Bullion

Volume 30 | Number 4 Article 5

9-2006

Promoting the use of coins in Nigeria.

A O. Ikuseedun
Central Bank of Nigeria, Nigeria.

Recommended Citation
Ikuseedun, A. O. (2006). Promoting the use of coins in Nigeria. CBN Bullion, 30(4), 35-52.

PROMOTING THE USE OF COINS IN NIGERIA

A. O. Ikuseedun

By

A. O. IKUSEEDUN
Deputy Director
Currency and Branch Operations Department
Central Bank of Nigeria

INTRODUCTION

The main purpose of currency in any economy is to facilitate transactions and serve as store of value. Currency is made up of banknotes and coins. While banknotes are expected to be used for relatively large value payments, coins are for low value ones. Indeed, from a legal perspective, payments for goods and services beyond certain amount in coins cannot be enforced. Both notes and coins are meant to complement each other in order to promote payment convenience and discourage rounding up of prices. The currency issuing authorities, therefore, should ensure, at all times, that the most suitable note and coin denominations are available in the right volume, to promote efficiency and cost-effectiveness in currency management.

In countries where coins are generally used, there are deliberate and conscious efforts on the part of currency issuing authorities to promote the use of coins because of the advantages coins have over banknotes. Coins, though costlier to mint, stay in circulation much longer than notes; have low processing and disposal cost and can attract reasonable demand from buyers on withdrawal from circulation.

Owing to the volume and value of currency- in circulation and the relative underdevelopment of the payments system, the Nigerian economy had been largely cash-driven. The large volume, value and denominations of banknotes in circulation relative to coins are indicative of structural defects which had promoted the use of notes as against coins.

The focus of this paper, therefore, is to examine why factors responsible for low usage of coins in Nigeria and suggest possible remedial measures. This paper is structured into six parts. The introductory remarks are contained in part 1 while conceptual issues are discussed in part 2. Part 3 examines the use of coins in Nigeria. The factors responsible for the low use of coins are discussed in part 4 while the way forward is highlighted in part 5. Part 6 concludes the paper.

PART TWO

(1) CONCEPTUAL ISSUES

2.1 Definition of the Currency Structure

An important objective of currency management is to maintain a currency structure that is efficient, balanced, cost-effective and responsive to changing needs of the economy as well as changes in economic and technological conditions.

The currency structure of a country refers to the note / coin combination that is balanced and appro-priate. The structure is balanced when the notes and coins have equal spread of denominations and each denomination in the note/coin structure is twice or two and a half time the one below it. The currency structure is appropriate when the denominations involve the least number of notes and coins in a range of payment transactions. A lop-sided or unbalanced structure is said to exist when either the notes or coins have more denominations; or when there is over-reliance on a single denomination. Lopsidedness also occur when the denominational structure is cost in-effective. The existence of structural imbalance provides the justification for the introduction of higher denomination notes, the coining of the lower denomination notes and the demonetizing of the lower denomination coins.

2.2 The Payments System

The payments system of any country refers to the payment mechanism for the settlement of business and personal transactions, thus providing a link between the real and financial sectors. Ndekwu, Eddy C. (1999) describes the payments system "as a related collection of structure of instruments for settling payments and transactions or part thereof through operating together as a whole. Each of the instruments shares attributes of being exchangeable with one another through substitution and convertibility mechanism". He identified seven basic characteristics of a payments system as follows:

(a) It consists of instruments for payments settlement which are viewed as assets by those who demand it and as liabilities by those who issue it. For instance, currency in circulation (both notes and coins) are treated as liabilities of the Central Bank of Nigeria (issuer of currency) in its balance sheet but treated as assets by those who hold it.

(b) The instruments are related to one another in a financial manner and are substitutable. This characteristic of being substitutes to one another creates the problem of cost, pricing, competition and risk. For example, one of the costs for demanding coins is the weight and size.

(c) It is constituted by debt instruments denominated in money with currency at the core.

(d) The instruments are operated together, in part, or whole in the settlement of a transaction, depending upon the point at which the instrument is viewed from currency.

(e) The price for each of the payments instruments could be determined by the forces of demand and supply.

(f) The relative value of each component of the instrument is determined by its economic use in exchange. This explains why coins are in low demand as there are virtually no goods and services that can be purchased with coins in Nigeria as at today.

(g) The payments system, as an integral part of the economy, is affected by the level of development of the economy. A highly developed economy operates a sophisticated payments system, relying heavily on the use of electronic modes of payment. Conversely, an underdeveloped economy operates a short range of payment instruments with cash as the dominant means of payment.

Payment instruments can be grouped into three broad categories:

(a) Currency or cash, made up of bank-notes and coins.

(b) Paper-based non-cash instruments such as cheques, debit cards, credit cards, bank drafts and electronic modes such as Electronic Fund Transfer (EFT), e-Purse etc.

(c) Others, such as postal orders, money orders, vouchers, pre-paid cards etc.

2.3 <u>The Impact of Inflation on Currency in Circulation</u>

Inflation can simply be defined as a general and continuous increase in prices of goods and services. In Nigeria, inflation is attributed, among others, to excessive monetary growth occasioned by government deficit spending, structural distortions, relative inelasticity of food supply, foreign exchange constraints, rise in food demand, devaluation of the Naira exchange rate, monetization of excess crude oil receipts, crop failure and increase in the price of petroleum products.

Thomas De La Rue and Company Limited (1989) asserts that the impact of inflation on currency is to reduce the purchasing power of the currency such that it would require larger volume to conclude payments than hitherto. It leads to increase in the volume of currency-in circulation, preference for higher denominations and crowding-out of lower denominations of notes and coins. It thins out the range of goods and services which coins can be used to purchase. Inflation is always used as one of the justifications for the introduction of higher note denominations, coining of the lower denomination of notes and demonetizing of the lower denominations of coins.

PART THREE

THE USE OF COINS IN NIGERIA

3.1 Currency/Coins-in-Circulation

The low use of coins in Nigeria is reflected in the declining proportion of coins (volume and value) in circulation. While the total value of currency in circulation increased by more than four times in the last ten years, the proportion of coins has dropped consistently from 0.52% in 1996 to 0.11% in 2005 (table 1). The value of the total currency in circulation grew from ₦125.98 billion in 1996 to ₦642.23 billion in 2005. For coins, it grew marginally from ₦0.65 billion to ₦0.72 billion. The growth in the value of the currency in circulation was due to the level of inflation which peaked at 72.8% in 1995 and had been double-digit in the last ten years except for 1997 (8.5%), 1999 (6.6%) and 2000 (6.9%) (table 7) and also as a result of growth in the informal sector. In volume terms, currency notes in circulation grew by over 127% from 3.65 billion pieces in 1995, peaked at 8.3 billion pieces in 2000 but steadily declined from 2001 due to the introduction of higher Naira bills (table 6). The notes were 4.03 billion pieces as at the end of 2005. However, the volume of coins remained fairly constant (table 8).

Despite the low volume and value of currency coins in circulation, an average of 18.4% of the total value of coins was held in the vaults of deposit money banks between 2000 and 2005 (table 2)

Transactions in coins at the Central Bank of Nigeria in the last ten years also reflected a low use of coins in the economy. The total annual deposit of coins by deposit money banks declined steadily from ₦136.3 million in 1996 to ₦43.0 million in 2004 (table 3). In the same context, total annual deposit money banks' coins withdrawals from the Central Bank of

Nigeria declined from ₦155.7 million to ₦44.9 million.

3.2 Comparative Spread of Currency Denominations of Selected Countries.

Against the background of the need for a balanced currency structure in developed economies such as the United Kingdom and Australia, the currency denominational spread is skewed in favour of coins to underscore its importance in cash payments (table 4).In these countries, the rate of inflation is low (table 9). While Australia has eight denominations of coins and five of notes in circulation, the United Kingdom has eight of coins like Australia and four of notes. South Korea and India have balanced currency structure with three and seven denominations of notes and coins, respectively. The structure is also skewed in favour of coins in Ghana (a country with high inflation rate) and South Africa. Turkey, with high inflation rate, has six denominations each of notes and coins in circulation. However, in Nigeria the structure is skewed in favour of notes as there are five denominations of coins and eight of notes in circulation.

3.3 Comparative Analysis of the Values of Coins of Some Selected Countries.

In U.S. Dollar terms, the Naira coins are virtually valueless. With the exception of ₦1 coin which converts to \$0.01, the other coin denominations have zero values, based on the exchange rate as at 31st December, 2004 (table 5). Compared with the South African Rands, the ₦1 coin is worth only two cents and the highest coin denomination of five Rands is worth ₦23.63. Four out of six coin denominations of the Ghanaian Cedis and seven out of eight of that of South Africa have values in Dollar terms. The low value of the Naira coins was due to the devaluation and instability of the Naira exchange rate.

PART FOUR

Factors Responsible for Low Use of Coins in Nigeria

4.1 Reasons for low use or near absence of coins in Nigeria.

(i) Low value of Naira coins

In the seventies and early eighties, coins were generally used in Nigeria for retail transactions. However, this trend changed from the late eighties to the early nineties with the introduction of the Structural Adjustment Programme. The adjustment programme focused on the deregulation of the foreign exchange market, among others, and led to massive devaluation of the Naira exchange rate. Substantial fiscal deficits, financed by the domestic financial sector fuelled the inflationary spiral. The impact of inflation on currency is to diminish its purchasing power such that it would require larger volume and value of currencies to conclude transactions than hitherto. This erodes the value of the coins.

With the exception of the ₦1 denomination which exchanged for about $0.01 as at 31st December, 2004, all other denominations are valueless in Dollar terms (table 5). There is hardly any good or service in the economy that could be purchased with coins. Between 1970 and 2004, the inflation rate was double-digit except in 1972 (3.2%), 1980 (9.9%), 1982 (7.7%), 1985 (5.5%), 1986 (5.4%), 1990 (7.5%), 1998 (8.5%), 1999 (6.6%) and 2000 (6.9%) (table7). The inflation moderated between 1999 and 2001 coinciding with the period when ₦100, ₦200 and ₦500 denominations were introduced into circulation. In countries where coins are massively used, the inflation rate is usually very low. Therefore, in any well-managed currency system, the net impact of inflation on the volume of currency-in- circulation should be zero.

(ii) Payment Inconvenience

The grammage of the present series of Naira coins is high. The ₦1 coin weighs 12 grams with a diameter of 27.50 millimeters while the other denominations of 50k, 25k, 10k and 1k weigh 5.5 grams, 4.5grams, 3.5 grams and 2.6 grams, respectively. The diameters of the other denominations are as follows: 50k(24.5 millimeters), 25k(22.50 millimeters), 10k(19.50 millimeters) and 1k(17 millimeters). While the ₦1 and 50k coins are made of nickel plated steel, the remaining coin denominations are made of copper plated steel. Apart from weight and size considerations, the coins may appeal or be attractive to some people. The combined problems of low value, large grammage and size make payments in coins inconvenient.

(iii) Failure to Restructure the Coin Series at the Appropriate Time.

Following the unprecedented growth in the volume and value of currency in circulation and the attendant, increasing currency management cost, in the late eighties, the Central Bank of Nigeria commissioned Thomas De La Rue Limited (now De La Rue Cash Systems Limited) in 1989 to undertake a comprehensive assessment of the Nigerian currency. The company came up with the conclusion that the Nigerian currency structure was in-efficient and cost in-effective. It, therefore, recommended the redesigning of the entire range of both notes and coins including ₦10, ₦20, ₦50, ₦100, and ₦500 notes: and 10k, 50k, ₦1, ₦5 and ₦10 coins. The highest note denomination in circulation, as at the time of the study and recommendation, was ₦20. However, the recommendations were not implemented in full as only one new note denomination, ₦50, and coin series of 1k, 10k, 25k, 50k and ₦1 were approved and implemented. Despite the unfavourable economic fundamentals experienced, it is pertinent to note that no review of the coin series has been carried out since 1991.

(iv) Pricing System

The pricing system in Nigeria promotes the low or near absence of the use of coins. Prices are rounded up to the lowest banknote denomination. While it might be true that rounding up of prices could be as a result of non-availability of coins to facilitate giving of change, the attitude of the populace had been such that they did not expect to be given coin change. For products such as gas (petrol) which the invoicing system incorporates coins, the general tendency is that consumers do not collect change in coins.

(v) High Cost of Distributing Coins.

Another factor responsible for the non-availability of coins to facilitate payment is the high cost of distribution and its effect on the profitability of banks.

4.2 Effects of non-use or near-absence of coins in Nigeria.

The operation of an inefficient currency coin structure in Nigeria has resulted in the near-absence of the use of coins in payment. The value of currency coins in circulation which stood at ₦0.72 billion as at the end of 2005 or 0.11% of the value of currency in circulation was relatively insignificant, in view of the large population of the country and the level of economic activities. Despite the low value of coins in circulation, a reasonable percentage of coins was held outside the banking system (table 2). On an annual basis, there was a consistent decline in total holding of coins by the public except for 2003 to 2005 when coins deposit at the Central Bank of Nigeria was somewhat discouraged. Some of the effects of low use of coins are itemized as follows:

(i) High Usage of Lower Denomination Notes.

The velocity of circulation of the lower denomination of notes i.e ₦5, ₦10, ₦20 and ₦50 had been very high and consequently the notes get dirty with use. Their lifespan was short and this resulted in high replacement rate and the attendant high costs. The lower denominations accounted for 2.04 billion pieces or 50.5% of the total volume of currency notes in circulation as at 30th December, 2005(table 6).

(ii) Pressure on Currency Processing and Disposal Facilities.

There was pressure on currency processing and disposal facilities as a result of the poor state of the lower denomination of notes occasioned by the velocity of exchange and poor handling by the public. This has led to an increasing demand for the procurement and installation of currency processing and disposal systems. The bulk of notes destroyed is made up of lower Naira denominations. As regards deposit money banks, the payment of unsorted currency deposit surcharge has led to the increase in their operational costs and a drain on their profitability.

PART FIVE

THE CURRENT CBN INTIATIVE

From the perspective of currency issuing authorities, coins have some obvious advantages over banknotes. Although, it costs much more to mint coins than banknotes, coins have longer circulation life and the expenditure on processing and disposal is very low. The annual replacement cost is low as coins, being made of metals cannot easily get dirty, defaced or corroded. Coins can stay in circulation for as long as 30 to 50 years. Coins can easily withstand all the abuses of poor handling, folding, tearing, writing, stapling and even spraying at social occasions which the Naira notes, especially the lower denominations, are subjected to. The circulation life of the ₦5 note is twelve months while that of ₦10 and ₦20 denominations are 18 and 24 months, respectively. However, the notes are usually disposed off on withdrawal from circulation by way of deposit with the Central Bank of Nigeria.

The need to review the currency structure regularly and promote the use of coins for retail transactions cannot be overemphasized. In developed economies the invoicing system promotes the use of coins. In such countries, invoices are issued to allow the use of coins (such as \$1.99; £2.99; \$3.96; Euro2.99, Euro19.99.)

The potential gains of long circulation life, savings from reduced production and processing costs etc. propelled the Federal Reserve System of the U.S to convert its \$1 note to coin in line with the practice in Australia, Canada, Japan and the major countries of Western Europe in 1979.

It is desirable for both the Central Bank of Nigeria (CBN) and the general public that coins are used for retail transactions in Nigeria. Steps being taken by the CBN to encourage and promote the use of coins include the following:

(i) The redesigning of the coin series

Following a comprehensive study of the currency structure in 2005, the CBN carried out a redesign of the coin series along with the lower denominations of the banknotes (₦5, ₦10, ₦20 and ₦50). The purpose of the redesign was to reduce the weight and size, enhance the value and aesthetics of the coins to ensure portability and promote payment convenience. It was also to address the problem of rounding of prices. A delicate balance between the intrinsic and monetary values of the redesigned coins has been maintained to discourage conversion to other uses other than for payments. The redesigned coin denominations, which had recently been introduced along with the redesigned lower notes denominations, are 50k, ₦1 and ₦2. The existing coin denominations had been demonetized and withdrawn from circulation.

(ii). Curtailing inflation

Inflation generally diminishes the purchasing power of currencies. The problem of excessive monetary growth occasioned by deficit government spending, foreign exchange constraints and devaluation of the Naira exchange rate are being addressed with a view to curtailing inflation and bringing it under control, possibly within single digit to take advantage of long lifespan of coins and prevent frequent review of the coin series.

(iii). Encourage the use of fractions in the pricing and invoicing system of retail goods and services

As against the general practice in which goods and services are priced / invoiced and approximated to the nearest banknote denominations in Nigeria, major supermarkets, bottlers of soft-drinks and allied products and retail goods would be encouraged to incorporate coins in their pricing and invoicing system in the publicity campaign for the redesigned coins.

(iv). Carry out pro-coins usage campaigns

In order to sensitize Nigerians on the advantages of using coins, adequate post-launch publicity campaigns had been mounted. Among others, the publicity campaign tried to introduce the redesigned coins and also encourage the public to collect their change in coins in any transaction no matter the value of the change. The campaign was expected to continue unabated until the public is fully sensitized.

PART SIX

CONCLUDING REMARKS

There had been a general low use of coins for retail transactions in Nigeria. This was reflected in the relative value of coins in circulation as against the value of currency which was as low as 0.11% as at 30th December, 2005. Coins, as part of the instruments of the payments system, are desirable for retail transactions, to avoid rounding up of prices and "forced purchase" of un-required quantities of some consumer items. In Nigeria, the currency structure has been reviewed and the coin series redesigned. The redesigned coins are smaller in size and lighter in weight. Unlike the existing coins, the redesigned ones are more portable and more convenient to carry.

Now that the redesigned coins have been introduced into circulation, members of the public have a responsibility to demand for and collect their change in coins, however little the value. In some countries, refusal to collect change, even in the least coin denomination, is taken as an act of rudeness. For consumer goods, Nigerians must resist the tendency to purchase quantities they do not want on the ground that change in coins was not available or unaccep-table. For instance, should I want a "tom-tom"; I should not be compelled to buy three for ₦10.00 when one sells for ₦3.00. The balance of ₦1.00 should be collected by the purchaser.

The press has a unique role to play in sensitizing Nigerians on the need to use the redesigned coins. The culture of foregoing change, whether in notes or coins, should stop.

TABLE 1

VALUE OF COINS AS A PROPORTION OF TOTAL VALUE OF CURRENCY-IN-CIRCULATION (C.I.C) (N billion)

Year	Total value of C.I.C	Total value of coins in circulation	Coins in circulation as a % of total
1996	125.98	0.65	0.52
1997	144.80	0.66	0.46
1998	172.41	0.67	0.39
1999	208.72	0.69	0.33
2000	310.18	0.70	0.23
2001	405.80	0.71	0.17
2002	463.67	0.71	0.15
2003	502.53	0.72	0.14
2004	545.74	0.72	0.13
2005	642.23	0.72	0.11

Source: *Currency and Branch Operations Dept. CBN*

TABLE 2

VALUE OF COINS IN CIRCULATION FROM 2000-2005 (N MILLION)

Year	Coins outside CBN	Coins with banks	Coins with the public	% of coins in circulation with banks	% of coins in circulation with the public
2000	698.1	86.7	611.4	12.4	87.6
2001	709.6	133.1	576.5	18.8	81.2
2002	714.3	229.5	484.8	32.1	67.9
2003	717.9	158.4	559.5	22.1	77.9
2004	720.3	140.3	580.3	19.5	80.5
2005	720.3	40.6	679.7	5.6	94.4

Sources: (*i*) *Currency and Branch Operations Dept. CBN.*

(*ii*) *Banking Supervision Dept. CBN*

TABLE 3

DEPOSIT MONEY BANKS' TRANSACTIONS IN COINS AT THE CENTRAL BANK OF NIGERIA FROM 1996 TO 2005 (N MILLION)

Year	Total Deposit of Coins by Banks	Total Withdrawal of Coins by Banks
1996	136.3	155.6
1997	124.8	135.6
1998	107.9	121.1
1999	98.0	114.5
2000	74.6	86.0
2001	71.0	81.7
2002	57.8	113.4
2003	58.2	61.5
2004	54.4	56.8
2005	43.0	44.9

Source: *Currency and Branch Operations Dept. CBN.*

TABLE 4

COMPARATIVE ANALYSIS OF THE CURRENCY STRUCTURE OF SOME SELECTED COUNTRIES

Countries	Number of Coin Denominations	Number of Notes Denominations	Balanced/Unbalanced Structure
Australia	8	5	Skewed in favour of coins
Algeria	8	4	"
Ghana	6	5	Fairly balanced
South Africa	6	5	"
U.K	8	4	Skewed in favour of coins
India	7	7	Balanced
South Korea	3	3	"
Nigeria	5	8	Skewed in favour of notes

Sources: *Central Banks Websites of the various countries*

TABLE 5

COMPARATIVE NOMINAL VALUES OF CURRENCY COINS OF SELECTED COUNTRIES IN U.S. DOLLARS AS AT 30/12/2004

Country	Exchange Rate	Coin 1	Coin 2	Coin 3	Coin 4	Coin 5	Coin 6	Coin 7	Coin 8	
Australia	1.2916									
Local Currency		0.01	0.02	0.05	0.1	0.2	0.5	1	2	
U.S. Dollar value		0.01	0.02	0.04	0.08	0.15	0.39	0.77	1.55	
Ghana	8900									
Local Currency		10	20	50	100	200	500			
U.S. Dollar Value		-	-	0.01	0.01	0.02	0.06			
South Africa	5.6103									
Local Currency		0.1	0.2	0.5	1	2	5			
U.S. Dollar Value		-	0.01	0.02	0.04	0.09	0.18			
India	43.67									
Local Currency		0.1	0.2	0.5	1	2	3			
U.S. Dollar Value		-	-	0.01	0.01	0.02	0.05	0.11		
Nigeria	131.25									
Local Currency		0.01	0.10	0.25	0.50	1				
U.S. Dollar value		-	-	-	-	0.01				

Sources: Central Banks *Websites of the various countries.*

TABLE 6

CURRENCY NOTES IN CIRCULATION FROM 1996 TO 2005
(BILLION PIECES)

Year	₦5	₦10	₦20	₦50	₦100	₦200	₦500	₦1000	Total
1996	0.29	0.37	2.31	1.48					4.45
1997	0.30	0.45	3.10	1.52					5.37
1998	0.26	0.45	3.57	1.89					6.17
1999	0.31	0.40	4.01	2.36	0.04				7.12
2000	0.48	0.51	4.10	2.34	0.74	0.13			8.30
2001	0.44	0.42	2.63	1.53	0.72	0.42	0.22		6.38
2002	0.45	0.40	1.99	0.95	0.69	0.56	0.37		5.41
2003	0.53	0.66	1.30	0.46	0.63	0.64	0.51		4.73
2004	0.54	0.34	1.01	0.17	0.56	0.77	0.60		3.99
2005	0.51	0.59	0.61	0.31	0.44	0.78	0.74	0.035	4.03

Source: *Currency and Branch Operations Dept. CBN.*

TABLE 7

INFLATION RATE IN NIGERIA (MOVING AVERAGE)

Year	Inflation Rate (Percentage)
1970	13.8
1971	16.0
1972	3.2
1973	5.4
1974	13.4
1975	33.9
1976	21.2
1977	15.5
1978	16.6
1979	11.8
1980	9.9
1981	20.9
1982	7.7
1983	23.2
1984	39.6
1985	5.5
1986	5.4
1987	10.2
1988	38.3
1989	40.9
1990	7.5
1991	13.0
1992	44.5
1993	57.2
1994	57.0
1995	72.8
1996	29.3
1997	8.5
1998	10.0
1999	6.6
2000	6.9
2001	18.9
2002	12.9
2003	14.0
2004	15.0
2005	13.5

Source: *CBN Statistical Bulletin, volume 14, December, 2005*

TABLE 8

CURRENCY/COINS IN CIRCULATION, 1996-2005 (MILLION PIECES)

YEAR	1K	10K	25K	50K	₦1	TOTAL
1996	42.4	128.9	182.5	403.6	386.7	1,144.10
1997	42.1	126.5	176.8	410.7	395.5	1,151.60
1998	42.3	126.2	175.2	417.0	406.0	1,166.70
1999	41.1	125.9	174.8	423.2	419.5	1,184.50
2000	40.9	125.5	173.5	427.9	428.8	1,196.60
2001	41.0	125.9	173.5	433.8	436.5	1,210.70
2002	40.5	125.6	173.2	435.3	440.5	1,215.10
2003	40.0	126.0	173.2	436.4	443.4	1,219.00
2004	40.0	126.00	173.2	437.2	445.4	1,221.80
2005	40.8	125.8	172.5	437.6	447.2	1,223.90

Source: *Currency and Branch Operations Dept. CBN*

TABLE 9

INFLATION RATE OF SELECTED COUNTRIES, 1999-2003

Countries	1999	2000	2001	2003	2004	2005
Australia	1.5	4.5	4.4	2.8	2.3	2.7
Algeria	2.6	0.3	4.2	2.6	3.6	1.6
S/Africa	5.2	5.3	5.7	6.0	1.4	3.4
U.K	1.6	2.9	1.8	2.9	3.0	2.8
India	4.7	4.0	3.7	3.8	3.8	4.3
S/Korea	0.8	2.2	4.1	3.6	3.6	2.7
Ghana	12.4	25.2	32.9	26.7	12.6	15.1
Turkey	64.9	54.9	54.4	25.3	8.6	8.2

Sources: *International Monetary Fund: International Financial Statistics, February 2004 and 2005 and May, 2006*

REFERENCES

Anyanwu J. C. (1999) *"Concept and Theoretical Framework of the Nigerian Payments System"* in CBN Bullion Vol.23 No. 2 April/June.

Currency and Branch Operations Department (2005) *" A Review of The Currency Structure"*, unpublished paper prepared by the Department.

Ndekwu, Eddy C. (1999) *"The Nigerian Payments System, Concepts and Theoretical Framework"*. CBN Bullion Vol.23 No 2, April/June.

Onwioduokit, Emmanuel A. (1999) *"Fiscal Deficits and Inflation Dynamics in Nigeria: An Empirical Investigation of Causal Relationships"* CBN Economic and Financial Review Vol.37 June.

Research Department (1995) *"Report on the Coin Acceptability Survey Conducted Between 22nd November and 6th December, 1994"*.

Sadiq, M.A. (1995) "Determination, Issuance and Distribution of Currency in Nigeria". CBN Economic and Financial Review Vol.33 N0 4, December.

Thomas De La Rue and Company Limited (1989) *"A Comprehensive Assessment of the Nigerian Currency"*, unpublished report of the studies conducted for the CBN.

United States General Accounting Office (1990) "National Coinage Proposals". Report to the Chairman, Sub-committee on Banking, Finance, and Urban Affairs, House of Representatives, U.S.

Web sites of various Countries.