

Chapter III.

THE BANK OF SIERRA LEONE: SOURCES AND USES OF FUNDS

1. ESTABLISHMENT OF THE BANK OF SIERRA LEONE

The most important institutional change in the evolution of the monetary and financial system was the replacement of the West African Currency Board by the Bank of Sierra Leone, the central bank, in 1963.

With the approach of independence, the governments of Sierra Leone and the Gambia, the remaining members of the West African Currency Board, invited Mr. J.B. Loynes of the Bank of England "... to examine the present currency system and to recommend how the system could be developed to meet the economic and political needs of the two territories both common and individual".¹ Mr. Loynes in his Report which was published in 1961 considered three possibilities. These were: continuation of the WACB arrangements but with headquarters transferred from London to Freetown; a joint Sierra Leone/Gambia currency board; and a central bank.

In his Report Mr. Loynes argued that even if the WACB was accepted on the grounds of its simplicity and cheapness, it could only

¹ Introductory letter to His Excellency the Governor of Sierra Leone in J. B. Loynes, *Report on the Future of the Currencies of Sierra Leone and the Gambia*, Freetown, Government Printer, 1961.

be a temporary measure. As a long term proposition, the WACB as it was then constituted and operated could be of no advantage to Sierra Leone. He did not consider a joint Sierra Leone/Gambia currency board as a practicable alternative because of the different political status of the two countries, and the consequent divergent interests, the fact that Sierra Leone and the Gambia had very little economic or trade links between them, and the distance between the two territories. Another possible area of disagreement related to the composition of a common currency board. He dismissed the idea of a central bank on the following grounds: Firstly, the establishment of central banks in developing countries had generally been influenced by prestige and partly by the mistaken belief that such an institution could create development. Secondly, he did not think that the conditions for the proper working of a central bank existed in Sierra Leone. Finally, there was no need for a central bank because the country's banking system, reinforced by its London connection, provided an adequate and efficient service to the government and the public.²

These views, which echoed the traditional objections to central banking in developing countries, were rather surprising;³ especially as prior to the Loynes Report in 1961 a number of studies

² Like Fisher, Sir Cecil Trevor, Paton and others, he argued that the "right conditions" did not exist for the establishment of a central bank. The right conditions for the functioning of a central bank were defined by Sir Cecil Trevor as follows: "... it is essential that all the flexible instruments necessary to an advanced economy should be available in the form of a Government Securities Market, a Bill Market, a Stock Exchange, Banking and Insurance Systems". Sir Cecil Trevor, *op. cit.*, para. 100.

³ Fisher had made the following argument for Nigeria: "The financial environment hardly exists at present for a central bank other than semi-automatically as a bank of issue". The point which must be emphasized here is that these experts considered the existence of a developed money and capital market as a prerequisite for central banking.

had shown that the usefulness or otherwise of a central bank in a developing country must be judged not by reference to what such banks have been accustomed to do in the economically developed countries, but rather with reference to what the economic conditions within the country dictated for them. For example, Sayers in 1957 had argued that the stress of controlling the supply of money comes from the circumstances of the time.⁴

There were other studies with virtually the same theme. These included the World Bank report on Nigeria and the study by Newlyn and Rowan. In criticizing Sir Cecil Trevor's reasons for rejecting a central bank for Nigeria, Newlyn and Rowan in 1954 had argued that the potentialities of a central bank should not be assessed from the capacity of the institution to "exercise general control by influencing the cost, availability, supply and international exchange of money". This was not the only argument in favour of central banking nor was it in West African conditions the most important one. They pointed out that it was questionable whether Sir Cecil was right in making the existence of a developed money

⁴ "In the inflationary Europe of the 1920's, it was immensely important that someone should advocate care of the issue of notes. But it did happen that the apostles were with the English or were ready to accept views that were coloured by English institutions. The central business of regulating the money supply therefore came to be thought of in terms of English techniques. The Bank of England became almost a pattern, sometimes directly sometimes indirectly through its influence on American views of the techniques of central banking". He then went on to explain how the functions then performed by the Bank of England were relevant to the needs of that economy. He said, "It happens that England has a highly developed banking system in which the functioning of the central bank as a banker's bank seems to have become an almost mechanical process linked to the gold standard by the rate of interest. Willingness of the central bank to act as lender of last resort was recognised as fundamental, being the condition of stability of cash ratios in the member banks". In short, the Bank of England performed functions and adopted techniques which were suited to the needs of the economy.

and capital market a necessary condition for the establishment of a central bank.⁵

A second reason for disappointment with his suggestion was that the country should continue to rely on the London market. It must be emphasized that colonies were able to use the London market because of concessions made available under the Colonial Stocks Acts. Once Sierra Leone attained independence she was no longer qualified for any of these concessions. There was thus the possibility that capital inflows would not be on the scale prevailing then. Besides, while it was desirable to encourage inflows it was equally important to mobilize domestic resources.

In short, if following Sayers and others Loynes had started from the premise that what a central bank does must be determined by conditions within the country, then not only would his approach to the problem have been different but also, the grounds on which he would have rejected a central bank for Sierra Leone would not have been the familiar ones in his Report.

Having rejected a central bank and considered that a joint currency board was not appropriate, he recommended the establishment of a "monetary institute" because of his reasoning that "... any individual monetary system should keep intact the features of the old system which help trade and investment and preserve public trust".⁶

This new institution should be concerned, in the early stages, only with the issue and redemption of currency; but he hoped that

⁵ Newlyn and Rowan, *op cit.*, p. 225. They then suggested that the case for central banking in West Africa should be looked at from two stand-points: "(a) The contribution to stabilization by advising government on the appropriate anti-cyclical policy and (b) its contribution to the economic development of Nigeria likely to be in the following areas, (i) the development of indigenous banking; (ii) the integration of expatriate and indigenous banking; (iii) the development of a local securities market; (iv) the development of agricultural credit".

⁶ Loynes, *Report, op. cit.*, p. 2.

in time, the institution would perform all the usual functions of a central bank. In a sense therefore, the new institution proposed by Mr. Loynes was a currency board with a new name.⁷

Although the Sierra Leone government accepted the Loynes Report, it did not establish the monetary institute recommended. The first indication that the Sierra Leone government intended to establish a central bank rather than a monetary institute was given by the Minister of Finance in his 1962/63 Budget Speech.⁸

During that financial year, Mr. H. S. Hall of the Bank of England was invited to undertake the preliminary arrangements for the establishment of a central bank including the drafting of the necessary legislation. The Bank of Sierra Leone Act became law on 27th March 1963, and the Bank was opened for business on 4th August 1964.

The appointment of Mr. Gordon Hall in 1962, actually marked the beginnings of central banking in Sierra Leone. In Mr.

⁷ It was his view that from these small beginnings the institute could gradually be transformed into a central bank. He said, "In time it might begin to vary its holdings of local assets in the light of the working conditions; it might help the banking system to meet seasonal pressures for credit if these arose without moving funds backwards and forwards from London; it could have the duty to make sure that proper banking standards were maintained; it would act as adviser to the Government for grant aids".

Dr. Cox-George in 1957 made the following recommendations: "The common-sense thing to do at this stage appears to be to set up a local Currency Board from the remains of the West African Currency Board which should be responsible for the issue of local currency. It should be the ultimate aim to transform this Board by a gradual process, that is by stages, into a fully fledged central bank for the territory". N.A. Cox-George, *Report on African Participation in the Commerce of Sierra Leone*, Freetown, Government Printer, 1960, paragraph 103, p. 53.

⁸ He said, "No independent country can regard itself as truly independent until it has its own national currency... the time is not too distant when Sierra Leone too will have its own central bank". *Budget Speech* delivered by the Minister of Finance in the Sierra Leone House of Representatives on 21st March 1963, Freetown, Government Printer, 1963, p. 5.

Hall's team in the early months were Mr. S.B. Nicol-Cole who was seconded from the Ministry of Trade and Industry and Mr. Juma Sei from the Ministry of Finance. Mr. Hall and his team occupied premises at No. 14 Gloucester Street, Freetown.

The drafting of the Bank of Sierra Leone Act occupied most of 1962 as this involved the study of central bank legislations in other developing countries and especially those of Nigeria and Ghana. It also involved visits to other central banks.

The next stage consisted of planning the introduction of the new currency which was to replace the pounds, shillings and pence of the West African Currency Board. This involved designing, arrangements for printing and minting, and the introduction of the new currency into the country. Arrangements had also to be made for the transfer of government accounts from the commercial banks to the central bank. Not only was the initial team by now too small for all these operations, but also technical experts were now required. These were obtained from the Bank of England. The supporting staff for these experts was recruited locally. By this time the Bank had moved to its premises in Leone House. By August 1964 when the Bank opened its doors for business, its staff totalled fifty-three. With the growth of the Bank's staff it had become necessary to acquire other floors in Leone House, with the result that when the Bank began operations in August it occupied virtually the entire building.

Since not only a new currency, but also a new currency system was being introduced, it was necessary for the associated publicity to be thorough and concentrated. To this end a Publicity Campaign Committee was formed during January 1964, to draw up and supervise the execution of the publicity programme. The members of the committee were selected from senior officials of the Bank of Sierra Leone, the Ministry of Finance, the Ministry of Information and Broadcasting, the Ministry of Social Welfare and other interested

ministries. The main part of the publicity programme began at the end of February 1964. It gradually mounted in intensity until the new currency was issued. On 4th August 1964, the Minister of Finance launched the "Leone note" and "cent" coins and declared the bank formally opened for business. To avoid confusion in the minds of the public, the Leone note and cent coins were substantially similar in shape, colour and size to the old WACB currency.

While the changeover was in progress, the Bank began its functions as banker to the government on 1st November 1964, by taking over the government's deposit accounts from commercial banks. Another major event took place on 5th November 1964, when the Bank of Sierra Leone began to issue Treasury bills. The Bank, early in 1965, assumed another important and related function, namely that of registrar of government stocks.

On 12th January 1965, the Bank established a clearing house for commercial banks to ensure a more efficient daily clearing of cheques. On 25th June 1965, the Bank took over the administration of exchange control from the Ministry of Finance.

The term of office of Mr. Gordon Hall, the Bank's first Governor, expired on 31st May 1966. With his departure, Mr. S.B. Nicol-Cole became the first Sierra Leonean Governor of the Bank with Mr. S.L. Bangura, previously a permanent secretary at the Ministry of Development, as his Deputy.

In November 1966, all departments of the Bank except the Research Department and the Exchange Control office moved from Leone House to its new eight-storey building. The remaining departments moved in January 1967 and the building itself was formally opened on 26th November 1967.

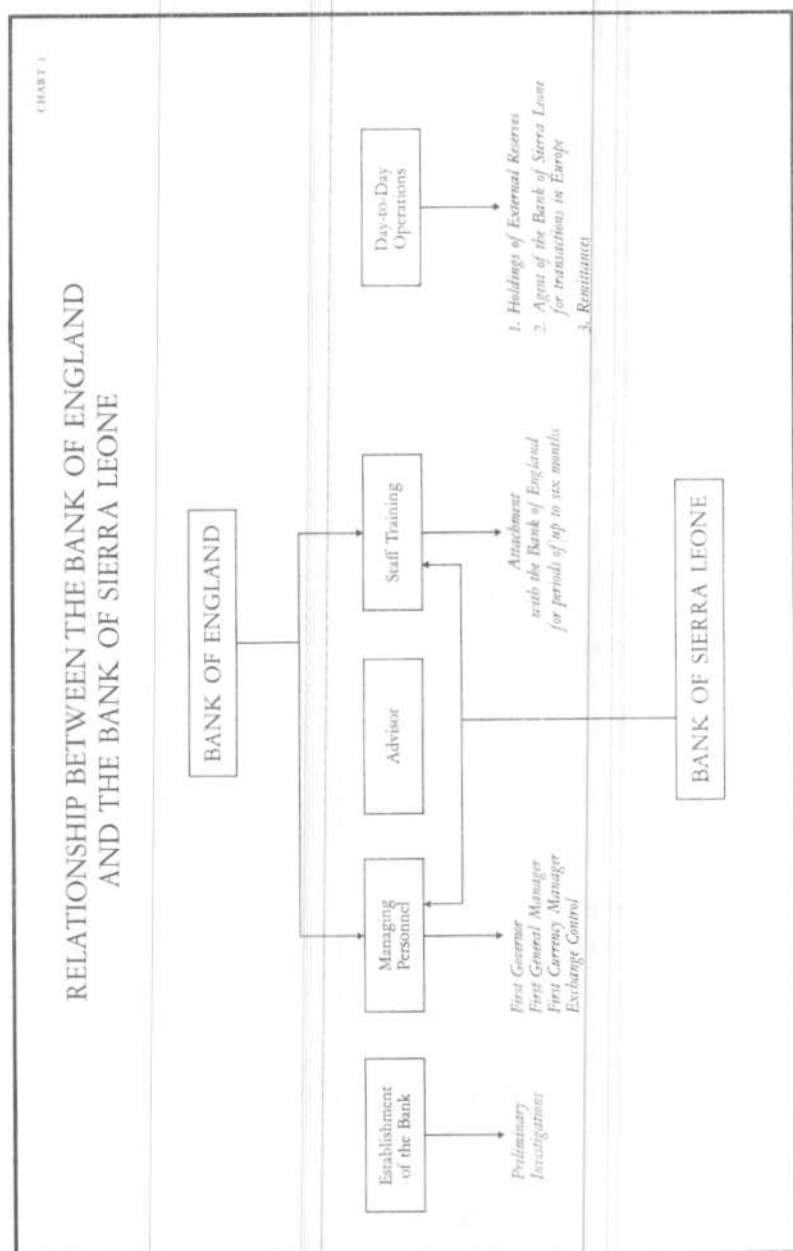
The officers who had been seconded from the Bank of England completed their tour of duty in 1967. With their departure in 1968 all the departments of the Bank were headed by Sierra Leoneans.

In Chart 1 we describe the relationship between the Bank of England and the Bank of Sierra Leone during the early years.

2. ORGANIZATIONAL STRUCTURE

The administration of the Bank of Sierra Leone is the responsibility of the Board of Directors, comprising the Governor, the Deputy Governor, and other three directors. The Governor and his Deputy must be persons with "recognized financial experience" while the other directors can be selected from those with experience in business, professional or academic matters. Following British tradition, government officials are excluded from the deliberations and decisions of the Board of Directors. The Bank of Sierra Leone Act states that: "No person shall be appointed or shall remain Governor, Deputy Governor or a Director of the Bank who is: (a) a member of the House of Representatives, (b) a director, salaried official or shareholder of any commercial bank which carries on business in Sierra Leone, (c) an officer of the public sector".⁹ All directors of the Bank are appointed by the President. The term of office of the Governor and his Deputy is five years; that of the three directors three years in rotation — although a director may be reappointed. The Governor and Deputy Governor are full-time executive directors and are responsible for the day-to-day administration of the Bank. The Bank has a team of advisers who have, since 1966, been provided by the IMF as part of its Technical Assistance Programme to advise the Governor on policy matters. The Bank is divided into four departments. These are headed by the following heads of department, who are directly responsible to the Governor: The General Manager; the Secretary; the Director of Research; the Exchange Controller.

⁹ Bank of Sierra Leone Act, Section 12.



Two other units under the Governor's direct control are: the Internal Audit and the Development Finance (Credit Guarantee Scheme).

Unfortunately the enthusiasm for change was not reflected in the objectives of the Bank, as defined by the Bank of Sierra Leone Act of 1963. The Bank's responsibility was defined as follows: "To issue legal tender currency in Sierra Leone and to maintain external reserves in order to safeguard the international value of the currency; to act as banker and financial adviser to the government and to promote monetary stability and a sound financial structure".

In contrast, the Bank of Ghana Act of 1963 defined the responsibility of the Bank as "to regulate and direct the credit and banking system in accordance with the economic policy of the government; to propose to the government measures which are likely to have a favourable effect on the balance of payments, movements of prices, the state of public finance and the general development of the national economy and of monetary stability; to do all such things as are incidental or conducive to the efficient performance of its functions under this or any other enactment".¹⁰ The Bank of Jamaica is required "to influence the volume and conditions of supply of credit so as to promote the fullest expansion in production, trade and employment consistent with the maintenance of monetary stability in Jamaica and the external value of the currency, and to foster the development of money and capital markets in Jamaica".¹¹ The Central Bank of Ceylon is charged with "the duty of so regulating the supply, availability, cost and international exchange of money as to secure (i) the stabilization of domestic monetary values; (ii) the preservation of the par value of the Ceylon rupee and the free use of the rupee for current international transactions; (iii) the pro-

¹⁰ The Bank of Ghana Act, 1963, p. 5.

¹¹ W.F. Crick, *Commonwealth Banking Systems* Oxford, University Press, 1965, pp. 41-42.

motion and maintenance of a high level of production, employment and real income in Ceylon; (iv) the encouragement and promotion of the full development of the productive resources of Ceylon".¹²

It is clear from the expressed purposes of these central banks that they were expected to look beyond the issue and redemption of currency to the general development of the economy.

There is no doubt that the limited objective of the 1963 Bank of Sierra Leone Act was influenced by two factors. The first was how best to entrust such an important institution to a country which had no experience in the field of monetary management. From this point of view, a conservative approach was suggested. The second factor was the influence of the Bank of England. As in Ghana, Nigeria and some other Commonwealth countries, an official of the Bank of England was commissioned to report on the desirability of establishing a central bank. It will be recalled that these officials saw nothing wrong with the currency board arrangement and, in any case, a central bank had no place in a country such as Sierra Leone. But once the decision was taken to establish a central bank in Sierra Leone, officials from the Bank of England not only drafted the statutes but also provided the "key" personnel. The influence of the Bank of England on the Bank of Sierra Leone can in fact be seen from Chart I. In taking up the assignment in Sierra Leone such officials were going to be cautious as the experiences gained at the Bank of England were irrelevant to the conditions of an underdeveloped economy.

Quite early, however, officials of the Bank recognized that its objectives and powers were rather restricted for a central bank operating within the context of a developing economy. The Governor of the Bank, in his first Annual Banquet Speech, in January 1969, observed as follows:

"It seems clear to me that the main thrust of the central bank

¹² *Ibid.*, p. 41.

must be, at this stage in national development, in the field of a more or less direct stimulation and discipline of the development process in those sectors of the monetary and financial spheres which can be shown to fall naturally within the overall competence of the central bank . . .

The endorsement of a growth-oriented role cannot, of course, be taken to imply any measure of abdication of our inherent responsibility for the maintenance of stability in the internal and external value of our currency and in the monetary and financial system as a whole. But stability can hardly be an end in itself. Properly conceived, stability must be a means to the attainment of the wider goals of economic development and national fulfilment".¹³

Consequently, in 1969, the Bank submitted proposals for the amendment of the Bank of Sierra Leone Act of 1963 and the Banking Act of 1964. The new Banking Act of July 1970 extended the Bank of Sierra Leone's influence over the commercial banks while the new central bank legislation of April 1974 enabled it to improve its flow of credit towards the neglected sectors of the economy.

3. SOURCES OF FUNDS

From Table 9, which shows the balance sheet of the Bank of Sierra Leone for the period 1964-1976, we may infer that the main sources of funds available to the Bank are currency issues and deposits. In addition, the Bank operates a Call Money Fund for short term surplus funds. The management of this fund also adds to the Bank's resources.

¹³ Speech by S.B. Nicol-Cole, O.B.E., Governor of the Bank of Sierra Leone, at the Governor's Banquet on 31st January 1969, p. 8

TABLE 9

STATEMENT OF ASSETS AND LIABILITIES OF THE BANK OF SIERRA LEONE: ASSETS
(thousand Le)

Years	External					Govern- ment securities	Redis- counts and advances	Fixed assets	Other assets*	Total assets
	Balances with banks abroad	Foreign govern- ment securities	WACB notes and coins	Holdings of SDR's	Total					
1964	1,646	6,780	4,096	—	12,522	—	—	—	1,320	13,842
1965	1,104	11,083	28	—	12,215	3,829	799	3,611	—	20,454
1966	836	11,243	—	—	12,079	3,543	1,580	837	2,693	20,732
1967	577	11,440	—	—	12,017	4,385	1,401	800	2,856	21,459
1968	1,907	20,994	—	—	22,901	2,412	150	1,566	5,789	32,818
1969	21,067	8,417	—	—	29,484	1,282	1	1,573	5,949	38,289
1970	16,448	7,796	—	401	24,645	2,009	4,264	1,794	6,511	39,223
1971	15,413	7,396	—	2,604	25,413	2,983	4,856	1,370	10,164	44,786
1972	22,183	4,624	—	4,786	31,593	3,640	3,526	1,132	13,917	53,808
1973	28,175	5,592	—	4,759	38,526	4,340	3,188	1,027	31,238	78,319
1974	36,815	5,270	—	3,670	45,755	2,448	12,147	789	60,995	122,134
1975	20,114	3,084	—	4,445	27,643	23,627	13,351	685	77,246	142,552
1976	20,367	5,055	—	3,661	29,083	31,892	12,609	736	97,809	172,129

* "Other Assets" for the period 1964-65 are included in "Fixed Assets".
Source: *Economic Review of the Bank of Sierra Leone*, Vols. 8, 9, 10.

TABLE 9 (contd.)
STATEMENT OF ASSETS AND LIABILITIES OF THE BANK OF SIERRA LEONE: LIABILITIES
(thousand Le)

Years	Deposits					Capital	General reserve	Allocation of SDR's	Other liabilities	Total liabilities
	Sierra Leone currency issues	Government	Commercial banks	Others	Total					
1964	11,268	1,539	223	218	1,980	—	—	—	594	13,842
1965	15,273	782	222	93	1,097	—	—	—	4,084	20,454
1966	16,116	510	220	46	776	700	101	—	3,039	20,732
1967	15,627	1,287	221	214	1,722	700	193	—	3,217	21,459
1968	19,679	1,687	217	3,204	5,108	1,500	268	—	6,263	32,818
1969	22,058	3,634	215	3,127	6,976	1,500	415	—	7,340	38,289
1970	20,162	1,885	329	4,950	7,164	1,500	415	2,100	7,882	39,223
1971	22,545	2,116	1,771	786	4,673	1,500	1,302	4,329	10,437	44,786
1972	26,222	1,942	1,351	1,022	4,315	1,500	1,493	6,538	13,740	53,808
1973	31,456	6,390	2,309	2,782	11,481	1,500	1,801	—	32,081	78,319
1974	32,824	4,925	4,783	12,418	22,126	1,500	2,226	—	63,458	122,134
1975	37,778	131	2,811	17,148	20,090	1,500	2,697	—	80,487	142,552
1976	44,052	5,018	4,551	8,189	17,758	1,500	3,031	—	105,788	172,129

The issuing of currency

As we have seen, prior to 1963 currency in circulation had to be backed 100 per cent by sterling assets. Consequently, the maximum rate of issue of currency depended on the rate of acquisition of sterling assets. The 1963 Bank of Sierra Leone Act, however, introduced two changes; these were a provision to enable the Bank to hold assets other than sterling and a reduction in the amount of external cover for the currency from 100 to 60 per cent. The significance of the change is that the issue of currency was facilitated by the greater ease of acquiring local assets as backing for the issue. But although these regulations set the limit for the amount of currency that can be issued, the actual issue depends upon the method of financing public expenditure and the demand for currency by the general public.

The relationship between currency issued, currency in circulation, deposits and the money supply is shown in Table 10. Between 1960 and 1976, currency in circulation (that is, currency issued less currency held by the commercial banks) increased about four-fold rising from Le 11 million in 1960 to Le 46 million by 1976. During this period there was a slight change in the proportion of currency held by the commercial banks in relation to the currency issued. The proportion of currency held by the commercial banks dropped from a high of 13.3 per cent in 1963 to 7.4 per cent by 1976. If we divide the period into two parts, that is, 1960-1964 and 1965-1976, currency held by the commercial banks averages 11.2 per cent and 7.5 per cent respectively. A probable explanation for the decline in the amount of currency held by commercial banks is the facilities for clearing operations provided by the Bank of Sierra Leone after 1964. The clearing facilities offered by the Bank have resulted in banks settling their accounts through the manipulation of their deposits with the Bank instead of by cash pay-

TABLE 10

CURRENCY IN CIRCULATION AND ASSOCIATED RATIOS

Years	Currency issued (Le '000)	Cash in banks (Le '000)	Cash in banks/Currency issued (ratio)	Currency (Le '000)	Currency/Total deposits (ratio)	Currency/Demand deposits (ratio)	Currency/Money supply (ratio)	Currency/GNP (ratio)
1960	12,068	1,168	.107	10,900	1.205	1.884	.653	n. a.
1961	13,924	1,284	.102	12,640	1.174	1.867	.651	n. a.
1962	14,414	1,334	.102	13,080	1.044	1.664	.623	n. a.
1963	14,632	1,712	.133	12,920	1.014	1.781	.639	.064
1964	15,023	1,599	.119	13,424	0.880	1.611	.630	.067
1965	15,502	1,315	.093	14,187	0.937	1.951	.656	.063
1966	16,116	1,641	.113	14,475	0.866	1.862	.660	.060
1967	15,627	1,263	.088	14,364	0.822	1.716	.659	.058
1968	19,679	1,826	.102	17,853	0.830	1.796	.673	.069
1969	22,057	1,839	.091	20,218	0.788	1.733	.665	.075
1970	20,162	1,305	.051	18,941	0.773	1.876	.668	.061
1971	22,545	1,604	.071	20,935	0.654	1.823	.648	.065
1972	26,222	1,567	.060	24,855	0.788	1.818	.642	.079
1973	31,456	1,733	.055	29,723	0.733	1.695	.626	.086
1974	32,824	1,429	.044	31,395	0.606	1.417	.576	.074
1975	37,778	1,235	.033	36,543	0.683	1.650	.622	.068
1976	44,052	3,270	.074	46,318	0.655	1.498	.651	.083

Source: *Economic Review of the Bank of Sierra Leone*, No. 4, March 1971, Tables 5, 7 and 37.

For 1960 figures, see same publication, No. 1, June 1968, Table 8.

ments which were the usual practice before this facility became available.

Currency in circulation as a ratio of the money supply averaged 63 per cent for the period 1960-1976. The ratio of currency in circulation to GNP which was 6.4 per cent in 1963 stood at 8.3 per cent by 1976. There was much fluctuation during the period and a high of 8.6 per cent was attained in 1973. The ratio of currency in circulation to total deposits gives some indication of the non-bank public preference for currency as against deposits. Currency as a ratio of total deposits shows some decline during the period of study. The small shift from currency to savings and time deposits may be due to the growth of branches of commercial banks. We will show in Chapter V that the number of banking offices increased from 3 in 1950 to 36 by the end of 1976. In those areas in which banking offices exist, the public's relative preference for deposits can be explained in terms of the yield and convenience of deposits. But because large areas of the country are still without banking offices and due to low incomes, the growth in bank branches has not had a significant impact on the currency in circulation with the result that currency still accounts for two-thirds of the money supply. The ratio of currency in circulation to demand deposits, as an indicator of the habit of using cheques, confirms that currency is more widely used than demand deposits.

Let us now examine the factors which explain the large currency component of the money supply. The main explanatory variable is the level of income. We pointed out in Chapter II that per capita income has been very low throughout the period of study and averaged Le 105 for the period 1963/64 - 1973/74. Because income is so low virtually all of it is required for basic necessities. Hence, while looking at the opportunity cost of holding currency,

account must also be taken of the level of income.¹⁴ Once this is done, the only choice available to a large number of people is between currency on the one hand and goods and services on the other. Another explanatory variable is the method of financing the marketing of diamonds. We pointed out in Chapter II that diamonds account for about 60 per cent of Sierra Leone's export receipts. In an effort to reduce the scale of smuggling, the Sierra Leone government in 1956 established the Government Diamond Office whose responsibility is to purchase diamonds mined under the Alluvial Diamond Mining Scheme.¹⁵ But because of the ease with which diamonds can be mined, most of the local miners do not have a licence. The illicit miner naturally insists on cash transactions; but even licensed dealers also insist on cash transactions as they themselves obtain some of their diamonds from illicit miners. Consequently, transactions through the Government Diamond Office are entirely in cash to encourage the flow of diamonds mined in the country through official channels. Thus, with the expansion of diamond output the volume of currency should also increase.

Also, the marketing of agricultural produce is entirely in cash. We showed in Chapter II that agricultural holdings are quite small and that output per farmer, as well as agricultural incomes, are also low. The farmer's meagre income prevents him from selling directly to agents of the Sierra Leone Produce Marketing Board (SLPMB) who may be several miles away from his farm. Consequently, he disposes of his produce at the place of production to traders and others who in turn sell it to agents of the SLPMB.

¹⁴ A regression analysis with currency as the dependent variable and real national income per capita as the independent variable gives the following result: $6.097 + 1.83 Y$ (Log Function) $R_2 = 0.966$ D-W = 1.6207.

¹⁵ H.L. van der Laan, *The Sierra Leone Diamonds: An Economic Study Covering the Years 1951-1961*, London, Oxford University Press, 1965, Chapters 1 and 10.

In addition, we argued that the agricultural sector's share of GNP increased slightly in relation to those of the other sectors. The growth of agricultural output is partly reflected in agricultural exports which rose from Le 5 million in 1967 to over Le 18 million by 1974. Since the agricultural sector is not adequately served by banks, an increase in its share relative to the other sectors, or higher incomes for farmers, would increase currency in respect to deposits. But the fact that agricultural incomes are very low may also explain why transactions in the agricultural sector are largely in cash.

Another contributory factor is the growth of retail trade, especially petty trading. This is closely related to income levels. As incomes are very low people can only purchase a few items as and when needed. To take one example, an individual will buy two cigarettes instead of a packet of ten because this is what he can afford; or he may buy four lumps of sugar instead of one pound worth. In Chapter II we pointed out that out of the economically active population of 938,000, 383,000 were self-employed and of these 53,000 are petty traders. These figures give some indication of the relative importance of retail trade.

In summary, the low level of income together with the marketing arrangement for diamonds mined by local miners, as well as the marketing arrangements for agricultural produce, have accounted for the expansion of the currency in circulation and hence the large currency component of the money supply.¹⁶

¹⁶ Cagan, in his analysis of the behaviour of the currency component of the money supply in the United States, suggests three main explanatory variables: The expected net rate of interest on savings and time deposits; the expected real income; and the personal income tax as a percentage of personal income. Macsich applies the Cagan analysis to the behaviour of currency in Canada and largely supports Cagan's thesis. But Khazzoom who deals mainly with underdeveloped countries disagrees with the emphasis that Cagan and Macsich place on interest on deposits and on the income tax. For him the behaviour of currency reflects the effects of in-

Deposits

Deposits are the second source of resources available to the Bank of Sierra Leone. The depositors of the Bank are the government, commercial banks and government corporations. In 1963 and 1964 government deposits averaged Le 1 million approximately. In 1965 and 1966 however, the average was only Le 0.8 million. Since 1967, government deposits have exceeded Le 1 million and were particularly high in 1969 averaging Le 3.7 million. The average monthly deposits for 1963 and 1964 were Le 6 million and Le 3.8 million respectively. These higher levels of government deposits since 1969 are due to favourable world prices for cocoa and palm kernels which prevailed in 1968 and 1969. The government's deposits benefited moreover when the higher incomes were spent through indirect taxes. Another contributory factor were the economies in government spending introduced with the Stabilization Programme of November 1966.

Between 1964 and 1970 deposits of commercial banks have been about Le 0.2 million, and only on four occasions was this sum exceeded to any appreciable extent. The level of commercial banks' deposits was agreed upon with the Bank of Sierra Leone who has undertaken to transfer to the Call Money Fund all sums in excess

stitutional and other factors. So that other factors such as the growth of banking, urbanization, monetization, income distribution and inflation (most of which are discussed by Cagan but which are not considered important in the United States situation) are the variables Khazzoom lays emphasis on. Our findings on the behaviour of currency in circulation in Sierra Leone lend support to Khazzoom's main conclusion. Philip R. Cagan, "The Demand for Currency Relative to the Total Money Supply", *Journal of Political Economy*, August 1958, pp. 301-328; George Macesich, "Demand for Currency and Taxation in Canada", *Southern Economic Journal*, July 1962, pp. 33-38; Joseph D. Khazzoom, *The Currency Ratio in Developing Countries*, New York, Frederick A. Praeger, Inc., 1966, pp. 22-24.

of the agreed minimum. Since 1971 deposits of commercial banks have been quite high reaching Le 4.5 million in 1976.

Other deposits have not been particularly significant, ranging between Le 50,000 and Le 0.4 million during most of the period 1964 to 1967. Only on a few occasions did these deposits exceed Le 0.3 million. Between December 1968 and December 1970 they have however increased considerably. At the end of December 1968, "Other deposits" were Le 3.2 million, a rise of Le 2.9 million on the previous month. This new level was maintained in 1968 and 1969, averaging Le 3 million and Le 4.7 million respectively. "Other deposits" were particularly high in 1970, rising to Le 6.3 million in August.

This big increase in "Other deposits" since December 1968, has been due to the Bank's treatment of the Call Money Fund. Before 1968 call money was not included in the balance sheet. On the recommendation of the external auditors call money has been included in "Other deposits" since December 1968. The Call Money Fund is discussed below.

The result of growth in government and other deposits is that total deposits at the Bank rose rapidly, rising from Le 1.9 million in September 1964, to Le 7.2 million by December 1970. By the end of December 1974 deposits had more than trebled to Le 22.1 million. Because of the growth in deposits, the share of deposits in the total liabilities of the Bank also went up, rising from an average of about 6 per cent between September 1965 and September 1968, to an average of 17 per cent since the end of 1968. In 1969 deposits averaged 18 per cent of the Bank's total liabilities though in September they went up to 21 per cent of total liabilities. By December 1970, however, deposits accounted again for 18 per cent of total liabilities.

The Call Money Fund

Through the Call Money Fund which is operated by the Bank, resources also flow into it. This Fund was established in 1964: its objective has been to provide short term investment outlets for surplus funds, that is, those ranging from one to seven days. The main participants are commercial banks, the corporations and the Sierra Leone Produce Marketing Board.

The total amount received by the Fund at the end of November 1964, the first month of operation of the Fund, amounted to Le 3 million, while withdrawals amounted to Le 1.5 million, leaving an operational balance of Le 1.5 million. Since 1964, payments into the Fund have grown rapidly. Payments in 1965 and 1966 averaged Le 5.5 million and Le 4.9 million respectively; while withdrawals were Le 5.4 million and Le 4.8 million per month in 1965 and 1966 respectively. The highest monthly payment was in May 1965, with a total of Le 10.8 million. Withdrawals then amounted to Le 9.8 million. Because these are very short investments, the rate of interest is only 2.5 per cent. The Bank is able to pay this rate because the funds received are invested in Sierra Leone and British Treasury bills.

The investment of the Call Money Fund in Sierra Leone government Treasury bills were as follows (thousand Le):

1964	725
1965	300
1966	2,645
1967	1,100
1968	15

After 1968 no more investments in government securities were made by the Fund.

The Call Money investments in British Treasury bills were as follows (thousand Le):

1964	300
1965	500
1966	1,010
1967	1,257

Source: *Economic Review of the Bank of Sierra Leone*, No. 1, June 1970, Table 4 and *Quarterly Statistical Review of the Bank of Sierra Leone*, No. 5, June 1966, Table 3.

By providing this outlet for investment the participants have been able to earn income on funds which would otherwise have been idle or remitted abroad.

Capital and other miscellaneous liabilities

Section 7 (i) of the 1963 Bank of Sierra Leone Act defined the authorized capital of the Bank as Le 1.5 million to be subscribed by the Sierra Leone government. Up to June 1968, only Le 0.7 million was paid-up. Since September 1968, the authorized capital has been fully paid.

The reserves of the Bank have been built up by transfers from net profit. The legislation of the Bank requires that one-quarter of net profit should be transferred to "reserves" until the reserve fund exceeds the paid-up capital and thereafter, the percentage should be reduced to one-eighth. At the end of 1974 the Bank's reserve fund exceeded the Bank's paid-up capital by Le 0.7 million. The reserves fund has exceeded the paid-up capital since June 1973.

Allocations of special drawing rights (SDR's) appeared as a liability of the Bank in 1970. SDR's were allocated to the Sierra

Leone government, and therefore, they appear as liabilities of the central bank because the Bank is the custodian of the country's international reserves.

The remaining liabilities of the Bank are largely liabilities abroad on documentary credits and guarantees.

4. USES OF FUNDS

From Table 9 one may infer that the main uses into which the Bank's resources have been put are holdings of foreign assets and advances to the government.

The holding of foreign assets

Foreign assets of the Bank have grown significantly since 1964. At the end of September 1964, one month after the Bank was opened for business, external assets amounted to Le 9.3 million and by the end of 1965 these assets totalled Le 12 million; they continued to rise after 1967, reaching Le 29.5 million at the end of December 1969. The Bank's external assets in 1970 included newly introduced IMF's special drawing rights which amounted to Le 0.4 million. Between December 1970 and December 1974 external assets went up by Le 21.1 million to Le 45.7 million.

The holding of foreign assets is a legal requirement. Section 27 of the 1963 Bank of Sierra Leone Act required the Bank to hold external assets equivalent to 50 per cent of its demand liabilities.¹⁷ The only difference between this provision of the Bank

¹⁷ The linking of reserves to demand liabilities recognizes the claim to convertibility of both components of the money stock. It should be noted that demand liabilities of the central bank include the Bank's deposit liabilities as well as currency issued, while its deposit liabilities include commercial banks' deposits. In addition, the Bank's obligation with respect to reserves is defined as 60 per cent of currency issued.

of Sierra Leone Act and the arrangement under the WACB is that whereas the former stipulates a reserve/currency ratio of 60 per cent, the latter required a 100 per cent reserve/currency ratio. This involves a once and for all fiduciary element of 40 per cent. In addition, any new issue of currency henceforth requires only a 60 per cent external reserves cover.

The previous provision requiring the Bank to hold foreign assets against the stock of money was probably unavoidable during the colonial period when convertibility then meant the conversion of local currency into a foreign currency and when such convertibility was essential for a colony wishing to attract foreign private investment. Under the present regulations of the International Monetary Fund, convertibility means the absence of exchange and payments restrictions on current account.¹⁸ This does not specifically involve the conversion of local currency into an international currency. Also, convertibility of the local currency into a foreign one is not necessary nowadays for the attraction of foreign capital because of various government guarantee arrangements. In these circumstances, the new regulation requiring the Bank to hold external assets against its currency in circulation would appear unnecessary. This does not mean that the country does not require foreign reserves. In fact, as long as the country continues to trade with other countries some amount of foreign reserves will always be required for international settlements. But the interesting feature of the reserve requirement is that the amount which is specified as the minimal cannot legally be used for the purpose of financing deficits in the balance of payments. And yet, it is precisely for such emergencies that reserves are held.

A more logical development would have been the creation of a wholly token currency managed by the Bank with the requirement

¹⁸ *International Monetary Fund Statistics*, published by the International Monetary Fund.

that the Bank holds the country's external reserves. In such a case, the Bank decides on the size of the reserves it considers adequate for foreign exchange transactions.

However, there are some advantages in having an external backing for the domestic money supply. It should be recalled that the WACB had been in operation in Sierra Leone between 1912 and 1963 and the replacement of its currency demanded considerable caution if confidence was to be maintained. Furthermore, the creation of an external reserve enables the central bank to resist an excessive demand for credit expansion.

The 1970 Bank of Sierra Leone (Amendment) Act defined the obligation of the Bank with respect to the holding of external reserves as follows:

"The Bank shall at all times use its best endeavours to maintain the value of reserve specified in Section 27, together with special drawing rights constituting assets of the account authorized by Section 4 of the International Financial Organizations Act 1962, at an aggregate amount of not less than the value of three months' imports as recorded and averaged for the last three preceding years."¹⁹

During the period 1964 to 1976, the ratio of external assets of the Bank of Sierra Leone to the country's imports ranged between 0.19 and 0.33.

According to Section 28 (i) reserves are defined to include special drawing rights allocated by the International Monetary Fund. Since the Bank manages most of the sinking funds of the government and at the same time is banker to the Sierra Leone Produce Marketing Board, it can be argued that the reserves held by the Bank should be interpreted as the reserves of the country. With this assumption we can then interpret the Bank's responsibility

¹⁹ Bank of Sierra Leone (Amendment) Act, 1970, Section 28.

with respect to currency and reserves as follows: As regards the issue of currency, the sole right of issue is vested in the Bank which determines the amount of currency to be issued — the holding of reserves is a separate function.

The significance of Section 28 (i) of the 1970 Act is that it removed the link between the money stock and the holding of external assets. In so doing, it has eliminated the apparent conflict which results from the maintenance of a legal requirement and the need for flexibility, which we have pointed out as one of the main criticisms of the colonial monetary system.

Advances to the government

The next main use of the Bank's resources has taken the form of purchases of government stocks and Treasury bills, and ways and means advances to the government. The maximum amount of stocks and Treasury bills that the Bank can hold as total ways and means advances that can be made available to the government is fixed by the Bank of Sierra Leone Act and the Treasury Bills Act.

The legal limit on the Bank's holdings of government stocks is defined as 20 per cent of its demand liabilities. The maximum amount of Treasury bills that the Bank can hold was defined by the 1964 Treasury Bills Act as 20 per cent of estimated recurrent revenue. This limit was raised by the Treasury Bills (Amendment) Act of 1971 to 30 per cent. Ways and means advances to the government are limited to 5 per cent of estimated recurrent revenue. Under the 1963 Bank of Sierra Leone Act, all such advances should be repaid within the financial year. Under the Bank of Sierra Leone (Amendment) Act 1970, however, the Bank can grant further ways and means advances to the extent to which the outstanding amount is less than the maximum permissible limit of 5 per cent of estimated revenue.

Section 34, subsection 1(a) of the Bank of Sierra Leone (Amendment) Act of 1970, allows the Bank to grant advances to the government for the settlement of subscriptions and other payments to international financial organizations. The Bank has provided loans to the government under this section for the repayment of the International Monetary Fund Credit and for the payment of the gold portion of the recent increase in the IMF quota.

The Bank's assistance to the government in the form of ways and means advances and the holdings of government securities was quite large during the period 1965-1967, the years of serious financial crisis which culminated in the Stabilization Programme of November 1966. The Bank's assistance to the government almost doubled between 1973 and 1974 because of the growing budget deficit.

Fixed assets and other assets

Fixed assets include the Bank's buildings as well as equipment. Between 1964 and 1968 the Bank of Sierra Leone had only one office, that is, its headquarters in Freetown. A second office in Kenema was opened for business in August 1970. The construction and equipment of this second office, as well as the completion of work on the main building, largely explain the sharp rise in fixed assets after 1968. The other assets include mainly "contra" items.

In summary, from the assets/liabilities of the Bank of Sierra Leone shown in Table 9, the Bank's resources went up from Le 13.8 million in 1964 to Le 172.1 million by the end of 1976. The increases in assets/liabilities were particularly large in the years 1967-1968 and since 1971. As a result of the considerable expansion of its assets/liabilities, the Bank has, since 1968, emerged as the largest financial institution. However, a large part of these resources, as was previously discussed, have been held in the form

of external cover for the currency as was required by the Bank of Sierra Leone Act of 1963 until its amendment in 1970.

5. LIMITATIONS ON THE EFFECTIVENESS OF THE BANK OF SIERRA LEONE

The direction of credit

To be able to influence the direction of credit, the central bank needs to be equipped with appropriate legal authority. Let us now examine the legal powers that were at the disposal of the Bank during the period 1964-1976.

The powers conferred on the Bank are contained in the Banking Act of 1964 and the Banking Act of February 1970. The legal provisions available to the Bank under the Banking Act of 1964 are the following: Section 12 prohibits loans (a) to any person in excess of 25 per cent of the published reserves of the banks; (b) against the security of its own shares; (c) unsecured credit facilities of an aggregate amount in excess of Le 1,000 to its directors, companies or partnerships in which the bank or its directors have shares; (d) unsecured loans to its employees must not exceed a year's salary.

Section 20 requires the commercial banks to maintain a minimum liquidity ratio of 15 per cent of their total deposit. Section 31 authorizes the Bank to fix general ceilings for bank credit of all types or of a specified category at the prevailing or higher rates.²⁰

²⁰ These rather general powers may be contrasted with the situation in some other developing countries. For example the Central Bank of Nigeria Amendment Act of 1968 has the following provisions with respect to directing the flow of credit from commercial banks: (a) power to vary the composition of special liquid assets to be held by commercial banks; (b) power to call for special deposits; (c) power to prescribe minimum ratios of total credit each commercial bank should grant to indigenous persons (in April 1972, the Central Bank of Nigeria instructed foreign

Several factors affect the effectiveness of the Bank's power to control commercial banks. The nature of their operations limits the effectiveness of the legal provisions. In this regard, Section 12 except for clause (d) is of limited usefulness in view of the fact that commercial banks, as we show in Chapter V, are supranational with all their directors and shareholders outside the country. Also, the importance of Section 20 is reduced because British commercial banks have been accustomed to holding about 30 per cent of their assets in fairly liquid form. Hence, the requirement that these banks should maintain a liquidity ratio of 15 per cent was of limited significance. With the exception of 1964 and 1965 commercial banks' liquid assets/deposits ratio had always exceeded 30 per cent. Another limitation on the effectiveness of the liquidity requirement is the fact that up to 1967 the required assets could include British Treasury bills, which were not subject to control by the central bank.

The liquidity ratio was progressively increased from 15 to 30 per cent between November 1966 and February 1967, as one of the measures adopted to implement the stand-by agreement which became effective in November 1966. Liquid assets were then defined to exclude British Treasury bills. However, the liquidity ratio was not very effective as an instrument of controlling credit during

commercial banks to reserve 35 per cent of their credit for Nigerians); (d) provision to require that commercial banks' loans exceeding such amounts as the central bank may decide be subject to approval from the central bank; (e) power to issue, allocate and repurchase securities from non-bank financial institutions. *Annual Report of the Central Bank of Nigeria*, 1968. Also, Central Bank of Nigeria (Amendment) Act, 1968.

Credit controls have been used in some countries to direct the flow of credit. Commenting on the success achieved by this instrument in the Philippines, Castro observed: "In one year, 1957, with the enforcement of a priority listing for credit, loans granted to industry rose by 73.1 per cent, which was surpassed only by the percentage rise in public utility loans where the base was smaller". A.A. Castro, "Central Banking in the Philippines", in Cethyn Davies (ed.), *Central Banking in South East Asia*, Hong Kong, University Press, 1960, p. 180.

the period 1964-1976 as the banks brought in funds from their head offices.

To strengthen the powers of the central bank, the Bank of Sierra Leone (Amendment) Act of 1970 and the Banking Act of 1970 were passed, the most important provisions being contained in Sections 29 and 37 of the Bank of Sierra Leone (Amendment) Act and Sections 16 and 21 of the Banking Act. Under Section 29 sub-section 1 (e), the Bank can purchase and rediscount inland bills of exchange which have been "... issued for the purpose of financing economic activities related to agriculture, forestry, fishing or mining and maturing within 15 months". Taken together with Section 21 sub-section 3 (e), of the Banking Act, it is now possible to direct the flow of credit to specific sectors. That sub-section includes inland bills of exchange which are eligible for rediscounting at the Bank, as one of the forms in which liquid assets can be held. The amount of such bills that the commercial banks can hold are subject to regulation by the Bank. Thus, by specifying that half of the required liquid assets could be held in the form of inland bills, the flow of loans would therefore be diverted. Although this provision looks promising, the handicap is that there are no inland bills of exchange of any form in Sierra Leone. Until such bills are created the provision is of no practical importance.

Under Section 37 of the Bank of Sierra Leone (Amendment) Act of 1970, the Bank can prescribe the minimum reserve ratio and may specify different reserve ratios for different classes of deposits. Section 16 of the Banking Act, on the other hand, authorizes the Bank to examine the books of each commercial bank at least once a year "... in order to determine that the requirements of law have been complied with in the administration of its affairs". These two provisions are likely to be successful in limiting the flow of credit to certain areas, but there is nothing positive in them to ensure that credit will be made to flow to the areas in which they are needed most for the development of the economy.

The general conclusion on the powers of the Bank to control and direct the flow of resources from commercial banks is that during the period 1964-1970 the enabling provisions of the Banking Act of 1964 were of limited practical usefulness. At the same time, however, the provisions of the Banking Act of 1970 and the Bank of Sierra Leone (Amendment) Act of 1970 are likely to succeed in prohibiting loans for certain purposes, but there is nothing positive in these enactments to influence the flow of credit directly.

Contribution to economic development

Given that the financial structure is underdeveloped, the central bank must not only be concerned with the direction of financial flows but it must also be concerned with changing the structure, partly to mobilize more domestic resources and partly to fill the credit gaps. We now examine the enabling provisions of the Bank of Sierra Leone Act as well as the Bank's performance in this field.

Section 31 sub-section 1 (i) of the Bank of Sierra Leone Act authorizes the Bank to contribute to the share capital of institutions established for "... the purpose of facilitating the financing of economic development". Under sub-section 1 (j) of the same section the Bank can grant advances for "... fixed periods not exceeding three months against publicly issued Treasury bills of the government and maturing within ninety-three days". These sections are retained in the Amendment Act of 1970 (Section 29). But in addition, the new Act requires the Bank to establish and maintain a Development Credit Fund (Section 40). This fund is to be established by grants from the government and by transfers from the Bank's profit. The fund is to be used for making loans and advances to co-operative banks and other financial institutions established with the Bank's participation, and to facilitate the purchase, holding or sale of debentures, bonds and other debt obligations having a maturity of eight years and issued by co-operative banks

or financial institutions established with the Bank's assistance.

During the period of our study the Bank made use of Section 31 sub-section 1 (i) by providing part of the capital for the National Development Bank, the Bentworth Finance Company and the National Agricultural Development Authority. To the extent that these institutions facilitate economic development, the Bank as a shareholder would have contributed indirectly to economic development. The performances of these non-bank financial institutions are examined in Chapter V.

In practice, the effectiveness of the enabling provisions of the 1970 amendments is limited for the following reasons: The provision of Section 40 and Section 29, sub-section 1 (i) merely enables the Bank to give financial assistance through institutions. Only the National Co-operative Development Bank is concerned with agricultural credit so that the Bank's assistance would have to be channelled through this institution. The problem however is that this institution deals with only a very small section of the agricultural sector. The National Development Bank and Bentworth Finance Company which the Bank helped to establish do not deal with the problems of agriculture. Of equal importance is the fact that the resources that the Bank can put at the disposal of financial institutions out of the Development Credit Fund depend on the size of the Bank's profits and of the government's contribution. The amount that the government can make available to the fund depends on the budgetary performance. We have seen in Chapter II that the current budget has not generated a large enough surplus for the development budget. Thus, the amount that can be made available through the budget, if any, is not likely to be significant.

Another restriction on the effectiveness of the Bank is contained in the proviso to Section 29, sub-section 1 (i). This states that "... the total value of any such holdings of shares shall not at any time exceed twenty per cent of the paid-up capital and general reserve of the Bank".

This provision limiting the share participation of the Bank to 20 per cent is rather restrictive when compared to other countries. For example, the participation of the Central Bank of Nigeria can amount to 10 times the aggregate of its paid-up capital and general reserve. And in the case of the Central Bank of Sudan there are no limitations whatsoever.²¹ The paid-up capital and general reserve of the Bank at the end of 1976 were Le 4.5 million in the aggregate. Twenty per cent of this amount is approximately Le 0.9 million. Part of this amount is already committed to the National Development Bank, Bentworth Finance Company and the National Co-operative Development Bank — thus leaving very little to be employed to finance other productive investments.

The Bank of Sierra Leone's major contribution to the economic development of the country has been in the field of research and to some extent in the training of personnel. The research aspects of the Bank's activities assume importance because the Central Statistical Office began operations only comparatively recently and, aside from the University, the Research Department of the Bank is the only other institution which undertakes a continuous programme of studies into various aspects of the Sierra Leone economy. The statistics assembled by the Bank, as well as the results of investigations, are primarily made available to the government, but some of these are also made available to the public through the Bank's publications. In addition, the Bank has commissioned special studies by experts both from within and outside the country. Four studies of particular importance include the Moinuddin study on agricultural credit;²² the study of the Glasgow University team which examined aspects of the Bank's research ac-

²¹ Bank of Sudan Act of 1962 (Section 57A).

²² This study will be discussed in Chapter V.

tivities;²³ the Killick study on the Balance of Payments of the Mining Sector;²⁴ and the Cox-George study on Entrepreneurship.²⁵ The first three of these studies were by foreign experts while the fourth is from the University of Sierra Leone.

Arising out of the Bank's research activities was the realization that it was necessary for the Bank itself to be more actively involved in the provision of credit to the agricultural sector. As the non-availability of acceptable securities has been one of the factors inhibiting the flow of credit from institutional sources to the sector the Bank has attempted to deal with this problem through its Credit Guarantee Scheme. Under the Scheme which was launched on the 1st January 1974, the Bank guarantees loans by commercial banks and the National Development Bank to individuals and establishments engaged in agriculture, animal husbandry, fishing, transport, trade and manufacturing. The extent of the guarantee cover is two-thirds of the amount in default in the guaranteed account or the guarantee amount, whichever is lower, subject to a ceiling of between Le 5,000 and Le 40,000 depending on the type of activity to be assisted. The period of the guarantee ranges between three months and seven years. Up to the end of December 1974 a total

²³ The Glasgow University team consisted of Dr. C. V. Brown, Mrs. S. Thorne and Mr. J.T. Hughes. They visited the Bank in the summers of 1965 and 1966. See C. V. Brown, *Measures for Increasing Credit to Sierra Leonean Enterprise: A Report Prepared for the Bank of Sierra Leone*, Freetown, August 1965.

²⁴ See Tony Killick and R.W. During, "The Balance of Payments Effects of Sierra Leone's Mining Sector", *Economic Review of the Bank of Sierra Leone*, No.2, September 1967; "A Statistical Approach to the Balance of Payments of a Low Income Country", *Journal of Development Studies*, No. 4, July 1968.

²⁵ Professor Cox-George was chairman of a working party appointed by the Governor of the Bank of Sierra Leone to report on "Capital Availability and Sierra Leonean Entrepreneurship". See N. A. Cox-George (Chairman), *Report of the Working Party on Capital Availability and Sierra Leonean Entrepreneurship: A Report Prepared for the Bank of Sierra Leone*, Freetown, Bank of Sierra Leone, 1972.

of 186 applications had been received since the inception amounting to Le 691,000. Of this, 152 amounting to Le 514,000 were approved and guaranteed, 3 amounting to Le 9,820 were withdrawn, 26 amounting to Le 166,800 were still under investigation; 5 guarantees totalling Le 3,651.50 expired during the period and were cancelled, leaving 147 guarantees amounting to some Le 510,000.

Table 11 shows that of the 152 guarantees issued by the end of December 1974, 134 amounting to over Le 408,000 (or 79.9 per cent) were in favour of trading concerns, while industry had 7 amounting to Le 76,000 (or 15.1 per cent), agriculture had 7 amounting to Le 20,700 (or 4 per cent) and transport/servicing a negligible share of the total.

TABLE 11

CREDIT GUARANTEE SCHEME: ANALYSIS BY SECTOR

Activity	Number	Amount	Percentage of total amount
Agriculture	7	20,700.00	4.0
Trade	134	408,190.65	79.9
Industry	7	76,000.00	15.1
Transport	2	7,000.00	1.0
Servicing	2	2,000.00	neg.
TOTAL	152	513,890.65	100.0

Source: Bank of Sierra Leone, *Annual Report*, 1976

The high proportion of credit going to the trade sector could be attributed to its relatively high turnover of business.

Limitations imposed by the nature of the economy

Quite apart from the legal restrictions imposed on the Bank, limitations imposed by the nature of the economy affect the ability of the Bank to maintain at one and the same time the internal and external value of the money as required by the Banking Act.

The internal and external value of money are to a very large extent outside the control of the Bank. For example, changes in the internal value of the currency are likely to arise from four main sources: Increases in the prices of commodities; increases in export receipts resulting in higher incomes for those connected with the export industries; capital inflows in the form of foreign private investment and official loans and grants; investment exceeding savings, with the difference being financed by the central bank. First we consider the relationship between money and prices.

As discussed in Chapter II foreign trade accounts for about 30 per cent of GDP. The implication of this is that prices in Sierra Leone are affected to a considerable extent by prices abroad. In the case of staple foodstuffs, external prices also play an important role, since the main staple food, rice, is imported on a large scale. In the case of locally manufactured goods, not only is the volume of such products small, but also their import content is quite large due in part to the fact that machinery and raw materials required are to be imported. In addition, these industries have tended to equate the prices of their products with the prices of imported commodities they substitute. Thus most domestic price changes will originate from outside the economy.

As regards capital inflows, the foreign private investor hands over to the Bank foreign exchange and receives local money from it. The Bank is therefore obliged to make local money available for the foreign assets it receives. With respect to exports, exporters generally surrender their proceeds in exchange for local money. The internal value of money is affected when this money is utilized.

Here, then, the Bank plays a purely passive role. Only where the Bank provides credit to finance additional domestic expenditure can it exert some influence. But even here, the central bank in an underdeveloped country may not have an entirely free hand. If the government is determined to obtain additional credit from the central bank, it can do so by merely altering the central bank's legislation, and a number of governments have been known to do this.

The external value of the money depends on the behaviour of import and export prices. The external value falls if import prices rise faster than export prices. This is because a larger quantity of exports is now exchanged for the same quantity of imports. Sierra Leone is a small producer, both in relation to the total world output of primary produce and mineral products so that the country is not in a position to influence the price she receives for her exports. Besides, the quantity of the main agricultural produce that can be exported is subject to international quotas, so that output in excess of the agreed quota would have to be sold at reduced prices. In the case of diamonds, which account for about 60 per cent of total export receipts, we have shown in Chapter II that their marketing is rigidly controlled by an international monopsonist to prevent frequent price fluctuations. Hence additional production which is likely to result in the lowering of prices may be stock-piled rather than sold. Thus, although the price elasticity of exports supply is low, significant expansion in output at a changed price is not likely with the present composition of exports and under the present marketing arrangements.

In the case of imports, the country depends on external sources not only for capital equipments and raw materials, but also for a wide range of manufactured goods as well as foodstuffs. But Sierra Leone is a small importer in relation to total world exports and in relation to the exports of countries such as the United States, the United Kingdom and Japan. At the same time, local industries and agriculture are not likely to offer substitutes whenever import

prices increases, because of the absence of other co-operating factors such as entrepreneurs and capital. Besides, the nature of the commodities exported and the size of the market limit the extent to which commodities now exported could be processed for the domestic market. For example, only a tiny fraction of diamond output can be sold locally. The country's requirements for steel, in relation to the cost of establishing a steel mill and keeping it fully operational, is such that exports of iron ore will continue. Given the climatic conditions, only small quantities of cocoa and coffee would be consumed locally. In this situation, Sierra Leone's demand for imports is not only very low, but also changes in the prices of imports are not likely to lead to a significant substitution of local production. And although the central bank can give advice on the exchange rate policy, its recommendations would take into account the price elasticities of imports and exports. We can therefore conclude that the Bank's influence on the value of money in Sierra Leone is very limited indeed.

Further, the nature of the economy also limits the scope for the use of the traditional instruments of monetary policy, such as the bank rate and open market operations.²⁶ This can be seen from an analysis of the money supply determination.

According to Brunner-Meltzer,²⁷ the money supply is derived as the product of the monetary multiplier (n) and the monetary base. That is,

$$M_1 = nB$$

²⁶ These instruments are provided for in Sections 31 and 33 of the Bank of Sierra Leone Act.

²⁷ Karl Brunner and Allan Meltzer, *An Alternative Approach to the Monetary Mechanism*, Washington, D.C., U. S. Government Printing Office, 1964. Also by the same authors, "Some Further Investigations of the Demand and Supply Functions of Money", *Journal of Finance*, May 1964, pp. 240-283, and Allan Meltzer, "The Behaviour of the French Money Supply, 1938-1954", *Journal of Political Economy*, June 1959, pp. 275-291.

Thus, to describe and explain the behaviour of the money supply, it is necessary to analyse the factors that determine the multiplier process and the factors that influence the monetary base. The monetary multiplier is determined by five ratios, which are the ratio of currency in circulation to non-bank public demand deposits (k), the ratio of non-bank public's holdings of savings and time deposits to demand deposits (t), the ratio of reserves to liquid assets of commercial banks (b), the ratio of reserves held by commercial banks to total deposits (r), and the ratio of government deposits at commercial banks to demand deposits (g). These ratios describe the behaviour of commercial banks for reserves and borrowing, the public's demand for currency and savings and time deposits.

The monetary base is made up of high-powered money, that is, currency in circulation, currency holdings of commercial banks, deposits of commercial banks and the private sector with the central bank. In an attempt to adjust to the quantity of high-powered money commercial banks and the non-bank public will shift demand between currency, financial assets and real assets. The process of portfolio adjustment will lead to a change in interest rates and prices of real assets, and to a change in the money supply. And in the case of the monetary base, any of its increases or decreases must affect one of the competing uses.²⁸

²⁸ The analysis of Friedman-Schwartz is similar to that of Brunner-Meltzer. They use an identity in which the ex-post rate of change of the money supply (currency in circulation plus total deposits, M_2) is allocated to three main determinants, high-powered money (H), the reserve ratio of commercial banks (D/R), and the deposits to currency ratio (D/C).

H reflects the behaviour of the monetary authority, D/R gives the reaction of the commercial banks, and D/C the attitude of the public. Like Brunner-Meltzer they argue that the ratios are influenced by a number of factors and reflect the preference for various financial and non-financial assets. Like Brunner-Meltzer, the money supply is determined jointly by the two ratios and the monetary base. See Milton Friedman and Anna Schwartz, *A Monetary History of the United States, 1867-1960*, Princeton, University Press, 1963, Appendix B.

In the analysis that follows, the objective is not to estimate the money supply, but rather to examine the process by which the money supply is determined so as to indicate the influence of the central bank.

The explanation of the ratios which determine the monetary multiplier is as follows:

- a is the ratio of private sector deposits with the central bank to demand deposits;
- b is the ratio of reserves to liquid assets of commercial banks;
- c is the ratio of currency in circulation to money supply;
- g is the ratio of government deposits with the commercial banks to banks' demand deposits;
- r is the ratio of liquid assets to deposit liabilities of commercial banks;
- t is the ratio of savings and time deposits to total deposits.

The monetary data on which our calculations are based are given in Table 12. Table 13 shows the ratios obtained for each of the variables in the monetary multiplier. The results of the analysis are shown in Table 14.

From Table 15 it can be seen that the impact of the a , e , g , and t ratios has been relatively insignificant in explaining changes in the monetary multiplier. The r ratio had a significant impact on the monetary multiplier in 1963/64 and in 1965/66. The former was due to the fact that the liquidity ratio was first stipulated in 1964, while the latter is explained by the higher liquidity requirements which came into operation in November 1966. With the exception of those two years, the impact of the r ratio has not been large. But changes in the b ratio have been significant. We argue in Chapter IV that a switch has taken place in the portfolio pref-

TABLE 12

MONETARY DATA
(million Le)

Items	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Money supply (M_s)	25.66	27.83	28.96	30.86	30.89	38.10	44.40	42.56	41.85	56.02	70.46	84.16	90.07	111.01
Monetary base ($B_s = Z_s + D_s$)	14.63	16.56	18.02	19.32	17.70	21.35	25.23	22.65	24.64	28.43	35.11	39.42	42.67	49.59
Currency in circulation (Z_s)	12.92	13.42	14.19	14.48	14.36	17.85	20.22	18.86	20.94	24.65	29.72	31.40	36.54	40.78
Cash reserves of commercial banks (R_s)	1.71	2.78	3.20	4.69	2.98	3.21	4.35	3.41	3.38	2.92	4.04	6.21	4.05	7.82
Private sector demand deposits with the central bank (D_p)	—	0.36	0.63	0.15	0.36	0.29	0.66	0.38	0.32	8.86	1.35	1.81	2.08	0.99
Deposit component of the money supply ($D_s = D_p + QM_s$)	12.74	14.41	14.77	16.38	16.53	20.25	24.18	23.69	26.91	31.36	40.74	52.77	53.52	70.23
Demand deposits (D_d)	7.26	7.48	6.91	7.44	7.43	8.67	10.17	9.35	11.35	13.77	17.75	23.08	22.20	30.40
Savings and time deposits (QM_s)	5.48	6.93	7.86	8.94	9.10	11.58	14.01	14.34	15.55	17.60	22.99	29.69	31.32	39.83
Total liquid assets of commercial banks (L_s)	1.88	4.12	4.02	6.24	6.03	9.29	8.80	8.69	9.87	11.04	14.42	22.14	23.24	39.18
Total deposits with commercial banks ($D_s = D_p + D_d$)	12.74	14.85	14.58	16.74	16.88	20.56	24.26	23.70	26.83	30.78	39.72	51.45	51.93	69.82
Private sector demand deposits with commercial banks ($D_p + D_d$)	7.26	7.12	6.28	7.29	7.07	8.38	9.51	8.97	11.03	12.91	16.40	21.27	20.12	29.41
Government demand deposits with commercial banks (D_g)	—	0.80	0.44	0.50	0.71	0.60	0.74	0.39	0.24	0.28	0.33	0.49	0.49	0.58

Source: Adapted from data appeared in *Economic Review of the Bank of Sierra Leone*, Nos. 3 and 4, July-December 1975, Tables 5 and 6 and Nos. 1 and 2, January-June 1977, Tables 1-6.

TABLE 13

MONETARY RATIOS

Items	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Ratio of private sector deposits with the central bank to demand deposit $\frac{D_p}{D_d}$ (a)	—	0.0481	0.0912	0.0202	0.0484	0.0334	0.0649	0.0435	0.0282	0.0625	0.0761	0.0784	0.0937	0.0326
Ratio of reserves to liquid assets of commercial banks $\frac{R_t}{L_t}$ (b)	0.9096	0.6699	0.7960	0.7171	0.4942	0.3455	0.4943	0.3924	0.3425	0.2645	0.2802	0.2805	0.1743	0.1996
Ratio of currency in circulation to money supply $\frac{Z_t}{M_2}$ (c)	0.5035	0.4822	0.4900	0.4692	0.4696	0.4685	0.4554	0.4431	0.4376	0.4400	0.4218	0.4068	0.4057	0.3675
Ratio of government deposits with commercial banks to banks' demand deposits $\frac{D_g}{(D_d - D_p)}$ (g)	—	0.1124	0.0701	0.0699	0.1004	0.0716	0.0778	0.0435	0.0218	0.0217	0.0201	0.0230	0.0244	0.0197
Ratio of liquid assets to deposit liabilities of commercial banks $\frac{L_t}{(D_t + D_g - D_p)}$ (r)	0.1476	0.2795	0.2757	0.3907	0.3572	0.4518	0.3627	0.3667	0.3679	0.3587	0.3630	0.4303	0.4475	0.5612
Ratio of savings and time deposits to total deposits of commercial banks $\frac{Q/M_t}{D_t}$ (t)	0.4301	0.4809	0.5332	0.5485	0.5505	0.5718	0.5794	0.6053	0.5779	0.5612	0.5643	0.5626	0.5852	0.5671

Source: Ratios calculated from data in Table 12.

TABLE 14

ANALYSIS OF CHANGES IN THE MONEY SUPPLY: THE IMPACT OF THE PRINCIPAL VARIABLES
(million Le)

Items	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76
CHANGES IN M_2 DUE TO CHANGES IN THE MONETARY MULTIPLIER													
(n_1)	-1.22	-1.32	-0.19	2.62	0.04	-0.62	2.70	1.57	0.78	1.28	5.05	5.57	15.32
The impact of the c ratio	0.78	-0.28	0.72	0.23	-0.20	0.80	0.83	0.44	0.23	2.23	-2.97	6.92	9.39
" " b "	-0.99	-0.81	0.82	2.35	2.46	-2.30	1.66	0.98	1.70	-0.45	-0.01	5.21	-2.51
" " r "	-2.20	0.07	-2.20	0.49	-1.20	1.88	-0.07	-0.02	0.15	-0.10	-1.42	-0.33	-4.01
" " t "	0.07	0.10	0.01	0.01	0.03	0.02	0.04	0.04	0.06	0.02	0.01	0.22	-0.10
" " a "	-0.48	-0.37	0.59	-0.30	0.19	-0.45	0.36	0.30	0.84	-0.44	-0.07	-0.65	4.09
" " g "	-0.25	0.09	-	-0.07	0.05	-0.02	0.08	0.06	-	-	-0.01	-0.01	0.03
Residual	1.85	-0.12	-0.13	-0.09	-1.39	-0.55	-0.20	-0.23	-1.74	0.06	9.52	-5.79	8.43
CHANGES IN M_2 DUE TO CHANGES IN HIGH-POWERED MONEY													
(B_1)	3.39	2.45	2.09	-2.59	6.37	6.92	-4.54	3.72	7.39	13.16	8.65	0.34	5.62
Changes in central bank's net foreign assets	2.02	1.58	-1.46	-4.29	-9.67	7.85	1.75	0.77	6.18	5.65	-3.93	-18.11	1.45
Change in central bank's net credit to the government	-0.81	1.68	2.74	2.49	-5.95	-3.08	-2.69	4.23	-0.31	2.20	3.19	25.47	18.01
Other changes	2.18	-0.81	0.81	-0.79	2.65	2.15	-3.60	-1.28	1.52	5.31	9.39	-7.02	-13.84
CHANGES IN MONEY SUPPLY													
(M_2)	2.17	1.13	1.90	0.03	7.21	6.30	-1.84	5.29	8.17	14.44	13.70	5.91	20.94

Source: Calculation based on model and data from Tables 12 and 13.

For a discussion of the model on which the calculations are based see A.B. Taylor, "The Role of Financial Institutions in the Economic Development of Sierra Leone", unpublished Ph. D. Thesis, University of Glasgow, 1973, Chap. VIII.

TABLE 15

DIRECT DETERMINANTS OF THE MONEY SUPPLY
(thousand Le)

Years	DOMESTIC CREDIT				FOREIGN ASSETS			OTHER ASSETS (NET)	QUASI-MONEY SUPPLY	
	Government (net)*		Private sector	Total	Central bank	Commercial banks	Total			
	By the central bank	By commercial banks								
1964	2,235	—399	15,596	17,432	13,607	—5,352	8,255	2,138	6,925	20,900
1965	3,910	—41	15,352	19,221	15,184	—5,468	9,468	19	7,860	21,096
1966	6,648	1,187	15,643	23,478	13,730	—5,685	8,045	—663	8,942	21,918
1967	9,143	2,241	15,451	26,835	9,439	—4,963	4,476	—423	9,098	21,790
1968	3,189	5,454	16,121	24,764	19,110	—3,295	15,815	—2,473	11,580	26,526
1969	105	4,495	16,908	21,508	26,956	—2,019	24,937	—2,048	14,006	30,391
1970	—2,576	5,057	19,350	21,831	28,711	—1,539	27,172	—6,447	14,344	28,212
1971	1,645	6,311	19,858	27,814	29,489	—3,707	25,782	—5,749	15,552	32,295
1972	1,335	8,031	21,741	31,107	35,668	246	35,914	—11,004	17,597	38,420
1973	3,531	12,533	28,606	44,670	41,314	—206	41,108	—15,319	22,987	47,472
1974	6,720	15,743	42,799	65,262	37,381	—1,256	36,125	—17,226	29,320	54,747
1975	40,025	18,700	41,986	100,720	13,736	—95	13,641	—24,294	31,320	58,747
1976	76,503	30,780	44,569	151,852	—6,233	3,638	—2,597	—35,631	39,828	71,178

* Net of government deposits with the central bank and commercial banks as well as IMF Treasury Account.

Source: Adapted from *Economic Review of the Bank of Sierra Leone*, No. 4, March 1972, Table 4a.

erence of the commercial banks. That is, they have increased their holdings of government securities. The b ratio reflects this change. Undoubtedly, changes in high-powered money have had a greater impact in explaining fluctuations in the money supply than the monetary multiplier. External assets of the central bank and also credit to the government by the central bank have been the principal explanatory variables.

Table 15 shows the actual determinants of the monetary supply during the period of our study. From this table it can be seen that three factors largely explain changes in the money supply. These are foreign assets of the banking system, credit to the government, and savings and time deposits.

Gains in savings and time deposits as well as increases in government deposits have a contractionary effect on the money supply. This is because the acquisition of these deposits involves a shift from currency and demand deposits. Government deposits, for example, rise as a result of the payment of direct and indirect taxes and such payments are made in currency and by cheques. Growth in savings and time deposits, on the other hand, may be the result of the opening up of new accounts. With monetization and the spread of the banking habit people become aware of the advantages of holding their savings in the form of deposits with commercial banks. The higher level of savings and time deposits may also be the result of larger payments into existing accounts.

Increases in credit to the private sector, credit to the government, and foreign assets all result in an expansion of the money supply. A rise in foreign assets increases the money supply because, in return for these assets, the banking system credits the customers' current accounts with the amount of surrenders' currency. In the case of credit to the private sector, the customers' current accounts are credited with the amount of the loan and the money supply in-

creases because of the rise in demand deposits. Credit to the government leads to an expansion in the money supply when the government spends the funds acquired on goods and services. But both the private sector and the government may use a part of the loans received from the banking system on imported commodities. In such an event, foreign assets decline, the extent of the fall depending on the marginal propensity to import. The money supply, in this case, contracts as currency and deposits are given up in exchange for the required foreign assets.²⁹

Between 1964 and 1967, the level of the government budget deficits was the most important single factor influencing Sierra Leone's money supply. To finance the large budget deficits of those years, the government borrowed extensively from the banking system, and such credit to the government went up by about Le 10 million. The result of these borrowings, however, was a decline in foreign assets of the banking system from Le 8.3 million to Le 4.5 million. Between 1964 and 1965 non-bank foreign assets also dropped by Le 9.1 million, again connected with the financing of the budget deficits.

The years 1968 to 1970 were associated with gains in foreign assets, made possible by the favourable trade balance of the period together with capital inflows. Also, economies in government spending resulting from the implementation of the Stabilization Programme led to budget surpluses. As a result, net foreign assets of the banking system rose sharply from Le 4.5 million in 1967 to Le 27 million in 1970. The favourable trade position was also reflected in higher incomes, some of which were absorbed by savings and time deposits. Hence, quasi-money went up also.

²⁹ For a general discussion on the direct determinants of the money supply, see L.V. Chandler, *The Economics of Money and Banking*, New York, Harper & Row, Fourth Edition, 1964, Chap. 11.

The growth in foreign assets was even faster between 1970 and 1974 again due to favourable external trade occasioned by the commodity boom of that period. The years 1970 to 1974 also saw a substantial rise in savings and time deposits. Although the higher levels of savings and time deposits should imply a contraction in the money supply, the faster rate of acquisition of foreign assets and the expansion of credit to the private sector prevented such a decline. Between 1974 and 1976 the money supply rose sharply due to an upsurge in credit to the government. The consequence of the growth in credit to the government was a considerable decline in external reserves.

In summary, foreign trade and government expenditure, through their effects on foreign assets, quasi-money and domestic credit, have been the principal factors affecting the money supply.

Having shown that the traditional monetary variables explain only a relatively small part of changes in the money supply we now examine the extent to which the central bank can influence these variables. We have argued in Chapter II that local rates of interest did not determine investments during the 1960's because these investments were financed largely by capital inflows. This being the case, high interest rates need not deter investors. At the same time, exceptionally low local interest rates would not necessarily lead to large increases in the volume of lending. This is because the amount of loans depend, on the one hand, on the right type of securities being available, and on the other the business to be financed must be "proper business of banks".

Thus, merely lowering the rate of interest may not result in an increased demand for loans. Moreover, if local rates of interest are too high, the volume of lending should not change significantly. It is suggested in Chapter IV that commercial firms, for various reasons including the fact that they have been excluded by law from the marketing of produce, do not bring in their own funds to the same extent as they did in the 1940's and 1950's, and now

rely on bank finance. This being the case, a higher level of local interest rates may not result in a severe drop in the demand for credit from these firms. Another factor which makes local interest rates a relatively unimportant policy variable is the absence of a capital market. In the rudimentary securities market that now exists, the main customers are the central bank, commercial banks, and public corporations. Commercial banks will purchase government securities irrespective of the rate of interest, to fulfill their liquidity requirements. The central bank and public corporations, being government bodies, could be "persuaded" to buy these securities, while individuals buy them because there are few other outlets for investment funds. Consequently, the conclusion on the rate of interest is that its manipulation by the central bank may not produce the type of effects that is associated with the rate of interest in the economically more developed countries.

With respect to the currency ratio (c) we point out in Chapter IV that purchases of diamonds and agricultural produce are entirely cash transactions. Moreover, cheques are not widely used in the settlement of debts, and because of low incomes, most wages and salaries are also received in cash. Hence the central bank is not likely to have much influence on the currency component of the money supply. Regarding government deposits, these depend on the government, and as such the central bank cannot control the g ratio. Nor does the central bank have much influence on borrowings by the commercial banks since borrowings are financed from their own head offices. Even though the central bank can prohibit such borrowings, it has not done so nor does it seem likely to do so in view of the need for capital inflows. Only the liquidity ratio (r) is subjected to a direct control by the central bank. The impact of this variable accounted for about 11 per cent of the observed changes in the money supply during 1964-1970. On the whole, therefore,

the central bank's influence on the money supply process is very limited indeed.

In contrast, in an economically advanced country, the monetary authority can influence the monetary multiplier as well as the monetary base. This is so because the central bank of a developed economy is the lender of last resort. Also, there exist in such countries well integrated money and capital markets which are highly sensitive to changes in the rate of interest. Consequently, through its interest rate policy the central bank can influence all the variables in the monetary multiplier. In the case of the monetary base (in the United States) it has been shown by Keran and Babb that it is primarily composed of Federal Reserve holdings of government securities (adjusted for changes in reserve requirements).³⁰

This variable was found to account for 73.5 per cent of the monetary base in 1968 and is directly controllable by the Federal Reserve. But while other items of the monetary base are not directly controllable, the Federal Reserve can influence these variables through variations in its holdings of government securities.³¹

Quite apart from the inability of the Bank of Sierra Leone to control the money supply there are other limitations on the effectiveness of traditional monetary policy in Sierra Leone. To begin with, one of the assumptions of the quantity theory of money is

³⁰ See Michael W. Keran and Christopher T. Babb, "An Explanation of Federal Reserve Actions (1933-1968)", *Federal Reserve Bank of Saint Louis Review*, July 1968, pp. 7-12.

³¹ To determine the indirect effect of the Federal Reserve actions on the non-controllable items, Keran and Babb ran a regression of changes in the controllable sources on changes of the non-controlled sources. They used seasonally adjusted monthly data for the period January 1953 to December 1968. Their results are statistically significant at the 5 per cent level and the conclusion is that the Federal Reserve is able to take defensive action to offset the impact of the non-controllable items in the monetary base. *Ibid.*, p. 12.

that prices are, in the main, determined within the economy and reflect the marginal cost of production. In this situation, increasing the quantity of money without adding to the volume of goods and services would result in higher prices — hence the emphasis on controlling the money supply. But we have already argued that prices in Sierra Leone are to a large extent determined by the costs of production in world markets for imports and exports, and in consequence it is difficult to influence local prices to any significant extent through domestic policies.

Furthermore, in the traditional Keynesian income determination model, aggregate demand, and hence employment and output, can be stimulated by policy measures aimed at influencing investment on which it depends. In Sierra Leone, however, fluctuations in export receipts are the key variable and they depend on supply and demand conditions in world markets and on international agreements on quotas. In this situation attention has to be directed towards exports and/or the reduction of imports.

Also, because of the openness of the economy, the credit multiplier is quite small. In economically advanced countries the formula for deriving the credit multiplier is:³²

$$\frac{1}{\alpha + \beta} \Delta^c$$

Where α is the public's cash ratio
 β is the banks' cash ratio
 Δ^c is the change in the cash base

This would yield a multiplier of 3 and above for most economically advanced countries and above 5 for countries with a public cash

³² W. T. Newlyn, *The Theory of Money*, Oxford, University Press, 1971, Second Edition, p. 22.

ratio of 10 to 15 per cent. The formula for an open underdeveloped economy like that of Sierra Leone is given as:³³

$$\frac{1}{\alpha + \beta + \left[M_e + \frac{m(1 + M_e)}{s + t + m} \right]} \Delta^C$$

Where $\alpha + \beta$ are as defined above

M_e is the direct expenditure on imports

m is the propensity to import

s is the propensity to save

t is the propensity to pay taxes

This formulation takes account of the fact that since there are no capital goods industries, a large part of any expenditure must be on imports and this is quite apart from the marginal propensity to import out of a given income. We substitute r for m (r is the required liquidity ratio) as this is a legal requirement. Substituting the appropriate values for Sierra Leone we obtain:³⁴

$$\frac{1}{.65 + .30 + .40 + \frac{.32(.60)}{.14 + .32} + .32} \Delta^C = .72 \Delta^C$$

³³ W. T. Newlyn, *Money in an African Context*, Nairobi, University Press, 1967, p. 126.

³⁴ The estimates of the parameters were obtained as follows: (a) public's cash ratio — the geometric mean of the ratios of currency in circulation to money supply; (b) liquidity ratio of commercial banks — 30 per cent of total deposits, a legal requirement; (c) propensity to import; (d) propensity to save — the geometric mean of the ratios of gross savings to disposable income; (e) propensity to tax — the geometric mean of the ratios of tax revenue to GDP; (f) we assume that direct

The credit multiplier is thus less than 1 and it would be smaller still depending on the size of the direct expenditure on imports. The small credit multiplier is due to the high propensity to import together with large direct expenditure on imports. What is important about the credit multiplier is not so much its small value but the fact that the variability of the leakages make prediction difficult. In addition, the implication of a high marginal propensity to import is that any inflationary pressure will be reflected in leakages into imports and consequent loss of external reserves rather than in domestic price increases. These leakages into imports are facilitated by the fact that credit has always been available for the export/import trade. This means that less emphasis should be placed on the problems of inflation as evidenced by price increases and attention should be concentrated on the level and flow of external reserves.

For traditional monetary management to be effective in a country such as Sierra Leone, the monetary authority must control the balance of payments, as incomes and the liquidity of the economy are dependent on the balance of payments. As pointed out by Olankanpo,³⁵ the only controllable item of the balance of payments is imports. To the extent that policy measures are adopted to control imports, it should be possible to affect both the public's liquidity and the banking system.

An instrument which has been suggested for this purpose is "advanced deposits on imports",³⁶ which reduce the ability of the

expenditure on imports is 40 per cent. This assumption is based on the findings of investment patterns in the mining sector. See Tony Killick and R. W. During, "A Statistical Approach to the Balance of Payments of a Low Income Country", *op. cit.*, pp. 274-278.

³⁵ J. O. W. Olankanpo, "Monetary Management in Dependent Economies", *Economic Review*, 1961.

³⁶ J. Marshall, "Advanced Deposits on Imports", *International Monetary Fund Staff Papers*, 1958 and 1960.

public to spend while at the same time restricting imports. The advanced deposit requirement may take a number of forms. The importer may be required to deposit with the central bank the full cost of imports in local currency or in a specified foreign currency. He may also be required to deposit a stated percentage of the total cost of the imports. In order to make the required deposits, the importer may either have to use his own resources or borrow from the banking system or the non-bank public. If the commercial banks and other financial institutions are prohibited from making loans for this purpose, then the importer has to depend on his own resources. He may have to disinvest and, depending on the extent of the disinvestment, incomes and total demand may decline. If the deposits are obtained from the non-bank public, the effect would be the same, i.e., the liquidity of the public will be reduced. The liquidity of the commercial banks will also decline if importers meet the deposit requirement from their deposit balances. In effect, the instrument of advanced deposits on imports has the ability of temporarily absorbing liquidity.

Since it has been argued that commercial banks had excess liquidity during the 1960's, in those circumstances it is essential to prohibit bank loans for meeting the advanced deposit requirement. Another condition which is required for success is that the accumulated deposits must be completely frozen. This implies that if the deposits were originally made to the commercial banks they should be transferred to the central bank or a 100 per cent liquidity requirement imposed against such deposits. It also implies that the government must not be able to expand its expenditure.

Another policy instrument which can be utilized is the "manipulation" of government deposits. Let us assume that the government budgeted for a surplus during the period of export expansion. To stimulate investment during a recession such accumulated deposits can be transferred from the central bank to commercial banks which are ready to finance loans to sectors approved by the central

bank. Alternatively, if the government deposits were previously with a commercial bank, they can be transferred from that bank if its credit policy is not considered appropriate. Such manipulation of government deposits presupposes that these are quite large. This has not been the case in Sierra Leone, and therefore the scope for such a policy is limited.

A third policy instrument which can be utilized is "special deposits". During a period of export expansion and when the commercial banks are gaining deposits, the central bank through special deposits can prevent their increased liquidity being used as a basis for further credit expansion. These instruments if successfully used can increase the effectiveness of a counter-cyclical monetary policy.

However, while recognizing the desirability of short period stability, this is relatively less important when compared to the long run objective of the development of the monetary and financial system.

