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Nigerian Stock Market Reflection Of The Global Financial Crisis: An Evaluation

BY MRS. A. A. SERE-EJEMBI, (Ph.D)

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By A. A. Sere-Ejembi, Ph. D

"...The fruit of... Greed... Dishonesty in the finance sector dragged us here... " - *Joseph Stiglitz*

1.0 INTRODUCTION

With its roots in banking, the sub-prime mortgage crisis that commenced in the United States in 2007 soon resonated in other sectors of its financial system, and the economy, at large. It spread quickly to the developed economies in Europe, including the United Kingdom, and Asia - with Japan becoming well affected. The emerging economies were not isolated. A transmission channel of the global financial crisis, which has been referred to as the "Globalised Synchronized Slowdown" is the stock market. Around the world stock market indicators started falling.

The capital market, vis-à-vis the stock market, is a channel through which national economies receive foreign capital flows that make their tendency towards the global economy easily visible. Developments in the market thus become a reflection of global financial developments. The level of responsiveness, however, depends on the level of development, exposure and insulation of the domestic market from the vagaries of the international.

In the case of the Nigerian stock market, following initial relative insulation, the speed of contagion and response was comparatively slower. However, the effects began to manifest in the first quarter of 2008. All market indicators commenced a downward spiral. Negative market growth ensued. It persists. The objective of this paper, therefore, is to review the global financial crisis, in the context of its recent effects on the Nigerian stock market. The timeliness and significance of this subject is in view of the un-salutary resonance that the plunging trends, if not reversed, could have on economic development through stifling the productive sectors' access to lower cost equity capital, amongst others. To this end, the rest of the paper is organised as follows: Section 2 highlights background issues on the global financial crisis, while section 3 contains a review of relevant empirical literature; Section 4 outlines the resonance of the crisis on the Nigerian stock market; Section 5 analyses recent movements in key indicators of the market; Section 6 presents current policy options and perspective measures in resolution; and Section 7 summarises and concludes.

2.0 BACKGROUND TO THE GLOBAL FINANCIAL CRISIS

In the wake of the US government bid to boost housing was a policy error that permitted sub-prime clientele unrestricted access to mortgage finance. Combined with the thriving derivatives market, the horizon for credit expansion widened to unprecedented levels. The result was private over-borrowing accompanied by an internal debt crisis. Perhaps one could justifiably fault the US government for failing to prevent the sub-prime mortgage bubble bust. However, what could have been done is a complex question, since the problem was not in liberalization as such, but combined with the absence of effective regulation and supervision. Properly enforced prudential limits on exposure could have helped mitigate the effects of the over-ambitious and excessive risk-taking, contain the defaults and limit the spread. As long as capital flows and credit expansion grew unchecked, lending expectedly spilt over from financing safe and productive investments to risky and speculative assets. Reckless financial innovations included leveraging, short selling, unsecured credit systems and swaps attributed. The loose monetary policy in the aftermath of September 11, 2001 terrorist incidence in the US, in the bid to forestall a depressed economy further exacerbated.

Agreeably, housing prices had trended upwards for ten consecutive years, up to 2004, enticing speculators, fuelling and prolonging the farce. Mortgagees perfected imprudent lending practices. Dove-tailing into the derivative market, including securitization, sale and re-sale of issued and re-issued sub-prime loans to secondary mortgage markets created a bubble that was sure to bust. After mortgagees booked sub-prime mortgages, they packaged them into Mortgage Backed Securities (MBS) and sold them to institutions, central of which were the US government Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac) now bankrupt. The intent was to enable the banks to free up funds to further lend to more prospective homeowners. Precisely, this singular action removed a constraint from the balance sheets of the banks, made them less concerned about the credit growth, paths and risks, while ensuring that, in addition, qualified borrowers were not stifled of mortgages. Fannie Mae and Freddie Mac repackaged the loans and sold them to investors and financial institutions around the world, who in turn repeated the securitization along a chain; widening exposure and spreading the scope for contagion and imminent collapse. In furtherance, some home owners, including the sub-prime, enticed by the lure of the accelerating asset price appreciation, refinanced their homes at lower rates, took out multiple (second, third, etc) mortgages against the added value and expanded other consumer spending. Satisfaction from the booming bubble was all-encompassing.

Commencing in 2006, a combination of other factors started taking a toll. Prominent were the chronic expansionary

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The views expressed are strictly the author's.

fiscal policy in the face of self-inflicted and natural disasters ("Nuclear Weapon Search War' with Iraq, Afghanistan war, Hurricane Katrina, etc) and the two "Fs" (food crisis from bio fuels, grains shortages and rising prices; and fuel crisis from upward trending costs of energy and international oil price). These combined with the monetary ease that the September 11, 2001 attack on the twin towers, culminated in stifling households and businesses (especially the small business), and increasing unemployment. This led to the third "F" (financial crisis). The macroeconomic turbulence translated to increasing default by mortgage owners aiding foreclosures (Fiakpa et al, 2008), specifically amongst the sub-prime. Rising foreclosure rates coupled with sustained and, in aspects, increasing supply ushered in price declines. Refinancing became constrained with the nose-diving prices. These developments encouraged defaults, further. In paradox, responding, the lending institutions unwisely reset to higher interest rates and payments. Facing negative equity from declines in home market value, the choice to stop mortgage service became pervasive. Fiakpa et al (2008) analysed that as at March 2006, the value of the U.S. sub-prime mortgages was estimated at $1.3 trillion; by March 2007, approximately 16 per cent of these had become 90-day delinquent; and they were in foreclosure proceedings by October 2007. By the next quarter, in January 2008, the delinquency rate had risen to 21 per cent and by May 2008 it hit 25 per cent. Though the sub-prime only represented 6.8 percent of the loans outstanding in the U.S, they represented 43.0 per cent of the foreclosures during third quarter 2007.

3.0 A SURVEY OF RELEVANT EMPIRICAL LITERATURE

Empirical studies have revealed that the US housing bubble burst was not without early warning (Kritayanavaj, 2008), which none the less was ignored. Shuttleworth (2008) stressed that during the period of boom, financial institutions, their supporting ideologues, politicians and regulators would not want to hear of caution or regulation as now being advocated. That would have been anti-capitalism. It was all done in the name of innovation, and any regulatory initiative was ignored with claims that it would suppress innovation. Even, then the dwindling regulatory capacity could not have kept pace. Fiakpa et al (2008) also attested that supported by the digital age, some of America's brightest were devoting talents to circumventing standards and traditional regulation regimes designed to ensure the safety of the financial system. Power without control produced natural results, as expected, with the loss of balance between financial market liberalization and financial regulation.

After all, the BASEL II Accord ensured some degree of self-regulation. Booker (2008) pointed out that it proposed a drastic tightening of the so-called "fair value" or "mark-to-market" rules. Depository and other financial institutions self-defined whether they were solvent and fit to continue trading. If not, they were to self-declare to the regulatory authorities. This provision successfully hid the fuelled appetite for outsized risks and entrenching downturn in the market before regulatory authorities even noticed. The rules of BASEL II are set up to ensure that the greater risk to which a bank is exposed, the greater the amount of capital the bank needed to hold to safeguard its solvency and overall economic stability. However, the provisions of Pillar 3, which rest on the disclosures that the bank must make to allow the market have a better picture of its overall risk position is a major loophole that the failed financial institutions exploited. The idea was that there would be better transparency in banks' public reporting that would encourage prudent management. On the contrary, the self-disclosure clause gave opportunity for concealment.

In Centre for Research and Globalization (2008), Professor Prabaht Patnaik, Centre for Economic Studies and Planning at India submitted that the cause of the problem was located in the fundamental defect of the free market system. This related to its capacity to distinguish between "enterprise" and "speculation". Hence, as supported by Kritayanavaj (2008), the tendency was the domination by speculators, interested not in the long-term yield of assets but only in the short-term speculative appreciation in values. Earlier, The Economist (2005) in The Global Housing Boom forecasted that the worldwide rise in home prices was the biggest bubble in history, and called for preparedness for severe economic pain when it busted. Other economic experts gave support and predicted that the US sub-prime mortgage expansion, with its exotic and over ambitious derivative instruments, when reversed, would trigger a meltdown across the global financial system - the stock market inclusive.

4.0 RESONANCE OF THE GLOBAL FINANCIAL CRISIS ON THE NIGERIAN STOCK MARKET

UNECA, African Development Bank and African Development Fund (2008) Ministerial Conference on the Financial Crisis had argued that with the comparative shallowness of the financial sector of African economies, including Nigeria's, and the illiquid capital markets, the system is weakly linked to the international financial system. Total share of stock market capitalization stood at 1.81 per cent of global. Banks inactivity in the derivative market and varied residual controls on capital accounts contributed to some insulation from severe contagion effects, as witnessed in advanced economies. The Ministerial Conference on the Financial Crisis (2008), then submitted that vulnerability, nonetheless, came through some financial linkages, including the receipt of approximately US$15.73 billion in portfolio flows in 2007. Portfolio flows were then estimated to have declined to US$5.7 billion in 2008. Given the small size of the market, even small declines would lead to appreciable volatility.

Resonating of the eruption of the global financial crisis, one issue that agitates with the crash in the Nigerian stock market prices, in March 2008, is the subsequent plummeting of other major indicators to date. Risk-averse institutional and individual foreign investors commenced divestment, also to compensate for loss of investment in the global markets. Local investors then supported with panic disposal. The tightness in the balance sheets of the deposit money banks (DMBs) and counter-party risk assisted.

Hitherto, particularly during the preceding three-year period, the Nigerian market had been exceptionally bullish, with share prices soaring. It is worthy to note, however, that not owing to the global financial crisis and the speculative sub-prime mortgage bubbles and bust alone, other contributory factors lent support. Some of these, namely, margin lending by the DMBs, stock price appreciation that had no correlation with the fundamentals in the quoting companies and local investors' opting to invest in foreign capital markets to take advantage of the low stock prices, could be seen, on their own part, as domestic response mechanism to the high risk taking tendencies in the global financial market.

Antecedents of the opening up of the Nigerian stock market, its bullish growth, reversal and subsequent bearish trends are presented in the next paragraph.

4.1 INTERNATIONALIZATION OF THE NIGERIAN STOCK MARKET

In 1996, the submissions of the Dennis Odife Panel laid the foundation for the internationalization of the Nigerian stock market. The reforms that followed promoted a more efficient and virile capital market, pivotal to meeting the nation's economic and development aspirations in the new millennium. Backing-up the opening up the market and exposure of the local investment climate to the international, were the removals of restrictions on foreign ownership of assets, loosening up of foreign exchange, interest rate and other controls and rigidities. The introduction of the Automated Trading System (ATS); the Central Securities Clearing System (CSCS) becoming operational in 1997; the removal of the fundamental elements of financial repression that had hampered capital inflows; electronic clearing, dematerialization of transactions, settlement and delivery; and availability of audit trail data began meeting international standards. Transaction processes were thence eased and foreign investors' confidence in the market surfaced. Earlier, the 1995 Nigerian Investment Promotion Commission (NIPC) Decree had liberalised the economy, by permitting unrestricted foreign investment in quoted companies in Nigeria. Strong Government commitment to the internationalization process encouraged it to reduce its direct interference in the operations of the capital market and allowed the market to develop at its own pace. Hence, it engendered strengthening of the surveillance function of the Securities and Exchange Commission (Odoko, 1998).

Adeyemi (1998), Emenuga (1998), Obadan (1998) and Onosode (1998) heralded the reformed Nigerian capital market, being that properly functioning stock markets contribute positively to economic development through the creation of medium to long term capital. Well-pronounced stock market development and opening up, however, materialised with the implementation of the 2004 Central Bank of Nigeria Banking Sector Reform Agenda at which basis laid the re-capitalization of the Nigerian banking sector (Sere-Ejembi, 2008). With the banking sector taking the consistent lead as part of the top ten stocks in the market, the Agenda itself was a positive development and timely intervention that better equipped the domestic banks to weather other more serious effects of the current global meltdown (Soludo, 2008). The banks' response was to raise funds through the stock market, not only from local, but from international investors as well. This effectively broke down the barriers to capital flows, which the Nigerian Stock Exchange had been struggling to achieve since the Odife Panel. International fund managers perceived the attractiveness of the market (opportunities and higher yields available); thereby making foreign portfolio investment inflow surge.

Murinde (2006) presented that some authors, notably Kim and Singal (2000) who had hypothesized that opening up to foreign investors invariably exposed domestic markets to unfavourable external shocks, increasing stock price volatility and consequently raising the cost of capital as shareholders demand higher risk premium. However, they and other authors, quoting Richards (1996), Chan et al (1990) and Airken (1998), failed to find enough evidence to substantiate the hypothesis. The submission, therefore, is that even with possibilities of contagion, appropriate supervisory, regulatory and legal frameworks, as well as transparency, good corporate governance and presence of fundamentals in quoted companies' stock price appreciation during the bullish period, would have served as needed insulator. Internationalization, thus, remains a positive development.

5.0 ANALYSIS OF THE NIGERIAN STOCK MARKET RESPONSE

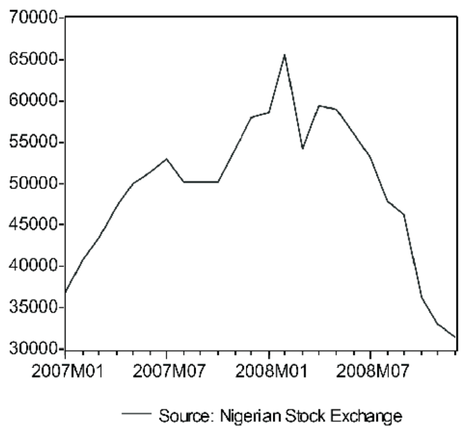
5.1 METHODOLOGY

To capture the effects of the global financial meltdown on the domestic stock market, this section examines the outcomes of trading activities, by descriptively analyzing movements in the major indicators of performance, of the Nigerian Stock Exchange (NSE), which is a self regulatory body and the statutory stock market of the Nigeria capital market. The analysis focuses on monthly market developments from January 2007 to December 2008, being the period of pronouncement of the global crisis. The sources of data are the monthly bulletins of the Securities and Exchange Commission (SEC), the NSE and the Trade and Exchange Department (TED) of the Central Bank of Nigeria (CBN).

5.2 INDICATORS OF PERFORMANCE

The Appendix contains the tables of the data utilized. Activities on the floor of the NSE were particularly impressive in 2007. Sluggish trading commenced in March 2008, coinciding with the period of widespread credit contraction in the developed financial markets, in the light of deteriorating balance sheets. Aggregate market indices nose-dived and continued dropping till end-2008, as the bears continued their hold on the market. This was attributable to the indices of the quoted blue-chip companies despite the impressive financials posted by most (Securities and Exchange Commission, 2008). The paradox underscores the point. Most probably, a major contributory factor is that some of the stock market drivers were unrelated to the performance of the quoted companies and the domestic financial market.

Figure 1: All Share Index (Jan. 2007 - Dec. 2008)



The data on inflow and outflow of capital from portfolio investment between January and December 2008 lend credence.

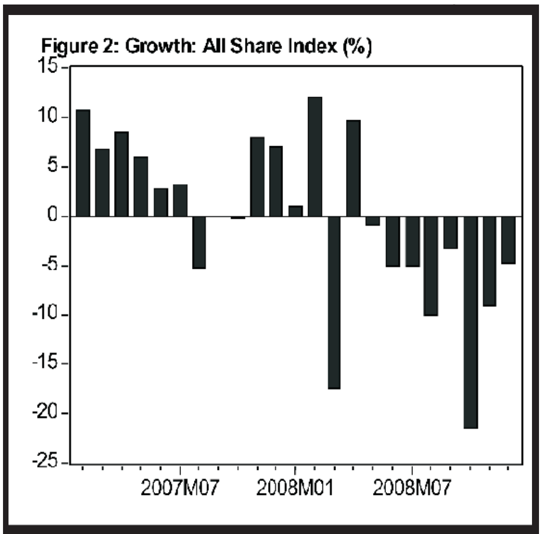


Figure 2: Growth: All Share Index (%)

5.2.1 All Share Index

Reflecting the months of global perception that the Nigerian stock market had favourable growth potentials, the all Share Index (ASI) of the NSE recorded an increasing trend from 37,764.5 at the beginning of the review period up till August 2007, when it dipped slightly. The positive growth however picked up during the next quarter to peak at 65,653.4 in February 2008. From then, in response to the deepening global crisis, the Nigerian stock market witnessed substantial divestment by foreign investors. The ASI reflected the bearish market till end-2008. It crashed to a 24-month low of 31,450.8 (Figure 1).

Figure 2 further underscores the effects of the global financial crisis on growth in the ASI. Growth has been largely negative since March 2008. Coinciding with the collapse of the age-long Lehman Brothers, and explicit pronouncement by the US government about the crisis, October 2008 recorded the largest decline of 21.4 per cent.

5.2.2 Market Capitalization

Similar to the movement observed in the ASI, Market Capitalization at the NSE peaked at N12.50 trillion in February 2008 (Figure 3). The trend maintained a reversal from March till the market closed at N6.96 trillion at end-December 2008.

Between March 2008 and the end of year, the market has lost N5.55 trillion in market capitalization, amounting to 44.4 per cent. Figure 4 displays the monthly percentage growth in Market Capitalization. In 2007, nine of the months recorded positive growth of as much as 26.2 per cent in April 2007. Meanwhile, nine of the months in 2008 beginning from March had varying degrees of negative growth of between 0.03 per cent in May and 19.99 per cent recorded in October.

5.2.3 Volume and Value of Stocks

Movements in both volume and value of stocks in the secondary segment reflected the downturn in March 2008. In Figure 5 the left axis presents the value, while the right the volume of stocks traded. Short-lived attempts at recovery occurred

Figure 3: Market Capitalization (N'B) Jan. 2007 - Dec. 2008

in July and August 2008, with expectations

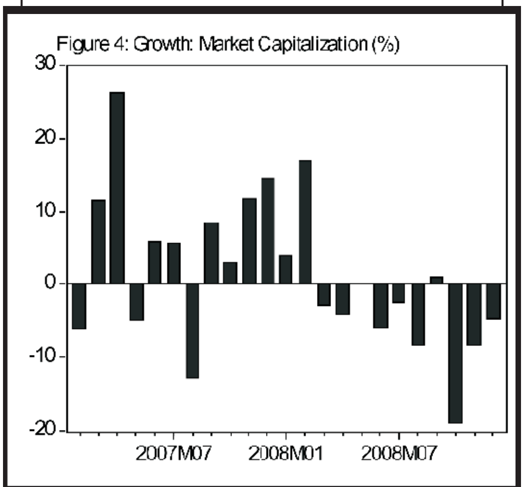


Figure 4: Growth: Market Capitalization (%)

that the situation would improve. In general, the pattern of movements mirrored those of the ASI and Market Capitalization. From a peak of N283 billion in January 2008, the value of stocks traded slumped to a record 24-month low of N44.3 billion at the year end. Similarly,

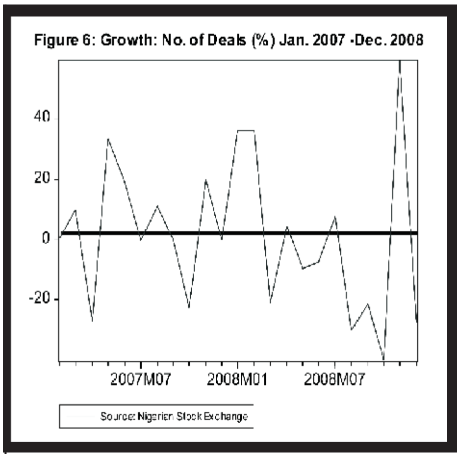


Figure 6: Growth: No. of Deals (%) Jan. 2007 -Dec. 2008

the volume of traded stock declined from its peak of 27.7 billion in February 2008 to close at 9.7 in December 2008.

5.2.4 Number of Deals

Movement in the number of deals, in addition, revealed the bears in the stock market during the last three quarters of 2008. The horizontal zero level growth displays this clearly. October 2008 witnessed a 20-month low negative growth of 40 per cent. Ignoring the sharp attempt at recovery in November, the indicator plummeted anew, by 27.4 per cent in December.

5.3 PORTFOLIO CAPITAL IMPORTATION AND CAPITAL OUTFLOW

Capital for portfolio investment flowed in, amounting to US$436.98 million in January 2008. The effects of the meltdown are gleaned from the low levels of inflow, of US$111.53 and US$133.12, in September and November, respectively (Figure 7). Overall, capital outflow from the system increased from US$1,687.48 in 2007 to US$ 1,702.88 in 2008 (Table 1).

6.0 POLICY RESPONSE AND OPTIONS IN RESOLUTION

Certain policy response mechanisms to the current impasse have been put in place by the institutional arrangements connected to, and within the stock market. While the list is not exhaustive, even with expected response lag in policy, the adequacy of the options is debatable in the face of continuing trends. It is important to examine these first, before presenting the proposals to slow down and resolve re-occurrence.

Figure 5: Volume and Value of Stocks (Jan. 2007 - Dec. 2008)

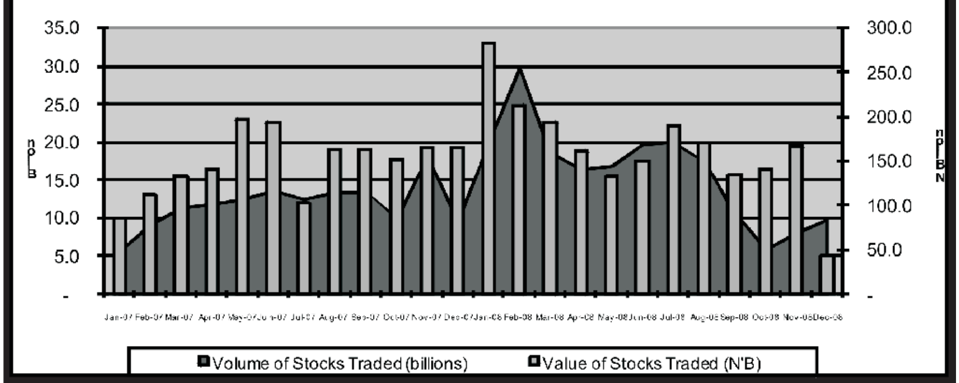
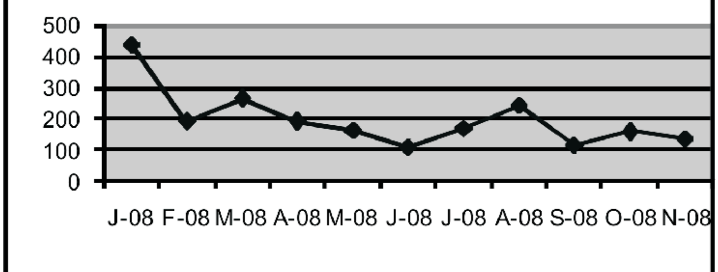


Figure 7: Capital Importation for Portfolio Investment (US$'M) - 2008



Source: Trade and Exchange Department, Central Bank of Nigeria

Table 1: Capital Outflow (US$ 'M) (2007/2008)

Year	Amount
2007	1,687.48
2008	1,702.88

Source: Trade and Exchange Department, Central Bank of Nigeria

6.1 POLICY RESPONSE TO ARREST THE DOWNTURN

6.1.1 Federal Government Constituted Presidential Advisory Team on the Capital Market

The mandate of the Presidential Advisory Team set up in August 2008, was to regularly deliberate on measures that would assist the speedy reversal of plummeting activities and indicators in the capital market. This pronouncement by the FG encouraged the policy responses by the statutory apex regulator, SEC, and self-regulating NSE.

6.1.2 Security and Exchange Commission Renewed Market and Guidelines

To reduce the costs of access to the market, the Securities and Exchange Commission reduced it own fees by 50 per cent, and mandated the NSE as well as other capital market operators to reduce likewise.

6.1.3 Nigerian Stock Exchange Review of Rules

The NSE reviewed trading rules to enforce zero tolerance for infractions. It curtailed limits on share buy-back to 15 per cent and de-listed the age-long moribund companies. Maximum limit on daily price movement was put at 5 per cent either way from October.

6.2 PERSPECTIVE MEASURES TO ARREST DOWNTURNS

6.2.1 Innovative, Forward-looking and Strengthened Regulation

The global financial crisis brought to fore the need to appropriately strengthen market regulation. To ensure stability, a robust regulation should be pre-emptive not reactionary. Central to this is the control of high risk approaches to trade. An example is the margin trading that could have been curtailed early; and which, in another dimension, increased the exposure of the DMBs.

6.2.2 Enhanced and Proactive Supervision

This involves closer supervision of the various institutions in the market, including the operators as well as the quoted companies. Clamping down on companies whose stock prices appreciate without corresponding fundamentals in operational performance could be, firstly by a written warning to the Management of the institution, and eventually by way of suspension from the market - if default continues.

6.2.4 Modified Legal Framework

To protect the domestic financial system, and engender some level of immunity to future international crisis, the legal framework for capital in- and outflow needs a review. Understandably though, the modifications should not serve to constrain foreign flows unduly, or place the Nigerian economy at a competitive disadvantage in the global arena.

6.2.4 Advocacy for Domestic Drivers of Growth

A quick fix solution to initiate recovery is strong advocacy of local institutional investors, through confidence building and assurances that the stock market will rebound, first by looking inwards to the domestic economy. In the current dispensation, the importance of domestic drivers of growth cannot be over-emphasized. Without a return to the market, and boost in domestic mobilization to support investment and market growth, it will not regenerate and foreign investors will not be attracted. The capital market regulatory authorities need to speedily stimulate, revitalize and boost local investor confidence.

6.2.5 Call for Greater Transparency in Presenting Accounts by Quoted Companies and Public Enlightenment on Fundamentals

The need for heavy sanctions on both external and internal auditors that misrepresent the position of quoted companies, in the bid make them attractive, cannot be over-emphasized.

Onus then rests with the supervisory, regulatory and policy making organs, and other stakeholders to adequately enlighten the Nigerian public on proper capital market investment decision making. There is need to stall the band-wagon effect in stock acquisition and entrench objective and sound selection criteria. Rather than mere following superficial price movements, the investor should seek to examine the fundamentals underlying the movements.

7.0 SUMMARY AND CONCLUSION

The current global financial crisis that emanated from the US sub-prime mortgage bubble bust is the worst global downturn since the 1930s, bringing turmoil to world's financial sectors the Nigerian stock market inclusive. With the inter-dependency of the financial markets, albeit to varying degrees, though the Nigerian market has made tremendous progress to strengthen in recent years, especially with its internationalization, it could not have remained completely immune to the exogenous shocks. In view of the important role of the market to the country's economic development, the contagion effects cannot be ignored. Even if they could not have been completely averted, there could have been in-built mechanisms to mitigate and dampen the severity.

The paper gave credence to recent policy responses to curb the downturn. Notwithstanding, additional areas of focus should include, but not be limited to innovative, forward-looking and strengthened regulation; enhanced and proactive supervision; modified legal framework; advocacy for domestic drivers of growth; as well as call for greater transparency in presenting accounts by quoted companies; and public enlightenment on fundamentals.

Expectedly, owing to empirically proven cyclical patterns of economic development, there will be future crisis. However, the contagion effect on economies will depend on preparedness. Fundamentally, to curtail severe contagion is to improve on the macroeconomic policy environment. This is critical to influencing the performance of the capital market in general and the stock market, in particular. The time to commence is now, and in anticipation that the winds of current global financial crisis will subside sooner than later.

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APPENDIX

A. 1: Selected Stock Market Indicators (2007 - 2008)

Period	Number of Deals	Volume of Stocks (Billion)	Value of Stocks (N'Billion)	Market Capitalization (N'Billion)	All Share Index
Jan-07	192,629	5.6	86.1	5,874.3	36,784.5
Feb-07	193,629	9.2	112.2	5,510.2	40,730.7
Mar-07	213,346	11.4	133.4	6,150.0	43,456.0
Apr-07	155,570	11.8	139.7	7,764.3	47,124.0
May-07	207,608	12.5	196.6	7,383.1	49,930.2
Jun-07	246,967	13.5	194.2	7,817.9	51,330.5
Jul-07	247,087	12.5	102.5	8,262.7	53,021.7
Aug-07	275,090	13.3	163.0	7,200.0	50,291.1
Sep-07	275,090	13.4	162.7	7,819.7	50,291.1
Oct-07	214,071	10.1	152.0	8,047.4	50,201.8
Nov-07	256,892	18.0	165.6	8,990.8	54,189.9
Dec-07	256,892	9.6	164.6	10,292.9	57,990.2
Jan-08	349,443	20.1	283.0	10,692.7	58,570.6
Feb-08	475,716	27.7	213.3	12,503.2	65,652.4
Mar-08	376,548	18.6	193.9	12,125.9	54,189.9
Apr-08	394,307	16.4	160.7	11,618.0	59,440.9
May-08	356,909	16.8	133.0	11,614.5	58,929.0
Jun-08	330,332	19.8	149.5	10,920.3	55,949.0
Jul-08	357,000	19.9	190.8	10,640.6	53,110.9
Aug-08	249,937	17.4	170.0	9,744.5	47,789.2
Sep-08	197,213	10.7	134.4	9,836.9	46,216.1
Oct-08	118,364	5.9	139.7	7,969.1	36,325.9
Nov-08	188,544	8.0	166.8	7,305.9	33,025.8
Dec-08	136,932	9.7	44.3	6,957.5	31,450.8

Source: Nigerian Stock Exchange

A. 2: Growth in Selected Stock Market Indicators (%) (2007 - 2008)

Period	Number of Deals	Volume of Stocks	Value of Stocks	Market Capitalization	All Share Index
Feb-07	0.519	64.286	30.314	(6.199)	10.728
Mar-07	10.183	23.913	18.895	11.612	6.691
Apr-07	(27.081)	3.509	4.723	26.249	8.441
May-07	33.450	6.247	40.761	(4.910)	5.955
Jun-07	18.958	7.680	(1.242)	5.890	2.804
Jul-07	0.049	(7.407)	(47.219)	5.690	3.295
Aug-07	11.333	6.400	59.024	(12.861)	(5.150)
Sep-07	0.000	0.752	(0.184)	8.607	0.000
Oct-07	(22.182)	(24.996)	(6.593)	2.912	(0.178)
Nov-07	20.003	79.189	8.988	11.723	7.944
Dec-07	0.000	(46.751)	(0.623)	14.483	7.013
Jan-08	36.027	109.072	71.932	3.884	1.001
Feb-08	36.136	48.130	(24.629)	16.932	12.091
Mar-08	(20.846)	(37.374)	(9.095)	(3.018)	(17.459)
Apr-08	4.716	(11.828)	(17.122)	(4.189)	9.690
May-08	(9.484)	2.439	(17.268)	(0.030)	(0.861)
Jun-08	(7.446)	17.857	12.448	(5.977)	(5.057)
Jul-08	8.073	0.505	27.625	(2.561)	(5.073)
Aug-08	(29.990)	(12.563)	(10.901)	(8.422)	(10.020)
Sep-08	(21.095)	(38.787)	(20.955)	0.948	(3.292)
Oct-08	(39.982)	(45.066)	3.973	(18.988)	(21.400)
Nov-08	59.292	36.264	19.408	(8.322)	(9.085)
Dec-08	(27.374)	21.471	(73.452)	(4.769)	(4.769)

Source: Computed from Data from the Nigerian Stock Exchange

A.3: Capital Importation for Portfolio Investment (2008)

Period	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08
Amount (US$"M)	436.98	190.07	264.97	190.15	160.38	107.00	165.23	240.01	111.53	157.55	133.12
Growth (%)	1230.30	(56.50)	39.40	(28.24)	(15.66)	(33.28)	54.41	45.26	(53.53)	41.26	(15.50)

Source: Trade and Exchange Department, Central Bank of Nigeria

Central Bank Communication And Monetary Policy- The Case Of The Central Bank Of Nigeria

BY Mrs. E. N. Egbuna, Ph. D

Abstract

The importance of concise communication in monetary policy making cannot be over emphasised. A good communication of policy definitely strengthens the institutional independence of central banks and enhances the effectiveness of monetary policy. However, no one single method could fit all when it comes to designing good communication strategies because central banks face different constraints as they try to fine-tune their messages. With current reforms and financial liberalization, there is added impetus for increased communication between the Central Bank of Nigeria (CBN), market operators, stakeholders and the public in general. Monetary policy needs to be explained and well understood for the purpose of transparency and accountability.

1.0 Introduction

Communication is an integral part and a veritable tool for the implementation of modern day monetary policy. In the last few decades, central banking practice and the act of monetary policy has been evolving. In order to ensure openness in the monetary policymaking exercise, communication has become a veritable tool in highlighting the core mandate of central banks, especially in the areas of ensuring low and stable inflation. In terms of recent communication efforts, the Central Bank of Nigeria (CBN) is certainly in the right direction, although there is still room for improvement. This is because, the current reforms and financial liberalization has added impetus for increased communication between the Bank and all its stakeholders. In fact, effective communication has become a vital tool in the implementation of monetary policy for two main reasons. First, experience has shown that communication improves the effectiveness of monetary policy or, put another way, monetary policy is most effective when it is effectively communicated; and secondly, communication helps central banks to be more transparent and accountable.

Like all public policies, monetary policy benefits from increased public awareness and support. This translates into what can best be known as “legitimacy of policy.” Through proper explanation of why some policies are introduced and certain actions are taken, central banks stand to gain more public support for what they are doing. When such confidence is established, greater expectations and trust tend to underscore good policymaking and favourable outcomes. In order words, with the clear recognition and appreciation of central banks objectives, agents in the economyconsumers, investors, businesses, financial market participants, and other stakeholders begin to adjust their behaviour in line with the expectation that future inflation will be relatively under controlled. Consequently, price, wage, and financial decisions will tend to be consistent with the targets. Thus, the net effect will be a more stable macroeconomic environment and greater success in keeping inflation low and stable.

Proper communication allows for a two way flow of information. In that case, to whom, should a central bank communicate? Two audiences seem critical. The central bank needs first of all to communicate with the broad public and its political stakeholders. This is because the virtues of central bank independence and price stability may not be self evident to the body politic. The central bank must constantly make the case that its job matters and that it is doing that job properly. To do so, it must address the concerns of ordinary citizens. This broad audience is best reached through the mass media, e.g. television and newspapers. What should this audience hear? The central bank needs to communicate its basic objectives, strategies for achieving them and its successes or challenges as well as failures with very good reasons. Consistency over time is crucial if public understanding is to be developed. The central banks' second audience is the financial markets. This is because monetary policy is transmitted through the markets to the rest of the economy. Thus the effectiveness of the policy will be greatly enhanced by open and clear communication between the central bank and the markets. Given that most of the treasury securities for the transmission of monetary policy have maturities that exceed the purview of the central bank, good communication should be able to identify the implications for longer period. To that end, the central bank needs to enlighten the market operators to think and process information as it does. This implies sharing with the market the broad objectives of the Bank's strategy, and even the tactical details. This is because the modern goal is to be so predictable that monetary policy decisions normally ratify market expectations- expectations that the central bank itself has managed successfully. According to King (2000), 'transparency should lead to policy being predictable. Hence a successful central bank should be boring. Therefore, the old communications principle, “Repeat, Repeat, Repeat,” has become more appropriate because through its communication, the Bank is providing the opportunity for public critique of its economic analysis, by economists, financial market players, journalists and reporters, politicians, and the public more broadly. This is constructive since engaging the public in issues are important for broadening awareness and understanding of monetary policy.

The main objective of this paper is to examine current CBN's communication practices and challenges as well as highlight the need to be proactive in planning a communication policy for the Bank. The question is: Is the Bank doing enough in terms of its communication policy and contemporary central banking practice?.

The rest of this paper is organized as follows. Section 2 discusses the literature in central bank communication, while Section 3 reviews monetary policy in Nigeria as well as the CBN's communication channels and challenges faced. Section 4 highlights various elements of communication in practice by other central banks, and communication challenges are in Section 5. Finally, Section 6 proffers policy options and concludes the paper drawing largely from lesson of experiences.

2. A Review of Literature

The empirical literature on central bank communication is still in its infancy, but has been growing rapidly recently. However, there is a general consensus that communication is a powerful tool to further strengthen and move financial markets. Blinder (1998) and Bernanke (2004) emphasized the importance for communication as a means for central banks to influence asset prices in the financial markets, provided that the central bank has acquired a credible reputation. In that respect, communication is an important tool for the effectiveness of monetary policy implementation (Buiter 1999, Eijffinger and Hoeberichts 2004, Issing 2005). It is important that communication attempts to influence the expectations of economic agents, such that the desired reaction of longer-term interest rates is achieved.

In principle, communication can in parts even substitute policy action. Demiralp and Jorda (2004) provide evidence that by announcing changes in the intended federal funds rate since 1994, it was possible for the Federal Reserve to move the federal funds rate with a smaller volume of open market operations, which indicates clearly that increased transparency and more communication can indeed be beneficial for the efficiency of policy implementation. Moving one step further, there might even be an effect on financial markets if the central bank communicates its views about the intended level of asset prices and signals its intention to make the necessary adjustments in policy rates if asset prices deviate from this target, a policy that has frequently been labeled “open-mouth operations” (Guthrie and Wright 2000, Thornton 2004).

On the other hand, several authors have argued that there might be a trade-off in that more communication need not always be optimal. King (2000) argues that a central bank should be highly transparent about its monetary policy reaction function and its target. Beyond that, however, a central bank should refrain from “creating” news instead, news should entirely arise from information about the development of the economy. The central bank also faces a trade-off when giving a lot of information induces not more but less clarity and common understanding among market participants, as there are limits to how much information can be digested effectively (Kahnemann 2003, Winkler 2000). The trade-off might become even more pronounced if the central bank communicates about issues on which it receives noisy signals itself, such as the revolution of the economy (as opposed to, e.g., its intentions regarding upcoming interest rate decisions). Amato, Morris and Shin (2002) argue that such communication can co-ordinate the actions of financial market participants away from fundamentals, in the sense that they attach too much weight to the central bank's views, not taking into account that they reflect a noisy signal. On the other hand, Svensson (2005) suggests that such an outcome is rather unlikely under plausible ranges for the model's parameter values. In sum, however, it is clear that transparency is not an end in itself but merely a means to help the authority achieve its mandate (Issing 1999, Mishkin 2004). Guthrie and Wright (2000) reported this to be true for the Reserve Bank of New Zealand, Kohn and Sack (2004) for the Federal Reserve, and Reeves and Sawicki (2005) for the Bank of England.

Beyond its importance in normal times, communication has been highlighted as a particularly effective tool under the zero lower bound, i.e. when nominal interest rates are close or equal to zero (Bernanke, Reinhart and Sack 2004, Woodford 2005). There is even evidence that it is an indication about the future path of policy that moves financial markets (Ehrmann and Fratzscher 2005a, Gürkaynak, Sack and Swanson 2005).

Finally, some authors have analyzed the *content* of central bank communication. Gerlach (2004) develops a quantitative indicator from the assessment of inflation, economic activity and M3 growth in the editorial of the ECB's Monthly Bulletins, and finds that this indicator can explain interest-rate setting of the ECB. In a similar fashion, Rosa and Verga (2005) and Heinemann and Ullrich (2005) analyze the content of the ECB's introductory statements to the press conference following Governing Council meetings. They constructed indicators for the monetary policy stance of the ECB based on the words used in the statements, and showed that the indicators can explain interest-rate setting, although they serve as substitutes, not as complements to macroeconomic variables in Taylor-type rules.

3.0 Monetary policy at the

Central Bank of Nigeria

The Central Bank of Nigeria has adopted various monetary policy regimes since its inception in 1959. The different monetary policy regimes that were adopted include: the Exchange rate targeting regime; (1959 1973), Monetary Targeting Regime 1974 to present; Direct Monetary Control 1974 - 1992 and Indirect Monetary Control 1993 to present. These policy regimes have been on short term basis (annual) between 1959 and 2001. However, in 2002, the medium term perspective monetary policy framework was introduced mainly to address the lag in which monetary policy affect the ultimate objective in the short-term. This framework is aimed at freeing monetary policy from the problem of time inconsistency and minimizing over-reaction due to temporary shocks. This new monetary policy framework, which is still in operation, is based on the evidence that monetary policy actions affect the ultimate objectives with a substantial lag.

Under the framework, monetary policy guidelines are open to half-yearly review in the light of developments in monetary and financial market conditions in order to achieve medium to long term goals. The main objectives of monetary policy since then have been to achieve a low and stable inflation as well as maintain a stable exchange rate of the naira. There is also the need for a more competitive financial sector geared towards improving the payments system. The open market operations (OMO) has continued to be the primary tool of monetary policy, and is complemented by reserve requirements, discount window operations, foreign exchange market intervention and movement of public sector deposits in and out of DMBs.

In order to achieve its objective the CBN, has the responsibility of formulating and implementing monetary policy, as well as of deciding on matters pertaining to the conduct of monetary policy, to the Monetary Policy Committee (MPC). The MPC comprises the Governor (Chairman), the 4 deputy Governors, six departmental Directors, two external board members, one member appointed by the Ministry of Finance and the Secretary. The Committee, which used to convene every quarter, now convenes on a bi-monthly basis with effect from January 2007. The secretariat for the MPC at the CBN has also gone through a number of modifications over time. From being an ancillary function of the Research and Statistics Department to the recent creation of a full fledged department in 2005.

3.1 CBN Communication Channels

In its effort to clarify all aspects of its monetary policy, the CBN has overtime, established various communication channels with the public and market participants. Immediately after the MPC meeting the Governor holds a press conference in which he gives an introductory speech on the decision reached and the rationale behind it. This press conference includes a question and answer session, which is attended by various media representatives, and provides the platform for a timely explanation of the decisions. At the press briefing, the media also has the opportunity to ask questions about broader economic issues that are of importance to the public. Following the press conference a policy decision announcement is then posted on the CBN intranet. As soon as this is done, transcripts of the press conference become available on the website.

The detailed minutes of the MPC are not published. Although some central banks, such as the Bank of England, release their minutes to the public, the CBN follows the practice of the ECB by not making the minutes available for public consumption. In recent times, the MPC report provides a comprehensive analysis of the domestic and international economy. In particular, the report consists of the following five major sections: (a) international developments and exchange rates, (b) monetary developments, (c) inflation, (d) the domestic economy and (e) external transactions.

As part of its communication channel, the CBN is also statutorily obliged to publish an annual report on its activities during the previous year. Moreover, the law requires that the Governor should submit as the need arises, a report on past and current year developments both to the President and the National Assembly. The Governor may also be asked by different house committees to testify on subjects pertinent to monetary policy and the economy as a whole. Annually, the CBN organizes an annual conference of financial correspondents and the Governor meets with them during which the Bank's practices and views about a wide range of economic issues are examined and explained.

The Governor and the Bank's senior staff also constitute an important vehicle for explaining the views of the CBN to the public. They are often invited to give speeches or take part in panel discussions which are usually open to the public on subjects that include monetary and exchange rate policy, etc. The CBN also gives presentations to groups of students and experts who are always welcome to visit the Bank.

The Bank brings out a number of *ad-hoc* publications, which contain a wealth of useful information on national and international issues. Information on various facets of Nigerian economy is disseminated through the CBN publications, such as, Monthly Economic Report, Public Education Series, Handbook of Research Methodology, Statistical Bulletin, CBN Bullion, CBN Briefs, Economic and Financial Review and Occasional paper series. These publications contain valuable information useful to researchers and to the general public at large. The CBN also brings out special publications and monographs from time to time dealing with issues such as the problems of agricultural finance, micro finance etc which have a unique place in the economic information system in the country. There is also a document known as the Monetary and Credit Guideline, which used to be issued every year and is an important source of background information, especially for practitioners in the banking sector and the judiciary as well as the academia.

4. Communication in practice by some other central banks

It is now a known fact that central banks are now generally more open about most aspects of monetary policy. A remarkable change towards greater transparency has occurred in the past decade regarding central banks' objectives, policy instruments, decision-making procedures and policy decisions. The developments of inflation targeting frameworks in particular have improved the standards of communication strategies. Inflation targeting involves more than just the announcement of a numerical inflation objective. A significant feature of the regime is the communication structures put in place. This has opened a multitude of issues for policy makers to consider with regards to their overall communication strategies. Objectives and instrument targets have been announced; interest rate decisions are explained in a range of fora; and there is greater recognition of the interaction between the tactics of monetary policy and communication policies.

Before the advent of formal inflation targeting regimes, the ultimate goals of monetary policy were rarely specified explicitly. While secondary stabilization goals are normally not formulated precisely, the primary goal of low and stable inflation is now clearly enshrined in numerical point targets and ranges. The United States and Japan are two notable exceptions. Even the ECB felt compelled to provide the public with a numerical definition of its price stability objective. A publicly announced numerical target for inflation, if credible and feasible, can be an extremely powerful anchor for coordinating expectations. However, the confusion generated by the ECB's two-pillar monetary framework serves as a partial warning of the dangers in releasing numerical guidelines for policy. In some countries, such as the United Kingdom, an official explanation of the circumstances surrounding a breach of the inflation target must be provided either to the government or the public. Even in those countries not obliged to do so, the central bank is often eager to explain the reasons for target misses in order to help preserve its credibility. However, such explanations themselves become an important part of public knowledge.

In most countries reviewed except the United States and Australia, policy decisions are explained in press conferences and speeches. In fact, minutes are published by most of them, though with some delay after the end of the MPC meetings.

More generally, the views of the central bank are elaborated upon in monthly or quarterly periodicals, such as the Bank of England's Inflation Report or the ECB's Monthly Bulletin. Technical descriptions of its knowledge of the economy are sometimes dispensed in working papers. Central banks perhaps reach the widest audience through the popular press. Developing relationships with members of the press may be crucial in ensuring that an undistorted picture of the central bank's views is given a proper airing. But care must be taken by the central bank in explaining its past actions relative to past events in order to avoid introducing greater noise into the pool of current public knowledge. The problems involved are in order of magnitude, especially when the views of a committee of independent members are to be explained. The revelation of disagreements among committee members may confuse the markets, causing more harm than good; this view is shared by ECB and CBN who do not reveal precise voting results.

A more sensitive issue concerns the release of numerical forecasts of macroeconomic variables or indications of the future stance of monetary policy. Forecasts typically assume constant policy rates over the forecast horizon. But this assumption is unrealistic in most situations: both policy makers and economic agents alike often have good reason to expect that policy rates will be changed during the period of concern. This makes the interpretation of such forecasts more difficult than may appear at first. Alternatively, the Reserve Bank of New Zealand has published projections with an endogenous path for policy. While this approach is arguably more consistent internally, it ensues from the possibility that agents do not fully appreciate that projections are made conditional on the data at hand. In the end, more confusion may arise when policy rates inevitably depart from a path projected previously, not to mention the potential for damage to the central bank's credibility. All the same, central banks do provide indications of their views of future economic conditions and the future stance of policy. For instance, one device used by the Federal Reserve is to announce a “bias” along with a decision on the target for the federal funds rate. The bias provides a qualitative indication of the perceived risks to the economic outlook, and hence the more likely future course of monetary policy actions.

A brief summary of current communication practices is given in Table 1. At the cost of some generalization, practices can be broadly divided into means to improve the effectiveness of monetary policy and means to enhance central bank accountability. The former category can be further broken down between communication on policy decisions and on the central bank's assessment of economic conditions. As is evident from the table, there is considerable uniformity across central banks on certain elements of strategies aimed at making monetary policy decisions more transparent; For example, the adoption of explicit short-term targets for instruments and the public announcement of policy decisions (eg press releases). In addition, most central banks now regularly publish detailed descriptions of their views on the current and prospective state of the economy. However, there is less agreement on the detail and timing of explanations of policy decisions. For instance, not all central banks publish the minutes of policy meetings, and the lags in publication vary for those that do.

Table 1: Summary of Current Communication Practices

	US	ECB	JAPAN	UK	NEW ZEL	AUSTRALIA	
Accountability:							
Quantitative inflation							
Objectives[1]	No	Yes	No	Yes	Yes	Yes	Yes
Report to Legislature[2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Policy Decisions:							
Decision announced							
immediately	Yes	Yes	Yes	Yes	Yes	Yes	Not always
Press conferences	No	Yes	Yes	No	Yes	No	Not always
Press releases	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minutes published[3]	Yes	No	Yes	Yes	.	No	No
Precise voting result							
published	Yes	No	Yes	Yes	.	No	No
Economic assessments							
report on monetary policy	H[4]	M	M	Q	Q	Q	Bi-monthly
Forecasts released	H	H	H	Q	Q	Q	No
Quantitative risk							
assessments	No	No	No	Yes	No	No	No

LU = Australia; UK = United Kingdom; JP = Japan; NZ = New Zealand; ; US = United States. M = monthly; Q = quarterly; H = half-yearly.

[illegible]

Australia: target range for medium-term average inflation.

2 United States: reports/testimony to Congress; ECB: reports/testimony to EU bodies; Japan: reports/testimony to Parliament; United Kingdom: reports to Treasury Committee; Nigeria: Report/testimony to the House of Assembly ew Zealand: reports to/hearings in legislature; Australia: reports to Parliament/testimony to House of Representatives Committee;

3 Publication lag: United States (five to eight weeks); Japan (one month); United Kingdom (13 days); Sweden (two weeks).

4 The Monetary Policy Report is provided semiannually; the Beige Book is published eight times a year.

Source: Various Central Banks

its policy rate target, which provided a signal of what deviations from target might be likely during the inter-meeting period. Its full meaning, however, was not well understood in financial markets. Consequently, in February 2000, the statement on bias was replaced by the "balance of risks" statement. This was meant to indicate the FOMC's view of likely outcomes for inflation and output over a horizon beyond the subsequent policy meeting. Moreover, wishing to keep its statement brief, the Committee has had to choose its words carefully in order to best express its views. Their experiences have shown that even slight modifications in the balance of risks statement can cause a large, and sometimes unwanted, reaction in the markets. A longer statement, with greater emphasis on the conditions under which certain policy actions would be taken, might seem the obvious alternative but would necessarily delay its release to the public at the conclusion of an FOMC meeting. Moreover, it might unduly raise the sensitivity of markets to unfolding economic developments.

Secondly, while striving to be clear and predictable during normal circumstances, central banks might not find it feasible, or desirable, to describe all possible contingencies and what they might do in response. This is partly because of the impossibility of knowing the precise nature of events until they occur and partly due to concerns that the discussion of extreme contingencies might unduly influence the public and ruin financial markets. In addition, the difficulties may reflect the reality that the public may be unwilling or unable to fully digest complex analyses and a substantial amount of policy information.

5. Communication Challenges

There are practical constraints on central bank communication strategies. These involves a situation where central banks might want in principle to release more information, there might be good for not to do so.

The first challenge is the fact that apart from the obvious inappropriate release of proprietary information, which could have a chilling effect on the future flow of such information to policymakers, improving communication is not costless. Clear communication requires time, money and central bank resources. Subjected to a serious cost-benefit analysis, releasing certain types of information might simply prove to be wasteful.

In addition, deliberations in policy meetings benefit greatly from full and frank discussions, which could be adversely affected by too much openness, such as broadcasting meetings or releasing complete transcripts as soon as would be possible. Similarly, enhanced transparency regarding policy deliberations, voting records and so on might induce the media to dramatise differences in opinion amongst policymakers, which in turn could politicise internal monetary policy discussions. All these concerns suggest that central banks must carefully consider what information they provide.

Another important issue is how the central bank can best get its intended message across clearly to the public that is mostly economic illiterate. There are several reasons why this is so challenging. First, language may be imprecise and subject to various interpretations, especially when policymakers feel the need to be concise. Consider, for example, the recent changes in the FOMC's post-meeting press release. Starting in mid-1999, the Committee indicated a "bias", along with

Finally, because a focal point of communication strategies is credibility, an ironic question arises: can central banks appear to be too credible? A central bank may face a “winner's curse” problem: if it is too credible, the public may place more weight on its pronouncements than the central bank intended. This problem might be particularly relevant when policymakers make comments on low-probability outcomes, which the public then blows out of proportion. In such an environment, providing too much information may end up adversely affecting the central bank's credibility. Similarly, if the markets simply accept the central bank's assessment of how policy should evolve in the future, the two-way communication referred to above could become seriously compromised.

The pay-offs to better communication are potentially significant but, if history is a reliable guide, attaining such gains will most likely involve careful and prudent efforts rather than quick fixes.

6. Policy Options and Conclusion

6.1 Policy Options

History has shown that central banks strive for continuous improvement in their communication strategies. They also learn from the efforts of their peers, as has been evident in the trend towards the use of inflation targeting frameworks by many central banks around the world. The CBN is still fine-tuning policies and steps towards transiting to inflation targeting as its monetary policy framework. Therefore, discovering new communication modalities, as well as refining existing strategies, remains integral to future progress.

Consequently, *there are some options the* CBN would have to pursue now and in the period ahead.

v The level of *economic illiteracy* in the Nigeria at large is a particular problem for the CBN as in other developing countries. Thus, the Bank would have to embark on massive campaigns and sensitization programmes geared towards educating the Nigerian public generally about economic policies but especially on monetary policy issues. The language/dialects of the various ethnic groups should be the medium of communication. The target audience is Nigerians in the market places, schools at all level, and National Youth corp camps, National and State House of Assemblies and Nigerians in Diaspora etc.

- The Bank should actively promote economic education through a variety of publications and activities for schools in Nigeria. These could include an annual Monetary Policy Challenge for secondary school economics students, in which teams compete to produce simulated monetary policy advice.
- Internal *communication is equally as i*mportant with external communications, and various challenges arise in this connection. To this end, the newly established Monetary policy Department should carry out regular sensitization exercise to all the CBN branches. External communication is widely delegated among staff, which therefore needs to be well informed on what they communicate. But at the same time, there is need for clarity about who the central bank's spokesperson is, who is responsible for which information releases especially on sensitive issues, and on when staff are speaking for themselves and not the institution, for example on their research work.
- It is also necessary to have an economic calendar for the effective conduct of monetary policy which is the primary role of the CBN. Unlike fiscal policy and other economic policy formulation processes, monetary policy requires up-to-date and detailed information for effective formulation. Therefore, it would be expedient for the CBN to lead a process whereby information for decision making is regular and as much as possible available.
- Economic calendars present a detailed schedule for obtaining these indicators, thereby giving economic managers room to plan as data is made available when due.
- Finally, c*redibility* is an attribute needed by the CBN, and establishing it is a challenge when there is a recent history of inflation being on the increase and no central bank can establish or maintain credibility through communications alone. It is what you do, much more than what you say, that is important in this regard. Therefore, the Bank should intensify its developmental efforts like the Agricultural Credit Guarantee Scheme, Micro Finance Scheme, and the SMIESS, which are all poverty eradication efforts.

6.2 Conclusion

In conclusion, our concern is that one way the CBN can help stabilize the economy for growth is by reducing the expectations of uncertainty about its monetary polices framework and actions. It was not uncommon in the past for CBN to see a strategic advantage in withholding some information about decision, intentions and actions. This was largely predicated on the view that monetary policy actions could be more effective if they were not anticipated by the public. In recent times, this view is clearly becoming obsolete given the amount of reforms and liberalization. It has become imperative that CBN should ensure wider dissemination of information, clarity and buy-in by all economic agents. Furthermore, timely and relevant information is vital for efficient policy making and stabilizing expectations in an emerging economy like ours.

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Electronic Banking In Nigeria: Problems And Prospects From The Consumer's Perspective

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Abstract:
This paper explores the adoption of electronic banking [e-banking] in Nigeria. It examines the problems and prospects of e-banking in Nigeria from the consumer's perspective. The research findings show that a number of problems ranging from human, operational and technical constraints hinder the maximum utilization of services provided through e-banking channels in Nigeria. However, the results from the study have also revealed that despite these problems, the rate of adoption of e-banking services in Nigeria is phenomenal as banks have recorded outstanding successes in some areas. Nigeria is a consuming nation and based on the experience from other sectors of the economy that over depend on foreign technologies , [e.g energy sector], sustainability of the successes recorded is threatened considering the huge cost of acquisition and of replacing ageing infrastructures such as the ATM machines and the poor maintenance culture prevalent in all organizations in the country.
Keywords: Electronic-banking, Problem, Prospects, Nigeria.

[1.0] Introduction:

Electronic-banking, (e-banking) refers to services provided by banks using Information and Communication Technologies [ICT]. Thus, e-banking involves computer-based systems used to perform financial transactions electronically. It allows bank customers to pay money from one account to another, pay bills, and transfer funds using recognised electronic channels, among others. E-banking represents a variety of financial services performed through electronic devices, including withdrawals and deposits using Automated Teller Machines [ATMs], Automated Bill Payment [ABP], Electronic Fund Transfer [EFT] and Personal Computer [PC] banking [Kolodinsky, Hogarth and Hilgert,2004]. Other types of e-banking include telephone banking and On-line-real-time banking services which is being operated now by almost all the banks in Nigeria. On-line-real-time technology gives individual bank "a one branch status" since customers can operate their accounts from any branch of the bank irrespective of where the account was opened and domiciled.

A number of transaction types may be performed using e-banking channels. These include withdrawal and deposit as with the ATM, inter-account transfer which involves the transfer of funds between linked accounts belonging to the same account holder; inter-bank e-payment in which money can be paid from one account in one bank to another account in another bank. Examples include NIBSS Electronic Funds Transfer [NEFT], inquiry or request for recent transaction statement, placing order for cheque book requisition and administrative issues involving non-financial transactions such as changing a Personal Identification Number [PIN].

The objective of this paper is to explore the adoption of e-banking in Nigeria with respect to the associated problems and prospects. The paper is divided into six sections. Following this introduction is section 2 which reviewed related literature on e-banking. Section 3 is an overview of e-banking in Nigeria while section 4 analyses the problems militating against e-banking adoption in Nigeria. Section 5 x-rays the prospects of e-banking in Nigeria, while section 6 gives the summary, conclusion and recommendation.

[2.0] Review of Related Literatures.

As earlier stated, electronic-banking is systems that enable the customers of banks transact banking businesses electronically using the Internet, ATM, mobile phones and point of sale [POS] devices. From theoretical and empirical literatures, e-banking are essentially about banks using the infrastructures of the digital age to create opportunities, transfer funds and also make payments locally and internationally. By way of definition Gbede,[2003:43] posits that e-banking is the use of computers and automated machines for carrying out banking services. Umoren,[2006:314] argued that "in its beginning, in the second half of the 20th century, e-banking was basically about funds transfers and inquiry. It has grown, especially in the last two decades to become the deployment of some or all operations of a Banking Service Provider {BSP] electronically".

One of the e-banking products common to most consumers is the Electronic Fund Transfer [EFT]. According to Macdonald and Koch [2006:272], EFT is an electronic movement of financial data designed to eliminate the paper instruments normally associated with such funds movement'. EFT transactions are carried out by various methods and channels, including Automated Teller Machines [ATMs], Automated Clearing House [ACH], Point of Sales [POS] devices, Short Message Services [SMS], Mobile phone, among others.

Obviously, the adoption of e-banking services in Nigeria is still evolving. Efforts are being made by banks to improve on services and many have recorded huge successes in e-banking development. The Nigeria Deposit Insurance Corporation [NDIC] 2004 annual report stated as follows: "To further improve the efficiency of the payment system, the Central Bank of Nigeria [CBN] had issued the broad guidelines on electronic-banking. The guidelines indicated that e-banking practice would continue to be promoted in line with international practice".

E-banking products and operations are customer focussed. Basically, it is aimed at satisfying the banking needs and desire of the consumer, such as cashing paltry sums of money for domestic purposes, to conclude business transactions efficiently at the shortest possible time, and to make quick money transfers. Accordingly, analysts and bankers are unanimous in their views that a lot more attention need to be focussed on customers, the consumers of the various e-banking operations to know what they need and how they want these needs delivered. Thus, despite the wide spread acceptance of e-banking in Nigeria, there are numerous challenges that restrain consumers from maximum utilization and thus satisfaction. These are challenges encountered in their adoption ranging from human impairment, operational faults to technical hitches. The American Banker [2000] reported that "one-third of consumers who signed up for e-banking had stopped using it due to unsatisfactory customer service or the complexity of using the services. While consumers may be willing to adopt e-banking technologies, they also want assurance that problems will be resolved". We enumerate below some of the challenges that militate against e-banking adoption in Nigeria.

[3.0] Electronic-banking in Nigeria: An Overview.

The adoption of electronic-banking in Nigeria started in the 1980s and was popularised by the advent of banks that were christened "new generation" banks. The founding of Diamond bank Plc with On-line-real-time "interconnectivity" facility popularised e-payment nationwide. This awakened new dimensions to competition among banks and consequently banks embraced e-payment options to stem up competition. Besides, the innovation e-banking brought enabled banks to display their products on their websites.

Electronic banking has gained acceptance in Nigeria on a rather rapid rate. According to Akpan, [2008] 'the adoption of e-payment processes actually started with the introduction of Magnetic Ink Recognition Character [MICR] cheques'. This was followed by the introduction of Automated Teller Machines [ATMs] for cash dispensing, account balance inquiry and payment of utilities in the early 1990s. The use of payment cards [smartcard] was introduced by the Central Bank of Nigeria [CBN] in 1993 and in August 2003, the Bank issued a broad guideline on e-banking in Nigeria. According to Umoren [2006:316], the CBN guideline identified the recognised e-banking operators, agents, products and channels. Specifically, banks and other financial institutions were identified as operators; Internet Service Providers [ISPs], Switch and Electronic Fund Transfer [EFT] messages companies were identified as e-banking agents, while card products, electronic funds transfers [EFT], E-bill presentation and Digital cash were identified as e-banking products and mobile phones, ATMs, website [Internet] and Point of Sales [POS] devices were identified as e-banking channels. For effective inter bank operations, the launching of Inter-switch by a consortium of banks in 2004 was a delight to consumers. Thus, the Nigerian Inter-Bank Settlement System [NIBSS] introduced the NIBSS Electronic Fund Transfers [NEFT] in 2004 as a boost to e-banking operations in Nigeria.

Central Bank of Nigeria Economic Report for the first half of 2008 [CBN 2008] summed the adoption of e-banking in Nigeria this way: 'the rise in the use of electronic payments was sustained in the first half of 2008, reflecting the aggressive marketing strategy of the banks and increased public awareness. Available data on various e-payment channels indicated that the Automated Teller Machine [ATM] remained the most patronised, accounting for 87.00 percent of the total e-banking operations, while Point of Sales [POS] terminals was the least with 2.50 percent".

Table 1 below summarises in percentage the value and volume of electronic payment for the first half of 2008 in Nigeria.

Table 1: Percentage value and volume of e-payments

	Channel of Transactions	Percent[%]
Volume Terms	ATM	87.00
	Mobile	7.30
	Web [Internet]	3.20
	POS	2.50
Value Terms	ATM	90.80
	Web [Internet]	4.80
	POS	4.30
	Mobile	0.10

Source: CBN Economic Report for the first half of 2008; P26.

The Real Time Gross Settlement [RTGS] system of e-banking allows the handling of large value payment for inter-bank operations. This system eliminates the risks involved in large value payments. The CBN had deployed the RTGS since 2006 for its operations.

[4.0] Analysis of Problems militating against e-banking adoption in Nigeria

The problems militating against e-banking in Nigeria may be classified as Human, Operational and Technical constraints.

[A] HUMAN CONSTRAINTS

Human constraints vary with different consumers. While a good proportion of Nigerian bank customers may be illiterate, i.e have learning impairment, others may be physically disabled and another group may be impaired as a result of age. E-banking delivery channels such as the Mobile phone, Website [Internet] and the ATM are operated by the consumers themselves. Consumers with *hearing impairment* may require visual representation of auditory information that a website may provide in order to understand such information, particularly now that the use of multimedia such as video streaming on websites have increased. Besides, consumers with hearing impairments cannot locate or identify command or control that requiring listening to menu items before pressing the button as we have in voice-based interactive mobile phones.

Also, partial blindness is a common problem in less developed countries such as Nigeria. Using e-banking delivery channels such as ATM, Mobile phones and the Internet by *partially sighted* consumers poses serious problems. Selecting the right card from the purse and inserting it correctly into the ATM machine constitutes a problem. Websites using graphics accessed by text-based browser may not be meaningful to the partially sighted consumers. Similarly, modern handsets are of miniature sizes and so are their keypads and the visual display screens. Using telephone for e-banking can provide problems for consumers with visual impairment who may find the tiny handset inaccessible.

Consumers with *physical disabilities* operating on-line through the Internet may find it hard or have difficulties controlling their hands and arms. Holding and manipulating a mouse effectively to use banking website or to hold and activate mobile phone buttons may pose problems for such consumers

Besides, wide-spread functional illiteracy is a chronic problem for the adoption of e-banking in Nigeria. Complex banking websites with numerous steps and messages, reading text messages on the mobile phones, among others, are obvious threats to consumers with cognitive or learning impairments. Complex page layouts, tables or navigation structures and blinking text messages may be distracting and misunderstood by illiterate consumers. Besides, illiterate consumers have problems remembering too many PINs, particularly when not put in use frequently. Reading and understanding displayed ATM messages also constitute a major hindrance for consumers with cognitive or learning impairment.

Further more, as a human phenomenon, elderly people experience changes in hearing, mental dexterity, agility and vision, although as these changes occur gradually with age, they may not consider themselves to have disabilities or impairments. These diminishing abilities reduce their capabilities in accessing the website effectively or using other e-banking channels such as the ATM or Mobile phone. Mobility difficulties is also associated with age, thus it could be a problem for the elderly consumers to effectively use the mouse or visit and operate the ATM. Age related hearing impairments, or reading small screens or key boards of miniature mobile phones may also constitute a range of difficulties for the elderly consumers using mobile phone channel.

[B] OPERATIONAL CONSTRAINTS

These relate to problems emanating from e-banking operations and they include security, frauds and standardization of channels.

The issue of security with respect to e-banking operations is of utmost importance particularly now that financial crimes are at their peak. Hackers locally referred to as “Yahoo boys” are at their best such that local e-banking consumers and even consumers in foreign countries are falling prey to their antics. Mobile phone banking which involves transmission of financial information over the air offers the most complicated challenges that need to be addressed jointly by mobile application developers and banks information technology department. Consequently, the need for the encryption of the data being transmitted over the air and other security measures such as instituting ID/Password or the authentication of the e-banking device being used with the service provider cannot be over-emphasized.

Security issues are major source of concern for e-banking Consumers and Banking Service Providers [BSP] alike because e-banking increases security risks, potentially exposing isolated systems to open and risky environments.

In addition, consumers of e-banking have perceived Internet banking, Mobile banking and the ATM as too vulnerable and prone to fraud. It is believed that the security measures taken by most banks are not adequate and safe particularly for consumers that are careless, gullible or lack computer operational knowledge. For instance, occasion abound where an account holder was craftily persuaded and cajoled by hackers to hand over his account number and while attempting to draw money to claim a fraudulent 'promo' using the ATM, the balance in his account was automatically transferred to an unknown account else where. For some consumers, their biggest risk or problem with respect to e-banking is information overload and not understanding who they are dealing with and on what terms. This certainly makes a consumer vulnerable to scams and frauds.

Moreover, either as a result of underdeveloped Information and Communication Technologies [ICT], poor infrastructures or poor management of personnel, the inability of e-banking channels to function properly constitutes a major problem to consumers. There are instances where consistent network failures have made inquiry or transactions impossible. Also, there are instances where ATM machines have refused to dispense fund, cease or destroy the card. The situation is worst when the personnel on hand manning the machine lack the skills to resolve or explain the problem immediately. Where ATM could not dispense funds and the customer's account is debited, getting refund, particularly for an inter-bank transaction takes at least two weeks which is unacceptable to most consumers who desire urgent use of their funds. Tiresias.org [online], highlights some of the problems encountered on the websites as follows:

- Ø Inconsistent navigation and page layouts.
- Ø Bank orientated language that is not explained.
- Ø Poor feedback when using interactive tools and forms.
- Ø Inability to save an application and complete it at a later date.

Proven high quality software and software professionals are thus necessary for effective e-banking operations and this the Nigerian system lacks.

[C] TECHNICAL CONSTRAINTS

A major problem confronting the adoption of e-banking in Nigeria is lack of necessary supporting infrastructures, notably electricity and effective telecommunication. The erratic nature of power supply is a major source of problem for both Banking Service Providers [BSPs] and consumers.

Interoperability constitutes a problem for e-banking operations. Mobile banking protocols, for instance XML, HTML, WAP et cetera, are being used. A common and widely acceptable set of protocol could be developed for mobile banking applications that connect to many banks for the enhancement of data exchange.

Another area of concern that often prompts problems is the lack of encryption of the data being transmitted over the air on mobile phones services. Thus, banks that use it have limited the scope of the SMS banking services rendered via the mobile telephone. Other major problems militating against the adoption of e-banking are the high cost of acquiring the various forms of foreign technologies involved and the high cost of maintenance or replacement of aging or obsolete infrastructure.

[5.0] Prospects of e-banking in Nigeria

Despite the numerous problems enumerated above that threaten the adoption of e-banking in Nigeria, indicators from the banking sector have shown that prospects of advancement of the process remain viable. From research findings, e-banking has received widespread acceptance, particularly among the younger generation who find it very convenient visiting an ATM for quick cash rather than queuing up for same as it was in the old dispensation. Research findings have also shown that the growth of e-banking has been astronomical and that the prospects for further growth in the near future are bright. Analysts predict it will grow by roughly 150.0 per cent annually over the next four years'. This assertion was supported by Akpan, [2008], who argued that “in the last one year, the number of cards issued industry-wide increased by 200.0 per cent from four million to twelve million cards, the number of ATMs increased by 133.3 per cent from 1500 units to 3500 units, while over 4000 additional POS terminals were deployed across the country in 2007 alone.

Central Bank of Nigeria Economic report for the first half of 2008, [CBN, 2008], was positive with respect to the growth of e-banking operations in Nigeria. Analysis from the apex bank economic report revealed that there was a substantial growth in volume and value for some of the e-banking channels already in operation. The rapid growth of e-banking in Nigeria are attributable to the convenience, compatibility, risk tolerance, safety of funds and the simplicity in the usage of e-banking channels.

[6.0] Summary, Conclusions and Recommendations

Electronic banking is a computer-based innovation adopted by the banking industry to enhance service delivery. It involves the use of ICT and refers to payments; fund transfers and other banking services carried out electronically via the Internet, ATM, mobile phones and point of sale devices.

Fundamentally, this paper has explored the adoption of e-banking in Nigeria with respect to the associated problems and prospects from the consumer's point of view. The research findings suggest that the problems confronting e-banking in Nigeria can be classified into three basic categories, namely, human, operational and technical constraints. Under human constraints, we discussed the problems confronting consumers such as physical disabilities, poor sight, illiteracy, and problems associated with ageing. In operational constraints we discussed problems such as security of funds transferred, frauds and standardization of channels, while technical constraint was centred on the lack of supporting infrastructures such as electricity, interoperability and lack of encryption on SMS messages.

The paper also shows that the adoption of e-banking in Nigeria has witnessed a tremendous success particularly in the past one year. The growth of e-banking has been phenomenal. Most banks have embraced the internet banking option which enable them display their products and services on the website. E-banking has proved to be a welcome innovation in the Nigerian banking industry for a number of reasons namely convenience, compatibility, simplicity of channels which are user friendly, risk tolerance and safety. The advent of e-banking in Nigeria has been seen by some analysts as the pathway to economic viability of the nation and growth of the banking industry in particular. It is a move towards the attainment of international banking standard, particularly with the recapitalization of the banks. From the consumer point of view, the overwhelming problems of poor supporting infrastructures such as electricity, operational deficiencies, huge cost of acquisition and maintenance, poor maintenance habit, total dependence on diverse foreign technologies and human disabilities, threaten continuous viability of e-banking operations and devices already put in place.

From the foregoing we conclude that e-banking services in Nigeria have started well with a phenomenal growth rate and efficiency level and have growth prospects in the economy. However, it is recommended that the numerous problems confronting e-banking operations cannot be jettisoned or ignored as the present success can only be improved upon to ensure continuous consumer's satisfaction.

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Investing Africa's External Reserves In Africa: Issues, Challenges And Prospects

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Abstract

This paper essentially explores how to invest African reserves on the continent. The paper underlined the challenges and opportunities for managing Africa's external reserves by Africans after identifying several pre-conditions for an African currency to emerge as international currency and noted that these conditions have not yet crystallized in Africa. Although African external reserves have grown over time the benefits of such growth in terms of facilitation of domestic financial markets and even the earning are not commensurate with the reserves growth rate. The non-convertibility of African currencies, volatile macroeconomic and sometimes volatile political environment coupled with the shallowness of the domestic markets are the main challenges that are faced by the continent. However, with recapitalization of the African financial institutions especially banks and the attainment of stable polity in both economic and political fronts, there is hope for the continent's institutions to take their rightful place in the emerging global financial system by first using the African resources as the first step. The involvement of creditable African financial institutions in the management of the reserves either within or outside Africa will in no small measure strengthen the development of the African financial system but also ensure that a bulk of African resources work for Africa as the difference between what the current fund managers paid to the African central banks and what they actually get as commission or profits will be retained explicitly or implicitly in Africa. Africa's financial systems have been deepening and broadening over the past years, the result not only of improvements in the macroeconomic and institutional framework, but also of the worldwide liquidity glut, which directed more capital flows into Africa. The current global crisis threatens to reverse this trend and undermine recent progress. In these adverse circumstances, it is even more important to upgrade the necessary frameworks for sound, efficient, and inclusive financial systems. This call for further institution building as well as cautious and case-by-case government intervention to aid financial market participants expand financial services to the frontier of commercially sustainable possibilities.

JEL Classification: C19, C22 C59, E45
Keywords: External Reserves, International Reserves Currency, Financial Markets

Introduction

Over the last few years, there has been considerable build up of foreign exchange reserves by some central banks of developing economies including some African countries, particularly in the aftermath of the East Asian crisis of the late 1990s. Foreign exchange reserves held by developing countries have risen from 56.9 percent of global reserves to over 62.0 percent between 2000 and 2007. The growth in the international reserves of African countries is striking when compared with the contemporaneous trends in reserves in industrial countries. Whereas reserves in a group of industrial countries as a percentage of world reserves declined from 43.0 per cent in 2000 to 37.8per cent in 2007, that of African countries increased from 3.8 per cent to 6.3 per cent during the same period. The recent global financial crisis has brought to the fore the danger of concentrating external reserves investment in a particular currency and/or country.

Much of Africa's external reserves accumulation was accounted for by the oil producing African countries. However, the increase in the world price of non-oil commodities also contributed to reserves accumulation by other countries. The buildup in reserves is seen as insurance against the increased volatility of capital flows associated with financial globalization.

In general, official foreign exchange reserves are held to meet a battery of objectives including, safeguarding the external value of the domestic currency, limiting the vulnerability arising from external shocks, providing a level of confidence to markets; and assisting the government in meeting its foreign exchange needs and external debt obligations.

Table 1 : International Reserves (%)

	2000	2003	2006	2007
Africa / Developing Countries	6.68	6.70	10.91	10.11
Africa / World	3.80	4.07	6.06	6.29
Developed Countries/ World	43.04	39.27	44.48	37.77
Developing Countries / World	56.96	60.73	55.52	62.23

Source: IMF/IFS Tables

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To effectively implement these objectives, the external reserves of countries are expected to be managed optimally.

By their dealings in the financial markets, reserve managers gain access to important information that keep policy makers informed of market developments including potential threats. The importance of appropriate practices has also been underscored by experiences where fragile or risky reserve management practices have restricted the ability of the authorities to respond efficiently to financial crises, which may have heightened the harshness of the crises.

Weak or risky reserve management can also have major financial costs. A few countries, have sustained large losses that translate into colossal fiscal consequences. Accordingly, appropriate portfolio management policies concerning the currency composition, choice of investment instruments, and acceptable duration of the reserves portfolio, which reflect a country's specific policy settings and circumstances, serve to ensure that assets are safeguarded, readily available and support market confidence (IMF, 2003).

Incidentally, most of the world reserves are held in the internationally traded currencies. None of the African currencies is currently serving as a reserves currency. This development implies that the continent's external reserves are entirely invested outside of the continent. This is a classical element of what Lawrence Summers calls the *capital flows paradox* as capital is flowing upstream from less developed African countries toward the industrialized countries, mainly the United States. However, a pertinent question to ask is: what are the impediments that militate against African countries investing their external reserves in the continent? This paper seeks to underline the challenges and opportunities of investing Africa's external reserves in Africa.

The remaining part of the paper is arranged thus: Part II dwells on conceptual and theoretical issues. Part III adumbrates the challenges confronting African countries with respect to investing foreign reserves in Africa. Part IV examines the way forward. Part V contains the summary, recommendations and the concluding remarks.

II. Conceptual/Theoretical Issues

Foreign exchange reserves are defined as external stock of assets, which are available to the country's monetary authorities to cover external payment imbalances or to influence the exchange rate of the domestic currency through intervention in foreign exchange market, or for other purposes (IMF, 2000). A country's reserve consists of gold, foreign currencies, Special Drawing Rights (SDR) and the reserve position with the International Monetary Fund (IMF).

Previously under the Bretton-Woods system, the foreign exchange reserves were utilized by central banks to maintain the external value of their respective currencies under the then fixed exchange regime. However, following the break down of Bretton-Woods system in the early 1970s, countries started adopting relatively flexible exchange rate regimes, under which the reserves assumed a less important role.

International currency reserves have largely been viewed as inventory held against an uncertain future in the balance of payment accounts. The uncertainty is largely due to the status of the current account, where adequacy level is adjudged by the size of trade flow. This reasoning is derived from the fact that international trade historically accounts for the largest factor in the balance of payments. Consequently, to assess levels of reserves, the first benchmark ideally should be the reserves to imports (R/M) ratio. The (R/M) ratio of a country is the number of months of normal imports capable of being financed by its international currency reserves. IMF (1958) indicated that, in general, countries achieve an annual (R/M) Ratio of between 30.0 and 50.0 percent. Admittedly, this minimum benchmark figure has been a matter of debate. However a three to four months worth of import consensus has emerged over the years (Fischer, 2001).

Frenkel and Jovanovic (1981) developed a solution for optimal reserve levels using the (R/M) ratio approach. They incorporated interest rates, an allowance for trend movement governing international payments and receipts, and the mean rate of net payments. The demand for reserves is a function of benefits in the form of smooth external transactions (trade) and a negative function of the opportunity cost (forgone earnings) of holding them. However, their assumption for interest rate as a measure of forgone earnings may not be appropriate; thus the approach described by the authors is merely indicative.

Economic theory postulates that reserve holdings will rise in tandem with economic size. Similarly, a high ratio of import to GDP, high trade to GDP, and high current account deficit to GDP may lead to current account vulnerability and this may in turn induce high reserve demand. In the same vein, a high ratio of capital account deficit to GDP, high short-term debt to GDP, and high broad money to GDP could be associated with higher capital account vulnerability and this may lead to a demand for reserve holdings. Greater exchange rate flexibility would reduce the demand for reserves because central banks no longer need a large stock of reserves to manage a pegged exchange rate. Also, a higher opportunity cost is expected to lead to a reduction in reserve holdings because alternative investments become comparatively attractive.

Clark (1970) developed a theoretical relationship between demand for reserves and cost of adjustment in the economy. He noted that the benefit of reserve holdings is simply the avoidance of the cost of adjustments. Reserves help to pursue domestic policy goals in the face of temporary deterioration in the Balance of Payments (BoP). The disturbance in BoP is either financed from reserves or eliminated by adjustments within the economy through appropriate government policies. He opined that the two policies implied different cost to the country. For instance, if a country holds a higher level of reserves as buffer, the domestic investment will be low and there will be a reduction of income. If a country prefers a high speed of adjustment due to low reserves, this will lead to high variability in income. Consequently, the preferred position is to maximize the welfare of a country by deriving an optimum combination of level of reserve and the rate of speed of adjustment.

The IMF (2003) examined the demand for foreign exchange reserves in emerging economies in the 1980s and 1990s. The results reveal that more than 90.0 per cent of variation in reserves is explained by economic size, current account vulnerability, capital account vulnerability, exchange rate flexibility and opportunity cost.

Frenkel and Jovanovic (1981) provide an approach where international currency reserve demand depends on the marginal propensity to import, a change in the balance of payments and the opportunity cost of holding the reserves. Even in this arrangement, there has been a difference of opinion on the assumed relationship of the reserve demand function and tendency to import. A negative relationship is expected as currency reserves are built by import policies including reduction in aggregate expenditure.

Frenkel (1978) argues that a high (low) import-GDP ratio reflects a high (low) openness of an economy which reflects vulnerability to external shock by presenting evidence on the stability of the demand. The demand for reserves by developed countries differs from that of less-developed countries. Consequently, a positive relationship is expected between reserve demand and propensity to import.

Ben-Bassat and Gottlieb (1992) take a different perspective by taking into account sovereign risk in their model for optimal international currency reserves and find the variable in their risk premium equations significant. The cost and probability of levels of reserves can be related to the default of external debt. Countries with default on external debt incur a higher borrowing cost; hence the level of international currency reserves depends on the credibility rating of the country.

A sudden drain on a country's reserves may hurt creditor's confidence regarding the borrowing countries ability to meet its payment obligations. Once a lender losses confidence in the borrowing government, it will be unable to restore assurances about the stability of its reserves which are likely to decrease rapidly. The rate at which the reserves deplete may further hurt the confidence in the borrowing country. However, for most developed countries which usually have a lower default risk rating, need for a large safety net is unjustified since they can borrow in world capital market as requirement arises (Flood and Marion, 2001).

An alternative view on reserve accumulation is that it is the by-product of a government strategy to keep the international value of the domestic currency low in order to boost export growth. In this view purchases of foreign reserves are not motivated by a desire to smooth consumption in the face of external shocks, but rather they are the unintended consequence of sterilized interventions in the foreign exchange market. Fatum and Hutchison (2003) explore the efficacy of sterilized intervention policy. In the traditional portfolio balance model sterilized intervention can only be effective if domestic and foreign assets are imperfect substitutes and Ricardian equivalence holds.

There have been a number of recent empirical studies attempting to measure whether the precautionary or mercantilist motive better explains foreign reserve accumulations by both industrialized and developing countries. These studies generally find evidence in support of both motivations, while at the same time finding that neither motivation fully explains the recent upsurge in reserve accumulations by developing countries (Jeanne, 2007).

However, a notable exception is a study by Obstfeld, Shambaugh and Taylor (2007) which suggests that if reserve adequacy is gauged against the size of the banking sector, the recent reserves accumulation in emerging markets is less puzzling. The rationale for reserve accumulation, typically labeled the mercantilist motive, has been advanced by Dooley, Folkerts-Landau and Garber (2003) as a description of the development strategy followed by many East Asian countries, particularly China.

The literature has identified five major factors that could facilitate the emergence of a currency as an international currency and by extension, a reserve currency. These include **large economic size, well-developed financial system, confidence in the currency's value, and political stability** (Chinn and Frankel, 2005).

Reserves currencies are typically linked with large, competitive economies, mainly those with extensive trade and financial ties. Such an economy will usually generate a large market in foreign exchange transactions with at least one strut in its own currency. Large market size has a tendency to effect lower transaction costs, reflecting *economies of scale* in financial resource management. That is, while large costs may be associated with installing the essential software, hardware, trading, and clearing systems, when installed, these investments can accommodate many more transactions without incurring additional cost. Consequently, marginal costs are negligible and average costs drop with scale, bringing about lower transaction costs.

International currencies which might also serve as a reserve currencies are generally linked with open, liquid, and well-developed financial systems. When sterling was the dominant international currency in the 19th and early 20th centuries, London was the world's superlative financial market. Presently, the dollar is backed by the deep, liquid, and well-diversified financial markets in New York. A well-developed financial system enhances the attractiveness of the domestic currency. It provides deep and liquid secondary markets for securities to global market participants; who do not usually hold their international money in the form of currency balances, but as alternative need liquid, interest-bearing assets of a short-term risk-free instrument, to hold their temporary positions.

Cooper (1997) notes that the liquid secondary markets allow participants to quickly build up or liquidate large positions in the currency without dread of capital loss. A well-developed financial system offers a wide range of subsidiary services proficiently to international market participants, who may want to borrow or invest in the domestic currency, or hedge their foreign currency positions. Greenspan (2001) opines that a well-developed financial system is more apt to attract business from abroad, where financial markets may be less developed or barriers to efficiency exist. This possibility makes it cheaper for market participants to borrow or invest abroad in an international currency and then exchange the proceeds for domestic currency, rather than conduct the transactions domestically.

International currencies (reserves currencies) are also held as stores of value, such as the short-term instruments noted above, working balances, and international bonds, etc. Consequently, an international currency must be perceived as sound, with stable future value in terms of goods and services it can command. Volatility in value raises holding risk, and inflation obliterates purchasing power. The prevalence of these elements would discourage investors from holding assets in that currency. Friedman (1971) noted that no exchange medium can survive if it is not also a store of value (although the converse does not necessarily hold). Confidence in a currency's value is also imperative indirectly for its medium-of-exchange function. However, noted by (Hartmann, 1998), since investors seek to curtail risk through diversification, an array of international currencies is likely to coexist as stores of value at any one time. Indeed, contemporary portfolio theory advocates that efficient portfolios are likely to be diversified over several currencies.

Political stability is specially underscored by most economists. For instance, Mundell (1998) observes that *when a state collapses, the currency goes up in smoke*. He underpinned the strong chronological link between international currencies and strong central states, because strength implies political stability, which also facilitates the pursuit of monetary stability. In the same way, Bordo (2003) and Dwyer and Lothian (2003) indicate that national monetary unions, where monetary integration is tied to political union, have historically been stable (e.g. the United States). On the other hand, international monetary unions, where monetary integration is not tied to political union, have historically failed (e.g. the Scandinavian Monetary Union). The reason is that shocks may affect each national member differently and give rise to pressures that weaken the political will to maintain the union.

Net externalities, a trend associated with international currencies whereby a good or service becomes more valuable as more people use it has been identified as one of the factors that facilitates the emergence of a currency as an international currency and by extension a reserve currency. Varian (2003) summarizes three features of net externalities. Network externalities are efficiencies because they increase average revenue (or demand) with scale, in contrast to the technical or supply-side economics, which decrease average cost with scale.

Many network goods also exhibit supply-side returns to scale, making the positive feedback extremely strong. That is, more sales lead to lower unit costs (supply side) and greater appeal to customers (demand side). Strong positive feedback is likely to drive the network good to market dominance; and once dominance has been achieved, it becomes extremely difficult to unseat it. Applying this concept to the currency implies that a currency becomes more useful if more people are using it. The larger the dollar's network of users, the more attractive the dollar becomes to a user. The demand-side economies derive from the currency's increased liquidity, which results because a larger network implies more potential counteroffers for a trade, thus enhancing the probability of a favorable match and quick sale. The increased liquidity then induces even more people to join the network, resulting in a self-reinforcing cycle.

Krugman (1984) indicates that an expanding network and market size reduces average cost with scale. In addition, large market size tends to reduce the average waiting time between matching buy/sell orders, allowing market-making banks to carry smaller (costly) inventories of currency, which also reduces cost.

III.0 Challenges of Investing African Countries' Reserves in Africa

Before discussing the challenges faced by the African countries in investing reserves in the continent. It is germane to examine briefly the nuances that have aided the American dollars as the reserve currency over time. The dollar has maintained the role of international reserves currency over the years, despite substantial fluctuations in its exchange value, because the size, sophistication, and relative stability of the US economy generally render the costs of transacting in US dollars lower than the costs of transacting in currencies that do not equally share these characteristics.

In large part, the widespread use of the dollar developed and continued because the US has been the largest, most broad-based exporter and importer in the world. With a lot of Americans trading globally, a lot of dollars naturally change hands. Because traders must finance a large portion of their business in US dollars, they maintain accounts, seek loans, and undertake myriad other financial arrangements in dollars.

A strong and open US financial system facilitates the dollar's international use. While a high degree of feedback naturally exists between the dollar's expanding role in trade and the growth of an accommodating financial structure, US financial markets have always been innovative and relatively free of cumbersome regulations. Their breadth and depth enhances the liquidity of dollar-denominated assets. Moreover, as dollar trade expands and US financial markets grow, more and more foreign financial firms, including those not located in the US, offer dollar-denominated products. This makes holding dollars convenient and transacting in dollars relatively easy. As the global network for dollars expands, the benefits of using the dollar in exchange rise. The process is self-reinforcing. Moreover, once the network benefits of a particular currency become substantial, people are prone to continue using it, even if viable competitor exists.

Since the peak in the US dollar's effective exchange rate in early 2002, the global stock of foreign exchange reserves has continued to grow rapidly. Between 2001 and 2005, official international reserves doubled, compared with cumulative global trade growth of two thirds and global nominal GDP growth of two fifths. Some of this expansion presumably reflects central banks' conscious decision to accumulate precautionary reserves, particularly in the case of those countries that were affected by the Asian financial crisis of 1997-98. But there can be little doubt that most of the recent accumulation of official international reserves has resulted from purchases of dollars to limit the appreciation of the currencies of a number of countries. From this perspective, central bank reserve accumulation has been more an instrument than a goal of national monetary and financial policy.

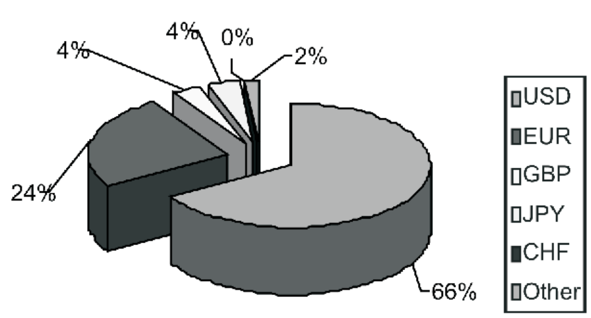
In the management of foreign reserves, two policy issues arise. The first is their allocation by currency; the second is their allocation across instruments. The currency allocation of global foreign exchange reserves has remained relatively stable over the past few decades, while the instrument allocation has changed significantly.

Heller and Knight (1978) found that in 1975 dollar share in foreign reserves was 80.0 per cent. Available data as at 2007 put this share at about two thirds. Indeed, this ratio has shown intriguing stability over time. On the average, countries tend to hold 66.0 per cent of their foreign-exchange reserves in dollars ... independently of their trading patterns and exchange arrangements. In other words, the modest decline of dollar holdings from 80.0 per cent of central bank reserves to 66.0 per cent over 32 years may reflect the simple fact that fewer countries formally peg to the dollar than was the case in the mid-1970s, and that their trading pattern is less focused on dollar area countries.

All in all, it appears that the two thirds share has held up remarkably despite a net decline over the past thirty three years of some 16.0 per cent in the value of the dollar against a weighted basket of other major currencies and its secular declines of 24.0 per cent and 44.0 per cent against the euro and the yen, respectively.

This remarkable persistence and resilience of the dollar as a reserve currency reflects several factors, including the liquidity of US financial markets and network externalities that lead to inertia in the use of vehicle currencies. Support has also come from

Figure 1:Currency composition of official foreign exchange reserves end 2007 in percentage of total



the sustained share of global output produced by countries that we can think of as being part of a broadly defined dollar zone in the sense that their currencies tend to move in tandem with the dollar. Today, most of the currencies of the Middle East and Asia fluctuate less against the dollar than against the euro or yen.

In contrast, the allocation of foreign reserves by instrument has changed markedly. A cursory perusal on official foreign exchange reserves held in US dollars indicates that since the 1960s the proportion held in US Treasury securities has declined significantly. Today, probably less than half of central banks' US dollar reserves are invested in US Treasuries.

These holdings have declined in favour of investments in other US sovereign, semi-sovereign and Agency paper, as well as US private (mortgage and corporate) bonds. US corporate equities also attract a surprisingly large amount of official investment, reflecting placements by central bank and other public long-term investment funds and central bank in-house pension funds. In addition, central bank reserve managers have extended the duration of their portfolios, and now hold most of their dollars in long-term instruments.

Perhaps a prefatory point of departure in assessing the challenges confronting African countries in the investment/management of their external reserves in the continent is a brief appraisal of the African financial system.

African financial systems are small, both in absolute and relative terms. In addition, Africa's financial systems are characterized by very limited outreach, with less than one in five households having access to any formal banking service (World Bank, 2007). Banking is inefficient and expensive in Africa, as reflected by high interest spreads and margins and high overhead costs. Banking is also very expensive for deposit customers, as reflected by very high minimum balance requirements and annual fees in many African countries (Beck et al. 2008). High documentation requirements to open an account that is, the need to present several documents of identification also represent significant barriers given that large parts of the population live and work in the informal sector. Similarly, physical access is limited, as the low bank branch and ATM penetration numbers for Africa illustrate.

However, standard indicators of financial intermediary development, such as the ratios of liquid liabilities to GDP, bank deposits to GDP, and private credit to GDP have shown financial deepening in most African countries in recent years. As credit has been growing faster than deposits in most countries, financial intermediation, that is, the extent to which banks intermediate society's savings into private credit, has also increased,

Table 2

Instrument composition of identified US dollar reserves at end- June 2008 in billions of US dollars

	Short term	Long term	Total
Treasury securities	205	1,054	1,259
Other assets	695	604	1,299
Repos and deposits in the United States	155		
Commercial Paper and certificates of deposits in the United States	122		
Offshore deposits	418	42	
Agency Securities		324	
Corporate bonds		61	
Equities		177	
Total	900 (35.2%)	1,658 (64.8%)	2,558 (100%)
Memo:			
Share of Treasury securities in assets of the given maturity	*22.7%*	*63.6%*	*49.2%*
Total IMF - reported US dollar reserves at end June 2008			1,789

Note: Figures for US Treasury,agency and corporate bonds and equities are from US Treasury, Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, *Report on foreign portfolio holdings of U.S. securities as at June 30,2007* ,June 2008
Figures for deposits and money market paper in the United states are from BEA, International Transactions Table 4 (or the US *Treasury Bulletin* , TablesCM-I-2 and IFS-2
Figures for offshore US dollar deposits are from *BIS Quarterly Review*, Table 5c, and the Japanese SDD for June 2005. The US Treasury definition of foreign official institions, including "national government sponsored investment funds" (page 10), may be broader than those of the BIS and IMF

although from very low levels. Although not documented in a statistical sense, there seems to have been progress in expanding outreach as well.

African financial system is heterogeneous. Financial market structure and degree of development vary significantly across African countries. Three groups of countries can be identified on the basis of financial depth indicators and capital market development. *Promising markets*: South Africa, the only emerging market in the region, has a well-developed financial system with a full continuum of market segments that are interconnected and integrated with global markets. The financial system includes subsidiaries of foreign-owned banks and insurance companies; large domestic financial conglomerates, asset management firms, insurance companies, and pension funds, many with significant cross border operations in sub-Saharan Africa and other regions; and nonresident and institutional investors (pensions, insurance, hedge funds) that invest heavily in equities and debt markets. Sovereign and corporate debt issuers are active in both domestic and international markets, and may issue in South Africa's own currency in developed offshore markets.

Border market countries: This group consists of twelve countries (Botswana, Cape Verde, Mauritius, Namibia, and Seychelles, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda, and Zambia). Though they vary in their degree of financial development, the linkages between financial segments and with global markets are fewer than in emerging markets. Foreign investors have increasingly participated in local and debt markets. Financial products are evolving and gradually more sophisticated.

Underdeveloped markets: The other 31 sub-Saharan African countries have narrow financial sectors, in which most segments are underdeveloped, and few financial instruments. Access to global financial markets has been non-existent or severely limited; where capital markets exist, they lack depth and liquidity. Systemic and institutional constraints have also contributed to a low level of intermediation and limited availability of financing for productive investments.

African financial system is essentially dominated by commercial banks. Most of the banks in Sub-Saharan Africa rely on deposits to fund their loan portfolios (which they keep on their books to maturity); the interbank market is small;

Table 3: Africa: Indicators of Financial development 1990-2008

	Africa			Promising Markets			Border			Underdeveloped		
	1990-99	2000-04	2005-08	1990-99	2000-04	2005-08	1990-99	2000-04	2005-08	1990-99	2000-04	2005-08
Bank deposits/GDP	26.7	29.2	31.8	46.6	50.5	58.1	16.0	29.5	22.2	13.7	15.8	16.4
Private sector credit/GDP	27.4	29.4	33.8	55.6	63.5	72.1	11.1	14.0	18.4	10.9	9.8	10.5
M2/GDP	30.7	32.5	36.4	49.4	52.8	61.3	20.0	22.7	25.8	19.5	21.5	21.0
Liquid liabilities/GDP	16.1	18.1	22.4	28.7	33.0	43.5	10.2	12.4	14.2	6.9	8.4	8.5

Source: IMF, International Financial Statitics the market for securitized or derivative instruments is either small or non-existent, and few rely on foreign borrowing to fund their lending operations.

Preceding 1989, there were just eight stock markets in Africa. In 2009 there are nineteen stock exchanges. With the exception of South Africa, most African stock markets doubled their market capitalization between 1992 and 2002. Total market capitalization for African markets increased from US$113,423 million to US$ 364,672 million between 1992 and 2007. African stock markets are effectively small in size and illiquid, partly a reflection of the low level of economic activities. Thus, while the price-earnings ratios for many African stock markets were above their sectoral equivalents in developed markets in 2007, the ongoing global financial crisis act as a reminder that what goes up eventually must come down (Caprio and Kane, 2008).

Integration into international financial markets has been a second important and controversial aspect of financial-sector policy over the past decades. Although capital account restrictions are still in place in many countries of Sub-Saharan Africa, these are often more *de jure* than *de facto*. And while capital account liberalisation has many benefits, it has to be managed carefully on the macroeconomic level and accompanied with appropriate regulatory policies (Kose et al., 2009).

While there has been a focus on opening capital accounts toward developed countries, the potential of regional financial integration has been much less exploited, although there are large economies of scale to be reaped by cooperation in technical areas such as harmonizing approaches to bank regulation or payment systems (World Bank, 2007). Reducing, if not eliminating, intra-regional capital account restrictions can help overcome the scale problem for financing large projects, such as those in infrastructures. While reducing dependence on international capital markets to a certain degree, such intra-regional capital account liberalisation seems less risky than complete capital account liberalisation vis-à-vis international investors.

Having gone through the cycle of nationalizing and privatizing their banking systems, more than half of the African countries have banking market with either a dominant or a significant share of foreign-owned financial institutions. Foreign bank entry has several advantages that are specific to Africa: international banks can help foster governance, bring in much-needed technology and experience from other parts of the region, and help exploit scale economies in their small host economies. However, there are many factors that can prevent countries from reaping the potential benefits of foreign bank ownership, such as the presence of dominant government-owned banks that reduce competitive pressures or the small size of many financial markets in sub-Saharan African markets preventing the necessary competitive pressure to emerge. The result in many sub-Saharan African countries has been a concentration of both domestic and foreign banks' portfolios on government papers and international assets and shying away from private sector lending.

Nevertheless, the new wave of foreign bank entry after liberalisation in the 1990s has seen not only the return of old colonial banks but also some new important players, such as several South African banks, banks from non-African regions other than Europe, and several regional banks, such as the Bank of Africa, Zenith Bank, Access Bank, United Bank of Africa and Ecobank. Many of these new entrants have put a much higher weight on sustainable outreach, introducing new products and technologies.

Banks in Africa have not been known for their innovative and liberal banking practices. Most banks are extremely conservative and traditionally invested in government securities and fixed assets. However, in recent times, real private sector credit, in particular, has been

Figure 2: Africa Reserves as percentage of World Reserves

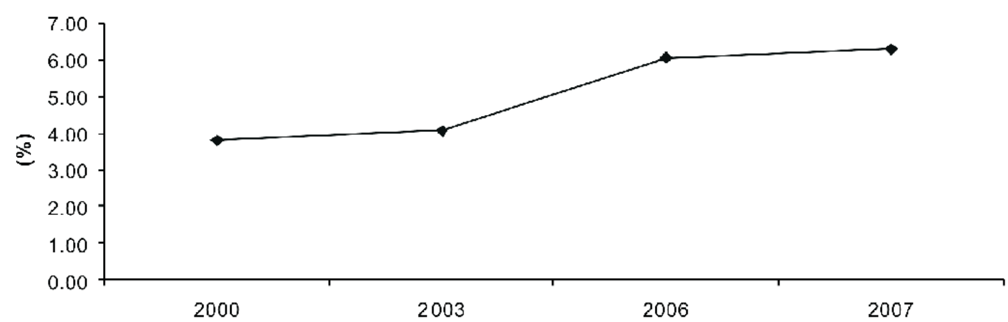
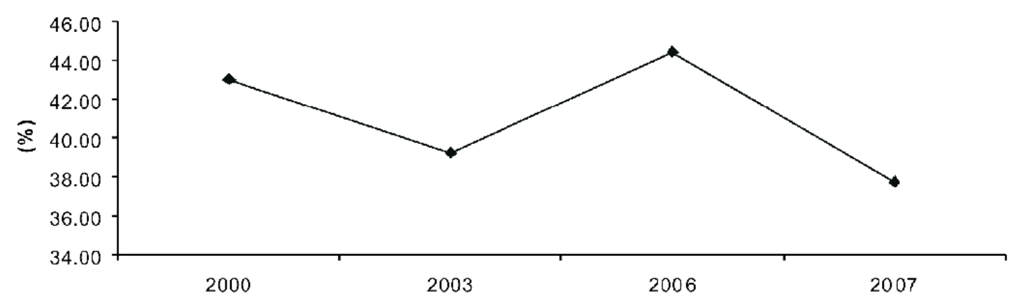


Figure 3: Developed Countries Reserves as percentage of World Reserves



growing at an accelerating rate, and its median value has doubled in the past decade. Even as a share of GDP, it has turned the corner, with the median share approaching 18.0 percent in 2007, about a third higher than at its anemic trough in 1996. Much of this increase was on the back of innovative non-collateralized lending practices (Geithner, 2007).

The reserves of small African central banks are growing because of debt relief, foreign aid, and other external inflows. And while these reserves may be small in absolute terms, the foreign currency reserves may be huge relative to the economy. How they are managed is of crucial importance. It has not been uncommon, for some central banks to place as much as 50.0 per cent of their total reserves with external fund managers on account of their own lack of skills in reserve management. Following the recent global financial crisis, at least one African central bank has indicated that it has suffered not negligible financial losses on account of investing in hitherto top rated financial institutions in developed economies.

If this type of loss is more widespread, it is likely to occur in central banks with no overall policy for managing the Central Bank's reserves in place; limited capacity to oversee their relationship with their fund managers and to monitor the market risks or capable information technology system for managing and monitoring the reserves portfolio. Overall, the present financial crisis has brought to the fore the need to have a defined strategy to manage African resources including the external reserves.

Table 4: International Reserves (US$ bn)

Rank	Country	Reserves (US$ Bn)	% of total Africa	Reserve/GDP (%)	Reserves/Imports (%)
1	Algeria	110.32	27.86	82.14	402.62
2	Libya	79.41	20.05	139.16	517.30
3	Nigeria	51.33	12.97	29.38	136.53
4	Egypt	30.19	7.62	22.71	74.58
5	South Africa	29.59	7.47	10.42	33.62
6	Morrocco	24.12	6.09	32.11	80.14
7	Angola	11.20	2.83	34.10	74.40
8	Botswana	9.79	2.47	84.76	235.33
9	Tunisia	7.85	1.98	22.27	41.32
10	Eq Guinea	3.85	0.97	36.98	119.44
11	Kenya	3.36	0.85	11.45	37.28
12	Cameroon	2.91	0.73	14.08	76.49
13	Tanzania	2.89	0.73	17.84	54.46
14	Ghana	2.84	0.72	19.34	35.15
15	Uganda	2.56	0.65	22.79	73.77
16	Cote d'Ivoire	2.52	0.64	12.00	41.30
17	Congo Rep	2.17	0.55	28.46	139.38
18	Mauritius	1.78	0.45	23.67	45.65
19	Senegal	1.66	0.42	14.14	39.06
20	Mozambique	1.44	0.36	19.11	47.68
21	Sudan	1.38	0.35	2.99	16.21
22	Gabon	1.23	0.31	10.86	55.78
23	Benin	1.21	0.31	24.78	108.94
24	Zambia	1.09	0.28	9.77	36.45
25	Mali	1.09	0.27	14.61	54.36
26	Burkina Fasso	1.03	0.26	14.50	60.54
27	Chad	0.96	0.24	13.45	63.67
28	Namibia	0.90	0.23	12.11	74.70 26.89
29	Madagascar	0.85	0.21	11.46	32.69
30	Swaziland	0.77	0.20	26.33	31.60
31	Niger	0.59	0.15	13.51	61.13
32	Rwanda	0.55	0.14	16.65	[illegible]
33	Togo	0.44	0.11	16.72	30.21
34	Cape Verde	0.28	0.07	19.66	37.49
35	Malawi	0.22	0.05	9.14	15.70
36	Sierra Leone	0.22	0.05	11.05	49.23
37	Mauritania	0.20	0.05	7.17	13.36
38	Congo DR	0.18	0.05	1.72	6.32
39	Burundi	0.18	0.04	18.76	55.10
40	Gambia	0.14	0.04	20.11	46.06
41	Djibouti	0.13	0.03	15.73	14.68
42	Liberia	0.12	0.03	16.35	1.67
43	Comoros	0.12	0.03	24.93	83.69
44	Guinea Bissau	0.11	0.03	6.84	102.63
45	CAR	0.08	0.02	5.01	35.91
46	Guinea	0.05	0.01	1.09	3.80
47	Seychelles	0.04	0.01	5.74	5.23
48	Sao Tome & Principe	0.04	0.01	28.09	5.39

Source: Wikipedia (2007).

The objectives and constraints of African central banks, like most other central banks in the developing countries are the optimal asset composition of foreign reserve portfolios. In principle the three main objectives (safety, liquidity and return) are usually trade-offs by the central banks in their reserve management decision. However, the overriding objective of securing monetary and financial stability overwhelmingly dictates the reserve management decision. Overall safety and liquidity are generally given prime consideration over returns. Definitely, it is specifically in the pursuit of this goal that central banks are normally exposed to very huge exchange rate risk.

To a large extent reserves management at the level of the central bank has political undertones. Thus, the domestic governance environment and the central bank's relationship with the government and the body politic play an important role. This is particularly so if higher volatility (that could bring about temporary losses) results from seeking higher returns, the central bank may come under closer public scrutiny including risk to its reputation. Furthermore, regulations for operational surplus remittances to the government may reinforce aversion to volatility.

Although individual country's policies differ widely, they tend to be asymmetric. In this regard, higher volatility of returns available for distribution increases the likelihood that central bank capital is eroded over time. This, in turn, may be perceived as undermining the central bank's budgetary and operational independence. Additionally, in some countries an advance estimate of the profit remittances to the government may need to be provided. Such a practice is also likely to constrain central banks from investing in riskier assets whose income flow cannot be forecasted with reasonable degree of certainty.

The first issue, and certainly the most obvious one even to the casual observer of central bank reserves management, is the current explosion in reserves asset growth. From a level of about $1.2 trillion at end 2000, total world international reserves exceed $2.9 trillion in 2008. Such a pace of reserves accumulation is unprecedented, and has generated considerable interest in recent times.

What is particularly evident is that the reserves accumulation is concentrated in really very few hands. Most of the growth is accounted for by less than ten major holders, mostly from Asia, and indeed no less than seven Asian central banks now have over $100 billion in reserves. And for the first time, the bulk of international reserves are held by developing / industrializing countries.

Several reasons have been put forward for this rapid growth in reserve assets. For some countries, especially in Asia, it signifies a desire to self-insure, following the experience of financial crisis in the late 1990s. Secondly, sequel to the attainment of the objective of rebuilding reserves, there has been a desire to maintain given exchange rates.

Finally, in the resource-rich countries, the unprecedented increases in the world commodity prices accounted for the increase, given that in many cases, domestic markets were unable to fully absorb the revenue streams. Many oil exporters especially find their domestic markets at risk of overheating and choose to keep a substantial proportion of their oil revenues abroad. In all an interesting development with regard to reserves accumulation is that in several countries it has moved from being a deliberate objective of policy to a by-product of other policies.

Consequently, some countries are confronted with the dilemma of when the continued increase in their reserves ceases to be an undeniable benefit and begin to pose its own challenges, including the sterilization of domestic credit expansion or the risks to the central bank's own balance sheet from such large unhedged positions. In other words, a growing number of central banks have had to mull two critical questions: how much reserves is adequate, and how much reserve is too much?

The next question that confronts central banks is how to invest their reserves. There are essentially two critical area of concern, first a reliance exclusively on traditional asset sectors such as money markets and short duration government bonds risks over-concentration in a limited number of securities, and second, as reserves levels grow and the need to keep the bulk of the assets fully liquid at all times diminishes, the opportunity arises to seek incremental revenue.

Admittedly, none of these concerns is completely new. And the solution that central banks have adopted: diversification into new asset classes in order both to reduce concentration risk and enhance return, has a protracted history. But the pace of the diversification and the range of new asset classes that central banks have invested in have increased considerably in recent times. In a recent survey of central banks, 80.0 per cent of those that responded said that they had added a wholly new asset class to their reserves portfolio in the last 24 months, and some of the new sectors that reserves managers have been studying and investing in include Mortgage-Backed Securities (MBS), Asset-Backed Securities (ABS), corporate bonds and Equities (BIS, 2008).

Given the increasing diversification of central bank reserves, several issues are emerging. The first is does the official sector have the required skills to manage increasingly diverse portfolios? Several countries have identified the need to establish a specialist investment agency to manage non-typical assets, though the exact location of the dividing line between what remains in the traditional central bank portfolio and what is hived off into the new investment portfolios is inconclusive. Other central banks prefer to keep all their assets in one place, but in recognition of the limits to their internal expertise they are increasingly willing to outsource the actual management of the assets to the private sector.

The second concern has to do with the classes of assets and their suitability. For instance, should some be considered unsuitable whatever their financial attractiveness in risk-return stipulations? Today the boundaries appear to be moving quite fast, as official sector asset managers are looking at asset classes that were considered hitherto to be outside their normal domain. It is, however, becoming increasingly obvious that the abstinence from holding obligations of another country's private sector no longer holds. One enthralling addition to the current debate is the use of public or national assets to buy other countries' private sector companies outright. It is increasingly the developing world which is seeking to purchase companies in the developed world.

Whatever the political concerns surrounding this issue, it could be argued that purely on a portfolio risk management basis, there are legitimate grounds for asset-rich countries to seek real assets in this way, not least to avoid the risk that official sector debtors from the industrialised countries will seek to reduce their (nominal) liabilities through a policy of inflation. It is not yet clear what the consequences of this new investment dynamic will be, and whether it is in fact either optimal or even in some senses legitimate for public sector asset managers to push the boundary of risk-reward maximization in this way. But the subject is certain to remain a live one as long as asset-rich states continue to look to diversify their national wealth away from portfolios consisting wholly of securities and paper assets.

Another major challenge is the question of the optimum currency allocation for reserves. There are two main reasons why this debate continues to occupy market participants. The first is the simple dynamic that it is by no means obvious that, as reserves levels rise, the optimal allocation of those reserves would remain constant. As reserves grow, they increasingly move from being mainly pools of liquidity to a mix of liquidity and investment, and while the US dollar markets remain the preferred source of central bank liquidity, the investment universe is wider and other markets come more and more into play.

Secondly, despite the seemingly widening trade deficits of the US, creditor nations of the United States are unable to ignore the longer term consequences for the dollar. The future value of the dollar is central to this decision, and as reserves managers move more and more into long term investment and store-of wealth

[3] Profits are remitted but losses do not lead to automatic recapitalization of the central bank

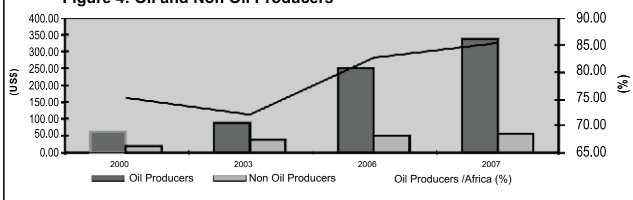
portfolios, it is increasingly driving attitudes to their preferred currency allocation. The debate is not only about the future consequences of these imbalances, but also about their causes. Two main theories have been identified: one, the US current account deficit is mainly a reaction to the excess of saving in the developing world, and secondly that the deficit is more home-grown, and the result of excess US consumption.

Drawing from the issues discussed above, the critical challenges in investing African reserves in the continent include: inadequate capitalization of African institution, especially; banks, shallowness of the African financial markets; non-convertibility of African currencies; political and macroeconomic instability.

With regards to the capitalization of the African banks, the issue of foreign reserves management as noted earlier is critical for all the countries and the institutions identified or entrusted with such responsibility must be ones that are big, strong and reliable. It will be economically incorrect to allow an institution with a paid up capital that is less than the value of the external reserves it is supposed to manage to participate in reserves management for the country. In the aftermath of the bank consolidation exercise 2006, the Nigerian authorities granted selected commercial banks that met certain conditions approval to manage some fraction of the country's external reserves. This is a model that could be adopted by other African countries.

Concerning the depth of the financial market, the absence of robust and well developed financial markets in Africa is usually identified as the key constraint to the development of financial products. The non-convertibility of the African currencies automatically implies that none of these currencies can function as a reserves currency. Consequently, most African countries have their international reserves in US dollars, Euro, pounds, etc.

Figure 4: Oil and Non Oil Producers



With respect to political and economic stability, African countries have had their unfair share of instability. It is expected that for a country or a currency to attract patronage it should be seen to be stable and the issuing authority must be an off-shoot of a politically stable environment. This has not been in abundant supply in Africa.

IV.0 WAY FORWARD

In this segment we shall discuss in practical terms drawing extensively from the discussion above on the opportunities available to the Africans to manage the African external reserves.

The regional breakdown of reserves buildup suggests a positive correlation between reserves buildup on the one hand and trade and output on the other. On the average the East

Asia and Pacific region has accumulated more foreign exchange reserves than other developing regions over the last decade. However, in addition to relatively high trade-driven growth, the East Asia and Pacific region witnessed the severest financial crisis in the last two decades. In this context analysts identify three factors, beside high oil prices, for the buildup of reserves in developing countries (ECB 2006). /

Table 5: African Countries Reserves (US$bn)

	2000	2003	2006	2007
Top 15 African countries	72.72	112.00	284.24	372.19
Bottom 10 African countries	0.32	0.47	0.84	0.10
Total Africa	79.19	122.89	304.00	395.94
Top 15/Total Africa (%)	91.84	91.14	93.50	94.00
Bottom 10 Total Africa (%)	0.41	0.38	0.28	0.03

The composition of African reserves highlights high exposure of reserve holders to global financial risks. Over the last few years, more than 95 per cent of African non-gold reserves were held in foreign exchanges including currency (mainly the US dollar) plus deposits with monetary authorities and banks and securities (US/foreign government securities, equity, bonds and notes, money markets, derivatives). Thus the value of African reserves can change with fluctuations in the reserve currency (especially the US dollar) or wider global financial market fluctuations.

The safest reserve asset, treasury bills, pays the lowest rates of return. Again this makes efficient reserve management a top priority for reserve holders. Private capital flows to sub-Saharan Africa reached over US$50 billionabout four times larger than flows in 2000. Most flows were directed to Nigeria and South Africa, but the increases also reflect the improved fundamentals elsewhere in the region. In a small group of countries, notably Ghana, Uganda, and Zambia, portfolio flows have been on the rise, attracted by improved risk ratings and higher yields. Sub-Saharan African countries have continued to reinforce their financial systems. Banking systems in much of the region are more stable because many countries (though not all) have liberalized interest rates, rehabilitated banks, and modernized the sector. Bank credit to the private sector is growing rapidly, but economies in the region still lack financial depth.

Faster progress in increasing financial intermediation would help foster private investment and growth. The priorities should be to increase access to formal bank financing; eliminate distortions in

[4] To self-insure;

[5] The desire to stop domestic overheating.

monetary and fiscal policy that discourage bank lending; strengthen creditor rights and information sharing; reduce reliance on unremunerated reserve requirements as a monetary tool; build domestic debt markets; improve the risk management capacities of banks; and encourage integration to increase competition and use economies of scale.

One of the key advantages of investing external reserves in Africa is obviously income and asset diversification. Foreign reserves are invested in more aggressive asset classes *vis a vis* the usual G-7 sovereign bonds or commercial bank deposits.

Admittedly, one main obstacle would probably be the ill-preparedness of the African domestic financial industry. Africa's foreign reserves have been reaching record highs. Along with global demand for natural resources, this trend could continue in the years to come. The continent has a lot to gain from optimally using those reserves. Apart from income reasons, external reserves management could be a way of developing the domestic financial markets.

One of the critical requirements to manage external reserves is adequate capital base of the financial institution concerned. As noted earlier, most financial institutions in Africa are not adequately capitalized. Therefore the opportunity to manage the African reserves by these institutions in the current form is slim. The experience of Nigeria cited earlier, where commercial banks were given some portion of reserves to manage after the re-capitalization of the banks that resulted in consolidation of the banks from over eighty nine to just twenty-five is an example that other African countries can emulate. This has the twin impact of aiding the advancement of the African institutions as well as ensuring that the realized profit from such venture is to a large extent domiciled in Africa.

The development of the financial sector will also be realized through the opportunities that would be created through the avenue of managing these reserves by African institutions. One quick win would be to work towards the integration of the existing capital markets in the continent. In this way the African countries that have excess reserves could make same available to those countries that have deficits. This will make the African resources to work in and for Africa. Admittedly, the immediate constraint to this opportunity is the non-convertibility of the African currencies. This shortcoming, not withstanding, the transactions in a reserve currency like the US dollar could still be carried out on the continent.

Overall, the opportunities abound but the supporting infrastructures are relatively inadequate. There is the urgent need to work towards the upgrade of the critical infrastructure that will aid the management of the African reserves by the African institutions and ensure that African resources work for the development of Africa.

V.0 Summary and Conclusion

The intention of this paper was essentially on how to invest African reserves in the continent. This paper underlined the challenges and opportunities for managing Africa's external reserves by Africans after identifying several pre-conditions for a currency to emerge as international currency. It is obvious that these conditions have not yet crystallized in Africa. Thus a lot of work is expected to deepen and broaden the continent financial system. Although African external reserves have grown over time the benefits of such growth in terms of facilitation of domestic financial markets and even the earning are not commensurate with the reserves growth rate. The non-convertibility of African currencies, volatile macroeconomic and sometimes volatile political environment coupled with the shallowness of the domestic markets are the main challenges that are faced by the continent. However, with recapitalization of the African financial institutions especially banks and the attainment of stable polity in both economic and political fronts, there is hope for the continent's institutions to take their rightful place in the emerging global financial system by first using the African resources as the first step.

The involvement of creditable African financial institutions in the management of the reserves either within or outside Africa will in no small measure strengthen the development of the African financial system but also ensure that a bulk of African resources work for Africa as the difference between what the current fund managers paid to the African central banks and what they actually get as commission or profits will be retained explicitly or implicitly in Africa.

Africa's financial systems have seen deepening and broadening over the past years, the result not only of improvements in the macroeconomic and institutional framework, but also of the worldwide liquidity glut, which directed more capital flows into Africa. The current global crisis threatens to reverse this trend and undermine recent progress. In these adverse circumstances, it is even more important to upgrade the necessary frameworks for sound, efficient, and inclusive financial systems. This call for further institution building as well as cautious and case by case government intervention to aid financial market participants expand financial services to the frontier of commercially sustainable possibilities.

For better or worse, the future of Africa's financial systems is closely linked to the development of global finance, as are its real economies. However, it is up to Africa's financial sector stakeholders bankers, donors, and policymakers to guide financial sector reforms in a way that maximizes Africa's opportunities, learning both from their own experience over the past 50 years and the experience in other emerging and developed economies. One of the ways to accomplish this is to fast track regional economic and monetary integration in Africa as well as infrastructure upgrade.

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Five Decades Of Agricultural Policies In Nigeria: What Roles Has Statistics Played?

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ABSTRACT

All over the country and internationally, the publications of the Central Bank of Nigeria (CBN) such as the Annual Report and Statement of Accounts, the Statistical Bulletin, Economic and Financial Review, the Bullion and Nigeria: Major Economic and Banking Indicators and those of the National Bureau of Statistics (NBS) have become a veritable source of data and reference materials on Nigeria. Without basic information on economic developments, it would be very difficult for policy makers to assess economic performances. The formulation of appropriate macroeconomic policies to address the problems of inflation (food shortages), balance of payments disequilibrium, sluggish economic growth and inequitable income distribution requires adequate, reliable and up-to-date data. Agriculture constitutes one of the most important sectors of the Nigerian economy. Despite Nigeria's rich agricultural resource endowment and the various policies instituted by successive administrations, the sector has been growing at a very low rate and this has increased the incidence of poverty in Nigeria especially in the informal sector. President Umaru Musa Yar' Adua realized this fact when he made 'Food Security and Agriculture' one of the pillars in the Seven Point Agenda of his administration. However, in the last forty-nine years, the sector which suppose to be the main driver to economic growth has not perform this role adequately in terms of foreign exchange earnings and better linkages with other sectors of the economy. To redress this enigma and to bring back the old glory of the sector, there is the need for adequate planning in terms of human and material resources, and these cannot be divorce from adequate, reliable and consistent statistics.

1.0 INTRODUCTION

One of the major challenges facing mankind is to provide an equitable standard of living adequate food, clean water, safe shelter and energy, a healthy and secured environment, an educated public, and satisfying work- for this and future generations. Of all these necessities, the first and most basic to human life and survival is enduring food security, which may be described as a situation in which majority of the populace of a country have access to domestically produced food at affordable prices at all times. It is not an overstatement to assert that the growth and development of any nation depend, to a large extent, on the development of agriculture. This is so because even industrial enterprises rely on agricultural undertakings to produce the raw materials that are transformed, using human resources, into capital goods. With the discovery of oil at Oloibiri (Bayelsa State) in 1959, agricultural productivity continues to lag far behind as a source of foreign exchange earnings to the nation. Agriculture is generally believed to propel economic growth and facilitate the achievement of structural transformation and diversification of economies. It empowers a country to fully utilize its factor endowments and thus reduces dependence on the oil for sustenance. If the agricultural sector is well developed, the economy would gains as the standard of living of its people would improve. To address this enigma, successive administration from 1960 to date put in place several food policies aimed at making the sub-sector takes its rightful place. Food policy may be seen as an integrated approach to issues that concern basically the food sector of an economy, but which is influenced not only by the linkages within the sector but also by the linkages among the rest of the economy and the international economic system. Food policy therefore involves not only activities in agricultural production but also includes feeding the industries, food processing and manufacturing, distribution and marketing, trade and consumption with the output from the agriculture sector. Besides being the major employer of labor, the sector raises the level of industrialization by providing food for the labor force. This is true because a poorly fed worker cannot supply efficient labor services which high level industrialization entails. This is elaborately manifested especially when viewed against the background that food is the source of energy and energy by definition is the ability to do work. Against this background, President Umaru Musa Yar' Adua realized this fact when he made "Food Security and Agriculture" one of his cannons in his Seven Point Agenda.

Over the years, the various governments of the country have enunciated and implemented a myriad of agricultural policies and programmes in an attempt to stimulate the sustainable growth and development of the agricultural sector. Till date, the achievements of these remains a subject of discuss both at the public and private fora. The paper examined the role statistics has played in the developments of the agriculture sector since 1960 with a view to gaining an insight into the extent of the transformations of the sector, particularly its contribution in ensuring food security. Structurally, the paper is organized into five sections including the introduction.

Section 2 presents the conceptual framework while section 3 examines the agricultural policies and programmes in Nigeria from 1960 2007 as well as show an appraisal of the policies by successive administrations. In section 4, the focus is on the on-going Seven Point Agenda crusade with emphasis on agriculture and food security while section 5 contains the summary, recommendations and conclusion.

2.0 CONCEPTUAL FRAMEWORK

Agriculture is the production of food, feed, fiber and other goods by the systematic growing and harvesting of plants and animals. It is the science of making use of the land to raise plants and animals. It is the simplification of nature's food webs and the rechanneling of energy for human planting and animal consumption. Until the exploitation of oil reserves began in the 1980s, Nigeria's economy was largely dependent on agriculture. Although only a tiny proportion of the population benefits from the oil boom, investment in agriculture has been allowed to decline to the extent that its productivity lags behind even some of the poorest countries in the region. Nigeria's wide range of climate variations allows it to produce a variety of food and **cash crops**. The staple food crops include cassava, yams, corn, coco-yams, cow-peas, beans, sweet potatoes, millet, plantains, bananas, rice, sorghum, and a variety of fruits and vegetables. The leading cash crops are cocoa, citrus, cotton, groundnuts (peanuts), palm oil, palm kernel, benniseed, and rubber. They were also Nigeria's major exports in the 1960s and early 1970s until petroleum surpassed them in the 1970s. Chief among the export destinations for Nigerian agricultural exports are Britain, the United States, Canada, France, and Germany.

2.1 The Role of Statistics in shaping Policy Formulations

The first president of the European Monetary Institute (EMI), Baron Alexandre Lamfalussy, wrote in 1996: Nothing is more important for monetary policy than good statistics. Statistical information is necessary to decide what policy actions to take, explain them publicly, and to assess their effects after the event. Unless policy can be justified and explained, it will not be understood and the institution carrying it out will lack credibility. We cannot think of a better way to put the role of statistics for monetary policy purposes. What is especially important in this statement is that good data are not only required for the decision-making process , per se, but also especially for the communications aspects of monetary policy. Good statistics are not only needed for an open market policy, but also for an open mouth policy. As monetary policy works to a large extent via expectations, this is crucially important.

2.1.1 Statistics for managing government: Governments need statistics to run a country efficiently, both for day-to-day administration and for policy making in the longer term. They need statistics to manage the economy, to 'balance the books' maintaining a balance between revenue and expenditure and ensuring macro-economic stability.

2.1.2 Data for managing the economy: One of the most important tasks all governments have is to manage the domestic economy and its interactions with the rest of the world. The actions governments take vary from country to country, but include maintaining an appropriate balance between supply and demand in the domestic and external economy and creating the right environment for investment, economic growth and poverty reduction.

2.1.3 Data for Long-term Policy-Making: Gross domestic product (GDP) and other measures of economic activity such as Gross National Income (GNI) areÊkey indicators for governments. Together with their individual components, they show how the economy is responding to government policy and other influences. Money and Banking statistics are very important for the purposes of formulating monetary policy and monitoring its implementation.

2.1.4 Statistics for Business Growth: Economic and financial statistics give the background to a country's economic health. Import and export data will offer clues on the international dimension of your chosen market sector. Figures on household consumption and spending patterns might indicate levels of demand forÊgoods and services, while those on retail or consumer prices (inflation) and retail sales ('factory gate' prices) will also yield useful business intelligence.

2.1.5 Using data to Improve People's Lives: In addition to managing the economy, official statistics are also needed to monitor the welfare, or well-being, of people. All governments have a concern on the status of their citizen's health, education and other areas of welfare. All countries have signed up to the United Nations' Millennium Declaration that requires actions to improve welfare and sets out specific indicators to be tracked between now and 2015.

2.1.6 Statistics to Attract Foreign Investment: Statistics are a crucial guide for firms considering investment in other countries, and for international organisations providing development assistance. The International Monetary Fund's (IMF) General Data Dissemination System Site was established in 1997 to provide a framework for evaluating needs for data improvement and setting priorities in this respect; and to guide member countries in the dissemination to the public, comprehensive, timely, accessible, and reliable economic, financial, and socio-demographic statistics. The website provides information on data produced and disseminated by member countries that participate in the GDDS.

3.0 AGRICULTURAL POLICIES AND PROGRAMMES IN NIGERIA (1960 2007)

3.1 Rationale for Agricultural Policies in Nigeria:

In Nigeria's political history, the agricultural sector like other sector was bedeviled with series of problems which was due largely to poor planning. This planning or what was described as policy summersaults cannot be divorced from deviation from what the data says. As elaborately discussed in the literature by

Olayemi and Dittoh (1989) and Okunmadewa (1993). The major constraints identified are summarized as follows.

3.1.1 Technical Constraints: Technical constraints include the high incidence of pests and diseases, inadequate infrastructural facilities, dependence on unimproved inputs and rudimentary technology. Others are inadequate extension services, inefficient inputs supply and distribution system and high environmental hazards.

3.1.2 Resource Constraints: A major problem of agricultural labor supply arises from the increasing migration of able-bodied youths from rural to urban areas. The consequence of the massive migration of youths is seasonal labor shortage, especially at the peak periods of labor demand (during land preparation, planting, weeding and harvesting). There is also the problem of low agricultural labor productivity. There is an increasing population pressure on land as well as a declining quality of land. Rate of land improvement is low because of a low rate of capital investment by the predominantly traditional farmers.

3.1.3 Socio-Economic Constraints: The socio-economic problems that constrain Nigeria's agriculture include scarcity and high cost of improved farm inputs, inefficient marketing arrangements characterized by high marketing margins, lack of grades and standards, and lack of legally enforceable ownership and control rights over land which serves as a disincentive to investing in agriculture and which arises from the lack of appropriate land tenure system. Other socio-economic factors are inadequate extension services and credit facilities, low rate of growth in the demand for primary export commodities arising largely from competition with synthetic products; and low income elasticity of demand, and increasing food deficit and high dependence on food import arising from the disequilibria in national agricultural resource base, a largely traditional agricultural production system and some domestic population dynamics.

3.1.3 Organizational Constraints: Agricultural production is predominantly in the hands of a multitude of small scale unorganized farmers, scattered across the country. Lack of organization, coupled with the dispersed nature of farm settlements; hinder the participation of farmers in agricultural and rural development. It particularly hinders the supply of extension services, farm credit and other vital inputs to farmers.

3.2 AGRICULTURAL POLICIES IN THE LAST FIVE DECADES

It was in realization of these that successive government embarked on policy measures aimed at improving the sector to serve as the engine of growth for other sectors. The policies since independence under successive administration are as indicated below.

Table 1: Administration and Agricultural Policies/Programmes in Nigeria since Independence (1960-1999)

No	Period	Duration (Years)	Head of Government	Type	Programme/Policies	Date	Aim
1	Oct. 1960 to Jan. 1966	6	Tafawa Balewa	Civilian	Nigerian Research Institute Acts	1964	To promote researches in agricultural and other areas
2	Jan. 1966 to July 1966	½	Aguiyi-Ironsi	Military	-	-	-
3	July 1966 to July 1975	9	Yakubu Gowon	Military	(i) Agricultural Research Council of Nigeria Decree	1971	To coordinate all agricultural research
					(ii) Agricultural Research Institute Decree	1973	To establish institute to conduct research in any field of agriculture
					(iii) National Accelerated Food Production Project (NAFPP)	1973	To accelerate Production of major staples
					(iv) Integrated Agric. Development Projects	1973	To enhance adoption of new agric. Technology by farmers
					(v) Nigerian Agric. and Cooperative Bank	1973	To make credit available to farmers
					(vi) Specialized Marketing Boards	1975	To fix commodity prices.
					(vii) National Grains and Roots Cultivation Programme	1975	To accelerate production of grains and root crops.

Table 1: Administration and Agricultural Policies/Programmes in Nigeria since Independence (1960-1999)

No	Period	Duration (Years)	Head of Government	Type	Programme/Policies	Date	Aim
4	July 1975 to Feb. 1976	½	Murtala Muhammed	Military	-	-	-
5	Feb. 1976 to Oct. 1979	3	Olusegun Obasanjo	Military	(i) Operation Feed the Nation	1976	To mobilize the public to participate in agricultural production
					(ii) River Basin Development Authorities	1977	To develop the country's land and water resources
					(iii) Agricultural Credit Guarantee Scheme	1977	To reduce the risk borne by commercial banks and make credit available to farmers.
					(iv) Rural Banking Scheme	1977	To encourage rural banking habit.
					(v) Land Use Act	1978	To make land available for agricultural purposes, etc.
6	Oct. 1979 to Dec. 1983	4	Shehu Shagari	Civilian	Green Revolution Programme	1980	To increase agricultural production
7	Dec. 1983 to Aug. 1985	1	Muhamadu Buhari	Military	Increase in the number of River Basin Authorities from 11 to 18	1984	
8	Aug. 1985 to Aug. 1993	8	Ibrahim Babangida	Military	(i) Directorate for Foods, Roads and Rural Infrastructure.	1986	To promote rural development.
					(ii) Reorganization of the River Basin Authorities	1986	
					(iii) Abolition of the Marketing Board	1986	To enhance the earnings of farmers
					(iv) Trade Liberalization Policy	1986	To encourage export employment
					(v) National Directorate for Employment.	1986	
					(vi) National Agric. Insurance Scheme	1987	To reduce the risk burden on farmers
					(vii) National Land Development Authority	1991	To develop agricultural land in the country.

Table 1: Administration and Agricultural Policies/Programmes in Nigeria since Independence (1960-1999)

No	Period	Duration (Years)	Head of Government	Type	Programme/Policies	Date	Aim
9	Aug. 1993 to Nov. 1993	¼	Ernest Shonekan	Civilian	Merger of the Directorate for Food, Road and Rural Infrastructure with Federal Ministry of Water Resources	1993	-
10	Nov. 1993 to June 1998	4¾	Sani Abacha	Military	Continuation of Babangida programmes	-	-
11	June 1998 to May 1999	-	Abdulsalami Abubakar	Military	-	-	-
12	May 1999 to 2007	-	Olusegun Obasanjo	Civilian	A series of initiative of the President targeted at particular commodities to increase food production in line with Vision 2020, with a view to attracting the attention of the highest political authority for special intervention in the commodity sector.	-	-

Source: Agricultural Policies in Federal Government Budgets:
(1)Federal Ministry of Agriculture
(2)National Planning Commission

3.3 AN APPRAISAL OF THE POLICIES

Within the 49 years of political history, (October 1960 to 2009), the government of Nigeria changed hands thirteen times, some regimes lasting less than one year. The instability in the political structure or leadership of the country has also resulted in frequent changes in the thrust of agricultural policy. In the face of all these, one would be tempted to ask if policy makers ever make use of data in their planning purposes. William Stopper during the early days of the country development plan summarized the bane of Nigeria policy making as “Planning without facts”. Some policies were introduced without any genuine political or economic reasons, but merely because they sounded different from previous ones.

The regime under Tafawa Balewa (1960-1965) was characterized by very limited policies as far as agricultural development was concerned. The regional administrations simply continued with the colonial policies of plantation agriculture. During these period statistics and data storage for planning purposes were at its rudimentary stage. However, there was instability of the Research Institutes as a result of constant movement of the agriculture research institutes from one Ministry to another. There was also a major problem with funding of these Institutes.

The period 1966-70, marked the 30 months of civil war that climaxed the turbulence in the Nigerian political scene. This hardly provided an enabling environment for reasonable policy formulation nor the use of data for any meaningful purposes as the Aguiyi-Ironsi-led administration which lasted for only 6 months could not formulate or implement policies.

The Gowon administration succeeding the war years, however, saw a number of agriculture-related decrees. This era also witnessed the introduction of the National Accelerated Food Production Project (NAFPP) in 1973, the establishment of the Nigerian Agricultural and Co-operative Bank (NACB) in 1973, the introduction of the Integrated Agricultural Development Projects (ADPs) in 1975 and the National Grains Reserve Programme (NGRP) in 1975. The NAFPP was designed to accelerate the production of major staple crops. There were also the National Grains and Root Crops Cultivation Programmes which were aimed at increasing the production of its mandate crops. However, most of the programmes started very well but the withdrawal of political support and lifting of the ban on wheat import affected the policy.

The Murtala-Obasanjo (February 1976 - October 1979) witnessed the emphasis on modern technology in the ADPs led their agricultural research and extension services. This administration introduced quite a number of policies and programmes. In 1976, Operation Feed the Nation (OFN) was launched to mobilize the public to take active part in agricultural production. Under the programme, agricultural inputs such as seeds, fertilizers, credit and bush clearing activities were highly subsidized. The River Basin Development Authorities, Agricultural Credit Guarantee Scheme and Rural Banking Scheme were introduced in 1977. The River Basin Development Authorities were aimed at developing the various river basin areas in the country while the Agricultural Credit Scheme was meant to reduce the risk borne by commercial banks by extending credit to farmers and the rural banking scheme to encourage the rural banking habit. Latter, programs for multiplication of improved seeds generally fell short of goals. Supplies of fertilizers were erratic largely due to centralized government control of international procurement and a very heavy subsidy program.

During the Shehu Shagari administration (October 1979 - December 1983) the only agricultural programme of note introduced was the Green Revolution. The programme involved the provision of improved seeds, fertilizers, pesticides, herbicides, irrigation, water, credit, appropriate mechanization, agroservice centres, improved marketing system and pricing policy as well as other incentives necessary for farming. The target was to make the country self-sufficient in basic food production within five years and to rehabilitate and restore the production of export produce in seven years.

The regime succeeding the administration (Buhari-Idiagbon) did not introduce any reasonable agricultural programme except the increase of River Basin Authorities from eleven to eighteen in 1984. Although the increase was aimed at decentralizing the authorities and bringing her functions and activities close to the rural populace, the number was returned back to the former 11 with the coming of another regime. In the face of these, the relegation in the use of statistics/data cannot be overemphasized.

From August 1985 to August 1993, Ibrahim Babangida headed thie administration of this nation, a regime that lasted longer than any other one since independence. He introduced Structural Adjustment Programme (SAP) in 1986. The adoption of SAP was a fall-out of the crisis in the Nigerian economy which arose from the collapse of oil prices in the world market. Among the programmes and policies of his administration was the Directorate for Food, Road and Rural Infrastructure (DFRRI) and the National Directorate of Employment (NDE), which were both established in 1986. The river basin authorities were reorganized and trade liberation policies were adopted in 1986. The government rural infrastructural programmes were embarked upon with limited programme of action and appropriate institutional arrangements for their execution. For instance, government established DFFRI at the Federal Level and only uses the states and the local governments for the disbursements of funds for the implementation of its programmes. The lack of spatial focus in rural development planning which can be traced to care-free attitude to handicapped the rural infrastructural programmes. The Shonekan administration which lasted for only four months in office only succeeded in merging the Directorate for Food, Roads and Rural Infrastructure with the Federal Ministry of Water Resources.

The Abacha regime which brought some modifications, the 'guided deregulation' policies had no major programme except that there were two exchange rates during this period. The NALDA approach increased rather than reduce the direct public provision of goods and services which could have been provided by the private sector instead. Many of NALDAs services were duplications, albeit on a more intensive basis of services provided by ADPs.

The third Republic (Obasanjo 1999 - 2007) initiated several food policies. However, inadequate funding and lack of institutional arrangements especially deviant for database policies for implementation hampered some of them. The initiatives generated interest and production increased but there were no concurrent provisions for storage and processing resulting in large post harvest losses and apathy on the side of the farmers.

4.0 FOOD SECURITY AND AGRICULTURE WITHIN THE SEVEN POINT AGENDA (2007 DATE): IS POLICIES BASED ON STATISTICS?

At the inception of his administration, President Umaru Musa Yar' Adua who succeeded Chief Olusegun Obasanjo earmarked on a Seven-Point Agenda so that the nation can move forward and be among the 20 largest economies by the year 2020. Briefly, the Seven-Point Agenda include Energy and power, Food Security and Agriculture, Wealth Creation, Education, land Reforms, Mass Transit and the Niger Delta issue.

4.1 THE SEVEN-POINT AGENDA: AGRICULTURAL POLICY THRUST:

Like the Obasanjo administration (1999 2007) the thrusts of the policy direction for agriculture and food security within the seven point agenda include:

- creating the conducive macro-environment to stimulate greater private sector investment in agriculture so that
- the private sector can assume its appropriate role as the lead and main actor in agriculture
- Rationalizing the roles of the tiers of government in their promotional and supportive activities to stimulate growth
- Reorganizing the institutional framework for government intervention in the sector to facilitate smooth and integrated development of agricultural potentials

- Articulating and implementing integrated rural development as a priority national programme to raise the quality of life of the people.
- Increasing agricultural production through increased budgetary allocation and promotion of the necessary developmental, supportive and service-oriented activities to enhance production and productivity and marketing opportunities
- Increasing fiscal incentives to agriculture, among other sectors, and reviewing import waiver anomalies with appropriate tariffication of agricultural imports
- Promoting increased use of agricultural machinery and inputs through favorable tariff policy.

Arising from the redefined role of the Federal Government, its thrust of activities will be directed to obviate the technical and structural problems of agriculture in the following aspect:

4.1.1 Development Activities: The effort in this direction is to finance agricultural research including bio-technology and breeding of predators for biological control of pests which the private sector may not be willing to invest in due to the high capital outlay and the prevailing low return on agricultural investment.

4.1.2 Animal Vaccine Production : The objective is to raise the level of vaccine production in Nigeria to self-sufficiency status and also to cater for the entire West Africa sub-region. Towards this end, the premier institution for animal vaccine production in the sub-region, the Nation Veterinary Research Institute (NVR) at Vom, would be strengthened, enlarged and modernized to actualize this objective under a three-year programme.

4.1.3 Veterinary Drug Manufacture: In order to boost livestock production through enhancing animal health, a veterinary drug manufacturing outfit with the capacity to meet the needs of the West Africa sub-region would be established.

4.1.4 Agro-chemicals Manufacture: Pest control is generally an all-year-round activity due to the continuous emergence of pests during the different seasons of the years. A major constraint hampering the use of agro-chemicals for agriculture is the limited availability and their high cost and therefore not easily accessible to farmers.

4.1.5 Water Management: Nigeria is blessed with abundant water resources, the potentials of which are yet to be fully tapped. Currently large dams constructed in the country have impounded a lot of water with high fisheries and duck farming potentials and have the capacity for irrigation in agriculture.

4.1.6 Agricultural Development Fund: A minimum statutory allocation of 5 per cent of the National Budget should be allocated to the agricultural sector. States and Local Governments should make adequate provision for funding agriculture in their annual budgets. The Fund will be built from: Saving from subsidy withdrawals on fertilizer, 5 per cent of the proceeds of the privatization of government enterprises, Funds from International Commodity Organizations, 2 per cent levy on the profits of Agro-based Industries, 50 per cent of Sugar Development Levy, 1 per cent levy on profit of Oil Companies, 2 per cent levy on all dutiable imports and Appropriation from annual budget of not less than 2 per cent of total budget.

4.1.7 Supportive Activities: The support for inputs is hoped to be administered in a cost effective and focused manner to ensure that the intended beneficiaries derive full benefit from the distribution of: seeds, seedlings fingerlings, broodstock, fertilizers, agro-chemicals, tractors and implements, vaccines, veterinary drugs, interest rate on credit. State and Local Government are to be encouraged to subsidize these inputs, as additional support to agriculture.

4.1.8 Commodity Marketing and Export: The marketing system through its pricing mechanism is paramount in sustaining production. The desire to satisfy the demand of the market should be the driving force for production. The development of an efficient agricultural marketing system is hoped to be promoted through the provision of adequate marketing information.

4.1.9 Input Supply and distribution: Timely availability of inputs is basic and critical to agricultural production. Government in recognition of this has strongly in the agenda mission statement promised to ensuring regular supply of agricultural inputs to the Nigerian farmers. In this regard, government is creating a conducive environment for profitable investments in the production and distribution of inputs such as improved starter materials, animal health drugs, fertilizers, etc.

4.1.10 Credit and Micro-credit delivery: Within the agenda initiative, the government has taken a major initiative to improve credit delivery to Nigerian farmers and rural dwellers. The emerging economic environment with institutional streamlining and restructuring is expected to create an enhanced financial system within which the rural financial institutions will develop and perform efficiently and effectively. Such a situation will, invariably, create the opportunity for the emergency of innovative ways of mobilizing local savings and providing support for local banking services. Strategies to be adopted will include: Provision and improvement of rural infrastructure to attract investment and financial services; Integration and linkage of rural financial institutions to the formal banking sectors; Regulating and supervising the growth of non-bank financial institutions with emphasis on saving mobilization at the grassroots; Expanding the mandate of the restructured Nigerian Agricultural Cooperative and Rural Development Bank to include savings mobilization; Promoting Self Help Groups for Savings Mobilization and Credit Delivery, Modification of the credit delivery modality to include the cooperatives and community-based organization as delivery channels to reduce transaction costs; Modification of terms of credit such as interest rate, eligibility criteria, legal requirement etc to enhance access; Simplification of operational procedures to reduce transaction cost. These strategies are expected to lead to the development of a viable micro and rural financial market that will assure self-reliance, viability, sustainability and better outreach with a greater impact on the rural economy.

4.2 THE NEED FOR RELIABLE DATA TOWARDS AN AGENDA FOR RESUSCITATING AGRICULTURAL EXPORTS TO BOOST FOREIGN EXCHANGE EARNINGS

Getting incentives right for farming in general and in particular for export crops production holds the key to resuscitation of exports. The focus should not be mainly on reviving the dwindled fortunes of traditional export commodities, but also to target new commodities, add value to traditional ones and new markets through appropriate pricing and marketing incentives and through the provision of an enabling environment that can spur agricultural development. These cannot be done without reliable statistics. Among the principal policy measures required are the need to:

Ø Mobilize the private sector through appropriate pricing and market incentives for all classes of farmers, fostering rural savings and credit schemes and through improving rural infrastructure so as to stem the rising rural-urban drift and market transaction costs. Market incentives could include price support schemes at the onset as a veritable instrument of spurring production beyond domestic markets.

Ø Harnessing technology through the search for higher-yielding varieties, expanding fertilizer use, controlling pest and diseases, irrigation water availability and control, agricultural equipment, livestock, measures to promote fisheries, better agricultural research, improving agricultural extension and the supply of inputs and reorienting agricultural education. In particular, effort should be made to bridge the missing link in technology as well as shift away from undue emphasis on mechanical technologies to biological and chemical ones that are scale neutral and have extensive application scope.

Ø Protect the rural environment through reforestation schemes, avoiding cultural practices that results in land degradation but stresses soil and water conservation

Ø Providing rural infrastructure: roads, water, electricity and cheap source of mechanical energy. These are important for curtailing production and transactions costs as well as fostering appropriate link with urban markets for sales of produce and purchase of necessary inputs.

Ø Developing farmers' associations and recognizing the role of women. These would empower the people to collectively take advantage of capital and other intensive resources required for production.

Ø Redefining land rights to grant access to new investors, women and make the current traditional system amenable to modernization.

In conclusion, the key to resuscitation of agricultural exports is to make the farm sector more productive through better policies and stronger institutions, and most of all, developing and empowering the people.

Ø Protect the rural environment through reforestation schemes, avoiding cultural practices that results in land degradation but stresses soil and water conservation

Ø Providing rural infrastructure: roads, water, electricity and cheap source of mechanical energy. These are important for curtailing production and transactions costs as well as fostering appropriate link with urban markets for sales of produce and purchase of necessary inputs.

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Ø Redefining land rights to grant access to new investors, women and make the current traditional system amenable to modernization.

4.3 SYNERGY BETWEEN STATISTICS GENERATING INSTITUTIONS FOR BETTER POLICY: The National Bureau of Statistics (NBS) occupies a premier position in the Nigerian Statistical System. However, in view of heavy demand and timely release of CBN financial data which are veritable tools for policy formulation, its Statistics Department forged ahead to collect, collate and disseminate statistical data relating to various aspects of the economy including manufacturing, public finance, agricultural production, energy production, foreign investment, prices, money and banking, capital markets, balance of payments, etc which are the necessary input for policy analysis and decision making. All over the country and internationally, the publications of the CBN such as the Annual Report and Statement of Accounts, the Statistical Bulletin, Economic and Financial Review, the Bullion and Nigeria: Major Economic and Banking Indicators etc have become a veritable source of the most current data and reference materials on Nigeria. *Without basic information on monetary and economic developments, it would be very difficult for policy makers to assess economic processes. The formulation of appropriate macroeconomic policies to address the problems of inflation, balance of payments disequilibrium, sluggish economic growth and inequitable income distribution requires adequate, reliable and up-to-date data. Even when the* *policies have been formulated, statistical data are also required in the implementation and evaluation of the policies to ensure that the objectives are achieved. It is in realization of the growing importance of data in the formulation of economic policies that governments all over the world and Nigeria in particular are showing increasing interest in the systematic collection and analysis of data on virtually all aspects of the economy.*

4.4 STATISTICS VS POLITICS: THE AGRICULTURAL GROWTH PACT

It is widely believed that despite the efforts by those in charge of statistical data (as detailed in the Nigerian Statistical System) such data required by government, legislators and institutions ended up being partly ignored by policy-makers. According to Charles Freedman…"one should keep an eye on all variables that are known to contain information about inflationary developments. We need to turn on every stone and look behind every bush, cross-checking information room and the other pillars to detect or predict inflationary tendencies. The art of governance thus lies in the careful assessment of the different pieces of information and their proper weighting, especially if they happen to send conflicting signals……." In the light of the above, it is necessary to highlight those data needed for policy decision making. First of all, the policy makers need reliable and timely information on the achievement of the ultimate goal, price stability. The quality of the national integrated survey of household (NISH) is very good, as it covers all household consumption expenditures as well as adjustments to account for quality improvements. To understand the dynamics of inflation better, we also need information on core, non-core as well as other underlying inflation trends. A detailed real sector (agriculture, manufacturing, mining and quarrying, wholesale and retail etc) analysis is key for all the world's major policy makers. Owing to the medium-term orientation of policy makers, the Nigerian government primarily needs to monitor the trend of inflation, exchange and money growth. It is not the short-run fluctuation that are relevant but the underlying longer-term trend. Therefore, the Nigerian policy makers need to extract from the real sector as well as monetary data the information relevant for long-term price developments. In order to understand fully the developments in prices, they need a comprehensive evaluation of the developments both at the primary as well as secondary situation in the Nigeria informal economy. In understanding the real sector especially agricultural sub-sector, special attention should be paid to credit growth, as it is very significant for crop plantation and also for important parts of segments of the sector. Here, we ask the salient question that, do the insecticides, herbicides etc get to the farmers in bulk, through middlemen or they are purchased across the counter? Therefore, it might represent a better early indicator for policy decision making. An analytically interesting concept relevant for policy is the price-gap (bulk/retail purchase), which helps guage the level of agricultural products in the economy.

There is a need for all kinds of different indicators of input costs, such as wages, the spot and futures prices of important commodities such as oil, but also asset prices or exchange rates. Indicators of aggregate demand, such as consumption, investment, government spending -fiscal policy- or external demand -balance payments-, are also needed to shed light on real economy as well as to serve as input for measuring potential output and for estimating the output gap. These need to be monitored in order to identify demand pressures on the economy relative to its production capacity. A well detailed statistics in this area will in no small way help the policy makers to mirror the economy. Nigerian policy makers need to emphasize the influence of forward-looking expectations on economics decision, a special role is played by market prices that can reflect expectations, such as the stock market indices or the prices of inflation-indexed bonds. There is a considerable amount of information embedded in interest and exchange rates and in financial market prices, which needs to be taken into account by policy-makers.

"As Alan Greenspan once put it, "the success of monetary policy depends importantly on the quality of forecasting". Therefore, available forecasts, different sentiment indicators as well as macroeconomic projection play an important role in policy-making, and serve to anticipate future developments"

4.5 MUST WE USE ESTIMATES FOR POLICY DECISION MAKING?

It has been argued that it was because the data are not available or when they are available they become stale and cannot justify the purpose for which they are meant for. On the basis of this, protagonist submitted that policy makers make use of estimates or just a rule of thumb in taking decisions. Why one might be tempted to agree with the use of estimates in policy formulations (in view of time lag in data collection), politicians more often than not use political rule and not statistical rule in decision making. **In a word of uncertainty in which policy policy-maker have to act decisively, more information always seems preferably to less information. Wim Duisbenberg once stated that, "one of the few things we economists know with certainty is that we know little without uncertainty". Alan Greenspan echoed that "uncertainty is not just a pervasive feature of the economic landscape: it is the defining characteristic of that landscape"**

As statisticians, we know that there is an infinite demand for any given good, which is free to users. Collecting new statistics, however, is resources-intensive and expensive. It carries a heavy burden for respondents as well as a burden on the compilers. In addition, we live in times of increasing resources constraints in which all public expenditures need to be justified. We therefore have to set priorities so as to meet our data requirements. One important feature that is worthy of note is that we should

review regularly whether the data collected and compiled are still needed, whether they are used efficiently, and whether they are still required at the same frequency.

5.0 SUMMARY, RECOMMENDATIONS AND CONCLUSION

It must be emphasized that in other to ensure adequate food security in Nigeria, the nature of governance counts in the growth and development process. Good governance and societal peace are sine qua non for the pursuit of sustainable socio-economic development. The opposite of good governance is known to impact severely on all facets of the society and ultimately on the economy as a whole. The destructive manifestations of bad governance include poverty, corruption, conflict, and changes in government, but these can be reversed by good governance. As encapsulated in the Seven point Agenda Mission statement… "We need to provide the correct leadership, we need to ensure the correct conduct and the correct attitude and we need to plan well towards our objectives so as to lay a solid foundation for building a modern industrialized nation that will meet the developmental needs of our people, their educational needs, their health needs and their psychological needs and develop the environment for them to grow and develop their potentials" . The level of poverty, corruption and conflicts are some of the barometers for measuring the development of a country. **The challenges for the policy makers in the area of statistics are many and varied. Some of them include the grey areas that government should address:**

1. **Close the policy-relevant gaps in agricultural statistics;**
2. **Keep track of possible changes in the economic environment that impact negatively on agricultural production;**
3. **Keep track of artificial and cultural changes that might have repercussions on the production of agricultural commodities;**
4. **Make the facts and analyses underlying the decision-making process clear, i.e. show which decisions were taken based on which statistics;**
5. **Defend and enhance the independence of statistics in policy making; and**
6. **Ensure adequate resources for statistics to meet both present and future challenges so as to boost agricultural production.**

It is accepted world wide that food is the ability to do work. A poorly fed populace cannot supply the needed labor necessary to move the nation forward. In doing this, there must be reasonable policies while the policy makers must inculcate the spirit of good leadership; execute viable policies which must be based on reliable statistics.

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