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# **Banking sector reforms and the Nigerian economy: performance, pitfalls and future policy options**

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**Banking Sector Reforms and the Nigerian Economy: Performance, Pitfalls,  
and Future Policy Options**

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# Banking Sector Reforms and the Nigerian Economy: Performance, Pitfalls, and Future Policy Options

By

E. D. Balogun \*

*This paper reviews the perspective of banking sector reforms since 1970 to date. It notes four eras of banking sector reforms in Nigeria, viz.: Pre-SAP (1970-85), the Post-SAP (1986-93), the Reforms Lethargy (1993-1998), Pre-Soludo (1999-2004) and Post-Soludo (2005-2006). Using both descriptive statistics and econometric methods, three sets of hypothesis were tested: firstly that each phase of reforms culminated in improved incentives; secondly that policy reforms which results in increased capitalization, exchange rate devaluation; interest rate restructuring and abolition of credit rationing may have had positive effects on real sector credit and thirdly that implicit incentives which accompany the reforms had salutary macroeconomic effects. The empirical results confirm that eras of pursuits of market reforms were characterized by improved incentives. However, these did not translate to increased credit purvey to the real sector. Also while growth was stifled in eras of control, the reforms era was associated with rise in inflationary pressures. Among the pitfalls of reforms identified by the study are faulty premise and wrong sequencing of reforms and a host of conflicts emanating from adopted theoretical models for reforms and above all, frequent reversals and/or non-sustainability of reforms. In concluding, the study notes the need to bolster reforms through the deliberate adoption of policies that would ensure convergence of domestic and international rates of return on financial markets investments.*

## 1. Introduction

There is a fair agreement in the literature that economic reforms, especially what came to be tagged structural adjustment programs (SAP), have almost always been mounted in response to national financial distress whose foundation could be traced to macroeconomic distortions (World Bank 1986). While such distress manifest mainly as deep economic deterioration (stagflation and huge external debts), distortions are often evident in the pursuit of unsustainable fiscal, monetary and exchange rates policies in addition to widespread government intervention in enterprises that can best be handled by the private sector. In general, several analysts believe that economic mal-adjustment is associated with policy pursuits which depart from free market pricing policies (Chiber, et al 1986; Ray 1986). Economic reforms are therefore seen as pursuits of fiscal reforms and market liberalizations, which focus on extensive privatization of state owned enterprises as well as liberalization of financial and foreign exchange markets, with the government limited to provision of the right enabling environment for a private sector led growth.

There is a consensus in the literature that at the heart of economic reforms is the need to address a two-fold task: restructure or get policy incentives right as well as restructure key implementation institutions. Financial sector reforms is that aspect of economic reforms which

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focus mainly on restructuring financial sector institutions (regulators and operators) via institutional and policy reforms. As part of the financial sector, banking sector reforms is that aspect which focuses mainly on getting incentives right for the banking sector to take the lead role in empowering the private sector to contribute more to economic growth.

In Nigeria, we recognize four phases of banking sector reforms since the commencement of SAP. The first is the financial systems reforms of 1986 to 1993 which led to deregulation of the banking industry that hitherto was dominated by indigenized banks that had over 60 per cent Federal and State governments' stakes, in addition to credit, interest rate and foreign exchange policy reforms. The second phase began in the late 1993-1998, with the re-introduction of regulations. During this period, the banking sector suffered deep financial distress which necessitated another round of reforms, designed to manage the distress. The third phase began with the advent of civilian democracy in 1999 which saw the return to liberalization of the financial sectors, accompanied with the adoption of distress resolution programmes. This era also saw the introduction of universal banking which empowered the banks to operate in all aspect of retail banking and non-bank financial markets. The fourth phase began in 2004 to date and it is informed by the Nigerian monetary authorities who asserted that the financial system was characterized by structural and operational weaknesses and that their catalytic role in promoting private sector led growth could be further enhanced through a more pragmatic reform.

Although these reforms have been acclaimed to be necessary, it is however debatable if they yielded the anticipated results. The objective of this paper therefore, is to assess the relative effectiveness of the reforms as well as gauge the likely impact of the outcomes on economic performance. Thereafter, the pitfalls which militated against the effectiveness of the reforms would be identified and future policy options recommended.

## **2. *Theoretical Underpinnings and Measurement of Effects of Reforms***

The literature is replete with studies which show that the objectives of financial sector reforms are broadly the same in most countries of Sub-Sahara Africa. Omoruyi (1991), CBN (2004) and several financial sector analysts summarized these objectives to include: market liberalization for the promotion of a more efficient resource allocation; expansion of savings mobilization base, promotion of investment and growth through market-based interest rates. It also means the improvement of the regulatory and surveillance framework; fostering healthy competition in the provision of services and above all laying the basis for inflation control and economic growth.

There also seems to be a universal agreement within the literature that these objectives could be attained through deregulation of erstwhile regulated domestic money and foreign exchange markets, adoption of market based approach to credit allocation and the pursuit of sustainable fiscal and monetary policies. It could also require the restructuring of financial markets via legislative changes and the active use of prudential regulations and enforcement of capital adequacy requirements.

With regard to the banking sector, the literature is of the view that its reform is imperative if it is to “to play a key role in pricing and trading risks and implementing monetary and fiscal policies” as part of the process of “a shift in emphasis to a private sector led economy”. It is further argued by this school of thought that reforms which foster institutional efficiency is imperative if the banking sector is to play the desired catalytic role in the real sector” (NPC 2004). The arguments are that for efficiency, such reforms should address the issues which militate against the efficiency of the banking sectors such as: the “shallow depths of the capital market, dependence of financial sector on public sector and foreign exchange trading as sources of funding; apparent lack of harmony between fiscal and monetary policies and above all, the poor loans repayments performance as well as bad debts (Ojo 2005; Nnanna 2005).

In terms of policy thrust therefore, the banking sector reforms is expected “to build and foster a competitive and healthy financial system to support development and to avoid systemic distress” (Soludo, 2007). It is further argued that deepening the banking sector in terms of asset volume and instrument diversity could lead to drastic reduction of fiscal deficit financing and freeing resources for lending to the private sector. In general therefore, banking sector reforms is interpreted to mean embarking on a comprehensive process aimed at substantially improving the financial infrastructure, strengthening the regulatory and supervisory framework to address the issue of low capitalization and a structured financing for cheap credit to the real sector and financial accommodations for small and rural credit schemes.

There is also a fair agreement within the literature on the transmission mechanisms between reformed policies and macroeconomic outcomes. The traditional view in general is that banking sector reforms is encapsulated in institutional, monetary and exchange rates restructuring, and can therefore be analyzed via the study of their transmission mechanisms. The main thrust of this argument is that policy actions of the monetary authorities which are implemented by the banking sector have as its ultimate target inflation control and growth stimulation. The response of the banking sector to these policies represents in principle the transmission mechanisms which hold the key to the realization of these ultimate targets. Masson and Pattillo (2003) notes four such channels between instruments of monetary policy

and its ultimate targets (inflation and real output) as: (i) direct interest rate effects, which influence investment decisions and the choice between consuming now and consuming later; (ii) indirect effects via other asset prices, such as prices of bonds, equities and real estate, which will influence spending through balance sheet and cash flow effects; (iii) exchange rate effects, which will change relative prices of domestic and foreign goods, influencing net imports, and also the value of foreign currency denominated assets, with resulting balance sheet effects; and (iv) credit availability effects, which may include credit rationing if there are binding ceilings on interest rates .

## **Method of Analysis**

In order to give an objective assessment of the outcomes of the banking sector reforms, there is the need to specify evaluating criteria. Given the fact that four phases of banking sector reforms had been undertaken since 1986 to date, I have proposed to use descriptive statistics to test the hypothesis that each phase culminated into improved incentives for the provision of better services to the economy as whole. The assumption is that the post reforms values of measures of institutional and policy response performance represents significant improvements over the pre-reforms value. Among these measures are: branch networks, increased supply and improved access to credit, improvement in selected financial sector and distress ratios, and above all increased profit earnings, as well as increased ability to compete within the global economy. It should however be noted that several factors exist besides the reforms measures that could explain the trend in these indicators.

In order to ascertain the relative efficiency of the reforms, we posit that increases in asset base should lead to increase in lending to the real sector at lower interest rates. Interest rates reforms should lead to positive real savings rate, as well as the convergence, and/or narrowing down of the premium between the savings and prime lending rates. Foreign exchange market reforms should correct overvaluations and foster relative stability of the exchange rate of the naira vis-à-vis world trading currencies, in addition to eliminating divergence inherent in the current multiple exchange rates system.

In order to assess the likely effects of these changes on economic performance, we posit that the emergent changes in incentives structure may have had the desired effects on real sector credit and performance during the period. On this score, it is proposed here that we test two postulates: the first, hypothesizes that policy reforms which results in increased capitalization, exchange rate devaluation; interest rate restructuring and abolition of credit rationing may have had positive effects on real sector credit. The second, from the macroeconomic perspective, tests the hypothesis that implicit monetary and exchange rates incentives which accompany the

reforms had salutary macroeconomic effects reflected in the trends in aggregate economic growth and inflation.

## Model Specification

In its implicit form, the first model can be rendered as:

$$\frac{PCR}{TCR} = f(CAPBR, CRR, LR, SR, MRR, EXR, BBr) \dots \dots \dots (1)$$

Whereby PCR = Production Sector Credit by Commercial Banks; TCR = Total Credit to the Economy; CAPBR = Capital and Reserves of the Banks; CRR = Cash Reserve Requirements; LR = Prime lending rates; SR = Savings Rate; MRR = Minimum Rediscount rates or monetary policy rates; EXR = Exchange rates, BBr = No. of branch networks of commercial banks. This equation is proposed to be estimated using single equations systems.

The second hypothesis would be investigated through two sets of equations rendered as follows:

$$GDP = f(M2, MRR, CP, CG, EXR) \dots \dots \dots (2)$$

$$CPI = f(M2, MRR, CP, CG, EXR) \dots \dots \dots (3)$$

Whereby GDP and CPI are defined as real Gross Domestic Product and Consumer Price Index; M2 = Money Supply; CP = Private Sector Credit; CG = banking sector credit to government, while MRR and EXR are as defined in equation (1). Given the fact that the equations have common explanatory variables, and the ample evidence that the two dependent variables are known to granger cause each other, it is intended that a simultaneous equations model which includes the autoregressive and distributed lags as part of the systems of equation may be more appropriate to its estimation. If we denote the matrices of the explanatory variables as X, the simultaneous equation form of (2) and (3) in explicit forms becomes:

$$GDP_t = \alpha_0 + \beta_1 GDP_{t-1} + \beta_2 GDP_{t-2} + \alpha_1 X_{it} + \alpha_2 X_{t-1} + \alpha_3 X_{t-2} + u_t \dots \dots \dots (4)$$

$$CPI_t = \alpha_0 + \beta_1 CPI_{t-1} + \beta_2 CPI_{t-2} + \alpha_1 X_{it} + \alpha_2 X_{t-1} + \alpha_3 X_{t-2} + u_t \dots \dots \dots (5)$$

Given the fact that the purely exogenous variables in the models are about five, equation 4 and 5 can be rendered in more complete and general form as:

$$GDP_t = \alpha_0 + \beta_1 GDP_{t-1} + \beta_2 GDP_{t-2} + \beta_3 CPI_{t-1} + \beta_4 CPI_{t-2} + \sum_{k=1}^{n=5} \alpha_{0+k} X_{kt} + \sum_{k=6}^{n=10} \alpha_{0+k} X_{k(t-1)} + \sum_{k=11}^{n=15} \alpha_{0+k} X_{k(t-2)} + u_t \dots (6)$$

$$CPI_t = \alpha_0 + \beta_1 GDP_{t-1} + \beta_2 GDP_{t-2} + \beta_3 CPI_{t-1} + \beta_4 CPI_{t-2} + \sum_{k=1}^{n=5} \alpha_{0+k} X_{kt} + \sum_{k=6}^{n=10} \alpha_{0+k} X_{k(t-1)} + \sum_{k=11}^{n=15} \alpha_{0+k} X_{k(t-2)} + u_t \dots (7)$$

Whereby: the autoregressive variables are as defined earlier on, while the distributed lag components ( $X_k$ ) can be defined as:

- $X_1 = M2_t$ ;  $X_2 = MRR_t$ ;  $X_3 = CP_t$ ;  $X_4 = CG_t$  and  $X_5 = EXR_t$



- $X_6 = M_{2(t-1)}$ ;  $X_7 = MRR_{t-1}$ ;  $X_8 = CP_{t-1}$ ;  $X_9 = CG_{t-1}$  and  $X_{10} = EXR_{t-1}$
- $X_{11} = M_{2(t-2)}$ ;  $X_{12} = MRR_{t-2}$ ;  $X_{13} = CP_{t-2}$ ;  $X_{14} = CG_{t-2}$  and  $X_{15} = EXR_{t-2}$

Thus equations 6 and 7 would be estimated through a simultaneous regression estimation procedure. This estimation procedure is often adjudged to yield better and more efficient estimates of the parameters and coefficients of the regression than the single equation models.

## **Data Sources and Adjustments**

Following our specification, the measure of real GDP is the volume index based on 2000 = 1000, and the consumer price indices for domestic prices. Money supply is captured by broad money (M2) as reported in IMF IFS and CBN monetary survey data, while the potential crowding out effect of domestic credit to the government is captured in the model, by the relative share of both the government and the private sectors in banking systems' credit to the economy. This variable is expected to embody the net outcome of monetary policy pursuits via reserve control and/or the implicit credit allocation bias which monetary policy induces. The bias and incentives created in favour of holding public debt instruments and/or recourse to rediscount facilities is presumed to be embodied in the treasury bills and/or minimum rediscount rates. In this study, the MRR is adjudged to be a better measure of interest rate policy since it is the benchmark rate often determined by the monetary authorities as part of its interest rate operating procedures. It is thereby adjudged to be the compass rate that steers all other interest rates, especially treasury bills rate and/or rates on special monetary authority's certificates issued as instruments of indirect monetary control. This rate can have significant bearing on inflation in the face of frequent recourse to its use, especially when the monetary authority sterilize such funds as part of its monetary control measure and the burden of debt service arising there from is not absolved by the fiscal authorities. With regard to exchange rate variable, it is measured in terms of local currency per \$, so as to reflect appropriately the direction of change which devaluations implies and its increasing effects on domestic consumer prices.

### **3. Empirical Results**

Three major outcomes of the empirical tests are discussed in this section. The first presents the descriptive statistics which show the trends and interclass difference between pre- and post-reforms variables and its implication for banking sector incentives. The second presents the results of equation (1), while the third section discusses the results of equations 6 and 7.

### 3.1 Reforms and Banking Sector

#### Institutional Strength and Investment Behaviour

Prior to SAP, aside from indigenization which gave government 60 per cent stake in otherwise foreign banks that operated in the country, there was no limit to the capital base requirements for banks. However, following the adoption of SAP, a limit of N1.0 billion was prescribed for commercial banks and about N500 million for merchant banks. This was however increased subsequently to N2 billion prior to Soludo. In Soludo's era, the commercial banks were mandated to recapitalize from a minimum capital base of N2 billion to N25 billion. As a corollary to asset base requirements, both prudential and monetary policy guidelines were prescribed for the banking sector. In pre-SAP era, banks operated in an environment of credit allocation, interest rate subsidy, fixed exchange rate and foreign exchange rationing. This however gave way to liberalization post-SAP era.

An assessment of the outcome of the reforms over time is as shown in Table 1. As can be deduced from the figure, post-SAP era witnessed rapid expansion in number and branches networks of banks, from 40 and 1323 commercial/merchant banks in 1985 to 120 and 2382 in 1993. During the Post-Reform lethargy era, some of the banks became distressed and were liquidated, reducing their number to 89 and 2220 branch networks in 1998. Although the Soludo reforms consolidated the banks through mergers, acquisitions and new issues to 25 banks, their

Period	Pre-SAP			Post-SAP			Reforms Lethargy			Pre-Soludo			Soludo
Item	1970	1980	1985	1986	1990	1993	1994	1997	1998	2000	2002	2004	2006
No. of Banks	15	26	40	41	107	120	116	115	89	89	89	89	25
No. of Bank Branches	273	752	1323	1394	2013	2382	2547	2477	2220	2306	3123	3382	4500
Total Assets Base of Banks (N'Billion)	1.2	17.3	37.0	48.1	117.4	341.7	357.5	681.7	818.4	1707.0	2766.6	3209.0	6555.0
Total Assets Base of Banks (\$'Billion)	1.6	32.1	37.0	14.5	13.0	15.6	16.2	31.1	37.4	15.6	21.9	24.2	51.1
Capital and Reserves (N'Billion)	0.1	0.4	1.1	1.5	5.2	10.9	9.1	35.2	72.9	394.6	821.9	1050.0	957.0
Av. Cap. and Reserves per Bank (N'Billion)	0.0039	0.0160	0.0282	0.0364	0.0484	0.0906	0.0789	0.3058	0.8186	4.4335	9.2348	11.7978	38.2800
Liquidity Ratio <sup>1</sup>	94.5	47.6	65.0	36.4	44.3	42.2	48.5	40.2	46.8	58.0	48.8	41.5	52.9
Cash Reserve Ratios <sup>2</sup>	5.2	10.6	1.8	1.7	2.9	6.0	5.7	7.8	8.3	10.0	11.6	5.9	6.1
Loan-to-Deposit Ratio <sup>3</sup>	51.3	66.7	66.9	83.2	66.5	42.9	60.9	76.6	74.4	46.2	78.4	85.4	97.5
Memorandum item													
Exchange rate	0.7100	0.5400	1.0000	3.3200	9.0000	21.8800	22.0000	21.8900	21.8900	109.5500	126.4000	132.3500	128.2000
<sup>1/</sup> Liquidity ratio is the ratio of total specified liquid assets to total current liabilities <sup>2/</sup> Cash reserve ratio is the ratio of cash reserve requirement to total current liabilities <sup>3/</sup> Loan-to-Deposit ratio is the ratio of total loans and advances to total current liabilities Source: Central Bank of Nigeria, Abuja													

total branch networks increased to about 4500 in 2006 (Soludo 2007).

Signs of institutional weakness were apparent through out the period under review. In pre-SAP era, average asset base per bank declined from N1.2 billion in 1980 to N0.924 billion in 1985. Thereafter, there was apparent growth in Naira terms post-SAP era as the average was

above the recommended N2 billion marks. However, following devaluations of exchange rates, these figures were the equivalent of US \$0.122 billion in 1993 to US \$0.272 billion in 2004. These figures tended to suggest that Nigerian banks were too weak to compete globally. Although a number of analyst have often argued that this outcome could be the result of assets undervaluation in the face of exchange rate depreciation, a number of the banks were adversely affected especially those saddled with external debt service burdens. The institutional ratios attested to this. In pre-SAP era, both the liquidity and cash reserve ratios deteriorated and the situation persisted in post-SAP era as they were quite below the prescribed minimum by the monetary authorities.

With regard to credit purvey, the banking sector exhibited mixed performance. The immediate post-SAP witnessed increased attention given by the banking sector to the production sectors. The share of agricultural and manufacturing sectors in banking sector credit increased post-SAP and the production sector as a whole accounted for an annual average of 58.3 per cent of total to the economy (see Table 2). However, during the era of reforms lethargy, miscellaneous lending crowded out production credit, to the extent that even in post-Soludo era, it accounted for about 70.6 per cent of total credit. While it can be argued that post Soludo's

Sector	Av. Ann. Total	Agric	Man.	Mining	R.E&C.	Productn	Miscel.	Svs/Others	Total
Period	N'Million	% Share	% Share	% Share	% Share	% Share	% Share	% Share	% Share
Pre-SAP 1970-79	3,952.9	2.3	12.5	0.9	8.9	24.7	1.8	73.5	100.0
Pre-SAP 1980-85	11,978.3	7.2	23.7	1.0	17.1	49.0	4.7	46.3	100.0
Post-SAP 1986-93	32,053.4	14.7	31.0	1.6	11.0	58.3	5.0	36.6	100.0
Refms Leth.1994-1998	202,177.9	13.0	34.7	8.7	0.0	54.7	34.6	10.6	100.0
Pre-Soludo 1999-2004	3,248,367.7	6.1	25.0	8.3	0.0	39.4	57.2	3.4	100.0
Soludo 2004	5,686,669.2	4.6	23.0	9.1	0.0	36.7	61.1	2.2	100.0
Post Soludo 2005	7,392,670.0	3.8	19.9	9.1	0.0	32.8	65.5	1.7	100.0
Post-Soludo 2006	9,684,397.7	3.2	16.9	8.0	0.0	28.1	70.6	1.3	100.0

Source: Computed from CBN Statistical Bulletin

reforms may have helped to build and foster a competitive and healthy financial system, it is debatable if the structure of their portfolio investments has the capacity to support the desired economic development aspiration of the proponents. This could be inferred from Table 2 which shows that despite the rapid increase in lending to the economy, the share of production sectors of the economy especially agriculture and mining remained low and indeed declined proportionately over time suggesting that the new monies may have been channelled into miscellaneous activities. Yet agriculture is known to contribute a major share to the GDP, even under conditions that it is not getting new funds. A significant proportion of the production loans go to manufacturing, probably to finance imports of raw materials, machineries and component assembly activities.

## Exchange Rates Reforms and Incentives Structure

Prior to SAP (1970 to 1985), banks operated under highly regulated environment, characterized by fixed exchange rates structures guided by official financial markets. In particular, an official foreign exchange market was operated by central bank which allocated foreign exchange to end users based on import licensing procedures at predetermined rates. Incidentally, this system led to huge unpaid trade arrears and external debts coupled with exchange rate overvaluation. With the adoption of SAP, this procedure was abolished and replaced with a two-tier market structure. While the official window was initially retained for special government transactions and debt service, the Second Tier Foreign Exchange Market, a

Period/Era	NER	NEER	MRR	TBR	DR	SR	LR	Inflation	CPI	USCPI
Pre-SAP 1970-79	0.65	6709.10	4.3	n.a	3.2	4.0	6.8	15.9	0.7	30.4
Pre-SAP 1980-85	0.72	7846.26	8.0	n.a	7.2	8.3	9.4	18.0	2.2	56.2
Post-SAP 1986-93	9.70	1201.00	16.1	20.4	15.7	15.6	20.3	27.8	8.9	73.8
Refms Leth.1994-19	21.91	240.17	13.5	12.4	11.4	8.7	19.3	36.0	66.0	90.7
Pre-Soludo 1999-200	115.44	93.90	17.3	16.5	14.1	5.0	21.6	12.9	129.2	103.4
Soludo 2004	132.58	107.74	15.0	14.3	13.7	4.4	19.2	17.6	176.1	109.7
Post Soludo 2005	131.27	123.81	13.0	8.6	10.5	3.6	18.0	15.0	227.1	112.9
Post-Soludo 2006	127.46	133.03	13.7	11.2	9.6	3.1	16.8	12.8	392.0	

Source: Computed from IFS, CBN and National Bureau of Statistics Data base.

Dutch-Auction System in which financial institutions bid to purchase foreign exchange at the market-clearing rates for their intended beneficiaries, was introduced. This system laid the foundation for exchange rates devaluation and the emergence of multiple exchange rates systems in Nigeria. However during the Reforms Lethargy era (1994 to 1998), which was characterized by adjustment fatigue with lots of policy reversals following the change in government, there was a return to regulation. The foreign exchange market was segmented into two: official window which accommodated government transactions at a special rate of \$1 = N22, and the other window at \$1 = N80. The market segmentation laid the foundations for the gross abuse of the markets and which seemed to defy any practical solutions even as of today. According to Ojo (2005), "...the malfunctioning of the foreign exchange market has made the various attempts at determining a realistic naira exchange rate prove elusive" and contributed in no small measure towards fuelling domestic inflation. He also maintained that malfunction permitted various malpractices in the market which include: spurious purchases and disbursements without complete documentation, charging of excessive fees and commissions by the dealing banks; failure to repatriate export proceeds and non-payment of interest earned to customers that operate letters of credit and domiciliary accounts.

With the advent of civilian democracy in Nigeria in 1999, there was an apparent return to the path of economic reforms again. Although for the first two years of this period, the basic

framework for foreign exchange management continued to focus on periodic changes in the rules of the inter-bank foreign Exchange Market (IFEM), by July 2002, the Dutch Auction System (DAS) which was jettisoned in 1992 for leading to rapid exchange rate devaluation was re-introduced. The DAS has remained in operation up till today, even in the Soludo era.

In terms of incentives structure, Table 3 shows that the Naira was highly over valued in pre-SAP era, while rapid depreciation in post SAP era narrowed the gap between the nominal and real effective exchange rates with an equilibrium attained in pre-Soludo era. Subsequently, continuous depreciation resulted in undervaluation of the Naira that was only corrected in Soludo's era. Many economic analysts believed that DAS has resulted in a nebulous exchange rates structure and has fostered abuses. Ojo (2005) supports the view that DAS is at the root cause of the problem of continuous depreciation and multiplicity of exchange rates within the economy, which hitherto, resulted in the entrenched speculation and arbitrage by the banking sector. Among the malpractices which he identified are: "spurious bidding by authorized dealers in line with their penchant to channel almost all resources to foreign exchange bidding to guarantee successful bids. This will, in turn, lead to a drying up of loanable funds and consequent return to higher and rising interest rates".

## **Monetary Control Techniques and Interest Rates Structure**

Prior to SAP and immediate post SAP, monetary management relied on direct controls of reserves and interest rates structure of banks. However, in 1993, an important reform of the monetary management strategies was the introduction of open market operations (OMO). OMO became the dominant instrument of liquidity management complimented by reserve requirements and discount window operations. Unfortunately, the new approach was yet to find its footing when macroeconomic management returned to an era of regulation by 1994-1998. Irrespective of the market fundamentals, the monetary authorities pegged minimum rediscount rates at 13.5 per cent, as well as specified interest rates limits to not more than 21 percent for lending rates, while the spread between savings and lending rates was expected not be more than 7.5 per cent.

As it turned, the introduction of OMO followed by a return to interest rates control opened up another investment portfolio to the commercial banks. This manifested mainly in the new opportunity offered the savings public to diversify their portfolio investments from traditional savings and the stock markets into money markets. The banks were also offered the opportunity to diversify from traditional credit purveys, and foreign exchange markets transactions to trading in money market instruments especially treasury bills and repos transactions at the OMO. Table 3 shows that the yield rates on OMO and treasury bills

transactions were comparatively more attractive than savings rate, while the alternative investment portfolio which would require borrowing to meet working capital requirement were priced out of the profitability threshold of the investing public. While low savings rate encouraged holders of idle cash balances to invest in money market instruments, it also encouraged financial institutions to shy away from the more risky lending portfolio and its associated high transactions costs to the relatively safe portfolio with little or no costs, with the guarantee of very good returns.

In the face of credit apathy, financial sector operators found investment in foreign exchange and public debts instruments especially treasury bills very lucrative as the returns on them moved in tandem with the MRR. Thus, the policy created a dilemma in the form of trade-off costs reflected in the arbitrage gains for speculators in the financial markets. Ironically, rather than serve as a penalty rate for borrowing from the central bank, the attractive treasury bills rate which followed the rise in MRR, saw the central bank borrowing from the banks and the public as part of its monetary control functions. Such funds were sterilized but which upon maturity the central bank was duty bound to pay the interest rates accrual, probably via the creation of high powered money with adverse implications for inflationary control. One may argue that if the CBN issued the debt instruments in favour of the government that the burden of debt service should be borne by it. Unfortunately, during this period, fiscal authorities were known to resort to ways and means advances far above the permissible limits, and which were usually written off at the end of the day.

The changes in the structure of treasury bills holdings attested to this. Prior to the commencement of SAP, CBN accounted for a significant proportion of the treasury bills outstanding. However, with the sharp rise in treasury bills rate, the situation changed, with the deposit money banks and the public now accounting for the major share. The shift in investment portfolio of the banks to this segment of the markets is quite rational. Indeed, the banks ceased the opportunity of the permissive financial operating environment to mobilize funds cheap, and invest in relatively secure instruments.

Also, their liability structure attested to this. The main sources of fund are demand deposits, time, savings and foreign deposits, central government deposits reserve accounts and unclassified liabilities. While the costs of funds from demand deposits, reserve accounts, and central government deposits is known to be very low, that of savings deposits have been seen to also be low in recent time. Indeed, less than 30 per cent of their funds are mobilized from the more expensive sources. The point to be made is that a significant proportion of their investible funds are sourced cheap, but are channelled into secure portfolios (money market instruments).

One is not surprised that since 1999 that the financial institutions that survived the distress emerged to become very sound and have had outstanding record of profitability, derived mainly from the defective interest rate structures.

### 3.2 Effects of Reforms on Real Sector Credit

The regression results of equation (1) are as shown in Table 4. The econometric property of the estimated equation for each reform era is remarkable, as the overall goodness of fit is high, while the coefficient of the explanatory variables displayed the right signs. The analysis show that increases in capital and reserves (CAPBR) which had significant positive effects on credit to the production sector in pre-SAP era became insignificant in post-SAP era, and indeed exhibited an inverse relationship since the reforms lethargy era to date. With regard to interest rates structure, savings rate which hitherto had insignificant influence in pre- and post-SAP era, exhibited a negative but significant effects to lending to production sector during the Reforms Lethargy era. It is quite interesting to note also that MRR (a monetary policy rate) exhibited a significant inverse relationship with the dependent variable, suggesting that erstwhile interest rates policy penalize lending to the productive sectors. Also, eras of fixed exchange rates

Period	Pre-SAP (1970-85)		Post-SAP (1986-93)		Reforms Lethargy (1993-98)		Pre/Post Soludo (1999-2006)	
Dependent Variables	Log(PCR/TCR)		Log(PCR/TCR)		Log(PCR/TCR)		Log(PCR/TCR)	
Independent Variables	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat
C	-10.910	-17.26	-3.060	-5.24	78.544	3.87	4.076	5.67
LOG(CAPBR)	0.226	6.39	0.010	1.13	-0.939	-2.10	-0.140	-2.00
LOG(SR)	0.112	0.86	0.068	1.90	-0.785	-1.99	0.293	3.22
LOG(MRR)	-0.557	-4.95	-0.053	-2.79	-1.252	-3.97	-0.063	-0.64
LOG(LR(-2))	-0.370	-2.93	-0.033	-1.43	0.430	1.65	0.170	0.92
LOG(EXR)	-1.201	-11.02	0.009	0.96	-4.571	-2.58	-0.374	-1.19
LOG(BBR)	1.448	9.72	0.328	3.41	-5.689	-3.10	-0.228	-2.62
LOG(CRR)	-0.108	-2.65	-0.027	-1.23	-3.019	-2.36	-0.165	-2.14
R-squared	0.992		0.971		0.826		0.969	
Adjusted R-squared	0.991		0.962		0.750		0.960	
S.E. of regression	0.071		0.010		0.142		0.035	
Sum squared resid	0.264		0.002		0.322		0.030	
Log likelihood	79.494		96.016		17.690		66.142	
Durbin-Watson stat	1.281		0.775		1.304		1.413	
Mean dependent var			-1.397				-0.934	
S.D. dependent var			0.745				0.177	
Akaike info criterion			-2.344				-3.634	
Schwarz criterion			-2.067				-3.267	
F-statistic			948.641				107.512	
Prob(F-statistic)			0.000				0.000	

policies especially pre-SAP and Reforms Lethargy displayed negative and significant effects on the dependent variable confirming our *a priori* expectation that overvaluation penalizes lending to the productive sectors. Also, the growth in network of bank branches which hitherto positively influence credit purvey in pre- and post-SAP era, had negative effect on production credit during the era of reforms lethargy and had remained so in pre- and post-Soludo's era.

Finally, the coefficient of the CRR variable confirm the assertion that reserve operating procedures limits the credit creating ability of the banks.

### 3.2 Policy Reforms and Economic Performance

Table 5 and 5<sup>a</sup> presents the Log linear and the linear regression results estimated with seemingly unrelated regression (SUR) methods of the simultaneous equations model made up of a system of equations (6) and (7). For the purpose of this study, let us examine the effects of the purely exogenous variables on the dependent variables. The result shows that in pre-SAP era, monetary and exchange rates policies were relatively ineffective. While MRR had an inverse influence on the GDP variable, credit expansion to government represented the main source of

Table 5: Simultaneous Equation Model of Monetary and Exchange Rate Policies on GDP and CPI

Period	Pre-SAP (1970-85)				Post-SAP (1986-93)			
	Log(GDP)		Log(CPI)		Log(GDP)		Log(CPI)	
Dependent Variables	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat
Independent Variables								
Log(GDP(-1))	1.5780	17.41	-0.1102	-0.42	1.7327	16.28	2.8122	1.64
Log(GDP(-2))	-0.6669	-7.12	0.1281	0.47	-0.7164	-7.04	-2.9703	-1.81
log(CPI(-1))	-0.0758	-1.87	1.1571	9.78	0.0231	2.20	1.1614	6.87
log(CPI(-2))	0.0772	1.94	-0.3807	-3.28	-0.0156	-1.07	-0.6004	-2.55
C	0.3165	2.59	-1.1020	-3.10	0.0315	0.28	-2.0819	-1.15
Log(M2)	-0.0026	-0.29	0.0359	1.37	-0.0096	-1.11	0.2925	2.10
Log(CG)	0.0047	0.69	0.0447	2.26	-0.0007	-0.34	-0.0001	0.00
Log(CP)	0.0113	0.80	0.0521	1.26	-0.0024	-0.50	-0.0123	-0.16
Log(MRR)	-0.0344	-2.24	0.0225	0.50	0.0074	1.10	0.1589	1.45
log(EXR)	0.0002	0.01	0.0957	1.43	0.0001	0.06	0.0577	1.63
Observations: 62			Observations: 62		Observations: 29		Observations: 29	
R-squared	0.9979		0.9979		0.9995		0.9941	
Adjusted R-squared	0.9976		0.9976		0.9993		0.9912	
S.E. of regression	0.0354		0.0354		0.0035		0.0568	
Durbin-Watson stat	2.0445		2.0445		2.1297		1.7884	
Mean dependent var		3.9813		0.0004		4.2461		2.0573
S.D. dependent var		0.1425		0.7186		0.1332		0.6064
Sum squared resid		0.0077		0.0650		0.0002		0.0612

  

Period	Reforms Lethargy (1993-98)				Pre/Post Soludo (1999-2006)			
	Log(GDP)		Log(CPI)		Log(GDP)		Log(CPI)	
Dependent Variables	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat
Independent Variables								
Log(GDP(-1))	1.1002	7.33	-2.0358	-0.29	1.1999	7.40	-1.2371	-0.51
Log(GDP(-2))	-0.1287	-0.86	-0.6193	-0.09	-0.3084	-2.02	2.5754	1.13
log(CPI(-1))	0.0002	0.04	1.0985	5.53	-0.0007	-0.08	1.3986	11.10
log(CPI(-2))	0.0088	2.01	-0.3662	-1.76	0.0105	1.09	-0.6147	-4.26
C	0.1065	1.42	5.5541	1.56	0.2845	2.25	-3.7370	-1.97
Log(M2)	-0.0151	-2.37	0.3717	1.24	-0.0111	-2.19	0.1891	2.49
Log(CG)	0.0017	2.55	-0.0162	-0.51	0.0021	1.23	-0.0244	-0.97
Log(CP)	0.0059	1.73	0.2167	1.34	0.0244	2.82	-0.1264	-0.98
Log(MRR)	0.0068	3.58	-0.0044	-0.05	-0.0066	-1.60	0.0023	0.04
log(EXR)	0.0240	2.43	0.0677	0.15	-0.0004	-0.05	-0.4326	-3.25
Observations: 24			Observations: 24		Observations: 32		Observations: 32	
R-squared	0.9997		0.9955		0.9998		0.9972	
Adjusted R-squared	0.9995		0.9926		0.9997		0.9960	
S.E. of regression	0.0010		0.0471		0.0019		0.0285	
Durbin-Watson stat	2.2216		1.8258		2.1995		2.2558	
Mean dependent var		4.4631		3.9466		4.7045		5.0487
S.D. dependent var		0.0469		0.5460		0.1090		0.4536
Sum squared resid		0.00001		0.0311		0.0001		0.0179

inflationary pressures. During the immediate post-SAP era, monetary and exchange rates policy were largely ineffective in influencing growth and inflationary control as almost all the parameter estimates were not significant. While expansionary money supply hurts real domestic output (GDP), it contributed to fuelling inflationary pressure as the parameter estimate is significant in the CPI dependent structural equation during the period. Exchange rate variable



also had significant influence on CPI at 5 per cent level (see Table 5) and indeed, the only significant variable in Table 5a, suggesting that devaluation resulted solely to fuelling inflation in this period.

The regression result for the Reforms Lethargy era (1993-1998) is most interesting. All the coefficients of the explanatory variables for the GDP dependent structural equation were significant. In particular, expansionary money supply had negative effects on GDP, while the pursuit of fixed interest and exchange rates policies reflected in MRR and EXR variables had

Period	Pre-SAP (1970-85)				Post-SAP (1986-93)			
Dependent Variables	GDP		CPI		GDP		CPI	
Independent Variables	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat
GDP(-1)	1.523373	18.03347			1.761436	15.667		
GDP(-2)	-0.573244	-6.887858	0.002301	4.906553	-0.762661	-6.747812		
CPI(-1)	-2.89707	-2.634146	1.187175	12.64045			0.861691	18.35415
CPI(-2)	3.922911	3.59154	-0.510676	-5.347885				
C	3.407464	2.90932			0.256137	0.578821		
M2	0.000376	2.723148	-2.65E-05	-3.093142				
M2(-1)	-0.000424	-3.019453						
M2(-2)			4.87E-05	5.023733				
CG			8.44E-05	6.557099				
CG(-2)			-4.06E-05	-2.739669				
EXR(-1)							0.196384	4.887192
Observations: 62			Observations: 62		Observations: 32		Observations: 32	
R-squared	0.994112		0.997424		0.998719		0.99108	
Adjusted R-squared	0.993348		0.997143		0.998631		0.990783	
S.E. of regression	0.577618		0.04842		0.337856		0.544109	
Durbin-Watson stat	2.056624		1.917743		1.569237		1.420242	
Mean dependent var		54.09516		1.280323		69.56562		8.9175
S.D. dependent var		7.082382		0.905899		9.129944		5.667397
Sum squared resid		18.01667		0.12895		3.310247		8.88163
Period	Reforms Lethargy (1993-98)				Pre/Post Soludo (1999-2006)			
Dependent Variables	GDP		CPI		GDP		CPI	
Independent Variables	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat	Coef.	t-Stat
GDP(-1)	1.799487	11.27409			1.48634	9.423953		
GDP(-2)	-0.798816	-4.848971			-0.464305	-2.828789	0.219137	3.448919
CPI(-1)			0.932006	33.71996			1.65892	15.39912
CPI(-2)							-0.801648	-6.535764
C	0.054143	0.070043			-1.693158	-2.745009		
CG(-2)							5.17E-05	6.243019
EXR(-1)			0.346884	4.158179			-0.168481	-3.160866
Observations: 20					Observations: 32			
R-squared	0.998853		0.98265		0.99969		0.997974	
Adjusted R-squared	0.998718		0.981686		0.999669		0.997674	
S.E. of regression	0.133767		2.773107		0.223624		4.612951	
Durbin-Watson stat	1.784612		1.603668		1.958547		1.936863	
Mean dependent var		87.845		65.9915		111.0875		174.2816
S.D. dependent var		3.736234		20.49173		12.28883		95.64048
Sum squared resid		0.30419		138.4222		1.450229		574.5415

<sup>a</sup>Linear model estimated using seemingly unrelated regression methods after eliminating insignificant variables

positive effects. Ironically, these policy variables had no significant effect on the consumer price index during the period. Indeed, the deliberate maintenance of fixed interest rates and the return to credit allocations during this period with the result that more credit went to the production sector could explain the positive effects on GDP. The result of the exchange rate variable also confirms the *a priori* expectation that stabilization of exchange rates in a country whose production base is foreign dependent augurs well for that economy. This is particularly true for Nigeria during this period, as she depended to a large extent on imports for capital goods, raw

materials and final consumer products to augment the inadequate production and domestic supplies. The return to reforms in pre/post Soludo's era changed the economic incentives structure. The GDP dependent equation show that while monetary expansion led to its contraction, it resulted in significant increases in consumer prices. Banking sector credit to the private sector had significant positive effect on GDP while that to the government sector had adverse effects on it. However, in line with theoretical expectation, credit to government variable had positive and significant effect on consumer prices, confirming the traditional view that it is inflationary. A salutary development in this era is that exchange rates policy had moderating effect on inflationary pressures.

#### **4. *Pitfalls of the Eras of Reforms***

The review of the incentives structure and impact of reforms so far show that the outcome fell short of expectations and that this was doomed to be so because of some pitfalls which militated against it. Among these are faulty premise for reforms, wrong sequencing of reforms, conflicts emanating from adopted theoretical models for reforms and above all, frequent reversals and/or non-sustainability of reforms.

##### **Faulty Premise and Inappropriate Sequencing of Reforms**

The review of eras of reforms in Nigeria shows that the premise was to get price incentives right for the banking sector through the abolition of foreign exchange and credit rationing in favour of liberalized domestic money and foreign exchange markets. The concern was more with reducing government intervention with the hope that there exists a virile private sector to fill the gap effectively. Unfortunately, the Nigerian financial markets was far from being virile, as it was characterised by dualistic financial markets, whereby the commercial banks operated side by side with rural, curb and parallel markets. While the government succeeded, albeit after a long period, of divesting her interests in the banking sector, market segmentations persisted and perhaps remain at the root of policy compromises which tended to thwart the reforms efforts till date. Thus, one of the pitfalls of the reforms programme therefore is the premise that there exist virile private sectors that can successfully implement the reforms agenda.

Related to the above is the poor sequencing and coordination between policy reforms initiatives, the timing of implementations and sustainability. This was particularly problematic in post-SAP era when the monetary authorities have had to subject the banking sector to liquidity shocks via discretionary monetary policy in order to tame the foreign exchange market. Nnanna (2005) is of the view that such shocks was detrimental to the performance of the banking sector and further exposed them to increased risks in the face of macroeconomic instability, arising

from the weakening oil market, exchange rate and financial sector crises. According to him, one such shock during this period occurred in 1988 when the monetary authority decided that the back-log of naira deposits for foreign exchange applications yet to be approved be moved from deposit money banks (DMBs) to the CBN. The second shock stemmed from the order that public sector funds in DMBs be transferred to the CBN. These combined actions precipitated the liquidity crisis in the period and subsequent large scale withdrawal of deposits from the financial system. Although, distress resolution measures were taken by the CBN through accommodating some of the banks as a lender of last resort, very few regained viability, while many of them had their licenses revoked and were subsequently liquidated.

### **Conflict Emanating from Adopted Theoretical Model for Reforms**

This was a common pitfall that characterizes the four models of reforms implemented in Nigeria so far, viz.: institutional and capital base reforms, adoption of the DAS market approach, model of monetary control and interest rates reforms.

With regard to institutional reforms, the assumption is that banking sector liberalization accompanied by increased capital base requirements is a necessary condition for improved performance of the banking sector. This was echoed by the proponents of the initial banking sector reforms in SAP era and re-echoed by the pre/post Soludo era. The underlying argument draws its strength from the neo-classical supply-side economics, rooted in Say's Law that "supply creates its own demand" (Jhinghan, 2003). That is, increased capital base may imply increased availability of loanable funds. This should lead to a fall in interest rate and should be capable of stimulating or eliciting a demand following response as envisaged by Say's Law of Markets. However, the major pitfalls of this assumption is reflected in the trade-offs costs which manifested in the various eras of reforms in Nigeria. In particular, the post-Soludo reform era, which is believed to have drawn into the banking sector a significant proportion of currency outside banks and new monies from both the domestic and international money markets (with the result that there was a remarkable increase in the capital and reserves of banks), did not result in increased credit purvey to the productive sector. Contrary to the expectation that this should enhance the ability of banks to create credit, systemic leakages resulted in banks investing their funds on alternative and secure portfolios, in addition to exhibiting detrimental credit apathy.

The second major pitfalls emanates from the wrong perceptions by the monetary authorities especially in Soludo's era that reforms via increased capitalization and financial strength can foster economic growth. This posture departs from earlier classical stance to agree with the Keynesians that cheap money policy which leads to lower interest rates and increased investment, could lead to increases in income, output and employment. However, an important

qualification to this assumption in Keynesian analysis is that this is feasible when the economy is known to operate below the full employment level. However, conflicts arise when the economy operates beyond full employment level, as has often been claimed by the monetary authorities who frequently resort to liquidity mop-up as part of monetary control measures. The adoption of a Keynesian monetary policy stance which shifts the equilibrium money supply towards intersecting with the demand for money curve at the precautionary and speculative level could generate this type of conflict. And indeed, with the advent of universal banking in Nigeria since the pre- and post-Soludo era, the demand for the new funds, is guided by the precautions that meeting the demand of real sector credit is risky; short term trade financing, especially imports yields quick returns, while opportunities to invest in bonds and treasury bills and other money market instruments offer a lucrative returns. There is therefore very slim chance that the new money would find its way into investment, given the general level of credit apathy on the part of financial markets, and it is therefore an illusion that being ‘big’ and ‘strong’ connotes ‘tremendous increase’ in credit creation ability and by inference, rapid growth.

The third conflict revolves around the apparent inability of the monetary authority to monitor and supervise the conduct of the emerging few but strong ‘oligopolies’ in the domestic money and foreign exchange markets. One argument often advanced for liquidity mop up by the monetary authorities is the need to keep a tab on monetary expansion as an instrument to stabilize the foreign exchange market. The operating procedure usually is to limit the capacity of banks to make outrageous bids for foreign exchange, through the control of their money reserves. This task was arduous when the banks were many and have a lower capital base. However, let us for once imagine the monster the monetary authority would have to contend with given the fewer but richer number of banks equipped to manipulate the foreign exchange market to their advantage. The foreign exchange market would remain their niche and the likelihood is there that they may become sharper and wiser in that market than in other investment portfolios markets. If anything, the recapitalization has strengthened them further to accentuate their rent seeking behavior, and domestic monetary policy appears inadequate to address this problem.

A conflict that is peculiar to the Soludo reforms is the monetary authority’s stance that the inability to recapitalize, and/or forged a merger and acquisition relationships with others implies institutional weakness and which led to the liquidation of such banks. This is in spite of the fact that the NEEDS’ (2004) document which laid the foundations for this era of banking sector reforms admitted “..... that despite *high profit levels*, the sector does not appear to be playing a catalytic role in the real sector”. It means that some of these banks were profitable

ventures, but had failed to play the envisaged catalytic role in the real sector. The pertinent question is: can small not be beautiful? If at the level of their capitalization they were doing good business, why should they be liquidated on the ground that they needed to be big to make ‘bigger profits’? Here lies the contradiction in policy. The financial distress experienced by this group of banks is policy induced as some of them were actually not distressed in the true sense of that word. Ironically, one of the elements of the financial sector reforms is the promotion of small holder and development finance institutions expected to grant concessionary loans to small holder enterprises. Indeed, the monetary authorities agree that small is beautiful, but prefers to kill the ‘small’ for the ‘big’.

### **Conflicts Emanating from Foreign Exchange Market Segmentation**

The review so far shows that a major element of the banking sector reforms is the introduction of a foreign exchange market that metamorphosed from SFEM to FEM and IFEM. However, the major hallmark of the markets is the adoption of DAS for the allocation and pricing of foreign exchange. The Nigerian DAS is a wholesale market dominated by the CBN as a monopoly supplier while the financial institutions are a buying cartel purportedly on behalf of their clients. These banks however retail foreign exchange to individuals and corporations through a second window the inter bank foreign exchange market (IFEM) which operates more like a spot market. In addition to these markets there is the bureau de change that sells foreign exchange to meet the needs for travels and personal allowances. Thus, in practice, the Nigerian foreign exchange market is segmented into: DAS, the wholesale segment which is monopolistic in supply and oligopolistic in demand, and the second: inter bank, which is oligopolistic in supply to ultimate users of foreign exchange, complemented by bureau de change operations and parallel markets.

The major dilemma or conflict arising from the segmentation of the spot market is the tendency of participating financial institutions in the DAS to convert purchases from the wholesale market to speculative operations at the inter bank market as well as in their retailing activities to individuals and corporations for arbitrage gains. This was the main source of multiple exchange rates, widened divergence between parallel and official exchange rates and indeed the continuous depreciation in post reforms and pre-Soludo eras. Although the monetary authority has often thought that what is needed to rectify this anomaly is increased funding of the wholesale market through very frequent interventions, the problem had persisted, with the result that rent-seeking behaviour assumed a more complex dimension. This has further dimmed the prospect for exchange rates convergence, especially so as the monetary authorities is content

with periodic interventions through DAS for the purposes of monetization of foreign exchange reserves in favour of the fiscal authorities.

**Conflicts or Trade-offs in Fostering Internal and External Balance via the Monetary Approach**

A common trend in all the eras of reforms is the adoption of a monetary approach for the attainment of internal and external balance. The monetary approach can be expressed in the form of the following relationship between the demand for and supply of money (Jhinghan 2003):

$$M_D = f(Y, P, i) \dots \dots \dots (1)$$

$$M_S = NDC + NFR \dots \dots \dots (2)$$

$$M_D = M_S \dots \dots \dots (3)$$

Or  $M_D = NDC + NFR \left[ \because M_S = NDC + NFR \right] \dots (4)$

Whereby  $M_D$  is the demand for money which is a stable function of income (Y), prices (P) and rate of interest (i);  $M_S$  is the money supply, which is a multiple of monetary base (m) and consists of net domestic money (credit) (NDC) and country’s foreign reserves (NFR). A balance of payment deficit or surplus is represented by changes in the country’s reserves such that:

$$\Delta NFR = \Delta M_D - \Delta NDC \dots \dots \dots (5)$$

Or  $\Delta NFR = BOP \dots \dots \dots (6)$

Equating equations 5 and 6, then:  $BOP = \Delta M_D - \Delta NDC \dots \dots \dots (7)$

Where  $BOP$  is the balance of payment and it is equal to the change in demand for money less the change in domestic credit. From equation (5) and (7), a balance of payment deficit means a negative BOP which reduces the NFR and the money supply. On the other hand, a surplus means a positive BOP which increases the NFR and the money supply. When  $BOP = 0$ , it means BOP equilibrium or no disequilibrium of BOP.

The adoption of this model in eras of balance of payment deficit was appropriate. However, in pre- and post-Soludo era, we were faced with a situation of a BOP surplus, which therefore suggests that expansion in money supply would have its origin from equation (4), such that:

$$\dots \left[ \because M_S = NDC + NFR \right] \dots (4) .$$

This can be interpreted to mean that, although domestic money supply may exceed the demand for money, the excess money is not from domestic borrowing but from draw-down on reserves. Although the potential of such funds to swell the reserves of deposit money banks exist, it may

not be inflationary given the credit apathy exhibited during this era. It could at best amount to 'insipid liquidity' at the disposal of these banks for other investments portfolios. The ability of such funds to compromise monetary policy pursuits is therefore limited and should not be of any primary concern to the monetary authority. However, experiences show that during the pre/post Soludo era, the monetary authority chose to mop up this liquidity through instruments of indirect monetary controls. In the face of dearth of instruments, since fiscal authorities were not borrowing from the public, the monetary authority has had to create its instruments to mop it up. Although it is often argued that it is a desirable pre-emptive action, such a precautionary reaction may in fact be the root cause of inflation of a monetary origin, as she had had to service the associated debt obligations upon maturity through fiat money creation. The contradiction of this approach is that the monetary authority has chosen to stab itself in the foot by helping the fiscal authorities to monetize reserves which it has to periodically struggle to control, even when such money is not a threat to rapid monetary expansion via domestic credit creation.

### **Ambivalent Theoretical Underpinning of Reforms**

From the analysis so far, it could be inferred that during the SAP era, a monetary approach rooted in a monetarist stance held sway as the foundation for banking sector reforms. The focus was to strike a balance between internal and external balance through a combination of exchange rates adjustments and the use of both reserves and interest rates operating procedures, with the sole objective of inflationary controls. However, as the pains of adjustments became severe, a Keynesian perspective was introduced as an attempt to use monetary policy to stimulate growth. However, the return to credit allocation, interest and exchange rates control despite supply shortages brought to the fore the short comings of Keynesian approach. There was an apparent return to a monetarist model in pre-Soludo era for fostering macroeconomic balance but with general believe that this time around it could yield a Keynesian result fostering development as well as taming inflation. The post-Soludo reforms represents a marked departure of erstwhile theoretic model of reforms. In thoughts, the Soludo's approach to reforms is Classical with deep foundations in Say's Law that supply creates its own demand. However, it is obvious that he adopts the Monetarist view for fostering internal and external macroeconomic balance as it often resorted to liquidity mop up as the major instruments for monetary and inflationary control. Experience during the period showed that rather than tame inflation, it seems to be the driving force behind domestic inflation of monetary origin. However, to the extent that post-Soludo reforms favoured interventions both in the foreign and domestic money markets, the monetary authority acted Keynesian, believing that the unseen hand of the state is capable of moving the economy in the desired direction. Perhaps, it is this

ambivalence that is the root cause of the conflicts and tradeoffs which the Soludo's reforms elicited. .

## **5. Future Policy Options and Concluding Remarks**

Going by our analysis so far, the choice for future policy options for banking sector reforms would be to bolster and move the Soludo's reforms towards a clearly neo-classical supply side economics beyond the ambivalence of Say's classical and Keynesian monetary stance. This choice is imperative if we are to reconcile monetary and fiscal policies for the purpose of attaining the twin objectives of growth and inflationary controls. Such reconciliation would mean that the monetary authority should be less concern with expansionary fiscal stance, for as long as its origin is not through domestic borrowing. Under such a scenario, it should rely mostly on interest rate operating procedures for macroeconomic management with the sole objective of moving towards the 'law of one market' in both the domestic and international money markets. The overriding objectives would be to minimize interest and exchange rates risks that can adversely affect the rate of return on domestic and international financial investments in the country. That way, the right incentives would be created for the inflow of foreign and domestic investment into the country. This requires the urgent need to fine-tune the Soludo's banking sector reforms through the deliberate adoption of policies that would ensure convergence of domestic and international rates of return on financial markets investment. This would require getting prices right in all the markets.

### **Getting Domestic Interest Rates Right**

On the domestic scene, there is the need to narrow the gap in interest rates structures of alternative financial markets investment portfolios. In particular, there is the critical need to determine the appropriate benchmark for interest rates policies. Although the newly introduced monetary policy rate is targeted at this, the extent of adjustment is inadequate. A situation whereby the interest rate premium between the MPR and the Savings Rate is so wide suggest that arbitrage activities informed by this development would continue to issue distorted signals for the viability of credit portfolios and real sector investments on the one hand, and alternative investments in securities and money market instruments on the other hand. Although a market based supply side policies was expected to attain this, the monetary authority would need to be less concern with the perceived adverse trade off implicit in their current approach. Indeed contemporary experiences of similar economies lend support to this approach. Thus, countries with best practices like the United States, United Kingdom keep their monetary policy rates close to their deposit rates especially savings rate. Also countries within Africa which belong to a



monetary zone maintained the same tradition as it is evident from the data on Senegal and South Africa. However, Botswana and Nigeria are classic examples of undesirable interest rates structures, induced by the failure of the monetary authorities to prescribe an appropriate reference rate in line with best practices (see Table 7).

	Botswana		Senegal		South Africa		United States		United Kingdom		Nigeria		
DESCRIP	SAVINGS	BOB LEND	DISCOUN	DEPOSIT	DEPOSIT	DISCOUN	DISCOUN	FEDERAL	3-MONTH	TBR	MRR/MPR	3-M DR	Sav. Rate
2004Q1	7.8	14.3	4.0	3.5	6.7	8.0	2.0	1.0	4.2	4.0	15.0	15.6	4.4
2004Q2	7.6	14.3	4.0	3.5	6.9	8.0	2.0	1.0	4.6	4.4	15.0	13.1	4.4
2004Q3	7.6	14.3	4.0	3.5	6.5	7.5	2.6	1.4	4.9	4.7	15.0	13.2	4.4
2004Q4	7.7	14.3	4.0	3.5	6.0	7.5	3.2	2.0	4.9	4.7	15.0	13.0	4.4
2005Q1	8.5	14.3	4.0	3.5	6.1	7.5	3.6	2.5	4.9	4.7	13.0	12.4	4.0
2005Q2	8.4	14.0	4.0	3.5	6.0	7.0	4.0	2.9	4.9	4.7	13.0	11.4	3.3
2005Q3	8.1	14.3	4.0	3.5	5.9	7.0	4.6	3.5	4.6	4.4	13.0	9.4	3.7
2005Q4	7.2	14.5	4.0	3.5	6.2	7.0	5.2	4.0	4.6	4.4	13.0	8.9	3.3
2006Q1	6.7	15.0	4.0	3.5	6.6	7.0	5.5	4.5	4.6	4.4	13.0	9.3	3.0
2006Q2	6.6	15.0	4.0	3.5	6.6	7.5	6.0	4.9	4.7	4.5	14.0	9.8	3.5
2006Q3	6.2	15.0	4.3	3.5	7.3	8.0	6.3	5.3	4.9	4.7	14.0	9.7	2.9

Source: IMF International Financial Statistics

## Getting External Investment Opportunities Right

On the international scene, it is critical to foster the emergence of a rate of return on foreign investments especially in the Euro-Dollar markets based on real changes in financial assets in question and not gains from nominal exchange rates adjustments. Luckily enough, the stabilization of exchange rates so far is a good omen, but the monetary authority should also compliment this with the adjustment of domestic interest rates to coincide with Euro Dollar interest rates so as to put paid to this speculations arising there from. This would require actions not only to synthesize the segmented domestic foreign exchange market, but also to ensure synergy between the foreign exchange market and the domestic money market. One way to achieve this will be to look at the market fundamental of the Nigerian foreign exchange market, especially the DAS vis-à-vis the inter bank, with a view to permanently merging the two markets.

Although it has often been argued the wholesale DAS is inevitable and that it is doubtful if the supply base can be broadened such that central banks intervention is eliminated while the perfect competitive outlook of the spot market is improved. In my view this is feasible if the central bank concede their role as major supplier to the commercial banks. This can be done via fiscal reforms which would enable all the tiers of government to negotiate their realized foreign exchange through spot market operators instead of the wholesale market. By this act, the

wholesale auction market would be eliminated and the window for speculation and arbitrage permanently foreclosed. It also means a conscious move towards the law of one market. In particular, this should mean that domestic interest rate should converge with the Eurodollar market rates. That way speculations based on inter-country differences will be eliminated.

## **Concluding Remarks**

Overall, the major challenge to the Nigerian financial sector reforms is how to engender healthy competition in addition to enhancing investments. This demands the need to evolve an investment friendly interest rate regime that is supportive of the growth objective of the government. The only way this can happen given the recapitalization schemes, is to allow increases in money supplies to be reflected in the costs of borrowing. The lower costs of borrowing would induce the desired credit expansion, which would give fillip to investment activities. Although this may be inflationary in the short run, it is still more beneficial since its origin is not from high powered money.

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