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Determination, Issuance And distribution Of Currency In Nigeria

by

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Introduction

The purpose of this paper is to examine and discuss the subject of the Determination of Currency Supply and its Distribution in Nigeria. Put in a more comprehensive sense, the paper will attempt to explain the procedures and processes involved in the determination of the volume and value of currency required to service the Nigerian economy and its distribution. The discussion will incvitably lead us into the issue of the determination of the structure of the currency which is of paramount importance in the overall currency management. It is not going to be a lengthy paper as it is essentially a factual account of an on-going activity. For convenience, the paper is madc up of four parts. We shall begin with a brief discussion about currency itself, including some high-lights on the historical evolution of the Nigerian currency from the mid-1940s to the present day. The second part focuses on the determination of the volume, value and structure of the currency, while the issue of distributing the currency to where it is needed is the subject matter of part III. The concluding fourth part touches on some new thoughts and ideas as well as the prospects for the future.

PART I

CURRENCY AND ITS HISTORICAL EVOLUTION IN NIGERIA FROM MID-1940s

In the present day economic systems, currency is defined as that portion of the national money supply consisting of paper money (banknotes and coins). In developed economies where cheques drawn on demand deposits or current accounts, as they are referred to in Nigeria, and other electronic forms of payment are an important means of transaction, currency may actually account for only a small percentage of the money supply. In contrast, currency accounts for a significant proportion of the total money supply in developing countries including Nigeria, where the usage of financial instruments as means of payment is minimal, owing to a multitude of factors, a discussion on which is obviously beyond the scope of this paper. According to Central Bank of Nigeria Annual Report for 1994, currency, as defined above, accounted for 55.8% of the total money supply as at the end of 1994.

From available records, the first West African Currency Board notes and coins were issucd in 1946. These remained legal tender throughout the four former British colonies of West Africa until the first Federation of Nigeria currency notes in the denominations of One pound, Ten shillings and Five shillings were issued in 1959. These were replaced with the Federal Republic of Nigeria currency notes in the same three denomimantions in 1965. Another series of Federal Republic of

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Nigeria currency notes in four denominations of Five pounds, One pound, Ten shillings and Five pence were issued into circulation in 1968. These were the last notes issued in the three units of pound, shilling and pence inherited from Britain as they were replaced by the first decimal notes and coins in January, 1973 in the denominations of ₦10, N5, ₦1 and 50k notes and 25k, 10k, 5k, 1k and 1/2k coins. In February, 1977, an additional denomination of ₦20 was introduced. This was the first Nigerian banknote to bear the portrait of a Nigerian Citizen, General Murtala Mohammed. In July, 1979, new designs of ₦10, ₦5 and ₦1 notes, bearing the portraits of three other eminent Nigerians and of the same size as the ₦20 note, were put into circulation. The standardization of the four notes (except the 50k note) was aimed at enhancing operational efficiency and to save costs. In April, 1984 all the denominations of notes, with the exception of the 50k note, were re-issued by merely interchanging their colours. This exercise was undertaken purely as a tactical measure by the military administration which took over power in December, 1983. It was intended to arrest the alarming rate of currency trafficking going on at the time. No further developments occurred in the structure or design of the currency until October, 1991 when the ₦50 note was introduced and the ₦1 and 50k notes were coined. A completely new coin-range was also issued as part of a major reform of the nation's currency structure, which we shall be discussing in greater detail in the next part of the paper.

PART II

DETERMINATION OF CURRENCY (VALUE AND VOLUME) AND ITS STRUCTURE

Since the 1930s when the Gold Standard was abandoned, which made it no longer an obligation on Governments to repay holders of currency in gold or other precious metals, the responsibility for the determination of the volume and value of currency has become that of the monetary authorities. That is to say, the volume of currency to be produced to service the economy is now determined by actions/decisions of the monetary authorities, specifically the Central Bank, rather than by the supply of precious metals. The Gold Standard allowed holders of paper money the legal right to obtain gold from the Central Bank in exchange at the established par value of the currency.

As provided for in the various enactments since the establishment of the Central Bank of Nigeria, the Bank has been charged with the responsibility (or empowered by law) for the issuance of legal tender currency in Nigeria. This responsibility automatically includes the determination of the structure, volume and value of the currency. The Bank is charged with the task of ensuring the availability of adequate stock of currency in proper denomination/mix to meet the demand of the economy, based on the fact that the demand for currency is a derived demand. As stated earlier in this paper, the Bank discharged this function for the first time in 1959 when the first series of Federation of Nigeria notes were issued in replacement of the West African Currency Board notes. During that exercise, the entire amount of the West African Currency Board notes with a total face value of 65 million pounds (₦130 million) circulating in Nigeria was redeemed. Thereafter, the determination of the quantity and value of the currency to be produced became a simple and evidently subjective annual exercise not based on any scientific approach. All that was being done by the few officers charged with the schedule was to look at the actual figures of currency-in-circulation at the end of the previous year and the figures at the end of the first

half of the current year. They would then examine the currency stock balance and combine all these with their best judgement to make a decision on what next year's currency indent should be. In other words, it was a purely an annual operational routine

In the earlier years up to the mid-1980s, the foregoing simple procedure of currency determination served the purpose, apparently without any noticeable problems. Thanks to the stable and uncomplicated nature of the socio-economic situation of the country at that time. However, the socio-economic circumstances of the nation began to assume some new characteristics from 1986 with the introduction of the Structural Adjustment Programme (SAP). The various principal economic/financial indicators began to move much vigorously than had ever been witnessed earlier. Consequently, it became increasingly more inappropriate to continue the determination of the nation's currency requirements using those simplistic approaches. It was therefore, necessary to replace that traditional and pragmatic approach with a new more scientific and more rational methodology.

Thomas De La Rue Limited, a reputable British Security printer, having a long standing association with the Nigerian currency production, came to the rescue. The company, which had enjoyed similar association with over 100 other currency issuing authorities around the world, had between 1973 and 1978 carried out a research which established the existence of close relationships between the daily average wage and the rate of inflation in a given economy with the country's currency structure, volumes-in-circulation and total value-in-circulation of the currency. Thus, the D-metric system,as it is generally called, has come to be accepted and adopted by several countries as a reliable methodology for the determination of the right denominations of notes and coins, the volumes of the various denominations to be produced as well as the total value-in-circulation. The D-metric methodology has shown that for an efficient currency management, it is necessary to adjust the currency structure periodically to ensure that the increase in the volume of currency is kept under control. The idea is to counter the effect of inflation which has been identified as the most distorting influence in any currency as it diminishes the purchasing power of the various denominations of notes and coins. The primary task of currency management, therefore, is to try to maintain the relationship between the currency structure and the purchasing power of the wage at all times. In other words, in a well managed currency system, the net effect of inflation on the volume of notes and coins should be zero.

Accordingly, the Bank decided to avail itself of the benefits of Thomas De La Rue research by commissioning the company to undertake a comprehensive assessment of the Nigerian currency, based on the well-tested and well-tried D-metric methodology. All the required statistical data were made available to the company to facilitate the study.. I do not intend to go into the details and technicalities of the report presented to the Bank in 1991 by Thomas De La Rue. Any of you who is particularly interested in such details can get hold of a copy of the report which is available in Currency Operations Department.

The conclusions and recommendations of the study were that the country's currency should be restructured into five denominations of notes, namely, ₦5, ₦10, ₦20, ₦50 and ₦100 and four denominations of coins, namely, 5k, 10k, 50k and ₦1. It was the view of the report that re-designing the note-range and coin-range as recommended will give a new currency structure which will be much more efficient and less costly to maintain. Indeed, the report went further to advise the re-designing of the entire range of both notes and coins into ₦10, ₦20, ₦50, ₦100 and ₦500 notes; 10k, 50k, ₦1, ₦5, and ₦10 coins. According to the report, if such proposal was adopted, the country would have no course to engage in any further designing of its currency for the next 15 years.

However, the recommendations were not implemented fully for other over riding national considerations. It was decided to introduce only one higher denomination of note – ₦50. A new coin range in 1k, 10k 25k, 50k and ₦1 was also approved and implemented.

The Thomas De La Rue report produced a currency management chart which now enables the Bank to determine the required volume and value of currency annually. All that is required is to up-date the input data on inflation rate and daily average wage, then the next year's currency requirement can be derived. It is this unique feature of the D-metric analysis which now makes it possible to arrive at accurate long term projections of our currency requirements in terms of volume, value and denominations in contrast to the old conventional guesstimates. I must not fail to mention here that the annual up-dating process is still being undertaken by Thomas De La Rue. However, arrangements are at hand for the Bank to acquire the software rights so that the up-dating can be carried out in-house. When that is eventually done, the software will be carefully studied by our Research Department with a view to effecting any adjustments that may be deemed necessary. I also must let it be noted that the projections being arrived at using the D-metric analysis are not always fully implemented owing to some other constraints.

PART III

CURRENCY SUPPLY AND ITS DISTRIBUTION

Having decided on the volume and value, as well as the structure of the currency, the other daunting task of producing the currency (supply) and distributing it to all the nooks and corners of the country then follows. As far as production is concerned, the country has been very fortunate to have taken the right decision at the right time by establishing its own Security Printing and Minting Company as early as 1965. This singular action of the Government made it possible to have the first Federal Republic of Nigeria banknotes issued in 1965 to be printed by the Nigerian Security Printing and Minting Company (NSPMC) which was commissioned in that year as a joint venture between the Federal Government of Nigeria, Central Bank of Nigeria and Thomas De La Rue of the U.K. Since then, all Nigerian currency notes and coins have generally been produced by the NSPMC here in Lagos. In the case of the coins, the company has so far limited itself to the last stage of the production process. It imports the coin blanks (i.e. coins already made and cut to the correct compositions and sizes of our coins) from the Royal Mint of the U.K. which it then strikes into finished coins and supplies to the Bank. There had, however, been occasions when for one reason or the other, the NSPMC could not meet the Bank's requirements for mint notes. In such situations, Thomas De La Rue, which apart from being a shareholder in the NSPMC, also serves as a technical partner to the company, is always ready to assist in filling in the production gap. Two such contributions from Thomas De La Rue were the buffer stock orders of 1991 and 1993. Similarly, when the new coin-range was introduced in 1991, the Royal Mint assisted the NSPMC by producing the bulk of the initial stock of finished coins.

Once the requirements of both notes and coins are decided by the Bank, an order, referred to as "Annual Currency Indent" is forwarded to the NSPMC. This is usually done by September/October of each year for the following year's production. The NSPMC will then prepare and forward to the Bank a delivery schedule, giving indications on the expected production and delivery levels on monthly basis. This is examined by the Bank and confirmed to the company, if found satisfactory. If, however, there is need for an adjustment to be made in the order of the production of the different denominations, the company is accordingly informed.

However, it is to be noted that currency supply (issuable currency) at any given point in time is made up of two components - the mint notes and clean recycled notes. As a consequence of the enormous escalation in the volume of currency in circulation witnessed in the last few years, as shown in the table below, the proportion of mint notes over the total notes in circulation has declined considerably.

Year	Curency-in-circulation
1960	₦ 174.4 million
1970	₦ 370.0 million
1980	₦3,600.0 million
1990	₦16,262.4 million
1991	₦25,707.0 million
1992	₦39,235.4 million
1993	₦60,980.5 million
1994	₦96,057.5 million

As a cost saving measure, the Bank embarked on automated currency processing in 1987 by acquiring 26 Automatic Currency Processing Machines, each capable of processing (i.e sorting the notes into clean and dirty) at least 10 boxes per day. More of the machines have been acquired over the years, bringing the total number of such machines in the present 14 processing locations 100. Four more locations are due to be started between now and the middle of next year, which will bring the total number of locations and machines to 18 and 115, respectively. Without any doubt, the currency processing project has made significant contribution towards meeting the nation's supply needs of issuable currency.

After getting the supply in the strongrooms, in the form of mint and clean notes, there still remains the equally important requirement of putting in place effective and efficient distribution arrangements. This aspect of the chain of activities is extremely sensitive because the consequences of any failure are instantly felt. Just imagine a situation whereby, due to faulty distribution arrange ments, the bank is unable to have the required volume and value of currency at the various distribution locations in the country, even though there are stocks available at other locations. However, with imaginative and well-planned distribution arrangements, the effect of a temporary shortage in the supply can be contained for quite a while, albeit at a cost as stocks would have to be redistributed.

Just as the determination of the volume and value of currency used to be carried out in the past three decades, so also was its distribution. It was devoid of any scientific methodology. However, in the case of distribution, the procedure is by far more data-based and to that extent, more realistic. The way it is done is to look at the actual stock position of each of the numerous branches of the Bank on weekly basis. This is generally done on Tuesday or Wednesday of every week. In normal circumstances, the position used for the exercise will be the actual daily stock position sent through the courier. In practice, more up-to-date positions are often obtained by telephone. A delivery and evacuation programme is then prepared and approved. Except in extreme and rare situations, all currency notes movements are by air while all coin movements are by road. In times of abundance of mint notes, most of the movements naturally originate from Lagos, which is the source of the mint notes. In lean periods such as now, when the position of mint notes is the worst in many years, a lot of the movements are inter-state, involving the movement of various categories of

non-mint notes from the so-called net receiving stations to the net paying stations. The office responsible has, over the years, acquired considerable experience in determining the demands of the various locations and the pattern of their transactions generally at different times of the year. For instance, the seasonal demand for cash in Ondo State in the cocoa season is quiet well known and special arrangements are always made for that. Similarly, efforts are always made to build up the stocks in the extreme northern stations of Sokoto, Kano, Maiduguri, prior to the setting in of the harmattan season each year.

However, fairly satisfactory as the present distribution arrangements are, a lot can still be done to make them more scientific. To this end, a collaborative endeavour has been embarked upon between Currency Operations Department and Research Department with a view to developing a model for currency distribution. The ultimate expectation is to develop a more efficient and, therefore, more cost-effective method of distributing the ever-increasing volume of currency to the different parts of the country.

Conclusion

Without any doubt, the currency management exercise undertaken for the Bank by Thomas De La Rue had marked a significant turning point in our understanding of the entire concept and strategy of currency management. Prior to that study and the presentation of the report thereon, our technical knowledge and appreciation of the subject was rather scanty. However, it must be confessed at this juncture that we are not yet in a position to derive the real benefits of the new found methodology in our currency management. As can be seen in the attached currency management chart, not only should the ₦100 note have been introduced since 1992, but also the ₦500 note last year. Unfortunately, this has not happened, the consequence of which is the enormous increase in the volume of currency-in-circulation with the attendant high cost of production, distribution and processing.

This is so because the total face value required by the system has to be met by producing more and more of the current denominations. It is a matter of simple arithmetic. The cost of printing varies only slightly between the high denominations and the lower denominations. It costs only slightly more to print a ₦50 note than to print one ₦20, N10 or ₦5 note. The difference in printing cost is due to the high security features introduced in the ₦50 note. We could practicalise the situation for clarity: let us assume that we want to produce ₦1 billion in face value to meet the demand of the economy for a given period, and let us assume that it costs ₦1 and ₦1.10 to produce ₦20, ₦10, ₦5 notes and ₦50 note respectively; ideally, we would produce say 50% of the required ₦1 billion in ₦50 notes and the remaining 50% in the other three denominations (30%, 10% and 10%). At the end of the production, the total cost will be ₦66 million. However, if we decide not to print the ₦50 note, for whatever reason, and we end up producing the required ₦1 billion in ₦20, ₦10 and ₦5 denominations in the proportions of ₦600 million, ₦200 million and ₦200 million respectively, the production cost will automatically jump to ₦90 million. We will, of course, also encounter the same rate of increase in the distribution cost because we will now have to distribute 9,000 boxes as against 5,500 boxes with the ₦50 denomination.

The view is all too often expressed that higher denominations of currency bring about inflation. Nothing can be further from the truth as the economists amongst us can confirm. What obviously causes inflations is money supply and not higher currency denominations, nor the quantum of currency printed and stored in the vaults of the Central Bank. As practising bankers can testify, whenever an account holder, be it an individual or a corporate body, demands

for cash from his banks, provided that his account is in funds, or there is an approved overdraft facility for him, the bank is under an obligation to meet his cash demand, be it in ₦50 or in whatever other denomination of currency is available. In other words, ₦1 million withdrawn from the bank is still ₦1 million, whether it is in ₦50 notes or in ₦5 notes. The only difference is that the customer will be taking away from the bank either two boxes in ₦50 notes or 20 boxes, as the case may be. One has to admit that there are social and other implications of having high denomination banknotes in any economy. What needs to be done, therefore, is to strike a reasonable balance. In this regard, it is my considered opinion that we ought to have in circulation in the country today a denomination higher than the ₦50 we have.

The issue of supply of the issuable currency is expected to improve significantly in the not too distant future. The Central Bank has recently taken a long over-due decision to get the commercial banks to be actively and properly involved in the arduous task of processing of used notes for the purpose of recycling the clean notes as obtained in other countries. This very vital activity has, over the years, been shouldered solely by the Central Bank. Various attempts made by the Bank in the past to persuade the commercial banks to sort their notes did not meet with much positive response. The Bank, realising that it cannot alone cope with the processing of the ever expanding volume of used notes, took a final decision, directing the commercial banks to embark on the sorting of their notes not later than April, 1997. The 2-year period of grace is necessary to enable the banks budget for and acquire the appropriate currency sorting equipment. Appropriate incentives have been provided for compliance as well as penalties for non-compliance.

Thank you for your attention.