

THE EFFECTIVENESS OF KENYA'S
MONETARY POLICY DURING
THE PERIOD 1967 -1976

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This Reserach Paper is my orginal work and has not been presented for a degree in another University.

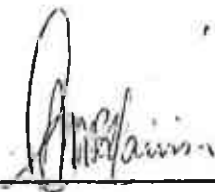


J O S H U A S . M U I R U

This Research Paper has been submitted for examination with our approval as University Supervisors.



P R O F . W . M . S E N G A .



D R . G . M . K A R I I S A .

A C K N O W L E D G E M E N T S .

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A B S T R A C T

TITLE:

THE EFFECTIVENESS OF KENYA'S MONETARY POLICY DURING THE PERIOD 1967- 1976.

Monetary policy like Fiscal policy is one of the Public interventionary measures aimed at influencing the level and pattern of economic activity so as to achieve certain desired targets. The ability of the monetary authority to influence the economic performance depends on the financial structure of the economy. It has been argued that with a rudimentary financial structure where money and Capital Markets are very thin or non-existent changes in money supply cannot be transmitted into the real sector and a reorganization of the financial system is required for the smooth functioning of monetary policy.

On examining the financial structure of the L.D.C's we find a rudimentary financial system with imperfect capital markets and thus wonder if monetary policy would have any role to play in the process of economic development. However there is a second approach which does not emphasize the institutional aspect of the financial structure and sees the major financial problem in the L.D.C's as that of Credit allocation amongst the various sectors of the economy. Noting that the monetary policy has in the past favoured the modern sector at the expense of the priority sectors, especially those in the rural areas, this approach calls for an increasing proportion of credit to the priority sectors as defined in the government's policy goals.

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The Central Bank of Kenya has pursued both direct and indirect methods of controlling the volume and allocation of credit to the various sectors of the economy with special consideration to the priority sectors. [This study has examined the ability of the Central Bank in carrying out its policy measures aimed at influencing economic performance. The emphasis has been on how successful the Central Bank's measures can be, especially when some of them have no legal backing and depend on moral suasion for their implementation.

It was found that on the whole the Central Bank is able to determine the direction of the desired changes but not the definite targets. The Central Bank needs to be more specific in its direct policies if the required targets are to be achieved.

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CHAPTER ONE:

I N T R O D U C T I O N

A: THE ROLE OF MONETARY POLICY IN ECONOMIC DEVELOPMENT

In their desire for rapid economic development most L.D.C's have come to place a lot of emphasis on *monetary* policy measure as a method of accelerating an orderly process of economic development. Most of the economies of L.D.C's have proved very vulnerable to the violent free-market forces and it has become necessary to protect themselves by regulating and controlling these market forces.

Monetary and fiscal policies are increasingly being used to regulate economic activity. While we may wish to split hairs by trying to establish a clear distinction between the two types of policies suffice it to say that monetary policy takes the form of influencing economic activity through changes in the money stock while fiscal policy tries to influence economic activity through the budgetary system that is through the revenue and expenditure policy of the Government. A Government deficit depending on how it is financed can be used to bring about changes in the money stock and one would wonder whether this is a fiscal or monetary policy. In our effort to determine the nature of the particular policy we might take some comfort from the fact that these policies have been institutionalized separately; the institution dealing with monetary policy is the Central Bank, while fiscal

policy is directly under the government and in such a situation. We would distinguish monetary policy action from that of fiscal policy by looking for the initial stimulus to the economy, but even this will not do because the two institutions do not work in isolation. The Central Bank is the financial advisor to the government such that any budgetary measures intended to alter the volume of money supply should have the blessing of the Central Bank so as to be successful.

However, since we shall primarily be examining the policy measures aimed at influencing the economic activity by specifically altering the volume of money stock, any Budgetary policy actions aimed at influencing the economic activity through changes in the money stock should be considered as part of monetary policy. In drawing this conclusion we have noted that since the Central Bank of Kenya (hereafter referred to as C.B.K) is the financial advisor to the government, any budgetary measures specifically aimed at altering the money supply must be endorsed by the C.B.K. and since the C.B.K's policy actions are identified with monetary policy such budgetary measures can be regarded as constituting monetary policy.

Although the Central Bank enjoys some degree of autonomy in the formulation of the financial policy it should be observed that this policy is not formulated in an "Ivory Tower" of financial sophistication. The Central Bank is very much an arm of the government which carries out the technical work of formulating and executing the monetary policy so as to achieve the

'wider goals set out by the government. Unlike fiscal policy which is directly formulated and implemented by the government,' the monetary policy is largely implemented by the Central Bank through the Commercial Banks. Since the interests of the Commercial Banks are not always in harmony with those of the Central Bank, the monetary authority requires statutory and discretionary instruments to push its policies through the Commercial Banking system. Although the Central Bank's tool-Kit may contain a wide range of amunitions they are usually found to be ineffective given the rudimentary financial structure of the L.D.C's. We shall therefore investigate the ability of the Central Bank to implement its monetary policies.

The monetary authority may be required to deal with a range of policy goals some of which are the following:- (1)

- (1) Growth of G.D.P.
- (2) Price stability
- (3) Favourable balance of payments
- (4) Full employment
- (5) Equitable distribution of Income.

GROWTH OF G.D.P.

Although the growth of GDP is not a sufficient condition for economic development a sustained growth of GDP increases the freedom of choice for the consumer.

Monetary policy can contribute to the growth of GDP by providing investment funds ^{through} credit creation.

Monetary policy can also be used to mobilize savings which can then be used for investment.

Another method to bring about an increase in GDP would be to institutionalize the flow of loanable funds such that investment funds will be allocated to those sectors with the highest rates of return; thus Institutionalization of savings and Investments brings about a better allocation of resources resulting in increased out-put. (2)

PRICE STABILITY:

If money is to perform its functions as a store of wealth and a medium of exchange then its value as reflected in the level of prices should only be allowed to change moderately. Traditional wisdom suggests that to maintain price stability we should regulate our money supply through credit creation using the classical tools of the Central Bank; these are the Discount Rate, minimum Reserve requirements and open market operations.

When we consider the Discount Rate we find that its effectiveness depends on the initiative of the Commercial Banks to use the borrowing facilities offered by the Central Bank otherwise if the Commercial Banks have sufficient reserves such that they have no need to borrow from the Central Bank then they cannot feel the pinch of the price of reserves. However if the Central Bank uses the Discount-Rate and the minimum reserve requirement at the same time it is possible to make the Commercial Banks feel the effect of the Discount Rate by raising the Minimum reserve ratio such that for the

banks to meet the minimum reserve requirements they have to borrow from the Central Bank.

When we observe the applicability of open market operations we note that the instrument requires that there be financial assets which can be bought and sold in the open market. The situation in the L.D.C's is such that the market for financial assets is very thin and in most cases limited to government securities only. We are thus left with one quantitative instrument of credit control and this is the minimum reserve ratio which can be used most effectively for reducing the volume of money supply. It is not very appropriate for expanding credit. We therefore observe that by contractionary measures monetary policy can be used to bring about price stability especially when price instability has been caused by an excessive credit expansion.

BALANCE OF PAYMENTS.

Defining the balance of payments as the sum of net receipts from trade and net Capital inflows, i.e

$$B = E - M + \text{Net Capital inflows,}$$

Where E = Exports

M = Imports

B = Balance of payments,

our - - intention may be to maintain some modest fluctuations in B such that our foreign reserves do not fluctuate widely outside the desired target. In Kenya the desired level is 3 months reserves worth of Imports. This minimum level of reserves guards against any contingencies in the foreign exchange receipts while an excessive level of reserves may deny the economy some badly needed investment funds. To maintain a favourable balance, monetary policy can be applied selectively so that credit is directed to the export sector and away from the Import sector while encouraging more capital inflow and discouraging capital outflow. Exchange Controls have been used to discourage the flight of capital.

FULL EMPLOYMENT AND EQUITABLE DISTRIBUTION OF INCOME.

When we analyse the problems of economic development it is difficult to separate employment and income distribution. By raising the level of employment, we can improve income distribution. In a situation where we have been experiencing all types of labour under-utilization in the L.D.C's a policy which alleviates the problem of unemployment improves income distribution. Monetary policy action can raise the level of employment by directing investment to the labour-intensive sectors like rural agriculture, small African businesses and light industries like those dealing with textiles. Monetary policy can also take the form of discouraging credit to the capital intensive sectors.

Having reviewed the dimensions of monetary policy in dealing with the above issues we shall now turn to the background of the Kenyan financial structure with particular attention to the Central Bank of Kenya, and examine its ability in coping with the above issues.

B. THE BACKGROUND OF KENYA'S FINANCIAL SYSTEM.

The Central Bank of Kenya.

Prior to the three Central Banks of Kenya, Uganda and Tanzania we had the East African Currency Board (EACB) which served the three territories. The EACB was established in 1919⁽³⁾ and its main function was to issue currency against Sterling Securities. The local currency issue was in principle 100 per cent⁽⁴⁾ backed by Sterling reserves although starting from 1955 the Board was authorized to create Fiduciary Currency of limited amounts backed by local securities.

Several years after Independence the EACB was replaced by the three Central Banks serving each of the territories. Thus in 1966 the Central Bank of Kenya was established by an Act of Parliament. The statutory powers of the Bank were further strengthened by the Banking Act of 1968.

The Central Bank besides performing the function of the Sole Issuer of currency is charged with the duty of maintaining a sound monetary policy; control of credit and the External Stability of the domestic currency; banker and financial advisor to the government and the administering of exchange control together with handling the external financial affairs of the government.

The CBK regulates the volume of money Stock through Credit Controls and exchange Controls. It uses both direct and indirect methods of Credit Control. The direct Controls take the form of Specific instruments regarding the volume and distribution of Credit; the distribution of Credit to the Various Sectors is achieved through Selective

Controls while the desired volume is achieved by instructing the Commercial Banks not to exceed certain ceilings of Credit.

Indirect methods, of controlling the size of Credit and its distribution take the form of minimum * liquidity requirements and Rediscount facilities for Credit to the priority sectors. The CBK admits that it has not found it necessary to use the interest rate structure as an instrument of Control.⁽⁵⁾

Unlike the EACB the CBK has thus a wider range of functions to perform in the process of financial development although it should be noted that towards the end of its life the EACB had started to play the role of monetary expansion through Fiduciary Issues backed by local Securities. The first one of up to £10 million was issued in 1955; the limit was raised to £20 in 1957; £25m in 1963 and £35 million in 1964. In addition when the Board moved from London to Nairobi in 1960, it was authorized to create a further issue of £5 million for Crop finance and this was increased to £10 million in 1962.⁽⁶⁾

The Commercial Banks.

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The other major element of the Kenyan financial system are the Commercial Banks which had started operating in the country even before the Currency Board was established. In fact the National and Grindlays Bank formerly National Bank of India opened its offices in Nairobi in 1896 and the Barclays Bank in 1916.⁽⁷⁾

Some other Banks were established in the fifties⁽⁸⁾ but the first three banks (including the Standard Bank) continued to play a dominant role in the Commercial Banking system of the country and they still continue to do so even to day despite the fact that the ownership of the National and Grindlays Bank has passed on^{to} the government under the name of Kenya Commercial Bank.

A major aspect of the Commercial Banks in Kenya is that most of them are foreign owned and until 1967⁽⁹⁾ they had continued to behave as if they were just overseas branches of their head Offices. This feature of foreign ownership and the local Banks acting as overseas branches meant that the reserves position of these banks reflected the world-wide position of their head offices and it was difficult to control the activities of these banks^{Commercial banks} have therefore been required to turn over any foreign reserves they have to the CBK and should only hold minimum working balances.

Another element of the Commercial Banking behaviour is the ~~the~~ conservatism of the expatriate banks as reflected in their undue concentration of branches in towns and discriminating against Africans in their lending policy⁽¹⁰⁾ This is especially so with the Barclays Bank and the Standard Bank. However according to another view the apparent discrimination against African borrowers as reflected in these banks' small volume of Agricultural Credit is due to the chaotic state of land law in many African countries which precludes real Security.⁽¹¹⁾

This discriminatory behaviour is likely to change with increasing local participation through joint ownership of the formerly foreign owned banks.⁽²⁾ There are 14 Commercial Banks with about 260 branches and there are 20 banking Offices per million of the population. The Commercial Banks account for 87%⁽¹³⁾ of the total deposits and the currency in circulation; account for 20%⁽¹³⁾ of the total money supply, where money supply in Kenya includes currency in circulation, all private sector bank deposits and the post Office Savings Bank deposits. This is the Official definition for money in Kenya.

Financial Intermediaries:

Although the Commercial Banks continue to play a dominant role in the Kenyan financial system, there is a very important function performed by the financial intermediaries. Because of the characteristic nature of certain services like long term lending in the form of Agricultural Credit, mortgages, assurances upon human life and savings like N.S.S.F. it requires that there should be certain institutions which have specialized in particular services.

Even though the proportion of the assets of the financial institutions is low compared with those of Commercial Banks, there is a wide range of financial intermediaries offering a wide range of services.

We have the "specified financial institutions⁽¹⁴⁾ which are subject to control by the CBK; these are usually private financial institutions and they offer an important service of mobilizing private savings as well as making loans to the private sector.

Included under specified financial institutions we have:

1. Credit Finance Corporation Ltd.
2. Diamond Trust of Kenya Ltd.
3. East African Acceptances Ltd.
4. Grindlays International Finance (Kenya) Ltd.
5. Housing Finance Company of Kenya Ltd.,
6. National Industrial Credit (EA) Ltd.
7. Savings and Loan Kenya Ltd.
8. Ismailia Corporation Ltd.
9. Akiba and Finances Ltd.
10. Kenya Commercial Company Ltd.

We also have the East African Building Society under a different category- the Building Societies Act of 1956.

One legal distinction to be noted between the financial institutions and the Commercial Banks is that the Commercial Banks accept deposits which are disposable by cheque while those of the financial intermediaries are not.

When we come to East African Building Society and Savings and Loans Kenya Ltd. We find that these two institutions specialize in mortgages while Credit Finance Corporation Ltd. and National Industrial Credit (E.A) Ltd. specialize in hire purchase financing. Grindlays International Finance Kenya Ltd, Kenya Commercial Finance and East African Acceptances Ltd. specialize in merchant banking.

The above institutions are mainly privately owned except the Housing Finance Company of Kenya where the Government owns 50% of the share capital. Public institutions specializing in Agricultural Credit are the Agricultural Development Corporation while I.C.D.C. and D.F. C. K. specialize in lending to Industry and Commerce, ~~and Agriculture.~~

It can be observed that because of the specialized nature of the services offered by the financial institutions they have an important role in the financial system even though their deposits may be only 13% of the total deposits in the financial system.⁽¹⁴⁾

C. IDENTIFYING THE RESEARCH PROBLEM:

Given the policy goals, the conflicts and the trade-offs; the structure of the financial system, the scope of operation of the CBK i.e. the available tools of operation and their effectiveness we can pose the following two questions.

- (i) Is it possible for the CBK to determine the volume of money stock in the economy?
- (ii) Has it been successful in its efforts to direct credit to the priority sectors and away from the non-priority sectors in its use of selective controls, i.e. how effective are selective controls through "moral suasion" without economic incentives to the banks or legal enforcement?

Before embarking on the answers to these questions it is important that we are clear in our minds of the nature of the variable we are trying to determine and control. This calls for an analytical definition of money stock. Before we come to the actual definition of money stock we should first understand the qualitative nature or properties of this asset which distinguish it from other assets. Money should be seen as a liquid claim to real wealth or real assets, since money consists of claims to real assets the issuing of these claims involves a liability to the body issuing the claims because the holders of these claims have now a claim to real wealth.

In our analysis we are interested in the quantity of claims to real wealth held by the private sector and therefore we have to look at the monetary system's liabilities reflecting claims held by the private sector.

Before we measure the quantity of the private sector's liabilities held by the monetary system we have to determine what the monetary system consists of. For lack of a better definition of the monetary system we shall take all those financial institutions under the Control of the monetary authority excluding the financial intermediaries, whose inclusion would violate the liquidity character of money. The monetary system in Kenya would thus include the Central Bank and the Commercial Banks and their private sector liabilities would constitute ^{part of} the stock of money.

The official definition of money in Kenya consists of all currency in circulation, all private sector deposits with Commercial Banks and deposits of Post Office Savings Bank. The fact that the post Office Savings Bank invests all its assets in Government securities implies that its assets are liquid enough to be included in the quantity of money. *inadequate? See Act*

SOURCES OF CHANGES IN MONEY SUPPLY.

It is necessary to focus our attention on the sources of money supply for us to be able to analyse fully the Central Bank's field of operation. In a developing Country like Kenya changes in money supply can be demonstrated by the Polak Model,

$$MO = X + NFA$$

Where MO = Change in Money Stock
X = Domestic credit creation
NFA = Change in net foreign assets

Domestic credit, X consist of government credit X_g and Private Sector credit X_p while changes in net foreign assets consist of net receipts from foreign trade plus net capital inflow, i.e.

$$MO = X_g + X_p + (E-M) + \text{Net Capital inflow.}$$

Where E = Exports
M = Imports.

We can now examine each of the components of the above expression and see how well suited the CBK is in determining each of the components. In fact it is clearly stated that the Bank's main operations are directed at these components.

"The Central Bank's main operation are directed towards the sources of money supply, namely the Government's financial transactions and the Credit and the Foreign Exchange transactions of Commercial Banks". (15)

If we take the sources of money supply in that order we see that the CBK can determine fairly accurately the size of X_g . The CBK is the financial advisor to the government and is therefore directly involved in the determination of X_g . The size of X_g is determined by government borrowing from the Central Bank and the Private Sector, of which most of the Private Sector lending is undertaken by the Commercial Banks. The amount of government borrowing from the Central Bank is limited to "25% of the gross revenue received into the exchequer account" while government borrowing from the Commercial Banks can be controlled by the CBK's use of discretionary power to accept or reject any amount of Treasury Bills applications.

The size of the private sector credit X_p is a function of the behaviour of the Commercial Banks and that of the Private Sector, and the Credit Control instruments are directed at this sources of money supply. our attention will be focussed on this component.

When we come to the net foreign assets we observe that the level of exports E , is an exogenous variable which cannot be directly controlled by the monetary authority whereas the quantity of imports although endogenously determined by the level of income can be controlled by the monetary authority through exchange control.

Besides the above approach on the analysis of the components of money supply there is another approach in which the determinants of money stock are expressed in the form of (16) a multiplier relationship and the monetary base.

According to this model the monetary authority controls the money stock by controlling the size of the money multiplier as well as the currency base. The multiplier is a functional relationship depending on the reserve ratio of the Commercial Banks and the public's preference between Commercial Bank deposits and currency.

Using the broad definition of Money Stock, $M_2 = C_p + D_p$, the following equation is obtained:

$$M_2 = \frac{(1 + a)}{a + b} (C_p + bD_g)$$

$$= mA$$

where C_p = Currency in circulation

D_p = Public deposits held by Commercial Banks.

D_g = Government deposits held by the Commercial Banks.

a = Public's preference between C_p and D_p .

b = Commercial Banks reserve ratio.

The determinants of the money multiplier are the variables a and b while Δ the monetary base is determined by the currency base c and the amount of government deposits with the Commercial Banks.

Since Δ the monetary base can easily be controlled directly by the Central Bank, the main problem of regulating the money supply lies with the determination of m through the independent variables a and b . The study on the ability of CBK to Control a and b found that the two variables could not be determined by the Central Bank. It was also found that the money multiplier was more responsive to changes in b than to changes in a . i.e. the elasticity of m with respect to b was much higher than that ^{of} m with respect to a . While a was found to vary moderately over time b was found to fluctuate very widely. The study concluded that it was an elusive goal for the Central Bank to control the money stock.

Our main criticism with this conclusion is that the analysis ignored the CBK's use of direct controls which may be more effective than the indirect ones of minimum reserve requirements.

Focus on Credit to the Private Sector.

We have already noted that without the influence of the Central Bank X_p would be determined by the joint behaviour of the Commercial Banks and that of the Private Sector. We wish to examine how the use of indirect controls in the form of credit guidelines have influenced the behaviour of the Banks.

In other words how effective are the classical tools of credit control especially when our Central Bank only uses two of them, the minimum liquidity ratio and the Discount Rate. Turning to the direct controls we want to find out if moral suasion and Credit guidelines without economic incentives or legal enforcement can achieve the desired goals.

Monetary policy in LDC's is geared towards economic development by directing credit towards certain priority sectors where the social rate of return may be higher than the Commercial Rate such that without this external interference these sectors may be denied of credit because of their low rates of return.

One major feature about private sector credit is the high risk of loan defaulting within the priority sectors and it is very difficult to direct credit to these sectors through moral suasion as the Commercial Banks may have no moral commitment to the process of development. We shall conclude this chapter by noting the following:-

" In performing its duties the Bank endeavours to bring about efficient allocation of resources by ensuring that the financial system invests in projects which are of high priority to the economy of the country" (17)

The high priority areas to the economy could in fact be the low priority areas to the Banks otherwise there would be no need for the Central Bank to interfere if the high priority sectors to the economy were identical to the priority sectors of the Banks.

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$i = \frac{L}{P_{L+}}$

CHAPTER TWO

L I T E R A T U R E R E V I E W

The debate on the role of monetary policy in LDC's has taken several approaches. There are those who feel that because of the rudimentary financial structure obtaining in these countries changes in money supply have little or no effect on economic activity.⁽¹⁾ The absence of capital and money markets; the lack of a wide range of financial assets precludes the transmission of monetary impulses to the real sector. With a sophisticated financial structure an increase in money supply may lead to the substitution of other financial assets for money. This will have the effect of lowering the interest rate as the prices of the financial assets increase, since the interest rate varies inversely with the price of financial assets, the falling interest rates will encourage the volume of investment which will increase aggregate demand through the expenditure multiplier effect, and the level of income will rise. Thus in the absence of a developed financial system monetary policy cannot be expected to be effective.

However, if we make the assumption that the physical assets are an equally good substitute for money just like the financial assets we find that monetary policy would be very effective in influencing economic activity within the LDC's. The fact that we have only two types of assets; money and physical assets, an increase in money supply will result in the substitution of physical assets for money.

Another approach related to the first one takes even a more negative view on the role of monetary policy in influencing economic activity. According to this view there exists a dichotomy between the real sector and the

financial sector and therefore changes in money supply have no effect on the real sector; an increase in money supply will not stimulate real income and will only be translated into absolute high prices. In other words real income is inelastic with respect to the rate of interest and there is no way of making real income respond to changes in interest rates resulting from changes in money supply. This dichotomy effect is more magnified in the LDC's where the range of financial assets is very narrow and the only major assets are money and real physical assets. However the validity of the dichotomy or the inelasticity of real income with respect to the rate of interest would have to be tested empirically. If we can show that real income is endogenously determined within the financial and the real sectors then the assumption about the dichotomy would be false.

The existence of excess demand at the prevailing low interest rates in the LDC's implies that investment will depend on the availability of credit rather than on its cost, i.e. the level of investment will be more sensitive to changes in credit than to changes in interest rates. Under these conditions investments will be very sensitive to non-price credit rationing.

Monetary policy can also perform the role of mobilizing savings for investment. According to this view the problems of LDC's are due to a short fall in savings and for the income to grow more rapidly we must continue to invest and this investment should be fueled by savings. The monetary policy recommended in this approach is to raise the interest rates so that those who save can be encouraged to save more. In this case the interest rate is the price paid to the savers. This approach calls for a tight monetary policy

where credit creation is no substitute for savings.

The prior- savings approach gained popularity from the experience of China and Korea in the early 1950's and late in the 1960's. ⁽²⁾

There is yet another approach which stresses the investment first strategy, the role of monetary policy should aim at encouraging investment through credit creation. This approach advocates an easy monetary policy where credit for investment is available at a low cost. Increased investment will bring about an increase in income such that the propensity to consume will decline with the increasing income and this will in turn result in increased savings which can be used for further investment.

The weakness of this approach lies in the fact that there is no consideration as to what might happen if the initial investment occurred in a situation where the resources were fully employed. In such a situation the investment financed by credit creation may only raise prices without increasing income.

The last approach to be discussed is one which sees the problem in the LDC's as that of economic development requiring savings and investment. In most of the LDC's one particular economic unit can only invest if it is able to save and in such a situation where the flow of investment funds is not institutionalized there is no opportunity to invest in the most productive projects because those who would like to invest are not necessarily savers.

In order to facilitate the smooth flow of loanable funds this approach calls for the institutionalization of this process. If the flow of funds is institutionalized the funds flow from ultimate lenders to ultimate borrowers. Such that the investments will only involve those projects with the highest rate of return and the less efficient projects will be left out because borrowers with more efficient investments can bid away funds from the less efficient ones by offering a higher interest rate on the loanable funds. Hence the institutionalization of the flow of funds brings about a more efficient resource allocation.⁽³⁾

The flow of funds approach therefore reconciles the prior - savings approach and the investment-first approach. When the loanable funds flow from the lenders to the borrowers through financial intermediaries the investor does not have to save to invest, the process involves the flow of funds from "surplus" spending units to "deficit" spending units. With this arrangement we only need to have surplus spending units in the economy and the funds will flow to the deficit spending units through the process of financial intermediation.

We have to identify the surplus spending units and deficit spending units in the economy. The household sector could be identified as a surplus spending unit while the deficit spending units are the government and corporate sector.⁽⁴⁾ After identifying the relevant sectors we should then create the financial assets which will induce those who save to hold their savings in the form of financial assets rather than physical assets. The creation of interest bearing financial assets induces more savings than when the savings is in the form of

physical assets. To those who save, saving becomes an investment in the process of buying the yield bearing financial assets thus more and more savings are mobilized as more financial assets are created and diversified.

In most of the foregoing analysis we have not questioned the inability of the monetary authority to determine the quantity of money stock; we continued to assume that the monetary authority is able to manipulate the size of the money stock so as to achieve the required policy measure. However this is not always the case especially with the less developed countries with a rudimentary financial structure. The Central Banks in these countries have wide statutory powers but are not able to regulate the money stock because of the inappropriate financial structure. The monetary authorities in these countries have applied direct controls more often than indirect controls both in the determination of the size of credit and its distribution. The increasing use of selective controls has become an important feature of these countries. But while much has been written on the indirect controls very little has been done on direct controls. Because the literature has ignored the direct controls most of the studies on the ability of the Central Bank to control the money supply conclude that monetary control is an elusive goal to the Central Banks of these Countries.

FOOT NOTES

1. The institutionalists include among others Sen, S. N. and Sayers, R. S.,
Khatkhate, D. R. "Analytic Basis of the working of Monetary Policy in less Developed Countries"
I.M.F. Staff Papers, Vol.XIX No.3
(No. V. 1972), p. 533.
2. Khatkhate, D. R., op. Cit. p.534.
3. This approach was pioneered by Gurley and Shaw;
Gurley, J. G. and Shaw E.S. "Financial Aspects of Economic Development", American Economic Review
Vol. XLV (September 1955).
4. Khatkhate, D. R. op. Cit. p. 547.

CHAPTER THREE

A: COMMERCIAL BANKING AS AN INDUSTRY:

In trying to analyse the behaviour of the monetary system we shall treat the banking system as an industry where the individual banks are profit seeking firms or profit maximizers. However, we shall continue to assume that the banking system is a regulated industry where the quantity and the distribution of output is controlled by the monetary authority. In our effort to use the theory of the firm to explain the behaviour of the individual banks we shall examine the behavioural characteristics of the Commercial Banks.

"Commercial Banks are business firms and as such are constantly striving to make a profit. They attempt to do this mainly by making loans and, what is really the same thing, purchasing securities, such as government or private bonds. In the process, each bank thus acquires a portfolio of "earning assets"- of bonds, promisory notes, and other instruments certifying someone else's indebtedness to the bank which yield an interest income. It is in the management of these earning assets, that is, in the making of loans and the purchasing of securities, that the banks earn their profits and exert a vital impact upon the economy. (1)

We can identify the inputs used in the process of creating the earning assets as the liquid reserves and the cost of these inputs is the interest rate paid on deposits and the interest foregone by maintaining the required minimum reserves.

From the theory of the firm the output capacity is determined by the size of the plant and with the Commercial Banks the capacity to create credit is determined by the level of liquid reserves. We would expect economies of scale in the banking industry although this has not been settled empirically.

"It has become a commonplace but certainly not an empirically proven fact, that there are economies of scale in banking. In view of the conceptual difficulties involved in defining output, in treating production-mix and separating the effects of branch and holding company operations in measuring scale, it is unlikely that the precise extent of these economies will be unearthed.⁽²⁾

The quantity of credit, X supplied by the individual banks will be a function of the average interest rate operating in the market. Because of the differentiated services offered by the banking industry each bank can charge a different interest rate from the others but the range of these rates in the industry is not very wide.

When we examine the industry as a whole we find some degree of monopoly power; with this monopoly power the banking system could either fix the quantity of credit to be supplied and the interest rate would be determined by the market, or fix the interest rate and the quantity demanded will be determined by the market forces. But because the banking system is a regulated industry it does not exercise most of these powers and it is the duty of the monetary authority to determine the volume of credit supplied within a given range of interest rates.

If the minimum lending rate was fixed by law⁽³⁾ the raising of this rate would be viewed as a contractionary measure while an upper limit beyond which the banks cannot charge has also a contractionary effect especially when the banks would require a very high interest rate before they can lend to a sector of low credit worthiness.

19/2/57
7/2/57
In trying to control the volume of credit creation the monetary authority can interfere with the capacity used for credit creation, the liquid reserves and/or the price of credit, the interest rate charged on the loans. The banking system's capacity to create credit is reflected by the level of free reserves. An increase in the free reserves increases the capacity for credit creation while a decrease in the free reserves reduces the capacity for credit creation. Thus if there is excess demand in the market for loans any increase in free reserves will bring about an expansion in credit while a decline in the free reserves would cause a contraction in the volume of credit supplied. It is not always true that changes in the free reserves will bring about changes in the volume of credit creation; an increase in the free reserves will bring about an expansion of credit creation if at the going interest rate there is unsatisfied demand, otherwise these free reserves will not be used to expand credit or may be used to purchase secondary reserves like government securities. A reduction in the free reserves may also not bring a change in the volume of credit unless the banks were working at full capacity that is fully loaned up.

On the other hand when the monetary authority tries to control the volume of credit through the interest rate, this may be done by raising the discount rate if the aim is to reduce credit creation and lowering it if the aim is expansionary but just like in the theory of the firm this will depend on the elasticity of credit with respect to the rate of interest.

There are three classical methods used by the monetary authority to regulate the volume of credit by varying the level of free reserves. These are open Market operations, the Discount rate and the minimum reserve requirements.

Open Market Operations:

When the monetary authority wishes to increase the quantity of free reserves for a given minimum reserve ratio this can be achieved by buying securities from the banking system and when the intention is to reduce the level of free reserves the monetary authority achieves this by selling securities to the Commercial Banks or to the Public so that the free reserves are mopped up. For the successful operation of this method there must be a market for the securities. These conditions do not obtain in most L.D.C's and therefore open market operations cannot be used for varying the level of free reserves.

The Discount Rate.

This is the price at which the Commercial Banks can buy additional reserves from the monetary authority. When the aim of the monetary authority is contractionary

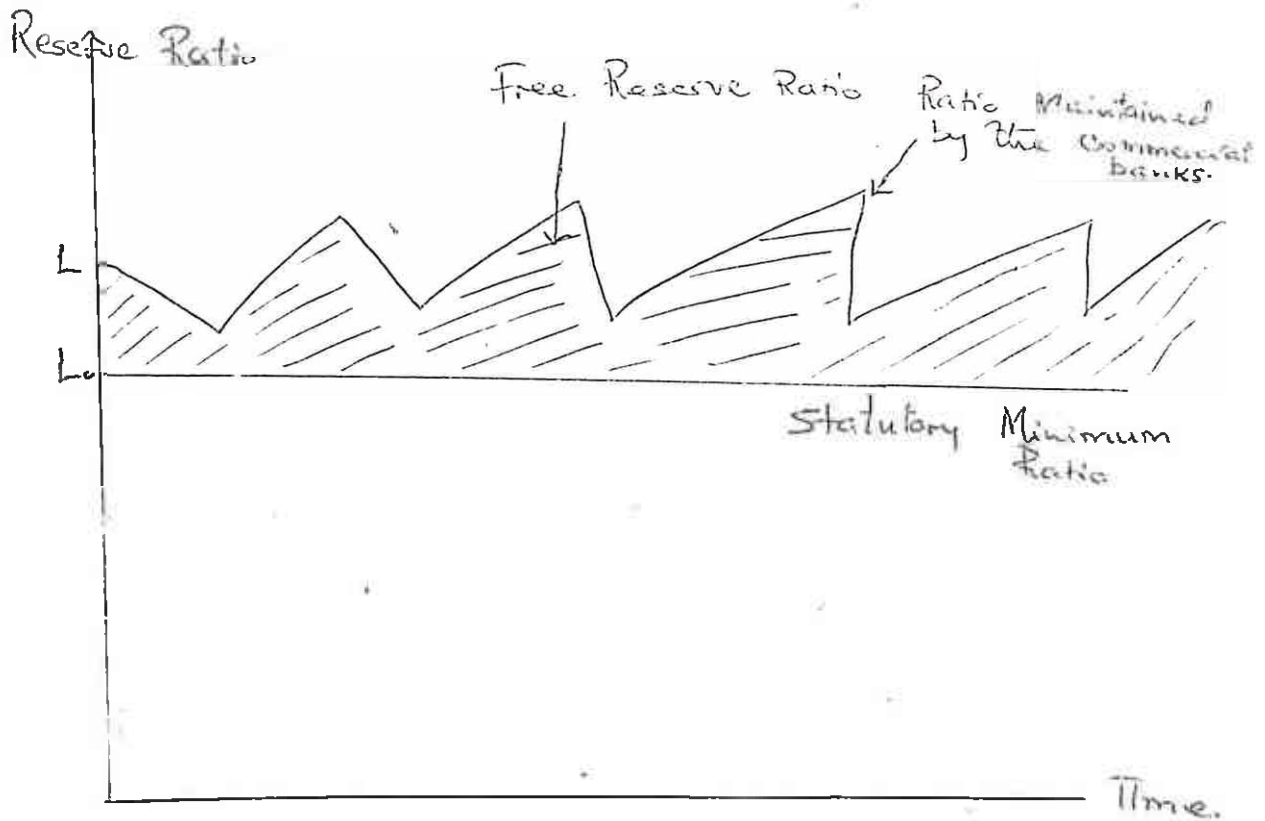
the Discount rate may be raised so that for a given minimum reserve ratio the Commercial Banks will have to pay more for reserves. The monetary authority can lower the Discount Rate when it wants to expand credit so that the Commercial Banks can now obtain additional reserves more cheaply. But it must not be forgotten that the success of the Discount Rate as an instrument of policy to a large extent lies with the Commercial Banks because it is them who decide whether to buy additional reserves or not. Whether changes in the Discount rate will be effective or not this will depend on the demand for reserves by the Commercial Banks. The Discount rate can be seen as the price at which the monetary authority sells the credit creation inputs, the ability of the monetary authority to control the volume of credit through the Discount rate also lies in its ability to be the sole supplier of reserves, if the Commercial Banks can obtain the additional reserves from other sources at lower prices than the Discount rate will be in-effective. The discount rate would thus be an effective tool for monetary policy in the L.D.C's where there are few sources of reserves.

Minimum Reserve Ratio

Since the reserves serve as inputs in credit creation the monetary authority by raising or lowering the required minimum reserve ratio can alter the capacity for creating credit. But there is no automatic mechanism that raising the minimum reserve ratio or lowering it will always bring about changes in credit creation. While lowering the

minimum reserve ratio increases the capacity of Commercial Banks to create credit they will only do so if it is profitable to do so, that is there must be excess demand for credit at the going interest rate or else interest rates are flexible. This means that it is not sufficient to consider the free reserves only, we should also bring in the interest rate which will determine the profitability of the Commercial Banks. If the Commercial Banks on the other hand had free reserves, an increase in the minimum reserve ratio may not of necessity bring about a contraction in credit, it would depend on whether all the free reserves have been wiped out by the increase in the minimum reserve ratio.

In our analogy of the theory of the firm we found that the Commercial Banks supply a range of differentiated services and as such it is possible to charge different interest within a narrow range. Because of offering differentiated services it is possible to maintain different optimal reserve ratios. Those banks with long term loans may wish to maintain a higher level of free reserves as it may be difficult to liquidate the long term securities at short notice while those banks specializing in short term loans may have a lower level of free reserves. In such a situation changes in the minimum reserve ratios will have different impacts on different banks and it may be difficult to determine the aggregate impact on the banking system. However, on the whole the minimum reserve ratio method of credit regulation works more effectively by contraction than expansion.



When we observe the reserve ratio of the banking system we find that it is not constant over time but it rises and falls depending on what the Commercial Banks feel the optimal level should be at a particular time; sometimes the optimal level, may vary with the seasons of the year or patterns of economic activity. During an economic boom there is a high demand for credit and the optimal reserve ratio may be low but during recessionary periods there may be high reserve ratios. When the reserve ratios behave in this manner a minimum reserve ratio will not have a uniform impact over time on the capacity to create credit.

Coming back to the observation that the minimum reserve ratios work more effectively by contraction than expansion we see that by continuously raising the minimum reserve ratio we can completely wipe out the free reserves of the banking system and after this point the banking system (assuming no other sources of reserves, either through the Discount window or by open market operations) will have to call back loans or liquidate securities to maintain the required minimum reserve ratio. On the other hand continuously lowering the minimum reserve ratio will not necessarily bring about an expansion in credit. This can be compared to the situation in the theory of the firm where the excess capacity can be reduced if we were to freeze the inputs by an amount greater than the excess capacity but the quantity of output supplied will not necessarily increase just because we have increased the volume of resources, we have also to consider the demand side if we are to expect an increase in supply. Referring to the diagram, any minimum reserve ratio above L will bring a contractionary effect on credit but any minimum reserve ratio below L_0 will not necessarily result in credit expansion.

This situation is further complicated if we introduce the optimal reserve ratios of the individual banks, unless we assume there are compensating influences a change in the minimum reserve ratio based on the consolidated reserve position of the whole banking system may not achieve the desired results because the impact will fall on the individual banks differently.

The situation obtaining in the L.D.C's is such that open market operations cannot be used because of the absence of a capital market, and because the interest rate structure does not reflect the opportunity cost of capital, the Discount rate even when used cannot be expected to be very effective. Thus we are left with the minimum reserve ratio as the only indirect method. This mechanism together with credit guidelines are the methods used to regulate the volume of credit in L.D.C's. In applying the minimum reserve ratio to the credit requirements in the L.D.C's we should observe that most L.D.C's are starved ⁽⁴⁾ of credit and we are called upon to use the minimum reserve ratio for credit expansion, but from the above analysis we have found that this instrument works effectively when we want to contract credit. However, this tool can be of some use in credit contraction during periods of stagflation when the cause of economic stagnation is not due to shortage of credit. It should further be observed that in the L.D.C's not all sectors are credit starved; the manufacturing sector and the trade sector are usually well supplied with credit. It is the agricultural sector which is usually starved of credit. We may note that over the last ten years the manufacturing sector in Kenya got over 20% of the total Commercial Bank lending, the trade sector which includes the export, import and the domestic trade sectors got well over 25% while agriculture got 11% on average over the same period. ⁽⁵⁾

In Kenya the minimum reserve ratio has been used to contract credit because it has moved from 12½% in 1969 to 15% in 1972 and to 18% in 1976. The growth of credit has in most cases exceeded the ceilings laid down in the credit guidelines despite the fact that the priority

sectors like agriculture have gone credit starved.

The above analysis has dealt mainly with the quality of credit creation, we shall now examine its allocation among the various sectors of the economy. In the ideal classical case the monetary authority would control the volume of credit creation and leave the distribution to the market, with the imperfect market conditions as observed in L.D.C's the monetary authority deals with both credit creation and with its distribution. Credit allocation is carried out through selective controls by favouring the priority sectors and discriminating against the non-priority sectors. The priority sectors are defined in accordance with the government's policy goals. As discussed in the introduction the priority sectors in Kenya are Agriculture, Exports, small African Enterprises and Tourism, while the non-priority ones include Imports of luxury goods and hire purchase goods.

Selective Controls.

Because of the market imperfections the general classical instruments have, a different impact on the various sectors of the economy, and selective methods of credit allocation are required. On the one hand the general controls can be applied selectively by maintaining different reserve ratios for different types of deposits and by having different rediscount facilities for different sectors. On the other hand the Central Bank can bring about a selective credit allocation by appealing to the Commercial Banks through moral suasion. Thus selective controls may be coercive or suasive.

The Central Bank may try to increase credit going to the priority areas like agriculture by having the Commercial Banks maintain lower minimum reserve ratios for the long term deposits and higher minimum reserve ratios for the short term deposits. But as we found in our discussion of minimum reserve ratios we found that before the banks can expand credit it must be profitable for them to do so and it would not be different even for differential reserve requirements. Similar criticism can also apply to differential rediscounting facilities for agricultural bills whose existence does not mean that it is profitable to lend to this sector and if the Commercial Banks do not take the initiative to utilize the easy rediscounting facilities for a particular sector then the measure will not be effective.

While some selective controls are modified versions of the general controls ^{other} selective controls are in the form of specific instructions relating to the proportion of credit which should go to a particular sector, while the statements may be very specific they may have no legal backing and it is left to the moral commitment of the Commercial Banks to meet the needs of these requirements. In most cases the success or failure of selective controls will depend on the behavioural practices of the Commercial Banks. Before we can fully evaluate the effectiveness of selective controls it is appropriate that we review Commercial Banking practices. To do this we shall examine some Commercial banking doctrines which attempt to explain the institutional behaviour of the Commercial Banks as opposed to the general behaviour of the Commercial Banks as an industry.

B. COMMERCIAL BANKING PRACTICES

Looking back at the history of Commercial Banks we can identify three strands of banking practices. The first one is the traditional view about Commercial Banking known as the 'Commercial loan theory of credit' which rests on the "real bills" doctrine. Commercial banking behaviour has also been governed by the "Shiftability" doctrine of liquidity where the banks protect themselves against illiquidity by maintaining credit instruments for which there is a ready market. The third one is based on the "anticipated income" of the borrower; the criterion for lending to the borrower is based on his anticipated income which reflects his ability to meet the repayments of the loan.

Commercial loan theory of Credit

According to the doctrine the Commercial Banks specialize in short term credit where the loans are self-liquidating in nature.

A self-liquidating loan is one which will normally be repaid out of the income resulting from the transaction financed by the proceeds of the loan. As the name suggests under the Commercial loan theory of credit, the bulk of the banks' loans are made to commerce for short term working capital; they are business loans on physical goods in the process of production or marketing. The borrowers can always pay back these loans after short period on the event of selling their products. Under the "real-bills" doctrine this practice was popular with Commercial Banks in the U.S. up to 1920's⁽⁷⁾ although it had been copied from the British banks.

The theoretical justification for the real bills doctrine is that Commercial Banks maintain a large proportion of their liabilities in the form of demand deposits because they are required to be liquid at short notice, they should therefore specialize in short-term self liquidating loans which are usually of three months duration.

Thus given the frequent excess liquidity ⁽⁸⁾ in the Kenya Commercial Banks which are patterned on the British Banking system we have reason to suspect that the deposit structure of these banks contain a big proportion of demand deposits such that for the Commercial Banks in Kenya to remain liquid at short notice they must specialize on short term self liquidating loans. This implies that the bulk of credit will go to those sectors which require short term credit to finance transactions over a short period; such sector could be identified as manufacturing and trade- this would include both domestic trade and international trade. With this type of Commercial Bank liabilities structure we would expect a small proportion of long term credit. If we identify such sector like Agriculture and small African enterprises as the ones requiring long term loans, then we would expect loans going to these sectors to comprise a small proportion of the total credit of Commercial Banks.

The shiftability doctrine of liquidity

In the course of Commercial Banking development the banks are faced with continuous renewal of short term credit and this amounts to, long term borrowing in effect. But the Commercial Banks being holders of a high proportion of demand deposits have to be fairly liquid even at short notice. This means that the credit instruments held by Commercial Banks can always be shifted within the economy.

that is there must be a ready market where these credit instruments can easily be sold in the event of illiquidity on the side of a particular Commercial Bank. This calls for a properly organized money market where the credit instruments can be traded. The shiftability doctrine views banking behaviour as an adaptation to increasing demands in long term borrowing and this adaptation is only possible if there is a capital market.

In most of the LDC's the absence of a money market excludes this type of adaptation as the loan securities cannot be easily shifted within the financial structure and for the commercial banks to satisfy the large proportion of demand deposits they will have to specialize in short term lending, implying that sectors requiring long term credit are therefore technically discriminated against. We should ^{however} ~~however~~ taken note of the debt shiftability between the Commercial Banks and the Central Bank in the form of Treasury Bills which in most LDC's is the only major trading of credit instruments.

The anticipated income concept of liquidity x

The increasing demand for long term loans in the form of mortgage ^{Loans} ~~loans~~ to owners of house, loans to consumers of durable goods and long term loans for business has given rise to the concept of anticipated income where the liquidity of the loan is based on the ability of the borrower to meet the repayment instalments out of future income. The anticipated income doctrine could be of limited application to the LDC's where the anticipated income of the would be borrowers is dubious.

This is especially true in agriculture where adverse weather conditions particularly drought could wipe out the anticipated income. It could also apply to the small African businesses where because of their size the risk of failure is not well spread out.

C: DEVELOPING OF HYPOTHESES

In the behaviour of the banking system as an industry we found that the capacity or ability to create loans depends on the level of free reserves although the credit actually supplied is determined by the demand conditions in the market as reflected by the interest rates. According to the policy of the Central Bank of Kenya it has not been found necessary to use the interest rate⁽⁹⁾ structure as a policy of credit control.

We wish to find out how successful the Central Bank of Kenya has been in determining the volume of credit creation through the use of minimum reserve ratios. But looking at the trend of credit creation we observed that despite these measures the volume of credit in most cases has exceeded the credit ceiling. We can therefore state the following hypothesis:-

1. The use of minimum reserve ratios together with credit ceilings have not been successful in determining the volume of credit.

Our second hypothesis will deal with the allocation of credit and will centre on selective controls. Except for the discount facilities offered to holders of Bills and notes under the crop finance scheme most of the selective controls in Kenya are of moral suasion in nature.

They are statements made frequently without legal backing or economic incentives, urging the Commercial Banks to increase their lending to the priority sectors and reduce their lending to the non-priority sectors.

When we examine the structure of Commercial Bank deposits we find a large proportion consists of demand deposits, in fact the proportion of demand deposits exceeds 50% (10) of the total deposits. Going back to the theories of Commercial banking the Kenyan banking system practice would be close to the Commercial loan theory or the real bills doctrine, where the banks specialize in short term, self liquidating loans, or the anticipated income doctrine. This is because the absence of a well organized capital market excludes the trading of credit instruments such that debts owed to one bank cannot be shifted to another bank while the dubious nature of anticipated income of the would be borrowers especially in the priority sectors like Agriculture and small African enterprises - precludes the use of the anticipated income criterion.

Under the Commercial loan theory of liquidity the loans are short term and self liquidating and this implies that this practice favours sectors which require short term loans and discriminates against sectors requiring long term loans. The sectors which would go for short term loans are usually manufacturing and trade while those for long term loans would be Agriculture and even small rural business in the process of growing. We would therefore expect to find a large proportion of credit going to the manufacturing and Trade Sectors and a small proportion going to the Agricultural Sector together with the other rural activities of long gestation periods. However the Central Bank of Kenya has tried to alter this situation by selective controls through moral suasion but given the high proportion of demand deposits the banks would tend to specialize in short term self liquidating loans and we suspect that the selective controls have not been effective. Thus our

will be:-

2. The CBK has not succeeded in its efforts to shift an increasing proportion of the commercial bank lending to Agriculture and Exports and away from Imports and the household sector.

FOOT-NOTES

1. Federal Reserve Bank of Cleveland,
"Continuous borrowing through ' short-term'
Bank loans", reprinted in Money and Economic
Activity, (3rd edition) (ed by Ritter L.S.,
(Boston, Houghton Mifflin Company, 1967), p.98.
2. Almarin Philips, "Competition, Confusion, and
Commercial Banking", Journal of Finance, Volume XIX
Number 1, March 1964, reprinted in Money and Economic
Activity (3rd Edition), ed. by Ritter, L.S., Boston,
Houghton Mifflin Company, 1967), pp. 135 -144.
3. In Kenya the minimum lending rates are determined by
the Central Bank.
4. Bortolani, Sergio, Central Banking in Africa, (Milan,
Cassa Di Risparmio Delle Provincie Lombarde, 1975),
p.109.
5. This has been calculated from the figures in the
C. B.K.'s Annual Reports from March 1969 to June, 1976.
6. Federal Reserve Bank of Cleveland op. Cit pp 98-104
7. Federal Reserve Bank of Cleveland, op. Cit p.99.
8. This is reflected in the low subscription rates for
Treasury Bills.
9. Central Bank of Kenya, Money and Banking in Kenya,
Nairobi, 1973.
10. Central Bank Annual Reports 1969-1976.

CHAPTER FOUR

A: PRESENTATION AND ANALYSIS OF RESULTS.

Most of the data used in the analysis was obtained from the Central Bank's Annual Reports: 1967 - 1976. In order to facilitate easy analysis the figures were transformed into percentages which were then graphed so as to observe the trends more clearly. The tables and figures used in the analysis are in the Appendix. Each of the policy measures taken by the CBK over the period covered by the study is evaluated on the basis of the graphical trends. We now turn to the evaluation of the policy measures.

Evaluation of Policy Measures Aimed at Regulating the Total Volume of Credit.

Referring to figures 4.1 A and 4.1 B we see that in figure 4.1 B the curve for the free reserves ratio has been shifted forward by one quarter. This was done after constructing figure 4.1A and observing the credit growth curve and the free reserve ratio curve appeared to be moving in the same pattern except that the free reserves ratio curve appeared to be lagging behind by a quarter i.e. three months. On shifting the reserves ratio curve by one quarter the free reserves appear to explain the growth in credit much more. However this was based on graphical observation only as we do not have any evidence of the length of the time lag between changes in the free reserves and changes in credit creation

From December 1969 the CBK instructed all Commercial Banks to maintain a minimum liquid assets/ deposits ratio of 12½%. The measure was not intended to be restrictive but to equip the CBK with an instrument of control if required; in fact the actual ratio was about 32.5% ⁽¹⁾. Up to 1970 the banks continued with excess liquidity because they took too long to adjust to the requirements of an independent economy ⁽²⁾ and to encourage credit expansion the CBK abolished interest rates on deposits of Commercial Banks kept with it. This measure was taken in June 1970 and it was intended to make the banks invest elsewhere especially in credit creation instead of maintaining special interest bearing deposits with the Central Bank.

When we examine the effect of the 1970 measure of abolishing interest on special deposits with the Central Bank we find that the volume of credit growth rate of 11% in December 1971 ^{fell} to 1.5% in March, 1972. In fact as the CBK admitted some of the banks were unable to maintain the 5% Cash/Deposits ratio together with the 12% minimum reserve ratio ⁽³⁾

Because of the difficulties experienced by some Banks as a result of the 5% Cash/Deposits ratio the CBK rescinded this measure in February, 1972. Instead there was a requirement that the Commercial Banks should maintain credit expansion to within 12% between February 1972 and February 1973. This measure had the effect of reducing the growth of credit far below the 12% ceiling. The situation might have been aggravated by the raising of the minimum liquidity ratio from 12½% to 15% in August 1972. From figures 4.1A and 4.1B this was a *period of low free reserves.*

Credit expansion resumed in 1974 resulting in a balance of payments deficit. To contain the worsening balance of payments the CBK in June 1974 raised the minimum lending rate from 7% to 8% and the minimum deposit rates offered by Commercial Banks were raised from 3% to 5%. This tight monetary policy was also aimed at checking stock building. As a result the growth of credit which was at 30% in June 1974 fell to 17% in September and in December the rate of expansion was only 9%. During this period when the rate of growth of credit was declining the free reserves were also falling and they might have contributed to the decline in credit growth.

Another measure was taken in June 1974 which required that the growth of credit between June 1974 and June 1975 should be kept at 12%. During this period the growth of Credit fluctuated widely between 30% in June 1975 to - 5% in March, 1975. However the growth in credit rose up and in June 1975 it was at 10%. On the whole the measure was hardly successful.

From June 1975 the Commercial Banks were instructed to expand credit by at least 12%. The results indicate that the growth rate in September of the same year was 9%, 25% in December and 11% in March, 1976.

Over the period between December 1974 to March, 1976 the level of free reserves had evened out although the growth rates in credit were fluctuating by a range of about 13%. The absence of data prevents us from speculating the effectiveness of the measure taken in July 1976 to raise the minimum reserve ratio from 15% to 18% while at the sametime requiring that credit to the private sector and Public institutions should not exceed 13% growth ceiling.

On the whole we observe that there is a definite common trend between the growth rates of credit and the level of free reserves. When we examine the effects of the policy measures on the growth rates of credit we find that they are even more powerful in determining the growth rates of credit than the changes in the free reserves. The policy measures are especially effective in the reduction of credit growth rates where there are specific targets which cannot be easily achieved by the indirect method of varying reserves.

Evaluating the Policy Measures Intended for
Credit Allocation.

From table 4.2 we observe that the proportion of demand deposits has been well over 50% with time deposits and savings deposits ranging between 15% to 25%. Although the decline in the share of demand deposits is not very significant there has been a reduction in the proportion of demand deposits over time; in certain cases the decline has been as high as 10%. There has also been a decline in the share of savings deposits with the proportion of time deposits increasing by over 10%. This change in deposits structure where the share of demand deposits has declined could be conducive to more long term lending. We should therefore expect increased lending to sectors like agriculture which require long term lending.

When we examine the sectoral distribution of credit in table 4.3. we find that the agricultural sector's share of total credit has increased from about 10% to 15% while that of manufacturing has not changed significantly. However the shares of the foreign trade sectors have declined with the share of imports declining from 13% to 5% and that of exports from 15% to 6%.

These changes would indicate that the changes in the deposits structure have been reflected in the lending pattern.

We shall use figure 4.3 to analyse the policy measures intended for credit allocation.

In July 1971 the CBK directed that a minimum 40% cash deposit be made against all hire purchase agreements on imports of consumer durables. It was also stated that the new ceilings on hire purchase credit should not exceed the one prevailing prior to July 1971. Even though this measure was successful in curbing imports it did not reduce the share of credit going to imports; infact the proportion rose from 9.6% in June to 9.7% in September of the same year.

From February to April 1972 the other selective policy measure was aimed at increasing the proportion of credit to agriculture and domestic manufacturing and reduce the proportion of lending to the household sector and the import sector. The results indicate that the proportion of imports credit declined while that of agriculture remained constant during the period. When we examine the proportion of credit going to domestic manufacturing we do not find any definite change while the share of credit to the household sector was on the increase despite the measure.

In July 1973 all restrictions on imports credit except that of hire purchase were rescinded but the measure did not increase the share of credit going to imports. In fact the proportion of credit to the

import sector declined from 7.3% in March to 6% in June of the same year.

The other selective measure instituted in July, 1974 was aimed at restricting lending to foreign registered firms. The level of lending to these firms was to be restricted to 20% of their investments. Lack of data prevents us from assessing the effectiveness of this measure.

In an effort to step up agricultural credit the Commercial Banks were urged to give special attention to agriculture. In July 1975 the banks were instructed to increase agricultural lending to 17% of their net deposit liabilities by 30th June 1976. From the advances/deposits ratios of the banking system the average ratio for this period was 79%, hence 17% of net deposit liabilities was equivalent to $\left(\frac{17}{79} = \right)$ 21.5% of total credit creation.

When we examine the share of credit going to agriculture over the relevant period we find that it was 15% of total credit that is a short fall of 6.5% and when compared to the net deposits the shortfall is $(79) 6.5 = 5\%$.

Towards 1976 the selective policies continued to emphasize increased lending to agriculture as well as exports and small African enterprises. The selective measures were also aimed at checking the rapid deterioration of the balance of payments. According to the results credit to agriculture continued to be relatively high at 15.3% in March and 13.3% in June. Credit to the export sector also rose from 6.5% to 8.1% between December 1975 to June 1976. The share of credit to imports was

declining during this period, it fell from 5.7% to 5.2% of total Commercial Bank credit. This proportion of 5.2% was the lowest over the period covered by the study.

In May 1977 the CBK reversed the selective measure of 1974 which had restricted lending to foreign - registered firms to 20% of their domestic investments. ⁽⁵⁾ Some of these firms can now borrow up to 100% of their domestic investments. The aim of this measure was to increase employment and production in these sectors.

On the whole we find that the selective measures taken during the period covered have succeeded in altering the proportional distribution of credit especially to the agricultural sector and the foreign trade sectors of exports and imports. The share of total credit going to agriculture has improved from 8.6% in March 1974 to 15.7% in December 1975. But the share of credit going to the foreign trade sectors has been on the decline with exports credit falling from 15.1% in March 1969 to 6% in September 1975 while that of imports fell even further from 13% in June 1969 to 5.2% in March and June 1976.

B. CONCLUSION.

From the foregoing analysis we note that although the CBK cannot determine the magnitude of the changes brought about by its policy actions it can at least determine the direction of the desired changes. This evidence was borne out by the results brought about by the quantitative measures designed to regulate the volume of total credit as well as those measures intended to allocate increasing or decreasing proportions of total credit to particular sectors.

The minimum reserve requirement has been found to work most efficiently during contraction rather than during expansion. This was demonstrated in the period between November 1971 and February 1972 when some Banks were unable to maintain the 5% Cash/Deposit ratio together with the 12½% minimum liquidity ratio. The measure can be particularly effective to the Banks which maintain a low level of free reserves.

Weighing our two hypotheses on the findings of the foregoing analysis we can conclude that although the CBK cannot accurately determine the magnitude of the changes which come about as a result of its policy actions it can in most case determine the directions of these changes. This conclusion applies to both measures aimed at controlling the volume of credit and those selective measures used for credit allocation. We found that during periods of excessive credit creation the CBK could make the Commercial Banks contract their total credit expansion by setting out credit guidelines specifying the growth of credit ceilings;

however we found that the mechanism was not as effective when banks were required to expand credit above a certain level. The selective measures although they had a positive effect appear less effective compared to the quantitative ones. This is demonstrated by the trend of the proportional distribution of credit in table 4.3 where there appears to be no significant structural change in the distribution of credit among the different sectors during the period covered by the study. The range between the lowest and highest percentage shares of credit for each particular sector is not significant.

We also note that the time lag between the time that the measure is announced and the time that its effects are felt could be a major determinant in deciding what type of policy measure to use. We found that when we allowed a 3 months lag in our graphical analysis we observed that the free reserves explained the changes in credit better. On the other hand when we examine the effects of the direct policy measures there appears to be very little time lag between the time the measure is instituted and the time the effects are felt.

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C: POLICY RECOMMENDATIONS

Given the small number of Banks in Kenya the CBK could be more effective in its policies if some of the policies were applied differently on different Banks. The fact that some banks offer different services from other Banks may mean that those Banks with different services maintain different levels of free reserves such that a policy impact is not felt uniformly in the Banking system; of course the CBK may assume some compensating influences which will eventually balance out and bring out the desired results but when we note that there are only 14 Banks in Kenya with 3 major ones, such one of these large ones, the Kenya Commercial Bank provides well over a quarter of total credit⁽⁶⁾. It is not safe to assume that the compensating influences will balance out because a small negative change in one of the big Banks will not be balanced by an equal proportional positive change in the small banks. It would thus be more effective to maintain different reserve ratios for different Banks based on the services they offer and their share in the supply of total credit.

Having noted that the distribution of Commercial Banks deposits is biased towards demand deposits thus making the banks in Kenya technically suited to short term lending we should encourage the development of credit instruments which can be traded within the monetary system by shifting them from one bank to another in the event of liquidity demand by the customers of the Bank. With the development of these.

readily marketable credit instruments the Commercial Banks do not have to specialize in short term self-liquidating loans they can therefore engage in long term lending. But for these credit instruments to be shifted easily from one Bank to another there must be a highly organized and ready market for them so that they can easily circulate within the monetary system. The money market must be such that any one individually Bank will always be able to sell its credit instruments with a very low risk of loss. The shifting of these credit instruments held by a particular bank depends on the willingness of other banks to buy them or in the event of most banks shifting their instruments the Central Bank could be relied upon to buy them. Thus besides creating credit instruments that can be traded within the monetary system a well organized money market should be developed so as to facilitate the trading of these instruments with minimum loss to the banks who wish to sell them.

When it comes to the selective policies the Central Bank of Kenya should always state the targets which the Commercial Banks are required to achieve. When this is done the Commercial Banks are likely to interpret the CBK's policies more accurately.

FOOTNOTES

1. Central Bank of Kenya, Money and Banking
in Kenya, (Nairobi 1973)
2. Central Bank of Kenya, op. Cit. p. 19
3. Central Bank of Kenya, op. Cit. p. 20
4. Central Bank of Kenya: 1972 Annual Report.
5. "Weekly Review" 9th May 1977 p. 18.
6. "Weekly Review", op. Cit. p. 18.

A P P E N D I X

TABLE: 4.1 A COMPARISON OF FREE RESERVE RATIO WITH THE PERCENTAGE GROWTH RATES OF CREDIT FROM MARCH, 1969 TO JUNE, 1976.

	<u>CREDIT GROWTH RATES (%)</u>	<u>FREE RESERVE RATIO</u>
1969 March		
June	5.29	N/A
September	1.93	N/A
December	1.61	N/A
1970 March	12.66	N/A
June	6.24	N/A
September	-4.21	N/A
December	10.51	N/A
1971 March	10.57	17.4
June	16.06	14.0
September	13.84	9.4
December	11.09	5.4
1972 March	1.44	4.8
June	0.33	5.9
September	3.34	7.3
December	3.36	7.2
1973 March	1.75	8.3
June	4.17	15.1
September	23.33	15.1
December	32.14	10.2
1974 March	16.35	8.2
June	29.88	5.5
September	16.72	4.1
December	8.72	4.8
1975 March	4.86	6.8
June	10.21	4.8
September	9.22	5.9
December	24.72	3.9
March	10.53	4.2
June	17.44	6.2

Table: 4.2: STRUCTURE OF COMMERCIAL BANK DEPOSITS (%)

		DEMAND	SAVINGS	TIME	TOTAL
1967		60.18	25.32	14.50	100
1968		58.93	26.62	14.45	100
1969	March	58.35	25.33	15.28	100
	June	58.80	25.69	15.50	100
	Sept.	56.57	25.88	17.55	100
	Dec.	57.05	25.44	17.41	100
1970	March	57.10	23.41	18.49	100
	June	56.40	24.96	18.64	100
	Sept.	55.54	24.71	19.75	100
	Dec.	54.92	23.31	21.27	100
1971	March	53.48	24.02	22.50	100
	June	53.85	23.06	23.09	100
	Sept.	51.90	23.89	24.22	100
	Dec.	54.37	23.88	21.75	100
1972	March	53.34	24.53	22.13	100
	June	54.05	24.50	21.45	100
	Sept.	52.91	26.11	20.98	100
	Dece.	56.23	23.71	20.06	100
1973	March	55.20	23.51	21.29	100
	June	56.22	21.85	21.93	100
	Sept.	52.91	23.55	24.54	100
	Dece.	56.05	22.13	21.52	100
1974	March	55.46	23.04	22.50	100
	June	56.15	22.06	22.79	100
	Sept.	52.61	24.08	23.31	100
	Dec.	56.39	23.86	19.75	100
1975	March	53.44	23.65	22.91	100
	June	53.67	22.41	23.92	100
	Sept.	50.28	23.54	26.18	100
	Dec.	52.77	22.51	24.72	100
	March	53.80	22.04	24.88	100
	June	53.33	20.80	25.83	100

TABLE: 43 SECTORAL DISTRIBUTION OF COMMERCIAL BANK CREDIT

	PUBLIC SECTOR		PRIVATE SECTOR										Total
	Govt	Statutory Boards	Agr.	Manuf.	Build. & Const.	Trade			Trans-Portation	Financial Institutions	Other Businesses	Private Households	
						Export	Import	Domestic					
1969 March	1.24	1.24	11.41	20.45	2.59	15.09	11.43	15.43	2.23	5.46	9.36	3.98	100
June	1.44	2.59	12.36	19.96	2.87	11.31	13.05	14.54	1.78	5.92	9.94	4.16	100
September	2.11	2.16	12.51	21.44	3.24	11.52	11.47	13.94	3.45	4.87	8.75	4.13	100
December	.86	1.59	12.30	21.60	3.10	11.22	11.22	14.41	2.15	4.90	8.68	5.49	100
1970 March	5.66	2.43	12.25	18.83	3.24	12.45	11.37	13.21	3.53	4.62	7.07	6.23	100
June	3.40	2.04	11.17	19.69	3.89	12.43	12.16	14.34	3.11	4.00	6.99	5.98	100
September	3.71	2.58	10.33	19.23	3.31	13.58	11.31	13.66	2.79	4.36	7.01	7.01	100
December	3.06	2.25	10.45	17.92	3.67	11.53	12.30	12.40	3.39	3.14	7.53	7.53	100
1971 March	3.65	2.30	11.63	16.44	4.19	11.63	11.71	15.12	4.47	3.46	8.81	8.81	100
June	3.78	3.29	11.13	12.64	4.13	7.62	7.20	12.12	3.46	3.28	8.98	8.98	100
September	4.64	1.85	10.60	20.97	4.02	9.70	9.76	14.55	3.60	2.67	8.38	8.38	100
December	4.99	2.32	10.43	20.90	4.10	9.32	9.54	14.11	3.27	2.82	9.94	9.94	100
1972 March	4.51	2.33	10.61	17.10	4.70	9.11	8.12	14.01	3.36	3.92	9.23	9.23	100
June	4.77	2.51	10.31	21.91	5.14	7.40	7.66	7.60	3.81	3.59	9.81	9.81	100
September	4.82	2.79	9.40	21.30	5.80	7.97	7.05	12.57	3.89	3.20	11.33	11.33	100
December	4.84	2.72	9.90	20.00	5.82	7.31	6.43	14.12	2.53	3.37	12.50	12.50	100
1973 March	4.81	2.32	10.22	21.31	5.21	9.19	7.20	11.36	2.42	3.92	12.51	12.51	100
June	4.53	2.56	10.40	19.43	5.32	9.15	5.96	12.11	2.91	2.95	12.76	12.76	100
September	4.48	2.51	9.79	17.51	4.67	7.33	6.41	11.22	2.95	6.47	13.07	13.07	100
December	4.13	2.51	11.05	12.57	4.92	7.55	5.83	11.01	2.26	7.32	12.86	12.86	100
1974 March	2.16	2.07	2.62	18.01	5.27	6.63	5.70	12.14	3.01	9.12	12.99	10.55	100
June	3.21	2.26	3.34	17.12	5.75	2.77	7.00	12.92	2.76	7.78	12.91	10.73	100
September	3.15	2.32	3.90	19.53	5.73	7.55	2.90	12.26	2.82	3.78	15.06	9.29	100
December	1.32	2.64	3.52	19.12	7.06	5.51	3.07	12.50	3.36	3.31	14.16	9.10	100
1975 March	2.19	2.06	1.53	20.42	6.25	3.06	3.32	12.20	2.18	3.30	16.00	8.28	100
June	1.83	2.35	1.73	20.55	2.61	3.73	3.00	12.11	2.31	3.44	16.71	10.00	100
September	3.56	3.25	1.41	20.03	4.16	6.03	5.82	11.21	2.89	2.19	17.51	8.46	100
December	2.41	3.95	2.00	17.74	4.40	2.20	3.24	11.11	3.15	2.73	16.94	9.37	100
1976 March	2.20	3.74	1.07	19.27	4.12	2.13	2.12	12.20	3.71	2.81	16.27	10.01	100
June	1.34	2.01	1.00	19.00	3.87	1.00	2.00	12.00	2.00	3.27	17.00	9.42	100
September	1.32	2.00	1.31	19.59	4.05	1.00	2.00	12.00	3.13	4.11	11.74	8.72	100

1969 March
 1970 June
 1971 September
 1972 December
 1973 March
 1974 June
 1975 September
 1976 December

All the figures are in percentages, the sum may not add up to 100% because of rounding.

Fig 4.1a: Growth rates of credit March 1959 to June 1971 - comparison with free reserves

Notes: Quarterly values are used
 W: March
 J: June
 S: September
 D: December

(2) The figures for free reserves start from March 1971
 (3) The two sets of figures are in percentages

Credit growth rates

Free Reserves Ratio

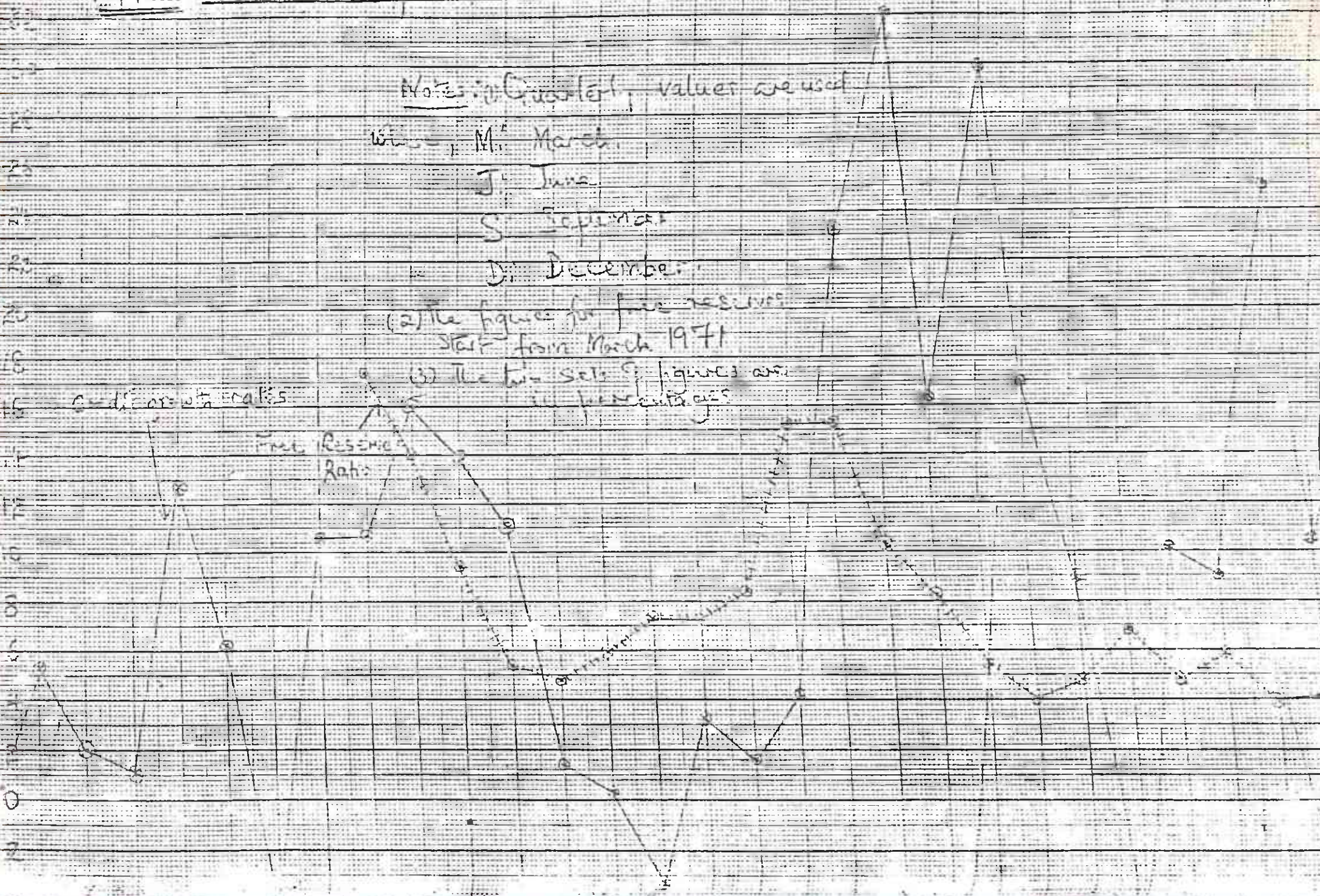


Fig 413: Resource shares of ...

from March 1969 to June 1976

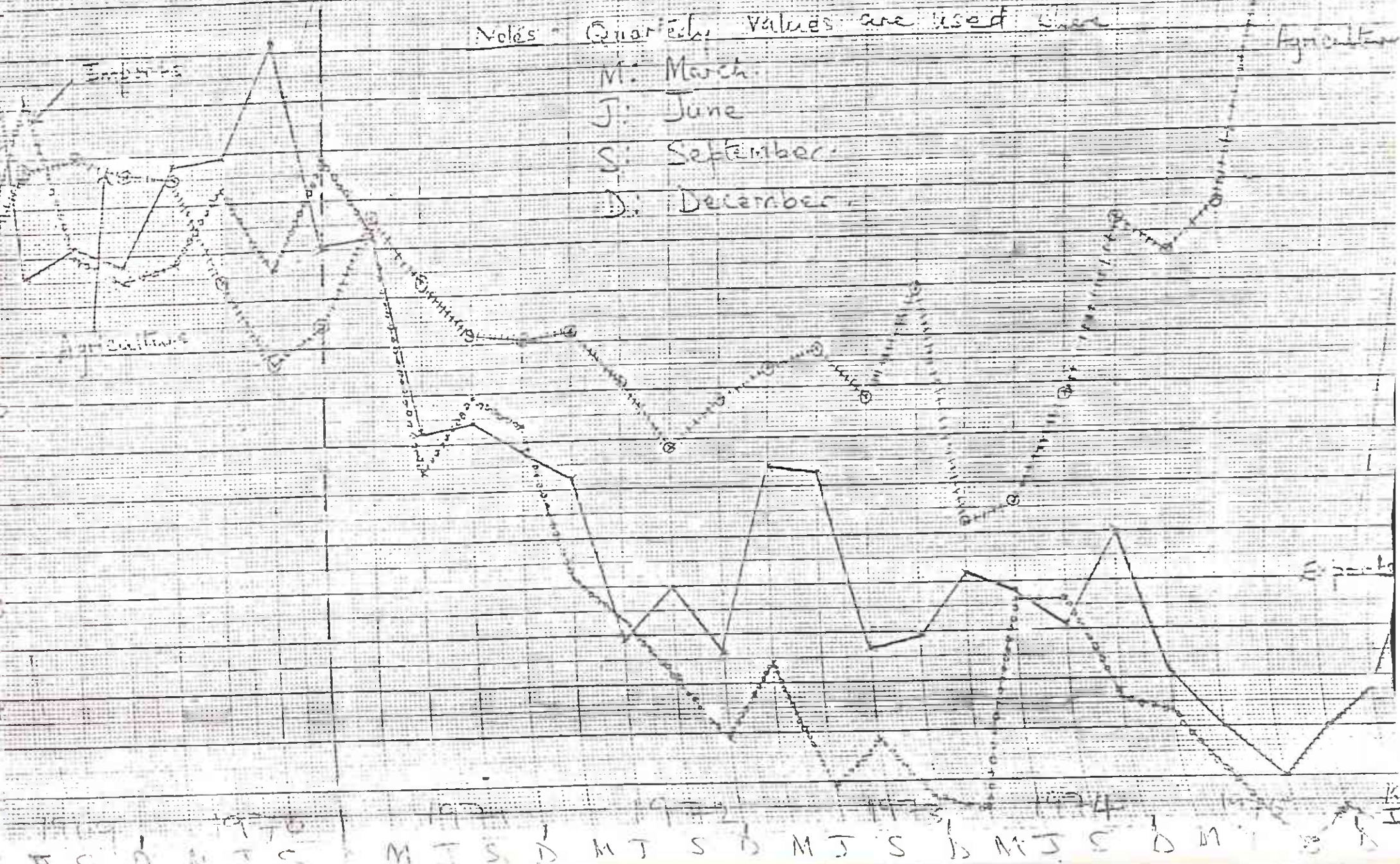
Notes: Quarterly values are used here

M: March

J: June

S: September

D: December



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DC's & LDC's

"~~A~~ Island of wealth surrounded by a sea of poverty represents an area of instability."