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IMPACT OF STABILIZATION PROGRAMMES ON THE GROWTH OF THE MONEY MARKET IN NIGERIA

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I. INTRODUCTION

ONE aspect of stabilization programmes that has received little attention in the literature is their impact on the money markets of less developed countries (LDCs). The fact that LDCs are characterized by very rudimentary money markets has tended to restrict the effectiveness of monetary policy as a stabilization tool. As a result, deliberate policies have been implemented to expand the money markets in these countries. In most cases, "supply-leading" policies [13, p. 178] have been initiated in the form of "creation of financial institutions and the supply of their financial assets, liabilities, and related financial services in advance for the demand for them" as a means of fostering the growth of these markets.[1] It is however not uncommon to find that such efforts to improve the growth of the money market in LDCs have yielded very limited results.

In the past three decades, most LDCs have undertaken stabilization programmes in the face of persistent disequilibrium of the balance of payments. Such programmes involve monetary, fiscal, and exchange rate policies as well as financial liberalization. One area in which the impact of such policies has been felt is in the growth of the money markets in LDCs. In Nigeria, for instance, the federal government initiated a Structural Adjustment Programme (SAP) in 1986 to correct the country's external imbalance and restructure the production base of the economy. Within this period (1986–89), the money market recorded considerable expansion.

The objective of this paper is to examine (using the Nigerian economy) the impact of stabilization programmes on the growth of the money market and the implication for monetary policy within the framework of a developing economy. The basic issue to be examined is whether such programmes delay or accelerate the growth of the money market and their effects on the nation's economy.

The paper is divided into five sections. In Section II, we examine the components of the stabilization programme in Nigeria. Section III examines the structure and growth of the money market in Nigeria with emphasis placed on the period following the inception of SAP. The implications of our observations are discussed in Section IV and in Section V, we summarize our recommendations and conclusions.

[1] For instance, the Central Bank of Nigeria introduced treasury bills and treasury certificates as short-term market instruments in 1962 and 1968, respectively.

II. STABILIZATION POLICIES IN NIGERIA UNDER SAP

The pattern of growth in the Nigerian economy reflected the general trend in most LDCs. In many LDCs, a structural imbalance occurs as increases in the level of income (both GDP and per capita) lead to the rapid growth of the economy, especially for manufactures, which may be unmatched by corresponding increases in the production of goods and services.

The emergence of the oil sector in the early 1970s as a major revenue earner for the government, coupled with defective (populist) economic policies adversely affected the terms of trade in the agricultural sector. The contribution of the oil sector to total exports rose from 57.6 per cent in 1970 to 97.2 per cent in 1986, accounting for 26.3 per cent and 74.2 per cent, respectively of the total government revenue. The objective of development following the oil boom was to absorb, monetize, and translate the oil revenue into investment in social, physical, and economic infrastructures. Large government investment expenditures were often biased and with the secure supply from oil, there was little incentive to increase domestic resource mobilization. Characteristically, the investment expenditure pattern emphasized the provision of social and economic infrastructures by the government with little incentive for private sector participation in direct productive activities. Thus, the productive sectors, particularly agriculture, came under serious pressures as there was a shift of the production base to construction, commerce, and the service sectors. This decline of the traditional productive sectors gave rise to a large-scale structural imbalance and it was therefore not surprising that the collapse of the international oil market in 1981 dealt major blows to the Nigerian economy. Oil exports fell sharply from U.S.$22.4 billion in 1980 to U.S.$14.3 billion in 1982.

Other major economic indicators prompted the restructuring of the economy. The GDP recorded a negative growth of 2.63 per cent and 10.7 per cent in 1981 and 1982, respectively. The persistent deficit in the balance of payments reached 3.56 billion naira in 1984 and debt service as a percentage of export earnings increased from 8 per cent in 1980 and to 33.2 per cent in 1985. From 1.9 billion naira in 1982, the country's external debt hit 19.1 billion naira in 1985. Government fiscal deficit also widened from 18.31 per cent of GDP in 1981 to 23.93 per cent in 1982 [9].

From the above, it was quite obvious that the economy needed restructuring. In the literature, stabilization programmes are classified according to whether their initial impact affects aggregate nominal domestic demand or aggregate real domestic supply. Demand-side policies include fiscal, monetary, and domestic credit control measures designed to influence the aggregate or rate of growth of nominal/domestic absorption. The major objectives of monetary policy under SAP are to mitigate inflationary pressures through a reduction in aggregate expenditures and to stimulate rapid financial development plus efficient resource allocation. To achieve these objectives, monetary policy under SAP has been largely restrictive. In 1987, the growth in money supply was fixed at 11.8 per cent and a ceiling of 7.4 per cent was placed on commercial bank credit expansion. The prescribed

liquidity ratio of commercial banks was also raised from 25 to 30 per cent.

Fiscal policy measures undertaken during this period aimed at curtailing government spending. In 1984 alone, overall government expenditure was cut by 28 per cent in nominal terms. Attempts to implement tax increases have not been very successful for political reasons. Emphasis therefore has been placed on the broadening of the tax base.

Exchange rate rationalization was the principal expenditure-switching tool employed. Before the introduction of SAP, one of the factors found to aggravate price distortions in the economy was the misalignment of the domestic currency (the naira) against major world currencies. The prevailing exchange rate encouraged massive importation of various goods into the country, to the detriment of the agricultural and manufacturing sectors. The new exchange rate policy has significantly addressed the misalignment of the naira. From an official exchange rate of 1.5535 naira to U.S.$1.00 at the inception of the foreign exchange market in 1986, the exchange rate of the naira at the end of February 1991 stood at 9.7585 naira to U.S.$1.00.

For our purpose however, supply-side policies are more relevant as they aim at increasing the volume of real goods and services supplied by the domestic productive sector for a given level of aggregate nominal domestic demand. Two major measures that have been implemented to achieve this objective are exchange rate rationalization and interest rate deregulation. We have discussed exchange rate reforms above. In August 1987, the federal government removed all controls on interest rates in line with the emphasis on financial liberalization. To indicate to the commercial banks the direction of interest rate changes, the minimum rediscount rate of the central bank was raised from 11 to 13.25 per cent. To stimulate the private sector to invest in government securities, the treasury bill rate was also raised from 10 to 14 per cent. Interest rate deregulation was assumed to complement exchange rate reforms by encouraging the inflow of foreign capital.

The aim of this paper is not to evaluate the success of the various stabilization policies outlined above. However, the period 1986–89 during which the policies were implemented has witnessed an unprecedented increase in the growth of the money market. Our objective is to indicate the reasons for this growth and examine some of the consequences.

III. THE GROWTH OF THE MONEY MARKET IN NIGERIA

A. *The Structure of the Money Market and Its Instruments*

The Nigerian money market came into existence soon after the establishment of a central bank in 1959. Like any other money market, the main reason for the establishment of the Nigerian money market was to transfer funds from one economic unit to another for relatively short periods of time. Since receipts and expenditures are not perfectly synchronized, there is a need to hold money balances to ensure that planned expenditures can be maintained independently of cash receipts. But holding such balances involves a cost in the form of foregone interest and to minimize this cost, economic units (banks inclusive) keep their

idle balances at a minimum and supplement these balances with holdings of liquid money market instruments. To determine the extent to which Nigerian banks economize on cash holdings, Table I compares the size of bank reserves with that of the short-term money market over the period 1960–89. It is evident that, except for 1960 and 1961, in the absence of transactions, the money market consistently outweighed bank reserves, confirming the assumption that it is an outlet for idle cash. This trend has been emphasized by the ongoing deregulation of the money market and the resultant expansion therefrom.

Under the Nigerian conditions, the requirement for this arrangement is further underlined by the history of the development of the financial system. Most of the financial institutions (mostly banks) operating prior to the establishment of the Central Bank of Nigeria (CBN) were owned by foreign establishments and there were widespread allegations that these institutions did not extend credit to Nigerian businessmen. Thus, one major consideration for the establishment of the Nigerian money market was the need to Nigerianize the credit base. Secondly, a money market was found to be necessary to provide the machinery needed for government short-term financing requirement [10]. It is not surprising therefore that shortly after the CBN was established in 1959, the first money market instrument that came into existence was the treasury bill which is used by the government to borrow money for short periods of about three months pending revenue inflows.

Money market instruments traded in Nigeria include treasury bills (TBs), treasury certificates (TCs), certificate of deposits (CDs), bankers acceptances (BAs), bankers' unit fund (BUF), commercial papers (CPs), and eligible development stocks (EDSs). TBs are short-term debt instruments (ninety-one-day maturity) issued by the CBN specifically to raise short-term finance for the federal government. They were first issued in April 1960 on a monthly basis and over the years, weekly issues have evolved after a brief experimentation with fortnightly issues. Though the first issue was limited to 10 per cent of estimated federal government revenue, it has subsequently increased to 150 per cent of the estimated revenue. The overriding interest of the government to encourage the growth of the money market led to the issue of TBs in excess of financing requirements in the early years. Table II shows TBs outstanding classified according to institutional subscribers for selected years. In 1962, TBs outstanding stood at 54.5 million naira but by 1989, it had reached 24,126 million naira, after peaking at 35,466 million naira in 1988.

Like TBs, TCs were introduced in 1968 to fulfill extra demands for government borrowing, specifically to finance the Nigerian civil war between 1967 and 1971. This was accentuated by the demise of the Bill Finance Scheme and subsequent shortage of money market instruments. TCs are short-term debt instruments with a maturity of one to two years. The changing fortunes of the government have been the underlying factor dictating the trend in the issuance of these instruments. Thus for instance, between 1962 and 1968, as a result first of the need to borrow to finance the gigantic Second National Development Plan (1962–68) and later the civil war, the activities of the money market received a boost but as government finances improved in the early 1970s due to the increase of oil production, the issuance of TCs was technically abolished and TB issues remained stationary

TABLE
SHORT-TERM MONEY

	TBs	TCs	CPs	CDs	EDSs	BUF	MM Size	TBs/MM (%)
1960			2.3				2.3	
1961			2.2				2.2	
1962	54.5	n.a.	6.2				60.7	89.8
1963	29.8	n.a.	14.8				44.6	66.8
1964	34.0	n.a.	30.1				64.1	53.0
1965	40.0	n.a.	42.0				82.0	48.8
1966	65.0	n.a.	60.1				125.1	52.0
1967	84.5	n.a.	36.4				120.9	69.9
1968	119.8	313.6	5.1				438.5	27.3
1969	175.5	70.9	4.5				250.9	69.9
1970	277.8	117.9	6.0				401.7	69.2
1971	615.9	253.0	11.2				880.1	70.0
1972	615.8	281.8	9.3				906.9	67.9
1973	615.8	279.1	7.9				902.8	68.2
1974	616.0	282.5	16.9				915.4	67.3
1975	615.9	226.5	24.1		833.3		1,699.8	36.2
1976	6,851.7	2,260.0	26.9	40.2	1,357.9	125.1	10,661.8	64.3
1977	9,063.0	10,250.0	26.2	23.8	1,126.6	347.3	20,836.9	43.5
1978	816.0	1,800.0	45.6	106.8	1,747.1	114.2	4,629.7	17.6
1979	2,118.0	2,310.0	24.2	89.2	2,546.2	125.4	7,213.0	29.4
1980	2,119.0	2,727.6	48.1	120.9	2,861.8	28.3	7,905.7	26.8
1981	5,782.0	2,307.6	73.0	168.5	3,148.0	19.4	11,498.5	50.3
1982	9,782.0	1,665.4	110.4	346.2	3,315.8	21.1	15,240.9	64.2
1983	13,476.0	4,914.4	153.3	419.1	3,668.0	18.5	22,649.3	59.5
1984	15,476.0	6,413.1	156.7	260.7	3,571.6	18.5	25,896.6	59.8
1985	16,976.0	8,354.1	139.0	211.7	4,154.5	20.3	29,855.6	56.9
1986	16,976.0	6,654.8	259.0	261.9	4,683.0	17.5	28,852.2	58.8
1987	25,226.0	6,654.1	496.4	1,384.4	4,716.3	8.6	38,485.8	65.5
1988	35,476.0	6,794.6	668.9	1,861.2	4,620.7	27.9	49,449.3	71.7
1989	24,126.0	6,951.4	737.2	1,309.6	4,556.3	5.9	37,686.4	64.0

Sources: [4, various issues] [5, various issues].
Notes: 1. Figures represent the situation at the end of December.
2. MM=money market; CB=commercial bank.

between 1972 and 1976. With the downturn in government receipts in 1977, these was a resurgence in the issuance of TBs and TCs. As a percentage of Nigeria's public domestic debt, TBs and TCs represented about 49.7 per cent in 1975 but by 1990 the two instruments alone accounted for about 80.1 per cent of the total [8]. Figure 1 shows that in 1962 the Call Money Scheme (CMS) was the principal holder of TBs with 34.0 million naira (62.3 per cent), but by 1989 the CBN was at the top with holdings representing 46.2 per cent of the aggregate. Merchant banks entered the market only in 1976, and have not been strong subscribers whereas commercial banks have been very active, the best year being

I

MARKET OUTSTANDING

(Million naira; %)

TCs/MM (%)	CPs/MM (%)	CDs/MM (%)	EDSs/MM (%)	BUF/MM (%)	MM/GNP (%)	CB Reserves
						9.4
						11.0
						12.3
						11.6
						14.4
						12.8
						14.6
						12.5
71.5					11.1	15.5
28.3					4.9	12.6
29.4					4.2	23.3
28.7					8.2	19.1
31.1					7.9	43.7
30.9					7.1	65.8
30.9	1.8				4.3	531.4
13.3	1.4		49.0		6.8	828.6
21.2	0.3	0.4	12.7	1.2	34.3	1,094.0
49.2	0.1	0.1	5.4	1.7	57.8	851.8
38.9	1.0	2.3	37.7	2.5	12.7	741.4
32.0	0.3	1.2	35.3	1.7	18.4	797.3
34.5	0.6	1.5	36.2	0.4	18.5	1,532.1
20.1	0.6	1.5	27.4	0.2	24.6	1,376.1
10.9	0.7	2.3	21.8	0.1	26.5	2,002.0
21.7	0.7	1.9	16.2	0.1	36.6	1,266.7
24.8	0.6	1.0	13.8	0.1	40.4	1,032.1
28.0	0.5	0.7	13.9	0.1	42.5	805.2
23.1	0.9	0.9	16.2	0.1	36.9	1,488.3
17.3	1.3	3.6	12.3	0.0	48.1	2,193.2
13.7	1.4	3.8	9.3	0.1	52.7	2,152.0
18.4	2.0	3.5	12.1	0.0	37.6	2,079.8

1975 when their market share stood at 83.2 per cent. Another strong performance is the "others" category which in 1989 was second to the CBN with 42.8 per cent of the total TBs outstanding.[2]

Total TCs outstanding increased from 313.6 million naira in 1968 to 11,248 million naira in 1989, posting an average annual growth rate of about 74.8 per cent. As Figure 2 shows, one of the consistent subscribers is the commercial banking sector whose holdings increased from 3 per cent in 1968 to 15.7 per cent in 1989. The "others" category has also performed remarkably well. In 1968

[2] "Others" category include statutory boards/corporations, local governments, companies, and individuals.

TABLE
HOLDINGS OF TBs, TCs,

	1975			1980	
	TBs	TCs	EDSs	TBs	TCs
CBN	1.2	2.7	309.7	—	1,590.9
Merchant bank	—	—	—	40.6	18.0
Commercial bank	512.7	214.2	74.3	1,600.5	834.3
Government[a]	17.0	9.0	3.5	38.2	—
Savings-type institution	—	—	397.0	—	—
Others[b]	85.0	0.6	48.8	439.7	284.4
Total	615.9	226.5	833.3	2,119.0	2,727.6

Sources: [4, various issues] [5, various issues].
Note: Figures represent the situation at the end of December.
[a] Federal and state government holdings for TBs and TCs, and state and local government
[b] "Others" includes statutory boards/corporations, local governments, companies, and
and individuals for EDSs.

it accounted for about 97.0 per cent of the total but by 1989, its market share had fallen to 19.6 per cent having been highly marginalized by the CBN whose share of the market increased from 1.2 per cent in 1975 to 64.4 per cent in 1989. Obviously, the market for these two securities has become increasingly narrowed down to the banking system, in particular the CBN, thus reducing their stabilization impact. The limited role in the market of these securities is often due to the yield which makes them very unattractive for voluntary subscribers. Most of what the commercial banks hold is foisted on them by the CBN. For instance, the current yield on TBs is about 16.7 per cent, whereas the cost of short-term funds is in the range of 25–30 per cent. Investing in TBs under these circumstances amounts to "an exercise in charity as not even its zero risk credit rating could justify this differential" [19, p. 48].

To promote the development of the young money market in its formative years, the CBN also introduced the CMS in July 1962.[3] This is an arrangement whereby participating institutions invest surplus funds on an overnight basis with interest that can be withdrawn on demand. The requirement for this scheme was underlined by the fact that the then existing money market instrument (TBs) provided opportunities for investment of short-term funds for a period of three months whereas it was necessary to be able to transact business on a shorter basis, preferably twenty-four hours. Under the scheme, a call money fund was created at the CBN and the participating banks had to agree to maintain a minimum balance at the bank. Any surplus above the minimum was lent to the fund and any deficits

[3] Actually two separate CMS were in operation in the early 1960s. One was operated by the commercial banks themselves without the participation of the CBN. The other and more prominent was supervised by the CBN and came into existence in 1962. The two schemes operated side by side until 1974.

II

AND EDSs OUTSTANDING

(Million naira)

	1985			1989		
EDSs	TBs	TCs	EDSs	TBs	TCs	EDSs
1,381.3	6,184.1	3,724.4	1,613.4	11,164.0	4,483.5	1,484.5
1.5	1,027.1	105.0	33.0	84.6	6.8	9.4
524.8	7,990.9	2,264.0	395.7	2,535.2	1,095.9	196.9
3.3	8.0	—	2.2	6.7	—	8.0
845.4	—	—	1,833.2	—	—	2,390.3
105.5	1,765.9	2,260.7	277.0	10,335.5	1,365.2	467.2
2,861.8	16,976.0	8,354.1	4,154.5	24,126.0	6,951.4	4,556.3

holdings for EDSs.
individuals for TBs and TCs; and insurance companies, statutory and other corporations,

compensated by borrowing from the fund. The CBN administered the fund on behalf of the banks and paid interest at a rate fixed somewhere below the TB rate. By law, the banks were required to maintain a minimum balance with the CBN for clearing purposes. Any excess money over these balances was lent to the fund for investment in TBs [10, p. 25]. The total funds under the scheme at the onset in 1963 amounted to about 9.020 million naira and when the scheme was abolished in 1974, the funds had grown to about 36.389 million naira. The scheme was abolished in 1974 due to the buoyancy of the federal government as a result of its revenue from the oil boom, a situation that led to the shortage of short-term debt instruments, a veritable avenue for the investment of funds from the CMS.

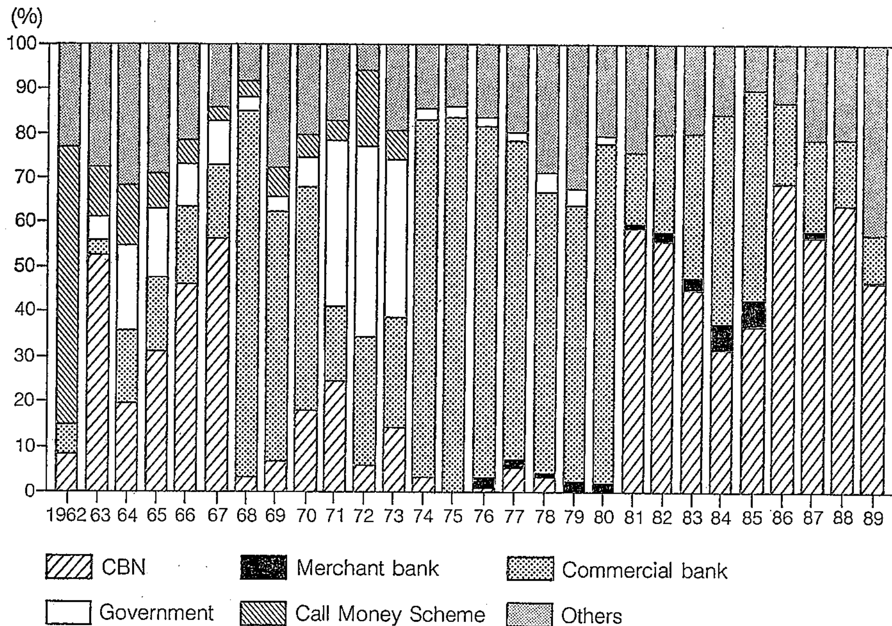
At present, the bank still operates a private CMS. In the new arrangement, bank A with surplus funds places it on call with bank B which is temporarily in need of funds. When the need arises, bank A can ask for repayment. On the other hand, bank B can voluntarily pay back as soon as its funding improves. The actual movement of the funds from bank A to bank B and vice versa takes place at the CBN which acts under the instructions of banks A and B.[4]

The CPs are another instrument traded at the money market. These are short-term debt instruments of the private sector. They were predated by the Bill Finance Scheme which was first introduced in 1962.[5] The scheme stemmed

[4] For details of this operation, see Adekanye [1, p. 39].

[5] The Bill Finance Scheme was an arrangement of the CBN under which the commodities marketing boards would draw bills on the then Nigerian Produce Marketing Company (NPMC), such bills being discountable upon acceptance by the NPMC, with a consortium of banks and acceptance houses. The CBN provided rediscounting facilities for such bills. The scheme was discontinued in 1968 following the refusal of banks to discount cocoa and cotton bills in 1964 and 1967, respectively because of sale uncertainty in those years.

Fig. 1. Holdings of TBs Outstanding

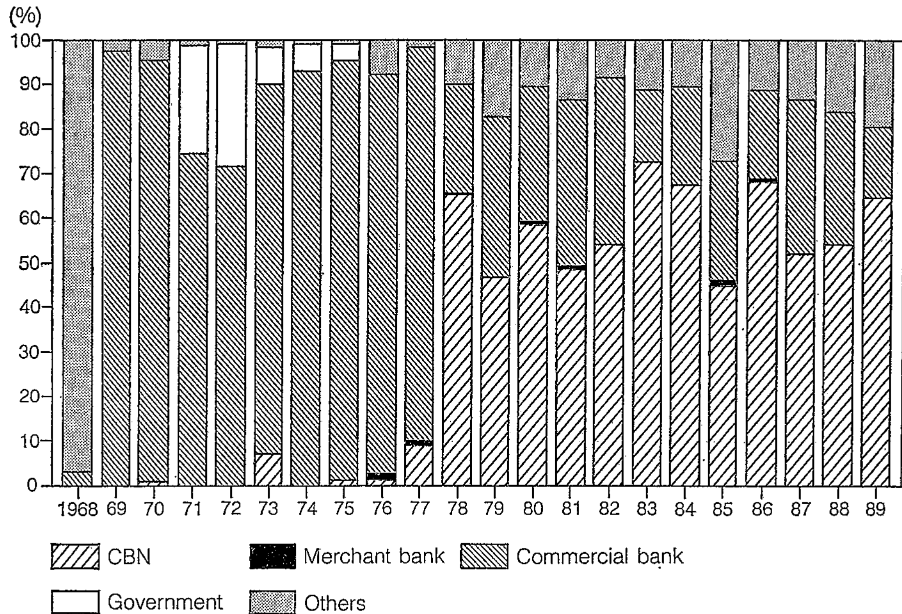


Sources: [5, various issues].
Notes: 1. The Call Money Scheme was abolished in 1974.
2. "Government" includes federal and state governments.
3. "Others" includes statutory boards/corporations, local governments, companies, and individuals.

from the need for the CBN to be prepared to provide the seasonal expansion of credit required to fill the gap between the credit which the banks could provide and the larger amount usually required to finance the major export crops. The volume of CPs issued sharply decreased in 1968 when the CBN was in change of direct financing of the marketing boards. In 1974, the total CPs outstanding was 16.9 million naira and by 1989 it stood at 737.2 million naira, representing an annual growth rate of over 35 per cent. With the abolition of the marketing boards in 1986 as part of the structural reforms in the economy, CPs have become very prominent in the money market.

Commercial banks generally outweighed merchant banks in importance until 1984 when merchant banks dominated the market with a market share of 65.7 per cent. This dominance continued until 1989 except for 1988 when it was briefly conceded to commercial banks, reflecting the continued reliance on merchant banks for the funding of external trade.

Fig. 2. Holdings of TCs Outstanding



Sources: [5, various issues].
Notes: 1. "Government" includes federal and state governments.
2. "Others" includes statutory boards/corporations, local governments, companies, and individuals.

CDs were first introduced in 1975 by the CBN. They are interbank debt instruments designed initially mainly to channel surplus funds from commercial banks into merchant banks for the purpose of promoting investment projects on a relatively larger range than the short-term projects which are handled by commercial banks.[6] The instrument was introduced due to the backwash of funds in the commercial banking system and lack of investment opportunities for these funds. Banks readily adopted this scheme as it offered new opportunities for the diversification of both assets and liabilities. Two classes of CDs were introduced: the negotiable CDs (NCDs) and the nonnegotiable CDs (NNCDs). The NCDs were more popular since they involved a secondary market and carried yields unattached to statutorily prescribed rates as opposed to the NNCDs which are redeemable only by the original buyer and carried fixed rates. NCDs are characterized by a maturity range of three to thirty-six months and wholesale unit issue

[6] Today, the instrument has become very popular even with commercial banks for the reasons explained in the text.

TABLE
HOLDINGS OF CPs, CDs,

	1976			1980	
	CPs	CDs	BUF	CPs	CDs
Commercial bank	23.7	30.9	112.0	42.6	114.7
Merchant bank	3.2	9.3	13.1	5.5	6.2
Total	26.9	40.2	125.1	48.1	120.9

Sources: [4, various issues] [5, various issues].
Note: Figures represent the situation at the end of December.

of not less than 50,000 naira. Those maturing within eighteen months are classified as liquid assets and satisfy the liquidity ratio requirements. The NNCDs are issued in denominations ranging between 1,000 and 50,000 naira and are held to maturity. Whereas interest charges on CDs are handled by negotiation, rates on NNCDs comply with the rate of interest on deposits as stipulated from time to time by the CBN [11, p. 55].

At the end of the first full year of activities in the NCD market in 1976, total value outstanding was 40.2 million naira which in December 1989, increased to 1,309.6 million naira, posting an average annual growth rate of about 68.7 per cent (see Table III). From 1976, commercial banks widely outpaced merchant banks until 1982 when the gap narrowed. A complete turnaround occurred in 1987 when merchant banks became dominant with a market share of 65.2 per cent, although by 1989 the commercial banks had once again reestablished their dominance.

EDSs were introduced in 1975 by the CBN. Like TBs and TCs, they are debt instruments of the federal government but unlike them the maturity period is three years. They are included in the calculation of bank liquidity ratio. At the onset, total EDSs stood at 1,217.3 million naira, peaking at 4,556.3 million naira in 1989. The principal holders of EDSs are savings-type institutions,[7] the CBN, and commercial banks (Figure 3).

BUF was introduced in 1975 to mop up the excess liquidity in the economy following the monetization of reserves accumulated from the oil boom in the early 1970s. The need for additional instruments arose out of the reluctance of the government to increase its borrowing through the issue of TBs and TCs. Thus, these instruments aimed at enabling the commercial and merchant banks as well as other financial institutions to invest part of their liquid funds in a money market asset linked to federal government stocks. Participants invest in multiples of 10,000 naira in the BUF, which in turn is invested in government stocks of various maturities. The BUF is rated as part of specified liquid assets of banks. Between 1976 and 1988 the total BUF outstanding declined from 27.9 million

[7] Savings-type institutions include National Provident Fund, Federal Savings Bank, Federal Mortgage Bank, and the National Insurance Corporation of Nigeria.

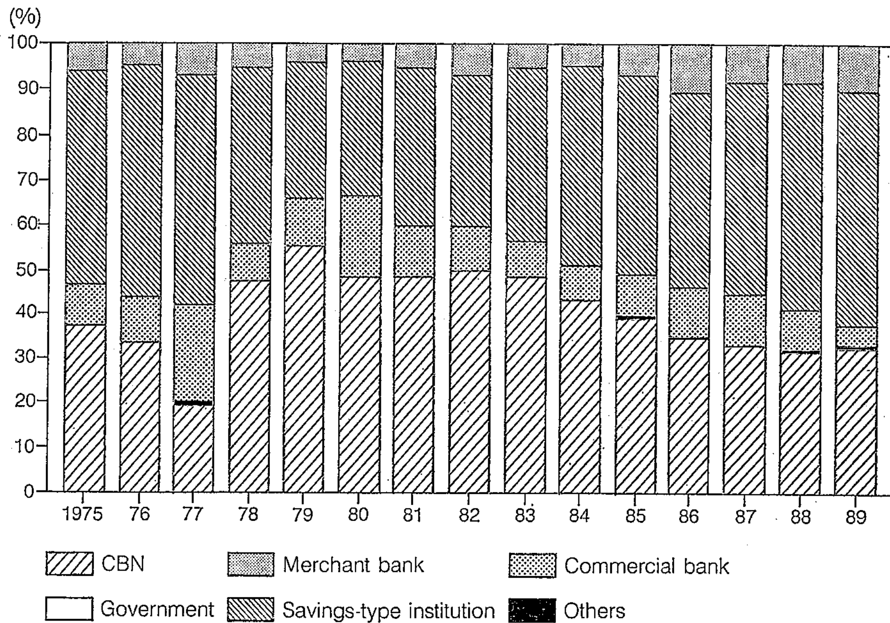
III

AND BUF OUTSTANDING

(Million naira)

	1985			1989		
BUF	CPs	CDs	BUF	CPs	CDs	BUF
19.3	47.2	129.2	18.5	368.2	705.5	5.9
9.0	91.8	82.5	1.8	369.0	604.3	n.a.
28.3	139.0	211.7	20.3	737.2	1,309.6	5.9

Fig. 3. Holdings of EDSs Outstanding



Sources: [4, various issues] [5, various issues].

Notes: 1. "Government" includes federal and state governments.

2. "Others" includes statutory boards/corporations, local governments, companies, and individuals.

naira, reflecting the increased attraction of alternative money market instrument such as CDs. Commercial banks have been very active in the market.

BAs are credit instruments issued by companies and individuals, and guaranteed by banks. They are normally drawn by an individual or business concern on a bank and accepted by the drawee bank. It is an order for the bank to pay a designated

person or to a bearer a certain sum of money at a stipulated time. When the bank accepts, the draft becomes literally a cashier's cheque or a promissory note of the bank. By accepting the draft, the drawee bank becomes the principal debtor and the drawer becomes secondarily liable. The payee or any holder in due course, may sell the acceptance at a discount in the open market since the instrument is now a bank instrument for which a ready market exists. Since BAs can be rediscounted at the CBN, they are an ideal type of secondary reserves for commercial banks. BAs became popular in the Nigerian money market in 1987 with the abolition of the marketing boards and the adoption of the Structural Adjustment Programme. At present it is not easy to quantify the volume of issues traded due to the paucity of data. The BAs have however been playing an important role in the financing of international transactions.

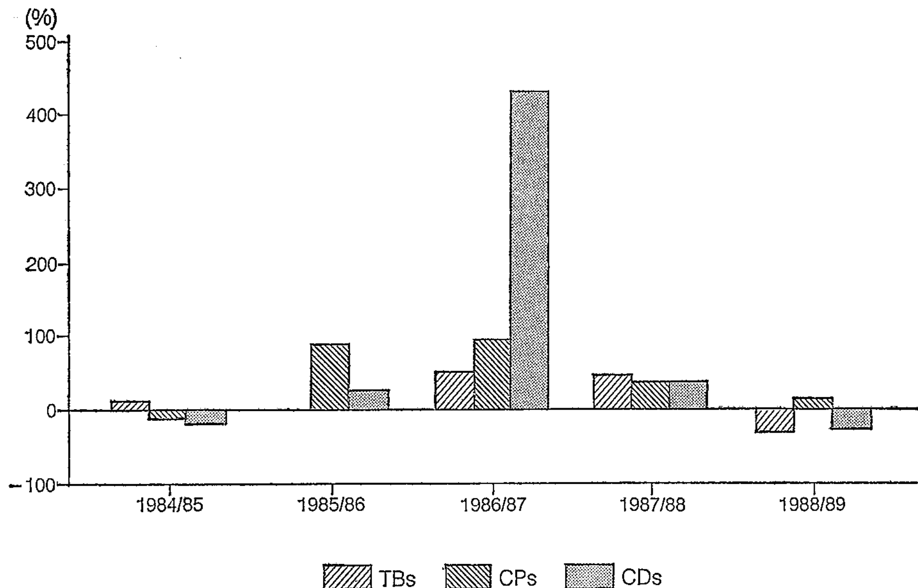
From the foregoing review of the instruments in the Nigerian money market and their growth, two main conclusions can be drawn. First, the Nigerian money market has succeeded to a great extent in providing facilities for the retention of funds in the Nigerian economy. It has created investment outlets for financial institutions in the country to hold their idle cash balances that would have been transferred overseas. This is often observed in the low level of cash ratio in the banking system, a reflection of the possibility for the banks to invest their short-term surplus funds [12]. Secondly, the growth of the market has in most cases been tied to the fluctuations in the government financing requirements and the direction of its policies. Thus in the 1960s, due to the commitment to Nigerianize the credit base and the need to finance a war economy, a number of debt instruments were introduced and the market witnessed a rapid growth. However, in the 1970s, due to the rapid expansion of the government revenue base arising from the increase in the crude oil sales, the activities in the money market declined along with government borrowing. The onset of the economic depression was largely accelerated by the decline in oil receipts in the late 1970s and in the early 1980s once again the government increased borrowing, resulting in the expansion of activities in the money market. Thus, the market has been very active in the mobilization of short-term funds for the government.

B. *The Impact of SAP on the Money Market*

The previous discussion outlined the structure of the Nigerian money market. There are direct dealings between market agents in the absence of intermediate brokers and since the introduction of SAP in 1986, far-reaching changes have occurred in the money market. To assess the impact of SAP on the money market, we will focus on the period 1984 to 1989, that is, three years before and two years after the deregulation of interest rates in January 1987. Further more, we will select three instruments, viz., TBs, CPs, and CDs as they are issued by a cross section of money-market dealers: the commercial banks, the private sector, and the treasury/monetary authorities (Figure 4). Moreover, since their respective maturities range between one and three months it is easy to ascertain their marketability.

Prior to the initiation of SAP in 1986, CPs registered a negative growth.

Fig. 4. Growth of Selected Money Market Instruments (Percentage Changes)



Sources: [4, various issues] [5, various issues].

Between 1984 and 1985, the CPs declined by about 11.3 per cent but by 1986, the CPs recorded a remarkable growth rate of 86.3 per cent which was further improved in 1987 with a growth of 91.6 per cent. This performance could be traced to the abolition of marketing boards, as banks assumed a more prominent role in the financing of commodity trade through the use of CPs.

Total TBs outstanding rose by about 9.7 per cent between 1985 and 1986. However, it recorded a substantial growth of 48.6 per cent in 1987 and a further gain of 40.6 per cent between 1987 and 1988, due to the increase in the government fiscal deficit and the attempts to finance it through domestic borrowing. Moreover, with deregulation, TB yields were increased from 10 to 14 per cent, which attracted potential investors. Although the TB issue rate was not allowed to be determined by the forces of demand and supply, the fixing of the minimum rediscount rate at 15 per cent in 1987 increased the bill issue rate of about 14 per cent. From 1960 to 1982, the bill rate ranged between 4.5 and 6 per cent, rising marginally to 5 per cent in 1985. Against this background one can appreciate the impact of the deregulation of interest rates on the TB issue rate and the near 40 per cent increase in the volume outstanding in December 1988. But as the rates in other instruments exceeded the TB rates, a drop of 31.9 per cent was observed in 1989, reflecting the preference of investors for higher-yielding instruments such as CDs.

CDs have registered the most impressive growth among the money market

instruments under consideration. The CDs became very popular following the deregulation of interest rates and the banks are now active participants both as issuers and purchasers of CDs. Generally, the interest rate on CDs is governed by supply and demand considerations since they need not be within the CBN's prescribed range of interest on deposits. However, over the years the CD rate in Nigeria has been aligned with the level of interest rate in the money market generally, though with some connection with interest movements in the inter-bank market. Now that interest rates are deregulated, the forces of demand and supply have become very important. CDs presently attract wealthy individuals, business firms, and other organizations with large amounts of cash balances that can be temporarily invested. Banks with larger excess reserves may also purchase CDs while those seeking funds for the purchase of foreign exchange may issue CDs to attract such funds. Since banks always seek more flexibility in expanding their lending capability in response to lending opportunities, they can increase the volume of CDs issued when the loan demand is strong and allow them to run off when the loan demand becomes sluggish. The negotiability of CDs also makes them more liquid than nonnegotiable instruments.

Generally, we can attribute the growth pattern outlined above to a number of policies under the SAP. Credit ceilings have been a major demand-side policy. The 1989 monetary policy guidelines placed a limit of 10 per cent on the expansion of credit by each commercial bank, down from the 12.5 per cent of 1988.

Since banks could not expand their loans and advances which is a major pivot of profitability, and funds cannot be left idle, the banks have resorted to holding money market instruments. The result was a shedding of assets by commercial banks who, in a bid to reduce the excesses in their loans and advances portfolios, preferred paying higher rates to subscribers of money market instruments rather than incur the wrath of the CBN. This is a cardinal principle of bank liability management. If banks cannot manage their assets, they could at least go out to solicit funds or increase profits by the issuance of money market instruments.

It has also been argued that the deregulation of interest rates under SAP has resulted in making the money market an attractive instrument for investment avenues, which mainly accounts for the growth recorded during the period under review. In January 1987, the CBN partially deregulated interest rates and increased the minimum rates payable on savings and time deposits from 9.5 to 11 and 12 per cent, respectively. Not satisfied with the partial deregulation, it opted for full deregulation in August 1987 by abolishing all direct controls on interest rates. Presently the CBN sets a minimum rediscount rate (MRR) as signal for other market rates. Market instruments that had little attraction in the past are increasingly being traded now since they carry higher yields.

The high interest rates were further pushed up by foreign exchange market (FEM) auctions which absorbed large quantities of the domestic currency. FEM as a major element in the restructuring programme appeared to have moderately revised commercial activities in the economy. In addition to the pressure exerted on liquidity by aggregate demand for bank credit, most banks usually called back their funds to finance foreign exchange requirements in FEM. Due to the tight liquidity situation, banks were often reluctant to invest in BAs and other instru-

ments, and as a result companies issuing such instruments were forced to increase the prevailing rates so as to make them more attractive for banks. Since there is no ceiling on the interest rates on such instruments, a further increase can be obtained. As of December 1988, the rates on CDs (of six-month duration) had hit an all time high of 16.5 per cent. Though supporting data are not readily available, there is some evidence that the money market has been a source of liquidity for institutional foreign exchange dealers. In May 1989, the CBN withdrew public sector funds from the banking system and the naira immediately gained some strength as many banks lacked the funds to request foreign exchange. However, within a week the naira came under renewed downward pressure, suggesting that orthodox deposits no longer played a major role in the determination of banks' access to funds.

Another factor that has contributed to the high yields on money market instruments is uncertainty. Prior to stabilization, most LDCs frequently suffered from high inflation. As regards the linkage between demand management and inflation, it is widely agreed that "when inflationary expectations have become firmly entrenched, pressures on prices can persist for a long time even when conventionally used indicators show no overall excess demand" [7, p. 56]. The stabilization programme in Nigeria has resulted in biting inflation which had considerably eroded the purchasing power of the domestic currency and led to a shift into short-term money market instruments by investors. Apart from inflationary expectations there has also been a considerable uncertainty about the future movements of exchange rates. To prevent future risks, investors have insisted on higher interest rates. Furthermore the increase in the money market trading reflects the government demand for funds to finance its widening budget deficit, an increase in the competition for funds by commercial banks and the introduction of 15 per cent withholding tax on time deposits. It was also realized that money market instruments offered safety and liquidity against demand deposits which did not yield any return. Not only can CDs be discounted at the CBN, but they are also traded in the secondary market, thereby making them more liquid than fixed deposits.

The peculiar case of BAs must be mentioned. There has been a preference for this instrument over CPs in recent times as CPs are two–way out papers whose marketability depends on the reputation of the company issuing them and the security provided, while BAs are three–way out papers whose marketability is bolstered not only by the reputation of the issuing company or the security provided, but also by the bank guarantee. Moreover, the investor that buys the instrument collects interest on the investment upfront (i.e., immediately) and is therefore able to reinvest this upfront income into other profitable areas, thereby creating new income even before the maturity date of the initial investment. As CPs are issued by large firms, small unquoted firms can benefit from the issuance of BAs.

In conclusion, several money market instruments became very popular with the degree of patronage depending on the peculiar characteristics of each instrument that is brought into the limelight under an adjustment programme characterized by a low level of investment funds and high interest rates.

IV. IMPLICATIONS OF THE GROWTH IN THE MONEY MARKET

In this section, we examine the implications of the recent expansion of the Nigerian money market and our analysis will proceed along three basic areas. First, we will examine the positive implications of the growth of the money market, particularly with reference to the improvement of the effectiveness of money policy in LDCs. Next, we will determine how the increasing use of these instruments can exert a negative influence on monetary policy and also undermine the soundness and stability of the financial system. Lastly, we will summarize ways of checking excesses in the money market.

There are multiple advantages in a well-developed money market. To the public, there are gains from having access to additional financial options with different maturities and savers with funds to invest can now buy not only TBs and TCs but also CDs, BAs, CPs, etc. In addition, borrowers with loan needs that might not have been accommodated at the banks now have access to such needed funds as banks are able to satisfy a larger number of loan requests than before.

For the CBN, the ingenuity and competitiveness of commercial banks in the money market may help to create an environment in which more effective financial policies could be activated. In administering its discount window, the CBN can rediscount various securities for commercial banks. Inasmuch as the securities eligible for rediscounting are short-term money market instruments (TBs, TCs, BUF, and EDSs), commercial banks appear on the supply side of the money market as they offer their holdings of such eligible assets in exchange for cash. The CBN appears on the demand side as it fulfills its obligation of providing discounting facilities.

In the management of banks reserves, the CBN has also relied on money market instruments. Reserve management is achieved through minimum liquidity ratios where the CBN prescribes the percentage of liquid assets that banks must keep against their deposits. Assets eligible for such purposes include TBs, TCs, BUF, plus short-term CDs and CPs and banks thus hold these instruments in trying to satisfy statutory liquidity ratios. The CBN does not engage in classical open market operations (OMO) due to the current range and depth of the money market. Although the amount of government securities held by the CBN varies from time to time, it should not be taken as evidence of conscious policy. As the underwriter of government securities, the CBN sells some of its holdings in response to the demand for them and as noted earlier, it offers rediscounting facilities for government securities.

In spite of the various opportunities offered by the money market, a number of adverse implications could also be drawn. First, the observed predominance of short-term lending is bound to impede capital formation in the country. Productive investment is likely to be hampered as market agents provide funds for only very short periods, for the two following reasons. First, due to the liquidity squeeze within the period under consideration, it appears that banks

and other money market participants are now keeping their funds within easy reach. Secondly, the prevailing uncertainty and expectations of future increases in interest rates narrow the time horizon of financial contracts. Since interest rates are related to time, the higher they become, the shorter the maturity of financial contracts. Therefore, since banks can only borrow for a short term, they also lend for a short term in order to avoid maturity mismatch, a situation in which the maturity of liabilities precedes the maturity of assets.

In taking account of the increasing popularity of money market instruments, there are serious doubts that restrictive policies pursued under stabilization programmes would be effective. During such periods, the individual bank now is confident that at a price, it may be able to raise the funds it needs to satisfy the credit requests of its customers.[8] The increased popularity of money market instruments may encourage customers to switch from demand deposits to variants of time deposits, such as a reduction in demand deposits with a resultant release of required legal reserves because CDs customarily have no legal reserve requirements. In addition, CDs turn over less frequently than demand deposits because they are dated and conversion into cash before maturity attracts interest penalties. Funds deposited against CDs are thus available to the bank for a longer period of time, and CDs have therefore the potential to expand the money-creating ability of banks even when the monetary policy becomes restrictive.

Another disturbing impact of the growth of the money market is its effect on velocity. CDs and other instruments have the potential of increasing the velocity of circulation through three basic routes. First, due to the attractive yields, they easily transfer money balance to business borrowers who wish to use the money immediately, resulting in the increase in the frequency of turnover of each unit of money. Secondly, CDs and BAs can alter the cash management behavior of economic units [18, p. 385]. The availability of such assets increases the range of interest-yielding liquid assets available to the public, thereby raising the opportunity cost of holding money. As a result, the money demand decreases with the corresponding increases in velocity. Thirdly, the increased use of money market instruments may alter the sensitivity of money balances to interest rates. Since the demand for money is inversely related to interest rates, a rise in the interest rate will lower the money demand relative to GNP and hence the velocity increases. These induced changes adversely affect the effectiveness of monetary policy. If the CBN attempts to hold down the money supply, banks can still issue CDs (for example) to activate idle money balances and induce an increase in velocity thus circumventing the CBN objectives of preventing a sharp economic upswing. The problem is that the stronger the CBN restraints, the greater the incentive for the banks to devise ways of side-tracking the tight policy. Empirical analysis of the CD market shows that both the loan rate and discount rate generally show a positive relationship to the supply prices of CDs,[9] therefore implying that banks respond to increases of the discount and loan rates by raising the offered rates on CDs. Since the discount and loan rate increases reflect a contradictory monetary

[8] See Schweitzer [15, p. 117].
[9] See Alawode and Ikhide [3].

policy, it is evident that when banks are faced with a tight monetary policy, they show a greater propensity to issue CDs and lend out the funds thus mobilized.

If such funds are not directed into productive channels, inflationary pressure becomes cumulative. In Nigeria, funds mobilized through the issuance of CDs were probably used to bit for foreign exchange and the continued access of banks to such funds has put downward pressure on the value of the Nigerian naira. This may also be the reason why the CBN has failed to discourage high biddings during foreign exchange market auctions.

The expansion of the money market may adversely affect the ability of the government to market traditional debt instruments such as TBs, TCs, and EDSs. The yields on these instruments do not reflect other market rates and investors are shifting already into higher-yielding instruments. This situation may lead to wider budget deficits as revenue falls short of planned expenditures and may lead the government to resort to additional external borrowing.

The growth of money market instruments may also make the money supply suspect as a target of CBN policy. CDs, for example, have the potential of artificially expanding the money supply, suggesting that policies aimed at achieving a given level of money are likely to bring about a higher level of spending than desired. This distortion occurs because CD issues cause shifts in the components of narrow money [$M_1 =$ currency (CC) + demand deposits (DD)], thus raising questions about the reliability of this aggregate as an indicator and its usefulness for policy [17, p. 6]. Due to the attractive rates they bear, CDs may induce the nonbank sector to hold a smaller currency-deposit ratio so that a higher proportion of high-powered money is held by the banks; the money multiplier is enlarged, resulting in an increase in money supply, independent of CBN's policy. Hence, the use of CDs may make it difficult for the CBN to maintain the growth rate of the money supply along a desired level.

Outside the arena of monetary policy, the growth of the money market has also raised some concern. First, the use of CDs and other money market instruments by banks may reduce the soundness of numerous individual banks and may therefore threaten the stability of the whole financial system. It is indeed possible that banks may be unable to meet unforeseen cash needs, due to the lack of liquid asset structure. Secondly, by encouraging the transfer of funds from one bank to another, the money market links the fortunes and misfortunes of different banks in the system. Crisis in one bank easily becomes contagious and this may be a serious problem in LDCs where financial markets are very narrow.

How then can we effectively control the adverse effects of money market expansion? The first measure is to place a ceiling on the rates offered on these instruments: such a ceiling will decrease the willingness of investors to hold money market instruments, thus reducing the access of banks to funds. This step will however conflict with financial liberalization which is a cardinal objective under the SAP. An alternative is to place such ceilings on very short-term instruments in order to prolong the maturity of traded instruments.

Another approach is to impose reserve requirements on these deposits. Such reserve requirements will consist of a certain percentage of the face value of CDs

and the intention will be to determine the maximum amount of CD funds that can be lent out. The reserve requirements could be higher than those in other forms of deposits in order to discourage the excessive reliance of banks on CDs. Presently, a bank can lend out the totality of the funds mobilized through CDs. However, with an appropriate reserve requirement, this lending capacity can be controlled.

In a period of general liquidity crisis, banks may face a lack of liquidity in the secondary market for various instruments. To avoid this situation, the CBN can widen its discount window to accommodate more instruments, resulting in the strengthening of the CBN control over the money market and in the increase in the confidence in the banking system. However, this measure must be subjected to strict administrative control to prevent continuous rediscounting. If the discount mechanism is too lax, banks will become less cautious since they are certain that they can always run to the discount window in time of crisis.

Another method of assuring the soundness and stability of the banking system is to supply the investing public with better information than it now gets about the sound operation of banks.[10] Up to now, customers have had very little information about the banks they deal with and thus often proceed on intuition. If the public knew the contents of reports of bank examinations, they would not buy instruments of banks that are not very sound, unless offered premium interest rates. This institution would enable to curtail the risk exposure of banks and force them to maintain a greater liquidity. It might also be advisable to provide limited insurance coverage for some money market instruments such as CDs. In this regard, the newly created Nigerian Deposit Insurance Corporation could play a significant role. Holders of covered instruments will be less apprehensive of default and will not become prone to out of fear-dump their holdings on narrow secondary market.

It is possible to levy a withholding tax on CDs which exceed a certain face value. Such a tax may reduce the eagerness of investors for CDs and hence help dampen activities in the CD market. This approach can also be used to prolong the maturity of the CDs traded if a longer maturity attracts lower taxes.

Lastly, if the CBN is certain to retain its control over the money supply, more instruments should be included in computing the credit ceilings for banks, which may reduce the latitude banks now enjoy in lending capacity via the expansion of their activities in the money market.

V. CONCLUSION

In this paper, we have attempted to demonstrate that stabilization programmes in LDCs often give rise to unprecedented growth of their money markets. Though the growth of the money market in these countries is desirable, it has to be closely monitored for several reasons. Most importantly, the attainment of structural adjustment objectives may be impeded. We particularly showed that such policies as credit ceilings and interest rate deregulation may spur the growth of money

[10] See Schweitzer [15].

market instruments. Such growth in their yields may exert an adverse effect on monetary policy which is a major demand-management tool in stabilization programmes. We suggested various measures to control the expansion of the money market while keeping in sight the ultimate aim of restoring domestic as well as external balance in the economy.

REFERENCES

1. ADEKANYE, F. *The Elements of Banking in Nigeria,* 3rd ed. (Lagos: F & A Publishers, 1986).
2. ADEKUNLE, J. O. "The Demand for Money: Evidence from Developed and Less Developed Economies," *IMF Staff Papers,* Vol. 15, No. 2 (July 1968).
3. ALAWODE, A. A., and IKHIDE, S. I. "Bank Liability Management, Structural Adjustment and Monetary Policy in LDCs," *Nigerian Journal of Economic and Social Studies* (forthcoming).
4. Central Bank of Nigeria. *Annual Report and Statement of Accounts.*
5. ————. *Economic and Financial Review.*
6. COHAN, S. B. "The Determinants of Supply and Demand for Certificates of Deposit," *Journal of Money, Credit and Banking,* Vol. 5, No. 1 (February 1973).
7. CROCKETT, A. D. "Stabilization Policies in Developing Countries: Some Policy Considerations," *IMF Staff Papers,* Vol. 28, No. 1 (March 1981).
8. FAJANA, F. "Nigerian Debt Crisis," Mimeographed (Addis Ababa: SERP Division, UNECA, 1991).
9. FALAE, O. "Two Years of SAP in Nigeria: Achievements, Problems and Prospects," Proceedings of a Symposium in Development Strategies in Third World Countries, Beijing, April 1989.
10. NWANKWO, G. D. *The Nigerian Financial System* (London and Basingstoke: Macmillan, 1980).
11. ONYIUDO, B. C. "Promoting Money Market Development in Nigeria," Central Bank of Nigeria, *Economic and Financial Review,* Vol. 24, No. 1 (March 1986).
12. ————. "The Nigerian Financial Markets: Growth, Performance, Appraisal and Prospects," Central Bank of Nigeria, *Economic and Financial Review,* Vol. 28, No. 2 (June 1990).
13. PATRICK, H. T. "Financial Development and Economic Growth in Under-developed Countries," *Economic Development and Cultural Change,* Vol. 14, No. 2 (January 1966).
14. PINDYCK, R. S., and RUBINFELD, D. L. *Econometric Models and Economic Forecasts* (Singapore: McGraw-Hill, 1981).
15. SCHWEITZER, S. A. "Bank Liability Management: For Better or for Worse?," in *Current Perspectives in Banking: Operations, Management and Regulation,* ed. T. Havrilesky and J. Boorman (Arlington Heights, Ill.: AHM, 1976).
16. SUSHKA, M. E., and SLOVIN, B. M. "An Econometric Model of the Market for Negotiable Certificates of Deposit," *Journal of Monetary Economics,* Vol. 5, No. 4 (October 1979).
17. TATOM, J. A. "Money Market Deposit Accounts, Super-NOWS (Negotiable Orders of Withdrawals), and Monetary Policy," *Federal Reserve Bank of St. Louis Review,* Vol. 65, No. 3 (March 1983).
18. THOMAS, L. B. *Money, Banking and Economic Activity* (Englewood Cliffs, N.J.: Prentice-Hall, 1979).
19. YUSUF, M. "Narrow Market for Government Debt Instruments," *Nigerian Economist,* Vol. 5, No. 25 (September 1992).