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# Implementation of indirect monetary control in Nigeria: problems and prospect.

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# Implementation of Indirect Monetary Control in Nigeria: Problems and Prospects*

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*The paper discusses the advantages and disadvantages, pre-conditions, instruments and issues in indirect approach to monetary and credit control. Among the preconditions stated are the ability of the Central Bank to formulate an appropriate monetary programme to which government must give support and co-operation to the Central Bank in its execution. The importance of competitive money and short-term securities markets to serve as medium for transmitting monetary policy action to the productive sectors of the economy is also stressed. This will facilitate the functioning of an efficient transmission mechanism for the allocation of financial resources among competing needs. The relevance of a machinery for the regular supply of up-to-date data on the operations of the financial institutions to permit the supervisory agencies and other operators to take timely decisions is also stressed. The principal instruments of the indirect approach to monetary control comprise mainly cash reserve requirement, the discount rate mechanism, and open market operations. Among the issues discussed on the market-based approach are problems of programme implementation, control of monetary aggregates and the international aspects. The modalities for the implementation of indirect approach to monetary and credit control in Nigeria are also discussed. Problems for immediate introduction of the new technique are listed as government fiscal deficit financing and excess liquidity; harmonization of fiscal and monetary policies, insolvent banks, non-bank financial institutions, inadequate money market activities, weak banking supervision, inadequacy of regular and reliable statistical data as well as the need to train the CBN staff that will handle the introduction of the new technique. The efforts of the CBN in addressing these problems are listed in the paper. The prospects for the successful implementation of indirect approach to monetary management are presented as being inextricably connected with the ability of government to minimize fiscal deficit, reduce its dependence on the CBN, and co-ordinate monetary and fiscal policies. The monetary authorities should also be able to foster and sustain confidence in the financial system. Another imperative factor in the prospect for the new technique is discipline on the part of both government and banks.*

Monetary policy is a package of actions designed to manage the growth of money supply during a period to its optimal target. When successful, the level of money

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becomes compatible with the rates of growths of output, inflation, and interest rates. At such a level, money plays the role of an efficient lubricant of the wheel of economic activities; money will then not constitute a nuisance to the extend that its supply is too much, or frustrate business intentions to the extent that its supply is too little. The strategy of monetary control may be classified into two: direct and indirect. The direct approach to monetary control comprises the fixing of quantitative ceiling on banks' credit expansion and taking actions to ensure banks compliance. The indirect approach involves the use of market-based instruments to effect changes in the availability and cost of credit. For a long time since political independence the monetary authorities in Nigeria relied on the direct approach, prescribing credit ceilings and administratively fixing interest rates.

The efforts to deregulate all sectors of the Nigerian economy through the Structural Adjustment Programme (SAP) introduced in 1986 have considerably influenced developments in the financial sector. The deregulation of the financial sector is intended to create a suitable environment for the introduction of the indirect technique of monetary and credit management. Initial reform efforts comprised simplification of the format for sectoral credit allocation, deregulation of bank deposit and lending rates, introduction of an auction system for dealing in treasury instruments, and liberalization of procedures for establishing new banks. In its 1991 budget announcement, the Federal Government indicated that the technique of monetary management would shift to the use of indirect monetary policy instruments during the year. However, government did recognize the existence of many problems which should first be tackled before the introduction of the new approach. While attempts have been made to solve many of the problems, some of them are still outstanding.

During the course of 1992, it became clear that in spite of a number of unresolved issues, it was neither realistic nor practicable to completely remove all identified constraints before the shift to indirect control is effected. Furthermore, the prolonged use of direct controls had engendered inefficiencies and distortions in the financial system, which in turn continued to pose major problems for monetary and credit policy implementation. Further delay in introducing indirect controls would only aggravate these problems. Consequently, in August, 1992, the CBN embarked on a phased approach to the use of indirect controls. Effective 1st September, 1992, in pursuit of the new monetary policy framework, the ceiling imposed on individual bank's credit growth was removed for banks which met some specified performance criteria set by the CBN. The criteria comprised specified cash reserve and liquidity ratio, prudential guidelines, statutory minimum paid-up capital requirement, capital adequacy ratio, and sound management. The meeting of the requirement was also to determine banks' eligibility for participation in the official foreign exchange market. Monetary policy proposals for 1993 were based on the broad framework of the new market-based indirect approach to monetary and credit control anchored on

Open Market Operations (OMO) and augmented by cash reserve requirements, liquidity ratio and discount window operations. The shift to the indirect approach reached an advanced stage in June, 1993, when OMO was introduced following the advent of one discount house which was joined in rapid succession by two other discount houses.

The main objective of this paper is to discuss the problems and prospects of successful implementation of indirect approach to monetary and credit controls in Nigeria. For ease of presentation, the paper is divided into five parts. Part I is devoted to the definition, preconditions, instruments and issues in indirect approach to monetary control. Part II discusses the modalities for indirect approach to monetary and credit control in Nigeria. The problems of the successful implementation of indirect monetary control in Nigeria are highlighted in Part III while Part IV contains a status report on the implementation of the new approach in Nigeria. The paper ends in Part V, which focuses on the prospects of minimizing the effects of the problems outstanding in order to derive the advantages of the new approach to monetary management.

## I. INDIRECT MONETARY CONTROL: DEFINITION, ADVANTAGES AND DISADVANTAGES, PRECONDITIONS, INSTRUMENTS AND ISSUES

Indirect approach to monetary control involves the use of reserve requirements, Open Market Operations, discount rate, etc., in the financial markets to control the cost and availability of credit. It is thus different from the direct approach whereby credit control is directly achieved through the imposition of credit ceilings on banks by the monetary authorities without going through the financial markets. Under the regime of indirect approach to monetary control, the permissible aggregate credit would continue to be determined by the Central Bank but mainly for monitoring purposes. The Central Bank will monitor the movement of its monetary base, defined as the sum of its credit to government and the private sectors, net foreign assets and other assets (net). The components of the monetary base represent sources of creation of the base while the monetary base is held by banks and non-banks as reserves and currency outside banks, respectively. The feasibility of controlling the monetary base hinges on the principle that credit control can be achieved by controlling the monetary base.

### I.1 Advantages and Disadvantages of Indirect Monetary Control

The advantages in the proposed technique of monetary management include the ease with which appropriate changes could be made in the instruments used for achieving monetary policy objectives and the possible improvement in the efficiency of the financial system that could be derived from the underlying flexibility of its operations. For example, reserve requirements are easy to administer as bank reserves held at the Central Bank could be known on a daily basis. Similarly, as a substantial part of bank reserves are held with the Central Bank, such cash positions are easily ascertainable and fairly quickly for an assessment of the state of banking system liquidity and potentiality for credit creation. Also, unlike credit ceilings, the flexible nature of Open Market Operations renders it easily adaptable to changes as situation demands. In addition, reserve requirements and Open Market Operations do not interfere with competition among banks. Moreover, the institutional arrangements required for the operation of the new system promote greater efficiency in the use of the financial system's resources.

However, the use of cash requirements entails withdrawal of reserves from banks. This may impose a cost on the economy. The withdrawal of bank reserves may also discourage deposit mobilization as the ratio rises. Higher values of reserve requirements could lead to higher lending rates. Also, the creation of new instruments by the Central Bank for purposes of Open Market Operations imposes a cost on the monetary authorities. In the alternative, when OMO is conducted in government debt instruments, the cost of government debt is left to vary according to market rates. This invariably leads to higher cost of government domestic debt.

### I.2 Preconditions

The conduct of monetary policy through the indirect approach to monetary control requires some prerequisites. There is the need to have appropriate institutional arrangement required for effective operations in short-term securities markets as well as adequate and capable Central Bank staff capacity that could prepare practicable monetary programme. Other prerequisites include availability of reliable data on the activities of the financial system and the existence of confidence of economic agents in the system.

The Central Bank and the government should be able to fashion out a financial programme that takes account of the public sector borrowing requirement (PSBR) and which is consistent with realistic objectives of growth of aggregate demand, inflation, interest rates and exchange rate. Such a programme will enable the Central Bank to determine the scope of feasible financial accommodation the banking system could give the government and the credit requirements of the private sector. Without the explicit co-operation of the fiscal authorities it is not possible for the Central Bank to achieve an acceptable nominal income path. The preparation or revision of a monetary programme usually begins with a review of the recent performance of the economy, taking into account the current inflation rate, factors indicating the state of pressures on the general level of prices, and prospects for the exchange rate and balance of payments. The review will also evaluate the growth of output relative to its medium-term potential. These reviews will lead to decisions as to the direction of the growth of nominal demand.

The effective control of the monetary base by the Central Bank requires appropriate legal and regulatory powers and the ability to enforce regulations. There must also be a competitive inter-bank market as well as a market for short-term securities and the relevant institutions for the trading of instruments. Bank supervision must be sufficiently strong to avoid major financial failures. There must be an effective transmission mechanism for monetary policy which should be based on active competition among operators in the financial markets.

The Central Bank and government must make effort to ensure confidence in the financial system. The existence of strong parallel markets, financial dis-intermediation, low debtor morality, and persistent inflation is symptomatic of a general loss of confidence in the integrity of the local financial instruments and markets. The extent of such markets may reduce if government pursues stable macroeconomic policies such as sustained reduction in deficit financing.

There must be information system for providing timely data on bank reserves, government activities, and money market conditions.

## I.3 Principal Instruments of Indirect Approach to Credit Controls

The principal instruments of indirect credit control are Cash Reserves Requirements (CRR), Open Market Operations (OMO), and the Discount Rate. Other instruments, which are not emphasized in the following discussions comprise the use of government deposits, Central Bank refinancing of designated loans, special deposits for Central Bank customers, etc. As long as these are used as market-based measures for controlling liquidity they are recognized as indirect control measures.

### I.3.1 *Cash Reserve Requirement*

Cash reserve requirement is a monetary policy instrument that obliges banks to hold a specified proportion of their deposit liabilities as cash deposits with the Central Bank. The higher the percentage of bank reserves that is stipulated as legal cash reserve requirement the lower the proportion of the banks' funds that is available as backing for credit expansion, thus reducing the capacity to create money. On the other hand, a reduction in the reserve requirement increases the capacity of banks to create credit. Reserve requirements are particularly effective for sterilizing excess liquidity in the banking system but are less efficient for the day-to-day management of bank liquidity, for which Open Market Operations are much more efficient.

### I.3.2 *Open Market Operations*

Open Market Operations (OMO) are powerful and flexible monetary policy tools available to a Central Bank under a free market system. The operations are coordinated with discount window and reserve requirement policies to achieve the desired monetary and credit target. Open Market Operations are used to regulate banks' cash reserves and money creation through the purchase and/or sale of securities by the Central Bank. The securities and bills traded by the Central Bank are not usually limited to government issues. They are also not limited in maturities although actual practice varies from country to country and over time. The effects of OMO on bank liquidity are the same as those of reserve requirements but with the additional advantage that Open Market Operations can be used for the day-to-day fine-tuning of bank reserves in the desired direction. For example, when the Central Bank sells papers in the market, the liquidity (excess reserves) of the banking system declines, thereby limiting the capacity of the banking system to extend credit and expand money supply. Conversely, when the Central Bank makes purchases, the liquidity of the system increases and the ability to expand credit is enhanced. Thus, the daily operations of the Central Bank in this regard are guided by the desire to produce a certain degree of ease or tightness in money supply, depending on the desired monetary and credit targets. Through these activities, the Central Bank directly changes the cash reserves of banks and indirectly induces banks to change interest rates, thereby leading to changes in the costs and availability of credit and, ultimately, money supply.

### I.3.3 *The Discount Rate Mechanism**

This is the interest rate charged by the Central Bank on its loans. The rate is set to reflect the banking and credit conditions available in the market. Discount rates are adjusted from time to time in the light of changing market conditions and to complement OMO and the thrust of monetary policy generally. A discount rate that is low relative to market rates makes it more likely that institutions will come to the window. Consequently, depository institutions (banks) will tend to increase their borrowing when market interest rates rise relative to the discount rate, and to curtail borrowing when market rates fall.

Adjustment in discount rate is generally effected as market interest rates and the level of borrowing change with a view to controlling the volume and profitability of the borrowing institutions. To the extent that changes in discount rates are made judgementally rather than automatically and may lag behind changes in market rates to a degree, the discount rate is not market determined.

In response to a given discount rate, changes in the level of borrowing may simply reflect temporary changes in the borrower's response to transitory demands for money and credit. Such changes might also keep money and credit from deviating substantially from targets by providing or absorbing reserves when the demand for excess reserves of the amount of required reserves needed to support a given level of deposits has changed unexpectedly. Under these conditions, an adjustment in the

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* It should be stated here that although the CBN charges banks on overdrawn accounts, the Bank does not operate a discount window from which banks could borrow. However, the discount houses which also enjoy discounting facilities with the CBN undertake discounting operations for banks.

discount rate would needlessly exacerbate money market pressures and could be counter-productive.

However, an adjustment in the discount rate may be desirable to reinforce Open Market Operations when a change in the level of borrowing is contributing to sustained growth in money and credit relative to policy targets. For instance, in a period of money growth a rise in discount rate would reduce incentives to borrow from the Central Bank and help to accelerate portfolio adjustments in depository institutions towards reduced credit expansion and money. Thus, a rise in discount rate could complement the effect of OMO on non-borrowed reserves.

The general response of the market rate to a change in discount rate will be larger when the market views the adjustment as signalling a shift in the Central Bank's evaluation of the underlying condition of the economy and of money and credit demands. Changes in discount rate must be interpreted in the context of surrounding economic and financial conditions and in the light of the way they complement other policy actions. If a change in discount rate is anticipated it may not make appreciable impact on market rates. This explains why timely actions are required for effecting changes in discount rates before such changes are predicted by banks.

## I.4 Issues in Monetary Management Under Indirect Approach to Credit Control

In this section we discuss the transmission mechanism and how this is influenced by the stability of the demand for monetary aggregates and the state of competition in the financial system. All things being equal, credit allocation by banks under a system of indirect controls is to the highest risk-adjusted bidder. The level of interest rates is determined by the interaction of the supply and demand for credit. The supply of credit depends on the available reserves. Demand for credit reflects the risk and expectations and prospects for investment as perceived by private borrowers. However, the demand by the public sector also affects the available credit to the private sector.

### I.4.1 *Programme Implementation Problems*

While the programme usually aims at target rates of output growth, inflation, exchange and interest rates, developments during the programme period influence the achievement of policy targets. Unexpected changes in demand for public sector credit will affect the share of credit available to the private sector and, consequently, the interest rates charged by banks on loans and advances to the sector. Other factors, such as the state of liquidity and solvency of banks, especially the problem banks, would affect interest rates. Also, unexpected developments, such as changes in weather conditions, export and import prices, flows of aids and foreign investments, play significant role in the achievement of programme targets. The quality and timeliness of available data used in programme formulation and implementation also affect the outcome of programme implementation and achievements. Under a system of indirect monetary controls the effects of these are most likely to manifest sharply than under direct controls because prices are more sensitive under market conditions. This is why programmes are usually reviewed periodically with a view to containing the effects of unanticipated developments on basic prices and balance of payments under the market oriented strategy of monetary control.

I.4.2 *Control of Monetary Aggregates*

In order to implement the programme the Central Bank controls the supply of reserve money through the use of the instruments already enumerated. It is believed that a relationship exists between the money stock and the reserve money. Reserve money, in this case, is defined as the sum of bank reserves (R) and currency outside banks (Cp); and that this relationship is stable in the sense that the associated money multiplier could be predicted fairly accurately. The simplest form of such a relationship is given by

$$M_2 = (1 + c)/(r + c + e) \cdot [R + C_p] \qquad \text{...........} (1)$$

where $c$ = currency to bank deposit ratio;
$r$ = required reserves to bank deposit ratio;
$e$ = excess reserves to bank deposit ratio.

The issues here are that the money multiplier depends mainly on three factors, and any development in the factors would affect the stability of the money multiplier. A component of the money supply is held as currency, the demand for which is determined by the general public, based on their payment practices, liquidity preference, the rate of inflation, expectations of exchange rate movements, and opportunities for alternative financial investments. Second, banks must hold reserves equal to a certain proportion of their deposits. The expansion of bank loans require acquisition of additional reserves. Third, banks hold reserves above stipulated requirements for prudential reasons. Variations in the money multiplier complicate the task of control of monetary aggregates although availability of timely and accurate data could enable a Central Bank to adjust its programme to offset the adverse effects of undesirable changes.

Some factors affecting bank reserves cannot be controlled by the Central Bank. The Central Bank cannot control the volume of currency outstanding although it can influence how much is held through its policies. Also, while some policies may affect the non-bank holdings of foreign exchanges reserves, the Central Bank does not control government deposits although it can enter into agreement on its management. Similarly, Central Banks that hold accounts for parastatals in the public sector cannot control the flow of reserves arising through the operations of such accounts unless specific policies are instituted for the achievement of such control.

Central Banks adopt a variety of techniques to affect changes in reserves. By lending to or borrowing from banks, Central Banks could increase or reduce reserves. However, for the purpose of achieving monetary stability, Central Banks usually adopt lending arrangements which permit them to decide how much is to be lent. Central Banks also use Open Market Operations to influence the volume of bank reserves. The Central Bank may refrain from lending to government directly although it could purchase government securities to the tune of its own needs only to adjust its holdings of the securities. Central Bank could also refinance particular types of loans with a view to putting reserves into the system. The use of government deposits and discount window operations are also other ways of influencing bank reserves. Some Central Banks manage bank reserves by selling their own debt obligations to reduce reserves.

In countries where government fiscal deficits are financed by the Central Bank reserve management may be difficult and problematic depending on the magnitude and frequency of the deficit. Large and rising fiscal deficits will involve fiduciary issues of the currency by the same magnitude. Bank deposits will also grow correspondingly, swelling bank reserves and currency outside banks. The rapid growth of reserve under this type of macroeconomic management reduces the effectiveness of monetary policy.

### I.4.3 *The Role of the Money Market*

For the effectiveness of indirect control an efficient, competitive money market is very essential in order to permit banks to compete for a share of supply of reserves and achieve desired structure of interest rates. As banks mobilize deposits and grant loans and advances their daily positions will result in temporary surplus or deficit holdings. The existence of a well co-ordinated competitive money market will enable banks in deficit to purchase reserves and those in surplus to dispose of their holdings, making it possible for banks to expand loans and advances and operate on the foreign exchange market without inhibition. A competitive money market provides equal opportunity for all banks to buy or sell the standard instruments in these markets, thereby establishing a standard cost of funds which will provide a uniform basis for setting loans and deposit rates. Thus, the existence of broad markets in short-term securities and inter-bank loans leads to more effective and active competition in the deposit and loans market which may grow to form a solid foundation for the development of financial market.

What is most important in the transmission of the effect of monetary policy to the real sector of the economy is the interest rates prevailing in the loans and advances market where interactions between lenders (banks and other financial institutions) and borrowers (firms and individuals) take place. In sharing the credit among individuals and firms banks are guided by their cost of funds and the prevailing conditions in the market, including the demand situation and returns on other activities competing for funds. Borrowers, on their part are influenced by the real marginal rates of return expected on investment opportunities available to them. Competition among lenders and borrowers will lead to the determination of risk-adjusted interest rates that would lead to an efficient allocation of the credit among the private demand. The role of the market is therefore to serve as a medium for these activities to occur. The more competitive the market is the more efficient the structure of interest rates that will emerge.

Under a system of flexible interest rates, variations in the rates will occur partly from non-monetary forces driving nominal expenditures such as changes in government expenditures, investment demand, export earnings, consumption expenditures, etc. Another source of variation in interest rates under a flexible regime is a change in the demand for money as depicted by variations in the velocity of money. Wide variations in interest rates usually have adverse economic and political effects. For a system of indirect monetary controls to attain its objectives it should therefore operate in such a way as to minimize inflation in interest rates.

The effectiveness of indirect approach to monetary and credit control depends on the existence of a stable and relatively interest elastic demand function for domestic credit by the non-bank public. This is to allow the effect of a change in interest rates on the demand for credit and, consequently, on money supply to be predictable and significant. Empirical studies need to be conducted to ascertain the prevailing relationship between credit and interest rates and in general, identify the determinants of non-bank public demand for domestic credit. Such study conducted by the Bank of England led to the conclusion that control of money through domestic credit was unlikely to be effective. Gowland (1980) claims that the Bank of England study is not the only evidence and that all the available evidence indicated inconclusive results. It is also claimed that a successful credit squeeze could lead to a shift in the demand for credit function as firms have no alternative to borrowing when stock are pilling and profits are falling. Another problem is that it is not clear whether the demand for credit function should depend on real or nominal interest rate.

### 1.4.4 *The International Aspects*

The reforms are intended to encourage the development of open financial market and promote competition among banks and other financial institutions thereby making it possible for the Central Bank to use money markets for indirect control of monetary aggregates and interest rates. These will create conditions under which domestic and foreign investments will become feasible for a wider range of investors. Domestic markets will become more sensitive to change in foreign financial markets. This will make it increasingly difficult for the monetary authorities to maintain local interest rates below the risk-adjusted levels available abroad. The objectives of the reforms could be achieved if policies that could lead to the minimization of risks attributable to interest and exchange rates instability are pursued. Apart from the promotion of macroeconomic stability, the achievement of socio-political peace and security of private property will contribute to a significant reduction in the perceived investment risks which have constituted the basis for sustained capital flight and loss of confidence in the economy.

## II. MODALITIES FOR INDIRECT APPROACH TO MONETARY AND CREDIT CONTROL IN NIGERIA

Having discussed the principal instruments usually used for the indirect approach to monetary and credit control, the paper now focuses on the modalities for the day-to-day operations of the instruments under the new approach by the Central Bank in order to achieve the desired policy objective. Banks maintain two accounts with the Central Bank: reserve requirement account (RR) and demand deposit account (DD). Based on the reported bank deposits and the stipulated ratio of reserve requirement for the fiscal year, the amount of required reserve (RR) is computed and transferred into the reserve requirement accounts of banks from banks' demand deposit accounts held in the CBN. Thus, RR varies from time to time depending on the amount of bank deposits mobilised. RR is not available for banks to use for their activities and, to this extent, it helps to regulate the ability of banks to create new credit and therefore influence the level of money supply. The total amount left in bank's demand deposit accounts (DD) is free for banks to use for their foreign exchange transactions, loans and advances to customers, purchases of treasury securities at the Open Market Operations of the CBN, and other activities. To the extent that banks are free to use such reserves for any conceivable transaction they are called free reserves. It should be stated that there is another component of reserves called vault cash (VC), which banks hold largely for contingency purposes such as meeting demand obligations on deposits. Vault cash depends on a bank's experience with regards to the frequency and magnitude of such demands; it may therefore vary according to the size of deposits or currency in circulation (CIC). The supply of total reserves (R) depends on total deposits (D)*. Total deposit is the sum of demand deposits (DD), savings deposit (SD), time deposit (TD), and interbank deposits (ID). These factors constitute the sources of bank reserves during a given period.

The demand for bank reserves derives from the need by banks to hold amounts that enable them to meet the cash reserve requirement, vault cash and free reserves. Thus, the demand for reserves can be stated as

$$R = RR + DD + VC \qquad \text{...........} (1)$$

In order to estimate the aggregate demand for bank reserves, the CBN projects each of the three components.

* This statement neglects shareholders' funds and accumulated reserves of banks which are also available to banks for use.

For the required reserve, given a deposit of size D, and a stipulated ratio, r,

$$RR = rD \qquad \text{..........} (2)$$

In the case of vault cash, this could be projected in relation to deposit (D) or currency in circulation, which is made up of vault cash and currency outside banks. The free reserves of banks are observed from the Bank's balance sheet.

There is an optimal level of money stock which economic agents would like to hold. The demand for this money stock is estimated from the demand for money function.* This is an essential component of the monetary programme already mentioned.

The demand for money function, in fact, gives the amount of money that should be supplied during a period. In order to determine the optimal monetary base that underlies the optimal money supply, the estimated demand for money is related to the monetary base. Using a behavioural relationship, the optimal component of Bank's free reserves is determined. The CBN ensures that the targets for its Open Market Operations are consistent with the level of free reserves observed daily from its balance sheet.

An essential aspect of the target for the Open Market Operations is the effect of some factors on the amount of domestic liquidity that should form the target for Open Market Operations. These factors include changes in currency outside banks, float, government deposits, deposits of parastatals with the CBN and other factors. Variation in currency outside banks could arise through the interaction of the non-bank public with banks which may affect the level of deposits and therefore the reserves. Cheques in the pipeline for clearing could, on the aggregate, result in a positive or negative clearing balance in favour of the banks or the CBN. A negative clearing balance against the CBN will result in injection of funds into the system while a positive clearing balance will have the opposite effect. Government parastatals holding accounts with the CBN could affect the level of domestic liquidity through the operation of their accounts at the CBN. An increase (decrease) in their deposits constitutes a withdrawal (injection) from (into) the economy including the banks. When the movement of such funds is to the Bank it affects the level of bank reserves directly. Changes in government deposits at the CBN affect the Bank's credit to government. A positive amount of credit to government represents an injection of high powered money into the economy. Untimely data availability on some of these factors has usually compelled estimates of the target for the Open Market Operations to be made.

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* The CBN has conducted a number of studies to determine the demand for money function in Nigeria. See, for example, "The Demand for Money Function In Nigeria: An Empirical Investigation," CBN Research Department Occassional Paper No. 3. Also published in *Economic and Financial Review*, Volume 30, No. 1, March 1992.

## III. PROBLEMS ON THE SUCCESSFUL IMPLEMENTATION OF INDIRECT MONETARY CONTROL IN NIGERIA

From the above discussion it is clear that the the movement to the market oriented system of indirect monetary control from a rigid regime of direct control will not be easy. It will involve taking considerable preparatory measures to improve the financial environment before the tools are implemented. In reality, it means building a financial system which will be more responsive to the needs of lenders and borrowers as well as to monetary control purposes. This will require substantial improvements in the macroeconomic, legal and regulatory environments. As a developing economy which has been depressed for too long, it will also require broadening the range and improving the efficiency of the financial institutions and markets. In the main, the preparatory activities necessary for the take-off of indirect monetary control will focus on removing the main obstacles to the new techniques.

Specifically, efforts have to be devoted to the restoration of the appropriate transmission mechanism between the money market and the real sector of the economy; the design of a competitive market as a medium for mobilizing and channelling financial resources as well as conducting monetary policy for the control of financial variables to their optimal levels to permit the achievement of target rate of growth of output under non-inflationary condition. Under the rigid, administratively-controlled economy prevailing before the introduction of the Structural Adjustment Programme the identified problems militating against the introduction of the market-based regime of monetary management are as stated below.

### (a) Government Fiscal Deficit Financing and Excess Liquidity

The fiscal deficit constitutes a direct injection to aggregate demand, increasing pressures on the general level of prices and the external balance of payments. Also, reliance on the CBN for the financing of the fiscal deficit of the Federal Government leads to increases in the monetary base and swells the level of excess liquidity in the banking system. However, a high level of excess liquidity is inconsistent with the principle of practical reserves system and the effective use of reserve requirements and Open Market Operations.

There was therefore the need to rid the system of unwanted liquidity. The most effective instruments at the disposal of the CBN were the stabilization securities and the cash reserve requirements. In addition, arrangements needed to be made for the privatisation of the CBN function of underwriting issues of government debt instruments as in countries already adopting the new technique. Also, institutional arrangement that would assist the CBN in a market-oriented management of domestic liquidity must be put in place to fill a perceived gap in the secondary market for short-term securities.

**(b) Harmonization of Fiscal and Monetary Policies**

Fiscal deficits of the Federal Government in the recent past has been out of tune with monetary targets largely because of improper coordination of the fiscal and monetary programme. Fiscal imbalance has adverse consequences on the monetary base and the effective use of indirect tools. Fiscal viability during and after the preparatory period of the monetary programme is thus very important; hence, it was necessary to set up a machinery to synchronize fiscal and monetary policies on a continuous basis as well as formulate the general thrust of the Open Market Operations policy.

**(c) Insolvent Banks**

Following the huge size of bad and doubtful debts in banks' portfolio of assets some banks are currently not solvent enough for the indirect controls. Insolvency undermines inter-bank confidence and also affects the general confidence of the non-bank public. Confidence in banking is an invaluable asset the lack of which would undermine competition among participating depository institutions during the period of indirect monetary and credit control. The problem of ailing banks which is already being looked into by a joint committee of the CBN and NDIC will thus be addressed during the preparatory period to ensure that insolvency which affects confidence is removed.

**(d) Non-Bank Financial Institutions**

Since the introduction of the Structural Adjustment programme in 1986, the number and size of non-bank financial institutions have risen tremendously. These institutions perform some bank-like functions but are not currently under the general credit guidelines of the CBN. If these institutions are not adequately monitored in the new era, they will be a source of enormous leakages in monetary control. For this reason, there will be the need to examine the activities of the the non-bank financial institutions. Though this may not be accomplished before implementation, the effort to assess and monitor the operations of these institutions could still extend into the implementation stage without precluding the introduction of the new method.

**(e) Inadequate Money Market Activities**

Activities on the money market are dominated by Federal Government securities which are held mainly by the CBN. Brokerage services in the market are controlled wholly by the banks while there is still no adequately developed secondary market for treasury securities. For this reason, money market activities have remained narrow even though the volume of securities is very large. Brokerage services need to be extended to a number of independent brokers beside banks as accredited official dealers in government securities, as is practised in many countries such as Indonesia, Malaysia and the U.S. The development of the money market is important for a successful use of Open Market Operations. Efforts during the preparatory period will be geared towards making the market more active along the lines indicated. To this end, non-treasury securities could be introduced into the market.

**(f) Banking Supervision**

Effective banking supervision is vital for the success of the new techniques. For this reason, the supervisory functions of the CBN will need to be strengthened. Hopefully, the role of NDIC will supplement the supervisory role of the CBN. Banks' reporting formats will need to be standardized in order to make bank reports and operational records comparable with one another.

(g) Statistical Data

A successful manipulation of reserve requirements and Open Market Operations will require timely and reliable data on the liquidity position of banks and the factors determining the monetary base. These data are presently available on monthly basis with some uncomfortable lags. Under the new techniques, data should be readily available on weekly and even on daily basis. To this end, the system of data processing, storage and retrieval in the CBN and the banks must be strengthened in order to make timely intervention of the monetary authorities easy during the implementation stage.

**(h) Training**

The personnel to be involved in the implementation of the new policy need to be trained. Already some staff of the CBN have undertaken country studies on the use of indirect monetary control in the Central Bank of Ghana, India, Indonesia and Malaysia. More of such practical exposure will be undertaken in the near future to enable staff familiarize themselves with the daily problems of implementation and design solutions to such problem.

## IV. STATUS REPORT ON THE USE OF INDIRECT MONETARY TOOLS IN NIGERIA

The CBN has made various efforts to tackle many of the above-stated problems in recognition of the need to provide effective solution to many of them in order to ensure a successful and smooth shift to the new technique. The Bank has conducted studies with a view to familiarizing itself with the theoretical and practical details of the indirect monetary and credit control. As a result of the insight gained, monetary policy has been structured to facilitate the shift in policy. At the beginning of this paper mention was made of a few of the structural changes already put in place. Other changes of particular interest include the introduction of the prudential guidelines, the establishment of the Nigeria Deposit Insurance Corporation, requirement of higher capital base for banks, the promulgation of CBN Decree (No. 24) and the Banks and Other Financial Institutions Decree (No. 25) of 1991. What follows is an elaboration of the efforts already made and the problems still outstanding.

### Actions Already Taken

Actions already taken relate largely to the liberalization or deregulation of the financial structure; increasing the regulatory and supervisory powers and operational capacity of the CBN and the establishment of new institutions and arrangements to facilitate the use of market-based instruments. The actions already taken are summarized in what follows:

(i) Deregulation of Interest Rates
In order to create a suitable environment for the use of Open Market Operations which will constitute the major instrument of monetary control under the indirect approach to monetary control, bank deposit and lending rates were deregulated in 1987. The temporary controls placed on some rates in 1991 were lifted early in 1992.

(ii) Issue of Treasury Instruments by Auction
An auction-based system for issuing treasury bills and certificates and the issue of these instruments as bearer bills to enhance transferability have been introduced with the objective of improving the efficiency of public debt management and the conduct of monetary policy; enhancement of investor interest and participation in the holding of government debt instruments; promoting greater reliance on market forces in the determination of yields on the instruments; and encouraging the development of the secondary market for government short-term debt instrument.

(iii) Simplification of the Procedure For Licensing New Banks
In order to promote competition in the money market, the procedure for licensing new banks was rationalized and liberalized. Consequently, the number of banking institutions increased from 50 in 1987 to 119 to date.

(iv) Promulgation of CBN and BOFI Decrees
In June 1991, the Federal Government promulgated the CBN Decree (No. 24) and Banks and Other Financial Institutions Decree (No. 25) of 1991. Among other things, the Decrees gave the CBN a high degree of autonomy in the conduct of monetary management, increased the Bank's regulatory and supervisory power over commercial and merchant banks and

extended its licensing and supervisory powers to cover new institutions such as Discount Houses as well as finance houses which were previously excluded from the Bank's surveillance.

(v) Issue of Guidelines For Finance Houses and Discount Houses
Following the promulgation of Decree 25, the CBN issued guidelines for the licensing and operations of finance companies in Nigeria.

(iv) Enforcement of Stringent Prudential Guidelines
The Prudential Guidelines were introduced in 1990 and are aimed, among other things, at compelling banks to make adequate provisions for the bad and doubtful debts underlying the insolvency of some banks. In order to attenuate the adverse effects of the implementation of the guidelines on banks' balance sheets, the CBN subsequently allowed banks to write off accumulated bad and doubtful debts over a phased period of four years.

(vii) Identification of Insolvent Banks
The CBN has embarked on the identification of insolvent banks through bank examination. One insolvent bank is currently undergoing restructuring while the remaining ones are allowed self structuring under the close supervision of the CBN. The CBN is awaiting directives on the proposals already forwarded to the Federal Government regarding insolvent banks.

(viii) Increase in Minimum Paid-up Capital of Banks
Steps have also been taken to strengthen the capital bases of banks. The minimum paid-up capital of banks has been increased to ₦40 million in the case of merchant banks and ₦50 million in the case of commercial banks with effect from June, 1992.

(ix) Licensing of Discount Houses
As a means of developing a secondary market for government debt instruments with a view to reducing government dependence on the CBN financing, three discount houses were licensed in 1992. Their primary role will be to intermediate funds among financial institutions as well as promote the market for government securities.

(x) Mopping-up of Banks' Excess Liquidity with Stabilization Securities
Since August 1990, strenuous efforts have been made by the CBN to mop-up excess liquidity from the banking system through the issuance of stabilization securities.

(xi) **Development of Data Base**

The Research Department has embarked on the development of an economic data bank. Some efforts have been made to improve the quality and timeliness of financial data. Time series data on financial and economic variables which will be useful in the projections of some key variables have been compiled. A machinery for up-dating the series as soon as information is made available by banks has been worked out.

(xii) **Selective Lifting of Credit Ceilings on Individual Banks**

Credit ceilings on individual banks were selectively lifted with effect from 1st September 1992. The lifting of credit ceiling is limited to banks adjudged healthy by the CBN, and a bank is considered healthy if it meets CBN guidelines on the following criteria during the previous three months:

(a) specified cash reserve requirement;
(b) specified liquidity ratio requirement;
(c) prudential guidelines;
(d) statutory minimum paid-up capital requirement;
(e) capital adequacy ratio, and
(f) sound management.

(xiii) **Creation of Bank Examination Department**

Early in 1992, the Field Examination Division of the Banking Supervision Department was carved out and upgraded into a full fledged Bank Examination Department in order to enhance the supervisory and regulatory capacity of the Bank.

(xiv) **Creation of Inter-bank Secondary Market**

In July 1991, the CBN issued guidelines on the inter-bank secondary market in treasury securities with a view to encouraging secondary market trading at a reduced cost to market participants and discouraging rediscounting at the CBN.

(xv) **Identification of Healthy Banks**

Following the application of the criteria set for banks for the lifting of credit ceilings, about 80 banks have been certified healthy and exempted from credit ceilings. The same criteria have been adopted for determining banks which qualify to participate in the official foreign exchange market.

### II. Actions Needed to be Taken

The actions needed to be taken which have been elaborated upon in the Framework and Implementation Schedule approved by CBN Management in August 1992 are outlined below:

(i) Minimizing Federal Government deficit financing;
(ii) Co-ordination and harmonization of monetary and fiscal policies;
(iii) Minimizing the use of ways and means advances;
(iv) Relieving the CBN of the obligation to underwrite issues of treasury instruments;
(v) Development of primary and secondary markets in treasury securities;
(vi) Restructuring of insolvent banks;
(vii) Promotion and development of the money market.

## V. PROSPECTS FOR THE SUCCESSFUL IMPLEMENTATION OF INDIRECT APPROACH TO MONETARY AND CREDIT CONTROLS

As indicated earlier in this paper, substantial deregulatory measures have been introduced, resulting in a remarkable achievement of the pre-conditions enumerated above. The much needed competitive and effective money and short-term securities markets have sprung up with many operators actively participating in each market. Interest rates on all financial assets including government instruments now reflect the yields on private financial assets of comparable maturities. Currently, the major instrument of monetary policy is the Open Market Operations supported by the cash reserve requirements and minimum liquidity ratio. The aspect of designing monetary programme based on credible targets for growths of output, inflation and net foreign assets has, for long, been the practice of the monetary authorities. However, the problems outstanding are still sufficiently formidable to reduce the pace of the forward match and undo the gains already achieved.

### V.I Government Fiscal Deficit

The most important problem of the shift to the indirect approach to monetary management in Nigeria is the persistence of government fiscal deficit, financed by the banking system, especially the Central Bank. The enormity of the problem derives from the magnitude of the deficit, its persistence and the mode of financing. In recent years, deficit financing has constituted the greatest threat to monetary policy, reducing the effectiveness of policy instruments. Consequently, inflationary pressures have persisted; exchange rate depreciation in all segments of the foreign exchange market has been rapid while the current account of the balance of payments has recorded unsteady performances, fluctuating between small surplus and large deficits.

The deficit has also complicated the management of the interest rates which are vital indicators of performance of policy under the indirect approach to monetary control. Efforts to minimize the growth of the domestic liquidity arising from the monetary effects of the deficits through the issuance of stabilization securities have resulted in an upsurge of inter-bank rates. The rates which in normal circumstances should be the lowest are the highest. The insatiable demand of banks for foreign exchange despite the adoption of measures to reduce domestic liquidity has been traceable to the monetary impact of the fiscal deficit. The fiscal deficit has been responsible for excessive growths in monetary and financial variables, exacerbating the distortions in the system. For instance, aggregate credit, propelled by excessive credit to the Federal Government, surpassed optimal targets in recent consecutive years, creating pressures for domestic and external sectors of the economy. Monetary base and the net domestic assets of the CBN also grew excessively, reflecting largely the Bank's credit to the Federal Government and threatening explosion in the money stock. It is generally believed that if the problems of fiscal deficit and its current mode of financing are removed from the economic problems challenging monetary policy today the country will witness greater macroeconomic stability reflected in the resumption of stable growth as well as reduced unemployment and inflation.

The prospect for improved performance of monetary policy under the regime of indirect approach depends, inextricably, on the extent of reduction in fiscal deficit financing and the avoidance of reliance on the financial resources of the banking system for the financing of the deficit. The probability of reducing the deficit depends on the ability of government to generate additional revenue and rationalise its recurrent expenditures. Efforts to raise revenue through reduction of petrol subsidy have met with political and social constraints. Government has also introduced the value added tax (VAT) with a view to improving revenue out-turn. With regards to expenditures, government has taken steps to privatize some parastatals with a view to eliminating the grants to these agencies. It is hoped that the intensification of these measures and the adoption of credible strategy towards removing the socio-political constraints will increase the prospects of viability of government finances and eventually eliminate unsustainable budgeting and financing

The achievement of the above mentioned improvements will no doubt promote the viability of government, thereby reducing or eliminating government reliance on the banking system's financial resources as it is in many countries adopting indirect approach to monetary and credit control. Such countries have either learnt from the adverse experiences of others or themselves have witnessed the dangers in this method of macroeconomic management.

Only a few decades ago a serious debate concerning the potency of monetary policy was raging among economists. Many then believed that money was irrelevant and did not require special attention. Concerning interest rates, they thought that what should be done was to keep it as low as possible by pursuing a policy of cheap money so as to keep down the cost of public debt and permit government to borrow as much as it would. In fact, several governments were misguided into this approach to economic management. However, experience over the years has proved the fallacy inherent in such economic policies. Nowadays, governments of many countries, including those in developed countries, have learnt from the problems created by unstable monetary growth, due especially to the financing of government fiscal deficit from the banking system's resources. The firm desire of such governments to promote macroeconomic stability and engender growths of investment and employment has led them to desist from pursuing policies which could lead to unstable expansion in money. There is no doubt that the forces that brought about the improvement in other countries will also bring a change in our own case.

### V.2 Co-ordination of Monetary and Fiscal Policies

The fact that monetary policy cannot succeed at achieving programme target without the support of fiscal authorities was emphasized in Part I of this paper. The co-ordination is necessary even at the preparatory stage of the programme. The target rates of growths of output and general level of prices as well as the expected balance of payments for the programme period should be inputs to the fiscal budget preparation. When the appropriate stance of monetary policy should be restrictive, the fiscal authorities have to lend support by not adopting expansionary policies. In the Nigerian situation where financing of fiscal deficit could be obtained from the banking system, the prospect of the indirect approach to monetary control in achieving target depends largely on co-ordination between the fiscal and monetary authorities particularly because the response of the economy to excessive monetary expansion is more pronounced and noticeable under the market oriented approach than under the credit ceiling. Even if fiscal deficit is financed outside the banking system in the domestic economy, movements in interest rates should be taken into account. Issue of bonds usually require higher rates to stimulate the response of the market. This may lead to a general rise in the structure of interest rates and the crowding out of private sector investments.

### Fostering Confidence in the Financial System

The prospect of the new monetary strategy could be significantly enhanced by intensified efforts to sanitise the banking system with a view to promoting the soundness and solvency of banks. To this end, the monetary authorities should increase the tempo of enforcement of regulations designed to raise the confidence of economic agents, the patronage of which sustain the system. There is also the need to find solution to such sectoral problems as the mushrooming of finance houses and mortgage institutions whose operations have conflicted with that of banking services in a number of activities. The apparent lack of order in the operations of these institutions need to be checked. Efforts need to be devoted to ensure the proper classification of institutions in the financial sector. Institutions meant for long-term finance such as merchant banks should not operate like commercial or retail bankers in order to foreclose the chances of mismatch of funds, i.e. using short-term funds for long-term financing and thereby increasing the risk of insolvency. The strengthening of the regulatory institutions through enhanced powers to deal with various categories of financial institutions as contained in CBN Decree No. 24 of 1991 and BOFI Decree No. 25 of 1991 has contributed significantly to the resolution of many problems in the system. This has also enhanced the prospects of the new market oriented approach.

### Discipline

Finally, it should be emphasized that indirect approach to monetary control cannot work without discipline on the part of both government and financial institutions. This aspect of fiscal restraint has been mentioned but it cannot be over-emphasized. In all the countries that have successfully adopted the market oriented techniques the finance of fiscal deficit is privatized and the involvement of the banking system's financial resources in the financing of government deficit is limited to what is sustainable. The magnitude of this sustainable financing is determined by the system itself. It is the market that determines the overall size of domestic financing of the fiscal deficit in those countries we are trying to copy. This is why indirect monetary and credit control has achieved the much needed macroeconomic stability required for growth in the countries.

With regard to the banks, discipline is required in prompt rendering of accurate returns and observance of the monetary policy guidelines which are based on the prevailing developments in the relevant indicators. Probity, forthrightness, and accountability are also required from the directors and staff of banks. Banks should also institute a system of self regulation alongside the official efforts. This will strengthen the current efforts designed to stimulate the confidence of the non-bank public in the financial system. The prospects of indirect approach to monetary and credit control in achieving output, inflation and exchange rate targets depend on the degree of discipline exercised by government and banks. The new technique of monetary management can only create a suitable environment for investment and growth if all sectors of the economy exercise a high degree of discipline.

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