.58	194.94	2,515.23
Mean		6,769.95	3,285.91	3,483.92	679.33	2,691.49
Standard Deviation		2,343.57	1,618.74	894.92	636.14	1,011.43
Coefficient of Variation		34.62	49.26	25.69	93.64	37.58
Count		16	16	16	14	16
Correlation Coefficient		NSE MC	0.964	0.876	0.896	0.977
			BSC	0.715	0.973	0.989
				NBSC	0.591	0.769
					IBC	0.931

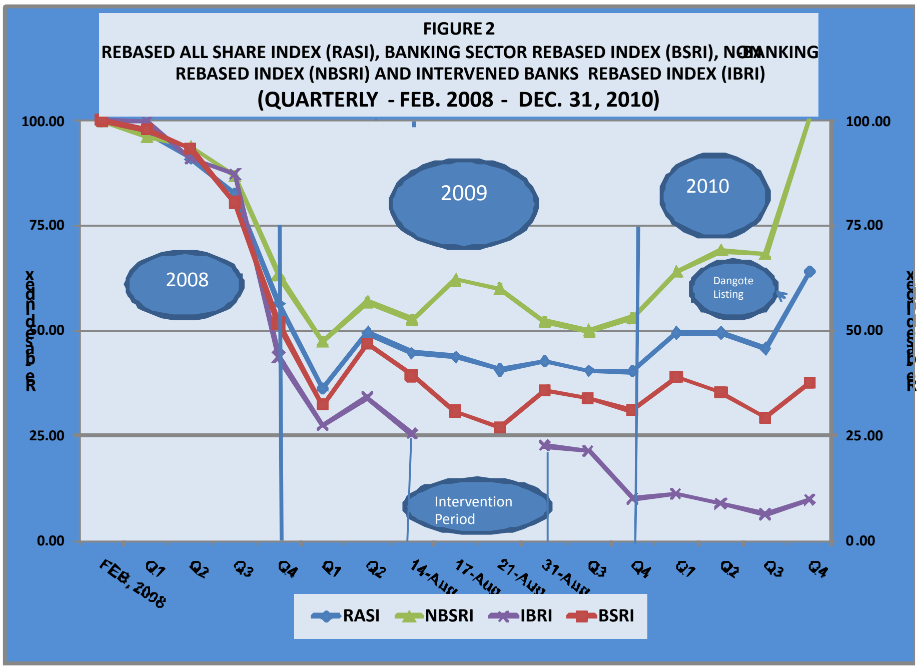
Source: NSE

TABLE 3
MARKET INDICES (REBASED)

	PERIOD	NSE ALL SHARE INDEX	REBASED ALL SHARE INDEX (RASI)	BANKING SECTOR REBASED INDEX (BSRI)	NON-BANKING SECTORS REBASED INDEX (NBSRI)	INTERVENED BANKS REBASED INDEX (IBRI)	OTHER BANKS REBASED INDEX (OBRI)
	FEB, 2008	65,652.40	100.00	100.00	100.00	100.00	100.00
	MARCH , 2008	63,016.00	97.05	97.80	96.02	99.86	97.04
	JUNE, 2008	55,949.00	90.91	93.22	93.75	90.98	88.10
	SEPT, 2008	46,216.13	82.49	80.47	86.83	87.21	76.50
	DEC., 2008	31,450.78	56.48	51.61	63.35	43.81	54.39
	MARCH, 2009	19,851.89	36.31	32.27	47.56	27.55	38.00
	JUNE, 2009	26,249.28	49.53	46.96	57.02	34.08	47.86
Trading day preceding the suspension of the intervened 5 banks (Friday)	AUG. 14, 2009	24,237.85	44.92	39.28	52.77	25.50	44.32
Suspension of the 5 banks (Monday)	AUG. 17, 2009	23,661.03	43.86	30.77	62.12		42.03
Suspension of the 5 banks (Friday)	AUG. 21, 2009	21,973.96	40.73	26.97	59.93		36.85
Intervened 5 Banks suspension listed trading day	AUG. 31, 2009	23,009.10	42.65	35.78	52.24	22.60	40.61
	SEPT., 2009	22,192.85	40.58	33.85	49.95	21.44	38.39
	DEC., 2009	20,827.17	40.35	31.09	53.22	10.16	38.76
	MAR., 2010	25,322.87	49.53	39.04	64.16	11.16	49.25
	JUNE, 2010	25,154.26	49.48	35.37	69.14	9.13	44.99
	SEPT., 2010	23,050.59	45.68	29.38	68.39	6.34	37.83
	DEC., 2010	24,770.52	64.00	37.64	100.73	10.10	47.74
Mean		31,916.80	57.33	49.50	69.25	39.99	54.27
Standard Deviation		15,425.07	21.45	25.80	18.66	35.63	21.68
Coefficient of Variation		48.33	37.41	52.12	26.95	89.09	39.95
Count		17	17	17	17	15	17
Correlation Coefficient		NSE ASI	0.974	0.987	0.794	0.955	0.995
			RASI	0.969	0.899	0.912	0.982
				BSRI	0.765	0.979	0.992
					NBSRI	0.658	0.809
						IBRI	0.953



Source: Nigerian Stock Exchange (NSE)



Source: Nigerian Stock Exchange (NSE)

4.3 Stocks Market Recovery in 2010

The CBN sustained its banking sector reform in 2010, which was designed to foster financial sector stability. The set time lines were realized in the commencement of operations of the Asset Management Corporation of Nigeria (AMCON), significant milestones were recorded, especially in the areas of releasing the new prudential guidelines; tenor limits for Managing Directors as well as non executive directors of banks and implementation of the Nigerian Uniform Bank Account Number (NUBAN) scheme.

Consequently, the weekly analyses showed that the ETMC of listed equities, which opened the year with N4.89 trillion ended the year in green at N7.9 trillion while the All-Share Index closed higher at 24,770.52 points, up from 20,827.17 points at the beginning of January 2010. On October 29, 2010 Dangote Cement Company was listed through merger into one of the non-banking sector (building materials) on NSE market, this increased equities market capitalization from N5.6 trillion at end-September to N7.9 trillion at end-December, 2010 (Figure3).

On November 3, 2010, AMCON approved the purchase of all the margin loans in the banking sector, including total non-performing loans of banks rescued by the CBN in 2009. The total loans to be purchased were initially estimated at N2.2 trillion. AMCON had valued non-performing loans backed by shares of listed companies at an implied premium of approximately 60.0 per cent on the 60-day average of recent prices, ending November 15, 2010. On December 31, 2010 a total of N1.04 trillion non performing loans were purchased from the banks with a three year initial consideration zero coupon bond, which would subsequently be registered with SEC and become discountable by CBN.

4.4 Base Period Implications for NSE All-Share Index

The study also revealed high degree of relationship between the All-Share Index of NSE computed with base year of 1984 and the Rebased ASI computed with February 28, 2008 as base period. This implied that computing the base year with a recent or realistic base period would not distort the Index. Overall, the NSE ASI and RASI trends have stabilized thenceforth up till December 31, 2010 (Fig. 3).

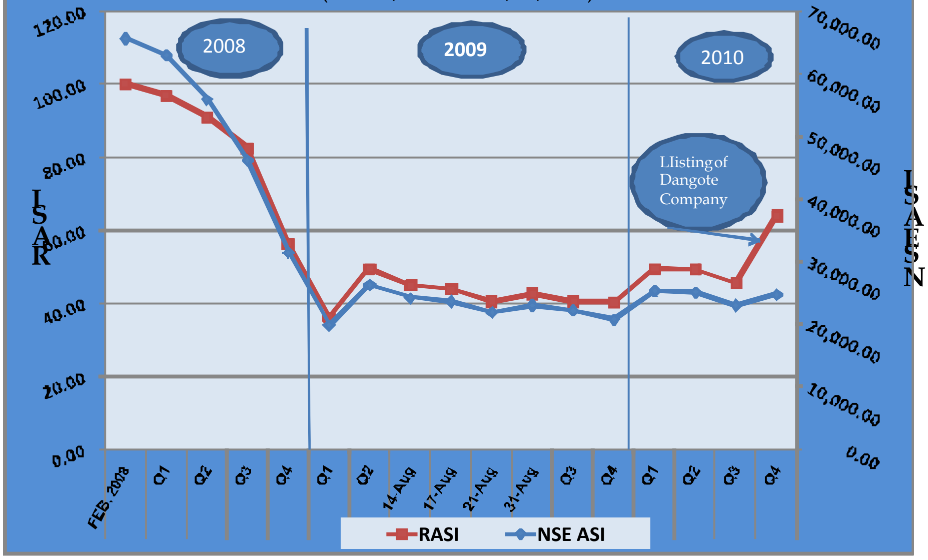
5.0 Industry Way forward

The 2008 2009 meltdowns and the recovery of 2010 in the Nigerian capital market provided excellent opportunities for both local and foreign investors to grab the shares at rock-bottom prices. There appears to be no better time to buy the shares in the Nigerian capital market than now. The fundamentals of the Nigerian capital market are still very strong-high earnings per share, high dividends per share, high earning yields, high dividend yields, good bonuses and low price earnings ratios. With the complete internationalization of the Nigerian capital market, foreign investors can acquire up to 100 percent of Nigerian companies and exercise full control.

5.1 Key Success Factors

The Nigerian capital market has

FIGURE 3
NSE ALL SHARE INDEX (NSE ASI) AND REBASED ALL SHARE INDEX (RASI)
(FEB. 28, 2008 - DEC., 31, 2010)



Source: Nigerian Stock Exchange (NSE)

witnessed tremendous growth in recent years. This growth is attributable to the Federal Government economic reform programme in the areas of Banks and Insurance companies consolidation, privatization, pension reforms, mortgages as well as increased investor awareness, confidence in the market and relative political stability.

Oteh (2010), in her testimony before the United States House of Representatives committee on financial services spelled out the reform agenda embarked by the Nigerian Securities and Exchange Commission in her efforts to awaken the hope of investors. The reforms are to reposition the Nigerian capital market to play a pivotal role in capital formation and the development of the Nigerian economy. Some of the areas of focus for the Commission's reform programme were outlined as follows:

5.1.1 Strengthened enforcement and enhanced regulatory oversight

The Commission has zero tolerance on market infractions and indeed any act which could undermine the integrity of the market as well as enforcement actions against operators and issuers with respect to inadequate filing of periodic returns and other market infractions. Following the audits of banks in 2009, led by the Central Bank, the Commission launched investigations into possible cases of market abuse that were associated with the capital raising exercises of banks. This has resulted in the Commission instituting legal proceedings against some 260 individuals and entities at the Investments and Securities Tribunal (IST).

5.1.2 Recent changes to the commission's rules and regulations

The Commission had set standards and created a level playing field for participants. These standards are also meant to promote orderly trading, transparency and market efficiency. Experience revealed that the absence or inadequate rules in some respect contributed to the scale of the crisis in Nigeria capital market. Some of the new rules were introduced to encourage the emergence of new products, strengthen the protection of customer assets in the market and improve financial reporting and governance of public companies.

5.1.3 Reforming the Nigerian Stock Exchange

Stock Exchange is known to be a visible symbol of the capital market and must not only exhibit but be perceived by the public to exhibit the highest level of good governance, transparency, fairness and accountability. Investors obviously will not want to participate in a market which lacks these attributes and nor would issuers. The Commission, in early August 2010 intervened in the Nigerian Stock Exchange, replacing the leadership with an interim administration. NSE should be ultimately demutualised and is examining the best model for Nigeria with the various initiative to reform the exchange a more focused, transparent and efficient exchange would emerge.

5.1.4 Promoting collective investment schemes

The experience of the recent past clearly revealed that most retail investors do not have the capacity for direct investing in the capital market. The Commission is therefore encouraging a more institutional market with retail participation principally through Collective Investment Scheme (CIS). The Commission had intensify establishment of Real Estate Investment Trusts (REITs), Exchange Traded Funds (ETFs) and in view of increased interest in mutual funds, the Commission has intensified it examination and monitoring of fund managers and trustees of such schemes and recently encouraged the establishment of an industry trade group for mutual fund managers.

5.1.5 Disclosure issues

Any meaningful reform of the capital market and indeed the financial market must of necessity include the reform of the governance of entities and players in the market. Such governance reform must not only be beamed at public companies but should also focus on regulated entities. For the Commission, the capital market reform agenda includes a review of our 2003 Corporate Governance Code in order to address weaknesses in current practices and strengthen governance and disclosure by public companies. The draft of the new Corporate Governance Codes which is comparable to internationally acclaimed codes has already been exposed to the public and will soon be released in the near future. The Central Bank and the Commission has also been sponsoring sensitization and awareness programmes for company directors.

The importance of transparency and disclosure cannot be over-emphasized in enthroning good corporate governance. The public want to believe the numbers they see and information they are given by companies. As is well known, financial information is a key barometer of the state of health of a business entity and should be timely, accurate and reliable to be meaningful to others. Information that is outdated would not serve investors much purpose in taking timely investment decisions. The Commission has therefore continued to strengthen its disclosure rules and to penalize issuers who violate the rules. Additionally, the auditor of a public company is now expected to issue a statement in his audit report to the company of the existence, adequacy and effectiveness or otherwise of the internal control system. This is borne out of the fact that a strong internal control system is important in promoting good governance of entities. The adoption of International Financial Reporting Standards (IFRS) by listed companies and regulated entities should improve the quality of financial reporting in the country. Through the efforts of the Commission and other stakeholders, the Federal Government has approved that Nigeria should adopt IFRS, and publicly listed companies and significant interest entities such as banks are required to comply by January 2012.

5.1.6 Greater emphasis on capacity building and investor education

In addition to enhancing the rigor with which it evaluates capital market operators, the Commission is reviewing ways to enhance the programmes offered by its training institute, the Nigerian Capital Markets Institute to ensure that the capacity of the industry continues to evolve in line with the growth in the size and complexity of the capital market product offerings. It is supporting trade groups and associations and encouraging them to develop and enhance their continuing education programmes, and develop accreditation schemes.

A well informed investing public will be better placed to protect itself, forming the first layer in investor protection. For instance, an investor who understands his right is most likely to assert his right and seek redress when such rights are violated. Similarly, an investor who understands the workings of the market is less likely to be taken advantage of by unscrupulous market participants than one who has a low knowledge of the market. When investors are knowledgeable about the workings of the capital markets, they are also better able to assess the risks and rewards of investment opportunities and participate in the market.

In this respect, the Commission has developed various investors' education initiatives including providing educational materials for various investor types, sponsoring seminars, town hall meetings, quiz competitions, and capital market studies in universities. It also has capacity building programmes for financial journalists and judges.

6.0 CONCLUSION AND POLICY RECOMMENDATIONS

The current efforts by the financial regulatory authorities have in many ways restored confidence in to the Nigerian capital market. Though, the effect of the global financial crisis was visibly felt in the stock market, as the prices of the shares of most of the stocks were highly depreciated, the timely intervention of the financial regulators to sanitize the system was imperative.

Based on the findings from this paper, the following are recommended for adoption: (1) Securities and Exchange Commission (SEC) should actively formulate policy that would encourage companies outside the banking sector to be listed on the NSE; (2) The current collaboration among the financial regulators should be sustained so as to enhance robust financial system; and (3) NSE should urgently review the 1984 base year currently used to compute the All-Share Index (ASI), to a more realistic base year.

REFERENCES

A Review of Market Performance in 2010 and the outlook for 2011 (2010), "**The Nigerian Stock Exchange"** pp. 2 6.

Abolo, Emmanuel M. (2009), "The Nigerian Banking Industry and Cross Border Transactions Post consolidation" Executive Seminar for Central Bank of Nigeria Executives.

Financial System Strategy, FSS 2020 (2008), "**Capital Market**" International Conference, Abuja.

Jennings S. (2007), "The Road to Success: Nigeria's Capital Markets" Speech delivered at Nigerian Stock Exchange Conference, London.

Okonjo-Iweala N. and Osafo-Kwaako P. (2007). "**Nigeria's Economic Reforms: Progress and Challenges**" Brookings Global Economy and Development.

Olisaemeka, A.G.(2009), "**The Meltdown of the Nigerian Capital Market: Causes and Consequences**" Nigerians Report for the benefit of Nigeria and the rest of the world.

Oni, Samuel A. (2009), '**The Regulatory Challenges of Cross-Border Baking in An Era of Post Banking Consolidation in Nigeria"** Executive Seminar for Central Bank of Nigeria Executives.

Oteh, Arunma (2010), **'The Global Financial Crisis and Financial Reform in Nigeria: A Capital Market Perspective"** Testimony b**efore the United States House of Representatives' Committee on Financial Services Sub-Committee on International Monetary Policy and Trade,**
pp. 8-12.

Research and Development Department, "**The Nigerian Capital Market: Development, Issues, Investment Options, Players Prospects and Challenges**" Securities and Exchange Commission publication, pp. 3-4.

Udom, I. S. and Adekunle Peter A. (2008), "**Capital Market Statistics; Compilation and Role in Financial Sector Stability and Development" Nigerian Statistical Association Conference, pp. 88-101.**

APPENDIX 1

CAPITAL MARKET (EQUITIES) STATISTICS

		VOLUME OF TRANSACTION (Million)	VALUE OF TRANSACTION (N'M)	NUMBER OF DEALS	MARKET CAPITALIZATION (MC) (N'B)		ALL SHARE INDEX
					(EQUITIES ONLY)	TOTAL (MC)	
2008	**JAN**	20,081.0	183,193.1	349,601	10,692.7	13,817.6	58,570.6
	FEB	29,770.6	213,265.4	475,716	12,503.2	15,639.2	65,652.4
	MAR	18,699.0	193,897.5	377,838	12,125.9	15,266.7	63,016.6
		68,550.6	**590,356.0**	**1,203,155**			
	APR	16,477.4	160,685.9	394,235	11,491.3	14,611.1	59,440.9
	MAY	16,798.7	132,948.5	356,909	11,614.5	14,981.5	58,929.0
	JUN	19,789.0	149,480.1	330,332	10,920.3	14,225.0	55,949.0
		53,065.1	**443,114.5**	**1,081,476**			
	JUL	19,977.6	190,754.0	357,000	10,971.8	13,931.9	53,110.9
	AUG	17,380.0	169,638.1	249,937	9,744.5	13,040.7	47,789.2
	SEP	10,651.0	134,382.8	197,213	9,836.9	13,010.0	46,216.1
		48,008.6	**494,774.9**	**804,150**			
	OCT	5,851.0	139,714.4	118,364	7,969.1	10,777.6	36,325.9
	NOV	7,973.0	166,829.5	188,544	7,305.9	10,111.5	33,025.8
	DEC	9,684.7	44,289.5	136,932	6,957.5	9,563.0	31,450.8
		23,508.7	**350,833.5**	**443,840**			
2009	**JAN**	4,793.5	29,761.0	138,700	4,879.1	7,453.9	21,813.8
	FEB	6,603.2	38,264.7	157,297	5,231.9	7,859.1	23,377.1
	MAR	7,801.0	40,153.1	131,419	4,483.5	7,177.9	19,851.9
		19,197.7	**108,178.9**	**427,416**			
	APR	7,957.0	42,367.4	121,940	4,883.3	7,575.8	21,491.1
	MAY	7,961.3	56,867.9	135,499	6,759.6	9,455.5	29,700.2
	JUN	11,272.0	94,130.6	217,949	5,986.3	8,809.6	26,249.3
		27,190.3	**193,365.9**	**475,388**			
	JUL	9,921.0	72,384.1	187,748	5,796.5	8,480.7	25,286.6
	AUG	9,910.0	68,741.9	156,726	5,274.4	7,919.7	23,009.1
	SEP	9,053.2	66,013.4	123,106	5,130.3	7,649.4	22,065.0
		28,884.3	**207,139.4**	**467,580**			
	OCT	10,670.9	73,312.4	134,394	5,144.0	7,818.8	21,804.7
	NOV	9,335.6	56,116.9	114,607	4,998.1	7,692.1	21,010.0
	DEC	7,572.9	47,603.9	119,979	4,989.4	7,030.8	20,827.2
		27,579.4	**177,033.1**	**368,980**			
2010	**JAN**	8,627.3	48,654.6	302,901	5,441.6	7,484.2	22,594.9
	FEB	7,858.2	54,061.1	133,112	5,535.7	7,615.8	22,985.0
	MAR	10,734.2	90,996.9	185,643	6,280.6	8,378.4	25,966.3
		27,219.6	**193,712.7**	**621,656**			
	APR	12,600.0	108,300.8	206,182	6,393.6	8,455.6	26,453.2
	MAY	8,250.0	76,140.2	180,489	6,373.0	8,425.3	26,183.2
	JUN	7,105.5	60,729.2	172,861	6,174.4	8,217.0	25,384.1
		27,955.5	**245,170.1**	**559,532**			
	JUL	7,638.1	58,795.8	134,220	6,320.6	8,370.9	25,844.2
	AUG	5,266.0	46,910.3	142,594	5,946.8	8,000.7	24,268.2
	SEP	4,836.0	47,255.6	117,366	5,648.2	7,825.6	23,050.6
		17,740.1	**152,961.7**	**394,180**			
	OCT	6,714.2	91,045.2	117,465	7,986.4	10,099.6	25,042.2
	NOV	7,434.1	60,339.2	121,531	7,912.2	10,015.5	24,764.7
	DEC	6,627.1	56,676.1	111,114	7,913.5	9,918.2	24,770.5
		20,775.4	**208,060.5**	**350,110**			

NOTE; **VOL, VALUE & NO. OF DEALS ARE ADDITIVE WHILE ASI & MC ARE STOCK VALUE**

APPENDIX II

21 Quoted Banks Listed on the Nigerian Stock Exchange

1. Access Bank Plc.
2. Guaranty Trust Bank Plc.
3. First Inland Bank Plc.
4. Intercontinental Bank Plc.
5. Afribank Nigeria Plc.
6. Unity Bank Plc.
7. Skye Bank Plc.
8. Diamond Bank Plc.
9. PlatinumHabib Bank Plc.
10. Fidelity Bank Plc.
11. Oceanic Bank International Plc.
12. Ecobank Nigeria Plc.
13. Zenith Bank Plc.
14. Stanbic IBTC Bank Plc.
15. Spring Bank Plc.
16. First Bank of Nigeria Plc.
17. Sterling Bank Plc.
18. Union Bank Plc
19. United Bank for Africa Plc.
20. Wema Bank Plc.
21. First City Monument Bank Plc.

Banks Not Listed on NSE

1. Nigeria International Bank Limited
2. Equatorial Trust Bank
3. Standard Chartered Bank Nigeria Ltd.

APPENDIX III

Other Sectors on the NSE

1. Agriculture / Agro Allied
2. Airline Services
3. Automobile and Tyre
4. Aviation
5. Breweries
6. Building Materials
7. Chemical and Paints
8. Commercial/Services
9. Computer and Office Equipment
10. Conglomerates
11. Construction
12. Engineering Technology
13. Food/Beverages and Tobacco
14. Footwear
15. Healthcare
16. Hotel and Tourism
17. Industrial/Domestic Products
18. Information, Communication and Telecommunication
19. Insurance
20. Leasing
21. Machinery (Marketing)
22. Maritime
23. Media
24. Mortgage Companies
25. Other Financial Institutions
26. Packaging
27. Petroleum (Marketing)
28. Priting and Publishimg
29. Real Estate
30. Real Estate Investment Trust
31. Road Transportation
32. Textiles
33. The Foreign Listing

THE POLITICAL ECONOMY OF CURRENCY RE-DENOMINATION BY COUNTRIES*

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INTRODUCTION

Currency redenomination is an exercise by which countries and their governments attempt to reassert their monetary sovereignty, as money enhances or diminishes the legitimacy of governments. It is the process where a new unit of money replaces the old unit with a certain ratio. Currency redenomination is usually achieved by removing zeros from a currency with the aim of correcting the macroeconomic misalignment and enhancing the credibility of the local currency (CBN, 2007). In the management of currencies, currency redenomination is different from currency decimalization, which is a process of converting from a traditional currency denomination to a "decimal" system usually with two units differing by a factor of 100.

Currency redenomination exercise itself falls within the realm of political economy, which looks at the interrelationships between political and economic processes of a nation and shows much concern on the political aspects of economic policy-making. It draws on the combination of economics, law and political science to explain how political institutions, the political environment and the entire economic system - whether capitalist, socialist or mixed influence each other (Encyclopedia Britannica). It may refer to very different things including simply the advice given by economists to the government or public on general economic policy or on specific proposals such as the one on naira redenomination exercise. In other words, it looks at the reciprocal influence of politics upon economics in the global system.

Currency, which is a unit of exchange that facilitates the transfer of goods and services, is one form of money, where money is anything that serves as a medium of exchange, store of value and a standard of value. Also, money is any approved currency issued by a central bank or monetary authority as the official unit of account for valuation of foreign exchange and payment of debts. Almost everywhere in the world, citizens view money solely as a medium of exchange that should facilitate transactions in the economy and affects people's identity. Governments are, therefore, concerned about the credibility of their national currencies and the effect of such currencies on national identity, hence they engage in activities such as currency restructuring, currency redenomination, currency decimalization, etc to keep in tune with domestic and international developments.

For Nigeria, the Central Bank of Nigeria (CBN), on August 14, 2007, unveiled its Strategic Agenda for the Naira, which contained measures to re-denominate the currency by August 2008. The argument in favour of redenomination was based on the need to re-align the naira with other currencies in the West African region as the Economic Community of West African States (ECOWAS) member countries prepare to move to a common currency (the Eco), possibly by 2015. It was also geared towards making the naira a convertible currency within the region. More so, the widespread confidence in naira purchasing power makes it popular and enhances the operation of the payments system within the region. However, the Government ordered the suspension of all actions of the CBN in the proposed redenomination exercise a week later, until an approval was sought for and obtained in writing from the president. This action of the Government created some psychological effects on the monetary authorities with many people giving the action various interpretations.

The objective of this paper is to articulate the reasons and conditions under which countries embark on currency redenomination exercises, and how successful these exercises had been over the years. The paper is descriptive with presentation based on literature reviews.

The rest of the paper is presented in four parts. Part II examines the conceptual framework of currency redenomination exercises by countries. Part III presents the experiences of various countries that had embarked on currency redenomination and the reasons for the exercises. Part IV presents Nigeria's experience in currency decimalization/redenomination. Part V summarizes and concludes the paper.

II. CONCEPTUAL FRAMEWORK

Currency redenomination goes beyond psychological effects, and must be associated with broader macro-economic and fiscal reforms for it to be effective. To some extent, redenomination exercise could as well be the last stage of a successful economic reform measure. Experience from some emerging market economies that had earlier embarked on currency redenomination exercises indicated that redenomination of currency units usually translates to significant efficiency gains, especially when viewed in the context of strong economic indices and macroeconomic stability.

The building of national identities is always one of the goals to be achieved in the creation of territorial currencies. So national currencies are of great values to the nationalistic believes of citizens of a country and hence deserve faith from the citizens, if it is to have its pride of place in the national

The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

heritage (Chigbu, 2007). According to Martinez (2007), when a large part of the population treats its own currency with disdain and engages in currency substitution, boosting the credibility of the national currency may or may not become a priority of the monetary authorities.

Governments attempt to reassert monetary sovereignty and counter citizens' loss of confidence in the national currency (IMF, 2003; Cohen, 2004), as was the case recently in Zimbabwe and Ghana, where three and four zeros were removed from the old Zimbabwean dollar and cedi, respectively (Mansah, 2007). This is because a loss of confidence by citizens of a country in their national currency may necessitate the use of foreign currencies, particularly those adjudged to have higher prestige. This could lead to dollarization (if the currency being adopted is the dollar), where a country gives up the option to print its own money, loses its ability to directly influence its economy, including its right to administer its monetary policy and any form of exchange rate regime. In fact, the central bank loses its role as the lender of last resort for the country's banking system (Cohen 2004), while the country's sense of pride is damaged. Increasing “dollarization” of the local economy weakens monetary sovereignty and the effectiveness of monetary policy. Governments attempt to reverse this currency-substituting behavior of their citizens through currency redenomination exercises (Mansah 2007). More so, condoning monetary substitution in any guise is, of course, a monetary policy in itself which involves very high costs.

Currency redenomination is a means by which credibility of a currency would be restored, as was the case in Turkey, leading to reduction in the nominal value of its Lira by six zeros (Mosley, 2005); or when countries are experiencing hyperinflationary pressures which have the effect of making their local currencies unattractive, as was the case before redenomination in Brazil, Argentina and Peru (Ajayi, 2007; Martinez, 2007). Several other countries had embarked on currency redenomination exercises over the years. These included Bolivia, Mexico, Nicaragua, Romania, Turkmenistan, Venezuela, Israel, Ukraine, Poland, Russia, Iceland, amongst others (see table 1).

According to Mas (1995) and Dogarawa (2007), redenomination also extends to adding of zeros to the currency as recorded in the immediate post-independence period by South Africa (1961), Sierra Leone (1964), Ghana (1965), Australia (1966), The Bahamas (1966), New Zealand (1967), Fiji (1969), the Gambia (1971) and Malawi (1971). From literature, there are indications that some governments shelve redenomination even in the face of, or the resolution of high inflation, while others embark on the exercise immediately after, and some others embrace it with some lags (Dogarawa 2007), and yet some countries ended up with decimalization.

There are arguments that redenomination exercise does not affect either the aggregate supply or aggregate demand of an economy in any significant manner but reduces the transaction costs. According to the GhanaThink Foundation, the ratio of factor prices as well as the ratio of input prices of final goods remains unchanged after redenomination. Other factors that are fully considered in currency redenomination include political variables, including Government's time horizon, the governing party's ideology, the fractionalization of the government and the legislature and the degree of social heterogeneity of the particular country (Mosley, 2005).

There is a strong belief that currency redenomination would not change the purchasing power of money and may not stimulate consumption in any significant manner, while investment is determined by real interest rate, tax rates and stability of government (GhanaThink 2007). The GhanaThink Foundation had argued that a government's spending is determined by the spending behavior of such government, while net exports would not change on account of redenomination. It was also the Foundation's view that redenomination neither affects the strength of currency which is determined by market forces, nor give the monetary authorities any justification to change money supply, or mean appreciation or depreciation of the currency.

In agreement with the Foundation, Edeh (2007) could not see how redenomination would affect the purchasing power and argued that it is not the name or amount you call the currency that is the purchasing power, but the rate and value of what it can buy. But in neo-liberal thought, according to Adejumobi (2007), re-denomination does not mean a revaluation of the currency, neither is it about state fixing and control of exchange rate, rather it is about changing the digits of the currency, which will not improve its value. Noting that currency redenomination is within the broad package of economic and political reforms, Mosley (2005) argued that while decision about the denomination and design of currencies may seem more technical than political, a government's control and administration of its currency, and more broadly, of transactions within its boundaries, is one of the hallmarks of the modern nation-states.

In the view of Odetunde (2006), manipulating the zeros is equivalent to looking for more efficient method of solving same problem in computational fluid dynamics. But Cohen (2004) pointed out that when an instrument that was intended to symbolize the power or nobility of the nation becomes instead a daily reminder of inadequacy and impotence, not sound currency but 'funny money', and an object of derision or disrespect, governments that issue such currencies are not apt to command much more respect.

Gaisie (2007) noted that currency redenomination exercise is embarked on after consideration of certain measurement indicators, besides the subjective indicators of feel, neatness, portability, convertibility, etc, that are commonly recognizable by the public. Quoting from the Daily Graphic article (2007), Gaisie pointed out that “between 1985 and 2005 most countries which redenominated their currencies did so from the standpoint of high inflation and lowly valued local currency”. He argued that the total cost of the redenomination exercise is not just an issue of printing and minting costs, but also an assurance that it would not trigger some inflationary trends initially, since it is a normal occurrence that interventionist economic activities trigger some form of inflationary or deflationary trends.

Analyzing the redenomination exercise in Ghana, Onochie (2007) argued that the cedi was neither devalued nor re-valued, but only redenominated as an extreme measure of liquidity squeeze to enhance the value of the Ghanaian currency and make it more competitive. He stressed that for over five years, Ghana experienced consistent macroeconomic stability, declining inflation and interest rates, and currency stability which restored the role of the cedi as a store of value, with commitment to monetary and fiscal prudence.

During chronic inflation, the monetary authorities have a choice between a large redenomination ratio and a small redenomination ratio. It is argued that the use of a small ratio may call for further redenomination as soon as possible, which will entail costs in the financial, accounting, and computing industries, while a large ratio may result in inconveniently large or small prices at some point in the cycle. This may have informed why many countries that embarked on currency redenomination based on inflation had to repeat the exercise several times (see table 1). In fact, there are indications that redenomination alone had not curbed inflation on its own nor the exchange rate stabilized due to a redenomination exercise, rather these macroeconomic variables will stabilize by strengthening the economy through adequate management of the economic resources. Establishment and joining of a monetary union may also call for currency redenomination.

According to Wikipedia Encyclopedia (2007), most countries started with decimalization of their currencies before some ventured into redenomination. Russia was the first to convert to a decimal currency when in 1710 the ruble was set equal to 100 kopechs. The United States of America introduced decimal currency with the dollar in 1792, while France introduced decimalization in 1803 up to the countries where it occupied. Canada, Sri Lanka, South Africa, Australia and United Kingdom decimalized their currencies in 1858, 1869, 1961, 1966 and 1971, respectively. Nigeria decimalized her currency in 1973.

From literature, the common ingredients of a Redenomination Policy are double posting of prices, in both old and new, including foreign exchange rates; expression of exchange rates at four decimal places without any rounding off; and in some countries, there are no limits for exchanging the old notes and coins, while in some other countries limits were imposed. Some countries are, however, very cautious about redenomination. In 2007, South Korea's won to a dollar was 932, Hungary's forint was 216 and Japan's yen was 117, yet these countries deemed it not appropriate to redenominate their currencies (Mosley, 2005; Dogarawa 2007).

The overall objective of redenomination in some sense is to ensure credibility (Mosley, 2003; IMF, 2003). Enhanced credibility can improve government electoral fortunes as the citizens' reward of economic growth and macroeconomic discipline (Armijo, 1996; Stokes, 2002 in Mosley, 2005). Cohen (2004) posits that national currency not only facilitates economic transactions but affects citizens' identity and subsequently the legitimacy of the national government.

Certain governments adopt redenomination strategies in order to improve on their monetary sovereignty and control tendency for currency substitution. If people do not value their local currency, they begin to use foreign currency. Aluko (2007) provides list of many African and non-African countries whose citizens almost lost confidence in their currencies. According to him, as at July 2007, a US dollar ($1) exchanges 9,270 cedi in Ghana; 9,426 rupiah in Indonesia; 9,861 franc/ariary in Madagascar; 10,184 kip in Laos and 15,921 dong in Vietnam.

But in the views of the organized private sector in Nigeria, the currency redenomination policy would have had a psychological impact of a strong currency relative to other currencies, but they were quick to point out that the naira had not degenerated to a level that calls for a re-denomination which they felt would disrupt the pricing equilibrium and mechanism in the economy. Furthermore, it was argued that Brazil, Argentina, Mexico and Turkey have successfully gone through redenomination exercises but the zeros still came back, thereby making the benefits of redenomination illusive and credibility lost. Opposition to redenomination exercise was also found to hinge on personal interests arising from the uncertainty on the effect of the exercise on peoples' wealth/assets, especially the bourgeois and the political class.

There are further arguments that most persons opposed to redenomination exercise do so because of unfounded or superficial considerations. For instance, it was argued in the case of Nigeria that the bias towards the redenomination policy was merely to protect the interest of bureau de change operators (and other speculators in the foreign exchange market) which was erroneously perceived to be threatened by the exercise. It was also argued that redenomination has an implicit revaluation tendency if not properly implemented. Further argument posits that producers respond to changes in relative prices, while redenomination does not change the relative prices in any economy.

From literature therefore, many positive reasons for redenomination of a country's currency will include the reassertion of monetary sovereignty, enhancing the credibility of the national currency, boosting of confidence in the currency as a national identity, enhancing efficiency gains and macroeconomic stability, reduction of the phenomenon of money illusion, inflation, portability and easy convertibility of the currency, as well as other political and economic variables, especially the psychological impact of a strong currency relative to other currencies. Among the several reasons why countries undertake redenomination is also the simple but obvious reason that it simplifies the mathematics of currency transactions as extra zeros put a burden on accounting and statistical records, data processing software, and payment systems.

III. COUNTRY EXPERIENCES

Ever since the Breton Woods system's crisis came about in 1970, Latin American countries had witnessed a significant number of currency redenomination measures. But in most cases, governments have been forced to repeat the exercise, time and again, within a relatively short span of life, until results finally showed up in some cases. In many Latin American countries, most of the redenomination exercises took place during the institutional reform of monetary policies of the early 1960s, as redenomination was generally believed to be an exercise used to clear the effects of past inflation. In some Latin American cases, currency re-denomination capped-off high levels of inflation and heralded the abating of hyperinflation. In those days, average inflation in the Latin America region reached a high of nearly 500 per cent, and some of the large countries within the region namely Brazil, Argentina and Peru posted quadruple-digit inflation rates.

The experiences of some of the countries in currency re-denomination exercises are as presented below.

Table 1: Countries attempts on Currency Redenomination

Countries	Action	Period (Chronological)
Russia	3 zeros in 3 operations	(1947/1961/1998)
Bolivia	9 zeros in 2 operations	(1963/1987)
Brazil	18 zeros in 6 operations	(1967/1970/1986/1989/1993/1994)
Argentina	13 zeros in 4 operations	(1970/1983/1985/1992)
Israel	9 zeros in 2 operations	(1980/1985)
Iceland	2 zeros in 1 operation	(1981)
Peru	6 zeros in 2 operations	(1985/1991)
Mexico	3 zeros in 1 operation	(1993)
Poland	4 zeros in 1 operation	(1995)
Ukraine	5 zeros in 1 operation	(1996)

Source: (i) 'Redenomination of Naira is Wasteful' by Brickfield Road Associates; The Nation, August 16, 2007 (ii) "Dropping Zeros, Gaining Credibility? Currency Redenomination in Developing Nations" by Layna Mosley (2005).

Argentina

Argentina saw four revaluation/ redenomination exercises between 1970 and 1992. The redenomination of 1992 marked the culmination of dramatic economic reform packages in the country. The old Argentine unit, Peso argentino was completely changed to a new unit, Argentine austral in 1985. However, episodes of hyper-inflation led to the introduction of Argentine peso which replaced the austral at a rate of 1:10,000 in December 1991. Caballero (2000) cited Argentina among the nations that adopted redenomination to save their currency from absolute neglect and restore some sort of regard to it in 1982 when it exchanged 180,000 pesos ley to one dollar.

Bulgaria

Bulgaria and Poland are two economies which are usually considered as near success stories in relation to redenomination of currencies. Even at that, Bulgaria redenominated its currency in mid-1999 when its year-on-year inflation was close to 1.2 per cent by cutting three zeros off the currency. Twelve months later, the year-on-year inflation was close to 12 per cent or ten times higher than what it was prior to redenomination.

Poland

On the part of Poland, the country's currency, marka, was rescued by monetary authorities' increase in key interest rates by 600 basis points (6 per cent) in 1999 in order to curtail the inflationary pressure generated by redenomination.

Brazil

In less than 25 years, Brazil went through six currency re-denomination exercises, and for the six times it failed to curtail inflation in the economy. The major challenge facing the exercises was increase in inflation and inflationary pressures after redenomination. In all cases, episodes of hyper-inflation led to redenomination exercises in Brazil and change of currencies, especially the replacement of the cruzeiro real by the Brazilian real in 1994. Three major effects which had always negated the positive impact of redenomination are inflationary effects of rounding-off figures, the effects of psychologically lower income levels and the threat of going back to multiple zeros due to inflation.

Ghana

The cedi was first introduced in 1965 to replace the British Pound and was then pegged at 2.4 cedis to one pound. This first cedi was replaced in 1967 with a second cedi which was worth 1.2 of the old cedi which allowed for decimal conversion with the pound at the rate of one pound equal to 2 new cedis. The value of the second cedi introduced in 1967 continued to degenerate amid high rate of inflation in the domestic economy, especially when measured against major international currencies; to the extent that the exchange rate was between 9,050 and 9,600 cedis to one US dollar between 2006 and July 2007 (Onochie 2007). The second cedi regime places significant burden on the Ghanaian economy in terms of high transaction costs and increasing complexity in financial transactions, and the strain on the payments system.

On July 1, 2007, Ghana again redenominated its currency, the cedi, by making one new Ghanaian cedi (GHc) equal to 10,000 old cedi (c), i.e. by dropping four zeros. The exercise was implemented to forestall inflation, make the cedi more competitive and reduce the cost and risks associated with carrying large quantity of currency notes. At present, c50 is the highest currency denomination in Ghana. Ghana's new top denomination, the 50 cedi bill, is worth $50. The previous top denomination was worth just $2.22. The new notes and coins have the same purchasing power as the earlier existing ones. Blake (2007) observed that the change came with challenges, as the Ghanaian population had to adjust to the new currency.

Romania

According to The Federal Research Division of Romania (2006), Romania had earlier redenominated in 2003 when the Leu exchanged for 33,200 to a dollar. The country had to again revalue its legal tender, the Leu on July 1, 2005 to a new Romanian Leu, the RON. The fixed conversion rate between the old Leu was 10,000 to RON 1, while one new RON is divided into 100 subunits named bani. The country allowed July 1, 2005 June 30, 2006 for double posting of prices, both in old and new Leu. As at July 2005, all taxes, charges, contributions and other amounts owed to the consolidated general budget were determined and recognized in the accounting records in RON. Also, basic pays and pensions regardless of the financing source, and unemployment benefits were rounded off to RON in favour of the recipient.

The redenomination of the Leu was designed to simplify domestic monetary transfers and calculations, and was seen to be a necessary transition phase in preparation for Romanian's integration into the European Union as well as the country's eventual adoption of the euro as its domestic currency (Leroy and Mindru, 2005). In order to ensure certainty and continuity of outstanding contracts, the redenomination laws provided that the conversion takes place automatically by virtue of law, hence there was no need for agreements or contractual amendments to existing documentation. The conversion of payments instruments and bills issued before July 1, 2005 in old currency were made on settlement date and at the same fixed conversion rate.

Russia

The Russian government announced a redenomination policy for the ruble effective January 1, 1998 to assure the public that the country's economic crisis was over. Inflation was on the decline, falling from 875 per cent in 1993, to 200 per cent in 1995 and further, to 15 per cent, in 1997. However, the redenomination did not mark the end to the country's hard times as inflation returned in 1999. The well known failure of Russia in 1998/99 is an example of a failed redenomination exercise. Russia slashed off three zeros from its currency in 1998 when inflation was only 15 per cent year-on-year and twelve months later worsening macroeconomic conditions pushed up inflation to over 120 per cent. The Russian case is a clear indication that in the absence of sound monetary and fiscal stabilization policies/reform, redenomination will not halt inflation.

Turkmenistan

The Central Bank of Turkmenistan issued the details of the redenomination plan of the national currency mantas in 2008, and the new bank notes were introduced on January 1, 2009. After the introduction of the new currency, a U.S. dollar bill was equal to 2.8 manats instead of the former value of 14,000 mantas (NCA, 2008). The exercise according to the Central Bank, was meant to ensure effectiveness and as a means of achieving the main objectives of the monetary reforms. According to NCA, the tax service of Turkmenistan and Ministry of Trade are jointly responsible for control of cash registers, issuance of receipts showing new prices and supervision of shops and retail outlets to ensure that price tags are marked in both new and old currencies.

Turkey

In January 2005, Turkey replaced its currency, the lira, with the new Turkish Lira with a conversion rate of one million of old lira to one new lira. The Turkish government was motivated by the fact that multiple zeros complicated both statistics and transactions within the economy, and that so many zeros in the lira had negative effect on the credibility of the national currency. According to Mosley (2005), one US dollar was equivalent to 1,500,890 lira in Turkey in 2003, which had a 20,000,000 single local currency bill.

Venezuela

A redenomination of Bolivar, the Venezuelan national currency, came into effect on January 1, 2008. Earlier in March 2006, and enabled by Especial Powers Act, the Executive Branch had issued a Decree that knocked three zeros off the banknotes and ordered a large amount of coinage representing cents and fractions of cents.

Zimbabwe

Zimbabwe redenominated her currency, dollar, not quite long ago. The country embarked on currency redenomination which wiped out three zeros off the $20,000 Zimbabwean bill into a $20 bill. The local currency had been rendered almost worthless by years of inflation that hit 1,200 per cent a year. Zimbabweans had to carry large satchels full of banknotes to pay for even the most ordinary and small transactions (Martinez, 2007). The $20 bill actual value after the redenomination (10 American cents at official rates, less than 3 cents at black market rates) remained unchanged. To a greater extent, hyperinflation had remained the same.

Other countries

The Icelandic krona, meaning 'crown', was separated from the Danish krone after the dissolution of the Scandinavian Monetary Union at the start of World War I and Icelandic autonomy from Denmark in 1918. The first coins were issued in 1922. Yugoslavia slashed nine zeros from the dinar during its redenomination exercise, while Bolivia has redenominated her currency, peso, twice since the 1980s. Mexico's 1993 revaluation put an end to one of the worst financial crisis which at a time took a continental dimension. Nicaragua on its part had its currency, Cordoba, redenominated twice in less than three years, starting in 1988 and Peru has redenominated her currency, inti, twice since the 1980s. Most countries redenominated their national currencies due to inflation, while a few of them embarked on the exercise due to hyperinflation and the establishment of Monetary Union.

IV. THE NIGERIAN EXPERIENCE IN CURRENCY DECIMALISATION/REDENOMINATION

The Naira is the currency of Nigeria and was introduced on January 1, 1973. There are three denominations in coins namely 50k, N1 and N2, while the eight denominations of the banknotes are N5, N10, N20, N50, N100, N200, N500 and N1000. The Central Bank of Nigeria (CBN) is the sole issuer of legal tender currency and controls the volume of money supply in the economy in order to ensure monetary and price stability. Other principal objects of the Bank include the maintenance of external reserves to safeguard the international value of the legal tender currency, promoting a sound financial system in Nigeria, and acting as banker and providing economic and financial advice to the Federal Government (CBN, 2007). In the pursuit of the achievement of these objectives, the CBN conducts monetary policy by which it influences the demand, supply and, hence, price of money and credit in order to direct the nation's economic objectives, and supervises and regulates the nation's banking system.

The Bank is equally in charge of currency management, through the procurement, distribution and supply, processing, issuing and re-issuing, and disposal of bank notes and coins. Heakal (2008) had argued that time has proven that the Central Bank can best function in these capacities by remaining independent from government fiscal policy and, therefore, uninfluenced by the political concerns of any regime. This is because government's undue intervention, whether direct or indirect, can inhibit central bank's development.

The Central Bank of Nigeria (CBN) had put in place several measures to ensure that macroeconomic variables, including inflation, interest and exchange rates, move in the desired direction before it announced the redenomination policy on August 14, 2007. Of course, not every country with high levels of inflation has chosen to re-denominate its currency. Those countries that have taken the road to redenomination have first of all put into effect strong painful measures to abate hyperinflation. However, redenomination is not without its cost, especially fixed cost in view of the fact that it takes human and material resources to implement. But experience has shown that redenomination is usually successful when there is macroeconomic stability, declining inflation and interest rates, stable exchange rate and currency stability, fiscal prudence and well anchored expectations of policy confidence.

To ensure success, therefore, certain economic fundamentals are normally put in place before embarking on currency redenomination. These include reducing inflation to a manageable level, stabilising the exchange rate, and having a strong and efficient financial system. To a greater extent, most of these factors were going for Nigeria as at August 14, 2007 when the CBN rolled out the Strategic Agenda for the Naira, whose thrust focused on the naira as the national currency, and aimed at realigning its denominations and effecting its redenomination, ensuring its stability and global integration. There was macroeconomic stability, declining inflation and interest rates, stable exchange rate and currency stability. In fact, the CBN had strengthened the institutional framework for the conduct of monetary policy, recapitalized the Nigerian deposit money banks and reformed the payments system for efficiency, as well as improved transparency and corporate governance. In addition, Nigeria was without a high debt burden after the debt relief secured from the Paris Club of Creditors in 2006, and had as much as possible eliminated multiple currency practices that were hitherto prevalent in the system.

In announcing the currency redenomination policy as a major plank of the agenda, the Bank explained that it was part of the on-going economic reform agenda (Soludo 2007). Other components of the agenda include the adoption of inflation-targeting framework for the conduct of monetary policy; sharing part of the federation account allocation in US dollars to deepen the foreign exchange market and for liquidity management; and current account liberalization/convertibility and accession to Article VIII of the International Monetary Fund (IMF). The Bank saw redenomination as the next logical step in the entire financial sector reform agenda.

The Government, however, suspended the redenomination exercise barely a week later, citing violation of Section 19, Sub-sections 1 and 2 of the CBN Act, as amended severally. The Act stipulates that "the standard weights and composition of coins issued by the Bank and the amount of remedy and variation shall be determined by the President on the recommendation of the Board" (CBN 2007). The suspension may have also been hinged on the theory of the political business cycle, which claims that governments suspend their particular policy orientation, especially in the run-up to election, in favour of policies which enhance popularity with voters (Concise Encyclopedia Britannica). In this case, the political class may not have been sure of the extent of the effect of the re-denomination exercise on their secured wealth/assets, and their popularity and electability/re-electability.

The redenominated naira was billed to make N20 note the highest denomination of currency in the country, with existing higher denominations of the naira trading off double zero units from the right or moving two decimal points to the left. All the naira assets, prices and contracts were to be redenominated. The CBN had stated that it will make the naira fully convertible against foreign currencies by 2009 and posited that the implementation of the policy would see a strong naira against major international currencies. The move, according to the Bank, was also to help in the management of inflation and liquidity, assuring that it would not lead to a loss in the value of the naira (rather the policy would enable the naira take its place in the international economy). The policy was in pursuit of the desire of the Bank to create conducive macroeconomic environment that would enable the Government's programme work effectively.

According to CBN (Money watch 2007), the new agenda will:

- Better anchor inflation expectations and strengthen public confidence in the naira;
- Make for easier conversion to other major currencies and reverse tendency for currency substitution;
- Eliminate higher denomination notes with lower purchasing power and reduce the cost of production, distribution and processing of currency;
- Promote the usage of coins and thus a more efficient pricing and payments system, promote the availability of cleaner notes;
- Deepen the foreign exchange market and ensure more effective liquidity management and monetary policy; and
- Ensure the convertibility of the naira and hence greater confidence in the national economy and lead to greater inflow of foreign investments.

In the view of the Bank, redenomination policy for Nigeria was not to translate to revaluation, as market forces were to continue to determine the prices, including interest rates and exchange rates, with the expectation that inflation will be low while exchange rate will appreciate. Under the redenomination programme, banknotes were to be issued in denominations of new 50k (old N50), new N1 (old N100), new N2 (old N200), new N5 (old N500), new N10 (old N1000); that is dropping two zeros, while a new N20 would have been the highest currency denomination in Nigeria. Although the Government explained that the suspension was without prejudice, most analysts argued that the redenomination exercise was within the mandate of the CBN.

The CBN first issued Nigerian currency notes and coins on July 1, 1959, which was, hitherto, the responsibility of the West African Currency Board from 1912 to 1959. The legal tender status was changed to reflect the country's new independent status on July 1, 1962 (see Table 2). The currency was changed again in 1968 as a war strategy and the currency names remained pound and shillings. As a result of the recommendations of the Decimal Currency Committee of 1962, Nigeria adopted the decimal system on January 1, 1973. The currency name was further changed on that date from pound, shillings and pence to Naira (major currency equivalent to ten shillings) and Kobo (minor currency, 100 of which makes one naira).

Table 2: The Changing Structure of the Nigerian Currency

Year	Currency	New Denominations	New Features and Remarks
Before 1912	Cowries, Manilas, etc.		
1912	WACB Notes and coins		
Jul. 1, 1959	Pounds and Shillings		CBN issued Niger ian notes and coins, and withdrew the WACB notes and coins.
Jul. 1, 1962	Pounds and shillings		Legal tender status was changed to reflect Nigeria's Independence.
1968	Pounds and shillings		Notes were changed as a war strategy.
Jan. 1, 1973	Naira and kobo	1/2k, 1k, 5k, 10k, 25k coins and 50k, N1, N5, N10 notes.	Decimal notes and coins were first issued. N1 replaced £1 as the major unit of currency.
Feb 11, 1977	Naira and kobo	N20	(i)Highest denomination of N20 note was first issued. (ii) First currency note bearing the

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
	[illegible]		[illegible]

Constructed from: 1/ "Naira is the Currency of Nigeria"
2/ "Nigerian Naira"; World Factbook, 2007

The highest denomination of N20 issued in 1977 became necessary as a result of the growth of incomes in the country, the greater preference for cash transactions and the need for convenience. Nigeria introduced the higher denominations of the naira 100, 200, 500 and 1000 currency notes in 1999, 2000, 2001 and 2005 respectively, and on February 28, 2007 new and smaller currency notes of the lower denominations, as well as coins, were introduced to replace the existing ones.

The CBN believed redenomination of the naira would make pricing more efficient and give coins the relative values which had eluded them over the years. For instance, it will ginger the Nigerian citizens to cultivate the habit of using coins, thereby reinforcing the country's on-going currency reforms. Cost and risks associated with large denominations and carrying large physical cash would have been eliminated. It would reduce the cost of printing, distribution and processing of currency. These associated costs and risks could be classified into inflationary, administrative, laws/regulations and psychological.

As an aspiring International Financial Centre and possibly Africa's Financial Hub by 2020, redenomination would have made for easy conversion of the naira to other currencies. Other nationals would convert easily to their currencies when engaging in transactions with Nigerians. Redenomination would discourage currency substitution and address the perception that domestic currency is weak despite its stability (Money watch, 2007)

Redenomination always poses a challenge to the capital market. Reactions/implications on stocks were that of the uncertainty on how the value of stocks would be affected in the Nigerian capital market whether stock prices would benefit immensely from the policy and add value to the stock market or drop significantly. The experience within the short frame was that most investors commenced the process of off-loading their stocks before the suspension by the Government. One obvious implication is that redenomination alters the par value of stocks and results to share reconstruction which would have solved the determination of the par value of stocks in the capital market. In any redenomination exercise, the share capital/mutual fund units are increased or reduced by maintaining the number of shares/subscribed share capital/mutual fund units and the subscription quota in the share capital/mutual fund units.

As the West African union continues the search for a common currency, the redenomination of the Ghanaian cedi has thrown up new challenges, especially for Nigeria as the leading economic force in West Africa. Already, there are indications that Nigeria's currency, the naira, is favoured to be the ECOWAS Common Currency (in case the ECO does not materialize), but given the current rate of exchange between the naira and the dollar, vis-à-vis the Ghanaian cedi and the U.S dollar, and even the Gambian Dalasi and the US dollar, there is need for the naira to buckle down and reposition itself for that role in the West African Sub-Region. After all, when countries form a monetary union, redenomination is usually required and financial data that spans across the change are presented with proper annotation to avoid giving the illusion of astronomical change.

V. SUMMARY AND CONCLUSION

The paper articulated the reasons and conditions under which countries embark on currency redenomination exercises. It found out that the explanations on currency redenomination exercises rest on both political and economic factors such as national/peoples' identity, credibility of national currency, domestic/international developments, nations' sense of pride, monetary sovereignty and psychological effects. Others include inflation level, macroeconomic and fiscal reforms, regional and sub-regional economic interests, government's time horizon, the governing party's ideology, the fractionalization of the government and the legislature, and the degree of social heterogeneity of the particular country. In fact, currency redenomination could be based on economic and political developments within a country or region, with the aim of stabilizing and repositioning a particular economy.

It is not all currency re-denomination exercises that failed. While some succeeded, others failed. Redenomination makes pricing more efficient, promote a more efficient payments system, lead to easy conversion to other currencies, discourage currency substitution and reduce cost of printing currency.

Although inflation wise, the naira may not have degenerated to a level that calls for redenomination, but the Government could still be proactive in repositioning the naira instead of waiting till the country starts experiencing hyper inflation. All said and done, redenomination of the naira on the political and credibility perspectives (even from inflation perspective) remains a policy for future implementation in Nigeria. It will do the country a lot of good as it prepares for the West African Monetary Union come 2015.

REFERENCES

Adejumobi, Said (2007) - "The Politics of Naira Re-denomination"; Guardian Newspaper, August 29, 2007; p. 67.

Afrol News (2008) "Nigerian Leader Suspends Currency Redenomination". September.

Ajayi, I. (2007) - "Preliminary Comments on the new Policy Announced by the Governor of the Central Bank of Nigeria", Saturday Tribune, available at http://www.tribune.com.ng/08092007/biznes.html

Aluko, Sam .A. (2007) - "The Proposed New Naira, Exchange Rate and the Nigerian Economy", www.nigerianmuse.com; September 1; pp 1-11.

Araki, Nobuyoshi. (2001) "Exchange Rate Policy of Russia: Lessons to learn from Russian Experiences", Economic and Social Research Institute, Russia. March.

Blake, Lambert (2007) - "Ghanaian Currency Redenomination Engenders Relief, Confusion"; World Politics Review; July 11.

Brickfield Associates (2007) - 'Redenomination of Naira is Wasteful'; The Nation, August 16, 2007

Britannica Concise Encyclopedia of Political Economy (2008)

Caballero, Ricardo J. (2000) - "Macroeconomic volatility in Latin America: A Conceptual Framework and Three Case Studies"; Economic 1.1

Central Bank of Nigeria (2007) "Answers to frequently asked questions about new naira policy, especially the naira re-denomination".

Central Bank of Nigeria (2007) Central Bank of Nigeria Act, 2007.

Central Bank of the Republic of Turkey (2004) "Redenomination of Turkish Lira by Dropping Six Zeros"; http://www.tcmb.gov.tr/yeni/eng/index.html.

Chigbu, Uchendu (2007) "Nigeria: Liberation of the Naira by the Central Bank"; Daily Champion Newspapers; August 24; P.11

Cohen, Benjamin (2004) The Future of Money; Princeton, NJ: Princeton University Press.

Dogarawa, Ahmad Bello (2007): "The Economics of Currency Redenomination: An Appraisal of CBN Redenomination Proposal"; Abuja Journal of Business Administration, No. 1, Vol. 1 (pp.23 39).

Edeh, Fidelis (2007) - "Why Soludo's Naira Policy Can't Fly"; National Mirror, August 24, 2007, P33.

Federal Research Division of Romania (2006) - Country Profile: Romania, available at http://lcweb2.loc.gov/frd/cs/profiles/Romania.pdf.

Gaisie Tom (2007) "Special Reports: Worries about the Currency Redenomination"; The Statesman.

Ghanathink.org (2007) "The Economics of Redenomination"; GhanaThink Foundation: A Free-Thinkers Association.

Heakal Reem (2008) "Dollarization Explained"; Investopedia.com

-------------------(2008) "What are Central Banks?; investorpedia.com

International Monetary Fund (2003) Lessons from the Crisis in Argentina; Policy Development and Review Department. October

Leroy Bruno and Mindru Christian (2005) - Memorandum on the Redenomination of the Romanian Currency.

Martinez Ibsen (2007) "Can 'New' Currency Abate Venezuelan Inflation?" Reflections from Latin America; May 07.

Mansah Adwowa (2007) "The Redenomination of the Cedi", http://www.ghanaweb.com

Mas, I. (1995) - "Things Governments do to Money: A Recent History of Currency Reform Schemes and Scams", *Kyklos*, 48: 483-512.

Mosley, L. (2003) - Global Capital and National Governments, Cambridge University Press, Cambridge.

Mosley, Layna (2005) - "Dropping Zeroes and Gaining Credibility? Currency Re-denomination in Developing Nations"; Paper Presented at the 2005 Annual Meetings of the American Political Science Association; Washington D. C.

Money watch (2007) "Naira Dangles on Policy Uncertainty". August 29.

National Bank of Romania (2004) Law on the Redenomination of the Domestic Currency; Law No. 348 of July 2004; Published in Monitorul Official al Romaniei, Part One, No. 664. July 2004.

NCA (2008) - News Central Asia.

Odetunde Christopher (2006) - "The CBN Naira Policy"; Daily Champion Newspapers, August 24, P.10).

Onochie Anselm (2007) "Currency Redenomination: The Cedi Ahead as Politics Halts the Naira"; www.nigeriasinamerica.com

Soludo Charles, C. (2007) "Strategic Agenda for the Naira"; Briefing by the Governor of the Central Bank of Nigeria; Abuja; August 14.

World Factbook (2007) - "Nigerian Naira"; The World Factbook.

.............................(2007) "Naira Dangles On Policy Uncertainty"; Guardian, August 29,

THE ROLE OF ECONOMIC COMMUNITY OF WEST AFRICAN STATES (ECOWAS) IN PROMOTING BORDERLESS TRADE IN WEST AFRICA*

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1.0 Introduction

The influential role of trade in economic development has long been accepted since 1776 when Adam Smith published The Wealth of Nations. The prevailing and still the popular view is that countries with more liberal trade policies have better economic performance than those with restrictive trade policies (Sachs and Warner, 1995 and Krueger, 1998). Proponent of this view argue that liberal trade policies enable countries to produce and allocate resources more efficiently; access new ideas and technology; and also have access to cheap foreign consumer goods. However, free trade is not without its disadvantages as it encourages capital flight and job loss as local firms loses sales to imported goods. Some of the groups that are hurt by foreign competition may not wield enough political clout to obtain protection dumping of substandard imported products in developing countries, which eventually destroy local industries. Nevertheless, barriers to trade continue to exist despite their sizable economic costs. The continued acceptances of the positive role of trade by countries within the United Nations (UN) were driven by two major factors. The first being the creation of the United Nations Conference on Trade and Development (UNCTAD) in 1964 and, its adoption as a permanent arm of the UN. This arm of the UN specializes in analyzing and reshaping trade policies to benefit developed and developing nations. The second was the adoption of new principles in the General Agreements on Tariffs and Trade (GATT). This has made trade policies to remain central in the design of macroeconomic policies in both developed and developing countries. Most importantly, it is now viewed that growth prospects for developing countries are greatly enhanced through an outer-oriented trade regimes, that is, trade policy which is more open enhances international trade on the ground that trade has acted as an important engine of growth for countries at different stages of development, not only by contributing to a more efficient allocation of resources within countries, but also by transmitting growth from one part of the world to another.

It is in recognition of the critical role of trade in stimulating development of nations that countries within the West Africa sub-region came together to form the Economic Community of West African States (ECOWAS). The objectives of ECOWAS include among others: the promotion of trade among member countries with the belief that increased participation in trade is associated with higher inflows of foreign investment/capital and new technologies which can be adopted to transform an economy through appropriate policy. This view is corroborated by the recent development in China, the fastest growing economy in the world, where trade potentials have been effectively harnessed to achieve higher growth rate of gross domestic product (GDP) as well as increasing the general welfare of the populace. The emphasis on trade integration by ECOWAS is consistent with the call by the World Trade Organisation (WTO) and the International Financial Institutions (IFIs) for countries to integrate in order to tap fully the benefits of global trade. That is, a process of economic integration will create better economic development, and security for the countries engaged in a process of integration. This "better" economic development will allow integrated countries to increase their GDP, and the overall welfare of member countries. However, most developing economies including ECOWAS member countries have not benefited much from trade owing partly to policy inconsistency, non-competitiveness of exports and the lack of access to global markets occasioned largely by inadequate and low quality of exportable (Sanni 2006).

Against this development, the objective of this paper is examining the role of ECOWAS in promoting

*The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

trade in the West Africa sub-region with a view to proffering suggestions for improvement. Following the introduction are the conceptual and theoretical issues. This is followed by the examination of ECOWAS integration efforts in the sub-region. Section four assesses the role of ECOWAS in promoting trade while section five concludes the paper with suggestions for improvement.

2.0 Conceptual and Theoretical Issues

Conceptually, international trade can be defined as exchange of goods and services between the residents of one economy and another (Stigeler, 1982). While free trade is usually defined as the absence of tariffs, quotas, or other governmental impediments to international trade, allows each country to specialize in the goods that it can produce cheaply and efficiently relative to other countries. Such specialization enables all countries to achieve higher real incomes (standard of living). Trade has been recognized by both the classical and neo-classical economists as an “engine of growth”. This is because trade promotes growth and development through technology and foreign investment flows and other benefits associated with global capital movements.

Trade can be divided into visible trade and invisible trade. The visible trade is trade in tangible items such as capital goods, manufactures, machinery and equipment and raw materials. The invisible trade relates to trade in intangible items such as communication services, financial services, postal services, transportation services, insurance services and other business services that enhance the production and exchange of physical goods. Krugman and Obsfeld (1999) posit that countries engage in trade for two basic reasons, each of which determines the extent to which a country gains from trade. First, countries trade because they have different resource endowment and can benefit from trade by making an arrangement in which each country specializes in those activities it does relatively well. Second, countries trade to achieve economies of scale of production. That is each country can produce more efficiently if it specializes in the production of those goods it has relative advantage, rather than producing all the products it needs.

2.1 Role of International Trade

International trade plays a positive role in economic development because exports serve as an earner of foreign exchange that are used to finance development programme. The most obvious gain from exports is the access to goods from abroad provided by earnings of foreign exchange. Exports permit not only the satisfaction of a broader range of consumer goods than could be supported by the narrow structure of traditional domestic output but also provide access to the capital equipment and technology of advanced countries that are crucial to the development process. The positive impact of trade has long been supported by the traditional trade theories such as those of Adam Smith's absolute advantage theory and the Ricardian and Heckscher-Ohlin Learner Samuelson (HOLS) models which consider differences in comparative advantage as the basis for trade. Though they differ in some of their assumptions and explanations of the differences in comparative advantages across countries, the later theories emphasize the production and consumption gains from trade. Granting critical shortcomings, Ricardo's theory states that a country will tend to export the commodity in which it has a comparative advantage and import the commodity in which it has a comparative disadvantage. Thus, given the assumption of constant costs, a country will specialize completely in the production of the commodity in which it has comparative differences in relative factor endowments, production functions, and pattern of demand. The summary of the HOLS model is that '*a country would export a commodity which uses its more abundant factor more intensively and import a commodity which uses its scarce factor more intensively*'. Other theories have been developed to explain the causes of trade, especially as related to strategic advantages of trans-national enterprises through foreign direct investment (FDI). Some of these theories admit human capital as a separate factor of production (management), or argue that scale and learning economies play crucial role in determining competitive advantage (increasing returns to scale), while others assign roles to differences in technology (product cycle). These theories suggest that trade of comparative advantage have developed beyond conceptual framework of the traditional explanation of undifferentiated labour, capital endowment and productivity (Bankole and Bankole, 2004).

2.2 Trade Liberalization

Trade liberalization is a form of trade policy (other forms are: export promotion strategy, import substitution strategy, etc.) that has been a central element of successful growth strategies especially in developed and emerging economies. The doctrine of liberalization contends that there are no restrictions to trade, economic and business activities. Specifically, it requires the state to dismantle existing regulatory structures in financial markets, traded goods markets and in labour markets. The central argument is that factors of production, goods and services are optimally priced and allocated when their prices are freely determined in a competitive environment. It is further argued that in the absence of free pricing, there would be inefficiency in resource allocation, which would worsen, as the authorities try to administer measures to cope with dwindling foreign exchange earnings and shortfall in public revenue. There are many possible ways to open an economy (sequencing of openness). The challenge for policy makers is to identify which best suits their country's political economy, institutional constraints, and initial conditions. As these vary from country to country, it is not surprising that there is a striking heterogeneity in country experiences regarding the timing and pace of reforms. Different countries have opened up different sectors at different speeds (for example Bangladesh and India); others have achieved partial liberalization through the establishment of export processing zones.

The rationale for the adoption of trade liberalization is well documented in the literature. In the World Bank

(1997) view for instance, good policies are those which accelerate integration into global markets by removing barriers to the free flows of goods, services, and investment. In the long-run, it is envisaged that trade liberalization will reduce poverty in LDCs through redistribution of gains from trade. Calvo and Drazen(1998), however, showed that trade liberalization of uncertain duration could lead to an upward jump in consumption including non-tradables. It is viewed that developing countries have reaped little from international trade with gains that have accrued to industrialized nations from trade. Another argument against trade liberalization is that of public revenue loss, arising from cut or removal of tariff on traded goods (Adam, 2005).

There are diverse opinions as regards the effect of trade liberalization on growth. The first school of thought believe that trade promotes growth through the impact of the inherent benefits associated with trade among countries. The other school of thought believe that trade liberalization does not promote growth particularly in developing countries owing to lack of tradable commodities in the global market such that trade openness by such countries would not enhance growth but rather undermine the growth of local manufacturing industries through importation of different kinds of goods. Developing countries are confronted with underdevelopment and poverty which requires a well articulated macroeconomic policy for the transformation of their economies in order to attain rapid growth and development. Olomola (1992) noted that for a developing economy to extricate itself from low equilibrium trap owing mainly to underutilization of its resources and poverty, it require the implementation of programme that emphasise increasing long-run growth. Trade liberalization is thus seen as a veritable means to achieve long-run growth. In a study by Sanni (2005) on Nigeria, the regression result showed that trade liberalization is essential for growth. Trade liberalization impact positively on non-oil exports and economic growth, but it found that weak infrastructural provision (power, roads, communication, etc), unfavourable international conditions, high inflation and misaligned exchange rate movements' all impeded the growth of non-oil exports in Nigeria.

2.3 Economic Integration

Economic integration can be viewed as second best trade theory, free trade being the first best trade theory. Economic integration is an arrangement of economic/social cooperation among some countries of the world. There are six different stages of economic integration, namely: (i) preferential trading area (ii) free trade (iii) custom union (iv) common market (v) economic and monetary union; and (vi) complete economic integration. Put simply, regional economic integration is an agreement among contiguous nations to allow for the free flow of ideas, investment funds, technology, goods and services. There are many degrees of economic integration, but the most preferred and popular one is free trade area Balassa (1961). The inherent benefits in economic integration explained why regional economic cooperation has gained momentum partly as a strategy to cope with global economic problems. As many countries are not strong enough on their own to cope with the rapid changes in the global economy, groups of countries use regional integration to achieve the necessary conditions for sustainable growth and development. The ultimate aim is to increase trade across the world. It allows for more trade creation amongst member countries, for instance they are privy to a wider selection of goods and services not previously available to them; member nations can also acquire goods and services at lower costs due to lower or elimination of tariffs. It also fosters political cooperation and relative peace amongst member states. A group of nations could have more political influence as a faction than each nation would have had on its own. Thus, integration is an essential strategy to address the effects of conflicts and political instability that may affect the region and is also an important tool in handling the social and economic challenges associated with globalization. In addition, economic integration provides employment opportunities, because it encourages trade liberation and leads to market expansion, more investment and greater diffusion of technology, all of which creates more employment opportunities for people and allow them to move from one country to another to find jobs or to earn higher pay.

In spite of these benefits, economic integration has a few demerits. The creation of economic bloc would assist in increased trade and movement but this would also lead to the creation of trading blocs which can increase trade barriers against non-member countries. Economic integration also leads to trade diversion because of trade barriers. Integration could be a threat to national sovereignty. Integration amongst nations requires member countries to give up some level of control over some of their key policies like trade, monetary and fiscal policies. The higher the level of integration, the greater the degree of controls that needs to be given up and threat to national autonomy particularly in the case of a political union which requires nations to give up a high degree of sovereignty. Three fundamental factors have affected the process of economic globalization and are likely to continue driving it in the future. First, improvements in the technology of transportation and communication have reduced the costs of transporting goods, services, and factors of production and of communicating economically useful knowledge and technology. Second, the tastes of individuals and societies have generally, but not universally, favored taking advantage of the opportunities provided by declining costs of transportation and communication through increasing economic integration. Third, public policies have significantly influenced the character and pace of economic integration, although not always in the direction of increasing economic integration. These three fundamental factors have influenced the pattern and pace of economic integration in all of its important dimensions.

3.0 ECOWAS and Regional Economic Integration Efforts

The Economic Community of West African States (ECOWAS) is a regional group of fifteen countries, founded in 1975. Its mission is to promote economic integration in "all fields of economic activities, particularly industry, transport, telecommunications, energy,

agriculture, natural resources, commerce, monetary and financial questions, social and cultural matters". The Institutions of the ECOWAS are the Commission, the Community Parliament, the Community Court of Justice and the ECOWAS Bank for Investment and Development (EBID). ECOWAS aims to promote peace, co-operation and integration in economic, social and cultural activity, ultimately leading to the establishment of an economic and monetary union through the total integration of the national economies of member states. It also aims to raise the living standards of its peoples, maintain and enhance economic/political stability, foster relations among member states and contribute to the progress and development of the African continent.
ECOWAS integration policies and programme are influenced by the prevailing economic conditions in its member countries, the need to take the principal provisions of the African Economic Council (AEC) Treaty into account, and relevant developments on the international scene. The revised treaty of 1993, which was to extend economic and political co-operation among member states, designates the achievement of a common market and a single currency as economic objectives, while in the political sphere it provides for a West African parliament, an Economic and Social Council and an ECOWAS court of justice to replace the existing Tribunal and enforce Community decisions. The treaty also formally assigned the Community with the responsibility of preventing and settling regional conflicts.

Several schemes/programme have been established to actualize the objectives of economic integration and trade facilitation by ECOWAS. Among them were ECOWAS Trade Liberalisation Scheme (ETLS), West African Clearing House (WACH) now West African Monetary Agency (WAMA), Inter State Road Transport (ISRT), ECOWAS Monetary Cooperation Programme (EMCP), West African Monetary Zone (WAMZ), West African Monetary Institute (WAMI); West African Institute for Financial and Economic Management (WAIFEM) and ECOWAS Bank for Investment and Development (EBID). Some of them are discussed below:

3.1 ECOWAS Trade Liberalisation Scheme (ETLS)

The ECOWAS Trade Liberalization Scheme (ETLS) came into force on January 1, 1990, with provisions for tariff reductions on unprocessed goods, handicraft and industrial products of community origin. The objective of the ETLS is to promote cooperation and integration leading to the establishment of an economic union in West Africa in order to raise the living standards of its citizens, and to maintain and enhance economic stability, foster relations among member states and also contribute to the progress and development of the African continent. It also aims to establish a customs union among all member states for the total elimination of customs duties and taxes of equivalent effect, removal of non-tarrif barriers and the establishment of a Common Customs External Tariff to protect goods produced in member states. The premise of the liberalization programme is based on the free movement of unprocessed goods and traditional handicraft products, to be exempted from import duties and taxes.

The second aspect of the programme involves the gradual removal of customs duties and equivalent taxes on industrial products of community origin and, thereafter, the lifting of non-tariff barriers to intra-community trade. The liberalization of trade in unprocessed goods are livestock, fish, plant or mineral products that have not undergone any industrial transformation while traditional handicraft products are articles made by hand, with or without the help of tools, instruments or devices that are manipulated by the craftsman. They are to be circulated freely, fully exempted from import duties and taxes and are not subject to any quantitative or qualitative restriction. Products which are considered originating from member states include; live animals born and raised within member states, mineral products extracted from the ground of member states, products obtained from animals living or raised in member states; electric energy produced in member states; scrap and waste resulting from manufacturing operations within member states; and vegetable products and herbs harvested within member states.

Amongst French speaking West African countries, there exists a common external tariff for imports originating from a third country, in contrast to the Anglophone group of ECOWAS who have different tariff rates. The tariff differences among the countries usually lead to trade creation and trade diversions which form the basis of discontent among cooperating countries in a regional trade arrangement; this absence of common external tariff in the ECOWAS makes inter-industry linkage which could occur in an economic entity or sub-region absent. Inter-industry linkages mainly occur in trade arrangements where industrial sectors of the cooperating countries are equally matched and advanced. Due to this various factors, ETLS has not been very successful as Intra-regional trade in ECOWAS sub-region and amongst member states is very low. According to the statistics for the years 1998-2002, intra-regional exports and imports averaged US$1250 million and US$.212 million respectively. In contrast, the region's total imports and exports to Europe Union averaged US$8260 million and US$8000 million during the same period. Leading economies in the region like Nigeria, Cote d' Ivoire, and Ghana have sustained economic development momentum and are preferring linkages outside the region. ECOWAS constantly faces challenges to trade which include illegal barriers, harassment, multiple roadblocks and reduced road use even with the ETLS scheme in place. In spite of signed cross-border trading provisions which are often violated by national border officials, Intra-regional trade is often minimal or largely informal and is often driven by inter-country price differentials. The free movement of goods continues to face challenges.

3.2 ECOWAS Bank for Investment and Development (EBID)

The ECOWAS Commission and the ECOWAS Bank for Investment and Development, more often called *The*

Fund, has its two main institutions designed to implement policies, pursue a number of programme and carry out development projects in member states. Such projects include intra-community road construction and telecommunications; and agricultural, energy and water resources development. The Heads of State and Government broke with the past by their decision to transform the ECOWAS Secretariat into a Commission at thirty. By becoming a Commission with enhanced powers and Commissioners in charge of smaller and clearly defined sectors, the ECOWAS Secretariat will have more impact and become more visible in Member States. Regarding the Community Parliament, the restructuring is designed to make it more efficient by providing it with relevant management support. Similarly, the Community Court of Justice is being re-organized to have its judges also concentrate on their core competences. Restructuring ECOWAS allows it to better adapt to the international environment, play a more effective role in the integration and development process, have smaller and more clearly defined sectors, support Member States in building their capacities for programme implementation, and a predictable rotation system based on equity, transparency and functionality.
EBID is an international finance institution established by the new Article 21 of the Revised Treaty as amended by the Additional Act A/SA.9/01/07 of 19 January 2007. It has two windows, one for the promotion of the private sector and the other for the development of the public sector. Its main objective is to contribute towards the economic development of West Africa through the financing of ECOWAS and NEPAD (New Partnership for Africa's Development) projects and programmes, notable among which are programmes relating to transport, energy, telecommunications, industry, poverty alleviation, the environment and natural resources. EBID's mission is to contribute towards the creation of the conditions which would enhance the emergence of an economically strong, industrialized, and prosperous West Africa that is perfectly integrated both internally and in the global economic system in order to benefit from the opportunities offered by globalization.

3.3 West African Monetary Agency (WAMA)

The West African Monetary Agency (WAMA) is an autonomous specialized agency of the Economic Community of West African States (ECOWAS). In 1996, the West African Clearing House (WACH), which was established in 1975 as a multilateral payment facility to improve sub-regional trade in West Africa, was transformed into a broad based autonomous agency called the West African Monetary Agency (WAMA). WAMA's Headquarters was officially inaugurated on the 28th November 1996. Upon the transformation of WACH into WAMA, WAMA took over the assets and liabilities of the West African Clearing House. WAMA is comprised of the eight Central Banks of the West African sub-region. These include: BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest), Bank of Cape Verde, Central Bank of the Gambia, Bank of Ghana, Central Bank of Liberia, Central Bank of Nigeria and Bank of Sierra Leone. These central banks serve fifteen out of the sixteen countries of the West African sub-region with Mauritania being the only one out of the union.

The Agency is concerned with monetary co-operations and payment issues within the context of economic and monetary integration process of the region and therefore has the following objectives: promotion and use of national currencies for regional trade and transactions; bringing about savings in the use of foreign reserves for member states; encouraging and promoting trade and exchange liberalization; enhancing monetary cooperation and consultation among member states; facilitating the harmonization and coordination of monetary and fiscal policies and structural adjustment programme; ensuring the monitoring, coordination and implementation of ECOWAS monetary cooperation programme; encouraging and promoting the application of market determined exchange and interest rates for intra-regional trade and initiating policies and programme on monetary integration and cross border investments that will lead to a single monetary zone in West Africa.

WAMA was empowered to ensure the monitoring, coordination and implementation of the ECOWAS monetary cooperation programme, encourage and promote the application of market determined exchange rates for intra-regional trade, initiate policies and programme on monetary and economic integration and ensure the establishment of a single monetary zone in West Africa. The Agency's financial resources are derived from annual contributions from member Central Banks and such other sources as may be approved by the Committee of Governors. Resources for the WAMA budget are derived 40 per cent from equal contributions of member Central Banks, and 60 per cent on the basis of the ratio used by ECOWAS in fixing each Member State's contribution to the ECOWAS budget.

3.4 West African Monetary Institute (WAMI)

The Heads of States of six countries in West Africa, as part of the fast-track approach to integration, decided in Accra, Ghana, April 20, 2000 to establish a second monetary zone to be known as the West African Monetary Zone (WAMZ) by the year 2003. These countries namely The Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone signed the '*Accra Declaration*' which defined the objectives of the zone as well as an action plan and institutional arrangements to ensure the speedy implementation of this decision. It is envisaged that WAMZ will be merged with the CFA Franc Zone to form a single monetary zone in West Africa. In order to facilitate the creation of the common Central Bank and the introduction of a common currency, an interim institution, the WAMI was set up in Accra, Ghana in January 2001. In accordance with its statute, the Institute is mandated to perform the following functions: monitor state of convergence; harmonise regulations and design policy framework; promote regional payment system; exchange rate mechanism and conversion rate; and organisation of scheme as well as designing technical preparation of the new currency; modalities for setting up a common central bank and foster cooperation among member countries.

4.0 Assessment of ECOWAS Efforts toward Promoting Borderless Trade in the West African sub-Region

The objective of ECOWAS to ensure trade creation within the custom union informed the introduction of ECOWAS trade liberalization scheme, as well as allowing free movement of labour, capital and goods and services within the sub-region. But the experience of ECOWAS countries so far show that this objective has not been fully met. Available data (Table 1 see appendix) show the volume of trade in the region. Total trade increased from US$5.3 billion in 1996 to US$5.6 billion and US$5.8 billion in 1997 and 1998, respectively. In 2000 total trade stood at US$6.5 billion and increased to US$10.8 billion in 2005. It rose further by 50 percent to US$17.7 billion in 2007 from the level in 2006. Exports from ECOWAS countries amounted to US$3.1 billion and US$4.0 billion in 2002 and 2004 respectively. It rose to US$5.7 billion and US$5.9 billion in 2005 and 2006, respectively. On the other hand, import by ECOWAS countries ranged between US$1.6 billion in 1996 and $8.8 billion in 2007(see table 1). Overall, there were trade surpluses in 1996 and 2002, while the region recorded trade deficit in 2003 and 2004.

Table 2 (see appendix) shows that within the West African sub-region, Nigeria account for the highest share of inter trade averaging 70.5 percent between 2003 and 2008. This was followed by Cote d'Voire with an average share of 10.55 percent, and Ghana which accounted for 6.1 percent. Despite, the glaring advantages of global trade, Africa recorded poor performances when compared with the rest of the world. The share of Africa in global trade was 3.3 percent in 2009 compared with Asia (30.4 percent), America (5.7 percent) and developed countries (60.0 percent). Within Africa, the share of Northern Africa recorded the highest with 38.2 percent, followed by South Africa and West Africa 20.6 and 18.0 percent, respectively.

The weak performance of sub-Saharan Africa in global trade is attributed to many factors including the export of primary products, non-competitiveness resulting largely from high cost of production as well as weak productive base among others. According to UNCTAD (2003), the continuing dependence on traditional commodity exports also reflects the region's inability to tap fully into the international trade in "*market-dynamic*" (non-traditional) commodities, such as horticulture and processed foods. These products are highly income-elastic, with lower rates of protection in industrialized and large developing countries (UNCTAD, 2003). In the period 2000 - 2005, no African country featured among the world's 20 leading exporters of processed food, although these include countries such as Argentina, Brazil, Mexico, India, Indonesia and Thailand. South Africa, the largest African exporter of these products, had a global market share of less than 1 per cent. Mauritius, the second-largest exporter of processed products in sub-Saharan Africa, came a distant 59th in the global rankings, with only a 0.2 per cent market share. In the case of semi-processed products, South Africa was the only sub-Saharan African country among the top 20 exporters in the period 2000 - 2005. There were no sub-Saharan African countries at all among the leading exporters of processed products in that period (OECD, 2008).

According to Dean and Owusu (1998) the prospect of ECOWAS providing a meaningful vehicle for the increase of trade, linkage, and economic development among its members does not appear to be strong. Trade creation effects of customs unions are likely to be realised in either of two ways: the conventional theory of comparative advantage and the new trade theory of increasing returns in differentiated markets, both resulting from a decrease in transaction costs that should occur with freer trade. Based upon the conventional theory of comparative advantage, such trade liberalisation would lead to trade based upon comparative factor costs, and growth would occur from the national specialisations that would result. If the new trade theory of increasing returns in differentiated markets is invoked, then the ultimate result is the same. Liberalised trade leads to particular specialisations within the members of a customs union based upon variations in market preferences rather than on variations in factor cost. Benefits from increased trade based on variations in comparative factor costs appear to be elusive in ECOWAS. Relative factor costs within the group of countries are identical, to a large extent, because the entire region is characterised by an abundance of labour and a shortage of capital (Dean and Owusu, 1998).

Beyond the apparent fundamental problems of trade generation within ECOWAS, the organisation seems to be faced by additional disadvantages that can hinder trade. Political problems, both domestic and international, have hindered efforts at regional integration in SSA since the end of the colonial era (Sommers and Mehretu, 1992). The uneven size of ECOWAS's individual members with Nigeria large, a small number of intermediate-sized countries in Cote d'Ivoire, Ghana and Senegal, and the remaining countries very small creates unease over the incidence of costs and benefits of regional integration (Gambari, 1991). In addition, transaction costs are high within ECOWAS (Knowles, 1990; Obadan, 1984; Gambari, 1991; Henink and Owusu, 1998 a sited by Augustine 2005).

There are common languages among some of the countries as a result of colonisation, but none that are common to all. There is a common currency within the French franc area, but that area and ECOWAS are not coincident. In some cases, infrastructure connecting individual countries is sparse, making large-scale shipments between them unlikely (Obadan, 1984). While these and similar problems are faced by all customs unions, they seem particularly important in ECOWAS, where they only serve to add to more fundamental economic problems of improving trade through regional integration.

Trade within ECOWAS often involves exchange of such commodities as grains (rice, corn, and cola from the forested areas to the Sahel countries (Dean and Owusu, 1998 Burfisher and Missiaen, 1990). On the other hand, it's livestock, however, which constitutes the highest valued agricultural commodity in trade which results from a complementarity in production and consumption between the Sahel countries and the coastal states. The cattle trade demonstrates the responsiveness of commodity flows in the region to drought as well as to changing political and economic conditions (Awudu and Egger, 1992). While much of this trade is informal and unrecorded, it appears to be highly important to the individual national economies. Locally manufactured items are less significant within the region's trade. They include yarn, fabric and jute bags (Burfisher and Missiaen, 1990), and processed wood (Owusu, 1994). PetroLeum trade is important, with Nigeria supplying crude oil in the region and refined petroLeum being supplied by Cote d'Ivoire, Ghana and Senegal (Burfisher and Missiaen, 1990).

The direction of trade within ECOWAS seems to follow established patterns. Dean and Owusu, (1998) and Obadan (1984) have observed that the landlocked countries of Mali, Niger and Burkina Faso conduct a substantial portion of their trade with other ECOWAS countries. It follows a north-south pattern, part of which is transit trade through coastal countries. They export such commodities as live cattle, sheep and goats, and hides and skins. They import food crops such as yams and vegetables in addition to petroLeum and petroleum products. Much of the trade within ECOWAS has not yet significantly transcended the colonial language blocs and their associated barriers which existed prior to the union's formation. There is, therefore, an apparent concentration of intra language-zone trade. This is stronger among the former French colonies; transaction costs are lowered not only by common language but also by a common currency system (CFA francs) and greater contiguity than in the case of the separated former British colonies (Obadan, 1984).

The low participation in the international trade in services has affected the volume of trade in the sub-region. Such services include shipping, telecommunication, air transportation, computing and financial services. Experience from emerging economies such as China and India has shown that the services sub-sector possesses potential for growth. India, for instance has made an impressive landmark in software development and the foreign exchange earned from it has been utilized to transform the Indian economy. China has also used the e-commerce facility to make more inroads into many economies (Sanni, 2006,). However, the Nigerian banking industry and communication sub-sector have recently made an in-road within the sub-region. This is hoped to enhance intra-regional trade as well as investment flows to the region.

Amongst French speaking West African countries, there exists a common external tariff for imports originating from a third country, in contrast to the Anglophone group of ECOWAS who have different tariff rates. The tariff differences among the countries usually lead to trade creation and trade diversions which form the basis of discontent among cooperating countries in a regional trade arrangement; this absence of common external tariff in the ECOWAS makes inter-industry linkage which could occur in an economic entity or sub-region absent. Inter-industry linkages mainly occur in trade arrangements where industrial sectors of the cooperating countries are equally matched and advanced. Due to this various factors, ETLS has not been very successful as Intra-regional trade in ECOWAS sub-region and amongst member states is very low. Industrial development has remained low among the countries and this has accounted for low intra regional trade, which has created dichotomy in ECOWAS cooperation (Adiavor, 2003). ECOWAS constantly faces challenges to trade which include illegal barriers, harassment, multiple roadblocks and reduced road use even with the ETLS scheme in place, in spite of signed cross-border trading provisions which are often violated by national border officials, Intra-regional trade is often minimal or informal and is often driven by inter-country price differentials.

The review has revealed that intra-trade has increased but not appreciably. The experience of ECOWAS countries has shown that the objectives of ELTS have not been fully met. The causes of low trade in the region have been attributed partly to the following factors:

(i) Export of primary products (mono-export base)

(ii) High cost of production, thus, leading to uncompetitiveness of export

(iii) Weak production base and supply response

(iv) Low trade in services(invisible trade)

(v) Poor infrastructure provision and near-lack of trust among members

(vi) Weak currency and language barrier

(vii) Political and economic instability

5.0 Conclusion and Policy Recommendations

The role of trade in the development of an economy has been well documented in the literature. China's rapid economic expansion with over US$5.0 trillion external reserves has been largely induced by its performance in global trade. ECOWAS effort to promote trade has resulted to increased intra regional trade but the share of the West Africa in global trade has been very low suggesting that the custom union has not brought desired trade creation into the region. This implies that the sub-region has not been able to fully tap the benefits of trade in terms of increased foreign investment, better standard of living, employment generation and increased industrial production, among others. This development is traceable to a lot of factors including the reliance on primary products for trade, uncompetitiveness of products from the region, lack of convertible currency, and prolonged crisis in some countries in the region as well as lack of good infrastructure that links the members of the custom union together, etc.

It is against this backdrop that ECOWAS member countries needs to be seriously committed to goals and objective of the union, find a lasting solution to the cases of trade diversion in the sub-region as well as solve the problems of low industrial productivity and infrastructural deficiencies in member countries. Similarly, there is need to improve on rapid technological and innovativeness through improve economic and political environment. Furthermore, there is need for improved road network (less road-check points), telecommunication facilities and lessen bureaucratic bottle-necks at border points. Measures should be taken to plan and sequence removal of restrictions on trade, labour and capital. Within this framework, effort should be made to encourage division of labour, specialization and industrialization in the region.

REFERENCES

Adam, A. J. (2005), "Development of Export Tourism in Nigeria,"Abuja Management Review, Vol. 2, No 4, August

Adjavor, Bonaventure**:** May 2003: Trade Liberalisation Scheme in West Africa: Progress, Constraints and Prospects Ghana's Perspective

Augustine S. Langyintuo (2005): Potential Regional Trade Implications of Adopting Bt Cowpea in West And Central Africa being a paper presented at the 9th ICABR International Conference on Agricultural Biotechnology Ravello (Italy), July 6 to July 10

Awudu, A. and U. Egger (1992) 'Intraregional Trade in West Africa: Impacts of Ghana's Cocoa Exports and Economic Growth', *Food Policy,* 17: 277-86.

Balassa B (1961): The Theory of Economic Integration published R.D Irwin in Homewood IL

Bankole A. S and Bankole M. A.(2004): Industrial Trade and Export Promotion Policies and Revealed Comparative Advantage in Nigeria's Manufactured Exports published in the book on "Leading Issues in Macroeconomic Management and Development

Burfisher, M. and M. Missiaen (1990) 'Intraregional Trade in West Africa', in J. Okolo and S. Wright (eds) *West African Regional Cooperationand Development,* Boulder Westview Press

Calvo, Guillermo A., and Allan Drazen, 1998, "Uncertain Duration of Reform: Dynamic Implications," *Macroeconomic Dynamics,* Vol. 2, No. 4, pp. 44355.

Dean M. Hanink and J. Henry Owusu (1998): "**Has ECOWAS Promoted Trade among Its Members?"** Journal of African Economics, Volume 7, Number 3, pp. 363-383.

ECOWAS Trade Liberalization Scheme, available:http://www.quorum-online.com/Documents/ECOWAS per cent20TRADE per cent20LIBERALIZATION per cent20SCHEME.pdf

Englama, A. and G.K. Sanni (2008), "Financial Integration in ECOWAS Sub-Region, CBN Bullion, CBN Publications, Abuja

Gambari, I. (1991) *Political and Comparative Dimensions of Regional Integration: The Case of ECOWAS,* Atlantic Highlands: Humanities Press International.

Krueger O 1998: Why Trade Liberalisation is good for growth The Economic Journal, Vol. 108, No 450

Krugman and Obstfield 1999, International Economics: Theory and Policy Pearsons New York.

Obadan, M. (1984) 'Regional Trade of the ECOWAS: Characteristics, Problems and Prospects', in A. Orimalade and R. Ubogu (eds) *Trade and Development in Economic Community of West African States (ECOWAS),* New Delhi: Vikas.

Organisation for Economic Cooperation and Development (OECD) 2008: Annual Report

Olomola A. P (1992): Oil Price Shock and Macroeconomic Activities in Nigeria

Orok Duke, Orok E., Ewa, Uket, and Essang, Atim E., 2009: .Critical Analysis Of Economic Community of West African States (ECOWAS)Intra- Trade Available at: http://ssrn.com/abstract=1444247. October 6, 2009.

Owusu, J. (1994) 'Ghana's Economic Recovery Programme and Changes in the Structural and Organizational Patterns of the Formal Wood-Processing Industry (1983-1991)', PhD Dissertation, University of Iowa. Ann Arbor, MI: University Microfilms International.

Sachs J and. Warner 1995, *Economic Reform and the Process of Global Integration,* Brookings Papers on Economic Activities, No.1.

Sanni G. K. (2006): "*Nigeria's Foreign Trade and the New Perspectives for its Enhancement"* CBN Bullion, November

--------(2005), "Trade Liberalisation and Non-Oil Export in Nigeria,"M.Sc. Thesis University of Abuja

Sommers, L. and A. Mehretu (1992) 'Trade Patterns and Trends in the African-European Trading Area: Lessons for Sub-Saharan Africa from the Era of the Lome Accords 1975-1988', *Africa Development,* 18 (2): 5-26.

Stiegeler S. (1992), "Dictionary of Economics and Commerce," MacMillan Press Ltd. Oregon.

UNCTAD (2003); Trade Development Report 2003 Capital Accumulation, Growth and Structural Changes

UNCTAD (2007): Regional Cooperation in Trade Logistics, energy and industrial policy" Trade and Development Report, United Nations, New York and Geneva PP 159-188.

UNCTAD (2008); Trade Development Report 2008 Commodity Prices, Capital Flows and the Financing of Investment

World Bank (1997): The State in the Changing World- World Development Report 1997

APPENDIX

Table 1: ECOWAS Visible Trade Statistics (US$' Billion)

YEARS	EXPORTS	IMPORTS	TOTAL TRADE
1996	3667.01	1629.68	**5296.69**
1997	3863.52	1766.87	**5630.38**
1998	3165.36	2639.65	**5805.01**
1999	2584.06	1684.02	**4268.08**
2000	2788.28	2324.41	**5112.69**
2001	2306.19	2631.93	**4938.12**
2002	3148.21	2415.76	**5563.97**
2003	3037.8	3458.73	**6496.52**
2004	3986.13	4327.85	**8313.97**
2005	5389.90	5361.39	**10751.29**
2006	5928.89	5897.53	**11826.42**
2007	**8893.33**	**8846.30**	**17739.63**

Source: Englama and Sanni (2008).

Table 2: Percentage (%) Share of ECOWAS Countries in Intra Trade 2003-2008

Country	2003	2004	2005	2006	2007	2008
Benin	1.68	1.33	1.15	1.35	2.01	1.99
Burkina Faso	0.80	0.95	0.91	0.95	0.74	0.74
Cape verde	0.82	0.83	0.75	0.69	0.95	0.94
Cote d' Voire	12.76	12.44	11.45	11.18	7.75	7.74
The Gambia	0.24	0.28	0.24	0.20	0.26	0.25
Ghana	7.40	6.60	6.39	6.41	5.22	5.21
Guinea	2.08	1.16	0.96	0.80	0.82	0.81
Guinea Bisau	0.18	0.29	0.12	0.10	0.11	0.11
Liberia	-	-	-	-	-	-
Mali	2.86	1.98	1.56	1.71	1.54	1.53
Niger	0.80	1.15	0.80	0.73	0.79	0.79
Nigeria	64.23	67.43	70.57	71.28	74.69	74.81
Senegal	4.68	4.50	4.14	3.68	4.14	4.11
S/Leone	0.28	0.16	0.18	0.19	0.16	0.15
Togo	1.19	0.94	0.77	0.73	0.82	0.82

Source: Computed by Author from ECOWAS data.

ANALYSIS OF REVENUE GENERATION AS A TOOL FOR SOCIO-ECONOMIC AND INFRASTRUCTURAL DEVELOPMENT IN NIGERIA*

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INTRODUCTION

After the World War II, massive public sector investment assumed the most viable mechanism for covering the major obstacles to development and ensuring sustained high rate of growth. The records of past decades, however, have generated mounting criticism among development economists as to the validity of the impact of increasing government expenditure on economic growth. In fact, there is ranging controversy among scholars over what should constitute the size of government and the roles, it is expected to play in any economy.

This controversy was once, one of the hallmarks of the ideological divide among nations, during the socialist-capitalist divide. Notwithstanding ideological inclinations, governments have duty to forestall anarchy and social disorder as well as improve the living conditions of the people through the provision of variety of services. Government performs these arduous tasks through the utilization of revenue generated or sometimes through borrowing public receipts. The major role of government in any economy was aptly captured by Adam Smith (1776), despite his strong belief in 'invisible hand', as cited by Brown and Jackson (1990) in the excerpt below;

> "the sovereign has only three duties to attend to; three duties of great importance, indeed, but plain and intelligible to common understanding; first the duty of protecting the society from the violence and invasion of other independent societies; second the duty of protecting, as far as possible, every member of society from the injustice or oppression of every other member of it, or the duty of establishing an exact administration of justice; and third, the duty of erecting and maintain certain public works and certain public institutions, which it can never be for the interest of any individual or small, or small number of individuals, to erect and maintain because the profit could never repay the expenses of any individual or small number of individuals, though it may frequently do much more than repay it to a society"

Government provides the foregoing through the instrument of budget - stating estimated revenue and expenditure. This brings to light government fiscal operations, encompassing government revenue, expenditure and borrowing. In Nigeria, huge amount of revenues have been received by various governments, and its usage in improving the level of socio-economic and infrastructural development in the country is still an issue of debate among academia, policy makers, politicians, etc. For example, the federal government retained revenue trended upward from N448.80 million to N5,514.70 million between 1970 and 1975, indicating a growth rate of 1,129 per cent. During the same period, the public expenditure trended upward from N903.90 million to N5,942.60 million, indication a growth rate of 557.4 per cent. The unprecedented growth rate in the government revenue was attributed to the increase in the oil component of the federally collected revenue from N166.60 million to N4,271.50 million during the period, 1970 - 1975. Between 2000 and 2005, the federal government retained revenue grow from N597,282.10 million to N1,660,700.00 million and further to N3,193,440.00 million in 2008, while the public expenditure grow from N701,059.40 million to N1,919,700.00 million and further to N3,240,820.00 million, during the same period. As observed by Gbayesola and Uga (1995), Nigeria has witnessed tremendous growth in her revenue generation capacity, especially with the discovery of oil. Oil has consistently accounted for over 80.0 per cent of total government revenue and over 90.0 per cent of foreign exchange earnings over the past two decades.

Despite the tremendous growth recorded in the federal government retained revenue and expenditure during the review period, there are reoccurring questions as to how and whether governments have fully utilized revenues earmarked for provision of socio-economic and infrastructural development. There are arguments that low tax structure and fluctuations in government revenues; due partly to international oil price volatility has impacted negatively on the level of socio-economic and infrastructural development in Nigeria, mainly because of increased uncertainty and erosion of budgetary planning and implementation (AIAE, 2006). Nonetheless, there seem to be disconnecting between government revenue and the level of socio-economic and infrastructural development in the country. Baunsgaard (2003) explains that despite the substantial oil resources that have been spent during the last thirty years, there is little to show in terms of economic development and poverty alleviation (Oil revenue amounted to more than US$300 billion during 1970-2001, whereas per capita Gross Domestic Product (GDP) declined from US$264 to US$254 over the same period).

It is in this light, that we shall analyze the federal government revenue vis-à-vis the provision of socio-economic

*The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

and infrastructural development in Nigeria from 1970 2008, the centerpiece, which is improved productivity and standard of living. To this end, the paper is divided into five sections. Following this introductory section, section two explains the concept of government revenue and infrastructural development as well as theoretical and empirical literature. In section three, we examine the sources and structure of government revenue. Section four focuses on the trend in government revenue and expenditure and the state of some infrastructure in Nigeria. It also discusses challenges of revenue generation and utilization for socio-economic and infrastructural development, while recommendation was discussed in section five.

2.0 CONCEPT OF GOVERNMENT REVENUE AND INFRASTRUCTURAL DEVELOPMENT

2.1 Government Revenue

Financial resources of government constitute the bulk of its revenue and this relate to monies mobilized or generated in the economy. Government revenue can be defined as public receipts, which the government collects from all sources, excerpt loans and borrowing (Ihimodu; 1995). It is different from public receipt, in that, the latter refers to government revenues and borrowings. This implies that in addition to government revenues, public receipts comprises of non-revenue aspects, which increase government debt obligations. Thus, public receipts consist of public borrowings, taxes, grants and gifts, administrative and business revenues.

Tax and non-tax revenues are the major sources of government revenue in Nigeria. The primary function of taxation is to provide funds for public services. Because of the peculiar nature of the economy, the sources take the form of oil and non-oil revenue. Notwithstanding the distinction, oil and non-oil revenues still forms integral part of tax revenue.

2.2 Infrastructure Development

By infrastructure, it means a large-scale public systems, services and facilities of countries that are necessary for economic activities. The components or elements of infrastructure are electricity, telecommunication, transport (road, rail, ocean, air, pipeline) etc, (Ajakaiye, 2002). Aigbokhan (1999) explains infrastructure as a term, which encompasses activities referred to as “social overhead capital”, with two principal characteristics being that they have economies of scale in production and spillovers from users to non-users.

The provision of infrastructure services by government can be explained in economics literature within the context of public goods, natural monopolies, merit goods and externalist. Public goods are goods, which once provided becomes available to all whether or not payments are made for the services. Examples are law and order, defence etc. Natural monopolies arise because of the enormous cost required to bring such goods/services to manageable levels, hence the need for a single investor (government) that would ensure for the economy to reap from the benefits of such investment. Merit goods are considered to have intrinsic values, which, if left to individual consumers, would generally not be consumed at the required level, for example, education, health etc. The positive externalities derivable from the services mentioned, may not allow it to be left with the private sector alone.

2.3 Theoretical and Empirical Literature

Theoretically, development economists posit that at the early stages of economic growth and development, government investment as a proportion of total investment of the economy is high (Musgrave-Rostow). Government provides infrastructure, which include: transportation system - road and railway; sanitation system; law and order; health; and education (human capital development), etc. The whole essence of government expenditure during this period is to stimulate the economy for eventual take-off into the middles of economic development. In addition, Wagner's law explains economic growth relative to the size of government. It states that as the per capita incomes in an economy grow, the relative size of the public sector grows. The law argues that as real incomes in the economy increases, government spending in the infrastructure; recreation and culture, roads, welfare, education and health increases.

Furthermore, development economics portend that when government revenue is properly invested in infrastructure, it leads to economic growth. It has also shown that public sector borrowing to finance improvements in infrastructure has positive impact on private sector investments in the economy through increased productivity of labour and greater efficiency of investment, hence, higher levels of aggregate output. Rubinson (1977) concludes that larger government revenue in GNP enhances economic growth mostly in poorer developing countries. Studies have confirmed that growth in infrastructure capacity is directly correlated with real positive economic growth. Ilori (2002) indicated that a per cent increase in the stock of infrastructure is associated with a positive percentage increase in gross domestic product (GDP). Hemming (1991) observed that growth is influenced by composition of expenditure, since certain types of spending may have more of a growth orientation. According to him, critical among these types of spending are provision of socio-economic infrastructure, operations and maintenance, and general administrative and legal framework. Akpan (1999) explained that public expenditure on transport, communication and agriculture crowd-in private investment, while public spending on manufacturing and construction crowd-out private investment. He pointed out that expenditures on education and health have a positive influence on private sector investment.

Blejer and Khan (1984) maintained that public investment, which has some bearing on infrastructure and provision of public goods, can be complementary to private sector investment. They show for a group of developing countries that longer-term infrastructural expenditures, rather than short-term public investment, positively induce private investment. Alogoskoufis and Kalyvitis (1996) analyze the effects of infrastructure on output and highlight the production enhancing role of public investment. From their analysis they show that public infrastructure changes operate through firms' production function and are then reflected in output changes.

Disaggregating the public expenditure into recurrent and capital, Ogiogio (1995) emphasized that adequate funding of public sector recurrent budget makes for an effective and functional civil service, and hence, the effectiveness of implementation of development policies and programme. Conversely, Fajingbesi and Odusola (1999) in their study indicated that real capital expenditures positively and significantly affect real output, while the effect of real recurrent expenditure was relatively marginal.

Despite the place of infrastructure in ensuring economic growth and development, a review of studies on infrastructural development in Nigerian revealed the level of infrastructural decay and its attendant impact on output growth and living standard. The Nigeria's National Economic Empowerment and Development Strategy (NEEDS) acknowledges that "Nigeria's infrastructure does not meet the needs of the average investor, inhibiting investment and increasing the cost of doing business" Reviewing manufacturing industries in Nigeria (Chhibber and Dailami, 1990) showed that a breakdown of social infrastructure forced private firms in Nigeria to acquire costly alternative sources of energy such as generators.

In all, there are economies of scale by the public provision of communication, utilities and social services from which private firms obtain much benefit. However, non-availability of these services increases the cost of production to the private producers as well as forcing firms to allocate scarce resources away from productive investment. Thus, public investment spending that provides public services and reduce costs of production to the private sector does enhance private investment and profitability. And non-infrastructure public investment usually crowds out private investment (Easterly and Schmidt-Hebbel 1993; Chhibber and Dailami, 1990).

3.0 SOURCES AND STRUCTURE OF GOVERNMENT REVENUE

3.1 Sources of Government Revenue

3.1.1 Tax

Primarily, government revenue is classified as tax and non-tax revenue. Taxes refer to compulsory, nonreturnable contribution (of money or occasionally of goods and services) from private individuals, institutions or groups to the government (Anyanwu, 1993). It could also mean non-voluntary or compulsory payment made to government by her citizens, institutions, companies etc as returns for the costs incurred in the provision of goods and services as well as for administrative purposes. Mbanefor (1990) argued that the basic premise behind tax is that the burden of providing governmental goods and services must be borne by those who enjoy them.

Tax is the most important sources of government income and compulsorily imposed by government, irrespective of the exact amount of services rendered to the taxpayer in return. Since, it is compulsory in nature, a person who is qualified to pay tax and refuses to do so is liable to punishment. It is a payment made by the taxpayers and is used by the government for the benefit of all the citizens. The government uses revenue generated from tax for providing infrastructure; hospitals, schools, public utilities etc. It is, however, not levied in return for any specific service rendered by the government to the taxpayer. Taxes are generally classified into both direct and indirect groups. The classification is done considering the following criteria; income and expenditure, production and expenditure and burden, which could be transferable or not. Tax is classified as follows;

(i) Direct Tax

The direct tax is the commonest type of tax in Nigeria and constitutes the most prominent source of revenue to the government. They are levied directly on the income and property of individuals and companies. It varies with the status of taxpayer and the burden is usually borne directly by the taxpayer. It includes, Personal Income Tax (PIT), Company Income Tax (CIT) and PetroLeum Profit Tax (PPT), etc.

(ii) Indirect Tax

Apart from the direct tax, the indirect tax is another major source of government revenue. They are taxes levied upon persons or groups whom they are not intended should bear the burden or incidence, but who will shift them to other people. They are normally levied on commodities or services and hence their incidence does not fall directly on the final payers. It includes, Import duties (and fees), Excise duties, Export duties, Value Added Tax (VAT), etc.

(iii) Other Tax Revenues

This includes interest and repayment, mainly, mining (rents, royalties and NNPC earnings as well as miscellaneous. The miscellaneous items are licenses, fees, earnings from sales and rent of government property.

3.1.2 Non-Tax

Non-tax revenue, classified into administrative revenues, commercial receipts and grants are non-compulsory payments for the reason that the individual has the discretion to either avail himself of the services or not, but chosen to do so, payment becomes compulsory. Administrative revenue refers to licenses, fees, etc, while commercial receipts are monies collected as payment for government produced goods and services; charges for the use of services, for example, education levies, water rates. Grants refer to contribution made by one level of government to another, especially for specific reasons, such as education, health care delivery, maintenance of roads etc. (Ibid).

3.2 Structure of Government Revenue

Nigeria operates a federal structure with three tiers of government exercising different rights of revenue administration and collection. For an adequate understanding of the nature and structure of government revenue in Nigeria, the following shall be considered;

(i) Federally-Collected Revenue

These are revenues, which fall within the Federal Government jurisdiction of administration and collection. The Federal Government does not have exclusive right over the federally-collected revenue; it shares some of it with other components of the federating units. The revenue shared among the three tiers of government is pooled into the federation account, which was formerly, the Distributable Pool Account (DPA). The bulk of federally-collected revenue comes from the oil revenue item. Prior to the emergent of oil as the major source of federally-collected revenue from the 1970s, the non-oil revenue, which was dominated by agriculture, was the largest source. For example, in 1970, the oil revenue constitutes about 26.0 per cent of the total federally-collected revenue, while the non-oil revenue constitutes was 74.0 per cent.

However, by 2008, the oil revenue constitutes 83.0 per cent of the total federally-collected revenue, while the non-oil was 17.0 per cent. The total federally-collected revenue was N634.0 million in 1970 and by 2008, it has risen to N7,866,590.10 million. The implication of the continued oil dominance of the total federally-collected revenue is that fluctuations in the international oil prices would impact on the government's ability to spend on goods and services, especially, where government did not resort to either domestic or external borrowing to bridge the fiscal deficit gap.

(ii) Federation Account

Section (162)(1) of the 1999 Constitution of Federal Republic of Nigeria provides as follows; "the Federation shall maintain a special account to be called "the Federation Account" into which shall be paid all revenues collected by the Government of the Federation, except the proceeds from the personal income tax of the personnel of armed forces of the Federation, the Nigerian Police, the Ministry or department of government charged with responsibility for Foreign Affairs and the residents of the Federal Capital Territory, Abuja"

What is pooled into the federation account is distributed monthly among the federal government and the other federating units through the Federation Accounts Allocation Committee (FAAC). The FAAC meets once or twice in a month on a very exceptional case to disburse funds among the three tiers of government from the federation account. It occasionally shares funds from the excess crude account among the three tiers of government. The manner of fund sharing from the federation account is determined by the prevailing revenue allocation formula.

Presently, the sharing formula vested the federal government with 52.68 per cent of funds, while the state and local government have 26.72 per cent and 20.60 per cent, respectively.

On the horizontal allocation formula for the states of the Federation, the Section 162(2) of the 1999 Constitution of Federal Republic of Nigeria empowers the National Assembly to use the following principles; population, equality of states, internal revenue generation, land mass terrain and population density as factors to be considered in sharing revenue from the Federation Account. Below are the existing criteria or principles of revenue allocation that have remained contentious. There is no general agreement on the relative weight to be attached to the principles.

Table 1
Verical Allocation of Nigerian Government Revenues Among The Three Tiers of Government

Period	Percentage (%) of Federation Account			
	Federal Government	State Government	Local Government	Special Funds
1981 *	55	35	10	-
1989	50	30	15	5
1993	48.5	24	20	7.5
1994	48.5	24	20	7.5
1992-1999	48.5	24	20	7.5
May-02	56	24	20	-
March 2004 to date	**52.68	26.72	20.6	-
Current Bill under consideration at the National Assembly	53.69	31.1	15.21	-
*Revenue Act of 1981				
**Prior to Supreme Court Judgment of April, 2002 on Resources Control Suit, the provision of Special Funds was nullified in abny given Revenue Allocation Formula				
Source: Revenue Mobilisation and Fiscal Commission, Ministry of Finance				

Table 2
Horizontal Revenue Allocation

	Principles	Weight (%)
(i)	Equality of States	40.00
(ii)	Population	30.00
(iii)	Population Density	
(iv)	Landmass and Terrain	10.00
(v)	Social Development Factor	10.00
(vi)	Internal Revenue Effort	2.50
(vii)	Equality of States in revenue generation	7.50
	Total	**100.00**

Source: Revenue Mobilisation and Fiscal Commission, Ministry of Finance

(i) Independent Revenue of Government

These are revenues collected by the Federal Government, and it has exclusive right over it. They are not subject to sharing by the three tiers of government and it does not find itself into the Federation Account. Among these are interest payments, rents on government properties, personal income of armed forces, the police, external affairs officers and residents of the Federal Capital Territory (CBN 1995:59).

(ii) Federal Government Retained Revenue

This constitutes the sum of Federal Government direct share of the Federation Account, which is based on the prevailing revenue sharing formula existing among the three tiers of government and other revenues (independent revenue earnings), it has exclusive right to administer and collect. The government retained revenue is largely dependent on the quantum of the total Federally-Collected Revenue, other revenue sources and the prevailing revenue sharing formula of FAAC funds. Its value is usually high, when compared with the state and local governments' value.

Table 3:
Structure of Government Revenue from 1970 -2008

Year	Total Federally Colle cted Revenue (N'Million)	Federation Account (N'Million)	Federal Govt. Retained Revenue (N'Million)	Revenue Sources (N'Million)		Percentage Distribution (%)	
				Oil	Non-Oil	Oil	Non-Oil
1970	634.00	582.40	448.80	166.60	467.40	26.28	73.72
1971	1,168.80	1,068.60	1,168.80	510.10	658.70	43.64	56.36
1972	1,405.10	1,325.80	1,404.80	764.30	640.80	54.39	45.61
1973	1,695.30	1,613.00	1,695.30	1,016.00	679.30	59.93	40.07
1974	4,537.40	4,371.10	4,537.00	3,724.00	813.40	82.07	17.93
1975	5,514.70	5,294.10	5,514.70	4,271.50	1,243.20	77.46	22.54
1976	6,765.90	6,470.10	6,765.90	5,365.20	1,400.70	79.30	20.70
1977	8,042.40	7,703.10	8,042.10	1,749.80	1,961.80	21.76	24.39
1978	7,371.00	6,781.40	5,178.10	4,555.80	2,815.20	61.81	38.19
1979	10,912.40	8,868.40	10,599.80	8,880.80	2,031.60	81.38	18.62
1980	15,233.50	14,746.50	12,993.30	12,353.30	2,880.20	81.09	18.91
1981	13,290.50	10,182.80	7,511.60	8,564.40	4,726.10	64.44	35.56
1982	11,433.70	9,884.90	5,819.10	7,814.90	3,618.80	68.35	31.65
1983	10,508.70	9,798.60	6,272.99	7,253.00	3,255.70	69.02	30.98
1984	11,253.30	10,672.40	7,267.20	8,269.20	2,984.10	73.48	26.52
1985	15,050.40	13,750.20	10,001.40	10,923.70	4,126.70	72.58	27.42
1986	12,595.80	11,868.30	7,969.40	8,107.30	4,488.50	64.37	35.63
1987	25,380.60	24,692.20	16,129.00	19,027.00	6,353.60	74.97	25.03
1988	27,596.70	26,770.30	15,588.60	19,831.70	7,765.00	71.86	28.14
1989	53,870.40	46,860.30	25,893.60	39,130.50	14,739.90	72.64	27.36
1990	98,102.40	68,064.20	38,152.10	71,887.10	26,215.30	73.28	26.72
1991	100,991.60	54,000.00	38,152.10	82,666.40	18,325.20	81.85	18.15
1992	190,453.20	77,800.00	53,264.90	164,078.10	26,375.10	86.15	13.85
1993	192,769.40	106,799.40	126,071.20	162,102.40	30,667.00	84.09	15.91
1994	201,910.80	110,461.00	90,622.60	160,192.40	41,718.40	79.34	20.66
1995	459,987.30	161,988.90	249,768.10	324,547.60	135,439.70	70.56	29.44
1996	523,597.00	179,000.00	325,144.00	408,783.00	114,814.00	78.07	21.93
1997	582,811.10	208,000.00	3,251,262.30	416,811.10	166,000.00	71.52	28.48
1998	463,608.80	257,331.40	353,724.10	324,311.20	139,297.60	69.95	30.05
1999	949,187.90	576,801.40	662,585.30	724,422.50	224,765.40	76.32	23.68
2000	1,906,159.70	1,262,468.30	597,282.10	1,591,675.80	314,483.90	83.50	16.50
2001	2,231,600.00	1,427,432.40	796,976.70	1,707,562.80	903,462.30	76.52	40.48
2002	17,321,837.50	1,606,119.70	716,754.20	1,230,851.20	500,986.30	7.11	2.89
2003	2,575,095.90	2,011,585.60	1,023,242.20	2,074,280.60	500,815.30	80.55	19.45
2004	3,920,500.00	2,657,200.00	1,253,600.00	3,354,800.00	565,700.00	85.57	14.43
2005	5,547,500.00	3,033,900.00	1,660,700.00	4,762,400.00	785,100.00	85.85	14.15
2006	5,965,101.90	3,219,099.10	1,836,605.00	5,287,566.90	677,535.00	88.64	11.36
2007	5,715,600.00	3,878,500.00	2,333,659.60	4,462,910.00	1,200,800.00	78.08	21.01
2008	7,866,590.10	4,552,835.00	3,193,440.00	6,530,630.10	1,335,960.00	83.02	16.98

Source: Central Bank of Nigeria Statistical Bulletin (50 years special anniverasry edition)

(i) Consolidated Revenue Fund

Funds in this account are not distributed among the three tiers of government, but solely for the Federal Government. The sources include; share from Federation Account, direct taxes, licenses, fees and other internal revenue, earnings and sales, rent on government property, etc . All recurrent expenditure including consolidated salaries of Auditor-General, Chief Justice, President etc. are charged to it.

Development Fund And Contingency Fund

Development Fund is a capital projects account where all revenue meant for capital projects are paid into, while the contingency fund is meant for unforeseen circumstances like the recent flooding in some parts of the northern states, Ogun and Lagos States. Funds are often transferred from the Consolidated Revenue Fund to each of them.

4.0 TREND IN GOVERNMENT REVENUE AND PUBLIC SECTOR EXPENDITURE

4.1 Government Revenue

Broadly speaking, revenue provides government with the finance to execute her expenditure. This, however, is not always the case. There are occasions when government revenue falls short of her expectations, yet, it may want to maintain the same level of expenditure or increase it. Under this circumstance, government would require either domestic or external borrowing to finance the shortfall in her revenue gap. Such finance, depending on its source, nature and size has the potential of affecting government debt stock as well as money supply, inflation and interest rates.

Government revenue comprises of oil and non-oil components. The percentage of the non-oil component of government revenue became reduced as the sale of crude oil gained prominent since the 1970s. In 1970, non-oil revenue constitutes about 74.0 per cent of the federally-collected revenue, while the oil revenue was about 26.0 per cent. In the same year, the government retained revenue rose from N448.80 million to N5, 514.70 million in 1975, indicating a growth rate of 1,129 per cent. During this period, the contribution of the non-oil revenue to the federally-collected revenue increased from N467.40 million to N1,243.20 million, while the oil revenue contribution increased from N166.40 million to N4,271.50 million. In terms of contribution to the federally-collected revenue, the non-oil revenue component dropped from 74.0 per cent in 1970 to 23.0 per cent in 1975, while the oil revenue component increased from 26.0 per cent to 77.0 per cent during the same period.

From 1980, the federally-collected revenue dropped from N12,993.30 million to N7,969.40 million in 1986, during which the Federal Government introduced the Structural Adjustment Programme (SAP). Before the SAP of 1986, there were efforts to solve the country's economic problems and these led to the introduction of various rounds of budget-tightening austerity measures (1980 - 1985). During this period, the government retained revenue dropped from N12,993.30 million to N6,272.0 million between 1980 and 1983, respectively.

There was, however, a tremendous improvement in the government retained revenue between 1990 and 2000. The period witnessed the Gulf war crisis that attributed in pushing up the oil prices, thereby, increasing the oil revenue component of the federally-collected revenue from N71,887.10 million in 1990 to N1,591,675.80 million in 2000 and further to N6,530,630.10 million in 2008. The non-oil component grow from N26,215.30 million in 1990 to N314,483.90 million in 2000, and further to N1,335,960.00 million in 2008. By 2008, the non-oil contribution to the federally-collected revenue was 17.0 per cent, while the oil contribution was 83.0 per cent. Thus, the government retained revenue rose from N38,152.10 million to N597,282.10 million between 1990 and 2000 and further to N3,193,440.00 million in 2008.

4.2 Government Expenditure

Generally, public expenditure is classified into two categories, namely, recurrent and capital expenditures and these are expenses on consumption and investment. Recurrent expenditures are consumption items; salaries and wages, while capital expenditures include expenses that contribute to long-term development; social and economic infrastructures. In order to avoid the complexities in

Table 4: Trends in Government Revenue and Expenditure from 1970 - 2008

Year	Retained Revenue (N'M)	Recurrent Expenditure (N'M)	Capital Expenditure (N'M)	Total Expenditure (N'M)	Fiscal Deficit (N'M)	Recurrent/Total Expenditure (%)	Capital/Total Expenditure (%)
1970	448.80	716.10	187.80	903.90	(455.10)	79.22	20.78
1971	1,168.80	823.60	173.60	997.20	171.60	82.59	17.41
1972	1,404.80	1,012.30	451.3	1,463.60	(58.80)	69.17	30.83
1973	1,695.30	963.50	565.70	1,529.20	166.10	63.01	36.99
1974	4,537.40	1,517.10	1,223.50	2,740.60	1,796.80	55.36	44.64
1975	5,514.70	2,734.90	3,207.70	5,942.60	(427.90)	46.02	53.98
1976	6,765.90	3,815.40	4,041.30	7,856.70	(1,090.80)	48.56	51.44
1977	8,042.40	3,819.20	5,004.60	8,823.80	(781.40)	43.28	56.72
1978	5,178.10	2,800.00	5,200.00	8,000.00	(2,821.90)	35.00	65.00
1979	8,868.40	3,187.20	4,219.50	7,406.70	1,461.70	43.03	56.97
1980	12,993.30	4,805.20	10,163.40	14,968.50	(1,975.20)	32.10	67.90
1981	7,511.60	4,846.70	6,567.00	11,413.70	(3,902.10)	42.46	57.54
1982	5,819.10	5,506.00	6,417.20	11,923.20	(6,104.10)	46.18	53.82
1983	6,272.00	4,750.80	4,885.70	9,636.50	(3,364.50)	49.30	50.70
1984	7,267.20	5,827.50	4,100.10	9,927.60	(2,660.40)	58.70	41.30
1985	10,001.40	7,576.40	5,464.70	13,041.10	(3,039.70)	58.10	41.90
1986	7,969.40	7,696.90	8,526.80	16,223.70	(8,254.30)	47.44	52.56
1987	16,129.00	15,646.20	6,372.50	22,018.70	(5,889.70)	71.06	28.94
1988	15,588.60	19,409.40	8,340.10	27,749.50	(12,160.90)	69.95	30.05
1989	25,893.60	25,994.20	15,034.10	41,028.30	(15,134.70)	63.36	36.64
1990	38,152.10	36,219.60	24,048.60	60,268.20	(22,116.10)	60.10	39.90
1991	30,829.20	38,243.50	28,340.90	66,584.40	(35,755.20)	57.44	42.56
1992	53,264.90	53,034.10	39,763.30	92,797.40	(39,532.50)	57.15	42.85
1993	126,071.20	136,727.10	54,501.80	191,228.90	(65,157.70)	71.50	28.50
1994	90,622.60	89,974.90	70,918.30	160,893.20	(70,270.60)	55.92	44.08
1995	249,768.10	127,629.80	121,138.30	248,768.10	1,000.00	51.30	48.70
1996	325,144.00	124,491.30	212,926.30	337,217.60	(12,073.60)	36.92	63.14
1997	456,366.30	158,563.50	269,651.70	428,215.20	28,151.10	37.03	62.97
1998	573,627.00	178,097.80	309,015.60	487,113.40	86,513.60	36.56	63.44
1999	690,887.70	449,662.40	498,027.60	947,690.00	(256,802.30)	47.45	52.55
2000	808,148.40	461,600.00	239,450.90	701,059.40	107,089.00	65.84	34.16
2001	925,409.10	579,300.00	438,696.50	1,018,025.60	(92,616.50)	56.90	43.09
2002	1,042,669.80	696,800.00	321,378.10	1,018,155.80	24,514.00	68.44	31.56
2003	1,159,930.50	984,300.00	241,688.30	1,225,965.90	(66,035.40)	80.29	19.71
2004	1,277,191.20	1,032,700.00	351,300.00	1,426,200.00	(149,008.80)	72.41	24.63
2005	1,660,700.00	1,223,700.00	519,500.00	1,822,100.00	(161,400.00)	67.16	28.51
2006	1,836,605.00	1,290,201.90	552,385.80	1,938,002.50	(101,397.50)	66.57	28.50
2007	2,333,659.60	1,589,270.00	759,323.00	2,450,896.70	(117,237.10)	64.84	30.98
2008	3,193,440.00	2,117,362.00	1,123,458.00	3,240,820.00	(47,380.00)	65.33	34.67

Source: Central Bank of Nigeria Statistical Bulletin (50 years special anniverasry edition) distinguishing between recurrent and capital expenditures, government expenditure could be classified according to the actual purpose of government expenditures transport, education, health defense, etc as in budget planning. In Nigeria, public expenditure is also classified according to function: General Administration; Defence, Internal Security, National Assembly; Social and Community Services; Education, Health and other Social and Community Services; Economic Services; Agriculture, Construction, Transportation and Communication and Other Economic Services; and Transfers; Public Debt Servicing, Pensions and Gratuities, Contingencies/Subventions and Other/CFR Charges.

A cursory look at the profile of government expenditure shows that greater percentage of government expenditure was spent on the capital item from 1970 to 1980. Within this period, the total capital expenditure constitutes 57.0 per cent of total government expenditure, while the total recurrent expenditure was 43.0 per cent. Meanwhile, the government retained revenue was N56,617.90 million, while the expenditure was N60,632.80 million, resulting in deficit financing of N4,014.90 million during the period. The period was remarkable in Nigeria's socio-economic development, apart from the establishment of many public enterprises, it witnessed the nationalization of several privately-owned companies and the execution of Second and Third National Development Plans between 1970-1974 and 1975-80, respectively.

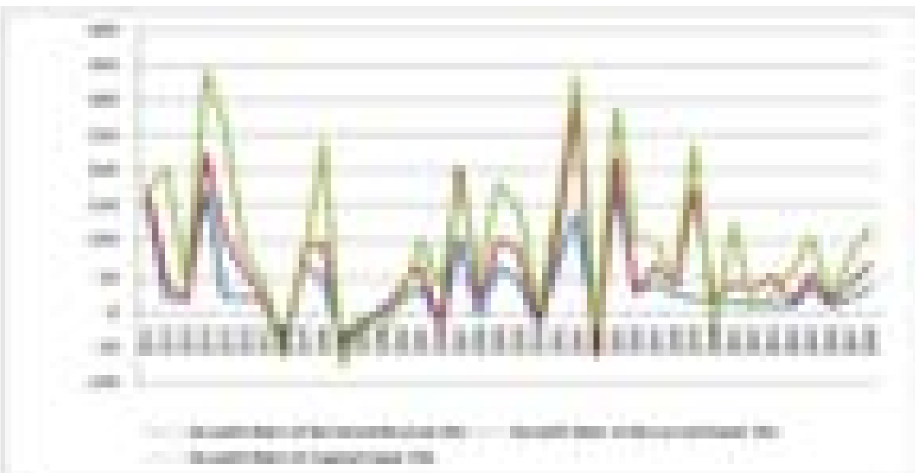
However, the drop in the government retained revenue from N47,362.80 million to N44,840.70 million between the period 1975 to 1980 and 1981 to 1986, respectively, did not deter its expenses. In fact, between 1981 to 1986 (Oil revenue amounted to more than US$300 billion during 1970-2001, whereas per capita Gross Domestic Product (GDP) declined from US$264 to US$254 over the same period), government expenditure went up to N72,165.80 million, exceeding N60,632.80 million spent from 1970 to 1980. The increased government expenditure at the dwindling government retained revenue resulted in enormous fiscal deficit of N27,325.10 million during the period. The massive public expenditure from 1970 - 1990 was bedeviled with lack of achieving self sustaining growth and other socio-economic objectives of government, as a greater part of government expenditure was channeled into projects that were neither properly conceived nor properly managed (Adubi, et al, 1995). The situation was succinctly captured in Ibe (2000) in the excerpt below;

> "…Nigeria appears to provide a textbook example of what can go wrong when the government gets directly into the business of producing goods and services. Between 1973 and 1990, the Nigeria public sector invested US$115 billion just about $1,000 for every citizen. Yet there is no growth to show for this investment. Why? Most of the investment was greatly overpriced for "non-commercial" reasons. In addition, most public sector assets are operating at capacity utilization of less 40 per cent. This is not to mention the US$3billion Ajaokuta Steel complex, which after another US$1billion to complete will then lose money even on a sunk cost basis".

Between 1990 to 1995 (The large growth witnessed in the government retained revenue could be attributed to the impact of the Gulf War crisis on the international crude oil prices. This has come to be known as the Gulf War Oil Windfall), government retained revenue grew to N588,708.10 million when compared to N44,840.70 million for the period, 1981 to 1986. Despite the large government retained revenue of N588,708.10 million, it incurred a fiscal deficit of N231,832.10 million after spending N820,540.20 million during the period. With soaring government expenditure, the size of its recurrent expenditure continued to increase unabated. The recurrent expenditure was N481,829.00 million, while the capital expenditure was N338,711.20 million during the period, 1990 1995 when compared with the 1981 to 1986 modest figures of N36,204.30 million and N35,961.50 million, respectively.

The period, 1996-2001 was remarkable in government expenditure profile. The period witnessed the capital expenditure exceeding the recurrent expenditure. The capital expenditure was N1,529,072.10 million, while the recurrent expenditure was N1,372,415.00 million. Though, government expenditure exceeded revenue during the period by N47,122.20 million, the increased capital expenditure is expected to impact positively on the level of infrastructural development. However, this fit could not be maintained by government in the period, 2006 2007. The recurrent expenditure rose from its previous period figure of N1,372,415.00 million to N10,886,048.90 million resulting in 693.2 per cent growth rate, while the capital expenditure increased from N1,529,072.10 million to N5,836,801.80 million during the same period, indicating 281.7 per

Figure 1: Government Retained Revenue, Recurrent and Capital Expenditure Growth Rate



cent growth rate. In 2008, the dominance of the recurrent expenditure over capital expenditure continued, with government spending N2,117,362.0 million on the former, while N1,123,458.00 million was on the latter.

In all, the growth rate of government expenditure profile (both recurrent and capital) and retained government revenue during the period, 1970 - 2008 depicts high level of volatility as shown in the Figure 1. The volatility could be attributed to fluctuations in the major source of financing (revenue) the expenditure as well as signs of manifest inconsistency in government programme and policies. The oil dominance of the Nigeria's revenue at the detriment of other sectors has haunted its overall economic development, provoking thoughts about the resource-curse hypothesis. However, it may not be entirely adequate to anchor the challenges on the socio-economic and infrastructural development to fluctuations or reduction in the government revenue. Relating drop in government retained revenue as the major cause of decay in infrastructure may be a far cry to the challenges confronting socio-economic and infrastructural development in Nigeria.

4.3 Socio-Economic and Infrastructural Development

Government plays a very vital role in the socio-economic and infrastructural development of any nation. Because of its nature and size, government involvement in the provision is inevitable. In Nigeria, socio-economic and infrastructural development has been at the fore front of governments' policies. Despite, the important position of infrastructure in the development of nations, its dearth, especially electricity, road, water supply, health etc in Nigeria, has impeded the much needed growth for socio-economic transformation. The poor infrastructure in the country has crippled Nigeria's corporate development. It reduces productivity and competitiveness by adding to firm costs and reducing competition. Companies generate their own power and provide their own infrastructure, thus adding about 20 per cent to firm costs (UNDP Report, 2009). The paper considers some of the infrastructures, such as electricity, water and sanitation, road and health.

(i) Electricity

Electricity infrastructure comprises of five thermal stations, three hydro-power stations, 19,330KV transmission lines, 69,132KV transmission lines and 92 bulk stations with a combined capacity of 5,800MW, which is much below the capacity in an average European city (MAN, 2004). Total electricity installed capacity has risen from mere 804.70MW/hr to 926.20MW/hr between 1970 and 1975, while the average capacity utilization was 34.13 per cent during the period. The average total generation during the period was 267.27MW/hr, out of which 142.37MW/hr was for industrial consumption and 83.48MW/hr for residential consumption, the average capacity utilization was 36.96 per cent. However, from 1990 to 1995, the average total generation rose to 1,681.05MW/hr, out of which 236.42MW/hr was for industrial consumption, 534.95MW/hr for residential consumption and 285.95MW/hr for commercial and street lighting.

Furthermore, from 2000 to 2005, the average total electricity generation was 2,252.15MW/hr, out of which 272.67MW/hr was for industrial consumption and 782.40 MW/hr for residential consumption and 396.93MW/hr for commercial and street lighting, while the capacity utilization was 42.10 per cent. By 2008, the total generation was 2,403.20MW/hr, out of which 421.6MW/hr was for industrial consumption and 1,165.72MW/hr for residential consumption and 520.68MW/hr for commercial and street lighting, the capacity utilization was 34.27 per cent.

The trend in average total electricity generation indicates that industrial power consumption has been dropping relative to the residential consumption, probably revealing the less reliance of the industrial sector on the electricity generation of the Power Holding Company of Nigeria (PHCN). According to the World Development Report (1988; Pp. 144) in the excerpt;

> "…frequent power outages and fluctuations in voltage affect almost every industrial enterprise in the country. To avoid production losses as well as damages to machinery and equipment, firms invest in generators…. One large textile manufacturing enterprise estimates the depreciated capital value of its electricity supply investment as USS$400 per worker…. Typically, as much as 20 per cent of the initial capital investment for new plants financed by the NIDB is spent on electric generators and boreholes"

The current status of electricity supply in Nigeria reflects that of an electricity supply crisis in which industrial growth and socio-economic development paces are kept below what is attainable by the economy (FRN, 1975; World Bank, 1991; Ayodele, 1992 and 1999). There is, no gainsaying on the sorry state of power sector in Nigeria, and if nothing is urgently done to rescue the sector from its deplorable state, the country's ambition of being among the productive League of Nations by the year, 2020 may be an exercise in futility. It is hope that the present plan by the Central Bank of Nigeria to invest about N500.0 billion into the sector, real sector etc. on what looks like the Nigerian equivalent of the European Marshal plan would salvage the sector.

(ii) Water Supply and Sanitation

Provision of adequate water supply is very important for human life existence. Unfortunately this has eluded many developing countries including Nigeria. Notwithstanding, government efforts at implementing the Millennium Development Goals (MDGs), which includes provision of portable water supply as one of its aims, a lot of Nigerians depend on well water and streams/ponds as their major source of water supply. Statistics has it that about 71 per cent of those living in rural communities do not have access to safe water supply or adequate sanitation, while for the urban and semi-urban population only about 42 per cent of the population have access to safe water supplies and adequate sanitation (NWSSP, 2000). The National Water

Table 5: Electricity Generation and Consumption in Nigeria from 1970 - 2008

	Generation			Consumption (MW/hr)							
Year	Installed Capacity(MW)	Total Generation (MW/hr.)	Capacity Utilised (%)	Industrial	% of Total Consumption	Commercial and Street	% of Total Consumption	Residential	% of Total Consumption	Total Consumption	Proportioin of Total Generation Consumed (%)
1970	804.70	176.60	21.95	91.40	62.90	-	-	53.90	37.10	145.30	82.30
1971	804.70	215.40	26.77	114.90	63.50	-		66.20	36.50	181.10	84.00
1972	786.70	255.40	32.46	138.20	65.50	-		72.90	34.50	211.10	82.60
1973	670.60	299.70	44.69	146.10	62.80	-		86.60	37.20	232.70	77.60
1974	721.00	261.10	36.21	163.20	61.30	-		103.00	38.70	266.20	100.00
1975	926.20	395.40	42.69	200.40	62.90	-		118.30	37.10	318.70	80.60
1976	1,125.20	468.70	41.65	214.60	58.00	-		155.20	42.00	369.80	78.90
1977	1,114.20	538.00	48.29	253.00	58.10	-		182.70	41.90	435.70	81.00
1978	1,793.70	522.70	29.14	157.70	31.30	93.50	18.50	253.20	77.90	504.40	96.50
1979	2,230.60	710.70	31.86	160.30	34.80	77.90	16.90	221.90	8.20	460.10	64.70
1980	2,230.50	815.10	36.54	199.70	37.20	74.10	17.50	243.10	45.30	536.90	65.90
1981	2,240.00	887.70	39.63	121.00	30.20	21.30	21.30	193.60	48.50	355.90	65.10
1982	2,902.10	973.90	33.56	260.00	38.40	79.10	11.60	344.50	50.60	685.60	70.00
1983	2,856.80	994.60	34.82	254.40	36.50	84.30	12.10	358.00	51.40	696.70	70.00
1984	3,178.00	1,025.50	32.27	217.20	34.70	81.70	13.10	326.60	52.20	625.50	61.00
1985	3,695.50	1,166.80	31.57	259.80	36.20	85.60	11.90	372.00	51.90	717.40	61.50
1986	4,016.00	1,228.90	30.60	280.50	33.30	84.70	10.10	476.60	56.60	841.80	68.50
1987	4,548.00	1,286.00	28.28	294.10	34.50	90.20	10.60	468.60	54.90	852.90	66.30
1988	4,548.00	1,330.40	29.25	291.10	34.10	118.60	13.90	443.80	52.00	853.50	64.20
1989	4,548.00	1,462.70	32.16	257.90	26.40	195.30	20.00	523.60	53.80	976.80	66.80
1990	4,548.00	1,536.90	33.79	230.10	25.60	217.60	24.20	550.80	50.20	898.80	58.50
1991	4,548.00	1,617.20	35.56	253.70	26.80	254.10	26.80	459.30	48.50	946.60	58.50
1992	4,548.00	1,693.40	37.23	245.30	24.70	266.10	26.80	481.60	48.50	993.00	58.60
1993	4,548.60	1,655.80	36.40	237.40	20.80	311.60	27.30	590.40	51.90	1,141.40	68.90
1994	4,548.60	1,772.90	38.98	233.30	21.30	386.70	28.00	575.00	52.50	1,115.00	61.80
1995	4,548.60	1,810.10	39.79	218.70	20.30	279.60	26.00	552.60	51.30	1,050.90	59.50
1996	4,548.60	1,854.20	40.76	235.30	22.80	280.00	27.10	518.00	50.10	1,033.30	55.70
1997	4,548.60	1,839.80	40.45	236.80	23.50	264.50	26.20	508.30	50.30	1,009.60	54.90
1998	4,548.60	1,724.90	37.92	218.90	22.50	253.90	26.10	500.00	51.40	972.80	56.40
1999	4,548.60	1,859.80	40.89	191.80	21.70	236.80	26.90	455.10	51.50	883.70	47.50
2000	4,548.60	1,738.30	38.22	223.80	22.00	274.70	27.00	518.80	51.00	1,017.30	58.50
2001	4,548.60	1,689.90	37.15	241.90	21.90	298.30	27.00	564.50	51.10	1,104.70	65.40
2002	4,548.60	2,237.30	49.19	146.20	11.50	372.60	29.30	752.80	59.20	1,271.60	56.80
2003	6,130.00	2,396.70	39.10	196.00	12.90	417.90	27.50	905.60	56.80	1,519.50	63.40
2004	6,130.00	2,763.60	45.08	398.00	21.80	489.30	26.80	938.50	51.40	1,825.80	66.10
2005	6,130.00	2,687.10	43.84	430.14	21.80	528.79	26.80	1,014.17	51.40	1,973.10	73.43
2006	7,011.60	2,638.10	37.62	383.44	22.00	465.35	26.70	894.11	51.30	1,742.90	66.07
2007	7,011.60	2,623.10	37.41	494.01	22.00	599.55	26.70	1,151.94	51.30	2,245.50	85.60
2008	7,011.60	2,403.20	34.27	421.60	20.00	520.68	24.70	1,165.72	55.30	2,108.00	87.72

Source: Central Bank of Nigeria (CBN) Bulletin of Statistics (2004), CBN Annual Report and Statement of Account of Various Years and Author's Computation

Sanitation Policy (NWSP) objective is for all Nigerians to have access to adequate, affordable and sustainable sanitation through the active participation of federal, state and local governments, Non-governmental organizations, development partners, private sector, communities, households, and individuals (NWSP; 2004). However, this laudable objective is far from being achieved.

Table 6 indicates a decline in the percentage of the population that enjoys pipe-borne water from 15.8 per cent in 2003 10.4 per cent in 2007, while those enjoying the well water increased from 27.8 per cent in 2003 to 33.3 per cent in 2007, revealing the deplorable state of pipe-borne water in Nigeria. This is against the backdrop of the National Water Supply and Sanitation Programme covering urban and small towns, rural areas, and water resource management and sanitation, that partners with the stakeholders to improve water supply, with target of 60.0 per cent rural coverage by 2007.

(iii) Road

The road transport is the most prominent means of transport in Nigeria, others include; railway, air and sea. In recent time, the major reform aimed at revamping the ugly roads situation was the establishment of the Federal Roads Maintenance Agency (FERMA), whose performance has been subject to criticism (AIAE Report, 2006). The roads are in deplorable state, and this adversely affects the socio-economic

Table 6: PERCENTAGE DISTRIBUTION OF DWELLING UNITS BY TYPE OF WATER SUPPLY, 2003 - 2007

Type of Water	2003	2004	2005	2006	2007
Pipe-borne Water	15.8	14.5	16.2	15.4	10.4
Bore-hole Water	22.0	17.6	24.0	20.8	26.8
Well Water	27.8	36.0	25.1	30.6	33.3
Streams/Ponds	33.0	31.5	33.5	32.5	24.4
Tanker/Truck/Van	1.4	0.4	1.2	0.8	4.1
	-	-	-	-	1.0
Total	100.0	100.0	100.0	100.0	100.0

Source: National Bureau of Statistics - General Households Survey activities in the country. It is estimated that Nigeria has a road to population ratio of 1.5 compared with 11.6 and 6.3 for Botswana and Kenya, respectively. Furthermore, it was estimated that 51, 58.3 and 61 per cent of federal, state and local governments paved roads, respectively are in disrepair (MAN, 2004a), while between 2005 and 2006, the total federal government roads in the states; asphaltic concrete, surfaced dressed, gravel or earth remained at 34,341.25 kilometers. Yet, government expenditure on roads and construction has continued to soar, from N34,403.60 million in 2003, except slightly in 2006, when it dropped to N92,600.00 million to N224,100.00 million in 2008.

(iv) Health

The government expenditure on the health sector has been growing tremendously. It witnessed a steady growth from 2003 to 2008. Between 2003 - 2008, the expenditure on the sector moved from N39,685.50 million to N195,400.00 million, indicating a growth rate of 392.37 per cent. Nigeria has embarked on reforming the health sector for over the past decade, the establishment of the National Health Insurance Scheme (NHIS) was adjudged by many as good policy. Nigeria's health sector reform programme is aimed at improving the quality of health service and availability to her teeming population.

However, health sector performance indicators were dismal. Nigeria ranks 100th in health and survival out of 128 countries, indicating that there are still much to be desired in the country's healthcare system. Life expectancy, which had increased till 1990, fell to 43.7 for men and 44 years for women in 2005, before moving up to 54 in 2007. With a high fertility rate, low family planning usage (15 per cent) and relatively poor access to healthcare, Nigeria has a maternal mortality ratio of 800 deaths per 100,000 live births. The estimated annual maternal deaths figure of 37,000 means that Nigeria bears the second highest maternal burden in the world (UNDP Report, 2009).

Table 7: LENGTH OF FEDERAL GOVERNMENT ROADS IN THE STATES, 2005 - 2006

Kilometres

STATE	Asphaltic Concrete		Surface Dressed		Gravel or Earth		Total Length	
	2005	2006	2005	2006	2005	2006	2005	2006
Abia	373	373	226	226	8	8	607	607
Adamawa	691	691	214	214	411	411	1,316	1,316
Akwa Ibom	348.9	348.9	213	213	40	40	601.9	601.9
Anambra	400.4	400.4	122	122	32	32	554.4	554.4
Bauchi	814	814	240	240	226	226	1,280	1,280
Bayelsa	67	67	-	-	100.8	100.8	167.8	167.8
Benue	1237	1237	87	87	287	287	1,611	1,611
Borno	1,040	1,040	379	379	788	788	2,207	2,207
Cross-River	807.35	807.35	163.8	163.8	104.04	104.04	1,075.19	1,075.19
Delta	657.5	657.5	37	37	38	38	732.5	732.5
Ebonyi	176	176	222.8	222.8	104	104	502.8	502.8
Edo	781.5	781.5	135	135	-	-	916.5	916.5
Ekiti	114	114	253.2	253.2	-	-	367.2	367.2
Enugu	533	533	300	300	25	25	858	858
Gombe	437	437	18	18	44	44	499	499
Imo	473	473	126.5	126.5	-	-	599.5	599.5
Jigawa	591	591	80	80	80	80	751	751
Kaduna	1,530	1,530	150	150	8	8	1,688	1,688
Kano	743.5	743.5	165	165	-	-	908.5	908.5
Katsina	495	495	292	292	55	55	842	842
Kebbi	248.4	248.4	273	273	341	341	862.4	862.4
Kogi	500	500	401	401	232	232	1,133	1,133
Kwara	421	421	236	236	387	387	1,044	1,044
Lagos	675.86	675.86	-	-	-	-	675.86	675.86
Nassarawa	522	522	123	123	242	242	887	887
Niger	969.2	969.2	807	807	401	401	2,177.2	2,177.2
Ogun	1,001.8	1,001.8	70	70	-	-	1,071.8	1,071.8
Ondo	577.4	577.4	147	147	-	-	724.4	724.4
Osun	438.9	438.9	185	185	4.6	4.6	628.5	628.5
Oyo	440.3	440.3	409.2	409.2	211	211	1,060.5	1,060.5
Plateau	401.8	401.8	264	264	313.5	313.5	979.3	979.3
Rivers	417.8	417.8	157	157	82.2	82.2	657	657
Sokoto	153	153	346	346	83	83	582	582
Taraba	566	566	357	357	701	701	1,624.0	1,624.0
Yobe	378	378	347.4	347.4	152	152	877.4	877.4
Zamfara	273	273	454	454	308	308	1,035	1,035
FCT, Abuja	158	158	-	-	78.6	78.6	236.6	236.6
Total	20,452.61	20,452.61	8,000.90	8,000.90	5,887.74	5,887.74	34,341.25	34,341.25

Source: Federal Ministry of Works

FIGURE 2: GOVERNMENT RETAINED REVENUE, HEALTH AND ROAD AND CONSTRUCTION EXPENDITURES

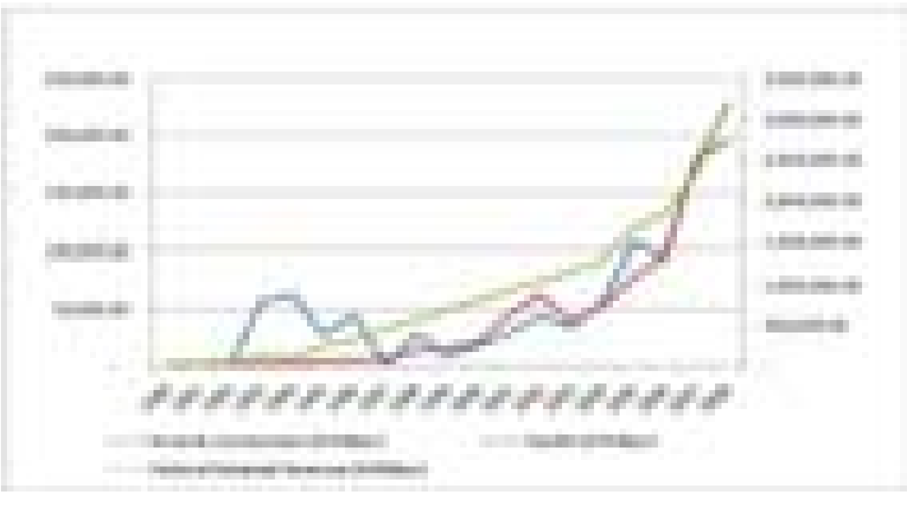


TABLE 8: SOME HEALTH SECTOR PERFORMANCE INDICATOR

Health Sector Indicator	1990	2000	2004	2005	2007	Progress
Fed Retained Revenue (N'Million)	38,152.10	808,148.40	1,277,191.20	1,660,700.00	2,333,659.60	
Fed. Expenditure on Health (N'Million)	823.20	20,445.20	52,400.00	77,500.00	178,800.00	
Health Capital Expenditure (N'Million)	322.50	8,865.60	18,200.00	21,800.00	96,900.00	
Health Current Expenditure (N'Million)	500.70	11,579.60	34,200.00	55,700.00	81,900.00	
Health/Fed. Retained Revenue (%)	2.16	2.53	4.10	4.67	7.66	Improving
Basic Health Indicators						
Infant Mortality/1000 Births (%)	91	81.38	100	110	86	Slow
Under-five Mortality1000 Births (%)	191	183.75	197	201	138	Slow
Maternal Mortality/100,000 Births	-	704a	800b	800	800c	Worsening
Underweight Children (%)	35.7	31b	30	30c	25	Improving
Life Expectancy Male (Yrs.)				43.7		

Source: Adopted from UND Report, 2009 and computation by the author (Life Expectancy for 2007 is 54, courtesy; CBN Annual Reports and Statement of Account, 2008)

5.0 CHALLENGES OF REVENUE GENERATION AND UTILIZATION FOR SOCIO-ECONOMIC AND INFRASTRUCTURAL DEVELOPMENT AND RECOMMENDATION

5.1 CHALLENGES OF REVENUE GENERATION AND UTILIZATION FOR SOCIO-ECONOMIC AND INFRASTRUCTURAL DEVELOPMENT

(i) The level of Tax Structure

As the economy expands, the tax structure grows and this reduces the level of indirect tax revenue generated, while the direct tax element increases. The level of indirect tax grows in an economy with heavy presence of informal sector. The theory of tax structure development suggests that at the early stages of economic development, the economic structure imposes severe limitations on the structure of the tax system and this affects the level of revenue generation from taxation.

(ii) Bribery and Corruption

Bribery and corrupt practices among those involved in the collection and disbursement of government revenue as well as those in the execution of infrastructural projects has endangered the success of most government projects, thereby denying the country the much needed infrastructural development required for her economic transformation. The level of infrastructural decay in Nigeria is high and this raises question of whether government revenue meant for infrastructural development is really channeled to it, while Nigeria has continued to occupy the list of the most corrupt countries in the world (Transparency International, 2009).

(iii) Mono-cultured Economy

The nature of the economic structure is very important in assessing the level of revenue generation capacity of any government. In Nigeria, over reliance in the oil revenue as government's major source of revenue at the detriment of developing other sectors of the economy is not in her economic interest. Notwithstanding, the enviable position of the oil sector in the Nigeria's revenue generation over the past three decades, the agricultural sector could be another major source of revenue generation for the government if genuine effort is made at developing the sector. It has remained the largest and arguably the most important sector of the economy (Obiechina, 2007). Agriculture's contribution to the Gross Domestic Product (GDP) has remained stable at between 30.0 and 42.0 per cent, and employs 65.0 per cent of the labour force in Nigeria (Aigbokhan, 2001). It is estimated to be the largest contributor to non-oil foreign exchange earnings. This means that it holds abundant potentials for enhancing and sustaining the country's foreign exchange - revenue.

(iv) Low level of Infrastructural Development

Provision of adequate infrastructure has been adjudged to be complementary to private sector investment, and hence, economic growth. Longer-term infrastructural expenditures have shown to be more productive in developing countries than short-term public investment. Infrastructural gap in the country imposes significant extra costs on business and reduces competitiveness.

(v) Poor maintenance culture and obsolete equipment

Investing heavily in infrastructures is very important, but equally necessary is making adequate provision for their maintenance and replacement of obsolete ones. One of the challenges of infrastructural facilities in Nigeria is lack of maintenance culture. Maintaining and extending the life span of infrastructure requires the commitment of enormous resources and the patriotic zeal to ensure that resources meant facilities maintenance are not diverted. In infrastructure management, poor maintenance culture and obsolete equipment has often being identified as central to the dearth of infrastructural development.

5.2 RECOMMENDATION

(i) Tax Structure

Increasing the level of tax structure in an economy would increase the level of government revenue generation, and as government revenue increases, it is expected that government investment in socio-economic and infrastructural development increases too. This, however, may not always be the case in a developing country, where there could exist wastages in the revenue infrastructure development nexus. Government might increase its tax structure by broadening the tax base and improving tax administration.

(ii) Diversifying the Economy

The continued reliance on the oil revenue as the major source of revenue for the government has affected the revenue generation capacity of economy as well as the financing ability of government. Government programme are abandoned due to inadequate revenue to finance them. The mono-cultured nature of the Nigerian economy predisposes government revenue and expenditure to oil price volatility. There is the need to diversify and develop other sectors of the economy that have the potentials of generating revenue for the government.

(iii) Budget Tracking

There is need for government revenue and expenditure tracking. The public should be able to know how much is budgeted for a particular infrastructural project, where it is cited or located and the various stages of the project development, funds disbursements as well as the completion period. It will also assist in knowing whether government is really disbursing funds, and applying such disbursement to a project it is tied.

Budget tracking could be achieved through community broadcasting. Community broadcasting provides avenue for information dissemination and interaction among the public. It is an advocacy instrument that could be used to sensitize its audience on government expenditure on any project in a particular area. Through community radio broadcasting, people should be able to monitor and report the progress made on existing infrastructural project in their area. Thereby, providing check against project abandonment by both some unscrupulous contractors and their government cohorts.

(iv) Institutional Development

There is need for the development of government agencies and parastatals vested with the responsibility of collecting and administering revenues on behalf of the government. This includes; manpower development and provision of relevant work tools that would facilitate their work. Institutional development includes reforms that would meet the challenges of time.

(v) Transparency and Accountability

One of the greatest obstacles to socio-economic development in Nigeria is bribery and corruption. This has permeated the system that most infrastructural projects suffer from allegations of lack of transparency and accountability in its award and execution. Even when finances tied to projects are provided, they are not adequately made available to contractors.

(vi) Quality of Leadership

The quality of leadership in any organization is very important in determining the success rate of achieving organizational goals and objectives. Nigeria is in urgent need of a dedicated and selfless leader, who would drive the country's entire process of socio-economic transformation. A quality leader that has transcended beyond ethnic and political proclivity is what Nigeria needs.

(vii) Improvement In Infrastructural

Improving infrastructural facilities is necessary for economic development of any country. Apart from reducing the cost of doing business, it provides a country with platform for socio-economic development as well as enhanced potentials for reduced competitiveness. Considering the enormous resources involved in infrastructural development and sustainability, prioritizing critical infrastructure could be a major step in the right direction and needs to be given a push by increased Public Private Partnership (PPP) arrangements and effective monitoring mechanism.

5.3 CONCLUSION

Government retained revenue forms the major source of finance for Nigeria's expenditure socio-economic and infrastructural development. Government revenue has grown remarkably over the years, while her expenditure had equally grown, at times above the revenue, resulting in deficit financing. The increasing growth of government revenue is expected to impact positively on the level of infrastructural development in the country. This has not really been the situation, thus invoking the publics' agitation against the falling standard of living or level of infrastructural decay as well as raising doubts to the effective use of government revenue earmarked for addressing the challenges of socio-economic and infrastructural development. While a lot of reasons had been provided for the decay in infrastructural development vis-à-vis the availability of government revenue, it is believed that as the level of government revenue increases, so would be increase in socio-economic and infrastructural development.

REFERENCES

Adubi, A. A., Fajingbesi, A. A and Obioma, E. C. (1999) “Public Expenditure Programming and Management under the Current Economic Dispensation” In Obadan, M. I. and Ogiogio, G. O. (eds) Planning and Budgeting in Nigeria: Institutional and Policy Reforms. Ibadan: NCEMA

Aigbokhan, B. E. (1999) “Evaluating Investment on Basic Infrastructure in Nigeria” Published in the CBN Proceedings of the Eight Annual Conference of the Zonal Research Units.

AIAE (2006) “Budget and Public Expenditure Across Nigerian States” BECANS Working Paper 3, (eds.) Eboh, E., Amakom, U. and Oduh, M., Publication of African Institute for Applied Economist, Enugu.

Aigbokhan B.E. (2001) “Resuscitating Agricultural Production (Cocoa, Cotton, Groundnuts, Palm Oil, Rubber, etc) for Exports”. In CBN Proceedings of the 10th Annual Conference of the Zonal Research Units, 2001.

Ajakaiye, O. (2002) “Infrastructure Development and Economic Growth In Nigeria” paper presented at the Eleventh Annual Conference of the Zonal Research Units, Research Department, Central Bank of Nigeria, June 3 7.

Akpan, A. H. (1999) “Public Expenditure and Economic In A PetroLeum- Based Economy: Nigeria 1960-1992” SAJEMS NS 2(3)

Alogoskoufis, G. and S. Kalyvitis. 1996. "Public investment and endogenous growth in a Small Open Economy". Discussion Paper Series No 1479, Center For Economic Research. London.

Anyanwu, J. C (1993) Monetary Economics: Theory, Policy and Institutions, Onitsha-Nigeria: Hybrid Publishers Ltd.

Ayodele, A. S. (1992) "Public Enterprises Institutional Reform, the NEPA and Electricity Development in Nigeria: An Economic Analysis" A Commissioned Paper, NEPA District Commercial Managers Workshop, Calabar, Cross Rivers State, April 8 10, 1992

Ayodele, A. S. (1998) "Energy Crisis in Nigeria: The Case of Electric Energy Market: Bullion Publication of CBN. Vol. 22, No. 4

Ayodele, A. S. (1999) "Illegitimate Energy Market Activities in the Nigerian Energy Industry: The Cases of Electricity and PetroLeum Products" Working Paper No. 2 DPC, Ibadan, Nigeria

Baunsgaard, T. (2003) "Fiscal Policy In Nigeria: Any Role For Rules? IMF Woking Paper (WP/03/155, Washington, D.C

Blejer, M. I. and Khan, M. S. (1984) "Government Policy and Private Investment in Developing Countries" IMF Staff Papers, 31: 379-403

Brown, C. V. and Jackson, R. M. (1990) Public Sector Economics, Oxford: Martin Robertson.

Central Bank of Nigeria (1995) Various Years Annual Reports and Statement of Accounts

Chhibber, A. and Dailami, M (1990) "Fiscal Policy and Private Investment in Developing Countries: Recent Evidence On Key Selected Issues" Ricerche Economiche, Vol. 91, Pp. 651-662.

Easterly, W. and K. Schmidt-Hebbel. 1993. "Fiscal deficits and macroeconomic performance in developing countries". World Bank Research Observer, Vol. 8, No 2. Washington, D.C.

Evans, P. and Karass, G. (1994) "Are Government Activities Productive? Evidence from A Panel of US States" The Review of Economics and Statistics LXXVI(1), February

Fajingbesi, A. A. and Odusola, A. F. (1999) "Public Expenditure and Growth" In Fiscal Policy Planning and Management in Nigeria (eds) O. S. Komolafe, Jalilian, H. and Hiley, M. An NCEMA Publication

FRN (1975) The Third National Development Plan: 1975 - 1980

Gbayesola, T. O. and Uga, E. O (1995) "Sources and Structure of Government Revenue" in Komolafe, O. S., Jalilian, H. and Hiley, Mark, eds, Fiscal Policy Planning and Management in Nigeria, Ibadan: NCEMA

Goldstein, M. and Khan, M. (1982) "The Effects of Slow in Industrial Countries On growth in Non-Oil Developing Countries" IMF Occasional Paper 12, Washington D.C

Hemming, R. (1991) "Public Expenditure, Stabilization and Structural Adjustment" In Public Expenditure Handbook: A Guide to Public Policy in Developing Countries. Keyoyoung Chu and Richard Hemming, (eds) Washington DC. IMF

Ibe, A. C. (2000) "The Politics of Economic Policy Reform In Nigeria" Anambra Nigeria: J'Goshen Prints

Ihimodu, I. I. (1995) "Resource Mobilization Under the Current Reform Programme in Nigeria" in M. I. Obadan and G. O. Ogiogio, eds, Planning and Budgeting in Nigeria, Ibadan: NCEMA

Ilori, B. (2002) "The Role of Government in the Development of Basic Infrastructure" paper presented at the Eleventh Annual Conference of the Zonal Research Units, Research Department, Central Bank of Nigeria, June 3 7.

MAN Manufactures Association of Nigeria (2004) "Progress Report 1 of the Energy Infrastructural Study in Nigeria. Lagos: Manufacturers Association of Nigeria.

MAN Manufactures Association of Nigeria (2004a) "Progress Report On the Transportation Infrastructural Research Project. Lagos: Manufacturers Association of Nigeria.

Mbanefoh, G. F. (1990) "Aspects of Nigerian Public Finance" In E.C. Ndekwu and O. A. Adeyemo, (eds) Public Expenditure Programmeming, Ibadan: NCEMA

Musgrave, R. A. (1969) The Theory of Public Finance, New-York: McGraw Hill Book Coy.

National Economic Empowerment Development Strategy (NEEDS), (2003), National Planning Commission

National Water Supply and Sanitation Policy (2000), Federal Ministry of Water Resources, Federal Capital Territory (FCT)

National Water Sanitation Policy (2004), Federal Ministry of Water Resources, Federal Capital Territory (FCT)

Obiechina, M.E. (2007) "Improving the Agricultural Sector toward Economic Development and Poverty Reduction In Nigeria" Central Bank of Nigeria (CBN) Bullion, Vol. 31, No. 4, October December.

Ogigio, G. O. (1995) "Government Expenditure and Economic Growth in Nigeria" Journal of Economic Management 2(1), October

United Nations Development Programme Report on Nigeria (UNDP) Human Development Report Nigeria 2008 2009

World Bank (1991) World Development Report.

World Bank (1988) World Development Report.

Rubinson, R. (1977) "Dependence, Government Revenue, and Economic Growth, 1955-1970", Studies in Comparative International Development, XII (2): 3-28

Stolper, W (1966) Planning Without Facts: Lessons in Resource Allocation from Nigeria's Development. Harward University Press, Cambridge

1999 Constitution of Federal Republic of Nigeria, FGN Press, Ministry of Information and Communication

OIL AND GAS MANAGEMENT IN NIGERIA: LESSONS FOR GHANA*

BY

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1.0 INTRODUCTION

Nigeria has a population of about 130million people and an abundance of natural resources, especially hydrocarbons. It is the 10th largest oil producer in the world, the third largest in Africa and has the most prolific oil producer in the Sub-Saharan Africa. The Nigerian economy is largely dependent on its oil sector which supplies 95per cent of its foreign exchange earnings.

The upstream oil industry is Nigeria's lifeblood and yet it is also central to the civil unrest in the country, which gained worldwide publicity with the trial and execution of Ken Saro Wiwa, and eight other political activists in 1995. The upstream oil industry is the single most important sector in the economy. According to the 2008 BP Statistical Energy Survey, Nigeria had proven oil reserves of 36.22billion barrels at the end of 2007 or 2.92per cent of the world's reserves. The Nigerian government plans to expand its proven reserves to 40 billion barrels by 2010. Most of this is produced from the prolific Niger River Delta. Despite problems associated with ethnic unrest, border disputes and government funding, Nigeria's wealth of oil makes it most attractive to the major oil-multinationals, most of who are represented in Nigeria, with the major foreign stakeholder being Shell. Nigeria produced an average of 2355.8 thousand barrels of crude oil per day in 2007, 2.92per cent of the world total and a change of -4.8per cent compared to 2006.

According to the 2008 BP Statistical Energy Survey, Nigeria had in 2007 proven natural gas reserves of 5.29trillion cubic metres, 2.98per cent of the world total. Due, mainly, to the lack of gas infrastructure, 75per cent of associated gas is flared and 12 per cent re-injected. Nigeria has set a target of zero flare by 2010 and is providing incentives for the production and use of gas. The government also plans to raise earnings from natural gas exports to 50 percent of oil revenues by 2010. It has been reported in the 2008 BP Statistical Energy Survey that Nigeria had 2007 natural gas production of 34.97 billion cubic meters, 1.18 per cent of the world total.

Nigeria's downstream oil industry is also a key sector including four refineries with a nameplate capacity of 438,750 bb/d. Problems such as fire, sabotage, poor management, lack of turnaround maintenance and corruption have meant that the refineries often operate at 40per cent of full capacity, if at all. This has resulted in shortages of refined product and the need to increase imports to meet domestic demand. Nigeria has a robust petrochemicals industry based on its substantial refining capacity and natural gas resources. The petroLeum industry is focused around the three centres of Kaduna, Warri and Eleme.

Until 1960, government participation in the industry was limited to the regulation and administration of fiscal policies. In 1971, Nigeria joined OPEC and in line with OPEC resolutions, the Nigerian National Oil Corporation (NNOC) was established, later becoming NNPC in 1977. This giant parastatal, with all its subsidiary companies, controls and dominates all sectors of the oil industry, both upstream and downstream. In April 2000, the Nigerian government set up a new committee on oil and gas reform to deal with the deregulation and privatization of NNPC. Seven subsidiaries of NNPC were to be sold including the three refineries, the Eleme Petrochemicals Company Ltd, the Nigerian Petroleum Development Company and the partially owned oil marketing firm, Hyson Nigeria Ltd.

Nigeria is a member of OPEC and is its 12th largest producer. The petroLeum industry in Nigeria is regulated by the Ministry of Petroleum Resources. The government retains close control over the industry and the activities of the NNPC, whose senior executives are appointed by the ruling government. As in many other developing-world federations with “twentieth-century constitutions” and large regionally concentrated hydrocarbons, multi-ethnic Nigeria has entrusted the ownership, regulation and redistribution of its oil and gas wealth in the federal government (Watts: 98). At the same time, the country's fiscal federalism architecture constitutionally and statutorily guarantees the devolution of considerable amounts of centrally collected oil and gas revenues to the federation's state and local governments.

This paper is to discuss the oil and gas management in Nigeria: Lessons for Ghana. The paper is structured into five parts with part 1 being the introduction while part 2 scoops the literature on the economics of natural resources and its management globally. Part 3 will situate the Nigeria's multifaceted crisis of oil and gas governance and all related issues. Part 4 will sieve out the lessons for Ghana while part 5 summarizes and concludes the paper.

*The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

1.0 LITERATURE REVIEW ON THE ECONOMIC MANAGEMENT OF NATURAL RESOURCES

Economists globally believe and they are concerned that economies dominated by natural resources would somehow be disadvantaged in the drive for economic progress (Prebisch, 1950, 1964; Singer, 1950). Baldwin (1996) based his concern upon the deteriorating terms of trade between the "*centre*" and the "*periphery*" coupled with concern over the limited economic linkages from primary product exports to the rest of the economy.

In the 1970's, it was driven by the impact of the oil shocks on the oil exporting countries (Neary and Van Wijnberger 1986; Mabro, 1980). In the 1980's, the phenomena of "Dutch Disease" (the impact of an overvalued exchange rate on the non-resource traded sector) attracted attention (Corden, 1984). Finally in the 1990's, it was the impact of revenues from oil, gas and mineral projects on government behavior that dominated the discussion (Ascher, 1999; Auty, 1990; Steven, 1986)

The common thread running through all these concerns are that the development of natural resources should generate revenues to translate into economic growth and development. Thus the revenues accruing to the economies should provide capital in the form of foreign exchange overcoming what was seen as a key barrier to economic progress. The development theories, especially the requirement for a "*big-push*" (Rosenstein-Rodan, 1943 and 1961; Murphy et al., 1989) capital constraint (Lewis, 1955; Rostow, 1960) and dual-gap analysis (Joshi, 1970; Elshibley and Thirwal 1981) supported these concerns.

However, the reality appeared to be the reverse. Countries with abundant natural resources appeared to perform less well than their more poorly endowed neighbors. Thus "*resource curse*" began to enter the literature (Auty 1993). These concerns had caused the IMF/World Bank to get involved with some non-governmental organizations (NGO) to work out the way forward in encouraging a "*resource blessing*" rather than "*resource curse*" by creating the "*Extractive Industry Review*" based in Jakarta to consider whether the World Bank group should, as a matter of principle have any involvement with the project of assessing the negative effects of oil, gas and mineral projects on developing countries.

Among financial investors in oil, gas and mineral projects, there is growing concern that the negative effects of "*resource curse*" could actually threaten the economies of the projects. This could be because the presence of "*resource curses*" increases the political risk associated with the project. Finally, this renewed interest is being fuelled by the fact that a number of countries are about to receive large amounts of revenue from such projects. Hence there is real concern and policy deliberation over how these revenues might be used as a positive rather than a negative force. These countries include some of the newly independent states of the former Soviet Union such as Azerbarjan and Kazakhstan, a number of African countries such as Angola, Chad and Ghana, the most recent; and some in South East Asia such as West Papua and East Timor.

However, in the literature, there are references to countries that allegedly managed to have "*resource blessing*" and avoided the "*resource cursed*". For example, some states with large extractive industries-like Botswana, Chile and Malaysia have overcome many of the obstacles and implemented sound pro-poor strategies (Hope, 1998; Jiwanji, 2000). The literature is replete with the analysis on "*resource curse*" but very few analyses on the "*resource blessing*" or "*resource impact*". Countries such as Botswana, Chile, Indonesia and Malaysia are success stories and the lessons of these countries should be relevant for Ghana to adopt in order to avoid the Nigeria's pitfall and have success story as well.

The literature uses a variety of criteria to establish the impact of Oil, gas and mineral projects. The economic criteria approach is the best in doing analysis for the economies with diverse resources and large population. The first is what happens to the rest of the traded economy as oil, gas and mineral projects involve the depletion of an exhaustible resource. One definition of sustainability requires that when the resources are depleted, other sectors of the economy have the strength to continue to generate value added. The second is what happens to people's well-being as the project develops.

Much of recent literature (Auty, 2001; Sachs and Warner 1995, 1997 and 1998) looks at what happened to percapita GDP as a means to determine economic performance. This approach is potentially flawed as GDP clearly include the value of the oil, gas and minerals. There is a tendency in the literature to use periods that distort the results. For example, one source bases the argument about poor performance on per capital GDP growth between 1955-97 (Auty, 2001). Yet in this period, real oil prices fell from $42.70 to $20.04 (BP, 2000). Where oil is significant in GDP, it is hardly surprising that per capita GDP registers a fall. Given the linkages that exist between gas and oil prices, a similar argument applies to gas. In theory, GDP measured in real terms should account for this but a cursory look at real GDP pattern for oil exporters illustrates it does not. Thus, the key variable to consider is the non-oil gas or mineral traded GDP since it is this that must eventually sustain the economy. Such a criterion also makes sense in the context of "*Dutch Disease*" when it is precisely that traded sector which is expected to suffer and contract. Consequently, the literature seems flawed and what should be the focus of measuring import should be the "*traded economy criterion*" (Steven P, 2003) which is the real per capita growth of agriculture, manufacturing and services.

The second approach-"*peoples' well being*" is more difficult to translate into operational criterion. Obviously, poverty levels and poverty reduction are keys but poverty data are of very mixed and generally poor quality. However, the UNDP criteria could come be useful, such as infant mortality, life expectancy and illiteracy, etc.

3.0 NIGERIA'S OIL AND GAS MANAGEMENT

Nigeria ranks among the top 10 nations in proven oil and natural gas reserves, worldwide. The number of international petroleum companies operating in Nigeria has increased from a single producer (Shell BP) in 1958 to more than 24 producers in 2007. The top four companies- Shell Petroleum Development Company (Shell), ExxonMobil, Chevron Nigeria Limited (CNL) and Total (formerly Elf Petroleum Nigeria Limited or EPNL) - accounted for nearly 83 percent of Nigeria's total petroleum production in 2008, an indication that the Nigeria petroleum industry is dominated by few international firms. The new players to emerge in recent years include the Korean national Oil Company, Addax Petroleum Development (Nigeria) Limited, China National Oil Company, Express Petroleum, Cavendish, AENR, Consolidated Oil Limited (Conoil), and AMNI International (AMNI) (Ariweokuma, 2008).

The changing structure of the industry coupled with the dominated control of the government fiscal revenue has a strong influence on the management of the oil and gas sector in Nigeria. Oil royalties, Petroleum profit tax, domestic crude sales, and others Petroleum revenues were only 26 per cent of federally collected revenues in 1970, but rose dramatically to 81 per cent in 1980. They represented 73.3 per cent in 1990, 83.5 per cent in 2000 and an estimated 79per cent in 2007 (before the leap in prices in 2008). The expansion of the Petroleum industry from the seventies produced fundamental changes in the structural configuration and fiscal architecture of the Nigerian Federation.

3.1 Ownership and Jurisdiction

In terms of ownership and jurisdiction, the current 1999 Nigerian Constitution as amended affirms the Federal Government's proprietorship and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria, its territorial waters, and exclusive economic zone. All such minerals, oils and gas shall 'vest in the Government of the Federation (GoF) and shall be managed in such a manner as may be prescribed by the National Assembly.' Accordingly, the Constitution places under the Federal Government's list of exclusive legislative powers all matters relevant to the regulation and management of the Petroleum industry. These include export duties, incorporation and regulation of corporate bodies, mines and minerals (including oil fields, oil mining, geological surveys and natural gas) and taxation of incomes, profits and capital gains.

Although ownership and control of all onshore and offshore mineral resources is constitutionally and statutorily vested in the Nigerian Federal Government, the federation has historically included arrangements for the compensation of oil bearing units through the payments of portions of centrally collected mineral revenues to those units on a derivation or unit-of-origin basis. However, whereas the constitutional framework of the First Republic had explicitly made both onshore and offshore Petroleum resources subject to the derivation rule, a 1970 military decree limited the application of the derivation principle to revenues from onshore resources only, while the post military constitutions since 1979 (including the current 1999 Constitution as amended) have been silent on the issue. In response to demands by the Niger Delta states for the application of the derivation rule to offshore oil and gas revenues, the federal government in 2001 approached the Supreme Court for a determination of the issue. In its ruling in April 2002, the Court validated the Federal Government's position that the derivation principle should apply to onshore resources only because natural resources in Nigeria's continental shelf belong to the federation as a whole and, therefore, cannot be said to be derivable from the adjoining littoral states for revenue allocation purposes. However, following strident agitation in the Niger Delta against the Court's ruling, the federal government crafted a political deal that culminated in the enactment by the National Assembly of the "Allocation of Revenue (Abolition of Dichotomy in the Application of the Principle of Derivation) Act of 2004" This provided that an area of "*two hundred meter water depth isobaths contiguous*" to the littoral states would deemed to belong to those states for the purpose of the derivation principle. This Act, however, provoked another round of litigation and till date the ownership and jurisdiction still belong to the federal which has led to conflicts and the exaggerated position of the Niger Delta crisis up to 2009 (Suberu, 2008).

3.2 Exploration and Production Regime

The Federal Government's absolute powers over the Petroleum industry have been exercised primarily through four government institutions, namely, the Presidency (the president and his top advisors), the Ministry of Petroleum (sometimes called the Ministry of Energy, Mines and/or Power), the Department of Petroleum Resources (DPR), and the Nigerian National Petroleum Corporation (NNPC). The President, who has often served as his own Minister of Petroleum (usually supported by a junior-level Minister of State for Petroleum), and his senior advisors on Petroleum matters, along with the top leadership of the NNPC, "form the inner circle for oil sector decision-making" (Gilles 2009).

The DPR functions as the official industry regulator, with the responsibility to oversee or supervise the activities of all companies licensed to operate in the industry, including the NNPC. It is charged with processing all applications for licenses and leases in the industry, ensuring compliance of all industry operators with applicable national regulations and good oil producing practices, enforcing safety and environmental standards, keeping and updating records on Petroleum industry operations, ensuring timely and adequate payments of all rents and royalties to the government, promoting and monitoring progress towards the indigenization of (or the enhancement of '*local content*' in) the oil industry, and providing appropriate technical advice on oil industry matters to the government. Reflecting the disorganization that often characterizes the Nigeria Petroleum industry, the DPR existed as a unit within the NNPC until 1988, "creating the untenable situation of the regulator being subordinate to the industry's largest player (Gilles, 2009).

The NNPC is the commercial and

business agency of the federal government in the Petroleum sector, with the most important oil and gas projects in the industry typically involving joint venture arrangements, production sharing contracts and related commercial partnerships between the NNPC and one or more oil multinational companies. NNPC is involved in two broad types of exploration and production arrangements with the oil multinationals. First, the concessionary arrangements, either a Joint Venture Agreement or a Memorandum of Understanding, are governed basically by royalty and taxation plus a government (NNPC) majority participation interest. The rewards to the federation in terms of revenues are based on posted price and gross oil and gas production in the form of bonuses, royalty payments, taxation of profit, and equity interest participation. A major problem with the joint venture structure has been the repeated failures of NNPC to find its share of capital and operating expenses. Consequently, the second contractual fiscal agreement, including Production Sharing Contracts (PSC) and Service Contracts (SC) was invoked. Under the PSC, the international oil company provides the funding for exploration and development operations in offshore Nigeria with the profit shared according to agreed arrangements subsequent to the recovery permitted company costs, subject to the specified cost recovery limit. The first production- sharing contract was signed in1973 with Ashland Oil. The contractual terms and instruments included a 40percent cost oil recovery limit, a 55 percent Petroleum profit tax, and 70/30- profit oil split in favour of the government.

Recent audits of the Petroleum industry, under the auspices of the Nigerian Extractive Industries Transparency Initiative (NEITI), have reinforced longstanding concerns and criticisms regarding the capacity of the federal political executive, the Department of Petroleum resources and the NNPC to effectively execute their administrative and management functions within the Petroleum industry. These structures have highlighted major shortcomings in the governance of the industry, including weak "DPR capacity, NNPC intrusion into regulatory and policy-making functions, lack of NNPC oversight and accountability, and weak incentives for efficiency and performance (Gilles, 2009). The Petroleum Industry Bill is designed to address these institutional inefficiencies.

The Petroleum Bill proposes three new sets of oversight institutions for the oil and gas sector in Nigeria. First, the Bill establishes the Nigerian Petroleum Directorate (NPD) as the overarching and coordinating Petroleum policy-making institution in place of the Ministry of Petroleum resources. Second, three regulatory institutions, the Nigerian Petroleum Inspectorate (NPI), the National Midstream Regulatory Agency (NAMIRA), and the Petroleum Products Regulatory Authority (PPRA) are proposed to regulate all matters related to the upstream, midstream and the downstream sectors, respectively. The third institution envisioned in the Bill is a restructured, commercially focused new national oil company. The goal is to reposition the NNPC on a level comparable to the status of successful National Oil Corporations (NOCs) in Malaysia, Venezuela, Norway, Algeria, Mexico, Brazil and Saudi Arabia. The relative absence of operational and strategic autonomy of the NNPC from the national government in comparison to successful NOCs elsewhere is appalling. Separating regulatory functions from commercial operations should help to reduce the prevailing ambiguities in regulatory responsibilities that have beclouded oil and gas operations in Nigeria over the years.

3.3 Macroeconomic challenges

Petroleum has transformed Nigeria from the diversified, agro-based economy that it was up till the sixties to the mono-resource; petroleum based economy that it has become since the 1970s. While Nigeria has earned billions of dollars exporting oil and natural gas, the industry has not generated the type of multiplier effects necessary to facilitate sustainable national development and economic growth. The "*Dutch Disease*" phenomenon, which traditionally afflicts natural resource dominated economies, has ravaged the Nigerian political economy. What is more, the petroleum economy has made the federation more like a unitary state than a federation in a fiscal sense. Expanded access to oil revenues has increased the financial dependency of the constituent states and localities (which derive 90per cent of their finances from federal revenue transfers), accentuated the disparities in central revenue transfer to them, and led to an underdevelopment both of alternative sources of sub-national revenues (partly because the fiscal effort criterion in the allocation formula is not worth much) and of effective budget formulation, accounting, recording, and reporting systems (owing to the easy availability of shared revenues). As things stand, the poor quality of public financial management at the sub-national level, where approximately half of national public spending takes place, represents a huge macro-economic challenge in Nigeria (IMF, 2009).

The oil legacy has also imposed significant costs on the Nigerian economy through petroleum and energy price distortions, corruption and inefficiencies, and fiscal instability due mostly to crude oil price volatility (Adenikinju, 2009). The subsidization of domestic petroleum prices has become a huge cost to the national economy especially with rising share of imports in domestic petroleum product supply. The subsidy has remained one of the most convoluted and protracted socio-economic policy issues and macroeconomic challenges facing Nigeria, defying attempts at its resolution by successive governments. The Petroleum subsidy increased from N278.9billion in 2006 to N633.2 billion in 2008.

Since 2004, the Federal government has spearheaded a political agreement between all tiers of government to implement an oil-price based fiscal rule. In response to significant fiscal instability, the rule adopted an approach that is based on relative conservative estimates of the oil price for each budget with "*excess revenue*" being saved for stabilization. The oil price rule "broke the link between public spending and oil prices and created an oil-savings cushion (the Excess Crude Account) of $18billion… as well as foreign reserves that peaked in September 2008 at $62 billion" (IMF, 2009). This is after government had used oil-saving to pay out Nigeria's international debt and negotiate debt forgiveness in 2006. The benefits of this rule became evident with the sudden decline in global crude oil prices from a high of $147 in July 2008 to about $45 in December 2008; the federal government had based its budget on an oil price of $45 and was able to draw monies from the excess crude fund to stabilize spending during downturn.

A country that wants its future generations to benefit from an exhaustible resource such as petroleum, must transform this non-renewable resource into a renewable one by investing in productive capital in the form of machines, energy and transportation infrastructure, water resources and sanitation, and human capital formation and development. Of course appropriate institutions must collect the revenue stream in order to build the national wealth in a transparent manner. Thus, one of the key macro-economic strategies for sustainable growth in a mono-resource economy is effective management of revenue flow during times of rising resource prices and the use of resource revenue to develop lasting infrastructure to support the economy. The success stories of Chile, Malaysia, Botswana, and Indonesia in the late 1990s came from such effective management and control of mineral revenue flows as revenue increased with resources prices (Stevens 2003).

Nigeria seems to be pursuing fiscal discipline at the federal level, but such discipline is yet to hold firm at the state and local government levels, where the worst corruption probably now occurs. The Federal Government has incorporated the oil-price fiscal rule into the Fiscal responsibility Act of 2007, which seeks to institutionalize budgetary transparency and accountability, promote effective management of the public sector, and reduce leakages in the economy (CBN, 2008). But reflecting pressures by the state governors, the National Assembly agreed to make the Act inapplicable to the states on constitutional autonomy ground. Yet, the expected voluntary implementation of fiscal responsibility regimes by the sub-units is progressing only slowly. The current stabilization regime also does not seem to have a truly integrated structure in terms of federal, state and local spending; the states seem to have taken a bigger hit during the downturn than did the federal government.

3.4 Environmental and Social Issues

Nigeria's centralized petroleum industry governance framework leaves the oil-bearing communities with no constitutional or statutory rights, voice, or even consent on oil and gas industry projects in their communities. This centralization extends to decisions regarding the use of land for the oil industry, which "are completely taken out of the hands of those who have lived on and used it for centuries" (Human Rights Watch 199:71). Such total exclusion of the Niger Delta communities from participation in oil and gas decision has combined with the environmental, socio-economic, and political deprivation of the region, to animate the militant campaign for regional and local "*resource control*" in Delta.

On the environmental degradation, there are numerous reports on the impact of the Nigerian gas and oil industry severe damage on the environment and the livelihood of many of those inhabiting the oil producing communities (Amnesty International 2009). Nigeria recorded the highest gas flaring rates in the world, the oil spillage or leakages arising from non-replacement of corroded, high pressure oil pipelines-vandalized /saboteur effected pipelines have tremendously affected the environment. With these developments the Petroleum industry operators are statutorily required to observe highest international environmental safety standards in their activities but these are lacking because all the rules binding the operations are loosely enforced owing to massive corruption of governments at the three tiers of the Government. This development had made inactive all the productive resources such as the fishing and farming. This has increased the levels of poverty unemployment and created socio-economic inequalities in the area.

In the reflection of these inequalities, there had emerged profound discontentment and what had emanated is the intensive agitation which has led to the Movement for the Emancipation of the Niger Delta (MEND)- an umbrella for a group of militants in the region. These groups held the production of the oil companies to ransom in the last 3 years and thus affected the revenue of the Federal government from oil. The recent rehabilitation of the militants had brought some level of respite to the oil producing area of the Niger Delta.

On the transparency and accountability, the major source of corruption in the oil industry include the systematic favoritism and endemic non-transparency perpetuated by the federal executive and its agencies in the allocation of licenses for the exploration, prospecting and mining of oil; large scale bribery of government officials for approvals of major oil sector contracts; the bureaucracy and inefficiency of the government officials; the direct bunkering or theft (with apparent official complicity) of crude oil from pipelines, flow stations, and export facilities; and massive irregularities and abuses in the operations of the NNPC, its subsidiaries, and associated bodies like Petroleum Technology Development Fund (PTDF) and the NDDC.

Although there are no systematic data on corruption in Nigeria, it was acknowledged that the return of civilian rule and the implementation of macro-economic reforms by the Obasanjo administration has arguably reduced the scale of corruption at the federal level, but not at the sub-national level, where the end of centralized military rule has apparently increased, rather than reduced, the opportunity for gubernatorial misconduct.

4.0 LESSONS FOR GHANA

The governance status in Ghana is quite consolidated that the discovery of oil will not have any impact to distort the good governance. In addition, it is gratifying that Ghana was not under the military rule as at the time of commercialization of the oil. In order that Ghana makes the oil resource a "*blessing*" and not a "*curse*" the following issues must be put into perspective as they have formed the "*Dutch Disease*" that Nigeria has been attacked with over years:

The revenue from oil must be used for the development of the economy-infrastructure maintenance etc.

There must be a creation of sovereign wealth fund with adequate legal backing to save for the raining day.

There must be adequate fiscal discipline and wise spending on "*necessary projects*" and not "*prestige projects*". In this wise, the National wage structure must be tailored towards the economic absorptive capacity.

The macro-economic policy must be market driven in such a way that the economic environment would be conducive to private investment and must continuously promote market-oriented sustainable development. Ghana must do everything right in terms of macro-economic policy to avoid economic overheating and exchange rate appreciation.

Ghana has an advantage of population which is small compared with Nigeria's population. She is more united, peaceful and ethnicity is under-played

Ghana political and bureaucratic elites have adopted/acquired a "*development orientation*" and as it is, she is a "*developmental state*". This is because she has a thriving democracy, peace and security and availability of basic infrastructure particularly electricity

Ghana's consensual democracy has shown a very high level of transparency in public revenue acquisition and disposable while corruption remained below the level common in most developing economies

Ghana's educational standard has been rated high and so there are crop of experienced bureaucrats and expertise at that level too. Most of their educated people work in the civil service and they work in close collaboration with their political leaders to avoid corruption.

Ghana has a growing economy and squeaky-clean image, so she is investors delight and a success story.

However, oil has a way of smearing reputation and the petro-dollars that come from it increases the temptation to be corrupt, and often, the intense scramble for a slice of the wealth could sometimes stir conflict

In summary, Ghana must avoid the pitfall of the Nigerian oil sector where oil has harmed economies rather than prosper the economies. Ghana must not do away with his non-tradable goods especially Gold even though it has added little to her economies.

The environmental disaster observed in Nigeria must not happen in Ghana even though there is the history of the environmental problem in the Gold mining areas. Ghana must use the oil revenue to diversify her economies.

5.0 SUMMARY AND CONCLUSION

This has presented the status of Nigeria as it relates to the oil industry and the current status of the sector as it relates to economic growth and development. The paper was able to establish that the literature considers the oil shock and "*Dutch Disease*" as issues that countries producing oil must address to avoid the management of the oil becoming a "*curse*". Countries with experiences of natural resources being a "*blessing*" was cited-Botswana, Chile, Indonesia and Malaysia. In part 3, the paper dwelt on the details of the Nigeria's oil and gas management. This part brings out the pitfalls in terms of the restructuring that occurred during the civil war, the ownership structure, the exploration and production regime, the macro-economic challenges and fiscal indiscipline of the government. The environmental and social issues were discussed by highlighting the environmental degradation, the socio-economic deprivation and the emergence of Emancipation for the Niger Delta (MEND) militant group. Part 4 dealt with the lessons for Ghana and emphasized the need to use the revenue for infrastructural development and to save for the raining day- in short fiscal discipline.

REFERENCES

Abidin M Z (2001) Competitive industrialization with natural resource abundance: Malaysia. In Auty, R. (Ed.) "Resource abundance and economic development", Oxford: Oxford University Press.

Aninat E (2000) "Chile in the 1990s: Embracing development opportunities". Finance and Development March.

Ascher, W. (1999). "Why governments waste natural resources", John Hopkins University Press, Baltimore.

Auty, R. (1986). "Resource-based industrialization and country size: Venezuela and Trinidad and Tobago", Geoforum 17.

Auty, R. (1990). "Resource-based industrialisation: sowing the oil in eight developing countries", New York: Oxford University Press.

Auty, R. (1993). "Sustaining Development in Mineral Economies: The Resource Curse Thesis", Routledge, London.

Auty, R. (1999) The transition from rent-driven growth to skill-driven growth: recent experience of five mineral economies. In Meyer, J.Chambers, B. and Farooq, A. (Eds.), Development Policies in Natural Resource Economies, Cheltenham, Edward Elgar.

Auty, R. (2001). (Ed.) “Resource abundance and economic development”, Oxford: Oxford University Press.

Baldwin, R.E. (1966). “Economic development and export growth: a study of Northern Rhodesia, 1920-1960”, Berkley and Los Angeles, CA: University of California Press.

Barnes P (1995) Indonesia: the political economy of energy. Oxford, Oxford University Press

Bayley, D.H. (1966). “The effects of corruption in a developing nation”, The Western Political Science Quarterly, Vol.19(4).

Booth A (1995) The state and the economy in Indonesia in the nineteenth and twentieth century, In Harris J, Hunter, J and Lewis C M (Eds) The new institutional economics and third world development. Routledge, London.

BP (2000) Statistical Review of World Energy. British Petroleum, London 23

Bulmer-Thomas, V. (1994). “The economic history of Latin America since independence”, Cambridge Latin American Studies, Vol.77, Cambridge University Press, New York.

Cobbe J (1999) A book review of Samatar A I (1999) An African miracle: state and class leadership and colonial legacy in Botswana development, Heinemann, Portsmouth N.H. in International Journal of African Historical Studies Vol 32 No 1

Corden, W.M. (1984). “Booming sector and Dutch disease economics: Survey and consolidation”, Oxford Economic Papers, Vol. 36.

Corden. W.M. and Neary, J.P. (1982). “Booming sector and Dutch disease economics: a survey”, Economic Journal, Vol.92.

El Shibley M and Thirlwall A P (1981) Dual-Gap analysis for the Sudan. World Development, February.

Forsyth P J and Kay J A (1980) The economic implications of North Sea oil revenues. Fiscal Studies 1 (July).

Gelb, A.H. (1986). “Adjustment to windfall gains”, In Neary, J.P. and Van Wijnbergen, S. (Eds). Natural Resources and the Macroeconomy, Basil Blackwell, Oxford.

Gelb, A.H. and Associates. (1988). “Windfall gains: blessing or curse?”, New York: Oxford University Press.

Hill, C.B. (1991). “Managing commodity booms in Botswana”, World Development, Vol. 19.

Hill, C. and Mokgethi, N. (1989). “Botswana: Macroeconomics Management of Commodity Booms, 1975-1986”, Successful Development in Africa, Economic Development Institute of The World Bank.

Hirschman, A.O. (1958). “The strategy of economic development”, New Haven CT: Yale University Press.

Hojman D E (2002) The Political Economy of Chile's fast growth: an Olsonian interpretation. Public Choice, 111

Hope K R (1998) Development policy and economic performance in Botswana: lessons for the transition economies in sub-Saharan Africa. Journal of International Development

Joshi V (1970) Saving and foreign exchange constraints. In Streeten P (Ed.) Unfashionable Economics. Weidenfeld and Nicholson, London.

Lal, D. and Myint, H. (1996). “The political economy of poverty, equity and Growth”, Oxford: Clarendon Press.

Lewis A (1955) The theory of economic growth. Allen and Unwin, London.

Love R (1994) Drought, Dutch disease and controlled transition in Botswana agriculture. Journal of Southern African Studies Vol 20 No. 1.

Mabro, R (1980) Oil revenues and the cost of social and economic development in Energy in the Arab world. Volume 1, Kuwait AFESD and OAPEC

Mabro R and Monroe E (1974) Arab wealth from oil: problems of its investment. International Affairs, January.

Mikesell, R. (1997). “Explaining the resource curse, with special reference to mineral-exporting countries.” Resources Policy, Vol. 23, No. 4.

Mkandawire T (2001) Thinking about developmental states in Africa. Cambridge Journal of Economics.

Modise M.D. (1999) Managing mineral revenues in Botswana. In Mayer J, Chambers B and Farooq, A (Eds.) Development policies in natural resource economies. Cheltenham, Edward Elgar in associated with UNCTAD.

Murphy, K., Schleifer, A. and Vishny, R.W. (1989a). “Industrialisation and the big push”, Journal of Political Economy, Vol. 97, No.5., October.

Nankani, G.T. (1979). “Development problems of mineral-exporting countries”, World Bank Staff Working Paper No.354, World Bank, Washington, D.C.

Neary and Van Wijnbergen eds. (1986). “Natural Resources and the Macroeconomy”, Cambridge, MA: The MIT Press.

Prebisch, R. (1950). “The economic development of Latin America and its principal problems”, United Nations, Lake Success, N.Y.

Prebisch, R. (1964). “Toward a new trade policy for development”, In Proceedings of the United Conference on Trade and Development, New York, Vols I-VIII, United Nations, New York.

Ranis, G. (1991). “Towards a model of development”, In Krause, L.B and Kim, K. (Eds), Liberalization in the Process of Economic Development, University of California Press, Berkeley.

Rasiah R and Shari I (2001) Market, government and Malaysia's new economic policy. Cambridge Journal of Economics.

Rosenstein-Rodan, P. (1943). “Problems of industrialisation of Eastern and South-Eastern Europe”, Economic Journal, Vol 53.

Rosenstein-Rodan, P. (1961). “Notes on the theory of the big push”, In Ellis, H.S. and Wallich, H.C. (Eds). Economic Development for Latin America, St Martin's Press, New York.

Ross M (2001) Extractive Sectors and the Poor. Oxfam America. www.oxfamamerica.org/eirexport/index.html.

Rostow W (1960) The stages of economic growth. Cambridge University Press, Cambridge.

Rowthorn R E and Wells J R (1987) De-industrialization and foreign trade. Cambridge University Press, Cambridge.

Royan R P (1999) From primary production to resource-based industrialization in Malaysia. In Mayer J, Chambers B and Farooq, A (Eds.) Development policies in natural resource economies. Cheltenham, Edward Elgar in associated with UNCTAD.

Sachs, J.D. and Warner, A.M. (1995). “Natural resource abundance and economic growth”, NBER Working Paper, No.5398.

Sachs, J.D. and Warner, A.M. (1997). “Natural resource abundance and economic growth”, Center for International Development and Harvard Institute for International Development, Harvard University, Cambridge MA.

Sachs, J.D. and Warner, A.M. (1998). “The big push, natural resource booms and growth”, mimeo, January.

Schurman R A (1996) Chile's new entrepreneurs and the “economic miracle”: The invisible hand or a hand from the state? Studies in Comparative International Development. Vol 31 No 3.

Seers, D. (1964) “The mechanism of an open Petroleum economy”. Social and Economic Studies, 13.

Shamsul A B (1997) The economic dimension of Malay nationalism: The socio-historical roots of the New Economic Policy and its contemporary implications. The Developing Economies Vol XXXV No 3.

Sarraf, M. and Jiwanji, M. (2001). “Beating the resource curse: the case of Botswana”, Environmental Economics Series, Paper No.83.

Singer, H.W. (1950). “The distribution of trade between investing and borrowing countries,” American Economic Review, 40, May.

Stevens P (1986) The impact of oil on the role of the state in economic development: a case study of the Arab world. Arab Affairs Vol 1 No1.

Stevens P (2003) Resource impact - A curse or a blessing?: A literature survey. CEPMLP Electronic Journal www.cepmlp.org

Temple J (2001) Growing into trouble: Indonesia after 1966. Unpublished mimeograph dated August 15, 2001.

Tsie B (1996) The political context of Botswana's development performance. Journal of Southern African Studies Vol 22 No 4.

Usui, N. (1996). “Policy adjustments to the oil boom and their evaluation: The Dutch disease in Indonesia”, World Development, Vol.24, No.5.

Usui, N. (1997). “Dutch disease and policy adjustments to the oil boom: a comparative study of Indonesia and Mexico”, Resources Policy, Vol 23, No.4.

Warr P G (1986), Indonesia's other Dutch disease: economic effects of the Petroleum boom. In Neary and Van Wijnbergen eds. (1986). “Natural Resources and the Macroeconomy”, Cambridge, MA: The MIT Press.

Wright, G. and Czelutsa, J. (2002). “Resource-based economic growth, past and present”, Stanford University.

PETROLUEM INDUSTRY LINKAGES AND NIGERIA'S ECONOMIC DEVELOPMENT*

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INTRODUCTION

Nigeria, Africa's most populous country and potentially its largest economy, has witnessed decades of dictatorship and misrule. Accompanying this misrule are severe economic problems of an unprecedented magnitude. A notable illustration of the economic crisis is the persistent deterioration in the living standard of her citizens over time. As estimated by Okojo-Iweala et al (2003), the average Nigerian is poorer today than in 1972 despite the country's nearly US$500 billion earnings from oil export between 1973 and 2009. Poverty is deep and pervasive with about 70 per cent of the population currently living in absolute poverty compared with 42 per cent in 1992 and 27 per cent in 1980. Continuous infrastructural decay is significant; corruption is endemic while institutions of governance and accountability are being grossly weakened. Today, with per capita income level of US$300, Nigeria is one of the poorest countries in the world.

In sharp contrast to the current economic conditions, four decades ago, Nigeria with her enormous human and natural resources coupled with the large inflow of income from crude oil export was primed for rapid economic development. Why did the economy fail to diversify away from a near total dependence on oil but instead produce a weak economic structure that tends to perpetuate underdevelopment? While there is no easily identifiable all-encompassing answer to this poser, this paper intends to add further clues to the solution for this national developmental puzzle.

The remaining part of the paper is arranged thus: Part 2 presents an overview of the Nigerian Petroleum industry while the part 3 looks at the literature of economic development the country appears to be executing. Part 4 discusses the various linkages the Petroleum industry offers visa-vis Nigeria's exploration of their potentials. The penultimate part will offer some recommendation and the part 6 would contain the concluding remarks.

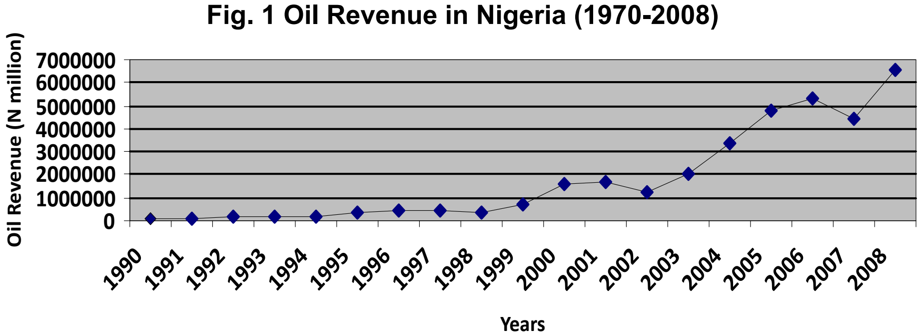
2.0 AN OVERVIEW OF NIGERIAN PETROLEUM INDUSTRY

The British discovered oil in Nigeria in 1956 at Oloibiri in the Niger Delta. This discovery was made by Shell-BP which was then, the sole concessionaire. Pioneer production began in 1958 and this took Nigeria to the rank of oil producers. Since 1970, the extraction and drilling of oil has become the biggest industry in the country. The country was able to reap the riches that came from the rise in the world oil price in 1970 and by 1971 she joined the Organization of Petroleum Exporting Countries (OPEC) and nationalized the oil industry by creating the Nigerian National Oil Corporation (NNOC) via a decree. To further establish control over the industry, in 1979, the government merged the NNOC and Ministry of Petroleum to form the Nigerian National Petroleum Corporation (NNPC).

By mid seventies, Nigeria had attained a production level of over 2 million barrels of crude oil per day (See table 1 in appendix.).
As a result of the economic slump in the country in the eighties, the production figure dropped but gradually picked up in the nineties. By 2005, the production level had increased to 2.6 million barrels per day (table 1 and fig. 2).

According to the 2010 BP Statistical Energy Survey, Nigeria has oil

Fig. 1 Oil Revenue in Nigeria (1970-2008)



Source: Central Bank of Nigeria Statistical Bulletin

The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

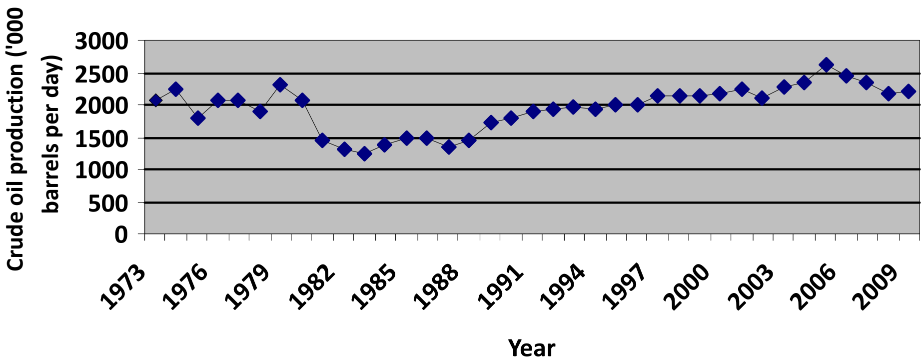
reserves of about 37.2 billion barrels at the end of 2009, representing 2.8per cent of the world's reserves. Nigeria is currently ranked as the 10th most Petroleum-rich nation in the world and one of the few major oil producing nations capable of increasing its output. With this position and depending on the price of oil at the global market, Nigeria is expected to have more external earnings and a better macroeconomic performance. However, there is even an increase in the expense burden on imported refined products to meet domestic demand. This is as a result of the fact that the Nigerian refineries are operating at far below their installed capacities, due to poor maintenance, spate of fire and theft incidences. At present, the Nigerian government, through the NNPC, has four refineries, with a combined installed refining capacity of 445,000 barrels per day (bpd). These refineries include: the Old Port Harcourt Refinery Company, the Warri Refinery and Petrochemical Company, the Kaduna Refinery and Petrochemical Company and the New Port Harcourt Refinery Company. The table below shows a brief history of these refineries.

The fact that the four refineries are operating below installed capacity is clearly shown on table 3 in the appendix. The inability of the refineries to meet the domestic need for Petroleum products, especially premium motor spirit (PMS), has led to the importation of Petroleum products.

On gas production, according to the same BP Survey, the country has in 2007 a proven natural gas reserve of 5.29 trillion cubic meters representing about 2.98per cent of the world's total. The country's 2007 natural gas production was at 34.97 billion cubic meters, accounting for just 1.18per cent of the world supply. This is mainly due to lack of gas infrastructure and flaring of 75per cent of associated gas which cost the country an estimated $18.2 million loss daily.

On the fiscal side, in 2002, the World Bank reported that oil accounts for 90per cent of the Nigeria's export revenue and 41per cent of its GDP. It also provides 95per cent of foreign

Fig. 2 Crude Oil production in Nigeria (1973-2009)



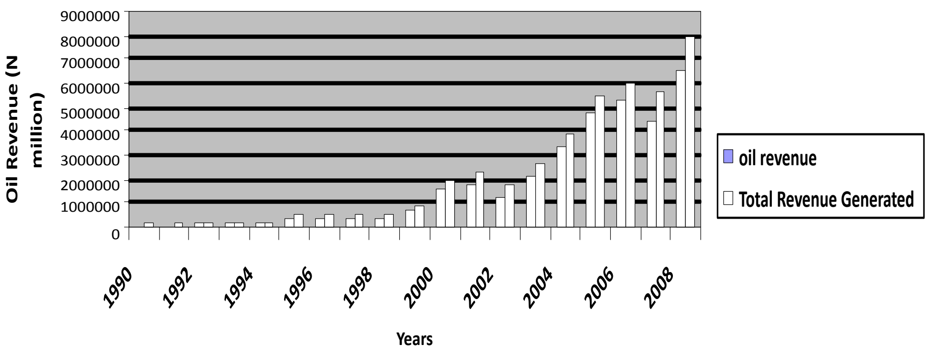
Source: United States Energy Information Administration (US EIA)

Table 2: History of refineries in Nigeria

PLANT	DATE COMMISSIONED	INSTALLED CAPACITY BBL / DAY
First Port Harcourt Refinery	1965	60,000
Warri Refinery	1978	125,000
PLANT	DATE COMMISSIONED	INSTALLED CAPACITY BBL/DAY
Kaduna Refinery	1980	110,000
Second Port Harcourt Refinery	1989	150,000
TOTAL		445,000

Source: Dayo, F. B. (2008).

Fig.3 Oil Revenue % contribution to Total revenue in Nigeria (1970-2008)



Source: Central Bank of Nigeria Statistical Bulletin

exchange earnings and about 65per cent of government's budgetary revenue. Evidently, Nigeria's consumption and investment is heavily dependent on oil revenue. To provide an insight into how large this industry is, NNPC estimated the industry's investment outlay for 2005-2008 at about $67 billion.

3.0 Economic Development Models Nigeria's Implied Option

Some development economists believed that instead of seeking a balanced-growth approach to development, it is better for countries to concentrate their efforts on few sectors. This is because once the leading sector gets established, then, the backward and forward linkage will build up with other industries and stimulate their development. The conclusion is that uneven development must come first and only then can the benefits of growth spread out more widely. The beauty of this approach was first advocated by Hirschman (1958), is that development can be kick-started with little or no market distortions. The recent work by Trindade (2005) which showed how late industrialization of South Korea and Taiwan can be produced through an export promotion policy, gave an empirical support to this argument.

The theory of linkages stresses that when certain industries are developed first their interconnections (or linkages) with other sectors will induce or at least facilitate the development of new industries (Todaro and Smith, 2006). Debraj (1998) listed some criteria under which the key or leading sectors of the economy can be chosen. These include:

(a) The number of linkages that a given sector possesses

(b) The strength of each linkage

(c) The 'intrinsic profitability of each sector (the leading sector may be the least profitable provided it spurs most of the other sectors)

With the near total dominance of the Petroleum industry, Nigeria's leading sector seems to have been naturally selected and widely accepted by successive governments. The Nigerian economy exhibits the characteristics of unbalanced growth with the dominance of the oil and gas sector both in export and earnings (unbalanced growth is a situation in which economic growth is significantly faster in some segments of the economy than others). It is, therefore, expected that with the massive production and exportation of oil and gas, the country's oil and gas industry will provide the necessary linkages for other industries to exploit and expand.

4.0 Petroleum Industry Linkages

The Petroleum industry provides the following linkages:

1. **Forward Linkage.** Forward linkage occurs when the products of one industry is used as the raw material of another industry. It can involve an industry in primary production linking with an industry in secondary production and occurs when one industry is producing the raw material for another industry (wikianswers, 2010).

   Nigeria recognized the importance of the downstream sector of the Petroleum industry which necessitated the building of four government owned refineries with an installed capacity of 445,000 barrels per day. Unfortunately, problems ranging from sabotage, lack of timely turn-around maintenance, poor management and corruption ensured that these refineries operate far below their capacities at times as low as 30per cent of installed capacity. Even the expected emergence of private refineries has turned out to be a mirage as a result of policy issues mostly on pricing. Today, Nigeria imports refined products to meet local demand. It is important to point out that even the advancement of exporting refined Petroleum products cannot shield the economy from the risks associated with exporting products with very high price fluctuation tendency in the world market. The problems with the refineries are also in the petrochemical industries. Nigeria has three petrochemical industries and none is operating near its installed capacity. The failure to establish a functional downstream sector ensured that the key raw materials for plastic, pharmaceutical, fertilizer, lubricants and a host of other industries are imported thereby truncating development, competitiveness and the growth of these industries in the country. As a result of this monumental failure of the state-owned key industries, expected potential gains that would have arisen from this linkage had been lost. Unfortunately, other countries are reaping the benefits of the current global shortage of refined products caused by strict environmental regulations on the establishment of new refineries in USA and Europe. Today, Saudi Arabia is a major exporter of refined Petroleum products and Singapore with no oil resources is now a major exporter of petrochemical products in the world.

2. **Backward Linkage.** This is the use by one firm or industry of produced inputs from another firm or industry. An effect in which increased production by a downstream manufacturer provides positive pecuniary externalities to an upstream manufacturer.

   Nigeria's Ministry of Petroleum Resources estimated that procurements account for 54per cent of $12 billion dollars that the Nigerian oil industry spends annually. The breakdown of the procurement showed that steel components account for 75per cent of total procurements (Okolo, 2008). The inability of the Ajaokuta Steel Complex to function despite gulping billions of dollars ensured that this ready market for steel with the attendant benefits was lost to foreign firms. The steel industry linkages with other industries like construction, shipping, car assembly plants, etc, were also lost. Painfully, other nations have used this linkage to trigger off development. For example, it is on record that former President, Park of South Korea, in order to create demand for the nation's ship making firm (Hyundai), forced the nation's refineries to ship their oil in Korean-owned tankers. Today, South Korea is one of the leading ship making countries and Hyundai one of the leading conglomerates in the world.

3. **Consumption Linkage.** This is expected when as a result of expanded export, a large segment of the labour force is paid higher wages above their previous rates which induces aggregate demand for a wide range of consumer goods. The

massive earnings of the oil workers, failed to generate this linkage because of the following reasons; first, it is proven that as people's income grow, they intend to spend more on durable consumer goods such as cars, television, air-conditioners etc. Since most of these sophisticated durable items are imported, the local economy loses out on the benefits of this consumption. Secondly, despite the dominance of the Petroleum industry, the sector employs relatively few workers and, therefore, cannot generate the required demand needed to stimulate the production of these durable consumer products locally. Consequently, a large chunk of earnings of Nigerians working in the oil and gas industry is spent to sustain foreign manufacturing firms. This leakage is enormous considering the earnings of the dominant expatriates who spend only their living cost here.

4. **Infrastructure Linkage.** This linkage arise when the provision of infrastructure for the oil industry can lower costs and open new opportunities for other industries. When an infrastructure is shared, each firm that uses the infrastructure witnesses a decline in the unit cost of production, becomes more competitive, and therefore is likely to be more profitable. The Petroleum industry is quite ineffective as it concerns this linkage. This is because pipelines, tanker ports, oil depots and deep sea ports have no other use outside the industry. In Nigeria, this is critical because as a result of small and scattered nature of the nation's oilfields coupled with the need to ensure adequate supply of Petroleum products in all parts of the country, billions of dollars have been spent over the years to develop and build an extensive network of pipelines to transport crude oil to sea ports and refineries across the country. Unfortunately, this huge capital outlay has no benefit to other industries. Since Petroleum is non-renewable natural resource which faces an inevitable depletion, one wonders what becomes of this investment when Nigeria finally runs out of oil.

5. **Human Capital Linkage** Petroleum industry requires a pool of engineers, scientist, geologists, project managers, ICT experts, welders, fitters, crewmen, divers, etc. Thus, it is expected to stimulate the development of skilled labour in Nigeria. Unfortunately, the multinational corporations seem more interested in '*importing*' workers than developing local workforce. The resultant effect is a petroleum industry where the expatriates hold the key positions. Consequently, the expected knowledge transfer from the industry to other industries is quite minimal, therefore, of no significant effect on the economy. Even the government response by establishing Petroleum Training Institute, National Institute of Welding, and Petroleum Trust Development Fund which offers scholarships to Nigerians to acquire advance degrees in Petroleum related studies abroad have not succeeded in wiping away the dominance of expatriates in the industry. It is hoped that the recently signed into law Local Content Bill will be strictly enforced to ensure that Nigerians take their rightful place in the industry.

6. **Fiscal Linkage** Fiscal linkages could be considered as the benefits to government treasury through royalty, rates and taxes.

   It is expected that government can capture a large share of the economic rent from Petroleum export as taxes, dividends and royalties and use the revenue to finance the development of other sectors of the economy. However, the effectiveness of these revenues in stimulating development in the other sectors of the economy is a function of the kind of projects and interventions the government undertakes. In Nigeria, almost all government revenue is exclusively dependent on the oil sector earnings. Unfortunately, these oil windfall earnings were squandered on wasteful projects, bloated civil services and the rest siphoned into the private bank accounts of the elites. The Federal Ministry of Works and Housing, (2003) reported that all road projects awarded to indigenous contractors by the Federal Government between 1999 and 2003 failed in terms of quality and delivery time. The Okigbo commission that estimated that \$12.2 billion in oil earning disappeared between 1990 and 1993 and the recent Halliburton bribe scandal are all pointers to the chronic corrupt practices of our leaders and the complicity of the multinational corporations in the mess of the sector. While Nigeria wasted her oil earnings, Indonesia used its own windfall to invest in agriculture with the goal of achieving self-sufficiency in rice production becoming today a major exporter of rice. In contrast, Nigeria's rise in Petroleum revenue correlated with a steep drop in agricultural production and exportation. A nation that was virtually self-sufficient in food supply in the 1960s and the leading cocoa exporter became a net importer of food by 1983 and the production of this all important cash crop dropped by 43per cent.

   The negative effect on the fiscal operations of nation with a dominant Petroleum sector is that the economy becomes vulnerable to external shocks particularly the fluctuations in the price of crude oil in the international market. So long as international oil prices continues to be a reflection of external factors (political and economic conditions in the Middle East, OPEC actions and inactions, economic and weather conditions of advanced economies, etc), oil revenue projections will remain a gamble thereby making economic planning difficult.

Since most of Nigeria's oil industry output is exported and most of its inputs imported, these linkages are therefore of little impact on the development of other local industries.

5.0 Recommendations

The highlighted weaknesses of the

Petroleum industry linkages in Nigeria made the diversification of the economy and weaning it of its total dependence on crude-oil export the real challenge. To achieve this, it is imperative that the government should take the following suggestions:

Government must desist from using oil earnings to establish corporations that can be better run by the private sector. To continue using oil revenue to sustain several inefficient, loss making public enterprises is a great disservice to the economic development of the country.

With about 70per cent of the population engaged in agriculture, revitalizing the sector should be in the '*must do*' list of the government's poverty alleviation programme. Besides, unlike the Petroleum industry, the agricultural sector possesses a greater linkage with the local manufacturing sector. Indeed, the two sectors are intimately related. It is, therefore, pertinent that the development and expansion of the two sectors should be pursued simultaneously. It is not a coincidence that the world's most efficient and productive farms are found mainly in the industrialized countries.

Since the problem of inadequate infrastructure has been identified as the greatest single contributor to the high cost of doing business in Nigeria, the oil wealth should be used to provide private investment friendly infrastructures. The fact that providing all the infrastructural needs of any economy is costly and unaffordable implies that choices need to be made. Adenikinju (2003), reported that firms lost 792 working hours in 1998 as a result of power outages. To effectively tackle the problem of low productivity and low competitiveness of the nation's manufacturing sector, government must take the provision of steady and stable electricity in the country a top priority.

Sometimes, projects are second best to policies. New public investment projects in many cases may not be the best contribution that government can make in the quest for development. A good policy is capable of reducing or completely remove the need for certain projects. Policies (not projects) made the massive private sector driven investment in the telecommunication industry possible. The same can be replicated in the power sector if the right policies are in place. Government should, therefore, develop policies and incentives that can attract private investment to the key sectors of the economy. Secondly, new projects that deprive core traditional responsibilities of government (law and order maintenance, road maintenance, teachers' salaries, etc) of essential funds are more harmful to the economy relative to the specific benefits of such projects.

6.0 Conclusion

What happens to our economy when the recently re-energized American research on developing a commercially viable alternative to gasoline for their automobiles and other energy needs makes a breakthrough? Truly, wealth based on natural resources can be eroded. Guatemala learnt this bitter lesson years ago when their wealth based on the highly prized crimson dye extracted from the insect cochinilla was almost instantly wiped out when the Europeans invented artificial dye(Ha-Joon Chang:2007).
Empirical and theoretical evidence over the years have shown that there is no close relationship between a country's resources and its wealth or GNP. Economies grow when her citizens continuously develop and add new activities to the list of those they engage in. The government

APPENDIX

Table 1. Crude Oil Production ('000 barrels per day)

Year	Crude oil production ('000 barrels per day)	Year	Crude oil production ('000 barrels per day)
1973	2053.16	1992	1943.00
1974	2255.08	1993	1960.00
1975	1783.00	1994	1930.9
1976	2067.33	1995	1992.75
1977	2085.67	1996	2000.53
1978	1895.75	1997	2132.45
1979	2302.50	1998	2153.46
1980	2055.00	1999	2129.86
1981	1433.00	2000	2165.00
1982	1295.00	2001	2256.16
1983	1241.00	2002	2114.86
1984	1388.00	2003	2275.00
1985	1495.00	2004	2328.96
1986	1467.00	2005	2627.44
1987	1341.00	2006	2439.86
1988	1450.00	2007	2350.00
1989	1716.00	2008	2165.08
1990	1810.00	2009	2207.91
1991	1891.80		

Source: United States Energy Information Administration (US EIA)

should, therefore, develop the necessary policies and infrastructures that will encourage entrepreneurship and investment in new activities. This will foster the much needed diversification of the economy that will set the nation on the path of industrial transformation.

Table 3:
Petroleum Product Supplies in Nigeria (Million Tonnes) (1980-2008)

Year	Local refineries (million tons)	Imported (million tons)	Total	per cent of local refineries
1980	4.45	2.46	6.91	35.6
1981	6.15	2.08	8.23	25.3
1982	8.29	2.05	10.34	19.8
1983	7.18	3.6	10.78	33.4
1984	6.2	2.68	8.88	30.2
1985	6.41	2.59	9	28.8
1986	9.07	2.89	11.96	24.2
1987	5.84	2.81	8.65	32.5
1988	7.01	1.59	8.6	18.5
1989	8.23	2.05	10.28	19.9
1990	8.67	0.93	9.6	9.7
1991	8.04	0.03	8.07	0.4
1992	8.56	2.15	10.71	20.1
1993	7.29	3.2	10.49	30.5
1994	5.44	2.79	8.23	33.9
1995	6.72	1.51	8.23	18.3
1996	5.44	2.36	7.8	30.3
1997	6.92	1.25	8.17	15.3
1998	5.09	3.69	8.78	42
1999	5.36	2.64	8	33
2000	2.59	7.26	9.85	73.7
2001	6.77	4.47	11.24	39.8
2002	6.86	4.57	11.43	40
2003	7.3	7.18	14.48	49.6
2004	6.31	6.5	12.81	50.7
2005	9.39	6.15	15.54	39.6
2006	6.08	6.49	12.57	51.6
2007	3.3	7.13	10.43	68.4
2008	5.13	5.51	10.64	51.8

Source: NNPC Annual Statistical Bulletin 2005 and 2008

REFERENCES

Adenikinju, A. (2003): Electric Infrastructure Failures in Nigeria: A Survey- Based Analysis of the Costs and Adjustment Responses, Energy Policy, Vol.31, pp 1519-1530

BP (2010): BP Statistical Review of World Energy

Central Bank of Nigeria (2008): Statistical Bulletin, 50 years Special Anniversary Edition, Golden Jubilee Edition; December

Dayo, F.B. (2008): Clean Energy Investment in Nigeria; The Domestic Context; A country case study completed for IISD's Clean Energy Investment Project

Debraj, R. (1998): Development Economics, Princeton University Press Federal Ministry of Works and Housing (2003): Quarterly Report, Federal Ministry of Works and Housing, Abuja, Nigeria

Ha-Joon Chang (2007): Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism, Bloomsbury Press

Hirschman, A.O. (1958): The Strategy of Economic Development, New Haven, CT, Yale University Press

Nigerian National Petroleum Corporation (2005, 2008): NNPC Annual Statistical Bulletin

Okolo, C.H. (2008): Local Content-Strategies for Maximizing Opportunities- The Dorman Long Experience. Paper presented at the KPMG Gulf of Guinea Oil and Gas Conference, Abuja, 5th-6th January

Okonjo-Iweala, N. et al. (2003): The Debt Trap in Nigeria: Towards a Sustainable Debt Strategy, Africa World Press, Inc, p.1

Todaro, M. and Smith, S. (2006): Economic Development, Harlow: Pearson Education

Trindade, V. (2005): The Big Push, Industrialization and International Trade; The Role of Exports, Journal of Development Economics, Vol. 78, pp 22-48

Wikianswers, 2010/: www.wiki.answers.com United States Energy Information Administration (US EIA)

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