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A. WENDELL A. McCLEAN

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Money and Banking in the East Caribbean Currency Area

This is an exploratory study which attempts to provide a perspective for Monetary Theory and Policy in Caribbean-type open dependent Economies.

An attempt is made to root the study as firmly as possible in empirical analysis. However, because of the absence of certain categories of data, many conclusions are arrived at through a blending of inductive and deductive methods.

The study identifies a number of features relevant to the formulation of a theory of dependent monetary economy. The proper focus for monetary policy in the Caribbean is identified, and proposals are made for monetary reform.

This is one of the series of studies that have been undertaken under the programme of Regional Monetary Studies.

INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH
UNIVERSITY OF THE WEST INDIES, JAMAICA

MONEY AND BANKING

IN THE EAST CARIBBEAN CURRENCY AREA

A. WENDELL A. McCLEAN

Institute of Social and Economic Research
University of the West Indies, Jamaica
1975

First published 1975 by

Institute of Social and Economic Research
University of the West Indies
Mona, Kingston 7, Jamaica

Printed in Jamaica
by The Herald Limited
43 East Street
Kingston, Jamaica

ACKNOWLEDGEMENTS

In the course of preparing this study I have incurred a number of debts to persons who have assisted me in one way or another. Professor C.Y. Thomas, my original supervisor, continued to read and comment on most of the material. Mr. Alister McIntyre, my eventual supervisor, made a number of useful suggestions long before this role devolved upon him. I have benefitted from private discussions with Dr. Alfred Francis, Mr. Frank Alleyne and Mr. Nugent Miller. Various parts of the study were presented at two staff seminars and two regional conferences on Monetary Policy, and I was able to benefit from the discussion on these occasions.

I am especially indebted to Mr. Bernard Codrington of the East Caribbean Currency Authority, who responded promptly and adequately to all my requests for information. Mrs. Desiree Tucker typed the original manuscript and Mrs. D. Gayle rendered valuable statistical assistance.

Finally, I would like to express my gratitude to my wife, Clothilda, who has functioned as my statistical assistant and mentor.

This is the fourth of a series of studies that have been undertaken under the programme of Regional Monetary Studies. This programme has been financed by the Central Banks of the Bahamas, Barbados, Guyana, Jamaica and Trinidad and Tobago, the Eastern Caribbean Currency Authority and the Monetary Authority of Belize. The programme is being undertaken on a collaborative basis by the Institute of Social and Economic Research, University of the West Indies and the Department of Economics, University of Guyana and is designed to carry out a wide variety of investigations on monetary and financial matters in the region.

In the best academic tradition, our sponsors, while participating in decisions about the planning of the programme, have not attempted to influence the conduct of the research or the conclusions drawn, which are those of the authors alone.

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INTRODUCTION

This study is an exploratory work which attempts to provide a perspective for monetary theory and policy in the East Caribbean Currency Area, which during the period covered by the study comprised Barbados, the Windward Islands (Grenada, St. Lucia, St. Vincent and Dominica) and the Leeward Islands (Antigua, St. Kitts, Nevis and Anguilla and Montserrat).[1] Such an exercise was considered to be worthwhile because of acknowledged gaps in our understanding of the monetary and financial situation in these territories.

The discussion in the seven chapters which constitute the study moves on two levels, normative and positive. Chapter One which deals with the East Caribbean Currency Authority is primarily concerned with an interpretation of the performance of this institution. In Chapter Two the orientation which should characterise Central Banking in the East Caribbean is discussed, and the related policy issues are identified.

In Chapters Three and Four there is a shift to positive analysis. An attempt is made to explain the operation of the commercial banking sector. The rationale for this exercise was provided by the view that monetary theory should be informed by knowledge of institutional arrangements obtaining in the economy to which it is meant to apply. Commercial banking is the single most important monetary institution in the East Caribbean Currency Area.

Chapter Five attempts to explore the concept of social efficiency as it applies to commercial banking, and to evaluate the performance of the commercial banks, from a social standpoint.

Chapters Six and Seven, in varying degrees, echo the analysis of the preceding chapters. The theoretical stance expressed or implied in Chapters One to Five is restated in Chapter Six, in a manner which indicates more precisely the relevance or irrelevance of orthodox monetary theory to the East Caribbean. In this chapter, orthodox monetary theory and policy are outlined in their main aspects. An attempt is then made to evaluate its relevance to the East Caribbean

Currency Area. In Chapter Seven, the major policy conclusions of the study are reiterated and supplemented by comments which did not fit neatly into the flow of discussion in the earlier chapters.

To say that this is an exploratory work is, perhaps, to suggest that this study is an excursion into a virgin field. To the extent that this study is considered as being specific to the East Caribbean Currency Area, this is generally true. However, to the extent that this study is perceived as having relevance for all dependent monetary economies, it can, in a sense, be regarded as building on the work of C.Y. Thomas, who has made a study of institutional arrangements in a dependent monetary economy [32]. However, the scope, orientation and methodology of this study differ significantly from the Thomas study. Thomas makes use of the method of the institutionalist school in describing the workings of the monetary system. This study, for the most part, attempts to move at a higher level of abstraction. Also, its preoccupation, on a positive level, is not primarily with the exposition of fact, but with the identification of features relevant to the formulation of a high level theory.

FOOTNOTE

[1] Barbados has since left the East Caribbean Currency Area, and has established its own Central Bank.

CHAPTER ONE

THE EAST CARIBBEAN CURRENCY AUTHORITY [1]

Historical Origins

The East Caribbean Currency Authority (ECCA) was established in 1965 in accordance with an agreement made between the Governments of Barbados, the Leeward Islands and the Windward Islands, with the exception of Grenada.[2] At the end of 1967, the Government of Grenada applied for and was subsequently granted membership in the East Caribbean Currency Area [Report 9, p. 8].

The establishment of the East Caribbean Currency Authority was occasioned by the dissolution of the British Caribbean Currency Board; and, therefore, a knowledge of the circumstances surrounding the establishment and dissolution of the latter is essential to an appreciation of the present structure and function of the ECCA.

At the beginning of this century, the principal medium of exchange in the West Indies and elsewhere in the British Colonial Empire, was United Kingdom coin. It soon became apparent that this arrangement was defective because of an absence of satisfactory arrangements for redeeming redundant coin and the United Kingdom's retention of the seignorage on the coin issued in the colonies. In regard to the former, G.L.M. Clauson [7, p. 4] writes:

> . . . the United Kingdom Government's transactions in silver coin were a one-way traffic only. The Government were prepared to deliver silver coins in the colonies in unlimited quantities for its face value, but legal tender of such coins in the United Kingdom was limited to forty shillings, and they did not hold themselves out to buy the coins back again at its face value or, indeed, at any value at all.

Clauson [7, p. 5] goes on to point out that the net effect of these two defects was that "Dependencies were buying large quantities of coins from the United Kingdom at a price much above its intrinsic value, and had no assurance of getting their money back if they wanted to".

It was partly in response to this situation that legislation was introduced authorising Colonial Governments to issue currency notes, with the obvious intention of economizing on the use of United Kingdom coins, thereby minimizing future issues of such coins. "In 1902 the first steps in this direction were taken in the West Indies with the issue of Government currency notes in the Turks and Caicos Islands. The second issue of similar notes was made by Trinidad in 1906" [Greaves 18, p. 64]. By 1941, experiments of currency issues by Colonial Governments in the British West Indies, and an agreement between Barbados, British Guiana and Trinidad and Tobago, resulted in the currency arrangements which preceded the establishment of the British Caribbean Currency Board.

During the 1940s, throughout the region covered by this study, British coin and the Government currency notes of Trinidad and Tobago were legal tender. In addition, the Government of Barbados had their own issue of currency notes, and currency notes issued by the Government of British Guiana were also legal tender in Barbados. Bank notes issued by the British and Canadian commercial banks operating within the region circulated freely throughout the islands. These bank notes were issued under licence up to specified amounts.

In May 1946, a West Indian Currency Conference was held in Barbados. This Conference recommended "the establishment of a Regional Currency Board and the Unification of the Currency of the Eastern Group of the West Indies on the basis of the British West Indian dollar worth four shillings and two pence, sterling" [8, p. 21]. As a result of these recommendations the British Caribbean Currency Board was established and given the sole right to issue currency in Barbados, British Guiana, the Leeward Islands, the Windward Islands and Trinidad and Tobago. British Caribbean currency notes were first issued on 1 August 1951, and British Caribbean coins on 15 November 1955.

From the standpoint of monetary policy, the establishment of the British Caribbean Currency Board did not constitute any significant improvement upon the currency arrangements which existed in the region prior to 1951. The British Caribbean Currency Board, like the three Boards which it replaced, was a mere instrument of Colonial policy. Its function was that of a money-changer, issuing physical currency on demand in exchange for bank payments made in sterling, or redeeming it when called upon by payments of sterling for immediate delivery in London. The operations of the Board in this respect were automatic and were performed in accordance with the 1950 Currency Act.

The lack of discretionary power which characterised the Board's operations in regard to the issuing and redemption of currency was equally manifest when it came to portfolio management. The Board was legally required to maintain a reserve fund of not less than 100 per cent of the face value of its currency notes and coins in circulation. The Board's singular lack of discretion in the investment of this reserve fund was revealed by Article 4 of the First Schedule to the 1950 Currency Act which stated that:

> The Fund may be invested in sterling securities of or guaranteed by the Government of any part of the British Empire (except the participating Governments) or such other securities as with the approval of the Secretary of State, may be selected by the Crown Agents:
>
> Provided that a proportion of the Fund shall be held in London in liquid form and such proportion may be determined and varied from time to time with the approval of the Secretary of State by the Board.

The preamble to the agreement which constitutes the First Schedule of the 1950 Currency Act alludes to the desirability of establishing "a Board of Commissioners to provide for and control the supply of currency to the territories administered by the Governments participating in this agreement". However, on no meaningful interpretation of the word 'control' can it be said that the Board was empowered to control the supply of currency. The power to control the supply of currency is suggestive of a position of dominance in the monetary system. But the dominant institution under the Currency Board system was commercial banking. The British Caribbean Currency Board was a passive institution which was activated at the instance of commercial banks operating within the region. It possessed no discretionary powers which would have enabled it to influence commercial banking activity. Consequently, from the point of view of dynamic analysis, the operation of the Board was not a variable influencing the supply of currency, but rather an institutional parameter of the most inflexible kind.

After Trinidad and Tobago and Guyana obtained their political independence from the United Kingdom, these two countries elected to withdraw from participation in the Board, and established their own central banking institutions. Their withdrawal led to the dissolution of the Board and the establishment of the East Caribbean Currency Authority.

In terms of its formal-legal structure, the East Caribbean Currency Authority is a slightly modified Currency Board, and still retains a strong colonial bias. However, the revolution of expectations which led Guyana and Trinidad and Tobago to establish their own Central Banks was no less evident in Barbados, the Windward Islands and the Leeward Islands. Consequently, in the preamble to the East Caribbean Currency Agreement 1965, it is suggested that the ECCA was formed because of a desire "to establish a common currency and to establish an authority to issue and manage that currency, to safeguard its international value and to promote monetary stability and a sound financial structure in the territories of the participating Governments". As a result, the ECCA, though organized along lines consonant with the British Colonial Currency System, is expected to perform in a way befitting the aspirations of an independent people; and was conceived to function as nothing less than a Central Bank.

The ECCA's Performance

The East Caribbean Currency Authority made its first issue of currency on 6 October 1965. During its short period of existence the ECCA has experienced a considerable rate of growth in its financial resources. At the end of 1965 assets stood at $26,546,000. By the end of 1968 this amount had increased to $84,709,816; an increase of 219.1 per cent over December 1965. This increase is almost entirely accounted for by increases in the Authority's holding of external assets. In March 1966 this percentage rose to 90.1 and has seldom fallen below this level since. United Kingdom securities comprised virtually all of the ECCA's external assets.

At the end of 1965 the Authority's assets were matched on the other side of the balance sheet by an outstanding currency issue amounting to $26,171,000 and a loan from participating Governments of $375,000. Since then the liability structure of the ECCA has been diversified to an appreciable degree. In December 1965 notes in circulation represented 98.6 per cent of the total liabilities. By December 1968 this percentage had fallen to 50.7. The major growth elements in liabilities were bankers' balances and bankers' deposits. Bankers' balances represent the Authority's indebtedness to commercial banks and the Central Banks of Guyana, Jamaica and Trinidad and Tobago, for the redemption of the ECCA notes. Consequently, a change in this item represents a change in the Authority's liability structure, rather than a change in its liabilities. On the other hand, bankers' deposits represent Money at Call deposits from commercial banks and, therefore, an increase in this item represents an increase in the assets and liabilities of the ECCA. Consequently, bankers' deposits are not only a major growth element in liabilities, but are also mainly responsible for the rapid growth of assets. In December 1965 the ECCA held no bankers' deposits. By December 1968 bankers' deposits accounted for 43.4 per cent of the liabilities. This amount also exceeded the total liabilities of the ECCA as at 31 December 1965 by 38.4 per cent.

Apart from the issuing and redemption of currency, and the management of a portfolio of assets, the only other area in which the Authority has been involved in the financial sector of the East Caribbean economy is through the operation of a cheque clearing system for commercial banks operating in Barbados. Under this system the ECCA "maintains accounts in its books for each of the commercial banks and settlement can be made in sterling or in East Caribbean dollars whenever the net balance on any bank's accounts exceeds E.C.$25,000" [10, p. 7]. This system has been in operation only since 1 February 1969, and it is still being conducted on an experimental basis.

In assessing the ECCA's efficiency we must first remark on its limited involvement in financial arrangements within the region. However, before looking into the reasons why the ECCA has been so inactive, an attempt will be made to appraise the quality of its involvement in East Caribbean Currency Area's monetary and credit arrangements. Because of the very recent introduction of the cheque clearing system, no attempt will be made to appraise the perfor-

mance of the ECCA in this respect. The ECCA's role in the issue and redemption of currency is purely passive,[3] and so the only basis on which we can appraise its activity (as opposed to inactivity) is by an evaluation of the efficiency of its portfolio policy. In this regard, it should be noted that sound portfolio policy entails maximizing the return on investments consonant with tolerable levels of risk and minimum liquidity requirements. In the case of a central banking institution operating in an underdeveloped country or area, there is the added dimension of maintaining external assets at the lowest level consonant with balance of payments requirements. The latter index of efficiency may or may not conflict with the income maximizing criterion. However, in the event that there is conflict, the minimizing of external assets (or the maximizing of local assets) must be given priority.

This ought to be so because, characteristically, underdeveloped countries are capital scarce countries, and the central banking institution can assist in the development effort by releasing as much of the resources which it controls to persons and institutions within the domestic economy for investment purposes i.e., by keeping foreign lending (its holding of foreign assets) to a minimum.

In assessing the efficiency of the ECCA's portfolio policy we must therefore take into consideration (1) the level of foreign assets maintained; (2) the liquidity structure of these assets; and (3) the distribution of foreign assets according to country of origin.

In December 1965 the ECCA's external assets were equivalent to 92.2 per cent of its demand liabilities. Since then there has been a persistent increase in this ratio. In December 1968 external assets amounted to 101.1 per cent. When we consider that all external assets represent a drain on a country's financial resources; and that the rationale for holding foreign securities derives from the need to accommodate balance of payments deficits, it becomes evident that the ECCA has been maintaining excessive reserves. The Authority's maintaining foreign reserves in excess of 100 per cent could only make sense if there was so much as a theoretical possibility that persistent deficits in the balance of payments could lead to a situation where the total currency supply, along with the ECCA's other demand liabilities, could be wiped out. Such a possibility not only runs counter to every known theory of balance of payments adjustments, but is also repugnant to commonsense. Consequently, we can conclude that, in this respect, the ECCA's portfolio policy leaves much to be desired.

However, this is not to say that those officers who are responsible for administering the ECCA's portfolio stand incriminated of gross negligence. Although they cannot be exonerated entirely, much of the blame must be placed on the legal strictures imposed upon the ECCA,[4] as well as on the policy of the regional governments. In regard to the latter, governments have altogether made too little use of the Authority. Given the limited range and volume of local private securities, government must be the main recipient of loans if the ECCA is to repatriate any of its accumulated financial resources.

The liquidity structure of the ECCA's portfolio of foreign assets, like the desired level of foreign assets, is also dictated by balance of payments requirements. However, the optimal level of reserves must be based upon estimates of possible cyclical variations in the balance of payments position, while the liquidity requirement ought to be based on seasonal considerations. Because the return on securities with a longer term to maturity is normally greater than on short dated paper, it constitutes sound policy to keep liquid assets to the lowest level consonant with expected seasonal deficits in the balance of payments.

When the ECCA's portfolio policy is evaluated in accordance with the foregoing principles, considerable inefficiency in the management of the portfolio of foreign assets is revealed. The ECCA's liquidity position for the fiscal years ended March 1966-9 is shown in Table 1.1.

TABLE 1.1 ECCA'S LIQUID EXTERNAL ASSETS RATIOS: 1966-9

	1966	1967	1968	1969
Liquid External Assets as per cent of Total External Assets	71.3	57.8	53.4	79.3
Liquid External Assets as per cent of Total Assets	65.7	54.3	49.5	76.0
Liquid External Assets as per cent of Demand Liabilities	55.5	57.1	54.0	80.9

Source: ECCA [10].

Rows one and two in Table 1.1 give an indication of the low return which the ECCA has been receiving on the majority of its assets. The third row reveals that it was totally unnecessary for the ECCA to maintain such a high degree of liquidity. The ECCA's liquid foreign assets are almost entirely made up of current accounts and money at call in London, and U.K. Government Treasury Bills. Consequently, the ECCA's maintaining a liquid assets to demand deposits ratio of 80.9 per cent can be logically justified only if there was the reasonable possibility that the liabilities could be reduced by 80 per cent in a period of three months; and even this would only be true if we made the assumption that the ECCA was 100 per cent averse to taking risks. For any willingness to trade off risk against profits would suggest that the ECCA should balance expected capital losses from a given portfolio against the yield from its assets. The extreme nature of these assumptions suggests that the ECCA has been unnecessarily sacrificing income by maintaining excessive liquid foreign assets ratios.

Table 1.1 shows also that the ECCA's management of its reserve has deteriorated rapidly since March 1968. This conclusion is verified by an analysis of the composition of liquid foreign assets since March 1968. As mentioned above,the ECCA's external liquid assets are made up of current accounts and money at call in London, and U.K. Government Treasury Bills. Rationally the former category of assets should be held only to accommodate daily or weekly reductions (if and when these should occur) in demand liabilities. Table 1.2 shows current accounts and money at call in London as a percentage of total external assets, and demand liabilities since March 1969.

TABLE 1.2 ECCA CURRENT ACCOUNTS AND MONEY AT CALL AS PERCENTAGE OF (1) EXTERNAL ASSETS, AND (2) DEMAND LIABILITIES: MONTHLY, MARCH 1968-MARCH 1969

	(1) Current A/cs and Money at Call in London	(2) Total External Assets	(3) Col. (1) as % of Col. (2)	(4) ECCA's Demand Liabilities	(5) Col. (1) as % of Col. (4)
1968 March	950,498	32,484,260	2.9	34,691,978	2.7
April	1,330,211	34,161,263	3.9	35,555,277	3.7
May	1,068,515	35,329,385	3.0	35,660,877	3.0
June	1,487,634	40,865,865	3.6	40,463,625	3.7
July	1,403,875	49,264,197	2.8	50,330,277	2.8
August	15,663,294	65,604,118	23.9	63,435,977	23.9
September	16,151,620	66,465,295	24.3	65,653,777	24.5
October	16,552,403	66,080,141	25.0	65,992,327	24.5
November	33,565,813	83,505,046	40.2	83,950,577	40.0
December	33,211,901	76,862,815	43.2	79,838,277	41.6
1969 January	35,456,465	77,985,522	45.5	79,506,097	44.6
February	38,788,304	82,756,636	46.9	82,840,547	46.8
March	38,548,085	81,811,720	47.1	82,233,028	46.9

Source: ECCA [10].

Table 1.2 reveals that in the short space of a year the composition of the ECCA's external assets had changed from a position where the ECCA was earning at least the British Treasury Bill rate on some 90 per cent of its total foreign assets, to a position where over 47 per cent of its total assets were earning somewhat less than this rate.[5] In March 1968, 2.7 per cent of the ECCA's demand liabilities were matched by current accounts and money at call in London.

By March 1968 this percentage had climbed dramatically to 46.9 per cent. The logic of this policy can be subject to serious questioning. This is doubly true when it is realized that this increase in the ECCA's non-earning assets is paralleled by a similar increase in Bankers' Deposits, the only interest bearing component in the ECCA's liabilities. This situation is depicted in Table 1.3.

TABLE 1.3 ECCA: MONTHLY CHANGES IN (1) CURRENT ACCOUNTS AND MONEY AT CALL, AND (2) BANKERS' DEPOSITS; JUNE 1968 – MARCH 1969

Month		Change in Current Accounts and Money at Call in London	Change in Bankers' Deposits
1968	June	419,119	4,800,000
	July	83,759	9,600,000
	August	14,259,419	14,400,000
	September	488,326	No change
	October	400,783	No change
	November	17,013,410	16,972,000
	December	353,912	9,022,000
1969	January	2,244,564	2,600,000
	February	3,331,839	2,460,000
	March	240,219	3,115,000

Source: ECCA [10].

The ECCA's questionable handling of its portfolio of assets with respect to its liquidity structure has been compounded by its failure to establish any type of balance between asset yield and the risk of capital loss through devaluation of a foreign currency. It has been the Authority's expressed policy to maintain all of its external assets in the form of sterling securities; mainly U.K. Government securities [9, pp. 10-11]. It can be proved mathematically that diversification of a portfolio tends normally to reduce the risk and uncertainty attaching to any rate of return from that portfolio.[6] However, this point can also be appreciated heuristically by contemplating the fate of the man who had all his eggs in one basket, or that of the ECCA on the occasion of the 1967 devaluation of sterling, when it suffered a 14.3 per cent reduction in the value of its external assets.

If it is difficult to formulate a reasonable case for the policies which the ECCA has been pursuing in regard to (1) the liquidity, and (2) the spatial distribution of its foreign assets; it is futile to attempt to reconcile these two

strands of the ECCA's portfolio policy. As has been argued above, any attempt at a logical defence of the liquidity policy must be based on the assumption that the ECCA is totally averse to taking risk. On the other hand, the spatial distribution of foreign assets can only be rational if it is assumed that risk avoidance is not one of the objectives of the ECCA.

The ECCA's Inadequacy: A Suggested Interpretation

The ECCA's limited involvement in the monetary and financial affairs of the region has been mentioned in the preceding section. To date, the Authority has functioned almost exclusively as a money changer. Although the ECCA has been granted enlarged powers in terms of its present operation, there is little to distinguish it from the British Caribbean Currency Board, which it has in part replaced. In this section an explanation of this occurrence will be advanced.

The inability of the ECCA to move beyond the mere issuing and redemption of currency, and actively promote the ends for which it was established can, perhaps, be partly explained by the fact that it is acutely short of staff versed in the theory and techniques of monetary management as it applies to small, open, underdeveloped economies. Of greater significance, however, is the fact that the orthodox central banking powers with which the ECCA has been invested, are not operational in the financial environment of the East Caribbean Currency Area.

The general powers granted to the ECCA and the specific restriction imposed upon it are enumerated in Articles 19 and 20 of the Currency Agreement. The powers granted to the ECCA correspond to the powers which a Central Bank in a developed monetary economy would need to enable it to pursue the orthodox techniques of monetary control: bank rate policy and open market operations. The ECCA has the power to grant advances to, open accounts for, and accept deposits from commercial banks. It can also purchase and sell a specified list of securities.

The restrictions placed upon the ECCA have the effect of ensuring that it cannot deviate significantly, by way of acts of commission, from the established practices of orthodox central banking. The most significant of these restrictions are that the ECCA may not grant loans upon the security of any shares; draw or accept bills payable otherwise than on demand; grant advances to financial institutions other than banks.

Thus it is that, on the one hand, the Currency Agreement inhibits the ECCA from operating in any manner which does not conform to orthodox central banking techniques, while on the other, our financial environment makes the use of these techniques futile, if not impossible. Essential to the successful application of Bank Rate policy is a situation where commercial banks regard the Central Authority as lender of last resort. However, the commercial banks operating in the East Caribbean Areas are branches of foreign banks with resources far in excess of those at the command of the ECCA. At present these banks rely on their overseas head offices for emergency loans. To them, the rate

at which the ECCA is willing to rediscount Treasury Bills and other first class bills borders on the irrelevant.[7]

Open market operations seek to regulate economic activity by influencing the liquidity position of the commercial banks in such a way as to force or encourage bankers to adjust their portfolios, thereby altering the volume of credit in a way desired by the Central Authority. The rationale for open market operations derives from the theory that commercial banks seek to maintain cash and liquidity ratios which would establish a desired balance between making profit and taking risks. However, because of the peculiar circumstances of our dependent monetary economy, banks operating within the region find it unnecessary to maintain fixed cash or liquidity ratios. As a consequence, open market operations cannot influence the behaviour of commercial banks in the East Caribbean Currency Area by influencing their liquidity position. But the most obvious reason why open market operations cannot work in the East Caribbean derives from the fact that the area does not have a money market of any significance in which the ECCA can operate.

Given the present structure of the East Caribbean economy, it is pointless to conceive of the ECCA as a miniature Bank of England. To the extent that the ECCA possesses the ambition to conform to the orthodox model of a Central Bank, there is little hope of its developing into an institution capable of promoting "monetary stability and a sound financial structure". Moreover, irrespective of the desires of the officers of the ECCA, if it is equipped with traditional instruments only, it will certainly remain ineffectual. The orthodox techniques of monetary control were fashioned to meet the requirements of a particular type of economic environment. We in the Caribbean must seek to develop techniques which are suited to the social, economic and political realities of our situation. Indeed, we must apply our minds to the basic problems of defining in specific terms, the role of a Central Bank in a dependent economy.

FOOTNOTES

[1]This Chapter incorporates and expands on most of the contents of the paper [27].

[2]Cf. 1965 Currency Agreement.

[3]The comment made on the operation of the B.C.C.B., in this regard, applies with almost equal force to the ECCA.

[4]This point will be developed in greater detail below.

[5]It can be argued that in a disorderly market, short term loans can earn a higher rate than long term loans, and that under such conditions the ECCA could maximize its portfolio returns over a three or six month period by holding mainly liquid assets. However, in conceding this, one must point out that the maximizing problem facing the ECCA should relate to a much longer time horizon; and that it is difficult to find empirical justification for attributing a higher expected rate of return to Call Money over an extended period of time.

[6]The only exception to this rule occurs when there is perfect correlation between security returns. For a thorough presentation of the effects of diversification see Markowitz [26].

[7]Indeed, up to the time that this study was undertaken, commercial banks in the region had never availed themselves of the rediscounting facility.

CHAPTER TWO

CENTRAL BANKING IN THE EAST CARIBBEAN

In this Chapter an attempt will be made to define what ought to be the specific objectives of central banking policy in the East Caribbean Currency Area. In doing this it will be accepted that, ultimately, the role of the ECCA ought to be the maintenance of external and internal monetary stability and the promotion of 'a sound financial structure', then specific content will be given to these general objectives by relating them to economic conditions and political aspirations in the region.

In regard to economic conditions in the region, the most significant features are a low level of development, extreme openness and a dependent monetary system. The economic implications of these phenomena have been given detailed treatment by others.[1] For the purposes of this study, however, the significant characteristics deriving from these features are a high import coefficient and monetary and credit systems that are highly integrated with British and other North Atlantic systems.

Monetary Stability

In any economy the problems of maintaining internal monetary stability can be subdivided into: (a) the problem of maintaining confidence in the value of the currency; and (b) the problem of maintaining confidence in financial institutions. In a developed monetary economy the problem of maintaining internal monetary stability is essentially the problem of maintaining a stable price level. This is so because confidence in financial institutions can, by and large, be taken for granted.

However, in an open dependent economy such as the East Caribbean Currency Area, control of the price level is beyond the immediate competence of the Currency Authority. The high import coefficient which is a characteristic of the East Caribbean economy, acts as an automatic adjustment mechanism to

keep the price level more or less in line with the rest of the world. The degree to which the price level in the East Caribbean Currency Area can vary from the price level in the North Atlantic is a function of transport costs, the percentage mark-up of the commercial sector, the degree of protection afforded local industry, the elasticity of substitution between locally produced goods and imports, and the differences between local and North Atlantic consumption and production patterns. Thus, in the East Caribbean, any tendency towards rapid and persistent price increases must either be rooted in real causes or transmitted via monetary disturbances originating in the North Atlantic. Consequently, the East Caribbean Currency Authority is not well positioned to contribute to monetary stability by controlling the price level. The circumstances of the Currency Area dictate that locally generated forces, making for substantial price increases, must be brought under control by such instruments as a prices and incomes policy, rather than by monetary policy.

Nonetheless, the East Caribbean Currency Authority still has a major role to play in the maintenance of internal monetary stability. Unlike the situation in the North Atlantic, confidence in financial institutions cannot be taken for granted. The Currency Authority must, therefore, seek to operate in a manner which would minimize the possibility of the public losing confidence in any particular financial institution.

In regard to external stability, the problem is similar to that confronting developed countries.[2] The promotion of external stability involves the long term objective of maintaining balance between current account transactions and the net flow of long term capital. It also involves taking the teeth out of speculation against the currency.

Sound Financial Structure

Our view of what constitutes 'a sound financial structure' in an East Caribbean context must not only be derived from economic conditions in the region, but must also be consonant with the aims and aspirations of the region. In regard to the latter, this study proceeds on the assumption that economic development is the over-riding consideration.[2] The further assumption will be made that there is a commitment to the idea of regional integration as a strategy of development. Thus, on the basis of these assumptions, it is being postulated that the criteria by which the 'soundness' of our financial system must be judged should in some way relate to the efficiency with which the system mobilizes and allocates loanable funds on a regional basis, to those sectors of the economy that are deemed to be strategic to the development process.

Viewed in this light, the development of a sound financial structure involves the regulation of existing intermediaries and the development of such additional intermediaries as are necessary to provide for the efficient transmission of loanable funds from surplus spending units to deficit spending units. It also involves the financial integration of the region.

The foregoing leads to the conclusion that the East Caribbean Currency Authority should be pursuing policies oriented towards two separate but related goals. First, but not necessarily foremost, the ECCA should concern itself with financial reconstruction. It should be pursuing policies designed to reduce the degree to which the financial system is integrated with North Atlantic systems, whilst imparting a regional bias to local financial institutions. It should also seek to promote the development of such additional institutions as are necessary to cater fully to the present and future credit requirements of a developing region.

The ECCA's second area of concern should be the regulation of the allocation of loanable funds. It should seek to place itself in a position where it is able to exercise quantitative and qualitative control over the portfolio preferences of financial institutions.

However, far reaching changes in the powers and organizational structure of the ECCA must take place before it is equipped to function in the manner suggested.

Problems in the Development of Central Banking in the East Caribbean

On this view of the role of a central banking institution in the East Caribbean, there arise at least seven major problems which will have to be solved:

1. How can the ECCA contribute to the maintenance of confidence in financial institutions?
2. How can the ECCA equip itself so as to be able to ensure the external value of the currency?
3. How best can monetary dependence on North Atlantic economies be broken?
4. How can a regional bias be imparted to financial institutions in the area?
5. What new financial institutions should be encouraged?
6. How can the ECCA influence the portfolio preferences of banks and other financial institutions?
7. How can the ECCA determine what is an optimal allocation of financial resources?

Cutting across all of the foregoing is the more general problem of operating a multinational central banking institution in a context of uncoordinated national policies, and in a region characterized by different levels of development in the constituent territories. This section will be devoted to a brief discussion of these eight problems.

Confidence and Financial Institutions

The major threat to confidence in our financial institutions is posed by the possibility that, at times, an institution can experience difficulty in honouring its short term obligations. Sound portfolio management requires that financial institutions maintain some level of liquidity in their asset holdings which is consonant with their liability structure. However, unless an institution keeps all its assets in liquid form, there is some degree of probability that it will from time to time stand in need of emergency loans in order to meet its short term obligations. If there is no source from which financial institutions can obtain this kind of loan, the occasional failure of an institution must be expected. The ECCA should therefore assume the role of lender of last resort, not only to commercial banks, but to all other financial institutions operating in the area.

The problem outlined in the preceding paragraph is particularly severe in the case of institutions such as building societies. A building society is an institution which specializes in making long term loans. However, a significant amount of its liabilities are essentially short term. Building societies are able to perform the important function of transmuting short term loans into long term loans, because of the averaging benefit of the law of large numbers. Given the portfolio preferences of surplus spending units and the rate of saving in the economy, building societies can normally expect an inflow of new loans which will tend to offset, if not exceed the demands made on them for repayment of loans. Of course the analogue to this is that we can occasionally expect the inflow of new loans to fall short of demands for repayment. The frequency with, and degree to which this latter situation will occur will depend on the probability density functions of the two flow variables. A strong *a priori* case can be made in support of the view that in the East Caribbean, institutional and structural parameters will lead to a high degree of variability in these flows[3], and to the relatively high probability of a building society experiencing a liquidity crisis.[4]

At the moment the ECCA is prohibited by law from lending money to building societies. Should it prove desirable to encourage the growth of this type of financial institution in the region, the ECCA should be permitted to grant loans to them, in cases of emergency. To be able to do this, the ECCA should be empowered to rediscount mortgages, as well as to grant loans on the security of mortgage instruments.

External Stability

As mentioned above, the problem of maintaining external stability involves the maintenance of balance, over time, in the autonomous transactions on the current and capital accounts of the balance of payments, including speculative movements against the currency.

At the moment the ECCA is singularly ill equipped to stave off any threats to the external value of the currency. Article eleven of the 1965 Currency Agreement compels the ECCA to buy and sell sterling on demand 'for immediate delivery in London'. In addition to this, the ECCA has absolutely no say in the

administration of foreign exchange controls against non-sterling currencies.[5] Consequently, the ECCA is in no position to regulate trade and payments with the rest of the world.

As a minimum approach to the problem of external stability, the ECCA should be empowered to issue general directives to the Ministries of Finance in regard to the exercise of foreign exchange controls; and should also be relieved of its obligation to buy and sell sterling on demand. In regard to the latter, it must be pointed out that there is no logical or casual necessity for the establishment of a fixed parity with sterling to be accompanied by free convertibility into sterling. Indeed, from the point of view of maintaining balance in our trade and payments position with the rest of the world, including the rest of the sterling area, it is logically possible that fixed parity with sterling can be inconsistent with free convertibility into sterling. In fact, to the extent that there is substitutability between transactions (both on current and capital account) with the sterling area and transactions with the non-sterling area, free convertibility arrangements with sterling make nonsense of the imposition of exchange controls against the non-sterling area, and amount to little more than discrimination in favour of British goods and British financial instruments.

In regard to the imposition of restrictions on convertibility, it is worthwhile to distinguish between restrictions on current account transactions and restrictions on the movement of loanable funds. The regulation of current accounts transactions usually involves interference in the pattern of trade and production. The greatest care must, therefore, be taken to ensure that restrictions on current accounts transactions are consistent with national development policy.

The influence of international capital flows on trade and production is more diffused and consequently less disruptive. In order to be in a position to regulate these flows the ECCA should be empowered to fix local asset ratios for commercial banks and other financial institutions.

So far we have been concerned with instability deriving from imbalance in our trade and payments. However, there is another source of instability which derives from our operating a sterling exchange standard. As long as we must fix the par value of our currency in terms of sterling, the external value of our currency can be no more stable than the value of sterling. Legislation should be introduced to empower the ECCA to alter the parity with sterling in the event of a devaluation or revaluation of that currency.

Structural Reorientation

The breaking of monetary dependence on the North Atlantic and the imparting of a regional bias to our financial institutions can be regarded as two aspects of a more general problem; the problem of reorienting our financial structures. Essentially, it involves the breaking of the branch firm relationship between commercial banks and insurance companies in the region and their

overseas head offices. Decision-making units such as Barclays Bank D.C.O. will have to be replaced by regional organizations which are given the highest possible degree of autonomy in so far as relations with the North Atlantic are concerned.

However, the question of decision-making is only one aspect of dependence. Our present monetary dependence derives not only from the fact that our major financial institutions are foreign-owned and controlled, but also from the fact that these institutions are unable to obtain securities of a wide enough variety to enable them to operate a balanced portfolio on the basis of local financial assets.[6] Simultaneously with the attempt at structural reorientation, the ECCA must, therefore, take steps to increase the variety and volume of available local securities.

New Financial Institutions

The question of what new financial institutions should be encouraged is essentially an empirical problem. This question can only be answered in the light of careful research into the credit requirements of the region, as well as the potential sources of loanable funds. Credit requirements will have to be estimated not only on the basis of demands currently made on the system, but also on the basis of projected growth rates in the various sectors of the economy. The type and volume of loanable funds that can be obtained from primary sources can be established through a careful examination of income and expenditure patterns within the region.

It is therefore evident that it is beyond the scope of this study to make a definitive statement concerning the type of financial institutions that are required in the East Caribbean. However, there is adequate theoretical justification for holding the view that the region stands in need of an organized market for equities. At present, equities have a low priority ranking in the portfolio preferences of the majority of surplus spending units within the region. This low priority ranking is in part a reflection of the fact that local equities are not very liquid and consequently are unable to compete with money, bank deposits and treasury bills as the temporary abode of purchasing power.

In places such as London and New York, equities have a relatively high degree of liquidity because of the high level of activity on the stock market. Because of the small size of the East Caribbean, it is unlikely that any market in the region will ever develop the volume of activity which is necessary to impart a high degree of liquidity to equities. Unless some other device is used to impart liquidity to equities, they will continue to have limited attraction for savers. This in turn will act as a serious brake on the development of a market for equities, on the mobilization of resources for development, and on the degree of popular participation in economic activity. However, it is highly probable that these problems would be obviated if the ECCA engaged in the buying and selling of equities, and undertook to make loans against the security of equities.[7]

It should be noted, however, that the low level of demand for equities is only one of the factors inhibiting the growth of a stock market. There is also a severe limitation on the supply side. At the moment, most of the firms operating in the region are either family firms or international concerns with little or no interest in the issuing of shares on the local market. At the same time with attempts at stimulating demand for equities, attempts should be made to augment the supply of this kind of paper by encouraging the formation of more public companies.

Credit Control

Techniques of credit control can be classified as direct and indirect. Two examples of direct control are moral suasion and the imposition of legal reserve ratios. In both cases a direct attempt is made to influence the institution's portfolio policy. The institution is persuaded or coerced into acting in the manner desired by the Central Authority, irrespective of the private profitability of the act.

Bank rate policy and open market operations are examples of indirect controls. Indirect policies attempt to alter the data upon which financial institutions base their calculations in regard to the optimal distribution of their portfolios. Indirect controls derive their validity from the postulate that financial institutions behave rationally in the pursuit of a clearly defined objective. In the case of commercial banks, in developed countries, this objective is usually taken to be the maximizing of expected profits. Indirect controls, therefore, involve the dangling of carrots or the setting of snares to induce financial institutions to re-adjust their portfolios in a way desired by the Central Authority.

It should by now be obvious that indirect controls require a higher degree of expertise on the part of central bankers than direct controls. The central banker must be clear on how a wide range of economic variables can influence the portfolio preference of financial institutions. He must also be sure of his ability to manipulate these variables with great precision. A necessary prerequisite for the use of indirect controls is accurate and comprehensive information on most aspects of economic activity.

In the absence of adequate information and expertise, direct controls will probably prove superior to indirect controls.[8] At the moment the ECCA is empowered to collect information from commercial banks only. It is also acutely short of staff. Indeed, unless the ECCA is granted the power to collect information from all types of financial intermediaries, and unless it takes steps to acquire additional qualified staff, it would be dangerous for it to attempt to exercise control of any nature over financial institutions.

Allocation of Financial Resources

There are two aspects of the problem of efficiently allocating a country's financial resources. First, there is the question of the holding of foreign reserves, and then there is the question of allocating available loanable funds to the various sectors of the economy.

The 1965 Currency Act stipulates that the East Caribbean Currency Authority:

> shall at all times maintain a reserve of external assets consisting of gold, sterling or currencies convertible into gold or sterling for an amount not less than seventy per cent of the value of its notes and coins in circulation and other demand liabilities . . . .[9]

The Act goes on to state that this minimum percentage may be reduced to 60 per cent if each of the participating Governments gives its written agreement. In practice, however, the ECCA has been maintaining an external assets ratio of somewhat over 100 per cent. In December 1968, the proportion of external assets demand liabilities was 101.1 per cent. As has been argued in the previous Chapter, this is an altogether unsatisfactory situation.

Strictly speaking, the rationale for holding foreign reserves should relate to the need for settling balance of payments deficits. The decision as to what constitutes an optimal level of foreign exchange should be based on an understanding of the determinants of the balance of payments. Moreover, the level of foreign reserves which the ECCA should maintain should be tied to its demand liabilities only if it has been indicated that the demand liabilities of the ECCA provide the best indicator of changes in our balance of payments position. In any event a 100 per cent external assets ratio is altogether too high. As Nevin [29 Ch. 1] points out,

> the maintenance of a 100 per cent foreign backing to a currency can be justified logically only on the assumption that the possibility exists that every single currency note outstanding might be presented to the issuing authority for conversion into some other currency.

The view has been expressed that high foreign reserves serve the purpose of maintaining foreign investors' confidence in the currency. In this connection, the question must be asked whether confidence is a variable directly correlated with the level of foreign reserves, or whether there is some critical minimum level of foreign reserves that is consonant with confidence. It will also be worth establishing whether the benefits derived from foreign investment can outweigh the costs involved in maintaining otherwise excessive foreign reserves.

However, concern with the problems mentioned in the preceding paragraph rests upon the assumption that we consider our holding of foreign reserves as one of the key variables which determine the volume of investment flowing into the region. This assumption is far from obvious and should only be accepted in the light of empirical evidence. On *a priori* grounds a much stronger case can be made ouf for the influence of political factors and real economic variables on the rate of foreign investment.

In its programme of research, the ECCA should give priority to the problem of determining what constitutes an adequate level of foreign reserves. However, whatever the optimal level of reserves will prove to be, one thing is certain: the present level is too high, and leads to a situation where we in the Caribbean are continually lending our money to Britain at relatively low, short term rates of

interest, and are at the same time borrowing from abroad at higher long term rates of interest.

So far the discussion has been about the quantitative aspect of the problem of foreign reserves. This problem also has a qualitative dimension. Apart from the problem of establishing the optimal level of foreign reserves, there is also the problem of attaining an optimal distribution of the portfolio of foreign assets. These two problems are not mutually exclusive, but it is methodologically advantageous to make a distinction between them for purposes of analysis.

The type of assets which comprise the ECCA portfolio should display a liquidity structure which harmonizes with the demand liabilities of the ECCA, and the behaviour pattern of persons and organizations who hold these claims against the ECCA. In addition to liquidity considerations, foreign assets must also be evaluated in accordance with yield and risk. Those responsible for administering the portfolio of the ECCA must establish a delicate balance between the yield on various types of assets and the risk of capital loss on these assets. The rational response to this problem will, in all probability, result in the ECCA's diversifying its assets, not only with respect to liquidity, but also with respect to country.

On 25 September 1968 the East Caribbean Currency Authority entered into an agreement with the United Kingdom Government, which requires the ECCA to hold all of its external reserves in sterling. Despite the fact that the ECCA was given a dollar guarantee on 90 per cent of its reserves held in sterling, it is safe to conclude that this agreement runs counter to sound portfolio management on the part of the ECCA.

The second aspect of the allocation problem, the decision as to how financial resources should be allocated to various sectors of the economy, is essentially a problem in economic planning and takes us somewhat beyond the exclusive domain of central banking. This decision would have to be taken in collaboration with those departments that are responsible for development planning. In fact these departments and the ECCA should collaborate in the drawing up of an annual monetary plan aimed at integrating monetary with general economic policy [Cf. Zolotas 37].

Problems of a Multinational Central Banking Institution

The problems discussed above are by no means peculiar to the East Caribbean Currency Authority. Indeed, the foregoing remarks could all apply in large measure to any of the Central Banks in the Commonwealth Caribbean. However, in the case of the ECCA, an added dimension is given to these problems by virtue of the multinational nature of this institution. Any discussion of the problems confronting the ECCA would be incomplete unless some mention is made of the problem of operating a multinational central banking institution in a context of uncoordinated national policies, and in a region characterised by different levels of development in the constituent territories. This problem will now be discussed briefly.

The problems posed by the multinational nature of the ECCA are all questions of management, which can be analytically separated into problems of portfolio management and problems of internal monetary and credit policy. In regard to the former, the problem of ascertaining what constitutes an adequate level of foreign reserves is aggravated by the varying levels of development and the absence of co-ordinated economic policies within the region. This study has not advanced a method for calculating an optimal level of foreign reserves. Nonetheless, it is safe to say that any attempt to calculate an optimal level of foreign reserves must revolve around an attempt to link reserve losses to economic aggregates such as National Income and the Stock of Money, as well as to the income and expenditure patterns of decision-making units. In attempting to calculate an optimal level of reserves for the ECCA, cognizance will have to be taken of the national differences mentioned above.

In regard to internal monetary and credit policy, economic and political reality dictates that there should be no single unified set of policies which apply without discrimination throughout the entire region. The region must be divided up into discrete policy areas. In the limiting case, there could be as many policy areas as there are separate territories. However, islands at a similar level of development, and pursuing a similar economic strategy can be grouped together.

Thus one can envisage the ECCA applying relatively sophisticated techniques of monetary control in Barbados, whilst at the same time, operating in Montserrat in the traditional Currency Board manner.[10] One can also envisage the application of one rate of rediscount in Barbados, and another rate in Antigua. In order to facilitate this approach to monetary and credit control, the ECCA's organisational structure should provide for separate Area Committees, each charged with the responsibility of administering a policy area.[11]

FOOTNOTES

[1]For a detailed discussion of monetary dependence, see C.Y. Thomas [32].

[2]It should, however, be noted that this similarity is only at the most proximate level. The disequilibrating influences on the Balance of Payments are not the same in the West Indies as in developed countries.

[3]Such a case would lean heavily on two assumptions: (1) that the East Caribbean is a mini economy; and (2) that the East Caribbean is undergoing structural and institutional change.

[4]The probability that a financial institution will experience a liquidity crisis depends on the distribution of reserve losses, as well as on the level of liquid reserves maintained by the institution. Building societies can, therefore, reduce their risk of failure by maintaining high cash reserves. However, this policy reduces their capacity to transform short-term credit into long term credit.

[5] Foreign exchange controls against non-sterling countries are exercised by the various Ministries of Finance within the region. Decisions in this regard are still made in conformity with Bank of England directives, rather than in accordance with local requirements.

[6]Another source of monetary dependence is free convertibility with sterling.

[7]The suggestion that Central Banks should hold equities is not a new one. Professor Kennedy [24] has made such a suggestion. However, Kennedy's case for the holding of equities was based upon income considerations, and was limited to the holding of foreign assets.

[8]This is not to suggest that the exercise of direct controls requires little information, and no expertise.

[9]Currency (No. 2) Act, 1965; Article 17.

[10]This possibility renders Barbados' recent decision to establish its own Central Banking institution at once unnecessary and unfortunate.

[11]This approach will undoubtedly engender problems of co-ordination and reconciliation. These and other aspects of multinational Central Banking will form part of a wider study of "The Economics of Financial Integration in the Commonwealth Caribbean", which is being undertaken by the author.

CHAPTER THREE

GROWTH OF COMMERCIAL BANKING

An analysis of activity in the commercial banking sector in the East Caribbean Currency Area since World War II reveals different patterns of expansion in Barbados, the Windward Islands and the Leeward Islands. Figure 1 depicts the growth of assets of commercial banks. In the case of Barbados, two phases of growth are identifiable, 1946-54 and 1956-68. In both of these periods, the rate of growth of commercial bank assets was similar. The average rate of growth during the period 1946-54 was 11 per cent, and in the period 1956-68 it was 10.6 per cent.[1] The sharp decline in the assets of commercial banks during the two year period 31 December 1954-56 (a decline of $816 million) can, perhaps, be explained in terms of the ravages of hurricane Janet which struck Barbados in September 1955.

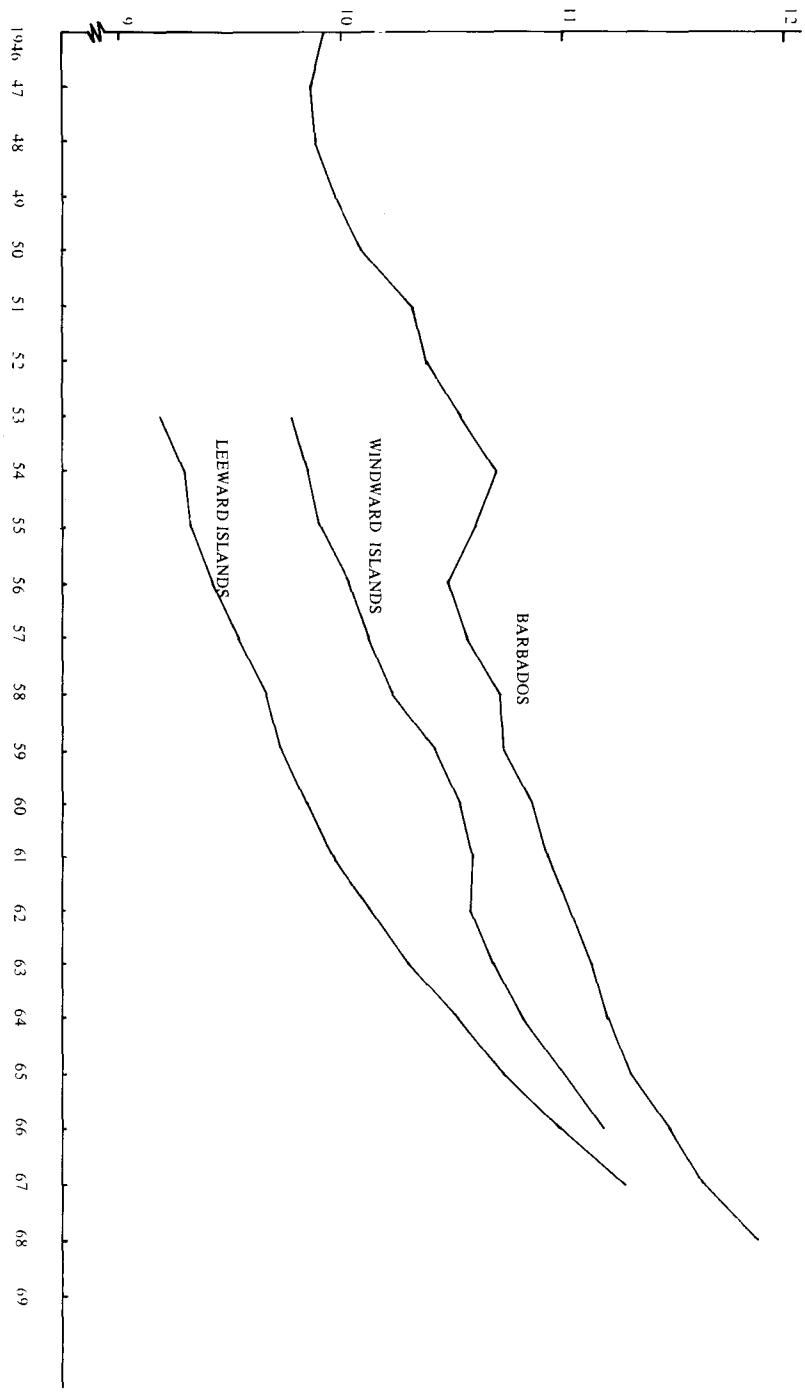
Data for the period 1946-52 are not available for the Windward Islands and the Leeward Islands. However, an analysis of the data for subsequent years reveals that in the Windward Islands, commercial bank assets have been growing consistently at an average rate of about 10.4 per cent. In the case of the Leeward Islands, two reasonably distinct phases of growth are discernible. During the first, which ended around 1959, commercial bank assets grew at a rate of 12.8 per cent. In the second phase, which started around 1962, the rate of growth increased to 18.7 per cent.[2]

The pattern of growth of commercial bank assets outlined above contrasts sharply with the postwar physical expansion of banking facilities. Table 3.1 shows the distribution of commercial bank offices in the East Caribbean Currency Area as at the end of 1945, 1959 and 1968. This table reveals that during the immediate postwar period, there was only a modest increase in the number of banking offices in the Currency Area. In 14 years the total number of new offices opened in the eight territories which now comprise the East Caribbean Currency Area, was 10. Three of these offices were opened in Barbados, four in

TABLE 3.1 DISTRIBUTION OF COMMERCIAL BANK OFFICES IN THE EAST CARIBBEAN CURRENCY AREA

Name of Bank	Location of Head Office	Year	Number of Bank Offices			
			Barbados	Windward Islands	Leeward Islands	ECCA
Barclays Bank D.C.O.	England	(1945)	1	4	3	8
		(1959)	3	8	6	17
		(1968)	9	11	7	27
Royal Bank of Canada	Canada	(1945)	1	2	4	7
		(1959)	1	2	4	7
		(1968)	4	4	4	12
Canadian Imperial Bank of Commerce	Canada	(1945)	1	–	–	1
		(1959)	1	–	–	1
		(1968)	4	2	1	7
Bank of Nova Scotia	Canada	(1945)	–	–	–	–
		(1959)	1	–	–	1
		(1968)	4	4	1	9
First National City Bank of America	U.S.A.	(1945)	–	–	–	–
		(1959)	–	–	–	–
		(1968)	1	–	–	1
Bank of America	U.S.A.	(1945)	–	–	–	–
		(1959)	–	–	–	–
		(1968)	–	–	2	2
Total Number of Offices		(1945)	3	6	7	16
		(1959)	6	10	10	26
		(1968)	22	21	15	58

Sources: Federal Statistical Office; *Financial Statistics*, No. 1 of 1960; Information supplied by Research Department of East Caribbean Currency Authority.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LEEWARD ISLANDS
WINDWARD ISLANDS
BARBADOS

the Windward Islands and three in the Leeward Islands. However, in the nine year period 1960-68 inclusive, Barbados and the Windward Islands experienced rapid expansion in banking facilities, whilst the rate of expansion remained modest in the case of the Leeward Islands. In Barbados, the number of banking offices increased dramatically during this period. In nine years the number of bank offices in Barbados increased by 16, from six to 22. The number of new offices opened in the Windward Islands and the Leeward Islands during the same period were 11 and five, respectively.

A comparison of the data depicted in Figure 1 and Table 3.1 reveals that there is little or no correlation between the rate of growth of commercial bank assets in the East Caribbean Currency Area, and the rate of expansion of physical banking facilities. However, such a comparison reveals that there is a high degree of association between the absolute level of commercial bank assets and the rate of expansion of physical facilities.

Sources and Causes of Growth

The liabilities of the commercial banks provide the analytical key to the growth in their assets. Normally, the size of a bank's portfolio of assets depends mainly on the amount of paid-up capital, the level of undistributed profits, and on its total deposit liabilities. Deposits are by far the most important of these three sources of growth. However, because commercial banks in the Currency Area are all branches of foreign banks, the assets and liabilities of local banks can be augmented by a transfer of funds from overseas head offices, to local banks. This type of expansion is largely illusory. True growth in the banking sector must rest upon the savings habits and portfolio decisions of local wealth-owning units, as manifested in the deposits which they hold with commercial banks. Consequently, the proximate reason for the growth in the assets of commercial banks is to be found in the growth of their deposit liabilities.

A comparison of the rates of growth of assets and deposits (Table 3.2) reveals that there was a high degree of similarity between these two growth rates in the case of Barbados and the Windward Islands. However, in the case of the Leeward Islands, the rate of growth of deposits has been significantly lower than the rate of growth of assets. The implication here is that, whilst the growth of the banking sector in Barbados and the Windward Islands has been rooted in the performance of these economies, and consequently display characteristics of permanence, the expansion in the Leewards has been induced to a significant degree by foreign borrowing.[3] It is, therefore, to be expected that there will be a decline in the present phenomenal rate of expansion in the assets of commercial banks operating in the Leeward Islands.

It has been argued above that the growth in deposits provides the basis for permanent growth in the commercial banking sector. It would, therefore, be instructive to investigate the relative importance of the various sources of commercial bank deposit liabilities. Available data do not classify commercial bank deposits in a way which would readily reveal these sources. However,

TABLE 3.2 AVERAGE GROWTH RATES OF COMMERCIAL BANKS' ASSETS AND DEPOSITS

Growth Rate of	BARBADOS		WINDWARD ISLANDS	LEEWARD ISLANDS	
	1946-54	1956-68	1953-66	1953-59	1962-68
	%		%	%	
Assets	11	10.6	10.4	12.8	18.7
Deposits	11.8	10.5	9.8	8.1	14.9

Sources: Same as Table 3.3

discussions with bank executives have confirmed the hypothesis that demand deposits are held mainly by businesses, while savings deposits and time deposits are held predominantly by households. Having regard to the foregoing hypothesis, an analysis of the changing composition of commercial bank deposits (Table 3.3) leads to the conclusion that the expansion of the commercial banking sector has, in large measure, been made possible, on the supply side, through the ability of the banks to attract an increasing amount of household savings. Throughout the Currency Area, demand deposits have been constituting a declining percentage of total deposits.

Theoretically, the growth in commercial bank deposits, and consequently the growth in commercial bank assets, could be the result of any combination of the following:- (1) an increase in savings within the Currency Area; (2) a net shift in the preferences of wealth owners towards the holding of bank deposits; (3) the intensification of financial intermediation. These three processes are not necessarily mutually exclusive, but it is useful analytically to make a distinction between them. Increased savings can be the result of an increase in income, an increase in the average propensity to save, or both. A shift in the assets preference of wealth owners in favour of commercial banks would be reflected in a change in the 'community portfolio-mix'[4] and a concomitant change in the relative importance of financial institutions. Intensification of financial intermediation is used here to refer to the process whereby the rate of growth of financial intermediation outstrips the rate of growth of Gross Domestic Product. A possible index of the intensity of financial intermediation is the ratio of 'indirect' debt[5] to Gross Domestic Product.

TABLE 3.3 GROWTH IN DEPOSIT LIABILITIES OF COMMERCIAL BANKS IN EAST CARIBBEAN CURRENCY AREA: 1953-68

	Date	(1) Total Deposits $000	(2) Demand Deposits $000	(3) Col. (2) as % of Col. (1)	(4) Time Deposits $000	(5) Col. (4) as % of Col. (1)	(6) Savings Deposits $000	(7) Col. (6) as % of Col. (1)
	31st Dec.							
	1946	18,533	10,325	55.7	318	1.7	7,890	42.6
	1947	18,341	9,975	54.4	859	4.7	7.507	40.9
	1948	17,807	8,776	49.3	1,481	8.3	7,550	42.4
	1949	19,564	9,004	46.0	2,557	13.1	8,003	40.9
	1950	22,536	10,066	44.7	3,562	15.8	8,908	39.5
	1951	27,893	13,916	49.9	4,538	16.3	9,439	33.8
	1952	31,650	13,686	43.2	8,950	28.2	9,014	28.5
	1953	36,771	13,956	38.0	13,061	35.5	9,754	26.5
B	1954	43,612	15,656	35.9	18,037	41.4	9,919	22.7
A	1955	38,646	14,555	37.7	13,693	35.4	10,398	26.9
R	1956	34,498	12,500	36.2	9,206	26.9	12,712	36.8
B	1957	37,687	14,781	39.2	8,564	22.7	14,342	38.1
A	1958	39,136	15,633	39.9	8,159	20.8	15,344	39.2
D	1959	42,081	19,552	46.5	6,276	14.9	16,253	38.6
O	1960	40,950	19,068	46.6	4,730	11.6	17,152	41.9
S	1961	41,037	16,276	39.7	5,336	13.0	19,425	47.3
	1962	48,921	18,259	37.3	8,149	16.7	22,513	46.0
	1963	60,253	22,094	36.7	12,574	20.9	25,585	42.5
	1964	66,046	21,204	32.1	16,896	25.6	27,946	42.3
	1965	71,513	24,272	33.9	16,184	22.6	31,057	43.4
	1966	82,408	31,306	38.0	17,470	21.2	33,632	40.8
	1967	99,598	34,065	34.2	27,267	27.4	38,266	38.4
	1968	128,520	43,396	33.8	38,943	30.3	46,181	35.9

Sources: Federal Statistical Office; *Financial Statistics,* No. 1 of 1960; Barbados [2]; ECCA [10]; Grenada [15]; information submitted by commercial banks.

(Continued)

(Table 3.3 contd.)

	Date	(1) Total Deposits $000	(2) Demand Deposits $000	(3) Col. (2) as % of Col. (1)	(4) Time Deposits $000	(5) Col. (4) as % of Col. (1)	(6) Savings Deposits $000	(7) Col. (6) as % of Col. (1)
	31st Dec.							
W	1953	16,974	7,072	41.7	1,002	5.9	8,900	52.4
I	1954	17,292	5,996	34.7	1,228	7.1	10,068	58.2
N	1955	18,063	6,261	34.7	1,623	9.0	10,179	56.3
D	1956	21,180	7,432	35.1	2,190	10.3	11,558	54.6
W	1957	23,194	7,554	32.6	1,776	7.7	13,864	59.8
A	1958	26,995	7,490	27.7	3,385	12.5	16,120	59.7
R	1959	31,151	8,359	26.8	4,531	14.5	18,261	58.6
D	1960	34,048	8,183	24.0	4,616	13.6	21,249	62.4
I	1961	36,702	8,447	23.0	5,389	14.9	22,866	62.3
S	1962	36,359	7,450	20.5	6,141	16.9	22,768	62.6
L	1963	40,269	8,326	20.7	7,201	17.9	24,742	61.4
A	1964	45,031	9,453	21.0	7,415	16.5	28,163	62.5
N	1965	54,453	11,062	20.3	11,585	21.3	31,806	58.4
D	1966	59,962	12,376	20.6	13,318	22.2	34,268	57.1
S								

(Continued)

(Table 3.3 contd.)

	Date	(1) Total Deposits $000	(2) Demand Deposits $000	(3) Col. (2) as % of Col. (1)	(4) Time Deposits $000	(5) Col. (4) as % of Col. (1)	(6) Savings Deposits $000	(7) Col. (6) as % of Col. (1)
	31st Dec.							
	1953	8,960	3,450	38.5	188	3.0	5,367	59.8
L	1954	9,996	3,670	36.7	332	3.3	5,994	60.0
E	1955	357	3,920	37.8	381	3.7	6,056	58.5
E	1956	11,271	3,759	33.4	405	3.6	7,107	63.1
W	1957	12,838	4,340	33.8	582	4.5	7,916	61.6
A	1958	14,108	4,543	32.2	793	5.6	8,772	62.2
R	1959	15,243	4,875	32.0	866	5.7	9,502	62.3
D	1960	–	–	–	–	–	–	–
I	1961	–	–	–	–	–	–	–
S	1962	19,680	–	–	–	–	–	–
L	1963	22,080	–	–	–	–	–	–
A	1964	24,960	–	–	–	–	–	–
N	1965	32,160	–	–	–	–	–	–
D	1966	35,311	7,799	22.1	6,378	18.1	21,134	59.9
S	1967	38,490	8,130	21.1	7,644	19.9	22,716	59.0
	1968	48,466	9,844	20.3	10,868	22.4	27,754	57.3

The present paucity of statistics on savings and financial assets in the Currency Area makes it difficult to establish the relative weight of these possible influences on the growth of commercial banks' assets and liabilities. However, an appreciation of the foregoing outline of the way in which these processes alter the balance between certain economic aggregates for which we can obtain some kind of estimate, will enable us to make a more precise statement than the foregoing, on the causes of growth in the commercial banking sector.

A comparison of the exponential rate of growth of Barbados' Gross Domestic Product, for the period 1961-8, with the corresponding growth rate of incremental deposits (Table 3.4), reveals that, on average, net new deposits with commercial banks operating in Barbados have been growing more than thrice as fast as Barbados' Gross Domestic Product. The average rate of growth of Barbados' Gross Domestic Product and of incremental deposits during this period were 8.4 per cent and 26.4 per cent respectively.

TABLE 3.4 BARBADOS: COMPARISON OF GDP AND COMMERCIAL BANKS' INCREMENTAL DEPOSITS – ANNUALLY, 1960-8

Year	(1) Gross Domestic Product	(2) Total Commercial Bank Deposits	(3) Annual Increments in Commercial Bank Deposits
	$000,000	$000	$000
1960	119.8	40,950	–
1961	128.7	41,037	87
1962	133.1	48,921	7,884
1963	152.9	60,253	11,332
1964	150.0	66,046	5,793
1965	158.2	71,513	5,467
1966	169.6	82,408	10,895
1967	189.2	99,598	17,190
1968	216.7	128,520	28,904
Growth Rate	8.4%		26.4%

Sources: Barbados [1] and [2]; ECCA [10].

Discounting the possibility of a substantial and continuing inflow of foreign capital held in the form of bank deposits, the situation outlined above could be the result of any combination of the following: an increase in the average propensity to save, a shift of the assets preferences of wealth owners in favour of commercial banks, or intensification of financial intermediation. An increase over time in the average propensity to save is consistent with elementary consumption theory which admits of the possibility of a declining marginal propensity to consume. To the extent that there has been an increasing average

propensity to save, this would permit incremental bank deposits to grow faster than GDP, without any accompanying structural change in the financial system. However, as has been mentioned above, any shift in the assets preferences of wealth owners in favour of commercial banks must be reflected in a change in the 'community portfolio-mix', and a concomitant change in the relative importance of financial institutions. Intensification of financial intermediation alters the structural relationships between the real and financial sectors of the economy, but does not of necessity alter the weight of any given financial institution *vis-à-vis* the rest of the financial system.

In the absence of adequate data on savings and financial assets, it is possible to evaluate the relative importance of the three influences which have been isolated only if we can find a way of estimating the relative rate of growth (or decline) of commercial banking *vis-à-vis* the total financial system, and (2) if we can estimate the degree of financial intensification, if any, that has taken place.

In regard to the relative importance of commercial banking, it must be noted that commercial banks play a two-fold role: (1) they are a part of the monetary system, and (2) they intermediate between lenders and borrowers. These two functions are not mutually exclusive, but it is analytically useful to make a distinction between them.

With respect to (1) above, commercial banks, through the operations of a cheque system, provide a service equivalent to that provided by currency notes and coins, when these are used as a medium for settling debt. Consequently, by focussing upon the medium of exchange function of money, it becomes apparent that demand deposits share the distinction with notes and coins of comprising part of the money supply.

In regard to the second role of commercial banking, the deposits liabilities of commercial banks represent savings of surplus spending units. As has been mentioned above, deposits determine the size of a bank's portfolio, and constitute the basis on which banks can extend credit to deficit spending units. Commercial banks intermediate between surplus and deficit spending units by issuing indirect securities (in the form of deposit accounts) to surplus spending units, and accepting the primary securities of deficit spending units. In this respect the operation of commercial banks is analogous to that of any other financial intermediary.[6]

Commercial Banks and the Monetary System

All things being equal, changes in the ratio of demand deposits to the money supply would give us an indication of the changing importance of commercial banks with respect to the monetary system. Table 3.5 shows adjusted demand deposits as a percentage of the total money supply in Barbados for the period 1960-8.

This table shows that in Barbados, the demand liabilities of commercial banks constitute the greater part of the money supply, but it does not reveal any significant upward or downward trend in the ratio of demand deposits to the

TABLE 3.5 BARBADOS: DEMAND DEPOSITS (ADJUSTED) AS PERCENTAGE OF MONEY SUPPLY, 1960-8

Year	(1) Adjusted Demand Deposits	(2) Total Money Supply	(3) Col. (1) as a % of Col. (6)
1960	18,977	24,270	78.1
1961	16,048	21,665	74.0
1962	17,531	21,369	82.0
1963	20,753	24,203	85.3
1964	19,852	22,672	87.6
1965	23,685	32,738	72.3
1966	28,983	40,764	71.0
1967	51,987	46,083	69.4
1968	51,103	67,999	75.2

Sources: ECCA [10]; Barbados [2].

money supply. Consequently, this particular comparison is suggestive of relative constancy in the importance of commercial banks in the monetary system.

Strictly speaking, however, it is not the abundance of any particular medium of exchange, but the degree to which it is used that is indicative of its importance in the monetary system; and so, one ought to weigh the value of demand deposits, and the value of notes and coins held by the public with an index of their respective velocities of circulation, before comparing their relative importance. In other words, a change in the relative importance of these two components of the money supply can be reflected in a change in their relative values, a change in their relative velocities, or both. Again, the lack of satisfactory statistics constitutes a barrier to empirical analysis. Available statistical data are not suitable for the estimation of velocity functions. Consequently, a strong statement cannot be made regarding change in the importance of commercial banking in the monetary system. However, a strong *a priori* case (based on the apparently increasing use of cheques in day to day transactions) can be made out to support the hypothesis that the velocity of demand deposits is increasing relative to that of notes and coin. Consequently, it is reasonable to conclude that the commercial banking sector in Barbados is increasing in importance relative to the monetary system.

Commercial Bank Intermediation

Ideally, any attempt to evaluate the relative importance of commercial bank intermediation should be based on an analysis of the portfolios of commercial

TABLE 3.6 BARBADOS: COMPARISON OF GDP AND COMMERCIAL BANKS' LOANS AND ADVANCES; ANNUALLY, 1960-8

Year	(1) Gross Domestic Product $000,000	(2) Commercial Bank Loans and Advances $000	(3) Net Annual Flow of Commercial Bank Loans and Advances $000
1960	119.8	37,700	–
1961	128.7	41,332	1,632
1962	133.1	46,100	4,768
1963	152.9	42,276	(–3,824)*
1964	150.0	48,566	6,290
1965	158.2	59.044	10,478
1966	169.6	66,696	7,652
1967	189.2	72,201	5,505
1968	216.7	85,446	13,245
Growth Rate	8.4%		29.2%

Sources: Barbados [1] and [2]; ECCA [10].

*Negative values create methodological problems for regression analysis. The technique used in this study is to apportion negative values between the two adjacent points in the proportion suggested by the magnitude of these two points.

banks and other financial intermediaries. However, for familiar reasons (i.e. the paucity of data) this is not a practicable undertaking. However, if one assumes constancy over time in the ratio of institutional credit to Gross Domestic Product, (i.e. constant financial intensity) it would be possible to compare the growth rate of the annual flow of commercial bank loans and advances with the growth rate of GDP to determine any change in the relative importance of commercial banking *vis-à-vis* other forms of financial intermediation.[7]

From the point of view of methodology, it would be more appropriate to compare the gross flow of loans and advances with GDP. However, no data are available on the gross flow of loans and advances; consequently, the analysis must be based upon a comparison of the net flow of loans and advances with GDP. This comparison (Table 3.6) reveals that, in Barbados, the net annual flow of loans and advances has been growing approximately 3.5 times as fast as the rate of growth of GDP.

On the basis of the assumption of constant financial intensity, this situation would be indicative of a very substantial increase in the relative importance of commercial banks in the financial system. A structural shift of this magnitude

TABLE 3.7 COMPARISON OF GROWTH RATES OF NET ANNUAL FLOW OF COMMERCIAL BANKS' LOANS AND ADVANCES AND ANNUAL INCREMENTS IN DEPOSITS WITH COMMERCIAL BANKS

	WINDWARD ISLANDS		LEEWARD ISLANDS	
Year	Net Annual Flow of Commercial Banks' Loans and Advances	Annual Increments in Commercial Bank Deposits	Net Annual Flow of Commercial Banks' Loans and Advances	Annual Increments in Commercial Bank Deposits
1960	6,286	2,897	–	–
1961	1,815	2,654	–	–
1962	(–1,755)	(–343)	–	–
1963	1,897	3,910	2,400	2,400
1964	4,665	4,762	(-4,680)	2,880
1965	10,317	9,422	12,840	7,200
1966	7,439	5,509	7,291	3,151
1967	–	–	(–12)	3,179
1968	–	–	17,639	9,976
Growth Rate	26.4%	21.2%	28.9%	18.6%

Source: Same as Table 3.3

would be enough to explain the rate of growth in the banking sector. However, the assumption of constancy over time in the ratio of institutional credit to GDP conflicts with financial theory and the experience of other countries, both of which tend to suggest that, at this stage in the development of the East Caribbean economy, institutional credit is most likely to grow at a faster rate than GDP.[8]

To the extent that this is true, this would lead to an upward bias in our estimate of the relative importance of commercial banking *vis-à-vis* other financial intermediaries.

The foregoing analysis leads to the conclusion that the growth in the commercial banking sector of Barbados during the period 1961-8, was made possible on the supply side by: (1) a shift in the portfolio preferences of wealth owners towards the holding of bank deposits, and (2) a general intensification of financial intermediation. However, it is still not possible to rank these two influences in order of importance.

On examination, the method used to arrive at the foregoing conclusions reduces to a comparison of the rate of growth of annual increments in commercial bank deposits with the net annual flow of commercial bank loans and advances. The logic of the foregoing analysis suggests that a faster rate of growth of the net flow of loans and advances than of incremental deposits implies the conclusions arrived at for the Barbados case. These growth rates are shown in Table 3.7, for the Windward Islands and Leeward Islands. In both cases, the rate of growth of the net annual flow of loans and advances is greater than the rate of growth of incremental deposits. It is, therefore, plausible that the conclusions arrived at for Barbados can be generalized to the entire Currency Area.

FOOTNOTES

[1]In obtaining average growth rates, it was postulated that the growth equation was of the form $Y = Ae^{bt}$, where b represents a constant growth rate. The method of least squares was then used to derive the Regression equation $\text{Log}_e Y = a + bt$, where $a = \text{Log}_e A$.

[2]Data for the years 1960 and 1961 were unavailable.

[3]At the end of 1968, 36.8 per cent of the total liabilities of commercial banks in the Leeward Islands were balances due to banks abroad.

[4]A term used here without any known precedent to refer to the aggregation of the financial portfolio of all wealth owners in the community.

[5]The term *'indirect' debt* has been coined by John G. Gurley and E.S. Shaw [19] to refer to debt issued by financial institutions, and to distinguish it from the debt of deficit spending units, which they called 'direct' debt.

[6]For a discussion of the similarities and dissimilarities between commercial banks and other financial intermediaries see Gurley and Shaw [20].

[7]The term financial intermediary is used in this study in a way which includes institutional arrangements such as the Sou-Sou or Meeting, an arrangement in which a number of persons come together and subscribe a fixed amount of money to a pool, on a periodic basis, usually weekly or monthly. The proceeds therefrom are made available to the members of the Sou-Sou on a revolving basis.

[8]See, for example, Gurley and Shaw [20]; Goldsmith [16] and [17].

CHAPTER FOUR

COMMERCIAL BANKING POLICY

Portfolio Management

In this section an attempt will be made to analyse and evaluate the portfolio performance of commercial banks. However, before this can meaningfully be done, it is necessary to appreciate certain institutional and behavioural characteristics of commercial banking in the East Caribbean. In this respect, the single most important characteristic is the nature of ownership and control. A look at Table 3.1 reveals that all of the commercial banks operating in the East Caribbean Currency Area are branches of North Atlantic banks. Of the six commercial banks operating in the Area as at the end of 1968, three were Canadian, two American, and one British.

Two important features of banking practice in the East Caribbean derive from this situation: (1) the portfolio of any bank in the East Caribbean Currency Area is managed in a way consistent with the maximization of profits accruing to a transnational firm, rather than in a way which would maximize the earnings of local branches; and (2) Caribbean banking tradition is a direct transplant of North Atlantic banking practice. The implications of the foregoing will become evident as we analyse the portfolio performance of commercial banks. The three aspects of portfolio policy which will be analysed are: (1) liquidity policy; (2) policy in regard to loans and advances; and (3) foreign lending.

Liquidity Policy

A significant feature of the composition of the assets portfolio of commercial banks is the low cash ratio maintained by these banks. Table 4.1 shows that throughout the Currency Area, especially in recent years, there has been a persistent tendency for this ratio to fall substantially below that maintained by commercial banks in developed economies.[1] The logic of commercial banking as it applies to a developed monetary system would lead one to deduce from the

foregoing that either there is less variability in the net encashment of bank deposits in the East Caribbean Currency Area than there is in developed countries, or that banks in the Currency Area are holding inadequate cash reserves and are thereby failing to achieve an optimal balance between risk and expected income in their portfolios, or that these banks place a lower valuation on risk than their North Atlantic counterparts. Any of these conclusions would be incorrect.

However, a rational explanation of the behaviour of local commercial banks derives from (1) the branch firm nature of commercial banking in the Currency Area, and (2) the type of Currency arrangements obtaining in the area. Because the ECCA is legally bound to buy and sell sterling for immediate delivery in London at a fixed rate of E.C.$4.80 to one pound sterling,[2] no meaningful distinction can be made between the cash and other liquid reserves of local banks and their London counterparts. To the extent that balances held with banks abroad represent balances held with banks in London, these can be treated operationally on the same level as the cash reserves of the local banking system. Consequently, there is no need for banks to maintain the type of liquidity structure, complete with an eight per cent cash ratio, adhered to by commercial banks in the U.K. Moreover, another reason why local banks can maintain low cash reserves derives from the fact that their London offices perform the role of lender of last resort to these banks in a substantially costless manner.

Another significant feature of the assets portfolio of commercial banks in the Area is the high level of liquid assets maintained by the branches in the Windwards and Leewards.[3] This is in marked contrast to the situation in Barbados where the ratio of liquid assets to total deposits has in recent years been continually below the conventional liquid assets ratio of banks operating in the United Kingdom.[4] Given the institutional and behavioural characteristics of commercial banking in the Currency Area, which were mentioned earlier, differences in the liquidity ratios of commercial banks operating in the various islands are a function of economic conditions in these islands.

It has already been argued that local commercial banks are not constrained to operate minimum liquid assets and cash ratios as an effective hedge against risk and uncertainty. A corollary of this theorem is that the actual liquid assets ratio of local commercial banks is mainly a residual relationship. That is, considerations of liquidity do not provide the effective constraint on the expansion of loans and advances in the East Caribbean Currency Area. Consequently, the ratio of commercial bank loans and advances to total deposits can in theory be expanded significantly beyond what is normal in the United Kingdom. Under conditions obtaining in the Currency Area, standards of credit-worthiness constitute the dominant constraint on the expansion of loans and advances. The standards of credit-worthiness which commercial banks apply to the operations in the East Caribbean Currency Area closely approximate those obtaining in the North Atlantic. The liquidity ratio is inversely related to the

TABLE 4.1 COMMERCIAL BANKS CASH AND LIQUIDITY RATIOS

BARBADOS

Date		(1) Total Deposit	(2) Cash	(3) Cash as % of Total Deposits	(4) Liquid Assets	(5) Liquid Assets as a % of Total Deposits	(6) Total Assets	(7) Liquid Assets as % of Total Assets
31st December	1946	18,533	1,523	8.2	13,189	71.1	20,250	65.1
	1947	18,341	1,786	9.7	8,650	47.1	19,314	44.8
	1948	17,807	1,670	9.4	6,514	36.6	19,477	33.4
	1949	19,564	1,278	6.5	7,512	38.4	21,531	34.9
	1950	22,536	1,479	6.6	9,609	42.6	24,407	39.4
	1951	27,893	1,550	5.6	9,074	32.5	30,737	29.5
	1952	31,650	2,543	8.0	11,484	36.3	32,752	35.1
	1953	36,771	2,104	5.7	21,944	59.7	37,957	57.8
	1954	43,612	2,086	4.8	28,470	65.3	44,507	63.8
	1955	38,646	1,672	4.3	22,622	58.5	40,342	56.1
	1956	34,498	1,921	5.6	14,163	41.1	35,917	39.4
	1957	37,687	2,583	6.9	15,450	41.0	38,908	39.7
	1958	39,136	2,679	6.8	11,424	29.2	45,264	25.2
	1959	42,081	2,617	6.2	11,619	27.6	46,174	25.2
	1960	40,950	2,598	6.3	7,303	17.8	51,796	14.1
	1961	41,037	2,619	6.4	9,118	22.2	56,331	16.2
	1962	48,921	2,789	5.7	11,134	22.8	62,634	17.8
	1963	60,253	4,225	7.0	18,739	31.1	68,516	27.3
	1964	66,046	3,951	6.0	18,509	28.0	73,920	25.0
	1965	71,513	3,128	4.4	15,091	21.1	81,114	18.6
	1966	82,408	4,317	5.2	21,406	26.0	97,233	22.0
	1967	99,598	4,605	4.6	29,259	29.4	113,504	25.8
	1968	128,520	4,874	3.8	40,800	31.7	144,048	28.3

Source: Same as Table 3.3

(Continued)

TABLE 4.1 contd.

WINDWARD ISLANDS

Date		(1) Total Deposits	(2) Cash	(3) Cash as % of Total Deposits	(4) Liquid Assets	(5) Liquid Assets as a % of Total Deposits	(6) Total Assets	(7) Liquid Assets as % of Total Assets
31st December	1953	16,974	1,575	9.3	11,317	66.7	17,812	63.5
	1954	17,292	1,658	9.6	12,979	75.1	18,684	69.5
	1955	18,063	1,349	7.5	12,683	70.2	19,492	65.1
	1956	21,180	1,470	6.9	17,130	80.9	23,122	74.1
	1957	23,194	1,500	6.5	18,507	79.8	25,116	73.7
	1958	26,995	2,028	7.5	19,993	74.1	29,258	66.3
	1959	31,151	1,744	5.6	23,332	74.9	33,790	69.1
	1960	34,048	2,113	6.2	20,428	60.0	37,599	54.3
	1961	36,702	2,331	6.4	20,913	57.0	40,028	52.2
	1962	36,359	2,399	6.6	21,982	60.5	39,163	56.1
	1963	40,269	2,911	7.2	23,973	59.5	43,228	55.5
	1964	45,031	2,660	5.9	26,164	58.1	50,604	51.7
	1965	54,453	3,320	6.1	26,956	49.5	60,006	44.9
	1966	59,962	2,648	4.4	27,633	46.1	72,580	38.1

(Continued)

TABLE 4.1 contd.

LEEWARD ISLANDS

Date		(1) Total Deposit	(2) Cash	(3) Cash as % of Total Deposits	(4) Liquid Assets	(5) Liquid Assets as a % of Total Deposits	(6) Total Assets	(7) Liquid Assets as % of Total Assets
31st December	1953	8,960	1,131	12.6	7,920	88.4	9,700	81.6
	1954	9,996	1,115	11.2	7,808	78.1	10,913	71.5
	1955	10,357	1,043	10.1	6,717	64.9	11,175	60.1
	1956	11,271	936	8.3	7,579	67.2	12,289	61.7
	1957	12,838	1,796	14.0	10,069	78.4	13,757	73.2
	1958	14,108	1,794	12.7	9,275	65.7	15,649	59.3
	1959	15,243	1,653	10.8	8,619	56.5	16,836	51.2
	1960	–	–	–	–	–	–	–
	1961	–	–	–	–	–	–	–
	1962	19,680	–	–	–	–	25,440	–
	1963	22,080	–	–	–	–	30,240	–
	1964	24,960	–	–	–	–	37,440	–
	1965	32,160	–	–	–	–	46,560	–
	1966	35,311	1,904	5.4	16,004	45.3	54,097	29.6
	1967	38,490	2,006	5.2	15,457	40.2	58,765	26.3
	1968	48,466	2,832	5.8	20,028	41.3	82,495	24.3

loans and advances ratio, and the level of loans and advances constitutes an index of the degree to which potential borrowers meet the established standards of credit-worthiness. Consequently, differentials in the liquid assets (or the loans and advances) ratios in the various territories reflect differentials in the degree to which potential borrowers meet the banks' standards of credit-worthiness. Hence, the reason why the liquid assets ratio is lower in Barbados than it is in the Windwards and Leewards is because there are relatively more persons and institutions in Barbados who meet existing standards of credit-worthiness than there are in the Windwards and Leewards.

It should be noted that the existing monetary arrangements which allow commercial banks to de-emphasize cash and liquidity ratios have attendant advantages and disadvantages. The fact that commercial banks can substitute balances held with banks in the U.K. for cash, thereby reducing their lending to the ECCA, constitutes a cost to the local economy. On the other hand, that it is practicable for banks to operate on a low liquidity ratio makes it theoretically possible for banks to contribute in greater measure to the development of the economy, by increasing loans and advances to a significant degree beyond what would otherwise be possible. However, although the cost mentioned above is very much in evidence, the potential benefits have been minimized by the application of restrictive, if not inappropriate, standards of credit-worthiness. The way in which these standards have prevented the Currency Area from enjoying the benefits which can accompany a branch firm banking system operating in a regime of free convertibility and fixed exchange rates between a dependent and a dominant monetary economy will be discussed in the next section.

Loans and Advances

It has been argued above that liquidity considerations do not operate as an effective constraint on the portfolio policy of commercial banks in the East Caribbean Currency Area. However, Table 4.1 reveals that, with the exception of Barbados, commercial banks in the Currency Area have been maintaining liquid assets ratios substantially above those obtaining in countries where liquidity considerations operate as the dominant constraint on portfolio balance. Even in the case of Barbados, it is only since 1958 that the liquidity ratio has fallen below the conventional ratio in the United Kingdom. As recently as 1954 this ratio stood at 65.3 per cent. This figure, though twice as high as the British ratio is still substantially below those obtaining in the Windward and Leeward Islands at the time.[5] A necessary concomitant of the situation outlined above is a relatively low loans and advances ratio. Table 4.2 shows loans and advances ratios.

The single most important factor which is responsible for this state of affairs is banking tradition. In this regard one must note the banks' preference for lending as short as possible, preferably for the financing of self-liquidating projects. This type of policy substantially limits the number of loan proposals

TABLE 4.2 COMMERCIAL BANKS LOANS AND ADVANCES RATIOS

BARBADOS

Date	(1) Total Loans and Advances	(2) Total Deposits	(3) Total Advances as % of Total Deposits	(4) Total Assets	(5) Total Advances as % of Total Assets
31st Dec. 1946	3,963	18,533	21.4	20,250	19.6
1947	8,600	18,341	46.9	19,314	44.5
1948	11,244	17,807	63.1	19,477	57.7
1949	11,672	19,564	59.7	21,531	54.2
1950	12,637	22,536	56.1	24,407	51.8
1951	18,015	27,893	64.6	30,737	58.6
1952	18,308	31,650	57.8	32,752	55.9
1953	14,596	36,771	39.7	37,957	38.5
1954	14,983	43,612	34.4	44,507	33.7
1955	16,627	38,646	43.0	40,342	41.2
1956	20,411	34,498	59.2	35,917	56.8
1957	22,141	37,687	58.7	38,908	56.9
1958	29,269	39,136	74.8	45,264	64.7
1959	30,090	42,081	71.5	46,174	65.2
1960	38,700	40,950	96.9	51,796	76.6
1961	41,332	41,037	100.7	56,331	73.4
1962	46,100	48,921	94.2	62,634	73.6
1963	42,276	60,253	70.2	68,516	61.7
1964	48,566	66,046	73.5	73,920	65.7
1965	59,044	71,513	82.6	81,114	72.8
1966	66,696	82,408	80.9	97,233	68.6
1967	72,201	99,598	72.5	113,504	63.6
1968	85,446	128,520	66.5	144,048	59.3

Source: Same as Table 3.3

WINDWARD ISLANDS

31st Dec. 1953	5,801	16,974	34.2	17,812	32.6
1954	5,086	17,292	29.4	18,684	27.2
1955	5,668	18,063	31.4	19,492	29.1
1956	5,383	21,180	25.4	23,122	23.3
1957	5,250	23,194	22.6	25,116	20.9
1958	6,416	26,995	23.8	29,258	21.9
1959	7,401	31,151	23.8	33,790	21.9
1960	13,687	34,048	40.2	37,599	36.4
1961	15,502	36,702	42.2	40,028	38.7
1962	13,747	36,359	37.8	39,163	35.1
1963	15,644	40,269	38.8	43,228	36.2
1964	20,309	45,031	45.1	50,604	40.1
1965	30,626	54,453	56.2	60,006	51.0
1966	38,065	59,962	63.5	72,580	52.4

(Continued)

(Table 4.2 contd.)

LEEWARD ISLANDS

Date	(1) Total Loans and Advances	(2) Total Deposits	(3) Total Advances as % of Total Deposits	(4) Total Assets	(5) Total Advances as % of Total Assets
31st Dec. 1953	1,233	8,960	13.8	9,700	12.7
1954	2,394	9,996	23.9	10,913	21.9
1955	3,393	10,357	32.8	11,175	30.4
1956	3,588	11,271	31.8	12,289	29.2
1957	3,680	12,838	28.7	13,757	26.8
1958	5,131	14,108	36.4	15,649	32.7
1959	5,974	15,243	39.2	16,836	35.5
1960	–	–	–	–	–
1961	–	–	–	–	–
1962	14,400	19,680	73.2	25,440	56.6
1963	16,800	22,080	76.1	30,240	55.6
1964	12,120	24,960	48.6	37,440	32.4
1965	24,960	32,160	77.6	46,560	53.6
1966	32,251	35,311	91.3	54,097	59.6
1967	32,239	38,490	83.8	58,765	54.9
1968	49,875	48,466	102.9	82,495	60.5

which commercial banks are prepared to entertain from potential borrowers. However, this practice, although crucial in explaining the maturity structure of loans and advances, is of secondary importance in explaining the balance between loans and advances and other assets. It is the standards of credit-worthiness which commercial banks in the Currency Area apply that are crucial in restricting loans and advances.

These standards of credit-worthiness emphasize the possibility of voluntary default by the individual borrower, rather than the probability of involuntary default. That is, greater stress is placed on the personality and present net worth of a potential borrower than on the profitability of the business in which the borrower plans to engage. Thus, in the East Caribbean Currency Area, the three main indices of credit-worthiness which are used by commercial banks are in order of importance, Capital, Character and Capability. Although these three attributes are given separate consideration, the highly subjective methods of evaluating character and capability result in a situation in which capital considerations influence the assessment of the other two attributes to a signif-

icant degree. Apart from capital, the single most important measure of character and capability is social status. Consequently, one can conclude that commercial banks in the East Caribbean Currency Area, not only discriminate between borrowers on the basis of wealth and social status but also consider most small businessmen to be bad credit risks irrespective of the economic good sense of their proposals. It is this situation which leads to the restriction of loans and advances, as well as to the very high reject rate of would-be borrowers.

Apart from restricting the absolute level of loans and advances, the loan policies outlined above are also the critical determinants of the maturity structure and the sectoral distribution of loans and advances. Table 4.3 shows the period of maturity of loans and advances outstanding, quarterly for the period 1966-8. Table 4.4 provides data for the same period on the sectoral distribution of loans and advances. The preponderance of short-term loans is in keeping with the commercial banks' expressed preference for short-term lending. An analysis of the sectoral distribution of loans and advances reveals that the distributive trades have been receiving by far the largest proportion of loans. This is in part a consequence of the structure of the economy.[6] However, the traditional policies of the commercial banks are better attuned to the needs of this sector than to those of any other. Indeed, commercial banking first came to the Currency Area to service the needs of this sector.

A shift away from a strong preference for the financing of self-liquidating projects, and a new approach to the assessment of credit-worthiness would reduce the proportion of loans going to the distributive trades. However, there is yet another factor which would tend to favour the granting of loans to the commercial sector, in preference to many other sectors. Consideration of profit would induce the banking sector to stimulate activity in those sectors which display a high degree of linkage with commercial banking. Banks are therefore as much concerned with the use to which their funds will be put as they are with the direct return on loans.

The commercial sector displays a high degree of linkage with the banking sector, through the high dealing in foreign exchange. Banks are therefore assured of a second line of income for handling the foreign exchange transactions of the commercial enterprises when this sector utilizes the loans which it receives from the banks. Moreover, the expansion of the business of the commercial sector, especially in the area of consumer durables, leads to an increase in demand for bank credit from those wanting to purchase the wares of the traders. An analysis of Table 4.4 would reveal that personal loans constitute one of the major categories in the sectoral distribution of commercial bank loans and advances. Most of the loans under this category are made to the professional and otherwise socially acceptable classes for the purchase of consumer durables. It is, therefore, evident that the commercial sector would be more favourably placed to obtain bank credit than many other

TABLE 4.3 MATURITY STRUCTURE OF COMMERCIAL BANKS LOANS AND ADVANCES

Date		(1) Total Loans and Advances	Period of Loans (2) Under Two Years	(3) Two Years and Over	(4) Col. (3) as % of Col. (1)
BARBADOS					
1966	March	59,812	45,082	14,730	24.6
	June	51,836	38,230	13,606	26.2
	September	57,304	41,730	15,574	27.1
	December	66,696	51,746	14,950	22.4
1967	March	62,454	46,738	15,716	25.1
	June	58,780	43,543	15,237	25.9
	September	58,472	35,602	13,442	23.0
	December	72,201	56,437	15,764	21.8
1968	March	77,430	60,508	16,922	21.8
	June	67,880	49,735	18,145	26.7
	September	68,343	47,315	21,028	30.8
	December	85,446	59,685	25,761	30.1
LEEWARD ISLANDS					
1966	September	30,080	19,490	10,590	35.2
	December	32,251	20,554	11,697	36.2
1967	March	32,986	21,471	11,515	34.9
	June	34,224	21,698	12,526	36.6
	September	28,954	20,243	8,611	29.7
	December	32,239	21,988	10,251	31.7
1968	March	31,907	15,280.5	16,626.5	52.1
	June	32,464	14,932.5	17,531.5	54.0
	September	34,507	15,513	18,994	55.0
	December	49,875	–	–	–
WINDWARD ISLANDS					
1966	September	25,466	20,916	4,550	17.9
	December	26,679	21,663	5,016	18.8
1967	March	26,644	21,233	5,411	20.3
	June	28,819	23,696	5,123	17.8
	September	27,507	22,820	4,687	17.0
	December	27,981	22,680	5,301	19.0
1968	March	27,822	22,370	5,452	19.6
	June	27,644	22,126	5,518	20.0
	September	26,984	21,515	5,469	20.3
	December	26,866	22,121	4,745	17.7

Source: ECCA [10].

TABLE 4.4 QUARTERLY ANALYSIS OF BANK LOANS AND ADVANCES – PROPORTIONATE DISTRIBUTION (PER CENT)

BARBADOS

	March 1966	June 1966	Sept. 1966	Dec. 1966	March 1967	June 1967	Sept. 1967	Dec. 1967	March 1968	June 1968	Sept. 1968	Dec. 1968	March 1969
Agriculture	17.7	11.1	14.4	19.0	18.3	10.2	13.9	16.5	19.4	10.2	12.2	15.9	14.7
Manufacturing	10.1	11	9	9	9	9	7.3	12	12	13	14.6	11.4	11.2
Distributive Trades	33.7	36.9	33.4	30.2	28.4	32.0	25.0	23.2	23.1	25.5	19.1	23.8	23.0
Tourism	5.0	6.0	6.0	5.4	6.2	7.4	7.2	7.3	6.8	6.1	9.1	7.5	7.5
Transport	.7	.9	.7	.6	.5	1.6	1.1	1.1	.4	1.3	1.3	1.1	1.0
Public Utilities (gas, electricity, telephone)	5.6	6.4	5.5	5.8	5.4	6.2	6.3	7.1	9.9	10.5	9.7	8.2	8.9
Building and Construction	2.5	2.8	3.1	4.1	4.2	3.2	5.9	3.4	3.5	4.8	3.1	3.2	5.8
Land Development and Real Estate	1.4	1.8	1.9	1.7	1.9	2.5	3.6	2.4	.2	2.4	2.3	2.6	4.1
Personal	10.8	12.5	15.4	10.7	12.9	15.6	15.7	13.8	11.7	11.5	18.5	13.8	13.5
Other Advances	12.5	11.0	10.6	13.5	11.8	12.2	13.6	13.3	12.4	14.8	14.5	12.5	10.3
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ECCA [10]

(Continued)

(Table 4.4 contd.)

QUARTERLY ANALYSIS OF BANK LOANS AND ADVANCES – PROPORTIONATE DISTRIBUTION (PER CENT)

WINDWARD ISLANDS

	Sept. 1966	Dec. 1966	March 1967	June 1967	Sept. 1967	Dec. 1967	March 1968	June 1968	Sept. 1968	Dec. 1968	March 1969
Agriculture	23.2	24.5	27.7	27.9	28.0	22.7	24.0	23.2	22.1	20.3	19.5
Manufacturing	3.4	3.3	3.1	2.9	2.7	3.1	3.2	3.7	4.4	4.4	4.7
Distributive Trades	29.3	29.4	27.1	26.7	24.5	24.6	22.0	21.5	20.0	20.6	19.9
Tourism	1.3	1.8	1.5	1.5	1.6	1.9	1.5	1.4	3.0	2.8	2.6
Transport	1.6	1.8	4.5	5.7	5.7	5.6	6.1	6.2	6.4	6.5	6.1
Public Utilities (gas, electricity, telephone)	2.2	2.8	3.2	3.9	2.7	2.2	3.6	1.8	1.8	2.0	2.3
Building and Construction	6.9	7.8	6.8	5.6	6.6	6.6	5.9	10.4	11.1	10.0	10.3
Land Development and Real Estate	5.9	3.6	5.8	8.2	7.8	7.7	7.0	6.1	6.4	8.7	8.5
Personal	5.4	6.4	6.9	6.9	7.8	6.8	6.9	7.0	8.2	8.3	8.8
Other Advances	20.7	18.6	13.4	10.7	12.6	18.8	19.8	18.7	16.6	16.4	17.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Continued)

(Table 4.4 contd.)

QUARTERLY ANALYSIS OF BANK LOANS AND ADVANCES – PROPORTIONATE DISTRIBUTION (PER CENT)

LEEWARD ISLANDS

	Sept. 1966	Dec. 1966	March 1967	June 1967	Sept. 1967	Dec. 1967	March 1968	June 1968	Sept. 1968	Dec. 1968	March 1969
Agriculture	17.0	16.5	15.1	17.2	1.5	2.4	1.7	3.6	3.6	1.9	3.0
Manufacturing	1.9	1.6	2.6	2.5	3.4	3.2	2.6	2.0	2.9	28.9	28.2
Distributive Trades	36.5	34.7	35.0	34.0	33.5	33.7	15.4	14.7	13.3	10.8	9.9
Tourism	5.8	7.1	3.5	3.5	3.3	4.7	2.8	2.9	2.4	2.7	2.6
Transport	2.2	1.8	2.3	2.1	2.2	2.7	1.7	1.8	3.0	1.6	1.6
Public Utilities (gas, electricity, telephone)	4.6	4.6	3.6	3.4	5.7	6.1	6.6	6.2	3.3	2.1	1.9
Building and Construction	6.4	6.8	9.6	10.2	13.6	13.6	5.5	5.6	5.0	3.7	3.7
Land Development and Real Estate	5.1	5.6	1.3	1.4	1.8	1.6	36.0	32.0	32.2	2.7	13.8
Personal	11.2	10.3	12.0	11.4	15.2	12.8	17.0	18.9	19.0	30.7	13.0
Other Advances	9.3	11.0	15.0	14.3	19.8	19.2	10.7	12.3	15.3	14.9	22.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Continued)

sectors of the economy, as long as the banking system is profit (as opposed to service) oriented.

Foreign Lending

An analysis of foreign lending by commercial banks (Table 4.5) reveals three features: (1) Net foreign balances normally represent a high proportion of total assets; (2) these balances display a high degree of variability and have been negative on a few occasions; (3) the ratio of net foreign balances to total assets seems to be declining over time.

TABLE 4.5 NET FOREIGN BALANCES OF COMMERCIAL BANKS

BARBADOS

($000)

Date		(1) Balances Due from Banks Abroad	(2) Balances Due to Banks Abroad	(3) Net Foreign Balances (Col. (1) – Col. (2))	(4) Net Foreign Balances as % of Total Assets
31st December	1946	11,573	290	11,283	55.7
	1947	6,657	210	6,447	33.4
	1948	4,796	815	3,981	20.4
	1949	6,193	1,156	5,037	23.4
	1950	8,128	654	7,474	30.6
	1951	7,266	1,274	5,992	19.5
	1952	8,524	230	8,294	25.3
	1953	19,331	178	19,153	50.5
	1954	26,067	124	25,943	58.2
	1955	19,957	564	19,393	48.1
	1956	11,587	371	11,216	31.2
	1957	12,320	193	12,127	31.2
	1958	7,055	4,403	2,652	5.9
	1959	8,009	3,044	4,965	10.8
	1960	4,041	9,081	(–5,040)	(–9.7)
	1961	5,905	13,844	(–7,939)	(–14.1)
	1962	7,365	12,226	(–4,861)	(-7.8)
	1963	13,115	6,250	6,865	10.0
	1964	12,782	5,052	7,730	10.5
	1965	10,522	5,226	5,296	6.5
	1966	14,109	8,671	5,438	5.6
	1967	22,312	7,603	14,709	13.0
	1968	26,513	6,114	20,399	14.2

(Continued)

Sources: Same as Table 3.3.

Table 4.5 contd.

LEEWARD ISLANDS

$000 omitted

Date		(1) Balances Due from Banks Abroad	(2) Balances Due to Banks Abroad	(3) Net Foreign Balances (Col. (1) – Col. (2)	(4) Net Foreign Balances as % of Total Assets
31st December	1953	6,777	217	6,560	67.6
	1954	6,692	260	6,432	58.9
	1955	5,675	382	5,293	47.4
	1956	6,640	371	6,269	51.0
	1957	8,158	328	7,830	56.9
	1958	7,440	500	6,940	44.3
	1959	6,948	799	6,149	36.5
	1960	–	–	–	–
	1961	–	–	–	–
	1962	–	–	–	–
	1963	–	–	–	–
	1964	–	–	–	–
	1965	–	–	–	–
	1966	13,595	16,065	(–2,470)	(–4.6)
	1967	12,927	16,902	(–3,975)	(–6.7)
	1968	13,120	30,332	(–17,212)	(–20.9)

WINDWARD ISLANDS

$000 omitted

31st December	1953	9,678	138	9,540	53.6
	1954	11,272	159	11,113	59.5
	1955	11,189	121	11,068	56.8
	1956	15,477	118	15,359	66.4
	1957	16,969	156	16,813	66.9
	1958	17,848	208	17,640	60.3
	1959	21,368	467	20,901	61.9
	1960	17,922	766	17,156	45.6
	1961	17,941	682	17,259	43.1
	1962	19,198	1,004	18,194	46.5
	1963	20,681	1,795	18,886	43.7
	1964	23,129	2,646	20,483	40.5
	1965	21,857	5,283	16,574	26.5
	1966	23,145	6,937	16,208	22.3

The first of these features is an indirect result of the standards of credit-worthiness which the banking sector imposes on potential borrowers. It has been argued above that these standards severely constrain the expansion of loans and advances. Given the limited opportunity to invest locally in other types of financial instruments, the portfolio choice confronting local banks reduces in large measure to the granting of loans and advances, the holding of currency or deposits with the ECCA or lending abroad. In the context of a branch firm banking system, lending abroad means the transfer of funds to overseas Head Office for application elsewhere in the banking network of a transnational firm. Because standards of credit-worthiness restrict the expansion of loans and advances, and because the second alternative of holding the debt of the ECCA is often less profitable (from the point of view of the transnational firm) than the investment of funds overseas, foreign lending has loomed large in the portfolio of commercial banks operating in the region.

To the extent that variations in the level of foreign lending reflect rational choice by transnational firms, the high degree of variability mentioned above would be the consequence of the ebb and flow of economic activity within the Currency Area as well as throughout all other countries in which these transnational commercial banks operate. In regard to the secular decline in the ratio of net foreign balances to total assets, this feature is suggestive of the growing opportunity, as perceived by commercial banks, for portfolio lending within the Currency Area.

C.Y. Thomas has formulated a model to explain the determinants of foreign lending [32, pp. 46-50, 75-77]. In this model, Thomas has partitioned the bank's portfolio of assets into three compartments: (1) loans and advances, (2) local and foreign transaction balances, (3) investment balances. Thomas claims that

> if it is assumed that the banks were willing to expand their loans and advances more or less independently of their liquid funds, then the differences between their local liabilities and their loans and advances will to some extent measure their involuntary accumulation of investible funds.

He then goes on to argue that any surplus to the "necessary minimum holding of transactions balances are investment balances to be distributed between cash and foreign balances."

The point of the Thomas model is to expose the variables which influence the rational distribution of 'investment balances' between local investments and foreign balances. The following is a relevant extract from *Monetary and Financial Arrangements:*

> If we start from an initial position in which the banks have some investment balances, then to invest these balances profitably they must act in such a manner that after a transfer of these funds from British Guiana to the United Kingdom has taken place, at some time in the future (t) profits obtained from keeping these funds in the United Kingdom are greater than zero.

Let 1. surplus funds equal *Qo* and *Qt* to be accumulated funds after time *t*.

2. the net yield on investments in British Guiana equals R_2 = zero.

3. the net yield on investments in the United Kingdom equals R_1.

4. transfer costs per unit to the United Kingdom be represented by C_1.

5. transfer costs per unit to British Guiana be represented by C_2.

If profits = receipts – costs (payment)

and Receipts are *A*. after time t = $Q_t = Q_o\ (1 + R_1)t$

and Costs are *A*. opportunity costs of investing surplus funds in British Guiana = $Q_o\ (1 + R_2)t = Q_o$

B. transfer costs of surplus funds from British Guiana to United Kingdom = $Q_o C_1$

C. transfer costs of accumulated funds in United Kingdom back to British Guiana = $Qt\,C_2$

To be profitable, receipts less cost must be positive at time period *(t)*.

If subtracting we get

$$Q_o\ (1 + R_1)^t - Q_o - Q_o\ C_1 - Q_t\ C_2 > 0 \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(i)}$$

then the solution to this relation provides *(t)*, i.e. the minimum time period for which it is worthwhile to repatriate funds [32, pp. 48-9].

Although Thomas' model provides useful insights into some of the determinants of foreign lending (i.e. differentials between local and foreign expected returns, and the cost of transferring funds to and from the region) it is lacking in mathematical elegance and theoretical rigour. Indeed, it fails to provide any solution to the problem of spatial allocation of commercial bank assets. Consequently, this model is unable to explain any of the three salient features of foreign lending by commercial banks mentioned above. Among the more serious shortcomings of Thomas' model are: (1) The mathematical formulation of the model does not lend itself to the provision of an optimum solution, given the normal objective function of commercial banks. (2) The model does not deal with those variables which determine expected or actual assets levels. (3) There is an unduly simplistic treatment of the influence of time. (4) Thomas confuses the return (yield plus or minus changes in market value) with the yield. (5) The partitioning of the portfolio runs counter to the logic of portfolio allocation policy.

In regard to the absence of an optimum solution, a glance at the foreign investment constraint

$$Q_o\ (1 + R_1)^t - Q_o - Q_o\ C_1 - Q_t\ C_2 > 0$$

is enough to show that the model has no solution other than an infinite one. This situation stems in large measure from shortcomings two and three. It is the

theoretical deficiency of the model in these two important areas that resulted in its unsatisfactory mathematical formulation. Consequently, the discussion on these two points will still shed light on the mathematical inadequacies of the model. However, this discussion can be anticipated by observing that the model does not indicate the existence of an upper time constraint on foreign lending.

Shortcomings two and three are inter-related. A proper understanding of the actual or expected availability of investible funds must rest upon an analysis of reserve losses through the encashment of deposits. Reserve losses are functionally related to the level of deposits and time. Consequently, time has a systematic influence on the expected level of assets via its influence on deposits variation. However, the unsophisticated treatment of time in the model is not only reflected in the non-specification of the relationship between time and the level of assets. It is also made manifest in the treatment of the return on investments. Hence, this point is also related to the fourth defect of the model.

In confusing the yield with the return on an asset, Thomas effectively excluded the influence of time on expected profits from any given level of investment. It is through its influence on the expected variation in market prices of assets that time has an effect on expected profit, subject to any specified risk situation.

That Thomas' partitioning of the portfolio runs counter to the logic of portfolio allocation policy, is revealed through a demonstration that there is substitutability between these three types of assets. The works of Tobin [33] and Baumol [3] which provide the theoretical basis for assuming the interest elasticity of transaction balances apply with equal force to commercial banking. Ideally, therefore, a theory of portfolio allocation should provide for the simultaneous determination of all the components of the portfolio.

Interest Rate Policy

An analysis of commercial bank lending and deposit rates reveals a high degree of association between these rates and the U.K. bank rate. The prime lending rate of commercial banks in the East Caribbean invariably changes in sympathy with the U.K. bank rate. Table 4.6 compares the U.K. bank rate with prime lending rates of commercial banks in Barbados, the Windward Islands and the Leeward Islands. It reveals that any increase in the U.K. bank rate is followed almost immediately by an increase in the prime rate of local commercial banks; whilst a decrease in the U.K. bank rate is followed by a reduction in the prime rate, about one month later.

C.Y. Thomas [32, pp. 70-75] has observed a similar pattern in Guyana and remarks that this is a characteristic common to most dependent monetary economies. Thomas also takes issue with those economists who fail to see any fundamental economic forces beyond the policy (rational or otherwise) of the

TABLE 4.6 COMPARISON OF UNITED KINGDOM BANK RATE AND PRIME LENDING RATES IN THE EAST CARIBBEAN CURRENCY AREA

Period Ended	U.K. Bank Rate	Prime Lending Rates		
		Barbados	Leeward Islands	Windward Islands
1965				
December	6.0	7.0		
1966				
March	6.0	7.0	7	7
June	6.0	7.0	7	7
September	7.0	7.5	7.5	7
December	7.0	7.5	7.5	7
1967				
March	6.0	7.5	7.5	7
June	5.5	7.0	7	7
September	6.0	7.0	7	7
December	8.0	8.0	8.75	8.75
1968				
January	8.0	8.75	8.75	8.75
February	8.0	8.75	8.75	8.75
March	7.5	8.75	8.75	8.75
April	7.5	8.5	8.75	8.5
May	7.5	8.5	8.5	8.5
June	7.5	8.5	8.5	8.5
July	7.5	8.5	8.5	8.5
August	7.5	8.5	8.5	8.5
September	7.0	8.0	8.5	8.5
October	7.0	8.0	8.5	8.5
November	7.0	8.0	8.5	8.5
December	7.0	8.0	8.5	8.5
1969				
January	7.0	8.0	8.5	8.5
February	7.0	8.0	8.5	8.5
March	8.0	8.5	8.5	8.5
April	8.0	8.5	8.5	8.5
May	8.0	8.5	8.5	8.5
June	8.0	8.5	8.5	8.5
July	8.0	8.5	8.5	8.5
August	8.0	8.5	8.5	8.5
September	8.0	8.5	8.5	8.5
October	8.0	8.5	8.5	8.5
November	8.0	8.5	8.5	8.5
December	8.0	8.5	8.5	8.5
1970				
January	8.0	8.5	8.5	8.5
February	8.0	8.5	8.5	8.5
March	7.5	8.5	8.5	8.5

firm, occasioning this type of response. In particular, he has taken issue with Edward Nevin for stating [29, p. 46]

> if interest rates were raised in, say, the United Kingdom as a result of a rise in the Bank rate and the usual accompanying measures, interest rates would be raised more or less equally by all the branches of that bank operating throughout the world without any special reference to the needs or circumstances of the individual overseas territories involved.

Thomas argues that the relationship between interest rates in the U.K. and the lending rate of commercial banks in certain dependent monetary economies is the result of the way in which changes in U.K. rates influence the demand for bank credit, and the level of bank deposits. He asserts that subsidiaries of United Kingdom companies would switch from borrowing in the United Kingdom market and attempt to borrow locally if the U.K. rate increased without a commensurate increase in local lending rates. But depositors would also be inclined to switch deposits from local banks to their U.K. counterparts. Thus, the normal interaction of supply and demand forces are seen as providing the rationale for increasing local interest rates in step with the United Kingdon bank rate. The foregoing responses are said to operate in reverse when the U.K. bank rate is lowered, and a fall in the U.K. bank rate is regarded by Thomas as setting in train forces which will lead to a rational reduction in the lending rates of local banks.

Although the Thomas thesis conforms to the principles of partial equilibrium analysis of the perfect competition variety, it cannot be verified (or disproved) on the basis of available financial statistics. The testing of this hypothesis would necessitate daily (or perhaps weekly) information of a detailed kind on the level and composition of deposits with commercial banks, the portfolios of persons and institutions holding deposits with commercial banks, and applications for commercial bank credit. However, the Thomas thesis seems to have limited *a priori* validity in the East Caribbean Currency Area. This thesis leans heavily on the assumption of the predominance of expatriate, branch firm enterprise in the non-banking private sectors of the economy. However, this is not nearly as significant a feature of the East Caribbean Currency Area, as it is of the Guyana economy of which Thomas was writing. It is doubtful whether the actors on the economic scene in the East Caribbean Currency Area possess the economic horizons which would generate the type of response Thomas was discussing.

Moreover, on close examination, the process which Thomas described can hardly be regarded (as Thomas claimed) as a consequence of structural and institutional factors in a dependent economy. The same process takes place between developed monetary economies. Indeed, at the level of borrowers and lenders, the developed monetary economies of the world are far more integrated among themselves than with the underdeveloped monetary economies. The major link between the East Caribbean Currency Area and the U.K. financial system is the financial intermediary and not the borrowers and lenders. Consequently, one must look to the behaviour of the commercial banks and not

to the behaviour of the private non-banking sector, if one is to explain the link between the prime lending rates of local commercial banks and the U.K. bank rate. Nevin was, therefore, correct in arguing that changes in commercial bank interest rates in 'overseas territories' did not arise out of the needs and circumstances of these economies. This situation is occasioned by the fact that the branches of transnational commercial banks are not organized as discrete, self-regarding entities, but are constrained to behave in a way which would maximize the profits of the total firm. The analysis of commercial bank interest rates is, therefore, a part of portfolio allocation theory as it applies to commercial banks in the East Caribbean Currency Area, and involves much more than an analysis of the supply of loanable funds and the demand for commercial bank credit.

Thomas also used his analysis to explain the difference in the adjustment lag, revealed in the statistics, between upward and downward interest rate movements. It has been pointed out above that an increase in the U.K. bank rate was followed almost immediately by an increase in local prime rates while there is a one month lag between a reduction in the U.K. bank rate and the attendant reduction in local prime rates. The logic of Thomas' analysis leads him to conclude that commercial banks act more promptly to avoid reserve losses than they do to avoid the decline in the demand for loans. However, the view is taken here that it is logically unsound to accept this as a general law.[7] The relative significance which commercial banks attach to these two possibilities ought to depend on time and circumstance. In particular, the attitude of commercial banks to either of these situations should depend on the difference between actual and desired portfolio balance; especially on the difference between the actual and desired levels of loans and advances. On this approach, the timing of interest rate adjustments is also a problem in the theory of portfolio allocation.

However, one can utilize partial analysis to obtain fundamental insights into the difference in the responses to upward and downward movements in the Bank rate, by establishing the impact of interest rate changes on the cost and revenue position of commercial banks. If commercial bank deposit and lending rates are lowered simultaneously, commercial banks would be called upon to pay the previous rate on time deposits placed with them previous to the lowering of the rate. To the extent that these funds are re-lent after a reduction in the rates, commercial banks hold the view that the return on this portion of their funds would be sub-normal. In order to circumvent this possibility, the commercial banks reduce the deposit rates before the lending rates, maintaining the lending rates until such time as they have found outlets for the deposits attracted at the higher rate.

A superficial analysis of Table 4.7 tends to suggest that the foregoing is incorrect, by revealing that the commercial banks vary all their published rates in unison. However, this is not the case. It must be noted that the rate on time deposits is open to negotiation, and that the major part of time deposits earn interest above the published rate. This divergence between the published rate and the actual rate paid on time deposits permits commercial banks to behave in

TABLE 4.7 COMMERCIAL BANK INTEREST RATES

BARBADOS

Period Ended	Deposits Rates				Prime Lending Rates
	Three Months	Six Months	Twelve Months	Savings	
1965					
December	3.5	4.0	4.5	3.0	7.0
1966					
March	3.5	4.0	4.5	3.0	7.0
June	3.5	4.0	4.5	3.0	7.0
September	4.0	4.5	5.0	3.5	7.5
December	4.0	4.5	5.0	3.5	7.5
1967					
March	4.0	4.5	5.0	3.5	7.5
June	3.5	4.0	4.5	3.0	7.0
September	3.5	4.0	4.5	3.0	7.0
December	4.0	4.5	5.0	3.0	8.0
1968					
January	4.5	5.0	5.5	4.5	8.75
February	4.5	5.0	5.5	4.5	8.75
March	4.5	5.0	5.5	4.5	8.75
April	4.5	5.0	5.5	4.25	8.5
May	4.5	5.0	5.5	4.25	8.5
June	4.5	5.0	5.5	4.25	8.5
July	4.5	5.0	5.5	4.25	8.5
August	4.5	5.0	5.5	4.25	8.5
September	4.0	4.5	5.0	4.0	8.0
October	4.0	4.5	5.0	4.0	8.0
November	4.0	4.5	5.0	4.0	8.0
December	4.0	4.5	5.0	4.0	8.0
1969					
January	4.0	4.5	5.0	4.0	8.0
February	4.5	5.0	5.5	4.0	8.0
March	5.0	5.5	6.0	4.5	8.5
April	5.0	5.25	5.75	4.5	8.5
May	5.0	5.25	5.75	4.5	8.5
June	5.0	5.5	6.0	4.5	8.5
July	5.0	5.5	6.0	4.5	8.5
August	5.5	5.75	6.25	4.5	8.5
September	5.5	5.75	6.25	4.5	8.5
October	5.5	6.0	6.5	4.5	8.5
November	6.0	6.5	7.0	4.5	8.5
December	6.0	6.5	7.0	4.5	8.5
1970					
January	6.0	6.5	7.0	4.5	8.5
February	6.0	6.5	7.0	4.5	8.5
March	6.0	6.5	7.0	4.5	8.5

(Continued)

(Table 4.7 contd.)

COMMERCIAL BANK INTEREST RATES

WINDWARD ISLANDS

Period Ended	Deposit Rates				Prime Lending Rates
	Three Months	Six Months	Twelve Months	Savings	
1966					
March	3.5	4	4.5	3	7
June	3.5	4	4.5	3	7
September	4	4.5	5	3.5	7
December	4	4.5	5	3.5	7
1967					
March	4	4.5	5	3.5	7
June	3.5	4	4.5	3.5	7
September	3.5	4	4.5	3	7
December	5	5.5	5.5	4.5	8.75
1968					
January	5	5.5	5.5	4.5	8.75
February	5	5.5	5.5	4.5	8.75
March	5	5.5	5.5	4.5	8.75
April	4.5	5	5.5	4.25	8.5
May	4.5	5	5.5	4.25	8.5
June	4.5	5	5.5	4.25	8.5
July	4.5	5	5.5	4.25	8.5
August	4.5	5	5.5	4.25	8.5
September	4.5	5	5.5	4.25	8.5
October	4.5	5	5.5	4.25	8.5
November	4.5	5	5.5	4.25	8.5
December	4.5	5	5.5	4.25	8.5
1969					
January	4.5	5	5.5	4.5	8.5
February	4	4.5	5	3.75	8.5
March	4.5	5	5.5	4.25	8.5
April	4.5	5	5.5	4.25	8.5
May	4.5	5	5.5	4.25	8.5
June	4.5	5	5.5	4.25	8.5
July	4.5	5	5.5	4.25	8.5
August	4.5	5	5.5	4.25	8.5
September	4.75	5.25	5.75	4.25	8.5
October	4.75	5.25	5.75	4.25	8.5
November	4.75	5.25	5.75	4.25	8.5
December	4.75	5.25	5.75	4.25	8.5
1970					
January	4.75	5	6	4.25	8.5
February	5	5.5	6	4.25	8.5
March	5	5.5	6	4.25	8.5

(Continued)

(Table 4.7 contd.)

COMMERCIAL BANK INTEREST RATES

LEEWARD ISLANDS

Period Ended	Deposit Rates				Prime Lending Rates
	Three Months	Six Months	Twelve Months	Savings	
1966					
March	3.5	4	4.5	3	7
June	3.5	4	4.5	3	7
September	4	4.5	5	3.5	7.5
December	4	4.5	5	3.5	7.5
1967					
March	4	4.5	5	3.5	7.5
June	3.5	4	4.5	3	7
September	3.5	4	4.5	3	7
December	4.5-5	5-5.5	5.5	4.5	8.75
1968					
January	4.5-5	5-5.5	5.5	4.5	8.75
February	4.5-5	5-5.5	5.5	4.5	8.75
March	4.5-5	5-5.5	5.5	4.5	8.75
April	4.5	5	5.5	4.25	8.75
May	4.5	5	5.5	4.25	8.5
June	4.5	5	5.5	4.25	8.5
July	4.5	5	5.5	4.25	8.5
August	4.5	5	5.5	4.25	8.5
September	4.5	5	5.5	4.25	8.5
October	4.5	5	5.5	4.25	8.5
November	4.5	5	5.5	4.25	8.5
December	4.5	5	5.5	4.25	8.5
1969					
January	4.5	5	5.5	4.25	8.5
February	4.5	5	5.5	4.25	8.5
March	4.5	5	5.5	4.25	8.5
April	4.5	5	5.5	4.25	8.5
May	4.5	5	5.5	4.25	8.5
June	4.5	5	5.5	4.25	8.5
July	4.5	5	5.5	4.25	8.5
August	4.5	5	5.5	4.25	8.5
September	4.5	5	5.5	4.25	8.5
October	4.5	5	5.5	4.25	8.5
November	4.5	5	5.5	4.25	8.5
December	4.75	5.25	5.75	4.25	8.5
1970					
January	4.75	5.25	5.75	4.25	8.5
February	4.75	5.25	5.75	4.25	8.5
March	4.75	5.25	5.75	4.25	8.5

the manner outlined above, by enabling them to reduce the margin between published and negotiated rates on time deposits, prior to a reduction in the prime lending rate.

FOOTNOTES

[1]E.g., in Britain it is customary for commercial banks to maintain a cash ratio of about eight per cent.

[2]Plus an exchange charge of not more than one per cent. Cf. Currency (No. 2) Act, 1965, Article 11.

[3]Cf. Table 4.1, column 5.

[4]Commercial banks in the U.K. aim at a liquid assets ratio of about 32 per cent.

[5]E.g., in 1953 the liquidity ratio in the Leeward Islands was 88.4 per cent and in 1956 it was 80.9 per cent in the Windward Islands.

[6]The distributive sector is the best organized sector of the economy. One aspect of structural imbalance in the East Caribbean Currency Area is the predominance of the distributive sector. Indeed, this predominance is a concomitant of openness.

[7]Of course the rejection of the Thomas thesis constitutes a prior reason why one cannot accept his interpretation of the lag.

CHAPTER FIVE

THE SOCIAL EFFICIENCY OF COMMERCIAL BANKING

Any analysis of commercial banking in the East Caribbean Currency Area would be incomplete without a discussion of the social efficiency of commercial banking. The rationale for this view derives from the oft perceived divergence between private efficiency and social efficiency. This section will, therefore, be devoted to an appraisal of the efficiency of commercial banking from a social (as opposed to a private) point of view.

However, before one can meaningfully discuss the social efficiency of commercial banking, it is necessary to specify the analytical framework in which the issue will be discussed. The central feature of this framework must be a clearly defined objective function, which would be expressive of the social role which one should reasonably assign to commercial banking. The circumstances of the East Caribbean economy dictate that this function should be related to the general problem of economic development. Thus, from a social point of view, the role which must be assigned to commercial banking is the consistent pursuit of the highest rate of economic transformation subject to the constraints of existing resources, financial stability and the pressing immediate needs of the population.[1]

In this regard, the performance of the commercial banking sector, strictly speaking, should be assessed on the basis of its ability to attract savings, as well as on its allocation of its portfolio of assets. However, the discussion in this section will be restricted to an analysis of the allocative aspect of social efficiency. Conceptually, socially efficient portfolio allocation involves determining the optimal price, quantity, time flow of credit into the various sectors of the economy. Given the objective function mentioned above, this allocation problem implies a maximization problem. However, deficiencies in the present state of social and financial accounting within the Currency Area, as well as the absence of a satisfactory theory of the role of finance in development precludes

any precise and general formulation of the conditions for optimization. Consequently, the technique which will be adopted here in evaluating the social efficiency of commercial banking will lean heavily on qualitative analysis. That is, no attempt would be made to estimate the degree of social inefficiency, if any. All that will be attempted is the verification of the existence of social inefficiency. If inefficiency is shown to exist, the direction in which the portfolio profile of the banking sector should be changed in order to increase efficiency, will be indicated.

In the previous section, three significant features of the portfolio profile of commercial banks in the ECCA were identified; (1) high levels of foreign lending; (2) a strong bias towards the commercial sector in the sectoral distribution of loans and advances; and (3) a preponderance of short term loans. Viewed in terms of the financial requirements of the ECCA as well as the potential of the commercial banking sector, all three of these features must be regarded as areas of inefficiency from a social standpoint. The high level of foreign lending constitutes a drain on the limited financial resources of the Currency Area. Consequently, although high foreign lending conduces to the attainment of the private objective of the trans-national banks operating in the East Caribbean Currency Area, this practice must be regarded as socially undesirable. Social considerations would dictate that the foreign balances of commercial banks should be reduced to the minimum level consistent with transaction requirements.

In regard to the second feature, structural transformation implies a reduction of the importance of distributive trades within the economy. This can be achieved only if other productive sectors gain relatively greater access to credit. Since commercial banks are by far the most important source of institutional credit in the ECCA, this implies the need for commercial banks to shift their traditional preference for lending to the commercial sector, and expand their lending to the other productive sectors.

The preponderance of short term loans in the portfolio of commercial banks operating in the ECCA does not accord either with what is desirable or with what is possible. It is in the area of long term credit that the financial constraint is most acute on the ECCA. Therefore, the present maturity structure of commercial banks' loans and advances could only be considered as satisfactory if it could be shown that stability considerations constrain the bank to maintain the present maturity structure. However, an analysis of the deposit liabilities of the commercial banks reveals that there is much scope for these banks to increase their proportion of long term lending.

It has already been noted that commercial banks attract savings of surplus spending units mainly in the form of savings and time deposits.[2] This situation indicates that commercial banks in the East Caribbean Currency Area are predominantly savings institutions, differing significantly from the traditional self-image of North Atlantic commercial banks. A concomitant of this feature of commercial banking is a high degree of stability in the level of deposits. This

stability, coupled with the fact of an expanding economy, results in a situation where there is a persistent tendency for deposits to grow continuously. Table 5.1 shows commercial bank deposits quarterly for the period March 1966 to March 1969. This table shows that throughout this period seasonal forces are reflected more in a decline in the rate of growth of deposits than in a decline in the absolute level of deposits. Consequently, it must be concluded that it is feasible for commercial banks in the ECCA to engage in more long term lending; and that the present maturity structure of commercial banks' loans and advances represents another area in which the social efficiency of commercial banks operating in the ECCA, is sub-optimal.

Causes of Inefficiency

The gap between the socially optimal and the actual performance of the commercial banking sector in the ECCA is the result of a number of institutional factors. These factors can be classified under two broad headings: (1) structural factors, and (2) policy factors. The structural factors are: patterns of ownership and organization of the banking sector, colonial monetary system,[3] underdeveloped financial structure, production patterns in the real sectors of the economy. The policy factors are reflected in the private objective function of the banks, the value system of the banks and the passive attitude of government in regard to the regulation of commercial banking. The two groups of factors are not independent, but it is advantageous to separate them for purposes of analysis.

It has been pointed out that existing patterns of ownership and organization within the commercial banking sector result in a situation where local banks are called upon to operate in a manner consistent with the objectives of foreign-controlled transnational banks. This situation creates two conditions which can result in local commercial banks operating in a socially inefficient manner. The fact of private ownership and the possible existence of external economies provide a source of conflict between the internal objectives of the banks and considerations of social efficiency. This situation is compounded by the type of modification which the branch plant arrangements impose upon the internal objectives of local banks. As has been stated earlier, local banks are called upon to operate in a way which would maximize the profits of the total firm rather than those of the local branch. The colonial monetary system obtaining in the East Caribbean Currency Area does nothing to mitigate the adverse consequences deriving from the present commercial banking arrangements. The underdeveloped financial structure and production patterns in the real sectors of the East Caribbean economy, when combined with the prevailing banking tradition, conduce to the existence of the features of the portfolio profile of commercial banks discussed above.

The impact of the value system and objectives of the commercial banks on portfolio allocation has already been discussed. In the final analysis, however, it is government which must assume responsibility for the regulation of commer-

TABLE 5.1 QUARTERLY ANALYSIS OF COMMERCIAL BANK DEPOSITS: MARCH 1966-1969

Period		Deposits			
		Demand	Time	Savings	Total
		BARBADOS			
1966	1st qr.	26,318	15,881	30,812	73,011
1966	2nd qr.	29,941	18,448	33,508	81,897
1966	3rd qr.	26,076	17,854	32,488	76,418
1966	4th qr.	31,306	17,470	33,632	82,408
1967	1st qr.	31,606	18,453	35,883	85,942
1967	2nd qr.	31,332	21,383	37,239	85,942
1967	3rd qr.	29,153	23,247	37,239	89,954
1967	4th qr.	34,065	27,267	38,266	99,598
1968	1st qr.	37,679	27,965	40,671	106,315
1968	2nd qr.	37,532	31,983	43,109	112,624
1968	3rd. qr.	35,009	31,178	44,489	110,676
1968	4th qr.	43,396	38,943	46,181	128,520
1969	1st qr.	44,733	43,136	50,243	138,112
		LEEWARD ISLANDS			
September 66		7,861	6,207	21,151	35,219
December 66		7,799	6,378	21,134	35,311
March 67		8,563	8,239	19,537	36,339
June 67		8,145	6,453	22,405	37,003
September 67		7,318	7,445	22,246	37,009
December 67		8,145	7,644	22,716	38,490
March 68		9,584	8,627	24,332	42,543
June 68		8,712	9,759	25,657	44,128
September 68		8,779	10,138	26,313	45,230
December 68		9,844	10,868	27,754	48,466
March 69		12,003	11,393	29,390	52,786
		WINDWARD ISLANDS			
September 66		7,333	6,660	23,193	37,186
December 66		7,410	6,801	23,639	37,850
March 67		7,661	6,871	23,613	38,145
June 67		7,094	9,441	22,733	39,268
September 67		7,105	7,548	24,821	39,474
December 67		7,244	7,862	25,184	40,290
March 68		7,535	8,847	25,752	42,134
June 68		8,527	14,055	22,771	45,353
September 68		8,990	10,648	27,949	47,587
December 68		10,197	10,305	29,302	49,804
March 69		12,291	11,534	30,085	53,910

Source: ECCA [10].

cial banks. It cannot be said that the governments in the East Caribbean have been making a concerted effort to regulate commercial banking in a way which would redound to the benefit of economic progress within the Currency Area.

FOOTNOTES

[1]This is a modified version of the main objectives which Xenophon Zolotas has assigned to 'economic policy in free-enterprise economies'. Cf. Zolotas [36] p. 14.

[2]Cf. Table 3.3.

[3]In this study a distinction is made between dependent monetary system and colonial monetary system. The main feature of a dependent system is the high degree of influence which external parameters (e.g. U.K. Bank Rate) exert on equilibrium conditions in the system. But the essential feature of a colonial system is subordination and exploitation. Thus, a colonial monetary system is organized to serve the interest of a colonial power, extant or erstwhile.

CHAPTER SIX

MONETARY THEORY AND POLICY IN A CARIBBEAN PERSPECTIVE

This Chapter will be devoted to an appraisal of the main streams of monetary thought in Britain and North America from the perspective of Caribbean monetary economy as formulated in the previous Chapters of this study. In particular, an attempt will be made to evaluate the relevance to the East Caribbean Currency Area, of the major theories of the demand for money, money supply theory, theories of monetary adjustment, as well as the rationale for and theoretical bases of monetary policy.

The Demand for Money

Two rival approaches to the demand for money are currently popular among economists: the so-called Conventional Approach and the Chicago Approach. The Conventional Approach is essentially a refinement of Keynesian theory. The Chicago Approach, as the name suggests, originated amongst economists associated with the University of Chicago. The advocates of this approach claim that it is in keeping with the essence of the quantity theory of money as formulated by classical economists.

The Conventional Approach

There is no single work that can claim to be a definitive exposition of conventional monetary theory. However, the main characteristics of this approach are to be found in Keynes' Liquidity Preference Theory. Foremost among these is an emphasis upon the store of value function of money. The common theme running through the writings of economists subscribing to the Conventional Approach is the view that, in regard to the demand for money, the single most important property of money is that it is an asset which can be held in preference to other assets.

In order to outline the main features of the Conventional Approach Keynes' explanation of the demand for money will be used as a point of departure. It will be remembered that Keynes partitioned the demand for money between the speculative motive on the one hand, and the transactions and precautionary motives on the other. In the main, however, Keynes hinged his analysis on a separation between the transactions demand and the speculative demand for money; with the transactions demand dependent on the level of income and the speculative demand dependent on the rate of interest.

Recent developments in the Conventional Approach to the demand for money have refined Keynes' treatment of the subject in four major areas:

> the separation of the demand into a transactions demand dependent on income and a liquidity-preference demand dependent on the rate of interest; the emphasis on the speculative element in liquidity preference; the neglect of wealth as a determinant of liquidity preference; and the aggregation of all assets other than money into bonds implicit in the use of a single (long-term) rate of interest [Johnson 23, p. 10].

Although Keynes had criticised classical economists for their mechanical treatment of transactions demand, he re-introduced the same treatment in his analysis when he made transactions demand a function of the level of income. Adherents to the Conventional Approach have subsequently dropped the assumption of a mechanical relationship between transactions demand and income, and regard transactions demand as reflecting rational choice. The logic of this approach has been provided by W.J. Baumol [3] and James Tobin [33]. Baumol links the problem to inventory theory. Tobin's work is an elaboration of Alvin Hansen's argument [21, pp. 66-7] that the transactions demand for cash is interest-elastic.

The speculative motive as the source of interest-elasticity in the liquidity demand for money is no longer stressed in modern formulations. Uncertainty about the rate of interest rather than definite expectation about its level is now considered to be mainly responsible for making liquidity preference responsive to the rate of interest. One of the best expositions of this approach has been provided by Tobin [34].

The two other major refinements of Keynes' liquidity-preference theory are the introduction of a wealth variable [Metzler 28], and the disaggregation of assets other than money.[1] These developments have all contributed to the reformulation of monetary theory as a part of a more general theory of asset holdings. Decision-making units are said to be faced with the choice between a wide range of assets of which money is only one type. The factors influencing their decisions include: their wealth position, their transactions commitments, the rate of interest, the range of available assets, and their perception of conditions in the money market.

The Chicago Approach

While Keynes' liquidity preference theory was being refined along the lines indicated above, another formulation of monetary theory was being developed by economists associated with Chicago University. The most complete statement of this approach has been provided by Milton Friedman [12]. The central point about this approach is that money is a capital good which is demanded for its services. Consequently, the demand for money is a problem in Capital theory. The Chicago School regarded the demand for money as a function of (a) the total amount of wealth; (b) the price of and return of money: (c) the price of and return on other assets; and (d) the tastes and preferences of wealth-owning units. All forms of holding wealth are relevant to the analysis, and human capital cannot be excluded.

As general approaches to the analysis of the demand for money, there is little to distinguish these two approaches, one from the other. They both stress wealth as a determinant of the demand for money, they both stress the price of other assets and they both incorporate a taste or preference variable.

However, as soon as one moves beyond the general framework in which these two bodies of theory are cast, and examine the working of the models developed by adherents to these two schools of thought, significant differences in the two approaches begin to appear. The Conventional or neo--Keynesian Approach retains Keynes' preoccupation with the rate of interest, while the Chicago or Quantity Theory approach stresses the point that rational responses to the problem of demand for money generate a velocity function. This difference in emphasis is the result of a much more deep-rooted controversy about income determination. The Chicago Approach is seen as a defence of the classical quantity theory of money. It attempts to re-establish the respectability of the quantity theory by showing that the velocity function can be based on rational choice and economic variables rather than on institutional arrangements. The Conventional Approach is regarded as being consonant with multiplier analysis. This aspect of the controversy between these two schools of thought will be discussed later under the heading "Money, Income and Interest".

In terms of a general framework of analysis, the general approaches of both these schools of thought can provide useful theoretical insights into the workings of Caribbean monetary system. However, the specific theoretical formulations of economists adhering to the Conventional Approach can hardly be regarded as appropriate to the East Caribbean Currency Area. These models give a heavy weight to non-monetary financial assets such as bonds; and the role of speculation, or uncertainty about the future movements in the value of these assets is the pivotal consideration in the analysis. But the East Caribbean Currency Area lacks the institutional setting which would enable speculation, or hedging against uncertainty, to dominate the financial scene.[2]

On the other hand, the Chicago approach does not appear to be tied to any particular set of economic conditions. Therefore, because of its apparent

flexibility it would seem as though this approach is more applicable to the East Caribbean Currency Area than the Conventional Approach. However, as Burstein [6] has pointed out, the Chicago School has not really specified a model 'or even an elaborated mechanism of adjustment', and they are unclear whether interest rates are the engine of monetary policy. Consequently, in the absence of a clearly specified model, one can only express a qualified preference for the Chicago Approach.

The Supply of Money

In the modern world of deposit banking, it has been found that changes in the supply of money (defined as a stock) are reflected primarily in changes in the volume of commercial bank deposits.[3] Because of this, the study of determinants of the supply of money revolves around the study of the determinants of the volume of bank deposits.

Traditionally, economists have sought to predict the behaviour of the supply of money by relating it to the currency base by a multiplier determined by the reserve ratio observed by the banking system and the ratio between currency and deposits held by the public. [Cf. Johnson 23 p. 21]. A simplified technique was to postulate constancy in these ratios, which determined the incremental rate of leakage from the ciruclar flow of bank deposits and advances generated by an autonomous injection of cash into the banking system. Consequently, any increase in the cash base was regarded as triggering off a 'circular bank credit flow' which generated a converging geometric series of deposits with common ratio one minus the sum of the rates of leakage. Consequently, the ratio observed by the banking system and the ratio between currency and deposits held by the public were the determinants of the money multiplier, which was given by the reciprocal of the sum of the rates of incremental leakage from the 'circular bank credit flow'.

This approach to money supply theory is exemplified in a recent textbook by W.T. Newlyn [30, Ch. 2]. In this book, Newlyn shows that the foregoing assumptions imply that

$$D = \frac{1}{a+B} C$$

where D = Deposits, a = public's cash ratio, B = Banks' cash ratio, and C = Total currency.

Also $M = D + C_p$

where M = money supply and C_p = Currency held by the public.

Substituting for D and C_p yields

$$M = \frac{C}{a + B} + \frac{C}{a + B} \text{ (because } C_p = aD\text{)}$$

$$= \frac{1 + a}{a + B} C$$

More sophisticated approaches to money multiplier analysis extended the foregoing to allow for the different reserve requirements against time and demand deposits and the demand for money by other financial intermediaries [Johnson 23, p. 21]. However, although this mechanical approach to the money supply has provided some fundamental theoretical insights and has been highly fruitful when used in empirical research, it remains a crude way of representing behavioural relationships. Recent research has been moving away from the money multiplier, comparative static, deterministic approach by attempting economic explanations of the critical ratios in the analysis. A number of recent studies have treated cash and encashment ratios as behavioural relationships reflecting asset choices rather than as exogenous variables.

Harry Johnson has noted that recent work on the response of the banking system to changes in reserves has departed from the mechanistic money multiplier approach in at least three respects:

> first, in basing the analysis on the behaviour of the individual bank instead of the banking system; second, in applying economic theory to the explanation of the level of reserves desired by the bank and relating its behaviour in expanding or contracting its assets to the difference between its actual and its desired reserves; and third in treating the loss of reserves consequent on expansion as a stochastic process [Johnson 23, p. 22].

This research has served to highlight the fact that commercial banks are profit-maximizing institutions with economic behaviour patterns on which the Central Bank must operate to control the money supply.

Among those associated with these recent developments are K. Brunner, D. Orr and W.J. Mellon. Orr and Mellon's analysis [31, pp. 616-7] of bank credit expansion applies inventory theory to the bank's holding of reserves against cash losses, which are assumed to be random and normally distributed.

> The objective of the bank is to extend new credit in a volume which will maximize its expected profits . . . . . The effect of new reserves on the volume of new loans thus will depend on the way in which reserve losses vary when the level of deposits is changed.

The central feature of Brunner's schema [4] is a relationship between a

bank's surplus reserves and its desired rate of change in its asset portfolio, formulated in terms of a 'loss-coefficient' measuring the probable loss of surplus reserves per dollar of asset expansion.

These recent developments in money supply theory are a marked improvement upon the earlier comparative static, deterministic analysis, still to be found in textbooks. However, money supply theory as exemplified by these recent studies needs to be further developed in at least two essential areas, before it can be said to be of much use in explaining the behaviour of the money supply in the East Caribbean Currency Area. It must come to grips with the nature of the financial system; and it must seek to explain the interaction between imports and the money supply. In regard to the former, the implications of a branch firm, transnational banking system have been discussed in Chapter Two. There are two characteristics of this system that are of importance to money supply theory; (1) the objective function of the transnational firm, which does not necessarily attempt to maximize profits at the level of the branch, but rather at the level of the transnational firm; and (2) the tendency towards a high level of and substantial variation in foreign lending.

The tendency for other financial intermediaries, such as insurance companies and the government savings banks, to hold substantial foreign investments is an important determinant of the equilibrium money stock in the East Caribbean Currency Area.

In regard to the interaction between imports and the money supply, payments for imports constitute another drain from the 'circular bank credit flow'. To the extent that this occurs, it tends to reduce the base of primary money upon which secondary expansion in the money supply takes place.

Money, Income and Interest

The views of most North Atlantic economists on the interrelationships between money, income and interest can be located on a Cartesian diagram whose axes are labelled 'Liquidity Preference/Investment Multiplier' and 'Loanable Funds/Quantity Theory'. That is, most modern North Atlantic economists are influenced, in varying degrees, by Keynes on the one hand and the Classical economists on the other, in their views on monetary dynamics.

The orthodox Keynesian approach to monetary dynamics, treats the relationship between money and income as mainly an indirect one. An increase (decrease) in the money supply is said to lead to a fall (rise) in the rate of interest, in the absence of a liquidity trap. The fall (rise) in the rate of interest leads, in turn, to an increase (decrease) in the level of investment and thence to an increase (decrease) in income via the multiplier process. Models of this type derive from a more or less sophisticated treatment of three components of Keynesian theory: liquidity preference theory, Keynesian investment theory and investment multiplier analysis [Keynes 25]. The more refined versions of the

Keynesian system allow for interaction between income and the rate of interest by casting the analysis in a general equilibrium framework.[4]

The Classical or Quantity Theory approach to monetary dynamics treats the relationship between money and income as a direct one. The analytical key to this relationship is the velocity of money. The velocity of circulation of money is regarded as a function of the demand for money, and is influenced by the preference of wealth owners as well as a number of institutional parameters. Modern formulations of the Quantity Theory treat money as a capital good yielding a service. When the economic system is in equilibrium, wealth owners would have attained an optimal combination of all forms of holding wealth. If there is an increase in the money supply, this disturbs the balance between money and other assets held by wealth owners. Each individual then tries to exchange money for other assets, financial and real. Within the closed system that the theory postulates, this becomes impossible for the economy as a whole, and the new equilibrium can only be achieved through an increase in prices and income. The strict classical approach to monetary dynamics does not accord an obvious role to money in the determination of the rate of interest. The rate of interest is regarded as a real phenomenon, determined by the demand and supply functions for loanable funds.

The modern approach to monetary dynamics embodies elements of both of the foregoing approaches. Harry Johnson agrees that Brunner has aptly summarized the new approach, from the point of view of monetary policy;

> Variations in policy variables induce a reallocation of assets (or liabilities) in the balance sheets of economic units which spills over to current output and thus affect the price level. Injections of base-money (or 'high-powered' money) modify the composition of financial assets and total wealth available, to banks and other economic units. Absorption of the new base money requires suitable alterations in asset yields or asset prices. The banks and the public are thus induced to re-shuffle their balance sheets to adjust desired and actual balance-sheet position.
>
> The interaction between banks and public, which forms the essential core of money-supply theory, generates the peculiar leverage or multiplier effect of injections of base money on bank assets and deposits and, correspondingly, on specific asset and liability items of the public's balance sheet. The readjustment process induces a change in the relative yield (or price) structure of assets crucial for the transmission of monetary policy-action to the rate of economic activity. The relative price of base money and its close substitutes falls, and the relative price of other assets rises.
>
> The stock of real capital dominates these other assets. The increase in the price of capital relative to the price of financial assets simultaneously raises real capital's market value relative to the capital stock's replacement costs and increases the desired stock relative to the actual stock. The relative increase in the desired stock of capital induces an adjustment in the actual stock through new production. In this manner current output and balance sheets and the related price movements set in motion by the injection of base money. The wealth, income, and relative price effects involved in the whole transmission process also tend to raise demand for non-durable goods.[5]

The modern approach to monetary dynamics represents a theoretical refinement of earlier approaches. However, modern monetary theory retains many of the axioms and implicit assumptions used in earlier formulations. To the extent that this is true, recent improvements in monetary theory have been in the direction of increasing the precision and enhancing the elegance of monetary theory, rather than in the direction of increasing its general applicability. Consequently, one can derive fundamental insights into the applicability of North Atlantic monetary theory to the East Caribbean Currency Area by examining the Quantity Theory and Keynesian approaches to monetary dynamics.

In an earlier section of this Chapter, Keynesian liquidity preference theory was dismissed as inapplicable to the East Caribbean Currency Area because of the absence of the type of institutional setting which the theory postulates. However, for purposes of the present analysis, a distinction will be made between the Keynesian model describing the relationships between variables, and Keynesian theory explaining the relationship between variables. That is, this section will be concerned with a discussion of the relative merits of the two adjustment processes outlined above. Before investigating the applicability to the East Caribbean of these two approaches to monetary dynamics, it should be pointed out that they are not necessarily mutually exclusive or conflicting. If the institutional setting is correct, both of these approaches can be equally valid.

In the East Caribbean, however, the Keynesian approach must be regarded as having little or no validity. It was pointed out in Chapter Two that changes in commercial bank interest rates can be explained largely by changes in the U.K. Bank Rate. The implication here is that changes in the money supply do not constitute a necessary or sufficient condition for changes in the rate of interest in the East Caribbean Currency Area. Thus, one must reject the Keynesian view that monetary disturbances will normally lead to interest rate changes.[6]

The Quantity Theory approach to monetary dynamics is highly valid as an explanation of the nature of monetary equilibrium in the East Caribbean. It must also be regarded as providing valid insights into the nature of the adjustment process which is set in motion when monetary disturbances lead to a disruption of wealth owners' optimal combination of all forms of holding wealth. However, the assumption of a closed economy leads to conclusions about the relationship between changes in the money supply and the level of income which are at variance with the East Caribbean experience. In an open economy, it is possible for the economy as a whole to reduce its holding of currency by shifting it back on to the Currency Authority, in exchange for foreign assets. In the East Caribbean, which is a highly open economy, the assumption of a closed economy is a poor approximation of reality. It is, therefore, important to reformulate the Quantity Theory for the case of an open economy; in which case it becomes the price-specie-flow mechanism of Classical trade theory. In the East Caribbean, changes in the money supply are not reflected so much in price and income changes, as in changes in the level of imports.

Brunner's summary reveals that the modern approach to monetary dynamics constitutes a subtle blend of the Keynesian and Quantity Theory approaches, retaining faith in the ability to regulate interest rates through variations in the money supply, and assuming a closed economy. The modern interpretation of the adjustment process set in train by monetary disturbances must, therefore, be regarded as having little validity in the East Caribbean Currency Area.

Monetary Policy

In the North Atlantic, the continuing debate surrounding monetary policy proceeds on the basis of expressed or implied agreement on the objectives of aggregative economic policy. Price stability, full employment, international balance and an adequately rapid rate of growth are regarded as the policy objectives. Consequently, a major issue in the debate relates to the allocation of responsibility for the attainment of these objectives among the four sets of instruments; monetary policy, fiscal policy, debt management and foreign economic policy. The current consensus is that monetary policy must assume "a large part of the responsibility for short-run economic stabilization – a consequence of both the inadaptibility of the budgetary process to the requirements of a flexible fiscal policy and the domination of the budget by other objectives of national policy than stabilization" [Johnson 23, p. 31].

The second level on which the debate on monetary policy is being conducted relates to the effectiveness of monetary policy in general and the traditional role of monetary policy in particular. The discussion is invariably conducted within the context of a developed monetary system. In recent years, the assault on discretionary monetary policy has been led by Milton Friedman [13 and 14]. He and other economists who are inclined to discredit discretionary monetary policy, point to the problems involved in timing the implementation of any particular policy. The question of the lag in the effect of monetary policy has been used to good advantage as a complement of the timing argument.

Much of the discussion of monetary policy, among North Atlantic economists is culture bound and has little relevance to the East Caribbean Currency Area. The framework within which this discussion has been taking place must be adjusted in two essential areas before it can be considered as relevant to the East Caribbean experience. Structural transformation must be admitted as the major objective of economic policy, and cognizance must be taken of the institutional factors relating to the East Caribbean environment. When this is done, it will be discovered that there is little scope for orthodox monetary policy in the East Caribbean Currency Area. It will also be perceived that monetary policy should be regarded as only one aspect of financial policy, and that the Monetary Authority must assume responsibility for the regulation of all forms of credit.

FOOTNOTES

[1]For a discussion of the issues involved in the disaggregation of assets, see Tobin [35].

[2]E.g., the absence of an organized capital market.

[3]This study seeks to avoid controversy over the precise identification of money, on the view that any reasonable delineation of money would make no fundamental difference to the analysis.

[4]See, for example, Hicks [22].

[5]K. Brunner [5] quoted by Johnson [23].

[6]Please note that, in abstracting from the Keynesian explanation of the relationship between money and interest, any discussion of the liquidity trap has been precluded. However, the modification of this statement of the Keynesian view with the word 'normally' is intended as an acknowledgement of the qualifications attaching to the Keynesian view.

CHAPTER SEVEN

COMMENTS ON MONETARY REFORM

A recurring theme throughout this study has been the deficient monetary system. That much is amiss with monetary arrangements in the East Caribbean Currency Area should come as no surprise. Colonialism is primarily an economic relationship with political ramifications and the monetary arrangements obtaining in the East Caribbean were fashioned for a colonial people by their imperial masters. It should, therefore, be expected that this Colonial Monetary System would be ill-equipped to facilitate the economic transformation of the East Caribbean Currency Area. Although implied throughout the study, the inefficiencies of the monetary system are made most explicit in Chapter One. In this Chapter, a number of proposals for reform were advanced. This study will now be concluded with a reiteration and elucidation of some of the major proposals for monetary reform.

These proposals can be classified under two broad headings: those relating to the powers of the East Caribbean Currency Authority, and those relating to policy and organization. In regard to the former, it was argued that the powers of the East Caribbean Currency Area should be enlarged in three critical areas: (1) the ECCA should be empowered to assume the role of lender of last resort to all other financial institutions operating in the Area; (2) it should have greater say in the imposition of foreign exchange controls; (3) it should have the authority to change the parity with sterling, and (4) it should be empowered to invest in and lend against the security of equities.

Points one and four above can be collapsed into an argument for increased latitude in portfolio policy for the ECCA. It has been pointed out that existing legislation prevents the ECCA from assuming the role of lender of last resort to any financial institutions other than commercial banks, by virtue of the limited range of securities that the ECCA is allowed to rediscount or accept as collateral for loans. Consequently, the Currency Act should be amended so as to widen the

range of securities acceptable as collateral for loans, as well as to increase the number of financial instruments eligible for rediscount by the ECCA. In regard to equities, it has been argued that the ECCA's participation in the market for equities is of vital importance in stimulating the development of this market. The higher degree of shiftability which this would impart to equities would enhance the attractiveness of this type of asset, and thereby contribute, on the demand side, to the development of the market. Select equities should therefore, be included among the number of financial assets which the ECCA can include in its portfolio.

The legal restrictions imposed on the ECCA were probably conceived as serving the interest of sound Central Banking. However, in an area as intricate as Central Banking in an underdeveloped economy, inflexible legislation is a crude and unworkable substitute for expertise and honesty. An essential ingredient of expertise is knowledge. Therefore, if the ECCA is to function in the manner outlined above, it is of paramount importance that it should be entitled to inspect the operation of financial institutions. The present Currency Act does not grant this authority to the ECCA. The Act, therefore, should be amended accordingly.

With respect to the imposition of foreign exchange controls, it has been argued that the ECCA should be empowered to issue general directives to the Ministries of Finance in regard to the exercise of foreign exchange controls. To appreciate fully the spirit in which this proposal was made, one must distinguish between the Ministry of Finance and the Minister of Finance. The ultimate responsibility of the government for decisions of this order would be maintained by providing for prior consultation between the appropriate Minister of Finance and the Central bankers.

The proposals made in this study regarding policy and organization can be sub-divided into those relating to the internal development of the wider financial system. In regard to the former, the main proposals related to staff development, research, investment policy and the organization of a multinational Central Bank. The ECCA's need for improved staffing cannot be over-emphasized. The role of research in Central Banking has been stressed on a number of occasions throughout this study, and the deficiencies in the ECCA's investment policy were indicated. However, enlightened investment policy and a sound research programme can be conducted only by adequate staff. It cannot now be said that the staffing arrangements at the ECCA are adequate.

The localizing of the commercial banking system and the development of a capital market were the two aspects of the development of the financial system which were discussed. It should not be inferred from this that these are the only areas in which there is need for financial reform. The orientation of this study, which centred around monetary institutions, precluded an exhaustive analysis of the financial system. Any excursions outside the domain of the monetary system were occasioned by a preoccupation with the role of the East Caribbean Currency Authority.

On the question of control of the financial system, the view expressed in this study is that short term stability considerations must be subordinated to long term development policy. That is, the traditional preoccupation with the money supply and the degree of liquidity within the economy must be supplemented by and subordinated to a concern with the flow of credit into the various sectors of the economy. Such an enlightened credit policy can only be pursued efficiently within the context of an overall monetary plan, based upon the financial requirements of national development plans.

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