

THE PROCESS OF MONETIZATION: A CASE STUDY OF KENYA.

1922 - 1972

BY

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Dissertation Abstract

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The study is about monetary influences on the development process. In terms of modern money, Kenya has one of the youngest monetary systems in the world. And over the last fifty years the system has been transformed from a currency board regime to a central banking stage. It, therefore, provides a good opportunity for the study of monetary influences on the pattern and pace of economic development.

In the first chapter an analysis of the growth of the monetary system and the economic transformation is provided. The period is divided into sub-periods reflecting major changes that occurred in the system.

Chapter two is a review of the theories of monetization, and the role of money in growth models. Although these models are theoretical, an attempt is made to relate some of their major conclusions to the Kenyan case.

In Chapter three, a review of the various savings functions is done. The effect of monetization on saving is analyzed, and some measures of monetization for incorporation in savings functions are suggested. The chapter is concluded with a review of the

savings performance and the composition of savings in Kenya. I conclude that both the spread of commercialization and the growth of intermediation have played a significant role in the promotion of saving in Kenya.

Chapter four examines the theory of intermediation and resource allocation. The empirical section deals with the effect of the Kenyan financial system on resource allocation. It is concluded with the analysis of the effects of various financial controls on resource allocation and possible changes to effect a more efficient resource allocation.

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INTRODUCTION

Widespread use of money and the growth of monetary and financial systems are some of the characteristics of economic development. In most studies of economic development there is an implicit assumption that the economy is monetized, or when the presence of a non-monetized sector is recognized, the economy is divided into two sectors; the traditional sector, where production processes are largely beyond the methodology of modern economic analysis, and the modern sector which is assumed to operate on profit maximizing principles. The problem is then visualized as one of expediting the flow of resources from the traditional sector to the modern enclave. Various techniques such as the use of taxes, forced movement of labor, and manipulation of terms of trade are then suggested to enable this transfer. This is the type of analysis that has dominated development studies for the last two decades.

The other approach, reflected in the new and increasing interest in the problems of rural development, seeks to examine how the traditional sector can be developed not at the expense of the modern sector, but rather, at about the same pace. This approach involves the study of how to facilitate the flow of resources between sectors and how to increase the awareness of market forces in the traditional sector. Budgetary and other techniques may be employed to effect this flow, but the emphasis in this study is on the use of the financial technology.

This latter approach involves, among other things, the increased usage of money as a medium of exchange, and the use of monetary and financial systems to mobilize and allocate savings. This dual process is what is termed monetization.

The study is divided into four chapters. Chapter I provides a descriptive analysis of the economic transformation and the growth of the monetary system. Chapter II presents a critical survey of theoretical approaches to monetization and growth. Some recent studies that attempt to incorporate the special characteristics of developing economies are also reviewed. Chapter III is an analysis of the effects of monetization on saving. Some measures of monetization for incorporation into savings functions of developing economies are indicated and a review of empirical work that incorporated some of these measures is presented. The chapter is concluded with an analysis of the saving performance and the structure of savings in Kenya for the 1964-72 period. Chapter IV provides the theory of intermediation and resource allocation. The second part of the chapter analyzes the financial and monetary system in Kenya, and the effect of various regulatory policies on resource allocation.

CHAPTER ITHE GROWTH OF THE MONETARY SYSTEMSection 1: The Economic Background.(a) The Pre-1922 Economy and Currencies.

The first modern currency to circulate in Kenya was the Indian rupee. This was on account of the Indian financing of Zanzibar - Mainland trade, and the Indian laborers working on the Uganda Railway. Indian traders, who established trading posts all along the railway route into the interior, were instrumental in the spread of the rupee currency into the interior, thus supplanting previous commodity monies that were used in the trade between the natives and the newcomers, and also in popularizing such imported items as cloth, soap and tobacco.¹ In 1906, the rupee was established as the standard currency in the British East African Territories.

Within the native economy, a number of commodity currencies continued to operate. Predominant among these were the livestock standard and the cowries.² The existence of these primitive currencies was initially ignored because barter seemed to be the dominant form

1

Report by the Mombasa-Victoria (Uganda) Railway Committee on the progress of the works 1898-1899, c.9333 (1899), p.10.

2

The Cowry shells were more important in Uganda than in Kenya.

of trade. And the large numbers of livestock that were observed were explained in terms of psychological complexes.³ A better understanding of the economic functions of these animals would have provided an explanation as to why numbers were so important. Later policies aimed at stock reduction to stop the soil erosion caused by the large number of animals were unsuccessful because of the failure to take into consideration the various economic functions that the animals performed. Recent studies have been able to disprove the existence of "a deeper, more intransigent relationship between men and cattle in East Africa"⁴ and to analyze the problem in terms of the economic role of the animals.⁵ This study follows this new approach.

The livestock performed three basic functions; subsistence, capital, and media of exchange. In their subsistence role, the livestock provided milk and other dairy products, meat and hides.

3

Herskovits, J.J., "The Cattle Complex in East Africa, Part (i)" American Anthropologist, Vol.28, pp.230-272.

4

Manners, R.A., "The Kipsigis of Kenya: Culture Change in a "Model" East African Tribe", in Stewart, J.H. (ed.), Contemporary Change in Traditional Societies, Vol.II, (University of Illinois Press, 1967).

5

Manners, op. cit.

Schneider, H.K., "Economics in East African Aboriginal Societies: In Herskovits, M.J., Harwitz, M. (eds), Economic Transition in Africa (Northwestern University Press, 1961).

As capital, "the herds and their progeny furnished the only form of interest-bearing investment,"⁶ they also provided manure among the communities that were engaged in mixed farming. In both roles, the number was very important. As wealth, obviously, the greater the number, the wealthier was the owner. And as providers of fertilizer, the numbers were important, with each stockholder trying to equate marginal product with the marginal cost. This monocultural portfolio involved a number of risks, such as disease and raids. Owners tried to reduce these risks by separating herds or by loaning out some of the stock. The latter practice had also the added benefit of cementing social relations and assuring reciprocal action in case of difficulty. Cooperative herding was also used in some regions to minimize losses through theft, since herds would be better protected.

The use of livestock as a medium of exchange was based on differentiated evaluation of stock. The cornerstone of this exchange system was the establishment of the exchange ratios between different types of animals. While one would have expected these ratios to vary with supply conditions, they seem to have been fixed and uniform over wide areas. The ratio of ten goats

⁶ Lord, Hailey, "African Survey" (Revised), p.871. (OUP, 1957.)

to one cow, for instance, is often quoted for different areas and different periods.⁷ The refusal by some authors to accept this monetary role of livestock is often based on the low velocity of circulation observed--especially for cattle.⁸ These authors accept the use of cattle as stores of value and means of payment--especially for bridewealth. The refusal to accept their role as media of exchange is due to the failure to view the livestock standard as a single system in which the smaller animals, e.g. goats, represent "small change". Large transactions involving the transfer of cattle were obviously rare, and the indivisibility of the animals along with the differences in the costs of maintaining different types of animals were the main factors responsible for the development of mortgages.⁹ Even where transactions were apparently conducted on barter terms, the livestock standard remained in the background functioning as a unit of account as the table below illustrates. There were also instances when barter trade was rejected and animals

7

Kenyatta, J., "Facing Mount Kenya", (London, 1933).
Schneider, op. cit.

8

Herskovitz, M.J. op. cit.
Melitz, J., "Primitive and Modern Money", (Reading, MA., 1974)

9

Often credit terms would be agreed on, with the buyer promising to deliver a future offspring of a particular animal, and the seller would assume custody of the animal until it redeemed itself.

demanded in payment.¹⁰ Reproduced below is a scheme of prices observed by Schneider among the Suk of Kenya as late as 1951-52. The persistence of the system up to so recent a period indicates how slowly the modern currency was able to spread. Einzig blames this slow shift to modern currency on the existence of "a psychological gap between the use of animals and mineral tokens of exchange."¹¹ The limited opportunities in which modern currency could be earned, and the restrictions on money supply imposed by the currency board system were also important impediments to the spread of modern currency.

In 1951-52, Schneider observed the following price scheme among the Suk of Kenya.¹²

10 goats = 1 steer

40 goats = 1 camel (hence 4 steer = 1 camel)

4 bags of grain (100-150 lbs.) = 1 load of meat
(2 legs and a few other parts).

1 goat = 2 axes

1 goat = 1 spear

1 goat = a small irrigated plot

2 goats = a large plot

1 goat = 1 pot of honey

1 steer = about Sh.100 (in internal trade)

1 goat = about Sh.10 (hence Sh.100 = 10 goats = 1 steer)

¹⁰ Birmingham, D., and Gray, R., "Precolonial African Trade: Essays on Trade in Central and Eastern Africa before 1900", (OUP, 1970).

¹¹ Einzig, P., "Primitive Money in its Ethnological, Historical and Economic Aspects", (London, 1951).

Schneider also points out the superiority of cattle as depositories of value since they yielded interest in the form of calves while currency does not. Schneider, op. cit. pp.67-68.

¹² Schneider, op. cit., p.65.

The table indicates how the livestock standard could support a system of 'barter' by acting as a unit of account. Thus, at the prevailing prices, 1 spear could exchange for 2 axes. The resort to 'barter' helped to conserve the medium of exchange especially since the supply was inelastic and largely beyond control. The table also shows the extent of overlapping between the two systems. This would suggest that difficulty in obtaining modern currency was a more important factor than the existence of a psychological gap in delaying the use of metal and paper currency.¹³

From the analysis of the economic functions of livestock, it is clear that the number rather than the quality of the herds was the more important variable. The resulting soil erosion was threatening to turn some parts of the country into desert. But attempts by government to encourage destocking were largely unsuccessful because they failed to take into consideration the economics of livestock and to provide attractive alternatives.

In principle, this exchange system could support a certain level of credit. Mortgages, above, were instances of consumer

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Trade was not only bilateral. One especially common chain of transactions being the acquisition of cattle for payment as bridewealth. This saved the recipient of the bridewealth from having to trade large quantities of grain at one time, and the bridegroom-to-be could trade his stocks of grain for animals at more convenient intervals. Schneider does not make it clear whether some of the ratios in parentheses are observed or inferred.

credit, and there were also instances where livestock were loaned out for the provision of manure.¹⁴ In general, however, accumulation did not go beyond the stage of enhancement of status--(wealth), to that stage where accumulation also involves increase in output.¹⁵ And intermediation in the credit market had not yet developed. Thus, the banking institutions that were established about the beginning of this century were certainly the first instance of intermediation. The lack of a banking tradition, coupled with the lack of effective demand for livestock in the modern sector, and the multiple uses of livestock, and possibly some psychological and social factors, were the factors responsible for the failure to convert the capital stocks into modern financial instruments. Such a conversion played an important role in the development of Scotland and Japan.¹⁶ In fact, the reverse process, viz. the conversion of modern money into traditional forms of wealth, occurred. People employed in the modern sector converted the savings out of

¹⁴

Schneider, op. cit.

¹⁵

Firth, R., and Yamey, B., (eds), "Capital, Saving, and Credit in Peasant Societies", (Chicago, 1964).

¹⁶

Cameron, R., Crisp, O.

Patrick, H.T., and Till, R., (eds.), "Banking in the Early Stages of Industrialization: A Study in Comparative Economic History", (OUP, 1967).

their wages into livestock.¹⁷ The livestock holders used the receipts to pay taxes and purchase various imports. The need for them to enter the labor market was, therefore, greatly diminished.

Pre-colonial trade consisted of long-distance caravan trade, and domestic trade. Caravan trade was originally conducted by people from the interior carrying various goods, particularly ivory, to the coast and exchanging them for imported manufactures such as cloth and iron ware. Later, with the increasing slave trade and the more ample financing, Arab and coastal traders penetrated the interior. The commodities traded remained essentially the same, except for the increasing importance of food supply to the traders. In the interior, trade involved the various staples and handcrafts. The coming of colonial rule stopped the brutal slave-trade, and also virtually eliminated all the legitimate long-distance trade, especially the African participation in this trade. Domestic trade, except the trade in food, was also exposed to overwhelming competition from superior manufactured imports. And what remained of this trade was largely ignored except that part that crossed

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This observation prompted Wrigley (below) to doubt the utility of the money income thus received--since it tended to be dissipated by inflation in the livestock market. But it is an indication that the pastoralists were willing to sell if the right price was offered. See also footnote 11, above.

business boundaries.¹⁸

The purpose of this introduction has been to show the existence of a wide range of trade activities and the role played by the livestock standard in this exchange.¹⁹ To some extent, therefore, the introduction of a modern currency was equivalent to the conversion of one currency for another. This equivalence, however, is quite remote since there was no established mechanism for converting the various monetary units into new currency. The analogy is valid in as far as the people were already accustomed to some media of exchange and consequently the resource saving was lower than in the case of a switch from barter to money exchange. The introduction of a coin currency had also the effect of widening the market since the colonial territory included several tribal economies that previously had little or no trade relationship.

The next section is an analysis of the various methods that were used to encourage widespread use of the new currency, and the organization of the monetary system.

A principal goal of colonialism was the procurement of raw materials for the industries in the metropolitan centers. Kenya's

18

Birmingham and Gray, op. cit., p.23

19

See Middleton, J., and Kershaw, G., "The Central Tribes of the North Eastern Bantu. (London, 1965) pp.19-20 for a more detailed account of this trade.

precolonial trade was mainly with Middle-Eastern countries via Zanzibar and none of the traded goods was in great demand by British industries.²⁰ The available alternatives, therefore, were the introduction of new export goods, as in Uganda, based on peasant production, or the exploitation of mineral resources, or the introduction of new crops and European settlers to produce them with the help of local labor. Kenya did not have any known mineral resources, and therefore the third alternative was chosen. The attraction of the third alternative was enhanced by the existence of suitable climatic conditions, and the sparse population that gave the impression of vacant land. Some thought was given to the idea of importing Indian peasants to produce the exports, and a few former railway laborers were actually settled on the plain East of Kisumu, but the experiment was stopped, partly due to political pressure from the European settlers, and partly due to the lack of financial resources to settle large numbers of poor peasants. By 1903 the lines of development were clear, and land alienation was almost complete, and the main problem was how to get the necessary labor. Since the Africans did not have a tradition of wage employment, there were very few people seeking employment. A similar situation had been experienced during the construction of the Uganda Railway, but then Indian coolies were imported.

20

Some exports based on traditional products did develop but they quickly lost importance.

There was no viable alternative source of agricultural labor.²¹ The question was, therefore, how to get the Africans to work on the European farms. A large part of government and settlers' effort was spent in trying to solve this problem.

The hut tax legislations of 1897 and 1902 were the first official instruments in the attempts to create adequate labor supply. Although the taxes were originally meant to be revenue sources, their potential use in forcing the Africans to seek employment soon became apparent. The requirement that the tax be paid in rupees meant that the Africans had to earn the money first, and the most likely way to earn it was to work on the farms. When some people tried to evade this tax by crowding into huts, a poll tax was introduced in 1903, thus making every male 16 years or older liable to pay tax, (the hut tax if he owned a hut, or the poll tax otherwise). Later legislation increasing the tax rates was enacted and in a 1910 ordinance the principle of individual responsibility for one's taxes was modified so that taxes on individuals could be paid by entire villages or even larger tribal groupings. Labor-time on public works was also permitted in

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In 1908 and 1909, sisal planters urged the government to allow Indian immigration, but the Colonial Secretary decided against it. The possibility of importing African laborers from Southern Africa was also rejected because of the costs involved and particularly because they were used to higher wages.

lieu of cash.²² A system of import duties on various articles of mass consumption was also enacted in 1904. Imports of investment goods were exempted from this tariff. The official view on the purpose of African taxation was summarized by the Governor of Kenya in 1913: "We consider that taxation is . . . compelling the native to leave his reserve for the purpose of seeking work. Only in this way can the cost of living be increased for the native, and . . . it is on this that the supply of labor and the price of labor depends."²³ Another compelling factor in the acquisition of cash was the payment of school fees. !?

A number of other measures were used to supplement the fiscal system in the reorganization of labor. These included the redefinition of the boundaries of the Reserves, the introduction of the Pass-system, the requirement that squatters work at least 180 days a year on the owners' property, (albeit at the going wage), and the appointment of chiefs sympathetic to the cause.

By the mid-1920's the labor situation had stabilized. The various policy measures had been largely successful, and the voluntary supply of labor was increasing because of the improved working conditions, the increase in population which was making it more difficult to live on the Reserves, and the increasing demand for imported goods due to the demonstration effect. Cautious

²²Wolff, R.D., "The Economics of Colonialism: Britain and Kenya 1870-1930", (Yale, 1974).

²³East African Standard, February 8, 1913.

steps were in fact being taken to reduce the demand for/and supply of labor. Steps to reduce the demand for labor included the recommendation for the introduction of labor saving technology and the development of crops and industries that made the least demand for native labor.²⁴ The restructuring of the monetary system in 1921 made it easier to obtain capital. The first attempts to encourage African production of some cash crops were also made in this period. This had the effect of reducing the supply of labor since it provided an alternative source of income.

(b) 1921-1955

In the period after World War I there were disruptions in the territories' monetary arrangements. The instability in the gold and silver markets was reflected in the exchange rate between sterling and the rupee. The former was based on the gold standard, whereas the rupee was based on silver. By 1920 the rupee had appreciated from its original value of 1s. 4d. to 2s. 10d. And since most of the exports went to London, and the local costs were contracted in rupees, a number of farmers were threatened with bankruptcy. The situation was further aggravated by the collapse of the world commodity market. The price of coffee had fallen from a peak of £150 a ton in London to about £60. Sisal had tumbled from £96 to £12. 10s a ton. In order to prevent further

²⁴

Wolff, op. cit., pp.130-131.

collapse, the conversion price of the rupee was fixed at 2s. and the East African Currency Board was constituted. The currency board was to issue on demand its currency (the shilling) in exchange for sterling and to redeem this currency against an equivalent amount of sterling. The new rate of exchange was fixed at 20 East African shillings to £1 sterling. The board was authorized to charge a commission not exceeding $\frac{1}{2}$ percent on these transactions. Because the rupee had begun to depreciate almost immediately after the conversion price was fixed, the board sustained big losses in the conversion. By 1925 the conversion was complete for the entire territory comprising Kenya, Tanganyika and Uganda. Zanzibar joined the system in 1936. A number of other adjustments in territorial coverage were introduced but they did not change the basic modus operandi of the board.²⁵ The main economic impact of the currency board was to remove the uncertainty that was ever present in the use of the rupee. This exchange risk was more important for the European settlers than for the Africans whose participation in the modern economy was still largely confined to wage employment.

There were three major developments in the years 1923-28. The first was the proclamation of a dual policy; namely, the encouragement of agricultural development in the European and native

25

In 1942 and 1943 its authority was extended to the former Italian colonies and Ethiopia. Ethiopia withdrew in 1945, and in 1950 former Italian Somaliland withdrew. Former British Somaliland and Aden withdrew in 1961 and 1965 respectively.

sectors. We have already seen that the emphasis in the preceding years was on supplying labor services to the settlers. And although some independent African exports persisted, they were not encouraged.²⁶ These exports were surpluses of traditional subsistence crops and animal products. Unfortunately, the attempts to encourage African commercial production were not very successful. The share of the African exports in the total domestic exports continued to decline. While this share was over 70 percent of the value of exports in 1913, it stood at less than 20 percent in 1928, and just over 10 percent in 1932. One reason for this decline was the fast growth in European exports. Another reason was because although the labor problem was no longer as serious, the government and the settlers were wary of the implications of increased productivity in the reserves, and therefore the dual policy "was not prosecuted with any great vigor."²⁷ Thirdly, the stagnation in commercial production may have been due to the 'target income effect' in that once the immediate cash requirements for taxes, school fees and clothing were satisfied, people 'withdrew' from commercial production. The fourth reason is that it was the young men who went out to seek employment on the plantations, thus leaving older and less energetic people on the reserves.

26

Cotton was introduced in 1907/08 but the experiment failed due to lack of agricultural personnel.

27

Wrigley, C.D., "Kenya: The Patterns of Economic Life 1902-45" in Harlow, V., Chilver, E.M., and Smith, A., (eds.), History of East Africa, Vol.II, (OUP, 1965), p.245.

The second major development in this period was the increased inflow of private capital. This was a direct result of the increased confidence following the reorganization of the monetary system. The greater availability of capital encouraged a shift towards more capital intensive methods of production. And the marked improvement in the commercial and financial services provided by major trading firms that had opened branches seemed to improve the marketing services and thus further reduce producers' risks. At the same time, the government was encouraging diversification in crop production to reduce the reliance on coffee. The main lines of diversification were into maize, wheat and barley growing, with the latter two crops being produced under protection.

The world economic depression of the thirties caused much hardship in the entire economy. But it was probably the most significant factor yet in the development of African commercial production. There was a lot of encouragement from the government and even the settlers' reluctance to allow the cultivation of coffee in the Reserves was melting away. The increased agricultural production was partly due to this encouragement, and partly due to the need to maintain their economic position. Faced with falling wages and a reduced demand for labor while the various obligations like taxes remained fixed, the only alternative was to increase production

for the market. The import component of their consumption was also increasing, and therefore there was a greater need for higher money incomes.

The increase in production was largely accomplished without great changes in technology. The methods of agriculture in the Reserves were mainly based on shifting; whereby a plot would be cultivated to exhaustion and abandoned and a new one opened. The increasing population pressure could no longer permit this land-intensive form of agriculture. The result was massive soil erosion which was exacerbated by the increasing numbers of livestock. The number of livestock had been increasing partly due to the reasons discussed in the introduction, and also due to the improved veterinary care. The maintenance of a quarantine against the native livestock prevented the development of market outlets for the excess stocks even where there was willingness to convert to modern currency. A number of measures were used to stop the menace of soil erosion. These included the use of surplus funds from the Statutory Marketing Boards to finance the soil conservation extension services, and compulsory destocking in areas that were most affected. The latter was abandoned when people protested against the inequity involved. It was inequitable because the exercise was limited to a small area, and the prices offered were below the market prices.

In 1931 the Land Bank was established. This replaced the various subsidies, refunds and rebates that had been used to reduce the impact of the depression. It was the first specialized financial institution established by the government. Its purpose was to provide farm credit to the European farmers. Credit for the African farmers did not become available until the 1950's. In fact, up to that time there was an ordinance that prevented granting credit to Africans, ostensibly for their own protection.²⁸

The first systematic organization of African agriculture was set out in the Ten-Year Plan of 1946 to 1955. This was supplemented by the Swynnerton Plan of 1954. The strategy of development was still based on the "dual economy". Developments in the Scheduled Areas (European) were organized separately from those in the Non-Scheduled Areas. The Swynnerton Plan was a 5-year plan within a framework of fifteen-year targets. The plan stressed the intensification of agricultural production through the planting of various cash crops (some of them previously restricted to the Scheduled Area) in suitable regions of the Non-Scheduled Area. It set out individual targets for the various crops to be achieved over the fifteen-year period. Some of these targets had to be

28

Credit to Natives (control) Ordinance No.67, 1948 prohibited granting credit of over Sh.200 (approximately U\$ 30) to Africans, unless they satisfied certain qualifications, like owning a registered business.

modified later in light of the changing market conditions and also where circumstances made them untenable. The overall emphasis of the Plan was to increase commercial production, but it was stressed that this should not be done at the expense of subsistence production. It was argued that most of the farmers needed to be protected from the risks of market failure since many of them did not have available lines of credit to help them in case of such failures. With increasing incomes, such specialization would evolve, but it was not to be the main policy goal. The marketing superstructure was also geared towards production for export and was not able to handle internal distribution adequately. In regard to livestock, the plan recommended (i) the limitation of stock to the carrying capacity of the land, (ii) provision of regular market outlets so as to discourage overstocking, (iii) controlled rotational grazing and (iv) extension of available grazing and facilitation of rotational grazing by the development of water supplies and eradication of tse-tse fly as measures to increase production.

To achieve these objectives, the plan suggested the following: (a) expansion of agricultural and veterinary field staff, (b) greater emphasis on training institutions, (c) more ample funding with provision of credit to individual farmers, and (d) campaign to promote better land tenure practices, e.g., consolidation, and issue of land titles.²⁹

29

Swynnerton, R.J.M., "A Plan to Intensify the Development of African Agriculture in Kenya", (Government Printer, Nairobi, 1954).

Although this plan was made on the basis of the separation between Scheduled and Non-Scheduled Areas that existed, the recommendations, if acted upon, would eliminate most of the differences. It would eliminate particularly, those differences that were based on the types of products and the nature of the production function in both sectors. There was still a certain amount of duplication caused by this policy of separate development; like the creation of different credit facilities and the operation of overlapping marketing institutions.

(c) 1955-1972.

Table 1.1 indicates the extent of success of the Swynnerton Plan. African production of coffee had increased almost eight-fold, from being about 8 per cent of the total quantity in 1955 to about 24 per cent in 1961. The rise in the share of sisal production was moderate and both the share and quantity fell in the case of maize and wattle. However, there was now African participation in the production of all major export crops. In 1960, the African settlement scheme in the formerly Scheduled Areas was started. This step marks the end of the dual policy, and although a distinction between large and small farms still exists, it does not carry the same policy implication as the original classification.

TABLE 1.1

PRODUCTION OF MAJOR CASH CROPS

	('000 tons)							
	1946	1955	1956	1957	1958	1959	1960	1961
1. Coffee *								
African	n.a.	1.0	0.8	1.5	2.3	3.6	4.6	7.9
Non-African	<u>9.0</u>	<u>11.6</u>	<u>23.1</u>	<u>17.0</u>	<u>18.5</u>	<u>19.6</u>	<u>18.8</u>	<u>25.2</u>
Total	<u>9.0</u>	<u>12.6</u>	<u>23.9</u>	<u>18.5</u>	<u>20.8</u>	<u>23.2</u>	<u>23.4</u>	<u>33.1</u>
2. Tea								
African	-	-	-	-	-	0.1	0.1	0.2
Non-African	<u>5.5</u>	<u>8.5</u>	<u>9.5</u>	<u>9.8</u>	<u>11.2</u>	<u>12.3</u>	<u>13.5</u>	<u>12.2</u>
Total	<u>5.5</u>	<u>8.5</u>	<u>9.5</u>	<u>9.8</u>	<u>11.2</u>	<u>12.4</u>	<u>13.6</u>	<u>12.4</u>
3. Sisal								
African	-	0.3	0.8	0.1	-	1.5	3.0	6.3
Non-African	<u>27.0</u>	<u>37.6</u>	<u>38.8</u>	<u>41.0</u>	<u>46.0</u>	<u>53.7</u>	<u>59.6</u>	<u>56.0</u>
Total	<u>27.0</u>	<u>37.9</u>	<u>39.6</u>	<u>41.1</u>	<u>46.0</u>	<u>55.2</u>	<u>62.6</u>	<u>62.3</u>
4. Maize *								
African	n.a.	116.0	58.1	57.0	69.6	79.7	73.2	62.7
Non-African	<u>n.a.</u>	<u>89.3</u>	<u>96.5</u>	<u>80.0</u>	<u>87.5</u>	<u>76.5</u>	<u>70.4</u>	<u>76.4</u>
Total	<u>146.8</u>	<u>205.3</u>	<u>154.6</u>	<u>137.0</u>	<u>157.1</u>	<u>156.2</u>	<u>143.6</u>	<u>139.1</u>
5. Pyrethrum								
African	n.a.	0.3	0.3	0.4	0.4	0.6	1.8	2.8
Non-African	<u>6.7</u>	<u>2.4</u>	<u>2.8</u>	<u>3.0</u>	<u>3.4</u>	<u>4.2</u>	<u>6.7</u>	<u>7.5</u>
Total	<u>6.7</u>	<u>2.7</u>	<u>3.1</u>	<u>3.4</u>	<u>3.8</u>	<u>4.8</u>	<u>8.5</u>	<u>10.3</u>
6. Wattle								
African	n.a.	46.9	38.2	25.8	25.4	18.1	19.0	16.8
Non-African	<u>n.a.</u>	<u>20.2</u>	<u>23.8</u>	<u>23.6</u>	<u>36.1</u>	<u>28.3</u>	<u>31.0</u>	<u>37.1</u>
Total	<u>n.a.</u>	<u>67.1</u>	<u>62.0</u>	<u>49.4</u>	<u>61.5</u>	<u>46.4</u>	<u>50.0</u>	<u>53.9</u>
7. Wheat *								
African	-	-	-	-	-	-	0.7	0.2
Non-African	<u>73.0</u>	<u>132.6</u>	<u>120.9</u>	<u>125.1</u>	<u>102.1</u>	<u>96.2</u>	<u>126.7</u>	<u>99.5</u>
Total	<u>73.0</u>	<u>132.6</u>	<u>120.9</u>	<u>125.1</u>	<u>102.1</u>	<u>96.2</u>	<u>127.4</u>	<u>99.7</u>

Source: IBRD - Economic Development of Kenya - 1963

* Production in crop years applied to calendar years in which crop year ends, except for 1946. Wheat indicates 1946/47 production.

TABLE 1.2

EMPLOYMENT OF AFRICANS BY SECTORS ('000)

Category	1946	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Agriculture	197	201.9	203.2	202.7	211.3	220.8	245.7	233.1	251.1	247.2	249.0	269.1	249.8
Private Industry and Commerce	101	123.8	115.8	130.3	123.7	141.6	157.4	158.3	156.8	149.6	148.0	151.1	134.1
Public Service	78.8	96.5	93.4	101.6	118.0	130.5	155.0	148.7	146.9	137.9	140.0	140.7	145.5
Total Employment	376.8	422.2	422.4	434.6	453.0	492.9	558.1	540.1	554.8	534.7	537.0	560.9	529.4

Source: IBRD - Economic Development of Kenya

The purpose of this survey was to trace the various steps in the monetization process. The emphasis on agriculture is a recognition of the predominant role the agricultural sector has played in the development of Kenya. African participation in the modern sector has also been mainly through agriculture. Their participation in commerce and industry was, until the 60's, confined to wage employment. The employment figures in Table 1.2, illustrate the overwhelming role of agriculture in the monetization of the native economy.

Section 2: The Monetary System

The East African Currency Board was constituted in 1919 and began operations in 1920. The main reason for its establishment was instability in the exchange rate between the rupee and sterling. The rupee, which had been the standard currency of the British Possessions in East Africa since 1906, had appreciated by more than 50 per cent between 1914 and 1919. As a result of the fluctuations in the exchange rates, the board started its operation with a large deficit. And by 1925, when the conversion was completed, the board's outstanding currency liabilities stood at £5.6 million, against which the board had £2.4 million in reserves. This represented a 43.6 per cent coverage, far below the statutory level. This percentage did not improve significantly until 1939.

The main reasons for the low rate of growth of currency were; first the generally static economic situation in Uganda and Tanganyika and the large imports of capital in Kenya that were discussed above; and secondly, the general world depression of the 1930's.

In 1931 the fear was expressed that the Board might not be able to redeem the currency. The Secretary of State directed the territories to authorize the raising of sterling loans to assure convertibility. Consequently a standing authority for a £1.5 million loan was issued, and this amount appeared as an asset in the board's balance sheet until 1944.³⁰ This step helped to maintain confidence in the currency and probably reduced the demand for redemption. It was supplemented by raising the commission on redemptions to $1\frac{1}{2}$ per cent in 1931, leaving the premium on issue at $\frac{1}{2}$ per cent. The two premiums were equalized at $\frac{1}{2}$ per cent in 1942 and they were both reduced to $\frac{1}{4}$ per cent in 1945. A transfer charge of $1/16$ per cent which had been levied on transfers between the East African territories was also removed.

(a) Regulations and Policies

Apart from the commission on the transfers into and out

30

This loan was distributed as follows:

Kenya.....	650,000
Tanganyika.....	500,000
Uganda.....	350,000
Total	1,500,000

Kenya ord. No. XVI, Uganda Ord.No.4, Tanganyika Ord.No.4, all of 1933.

of East Africa, the board was charged with seeing that the reserves were "more than sufficient for all the purposes for which such reserves may be required." The board was authorized to make payments out of the "surplus" reserves to the constituent territories. But since the minimum safe level of reserves was not clearly defined, it was up to the discretion of the board, with the approval of the Secretary of State, to decide what was the safe level. In East Africa this was interpreted to mean 100 per cent cover of the currency liabilities and payments were made after this level was attained in 1952. The board was to invest the reserves "in sterling securities of the government of any part of His Majesty's dominions, or in such other manner as the Secretary of State may approve." But they were not allowed to hold securities of the governments within the currency board system. In practice their portfolio consisted of United Kingdom and British Dominion Government, Municipal and Public Corporation securities issued in London, and cash held in London banks. The board's headquarters were in London but it maintained currency centers in the various territories. In order to reduce the number of exchange transactions, the board could fix a minimum amount per transaction. This meant that it was mainly banks that could avail themselves of this facility and individuals wishing to transfer smaller amounts had to pass through banks and pay an extra service charge.

TABLE 1.3.

EAST AFRICA CURRENCY RESERVE SYSTEM⁽¹⁾

1925-1965

(in millions of £ sterling)

<u>Year</u>	<u>Currency Outstanding</u>	<u>Reserve Fund</u> ⁽²⁾	<u>Percentage Cover</u> ⁽³⁾
1925	5.6	2.4	43.6
1926	5.3	2.3	43.8
1927	5.3	2.4	45.1
1928	5.1	2.1	42.3
1929	5.1	2.2	43.4
1930	4.7	1.3	27.9
1931	4.0	0.7	17.6
1932	3.6	0.4	9.9
1933	3.8	0.6	16.8
1934	4.2	1.0	24.8
1935	4.3	1.3	30.2
1936	5.1	1.9	38.1
1937	6.0	2.7	45.5
1938	6.5	3.2	49.8
1939	6.5	3.2	49.5
1940	6.9	3.7	54.0
1941	8.2	5.1	62.1
1942	14.1	11.0	78.3
1943	21.1	18.2	86.0
1944	24.8	22.5	90.7
1945	28.4	26.6	93.9
1946	24.5	23.4	95.4
1947	24.4	23.6	96.8
1948	23.7	23.2	98.1
1949	27.2	26.8	98.3
1950	29.6	29.8	101.2
1951	39.4	39.9	101.3
1952	48.3	46.5	96.2
1953	48.6	50.3	103.6
1954	53.3	57.6	108.0
1955	60.4	61.8	102.3
1956	60.7	61.3	101.0
1957	60.7	63.8	105.0
1958	58.7	63.4	108.1
1959	57.3	63.8	110.4
1960	60.4	66.8	110.1
1961	59.2	68.4	115.5
1962	57.8	68.4	118.1
1963	65.5	75.2	114.9
1964	68.3	75.9	112.6
1965	60.8 (4)	69.9	114.9

Source: East African Currency Board Reports.

(1) The figures are for the entire territory covered. (2) Securities at market value. (3) Calculated from unrounded data. (4) The decrease is due to the withdrawal of the East African Shilling from Aden.

(b) 1920-1955.

Apart from varying the commission of exchange transfers during the depression, the board conformed with the regulations and functioned more or less like an automatic money changer. The surpluses on the balance of payments in the forties and income from investments, enabled the board to build up the currency reserve fund and in 1950 they provided more than 100 per cent cover of the currency liabilities. The desirability of this 1:1 cover will be discussed below.

(c) 1955-1959.

In 1955 the Secretary of State issued an amendment to the regulations of the board. The board was authorized to hold up to £10 million sterling in long-term securities "issued or guaranteed by a constituent government or by any authority established to administer services common to two or more of the constituent governments."³¹ This amount was increased in 1957 to £20 million. And in 1959 the board was authorized to acquire local Treasury Bills within the specified limits of the fiduciary issue to governments. This provided a source of short-term finance to the governments. The use of this new facility tended to reflect the revenue difficulties which the individual territories were facing. Kenya, which had the least difficulties with tax revenues,

³¹

East African Currency Board Report for the year ended 30th June 1955.

utilized the lowest percentage of the amount available, and except for December 1960 and December 1961, they did not issue any Treasury Bills. This was in contrast to Uganda which used almost its entire allotment. (See Table 1.4). The more important resource gap may also have been foreign exchange so that the territories continued to borrow sterling on the London market.

(d) 1960-1965.

In 1960 more modifications were made in the structure of the board. The headquarters of the board were moved from London to Nairobi, and membership of the board was raised from four to seven members. Treasury officials in the constituent territories were appointed to the board, and the chairman was the Secretary of the East African Common Services Organization. The board also started to provide seasonal financing for export crops. The financing was for export promotion and it later served as a basis for the development of a local money market. And in order to facilitate banking operations in general, the board opened accounts for commercial banks and provided clearing facilities. New currency sub-centers were also opened to reduce the costs of distributing currency.

Tanganyika, Uganda, Kenya and Zanzibar achieved political independence in 1961, 1962, 1963 and 1964 respectively. The political

uncertainty during this period had serious repercussions on the monetary system. There were large capital outflows and currency in circulation dropped by £2.6 million. (Part of the decline was due to the withdrawal of the East African Shilling from British Somaliland in 1961). Commercial banks helped to reduce the impact of the decline by financing part of the outflows by drawing on the sterling balances in London and by expanding domestic credit. The banks later tried to ease the resulting pressure on liquidity by raising the prime lending rate to 7 per cent and then to 8 per cent between July and October, 1960. The board was still unable to help the banks. In November, 1960, the rules of the board were amended to permit discounting and rediscounting of "appropriate instruments issued in connection with the marketing of specified crops."³² A maximum of 5 million was set on this type of advance. This raised the total fiduciary issue to £25 million. The terms under which this facility was provided were not attractive to the commercial banks and they did not use it until 1961/62. Even then the banks did not use much of this advance due to the poor crop in this period and the high standard of paper demanded by the board. They used £0.9 million only. In 1962, the board reduced discount rates on crop financing bills from 7 per cent to 5½ per cent. The commercial banks reacted by reducing the prime rate

³²Coffee, tea, sisal, cloves and pyrethrum; it was also made clear that this list could be expanded to include other crops, if needed. Katz, J., IMF Staff Papers, 1966, p.237

TABLE 1.4
 EAST AFRICAN CURRENCY BOARD: FIDUCIARY ISSUE TO GOVERNMENTS,* ANNUALLY, 1956-59 AND SEMIANNUALLY, 1960-65
 (In millions of East African Pounds)

	June 1956	June 1957	June 1958	June 1959	June 1960	Dec. 1960	June 1961	Dec. 1961	June 1962	Dec. 1962	June 1963	Dec. 1963	June 1964	Dec. 1964	June 1965
<u>Kenya</u>															
Total taken up	0.2	1.9	2.5	4.0	3.8	5.8	3.8	4.8	3.8	3.8	3.8	3.6	3.5	3.5	3.5
Amount in Treasury Bills	-	-	-	-	-	(2.0)	-	(1.0)	-	-	-	-	-	-	-
Total Available	...	2.5	5.8	5.8	5.8	5.8	5.8	5.6	5.6	5.6	5.6	7.0	7.0	9.9	9.9
<u>Uganda</u>															
Total taken up	-	2.9	2.9	2.9	4.5	3.1	3.4	5.5	5.1	4.9	3.6	5.9	3.7	8.9	9.5
Amount in Treasury Bills	-	-	-	-	(1.6)	(0.2)	(0.5)	(2.6)	(2.2)	(1.9)	(0.6)	(2.9)	(0.8)	(6.0)	(6.5)
Total Available	...	3.4	5.9	5.9	5.9	5.9	5.9	5.6	5.6	5.6	5.6	7.0	7.0	9.9	9.9
<u>Tanganyika</u>															
Total taken up	-	1.0	0.8	1.1	3.6	4.1	4.5	4.7	5.6	5.1	6.4	4.7	4.7	8.1	6.2
Amount in Treasury Bills	-	-	-	-	(1.5)	(2.0)	(2.3)	(2.4)	(2.7)	(3.6)	(3.1)	(4.4)	(2.8)	(6.3)	(4.5)
Total Available	...	2.8	5.7	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.6	7.0	7.0	9.9	9.9
<u>Zanzibar</u>															
Total taken up	-	-	-	-	0.3	0.3	0.3	0.3	0.4	0.3	0.6	0.6	0.8	0.7	0.9
Amount in Treasury Bills	-	-	-	-	-	-	-	-	(0.1)	-	-	(0.1)	(0.2)	(0.1)	(0.3)
Total Available	...	0.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.9	1.2	1.2
<u>Aden</u>															
Total taken up	-	-	-	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	-
Amount in Treasury Bills	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Available	...	0.7	1.5	1.5	1.5	1.5	1.5	2.4	2.4	2.4	2.4	3.0	3.0	4.2	-
<u>East African Currency Board</u>															
Total Fiduciary Issue: Gov't.	0.2	5.8	6.3	8.9	13.1	14.2	12.8	16.0	14.9	15.5	14.0	17.4	13.6	22.0	20.1
Amount in Treasury Bills	-	-	-	-	(3.1)	(4.2)	(4.8)	(6.0)	(5.0)	(5.5)	(3.7)	(7.4)	(3.8)	(12.3)	(11.3)
Governments authorized.	10.0	10.0 ⁺	20.0 ⁺	20.0 ⁺	20.0 ⁺	20.0 ⁺	20.0	20.0	20.0	20.0	20.0	25.0	25.0	35.0	30.8

Sources: East African Currency Board Reports

* Investments at cost; bills at nominal value.

+ Totals available for the five constituent territories do not add to the total authorized because a small amount was allocated to the part of Somalia where the East African Shilling was still legal tender.

from 8 per cent to 7 per cent. Because of the freedom of movement of funds within the East African territories, and the extra-territorial character of the commercial banks, the crop finance funds were not allocated according to the territorial distribution ratios devised for lending to governments. According to this formula, the three mainland territories received almost 28.2 per cent each, while Zanzibar and Aden received 3.5 and 12 per cent respectively.

In 1962, the board made the first changes in the commissions on redemptions and issues. These changes were made with the intention of encouraging retention of funds in East Africa and to encourage capital inflows. The rates were again changed in 1964. Table 1.5. below contains the various rates. In order to encourage the development of the local treasury bill market, the board also maintained the local rediscount rate $1/8$ per cent below the London Treasury Bills' rate. In view of the commissions on the purchase and sale of sterling, this differential made it more profitable to invest surplus funds in local treasury bills. When the London rates rose sharply in 1964, the board was able to maintain low rates through variations in the exchange commissions.

In 1964, the maximum limit of the fiduciary issue was raised to 45 million. However, the governments in the currency area did not utilize this facility to the maximum. In June, 1965, they had issued £22.3 million in short- and long-term securities. This comprised 28.2 per cent of the assets of the board and 38 per cent

TABLE 1.5.

EAST AFRICAN CURRENCY BOARD: RATES OF INTEREST AND EXCHANGE COMMISSION, AT THE END OF JUNE, 1955 AND 1960-64, AND AT THE END OF NOVEMBER 1964.

(In per cent)

Exchange Commissions on Purchases		Sales	Rediscount Rate for Treasury Bills	Rediscount and Advance Rate for Crop Financing
1955 June	1/4	1/4	-	-
1960 June	1/4	1/4	-	-
1961 June	1/4	1/4	-	7
1962 June	1/8 } *	3/8 } *	1/2 per cent above local tender rate	* { 5 1/2
1963 June	1/8 }	3/8 }		{ 5 1/2
1964 June	1/8 }	3/8 }		{ 5 1/2
1964 Nov.	1/8 }	1/2 }		{ 5

Source: J. Katz - IMF Staff Papers, 1966.

* The exchange commissions in Aden remained unchanged at 1/4 per cent, but a charge of 1/8 per cent was applied for transfers from East Africa to Aden.

of currency in circulation. The board also continued its efforts to shorten the maturity of its investments. Thus, while investments of more than ten years' maturity comprised 30 per cent of the portfolio in 1951, they formed only 0.2 per cent of the sterling investments and 22 per cent of the East African investments in 1965. The board was aiming at a more liquid local portfolio, but it did not get the chance to do so, as it ceased operations in 1966.

The principal goal of the currency board system was to assure full convertibility between the local currency and sterling. In order to achieve this goal, the 100 per cent "reserve system" was thought to be essential in the management of the East African Currency Board. The main advantage of the system is that it encouraged long- and short-term capital flows and also helped to promote international trade. The system had also some drawbacks and some of these were in the process of being corrected at the time the board was dissolved. The principal criticism of the system was that it lacked an internal mechanism by which money supply could be made to keep pace with an expansion in production. Money supply would keep pace with production only if the production fell into one or more of the following cases. If the increased production went into exports, then it would automatically increase the amount of sterling available, and hence the currency. The second case where production and money supply would keep pace with each other, was when the increased production was

financed by capital inflows, and the third case was the one where the increase in domestic production was financed by bank credit. Domestic production for the domestic market would, in general, not lead to an increase in money supply, and therefore, unless there was a rise in velocity of circulation, there would be deflationary pressures. Proponents of the system argued that given the nature of the economies in these currency areas, the third case was of negligible importance.³³ Greaves carries this argument further and adds that:³⁴

" . . . factors that increased the demand for colonial currency increased at the same time the local bank deposits of external origin, hence the external funds required to supply the increase in currency were provided by the same forces that produced it."

The main weakness in this argument is that the flexibility that exists arises out of the actions of private entities; banks and other international firms, and is not subject to control by the monetary authority. Thus, so long as the process of monetization involved expansion in production for export, no crisis would arise. (See Section 1(b) and 1(c). The system also depended on the financial strength of the commercial banks to avert a liquidity crisis during periods of contraction.

33

Earle, A.F., "Colonial Monetary Conditions", Colonial Research Studies, No.10, 1953.

34

Greaves, op. cit., p.70.

Another criticism of the system was that the 100 per cent reserve was excessive since it was not likely that all the currency in circulation would ever be presented for redemption. This argument was valid only when currency was the predominant component of money supply. It would only be coincidental if it led to optimal reserves in a situation where bank deposits were the more important component of money supply, as would be the case with increasing use of banks. But in the earlier period, it is probable that the reserves were excessive.

(e) Commercial Banks.

The first banking institution to operate in Kenya started business in 1896. It was soon followed by a number of other banks. All these banks had one thing in common; they were branches of large international banks whose operations in any or all of the countries of the East African Currency System represented a small percentage of their business. The result was that their credit policies were determined more by the events at headquarters than by what was going on in the territory. This was a source of flexibility, as was pointed out above, but it could also be a source of trouble since the monetary authority had no control over the commercial banks.

Up to 1950, these banks tended to "maintain branches only

in those towns in which expatriate enterprise and/or government enterprise) were well established."³⁵ However, in the fifties they began to establish branches in other areas and to establish mobile banks for the purpose of attracting deposits from Africans. (The success of these efforts is difficult to measure since there is no data on the racial composition of depositors). By 1960, the banks had opened 139 branches in Kenya. This expansion was both in terms of rival branches and locations served. Locations served had increased from twenty in 1955 to sixty-five in 1960. This expansion continued in the sixties as even the number of rival banks increased. In 1972, there were over 250 bank branches, sub-branches and agencies, besides a number of mobile bank units that visited small towns and villages. A peculiar feature of this expansion is that competition was in terms of branches opened and services offered rather than variations in the interest rates. The banks had agreed in the twenties on a structure of interest rates and this cartel has continued to operate even after the opening of government banks which promptly joined the cartel.

In the earlier period, the banks' portfolios were dominated by balances held abroad and trade credit. (See Table 1.6A, 1951) but lately, with the restrictions on movement of funds and the

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Newlyn, W.T., and Rowan, D.C., "Money and Banking in British Colonial Africa", (OUP, 1954).

transfer of most external reserves to the central bank, there is more diversification of the portfolio. However, trade credit still dominates. (See Table 1.6B). Another factor that has tended to reduce the effectiveness of the banks' mobilization of savings is the high minimum deposit required. This minimum is about \$70 or about 70 per cent of per capita income.

(f) The Post Office Savings Bank.

The Post Office Savings Bank was opened in 1926. It was generally more accessible both in terms of the number of locations and the willingness to accept small deposits. Its interest rate was the same as the commercial banks' rate until 1950 when the banks raised the rate on savings deposits to 3 per cent. The Post Office Savings Bank was not able to compete with the commercial banks, and although the number of depositors continued to increase, the average deposit fell from £14. 2s. in 1950 to £5. 4s in 1962. The decline was aggravated by the expatriate withdrawals in the 1959-61 period. The Post Office Savings Bank remains the only banking institution whose deposits are guaranteed by government, but this additional security does not seem sufficient to attract enough business. The positive effects of the recent (1968) increase in interest rate to 3 per cent may have been canceled out by the limited access, since it is no longer possible to make deposits and withdrawals in any of the territories. This change

was introduced after the imposition of exchange controls within East Africa.

(g) Other Financial Institutions.

Because Nairobi served as the de facto commercial center of East Africa, Kenya was the most financially developed of the territories in East Africa. However, most of the services were available only to expatriate communities, the European settlers and the Asian traders. Before 1950, it was not permitted to give credit to Africans. The only participation available was as depositors, and as we have pointed out above, the terms may not have encouraged full utilization of this service. The main limiting factor to African participation was that they had no acceptable securities. This problem was partially solved in the early fifties when the system of land tenure was reorganized and land titles issued. However, because of the social and political factors that made foreclosure difficult, the banks were still reluctant to issue credit. The African Land Development Bank, (the equivalent of the Land and Agricultural Bank for the Scheduled Areas), was established with grants and loans from various international organizations, IBRD, and foreign governments, the USA and the Federal Republic of Germany. It was this duplication in the functions of providing credit and marketing services, that prompted the IBRD-mission to comment that ". . .there was an

TABLE 1.6.A

Distribution of Bank Assets in Kenya - 1951

	(£ '000)	%
1. Cash	2.4	4.5
2. Balances due from Banks in the Same Territory	0.3	0.5
Banks in East Africa	6.4	12.0
Banks Abroad	24.1	45.2
3. Loans and Advances		
Industry	2.8	5.3
Agriculture	2.0	3.8
Other	10.4	19.4
4. Bills discounted	2.4	4.4
5. Investments in East Africa	1.4	2.6
6. Other assets	1.2	2.2
TOTAL	53.4	100.0*

TABLE 1.6.B

Distribution of Bank Credit: Kenya 1967-72.

Year end	Public Sector (%)	Manufacturing (%)	Trade (%)	Agric. (%)	Personal (%)	Other	Total £Km.
1967	5	18	44	10	4	19	68.0
1968	5	19	42	12	4	22	66.8
1969	2	22	37	13	5	21	70.0
1970	3	18	39	12	9	21	86.9
1971	7	21	32	10	9	21	120.1
1972	8	20	28	10	10	24	121.4

* Rounded out.

Sources: E.A. Statistical Review and the Banker, London, 1973.

unnecessary number of government institutions providing credit. Their activities overlap."³⁶ In regard to marketing boards, they felt that Kenya was "over-boarded."³⁷ Some of the overlapping was eliminated during the reorganization of the 1960's, but the financial system is still not fully integrated. This aspect will be discussed in Chapter IV. There are also a number of other financial institutions such as hire purchase companies, building societies, and savings and loan associations, and insurance companies. These institutions controlled about 22 per cent of the financial assets in 1969.

(h) The Central Bank.

The Central Bank of Kenya was established by an Act of Parliament on 24th March, 1966. It was formally opened on 14th September, 1966. Its first undertaking was the issue of a new currency and the withdrawal of the East African Currency Board issue. As we have already seen above, the financial system in Kenya had developed in the absence of any supervisory authority. Credit policies were wholly under the control of the various institutions, and as such, they may sometimes have conflicted with the development objectives of the government. We have already

³⁶

IBRD - The economic Development of Kenya, (Johns Hopkins, 1963).

³⁷

IBRD - op. cit., p.85.

noted the tendency of these institutions to move idle funds to the headquarters, due to the absence of channels to employ such short-term funds locally. One of the first steps taken by the Central Bank was to limit the balances which the banks could hold with their head offices and others abroad to modest working balances. Instead, the Central Bank opened accounts for the commercial banks and paid interest on these deposits. The payment of interest was stopped in June 1970. This was done because the issue of Treasury Bills that started in March 1969 was considered an adequate channel to handle such short-term funds. In the period up to the end of 1970, the Central Bank policy was directed at influencing the sectoral flow of credit rather than the volume. This was because a number of government policies during this period had changed the traditional loan market rather radically. These policies were; the restrictions on lending to foreign-owned or controlled companies, the introduction of the Trade Licensing Act--which curtailed the business activities of a large number of Asians, and the Kenyanization of the agricultural sector--through the settlement schemes. These had been the traditional clients of the banks. The effects of these policies can be seen by examining Table 1.6.B. The percentage of loans and advances going to trade had declined from 44 per cent in 1967 to 28 per cent in 1972. In 1971, the Central Bank applied quantitative controls to halt an expansion in commercial

bank lending to finance imports. This was prompted mainly by the deteriorating foreign reserves position. The government supplemented these controls by imposing selective import controls.

The structure of interest rates has remained virtually unchanged. The prime lending rate has remained at 7 per cent and the various rates on deposits have remained fixed. This has tended to reduce the extent of financial integration since rates offered by various institutions are crowded in a very narrow range.

The purpose of this review was to sketch the development of Kenya's financial and monetary systems. We tried especially to examine the effect of the systems on the enlargement of the exchange economy.

CHAPTER IITHEORETICAL APPROACHES TO MONETIZATION AND ECONOMIC GROWTHIntroduction

Theoretical expositions on monetization seek to answer two basic questions. First, how does money evolve, and secondly, what is the role of money in the growth process? A third issue which has received a good deal of attention is the optimum supply of money, but the answer is closely related to the findings about the first two issues.

It would appear that once an answer has been found for the first question, that is about the economic origin of money, the answer to the second one would follow. However, as the review of the various approaches will indicate, this is not the case. This is mainly because money performs a number of different functions, and results depend, to a large extent, on the function that one chooses to emphasize. The difficulty lies mainly in trying to append the results of the microeconomic foundations of money on to macroeconomic models that already assume a perfectly functioning monetary economy. It is therefore not surprising that the results in the macroeconomic models are very sensitive to the assumptions used about the specific uses of money.

Section 1. Services of Money.

Several models which attempt to explain the emergence of money as a medium of exchange have been constructed.¹ All these models

¹ Niehans (1971), Brunner and Meltzer (1971) and M. Perlman (1971) are just some of these.

emphasize the inconvenience and inefficiency of trade in a barter economy. Niehans (1971), specifies two types of costs that an individual conducting trade in a barter economy would experience. They are, transaction costs, which are commodity and transactor specific, and storage costs which are specified simply as the wastage of commodity stocks.

The trade technology is fully specified by the nature of these costs, and efficient solutions depend on the structure of the costs. Thus, depending upon the structure of these costs, the efficient trade arrangement may lead to a set of commodities being used in indirect trade, i.e. the emergence of a multi-money economy, or the economy may stop trade altogether. In particular, it is shown that pure barter, the situation in which commodities are traded for other commodities, need not be inefficient, and that the case of monetization with a single medium of exchange is a limiting one in which one commodity is assumed to have zero transaction costs.

The importance of Niehans' model lies in its ability to demonstrate the services of money and to give explicit meaning to the resource saving nature of monetization. Such a demonstration is impossible in the neoclassical models which assume frictionless exchange. Further, it follows that once a common medium of exchange has been chosen, it becomes inefficient to use any other good as money since, for a given volume of trade, the common medium of

exchange entails the least transactions costs. Two other benefits of a common medium of exchange are the possibility of extending the market and the equalization of prices. (adjusted for transport costs) throughout the market.

The caravan trade that was mentioned in Chapter I was severely hampered by the lack of a common medium of exchange. As early as 1849, the Kamba in the interior had accumulated so much of the coastal goods that they refused to sell their ivory for more of these goods, demanding instead, that payments be made in livestock.² This placed a great burden on the coastal traders who had to devise various indirect trade mechanisms. The later introduction and general acceptance of the rupee, eased this problem. A large part of the increase in trade, both in the volume and range of commodities traded in the early part of this century was due to the introduction of the rupee.

2. Money in the Theory of Economic Growth.

In the one-sector neoclassical growth model, output depends on two inputs; capital and labor. These are combined in a production function which assumes constant returns to scale and diminishing marginal products for both factors.

$$Y = F(K, L) \dots \quad (1)$$

A constant savings ratio, s , is assumed and all savings are

2

Birmingham and Gray, p.78.

automatically used to augment the capital stock. Depreciation can be ignored so that saving is equal to net and gross investment.

$$sY = \dot{K} \dots \quad (2)$$

Furthermore, effective labor supply is assumed to grow at a constant natural rate n , and therefore, in balanced growth, capital and output grow at rate n .

That is,

$$\frac{sY}{K} = n \dots \quad (3)$$

which, in per capita terms reduces to

$$sf(k) = nk \quad (4)$$

Y = output

L = effective labor supply

s = savings ratio

$f(k) = Y/L$

$k = K/L$

Equation (4) is the steady state equation for the model.

Tobin (1965) noted a number of conflicts that arise from this model and its variants. For instance, if it is assumed, as in the Harrod model, that investors have a minimum rate of return in mind, problems would arise if capital deepening led to rates of return

falling below the minimum. Savers would not be deterred by this low return and the economy would be forced off the balanced growth path. Keynesian difficulties of deficient demand and the liquidity trap are also related to this problem. But as Tobin pointed out, it is scarcely possible to talk of deflation (in periods of deficient demand) and the liquidity trap when there is no mention of prices and liquid assets in the model.

It is against the background of these conflicts that Tobin proposed explicit introduction of money into the model. The model, as he clearly states, is concerned with portfolio choices and not with the size of the portfolio. To this extent, the constant savings ratio is retained as are the essential properties of the neoclassical growth model discussed above.³

He introduces a single monetary asset with the following characteristics.⁴

(a) It is supplied only by the central government. This means that it represents neither a commodity produced by the economy nor the debts of private individuals.

(b) It is a means of payment, the medium of exchange of the economy, and it is a store of value by reason of its general acceptability in the discharge of public and private transactions.

³

Tobin, J. (1965), p.676

⁴

Ibid., p. 676.

(c) Its own-yield is arbitrarily fixed by the government.

This may, of course, be zero, but it is not necessarily so.

Redefining disposable income to take into account the money transfers, we have:

$$Y_d = F(K, L) + \frac{d}{dt} \frac{(M)}{p} \quad (5)$$

Physical investment is given by

$$\dot{K} = s \left[F(K, L) + \frac{d}{dt} \frac{(M)}{p} \right] - \frac{d}{dt} \frac{(M)}{p} \quad (6)$$

where

$$\dot{K} = \frac{dK}{dt}$$

$$\frac{M}{P} = \text{real balances.}$$

In per capita terms, (6) becomes

$$\dot{k} = sf(k) - (1-s) (\mu - \pi) m - nk$$

and the steady state equation is

$$sf(k) - (1-s) (\mu - \pi) m = nk \quad (7)$$

where $\mu = \frac{\dot{M}}{M}$ $\pi = \frac{\dot{p}}{p}$ and $\frac{M}{pL} = m$

Most of the literature which followed Tobin's pioneering model concentrated on the differences between Equations (4) and (7).

The two equations are representations of the steady state in the one-sector neoclassical model and Tobin's model. However, a large section of this literature misinterprets both the neoclassical 'real' model and Tobin's model and therefore leads to wrong comparisons being made and the formulation of alternative models that do not help us to resolve the basic issues.

The main deductions from Equations (4) and (7) are: (i) that the equilibrium capital/labor ratio in (7) is lower than that in Equation (4), and (ii) that an increase in the rate of inflation will lead to a higher equilibrium capital/labor ratio. See diagram.

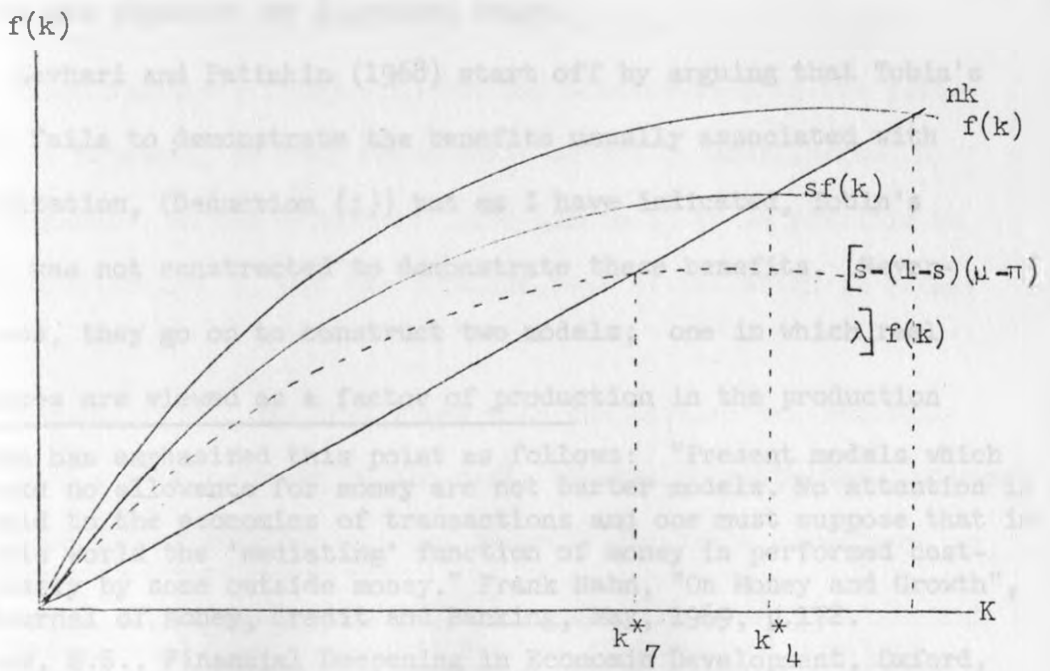


Figure 2.1

where $\frac{M}{P} = \lambda Y$

Invalid inferences are drawn when some authors describe the neoclassical model as a barter model; e.g. Crouch (1971), Levhari and Patinkin (1968), and Shaw (1973); and Tobin's model as a monetized economy model. Such a description is false and the models cannot be compared except on the basis of the conflicts that Tobin discusses.⁵

Models that attempt to introduce 'useful' money and to resolve the 'dilemma' of optimality in the money market on the one hand calling for satiation with money balances whereas optimality in the capital market implies no money, must be examined on their own merit.⁶ There is no dilemma in Tobin's model on the basis of its assumptions. The new approaches attempt to resolve a different problem from the one posed in Tobin's analysis. Two representatives of the new approach are discussed below.

Levhari and Patinkin (1968) start off by arguing that Tobin's model fails to demonstrate the benefits usually associated with monetization, (Deduction (i)) but as I have indicated, Tobin's model was not constructed to demonstrate these benefits. Nevertheless, they go on to construct two models; one in which real balances are viewed as a factor of production in the production

⁵ Hahn has emphasized this point as follows: "Present models which make no allowance for money are not barter models. No attention is paid to the economics of transactions and one must suppose that in this world the 'mediating' function of money is performed costlessly by some outside money." Frank Hahn, "On Money and Growth", *Journal of Money, Credit and Banking*, May, 1969, p.172.

⁶ Shaw, E.S., *Financial Deepening in Economic Development*, Oxford, 1973, p.36.

function on the basis that monetization allows for more efficient combinations of factors, and the other, in which money balances yield direct utility for the holder through the elimination of inconveniences that one would face if one had no cash reserves.

Since the other assumptions of the neoclassical model are retained, it is sufficient to report their steady state equations under the two proposed approaches and to see how they compare with previous expressions.

(i) Money as a producer good:

$$sf(k, m) - (1 - s)(\mu - \pi)m = nk \quad (8)$$

(ii) Money as a consumers' good:

$$sf(k) - (1 - s)(\mu - \pi)m + s(r + \pi)m = nk \quad (9)$$

$$\mu - \pi = n$$

With money as a producer good, the economy is on a higher production frontier, $f'(m) > 0$, but the substitution in the portfolio is retained, so that the overall effect on equilibrium k is ambiguous. In the consumers' good approach, it is possible to raise equilibrium k , but the required rate of inflation is rather high.

Crouch,⁷ (1971) has criticized both the Levhari and Patinkin and Tobin's models, first on the basis of what he calls the 'dilemma' of impoverishing monetization and secondly for their dependence on

7

Crouch, R.L., "A New Approach to the Monetization of Neoclassical Growth Models", in Econometric Studies of Macro and Monetary Relations, North-Holland, 1973, p.292.

a particular money arrangement. In particular, the inability of Tobin's model to predict anything when inside money is assumed, and the requirement of sub-optimum money supply in Levhari-Patinkin's consumers' good approach, are cited as weaknesses.

His approach is to introduce money as a technological innovation that raises the production frontier once and for all, and is independent of the monetary arrangements. He introduces money as a labor-augmenting innovation. The new production function is:

$$Y = F(K, \gamma(t)L) \quad (10)$$

where $\gamma = 1$ for $t = 0$ to $t = \theta$, the 'barter' period and $\gamma > 1$ for $t = \theta$ to $t = \infty$ (the monetary period). The other assumptions are retained, but money balances do not appear as a component of disposable income. The steady state growth equilibrium equation is given by:

$$s\gamma f(k\gamma^{-1}) = nk \quad (11)$$

Equation (11) resolves the 'problems' which he argues are associated with previous approaches. The steady state k is higher than in (4). But the approach has its own problem. In particular, what determines the value of γ ? Crouch states that "the larger the benefits to be reaped from monetization, the larger γ ." But what determines the size of the benefits?

Pierson (1972) has criticized these new approaches to the role of money in growth from a different point of view than the one used above.⁸ She argues that these models emphasize the medium of exchange function of money, but that in fact, monetization permits two other innovations, credit creation and intermediation, which have strong positive effects on productive efficiency. She goes on to argue that consistency would demand that either all three effects be introduced into the growth models or that none be introduced. She favors non-incorporation of either, since, she argues, these innovations are of the Schumpeterian type, with high marginal influences in the beginning but rapidly declining marginal productivities thereafter. These influences are important only in the transition stage but none of these models is designed to handle short-term problems.

The second result from Equation (7)--the effect of inflation on the equilibrium capital/labor ratio, has been cited as a possible policy instrument for developing economies. That is, whether developing countries which wish to raise per capita income should be advised to inflate the growth of money supply.⁹ This argument

8

Hahn, F., op. cit.

9

J.L. Stein, Money and Capacity Growth, Columbia University Press, 1971, p.9.

has led to another group of monetary growth models whose authors claim are more applicable to developing economies. The main thrust of these models is that inflation is not the best approach to monetary policy. This argument is not based on the usual welfare losses associated with inflation, but rather on the argument that developing economies have special characteristics which justify a different model formulation. This new group of models is the subject of the next section.

3. Money and Growth in Developing Economies.

There are several characteristics which distinguish developing from developed economies. Among these are imperfect capital markets, dualistic-type economic systems--i.e. the existence of a modern sector and a traditional, mainly agricultural sector in which the penetration of the money economy is incomplete.

Contributors to this field of study argue that two of the assumptions of the neoclassical model are not applicable to developing economies. The two assumptions are the existence of perfect capital markets, and full employment of labor, which makes the equilibrium growth rate equal to the growth rate of labor and, therefore, exogenous to the system. McKinnon (1973) and Shaw (1973) emphasize the imperfect capital markets while Kapur (1974) and Findlay (1975) emphasize the differences in the labor market.

Findlay and Kapur argue that the Lewis-type assumption of surplus labor--which implies a constant wage in the modern sector--is more applicable to developing economies. They retain the assumption of a perfect capital market, with a very simple structure, in the modern sector. They also include real balances in the production function of the modern sector to reflect the 'transaction services of the medium of exchange.'¹⁰

Kapur goes on to investigate the implications of raising the rate of inflation, while Findlay analyzes the appropriate monetary policy for maximum growth. In both studies, the problem of expanding the monetary economy into the traditional sector is ignored.¹¹

Kapur's results indicate that while increasing the rate of inflation raises the capital/labor ratio, it lowers the growth rate. This is because an inflationary policy reduces the productive efficiency of real balances. The rise in the capital/labor ratio, on the other hand, is due to the redistribution of income to the capitalist sector which is assumed to do all the saving.

Findlay's maximum growth model suggests that deflation would be the appropriate monetary policy. The optimum rate of deflation is equal to the growth rate of income.

¹⁰Kapur, B., "Monetary Growth Models of Less Developed Economies", unpublished Ph.D. dissertation, Stanford, 1974, Chapter 1.

¹¹Findlay, R., says that "The 'backward' or 'native' sector plays no role in the model other than as a source of labor. It can also be regarded as providing food in exchange for manufactures from the 'capitalist' sector so long as the price-ratio is taken as fixed exogenously and there is no movement of physical capital or real balances. This precludes the possibility of studying the fascinating question of 'monetization' of the subsistence sector...", in Money, the Price Level and Maximum Growth in a Developing Economy", Discussion Paper 74-7511, Columbia University, p.3.

McKinnon's approach is via the imperfections in the capital market of the underdeveloped economy. The labor market is ignored and so it must be assumed that full employment obtains. McKinnon argues that in the developing economy with its underdeveloped and segmented capital market, investors depend on self-finance in order to undertake any investment. There are two assets in the economy, cash balances, and commodity inventories--or physical capital. But, unlike in the one-sector neoclassical model, investment goods do, in general, differ from the own-produced bundle of goods so that some transformation has to take place before an investment program is undertaken. The case where a farmer sells his produce to purchase a plough is the simplest one. Also, unlike in the neoclassical model, there exist indivisibilities in investments, so that a minimum amount of accumulation has to be undertaken before investment can begin.

The accumulation of cash balances is one way to facilitate the financing of the investment project. And this accumulation can be enhanced by providing attractive yields on real balances. According to McKinnon, it is necessary to make the yield on such balances positive. This is the basis of the 'conduit effect' hypothesis. This hypothesis states that real balances which, in Tobin's model, compete with physical capital in the individual's

portfolio, serve as a 'conduit' or facilitator of accumulation of real capital. In other words, prior accumulation of cash balances is a necessary precondition for investment. Therefore, inflationary policies by reducing the attractiveness of cash balances, also reduce the level of investment. These policies may also inhibit the spread of monetization in economies, like Kenya, that are not yet fully monetized.

The appropriate policy objective should, therefore, be to raise the real rate of return on cash balances. McKinnon notes that in most underdeveloped countries this return is negative. This policy has two effects: first, it will tend to raise the level of accumulation, and second, it will eliminate investments whose rate of return are lower than the yield on real balances, thus improving the quality of investment.

Segmented capital markets imply also that rates of return on investment vary within wide margins. Therefore, in the beginning when the conduit effect is strongest, investment projects with sufficiently high rates of return to justify the prior accumulation of cash balances can be found. However, as capital deepening progresses, there is a reduction in the dispersion of the rates of return and the differential between yields on investments and real balances declines. Money balances then become a substitute to

physical capital in the individual's portfolio. There is, therefore, a hump in the locus of the 'conduit effect.' Beyond the hump, self-finance declines in importance as a method of financing investment. Intermediation becomes more prevalent.

McKinnon summarizes the policy implications of his approach as:¹²

(a) The quality of capital stock (average rate of return) is positively related to the real return on holding money.

(b) The demands for stocks of cash balances and physical capital are complementary over a range where the conduit effect dominates the competing-asset effect.

(c) Private saving (investment) is quite sensitive to the real return on holding money and its stability.

(d) There is a determinate optimal real return on money that is likely to be significantly greater than zero and a presumption that inflation is a poor way to deal with the scarcity of real capital.

The main weaknesses of the model are its failure to provide a method for determining the optimal rate on cash balances, and the inadequate treatment of the growth of other financial assets.

Shaw's model is more concerned with intermediation and its

¹²

McKinnon, R.J., "Money and Capital in Economic Development",
Brookings Institution, 1973, pp.66-67.

effects on saving and resource allocation. It will, therefore, be discussed in the chapters below. The main reason for mentioning it in this section is that the author, like McKinnon, starts off with a critical review of the neoclassical monetary growth models. Neither, however, provides alternative, formal growth models.

Section 4. An Evaluation of the Monetary Growth Models as Applied to Developing Economies.

A principal characteristic of monetary development in the developing economies is the amount of structural change that accompanies it. In Chapter I, I highlighted some of these changes, such as the development of a labor market, and the introduction of cash crops, some of which have no on-farm consumption value, e.g. pyrethrum, and even very little domestic consumption component initially. These changes introduce new consumption patterns and also different demands for saving from those previously experienced. For instance, the problem of indivisibilities which plays an important role in McKinnon's model, can be applied to the case of a farmer who has to set aside time, land, and capital for the production of crops that have no direct consumption for him. The switch also involves a new type of risk - market risk, since, if he should fail to market the produce, he could not utilize it for subsistence. This risk element is in addition to the usual investment risk which concerns

the expected volume of output. This is the type of risk that the Swynnerton Plan (1954) sought to reduce by encouraging the joint production of cash and subsistence crops.

This transformation in patterns of production creates different demands for capital--more capital than is needed for subsistence production. And monetary arrangements that provide easy access to capital both for production and marketing are very important. It has already been pointed out in Chapter I what an important role crop finance, mainly for marketing, played in the growth of commercial production.

Another transformation that takes place is the provision of various financial assets that provide channels for saving and influence the pattern of resource allocation. Money is clearly necessary for the growth of efficient credit systems and intermediation, but as Pierson argues, these are aspects of monetization that have received no attention. Chapters III and IV below will deal with both of these aspects of monetization. Chapter III deals with the effect of monetization on saving, while Chapter IV deals with the effects of intermediation on resource allocation. Both chapters include applications to the Kenyan economy.

Monetary growth models discussed above, ignore these issues, and therefore, I think, sidestep the fundamental issues of monetization.

CHAPTER IIIMONETIZATION AND SAVING.Introduction.

A considerable amount of development literature has been devoted to the problem of national savings in the growth process. However, both the nature of the relevant savings function for underdeveloped countries and the "significance of the savings effort as an independent determinant of economic progress,"¹ are still among the unsettled issues in the literature. In this chapter an attempt is made to contribute to the formulation of a savings function.

Section 1. Hypotheses Concerning the Nature of the Savings Function.

The main theme in development literature has been the concern with the problem of capital accumulation. According to these models, a high rate of capital accumulation in the economy will induce a high rate of growth in income. And since such investment needs to be financed, it follows that a high rate of saving is a prerequisite for rapid growth. This hypothesis is capsulized in the Harrod-Domar growth model where the rate of growth of income

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R.F. Mikesell & J.E. Zinser: The Nature of the Savings Function in Developing Countries: A Survey of the Theoretical and Empirical Literature, Journal of Economic Literature, XI, No.1, March 1973, p.1.

$g = s/v$. s = average propensity to save, and v is the capital-output ratio. A number of writers, the most prominent of whom were Lewis and Rostow, stressed the existence of a critical minimum value of s for economic prosperity. According to Lewis, "the central problem in the theory of economic growth is to understand the process by which a community is converted from being a five per cent to a twelve per cent saver..."² and according to the Rostow thesis as deduced from the study of economic history, self-sustained growth calls for a ten per cent saving-investment minimum. The two conclusions are based on different sets of studies, with the Lewis conclusion being a deduction from observing the differences in the savings propensities of contemporary developed and underdeveloped economies, while Rostow's conclusion is based on discontinuities (stages of growth) in the development process. However, it is clear from both studies that the developing countries would have to exert a lot of effort to boost their savings rates if they were to achieve reasonable growth rates.

In the 1950's, owing to a number of factors, one of which was the dominance of Keynesian-type consumption functions, the chances of less developed countries boosting their savings rates by internal effort were rated very low. Since the level of saving was hypothesized to be dependent on income, and income levels in

²

Lewis, W.A., Theory of Economic Growth, (New York, 1970)., p.221.

the underdeveloped countries were very low, reliance on domestic effort alone would not enable these countries to break out of their poverty. The "vicious circle" as expounded upon by Nurkse³ would effectively keep these countries poor. According to this hypothesis, "low income levels lead to a small capacity to save which in turn leads to a lack of capital and this leads to low productivity hence low income levels, . . ."4 and the process goes on ad infinitum.

One way to break out of the circle was through the inflow of foreign capital to supplement the domestic resources. Both the political atmosphere and the economic performance in the developed countries were favorable to this approach. With the aid of the Harrod-Domar formulation, foreign aid requirements could be calculated easily. And to a certain extent, such aid was forthcoming. Over the 1956-61 period, the flow of foreign resources into less developed countries grew at an annual rate of 8 per cent. This dropped to 4.8 per cent over the 1961-68 period.⁵

In the 1960's, with the decline of capital inflows, there was

3

Nurkse, R.: Problems of Capital Formation in Underdeveloped Countries, (OUP, New York, 1966).

4

Nurkse, R.: op. cit., p.57.

5

Partners in Development - Report of the Commission on International Development (New York, 1969).

a shift towards the use of fiscal instruments to mobilize domestic savings and allocate them. Studies of the fiscal systems in developing countries by Chelliah, and Bahl indicate a modest increase in tax effort as measured by the average and marginal rates of taxation for most of the countries.⁶ In what has been called the strategy of the seventies, some developing countries are moving to supplement the previous two approaches by developing complex financial systems and capital markets to mobilize private savings.⁷ This last approach is the main concern of this study.

Empirical studies of the savings function in developing countries can be divided into five broad categories. These are: the income-savings relationship which includes the Keynesian formulation, and the Permanent-Income, (Friedman), Life-Cycle, (Modigliani-Brumberg-Ando) and the Relative Income, (Duesenberry) hypotheses; the capital inflow--saving and the taxation-saving approaches which

6

Chelliah, R.J.: Trends in Taxation in Developing Countries, IMF Staff Papers (XVIII, 1971), pp.254-331.

Bahl, R.W.: "A Representative Tax System Approach to Measuring Tax Effort in Developing Countries," IMF Staff Papers, (XIX), 1972, pp.87-124.

7

For example, Patrick, H.T., and Wai, U Tun: "Stock and Bond Issues and Capital Markets in Less Developed Countries," IMF Papers (XX) 1973, pp.253-317.

hypothesize a negative influence of taxation and capital inflow on domestic saving; the exports and savings hypothesis, and the rates of interest and saving approach. The last two hypothesize positive effects of higher exports and interest rates on saving. Studies supporting each of the hypotheses above are cited in Mikesell and Zinser.⁸ The number of hypotheses is a clear indication of the lack of unanimous agreement among economists interested in development problems on the formulation of a savings function.

Section 2. Accumulation in a Barter Economy.

In the introduction to Chapter II, I discussed the costly trade processes in a barter economy and how the evolution of a common medium of exchange leads to more efficient resource use. There is no reason to believe that the process of accumulation would be any less inconvenient and costly in such an economy.

In the one sector neoclassical model, the single putty output serves as a capital and a consumption good. The investment process is not distinguishable from saving since any portion of current output that is not consumed is automatically, (and costlessly) invested. And if one goes further and assumed complete certainty about rates of return, the commodity is a riskless investment and

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Ibid. The review also discusses the various data and econometric problems associated with each approach.

there is no rationale for the evolution of a money asset.⁹

However, when uncertainty is associated with real investment, then the introduction of a riskless asset, (money), is likely to have an effect on the propensity to save even in the one sector model.¹⁰ Tobin analyzes two types of uncertainty; yield and need uncertainty, and shows that 'not only does saving exceed what would be forthcoming without any safe asset available, it also exceeds the amount that would be saved if there were no uncertainty about either need or yield.'¹¹ Uncertainty about need is with regard to the pattern of future expenditure, while yield uncertainty is with respect to the variability of yields on assets. He shows also that the availability of a safe asset even in the absence of need uncertainty may increase saving.

In the multi-commodity world where barter is more appropriately discussed, the process of accumulation involves trading as well as holding of commodity inventories. Trading is necessary because, except for a few investments, the investment good will be different

9

For instance the discussion of the Wealth View Model in Shaw. Financial Deepening in Economic Development, (Oxford, 1974).

10

Tobin, J.: "Notes on Optimal Monetary Growth", Journal of Political Economy (Supplement) No.5, Part II (July/August, 1968) pp.833-859.

11

Ibid., p.853.

from the commodities produced. Therefore, in order to get the required commodity bundle for investment, the individual will have to execute a number of trades that involve the transaction costs previously discussed. Even when the investment bundle is reduced to one commodity, say a plough, the number of necessary trades may be extensive if double coincidence of wants does not hold.

The holding costs are associated with the problem of indivisibilities in investment. That is, the requirements for the project exceed what can be saved out of one period's production. And, so, the larger the project relative to current period income, the longer will be the accumulation period and consequently the higher will be the holding costs.

Holding costs may be in the form of depreciation according to some rule of deterioration, in which case they are borne wholly by the unit doing the accumulation, but as was pointed out in Chapter I, they may also involve high social costs as in the case of environmental destruction caused by large stocks of animals.

These costs are independent of the investment risks which are related to variance in rates of return on capital. The emergence of a money good--say outside money, would immediately reduce both types of costs and also provide a safe asset. Both effects would tend to increase the level of saving.

Section 3. Monetization and Saving.

Monetization is a two-part process. On the one hand, we have the spread of commercial production and the development of factor markets, and on the other, the growth of the financial system supplying a wide range of financial assets. Both aspects of the process have positive effects on the supply of savings; but, in general, the literature has tended to emphasize the financial development.

(i) Commercialization and the Supply of Savings.

The neglect of the rural sector, also variously described as the indigenous or subsistence sector, as a source of voluntary saving is based on the assumption that this sector is hardly able to produce enough for the biological needs of the people in it and, therefore, cannot be expected to produce a surplus. In his "Strategy for Economic Development" (1958) Hirschman criticizes this view, and argues that even in the poorest of the economies there is a potential for saving which remains unrealized due to the lack of profitable investments. The introduction of market goods-- say cash crops, is one way in which to provide such profitable channels for investment. Experience in Kenya has also tended to disprove the hypothesis that individuals were so poor that they could not save.

The inauguration of the Swynnerton Plan (1954) which permitted

Kenyan Africans, for the first time, to enter into legitimate cash-crop production is a case in point. Most of the investment for land consolidation, purchase of seedlings, etc., was self-financed. And according to various authors, the required capital for such a switch was quite considerable.¹² An additional incentive in Kenya, which may not be applicable to other economies, is that the alternative methods for earning money income--and labor, was not particularly attractive due to the poor conditions of wage employment on the settlers' farms. The fact that such production also involved production of export crops with little or no consumption value on the farm, was also peculiar to the Kenyan circumstances since there were no established export commodities prior to the establishment of colonial rule--as opposed to the existence of palm oil in Nigeria.

The higher incomes generated by commercial production also enable individuals to save more,¹³ and the relative ease of imposing taxes on export production, both directly and indirectly through the price stabilization funds of the marketing boards, provides an additional source of public sector saving. This latter aspect is

12

deWilde, J.C., "Experiences with Agricultural Development in Tropical Africa", Vol.I, The Johns Hopkins Press, 1967, p.198.

13

Ibid. He quotes the example of the Nigerian Cocoa farmers who were able to save 40.6 per cent of disposable income in 1951/2.

often treated under the general heading of the effect of exports on saving, but as we have seen, export growth and monetization were closely related especially from the early 1950's.

(ii) The Financial System and Saving.

In the one-sector monetary growth models discussed in Chapter II, above, it was assumed that the propensity to save remains fixed. This assumption helps to simplify the mathematics of the growth models, but it does not seem to be well-founded in theory nor as a historical fact. Three arguments were advanced above to show that this assumption is not valid. The three were, the reduced cost, private and social, of accumulation, the opening of more profitable lines of production that was associated with the spread of the monetary economy, and the effect of introducing a safe asset, as discussed by Tobin. The three arguments show that even in the restricted circumstances of outside money, the assumption of a constant savings ratio is not justified. The assumption seems to be even less justified when we assume a more realistic economy with various financial institutions supplying a wide range of financial assets. The remainder of this section is concerned with the influence of the financial system on saving.

Financial intermediaries, encompassing the banking system and various non-bank financial institutions, perform three basic functions;

promotion, mobilization and allocation of savings. The first two of these functions will be discussed in this chapter. The third function is covered in greater detail in the next chapter.

Section 4. The Financial System and the Mobilization of Savings.

In general, an economy consists of surplus and deficit units. Surplus units are those whose expenditure plans permit them to retain a part of their current income to augment their wealth. Deficit units, on the other hand, plan to spend in excess of their income. However, since the accretions to wealth may take various forms, some productive and some unproductive, the economy may end up in a situation where highly productive investments fail to be undertaken for lack of resources, while some units hold resources with low or even negative rates of return.

Financial intermediaries help to resolve the problem by providing a variety of financial assets to the savers and lending the proceeds to the deficit sectors. Savers receive a variety of assets differing in maturity, liquidity, yield and marketability, while borrowers receive funds in the desired amounts and with the desired term structure.

This approach to resource transfer has a number of advantages over the alternative approach whereby borrowers issue their own securities to the lending units. First, the lending units do not

have to assume the risks involved in the expenditure plans of the borrowing units. They also do not have to invest resources to acquire information about prospective borrowers on such things as reliability, soundness of investment, and the entrepreneurial ability of the borrower. This information is pooled by specialized sections of the financial intermediary and all the saver has to investigate is the soundness of the financial institutions. Secondly, the financial institutions are able to accommodate any amount of resource that the saver wishes to dispose of, whereas direct investment or lending may involve a certain amount of indivisibilities. Also, there is the possibility of asset-transformation. This permits the saver to maintain a relatively high level of liquidity in his portfolio without constraining the forms of investment the borrower may undertake. Thirdly, the total cost of borrowing, consisting of the interest charges, loan arrangement and repayment schedules, is likely to be lower when funds are channeled through the financial intermediaries than when dealing directly with the ultimate lenders.

The conclusion from this section is that a given volume of saving may yield a higher level of utility for the savers and borrowers when there is intermediation than when no intermediation exists. The direct resource cost in the financial, by no means negligible, is much lower than the total cost, social and private, of lending and borrowing directly. Lenders receive lower rates of

interest than when they lend directly, but with a greatly diminished risk component, while borrowers can borrow at lower rates of interest that afford them a better chance of success.¹⁴ The differential between the lending and borrowing rates of the financial institutions is the cost of intermediation and it diminishes as the process of intermediation becomes more efficient.

Section 5. The Role of the Financial System in Promoting Saving.

There is widespread agreement on the mobilization function of the financial system. However, there is still some doubt on the ability of financial intermediation to raise the level of saving. There are two parts to this question. First, what is the effect of financial intermediation on the volume of financial saving, and second, what is its effect on the overall propensity to save? One needs answers to both questions in order for one to be able to design appropriate financial strategies, since, as I have indicated, financial intermediation, unlike the supply of outside money, uses up some of the scarce resources, such as capital and skilled manpower.

¹⁴

Rates of interest in excess of 100 per cent are not rare in cases where individuals depend on direct borrowing. Obviously such rates impose a great burden on the borrower and severely limit the types of investments he may undertake.

See J.D. Von Pischeke, "A Critical Survey of Approaches to the Role of Credit in Smallholder Development", IDS, University of Nairobi, Working Paper # 145.

See also U. Tun Wai, "Interest Rates Outside the Organized Money Markets of Underdeveloped Countries", IMF Staff Papers, Vol.6 (November, 1957) pp.80-142.

We divide the economy into four sectors; households, non-financial corporations, commercial banks, and non-banking financial institutions. Money is supplied by the Central Bank which is consolidated with the public sector. The private sector holds government liabilities in form of currency and government bonds, but the government holds no private securities. The commercial banks and financial institutions are considered to be a part of the private sector. Then private wealth is given by:

$$A \equiv K + C + GB$$

K = real capital, C = currency, GB = government bonds. In the four sector scheme this identity can be written as:

(1)

$$A = (K_h + C_h + GB_h) + (K_b + C_b + GB_b) + (K_f + C_f + GB_f) + (K_n + C_n + GB_n)$$

where subscripts h , b , f , and n stand for households, banks, financial institutions, and non-financial corporations respectively.

In order to derive an expression for household wealth in which corporate wealth is transformed into assets held by households, we require balance-sheet accounts for the corporate sector. These are given by (2), (3) and (4) below.

$$(K_b + C_b + GB_b) + PB_b + E_b^n + E_b^f + N_b + L_b = (E_h^b + D_h) + (E_n^b + D_n) + (E_f^b + D_f) \quad (2)$$

$$\begin{aligned}
 (K_n + C_n + GB_n) + D_n + N_n + E_n^b + E_n^f + L_n &= (E_h^n + PB_h^n) + (E_b^n + PB_b^n) \\
 &+ (E_f^n + PB_f^n) \qquad \qquad \qquad (3)
 \end{aligned}$$

$$\begin{aligned}
 (K_f + C_f + GB_f) + D_f + PB_f + E_f^b + E_f^n + L_f &= (E_h^f + N_h^f) + (E_b^f + N_b^f) \\
 &+ (E_n^f + N_n^f) \qquad \qquad \qquad (4)
 \end{aligned}$$

where PB are corporate bonds issued by non-financial corporations. Banks and non-bank financial institutions do not issue bonds. $D, N,$ are the deposit liabilities of banks and financial institutions. E represents equity holdings. E_h^n , for instance, represents the households' equity capital in non-banking financial institutions. $L_b, L_n,$ and L_f are loans by the various sectors to households.

In consolidating the balance-sheet accounts, those items that appear as assets of one sector and liabilities of another, wash out. These items, like E_n^b , represent the extent of integration within the financial system and they have significant effects on the mobility of funds through the financial system and on the allocation of such funds. These considerations will be part of the next chapter. The consolidated balance-sheet is:

$$\begin{aligned}
 (K_b + C_b + GB_b) + (K_n + C_n + GB_n) + K_f + C_f + GB_f + L_b + L_n + L_f \\
 = E_n^b + E_n^f + E_n^n \qquad \qquad \qquad (5)
 \end{aligned}$$

An increase in the 'liquidity' and/or the rate of interest on one of the assets leads to a substitution among the various assets, but also movement from other forms of accumulation like speculative investment, jewelry, etc. into financial assets since the average yield and/or liquidity of the financial component of the portfolio has increased.

McKinnon and Shaw argue their case for financial liberalization along the same lines. Their approaches go a little further, however, in that they argue that the increase in the yields on financial assets raises not only the volume of financial flows, but also the propensity to save. In McKinnon's model, only M_2 is considered, and so there is no discussion of liquidity, since, by definition, money is the most liquid asset.

The next step is to consider the effect of financial intermediation on the propensity to save. In this sub-section we concentrate on interest rates as the main characteristic of financial assets, and money, defined as M_2 , as the only financial asset.

There are several ways in which the growth of financial intermediation may be expected to raise the propensity to save. First, with the growth of intermediation, there is greater access to external finance. However, the ease with which such financing may be obtained, and the terms on which one may borrow depend heavily on the creditworthiness of the prospective borrower. Creditworthiness, in turn, depends in part on the quality of the collateral one is able to offer. In general, the quality of the

collateral is directly related to the wealth the individual holds. Therefore, in order to improve one's chances and terms of borrowing, one would be induced to accumulate more wealth, hence, save more.

The relationship between interest rates and the aggregate propensity to save involves a certain amount of ambiguity which has led some authors to dismiss any use of interest changes as a policy tool in the promotion of saving.¹⁵ The ambiguity arises because, like with all price changes, interest changes are associated with substitution and income effects. The substitution effect tends to raise the propensity to save, while the income effect has a tendency to lower the ratio since individuals can be better off both in the present and future periods with less saving out of currency income. It is argued that the effect of changes in interest rates should be sought in the channels of saving rather than in the aggregate propensity to save.

Proponents of the interest approach argue that at low levels of income, the substitution effect is likely to overwhelm the income effect, thus raising the aggregate propensity to save.¹⁶ This argument is especially true in economies where nominal rates of interest on financial assets have been kept very low and real

¹⁵

See Suits, D.B., "The Determinants of Consumer Expenditure: A Review of Present Knowledge," in Impacts of Monetary Policy, Englewood-Cliffs, N.J., Prentice-Hall, 1963.

¹⁶

Shaw, E.S., Financial Deepening in Economic Development, Oxford, 1974, p.73.

rates are probably negative. Raising real rates of interest serves to reveal sectors where capital is in scarce supply and rates of return are high, and also raises the yield on financial assets. The combined effects of higher demand for financial assets and faster growth rates, tend to raise the propensity to save.

Further, the noted possible perverse effects of higher rates of interest are only valid in a static framework. When growth in income is taken into account, an increase in the desired ratio of wealth to income will permanently shift the aggregate propensity to save upwards.

In the next section I report on some of the empirical work that has attempted to test the effect of financial intermediation on saving.

Apart from the common problem of unavailability of data, the crucial question is determining the appropriate variable for measuring the degree of financial intermediation. Interest rates and the ratio of financial assets to income are used in one study, while ratios of various financial assets are used in the other. Both approaches suffer from some conceptual difficulties. First, there is no discussion of why deposit rates, for instance, should be chosen over loan rates. And moreover, there is no determinate relationship between interest rate levels and the level of financial intermediation. The appropriate variable would appear to be the

the differential between "deposit" and loan rates since this is the one that measures the level of efficiency in the intermediation process. The fact that this differential does, in part, depend upon the volume of funds flowing through the intermediaries is not a good reason for using the volume of funds as the dependent variable since there are other variables in the determination of the differential such as the difference between liquidity to lenders and liquidity to borrowers.¹⁷ However, the differential in interest rates is not available for regression analysis because lending and borrowing rates have been fixed over extended periods of time.

The use of ratios of various financial aggregates is also on suspect theoretical grounds because, as Tobin (1952) has argued, in portfolio equilibrium, individuals determine the size and the composition of the portfolio jointly so that any component of the portfolio or a ratio of such aggregates cannot be used to 'explain' consumption or saving behavior.¹⁸

On the other hand, however, it is empirically observable that as financial deepening progresses, the ratios of the various assets change and tend to some equilibrium. For instance, while currency dominates the financial assets in the early stages of

17

Mangoletsis, D., "The Microeconomics of Indirect Finance", Journal of Finance, Vol. XXX, No.4, September 1975, pp.1055-1063.

18

Tobin, J., "Asset Holdings and Spending Decisions", American Economic Review, Vol. 42, May, 1952, pp.109-133.

monetization, deposits assume a more dominant role in later phases. It is on this ground that it may be admissible to use the various ratios as independent variables as is done by Christian and Pagoulatos (1973). Use of these ratios would be invalid when the ratios approach equilibrium values, and the study notes this.

Use of the ratio of total financial assets to GNP is also perhaps questionable on the basis of Tobin's argument, since financial assets are only part of one's total wealth. However, according to Goldsmith's data, (Goldsmith (1969)), this ratio is consistently higher for the developed than for the underdeveloped countries and it has been rising (with fluctuations) for most of the countries. One problem with the ratio is that it is not easy to explain differences in the ratio for countries at comparable levels of development. For instance, Switzerland's ratio is nearly twice that of the USA for 1963.¹⁹ Another problem, data related, lies in obtaining consistent data since some of the securities may be valued at cost and others at current prices.

Section 6. Empirical Studies.

There are two recent studies on the role of financial systems in the saving process. One is by U. Tun Wai (1972) and the other is by Christian and Pagoulatos (1973).

¹⁹

Goldsmith, R.W., Financial Structure and Development, Yale University Press, 1969, p.209

Wai's study is an international comparison of the effects of financial intermediation on saving in developed and developing economies. And from the various regression results he concludes that the evidence supports the hypothesis that the greater the financial intermediation, the larger will be the amount of saving. His methodology consists in dividing aggregate private saving (including savings by local governments and public enterprise) into financial saving and retained saving--or in McKinnon's terminology, self-finance. He estimates each component as a function of the real rate of interest (given by the government bond rate), real income and a trend variable, and then tests the dependence of each component on the other. The two models are:

$$A. \quad \frac{\Delta F}{P} = f((i - \dot{p}), \frac{Y}{P}, t) \quad A_1$$

$$\frac{R}{P} = k \left(\frac{\Delta F}{P}, t \right) \quad A_2$$

$$\frac{R}{P} + \frac{\Delta F}{P} = \frac{S}{P}$$

$$B. \quad \frac{R}{P} = g((i - \dot{p}), \frac{Y}{P}, t) \quad B_1$$

$$\frac{\Delta F}{P} = n \left(\frac{R}{P}, t \right) \quad B_2$$

$$\frac{R}{P} + \frac{\Delta F}{P} = \frac{S}{P} \quad B_3$$

$\frac{\Delta F}{P}$ = financial savings, $\frac{R}{P}$ = retained-savings, $\frac{S}{P}$ = aggregate saving, all in real terms.

In A_2 , $\frac{\Delta F}{P}$ is used as a proxy for the degree of financial intermediation. The use of $\frac{\Delta F}{P}$ as a proxy for financial intermediation is subject to Tobin's objection above, and moreover, since it says nothing about the relative importance of the various financial assets, it is an inadequate indicator of financial intermediation. Two countries with the same $\frac{\Delta F}{P}$ may be at different levels of financial progress in that $\frac{\Delta F}{P}$ for one country may be dominated by currency.

The two formulations, A and B, are also used to test Patrick's hypotheses of supply-leading and demand-following financial strategies.²⁰ The author concludes that data from developed countries tend to support the demand-following strategy while the results for developing countries appear to support the supply-leading formulation. This would suggest that a development program which provides a wise selection of financial assets will raise aggregate savings more than proportionally by raising the level of financial saving, $\frac{\Delta F}{P}$ and self-finance $\frac{R}{P}$. In what the author calls world and regional regressions, the indicator for financial intermediation is switched

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Patrick, H.T., "Financial Development and Economic Growth in Underdeveloped Countries", Economic Development and Cultural Change, January, 1966.

to Goldsmith's financial interrelations ratio (FIR) given by $\frac{\Delta F}{Y}$ where Y is GNP.²¹ The coefficient of $\frac{\Delta F}{Y}$ is found to have the correct sign (positive) and it is significant.

The second study tests the following savings function on cross-section data drawn from sixty countries for the period 1962-66.

$$\frac{I}{Y} = \alpha_0 + \alpha_1 \frac{DD}{M} + \alpha_2 \frac{TD}{M} + \alpha_3 \frac{F}{Y}$$

where $\frac{I}{Y}$ is the investment ratio, $\frac{DD}{M}$, $\frac{TD}{M}$ are the ratio of demand deposits and time deposits to money supply (defined as M_2), and F is capital inflow. The hypothesis tested is that $\alpha_1, \alpha_2, \alpha_3 > 0$, and it is sustained by the data. The authors go on to show that the hypothesis is valid only for developing countries (defined as those having per capita incomes under \$1,000), thus supporting the view that the savings effects of financial development are in the nature of 'innovations' and once the transfer mechanisms between saving and investing units are functioning properly, the effect disappears.

Section 7. The Growth of Financial Assets in Kenya.

Financial policy in Kenya has consisted mainly in the expansion of the financial system through greater spatial coverages and institutional diversification. There has not been any use of interest rates as a policy tool to promote monetization and saving.

21

Goldsmith, R.W., op. cit.

The interest rate structure has remained pretty much the same over the last fifteen years.

As a result of the spatial expansion, the number of banking offices grew from 57 in 1955 serving 20 locations, to 139, serving 65 locations in 1960, and to 270 offices serving 116 townships by 1970. The resulting number of offices per million population, about 25, while still much lower than the comparable figure for developed countries, except Japan, compares favorably with other developing countries.

The institutional diversification created a number of specialized institutions serving particular sectors of the economy. While the majority of these institutions accept savings and time deposits, many others are primarily designed for granting loans to preferred sectors.

The results of this financial expansion can be seen in Table 3.1 below. The main sources of growth in the financial assets are the savings and time deposits at commercial banks and also deposits held at 'other' financial institutions. Currency in circulation and demand deposits have not expanded as rapidly. There are two main reasons for the pattern of growth. First, the effect of higher interest rates can be observed in the growth of financial assets at 'other' financial institutions which offer higher rates than commercial banks, and also in the preference for time and

savings deposits at commercial banks over currency and demand deposits which pay no interest. The preference for interest bearing assets is clearly observable even though interest rates have been fixed for the whole period. One would expect that higher rates might lead to an even greater shift. Another reason for the relative preference for time and savings deposits is the relative ease with which accounts for such deposits can be opened. The stringent regulations attached to demand deposits and the limited acceptability of checks as a means of payment may provide the reason for the rather slow growth of demand deposits, but they do not explain the even slower growth of currency.

Section 8. Some Indicators of Monetization.

According to McKinnon's indicator for the level of financial development $\frac{M_2}{GNP}$, Kenya belongs to the league of financially repressed economies. This ratio stands at about 25 per cent as opposed to McKinnon's star performers, Korea and Taiwan, where the ratio had risen to 35 per cent and 47 per cent respectively in 1970. However, the indicator for financial intermediation, $\frac{C}{M_1}$, exhibits a higher level of intermediation than is observed for developing countries at a similar stage of economic development. Kenya's ratio of currency to money supply is slightly under $\frac{1}{3}$ whereas the same ratio for most underdeveloped countries is

TABLE 3.1

Composition of the Financial Assets held by Private Sector: m.shs.

	Currency ¹	Demand Deposits at Commercial Banks	Time and Savings Deposits at Banks ²	Time and Savings Deposits at 'other Financial Inst'ns. ³	M ₁	M ₂
1956	335	730	354	NA	1065	1419
1960	333	655	320	NA	988	1308
1967	454	822	726	423	1276	2002
1968	492	918	864	783	1410	2274
1969	578	1030	1002	1007	1608	2610
1970	706	1188	1324	1227	1894	3218
1971	748	1292	1464	NA	2040	3504
1972	902	1518	1576	NA	2520	4096

1. Currency in circulation for 1956, 1960, is calculated on the basis of replacement ratios in 1964 since there were no separate circulation figures for the various territories in the Currency Board area. According to the replacement data, 36 per cent of currency was redeemed in Kenya.
2. Includes deposits with Post Office Savings Bank because interest rates are comparable.
3. Includes hire purchase companies, housing finance companies, and others: See appendix, Chapter IV. These institutions have generally higher interest rates than the banks. Also includes National Social Security Funds.

over 50 per cent. This may reflect the importance of the settlers-- European and Asian, who had a more developed banking habit.

Two other measures that may be used as indicators of financial intermediation are, interest differentials and the ratio of the rate of change of financial credit to the rate of change of deposits. Interest differentials would avoid the theoretical problems of using interest rates while providing a measure of the efficiency in intermediation. The second indicator would provide a measure of the separation between the saving and investment process, a major distinguishing feature between monetary and non-monetary economies.

Both these measures, and the ones used in other studies were not used in regression analyses of Kenyan data because of unavailability of data on some of the measures, and also the shortness of the time series. A consistent series of data is available for the 1964-72 period, a period too short for any statistical inference especially on a long-term phenomenon such as monetization.

Section 9. The Structure of Savings in Kenya: 1964-1972.

According to a recently completed study of the Kenyan economy by the World Bank,²² Kenya's savings performance was very good. The savings-income ratio was over 18 per cent for most of the period, except 1965 when it was 15 per cent. This ratio compares favorably with the best of performers among developing countries. The

²² IBRD, Kenya: Into the Second Decade, The Johns Hopkins Press, Baltimore, 1975.

household contribution to the savings effort was also remarkable, varying from 27.5 per cent to 53.5 per cent. A substantial component of these savings consisted of financial saving, thus indicating the importance of financial intermediaries. Although nominal interest rates remained fixed over the entire period, the relatively stable price level meant that there was little divergence between the nominal and real rates of interest. The growth of deposits at institutions offering high rates of interest is an indicator of the effect of interest rates on financial saving. In fact, the report attributes some of the decline in the savings-ratio to the rise in the rate of inflation which has made rates of return on most forms of deposits negative.²³

²³

op. cit. p. 358

TABLE 3.2

GROSS DOMESTIC SAVINGS.

Year	GDS Kfm.	GDP Kfm.	Savings-Income Ratio %
1964	63.92	355.0	18.0
1965	53.57	356.4	15.0
1966	82.49	415.9	19.8
1967	86.66	437.5	19.8
1968	87.08	479.7	18.2
1969	106.55	519.2	20.5
1970	116.40	577.8	20.1
1971	121.13	630.5	19.2
1972	143.51	711.2	20.2

Source: World Bank Report, p. 373.

TABLE 3.3

SOURCE OF SAVINGS IN KENYA
Kfm.

Year	Households	Government	Business	
			Undistributed Profits	Depreciation Allowances
1964	24.8	12.8	13.5	16.8
1965	17.0	9.8	6.7	17.4
1966	31.7	10.3	12.0	19.2
1967	33.8	10.6	6.9	22.6
1968	39.8	10.7	3.6	26.3
1969	55.4	7.4	10.6	30.1
1970	47.3	20.4	12.0	33.4
1971	30.5	26.2	13.1	41.0

Source: World Bank Report, p. 375.

N.B. The rows do not add up to equal Table 3.2, due to differences in definition.

CHAPTER IVTHE FINANCIAL SYSTEM AND RESOURCE ALLOCATION
IN KENYAIntroduction

Kenya is a mixed economy. While it has a considerable amount of central planning, the private sector has continued to play a significant role in the economy. Financial intermediaries, both private and public, have been instrumental in the growth and pattern of development of the economy.

The purpose of this chapter is to explore the effect of the intermediaries on resource allocation, the system of controls on the financial sector and their effect on resource flow through the financial system.

In Section 1, the theory of intermediation and resource allocation is presented. Various indicators of financial efficiency are examined as is their applicability to the Kenyan case. In Section 2, I present an analysis of the financial structure. In Section 3, the effects of various controls on allocative efficiency are examined.

Section 1. Intermediation and Resource Allocation.

The problem of resource allocation is at the core of the growth process. The economy has limited resources and in order

to maximize growth and welfare arising thereof, it is essential that resources be allocated efficiently. Such an efficient allocation would mean that sectors capable of yielding high rates of return on the scarce factors of production are not starved for these factors while other sectors have a glut of such factors.

Capital is one factor that is in scarce supply in developing countries and as such measures to improve its allocation should be devised. In Chapter III, above, we were concerned mainly with the problem of supply--the mobilization of savings. And it is as important that when these resources become available, they are allocated in such a way that they yield the highest rates of return possible.

The various growth models in the literature provide a number of alternative approaches to the problem of capital allocation. In this chapter, the emphasis is on the use of the financial technique and capital markets.

The usual frame of reference in growth literature is the neoclassical growth model. The perfect factor markets in this model guarantee that factors are paid their marginal product; and whether one is dealing with the one sector aggregate model, or the two-sector variant, the problem of resource allocation is easily dealt with since factors respond to differences in earnings

and move costlessly and instantaneously from one employment to another. The main problem of interest is the determination of the rates of growth given the various parameters about saving.

In the neoclassical framework there is no theoretical basis for distinguishing between surplus and deficit units, and where such a separation is visualized, the model requires that savings be transferred from the saving units to the investing units in a frictionless manner. And furthermore, it is assumed that "the market price of the stock of capital which is traded on the market is the same for newly produced capital goods and for existing capital goods which are the result of past investment."¹ That is, the fixity of capital disappears and entrepreneurs wishing to enter into production may do so either by purchasing capital goods or renting capital services.

A corollary of this approach is that any transfer mechanism that is interposed between savers and investors must be costlessly operated since any resource using operation would negate the assumption of frictionless movement of capital and other factors between sectors. It is for this reason that the handling of financial and capital markets in the neoclassical framework is inappropriate for discussion of problems of financial development

¹Uzawa, H. On Dynamic Stability of Economic Growth: The Neoclassical versus Keynesian Approaches; in Trade, Stability and Macroeconomics: Essays in Honour of Lloyd A. Metzler, E. Horwich, P.A., Samuelson (eds.) Academic Press, New York, 1974., p.524.

in the less developed countries.

There is no presumption in the neoclassical model that all investment is self-financed and that therefore, there is no borrowing and lending. The essence of the assumption in the neoclassical model is that whatever borrowing and lending goes on, is such that both borrowers and lenders have perfect information so that all units of capital earn the same rate of return at the margin.

The main assumption behind financial intermediation is that borrowers and lenders face different types of risks and that while direct borrowing and lending are possible, indirect financing through the financial system permits lenders and borrowers to hold an optimal composition of portfolio with optimum risk and yield characteristics. Through the process of liquidity transformation, financial intermediaries enable savers and deficit units to acquire the desired levels of risk and yield. Financial intermediaries are able to do this by pooling information on various investment opportunities. Individual surplus and deficit units wishing to engage in direct lending and borrowing would, together, spend more resources on collecting information about the various units. The specialized knowledge accumulated by financial institutions permits the economy to save on resources that would

be used up in the saving-investment process much in the same way as the evolution of a medium of exchange permits the release of resources previously used up in the trade process.

The main point of departure in the intermediation model, therefore, is that while intermediation uses up some resources, the resource cost is lower than if direct finance was the rule.² The cost of intermediation is given by the difference between lending and borrowing rates. And as the intermediation process becomes more efficient, the differential declines.

Apart from the resource saving nature of intermediation, the effect of intermediaries on economic growth is based on two assumptions.

First, it is assumed that individuals differ in their ability to combine resources in production and in particular, that the surplus units may not be the most competent investors. Therefore, the existence of a system whereby owners of resources relinquish direct command over their resources in exchange for financial obligations, will improve the quality of investment undertaken.

Second, it is assumed that most projects may exhibit economies of scale such that the least cost combination of resources may demand capital inputs in excess of the individual's endowment.

2

The case of pure self-finance was discussed in Chapter II, above, and it was shown that the individual resource constraints do not permit the economy to attain its full growth potential.

A related problem, emphasized by McKinnon (1973) is the existence of indivisibilities in investment projects. In both cases, financial intermediaries help to resolve the problem by providing highly divisible securities to savers, while permitting the borrower to borrow in large amounts at more affordable risk levels.

A further problem is one of complementarity in investment projects. In this case, the undertaking of one project may open up other profitable ventures. If investible resources are limited to one's endowment or even to direct borrowing, resource constraints and the need to diversify one's portfolio may hinder the undertaking of the entire investment program. Financial intermediaries, by virtue of their large resource pool and also their ability to provide management advice, may be able to finance the whole program. This would permit the economy to exploit the various linkages in the production process and thus allow the economy to attain higher levels of growth.

Two additional conditions are necessary for efficient resource allocation through financial intermediation. These are; (a) that the different categories of securities must be perfect substitutes for one another in the portfolio of the intermediaries, and (b) that the liabilities of these institutions are substitutes for

each other in the public's portfolio.³

The importance of both these conditions for efficient resource allocation is straightforward. It is only if portfolios are sensitive to rates of return that equalization of marginal yields can be achieved. Segmented capital markets, which McKinnon (1973) and Shaw (1973) stress, arise because of limited substitutability in portfolios. Savers are limited in the types of assets they may buy, and borrowers have limited access to external financing.

Conditions (a) and (b) are independent in that both of them do not have to hold for efficient allocation of funds. If institutional regulations and inflexibilities should be such as to prevent the financial institutions from adjusting their portfolios to reflect the changes in rates of return, it is sufficient that (b) hold for such efficient allocation. Condition (b) depends on the existence of sufficient sensitivity to yield differentials on the part of the asset holding public, and on the ability and willingness of the financial institutions to transmit the yield differentials to holders of claims on the institutions. If, for

3

Fand, D.: A third condition, that the different categories of securities be substitutes in the borrower's portfolio, is of limited significance since individuals are limited in the types of securities they may offer. Furthermore, these conditions are true in the absence of risk so that the yield is the only decision variable. "Financial Regulation and the Allocation Efficiency of Our Capital Markets," National Banking Review, Vol.3, 1965, pp.53-61.

instance, regulations prevent financial institution A from acquiring securities in a sector which is offering high rates of return either directly, through the purchase of securities or indirectly, through lending to institution B which is allowed to invest in the sector, it is sufficient for efficiency that the B institution's claims reflect the higher rate of return and that savers shift funds from A to B.

In practice, however, there are a number of factors that may prevent B from offering yields reflecting the increased demand for loans. Fand (1965), lists five such factors:

1. Financial institutions pay the same rate of interest on 'old' and 'new' funds, a rate that roughly corresponds to the weighted average of the yields on their portfolio. Therefore, unless all loans are very short term commitments, the yield on funds may lag behind the yield on new investments that the intermediary is undertaking.

2. Searching for new investments and administering them cost resources, so that unless the cost structure of 'new' versus 'old' investments is constant, the net yield on 'new' investments will be reduced.

3. Financial institutions are faced with a trade off between increasing their reserves to increase the security of the deposits and offering higher yields to attract further deposits. Government regulations on the level of reserves may also reduce the competitiveness on basis of yield.

4. Different institutions behave differently vis-a-vis each other with regard to their reserve and dividend policies and a given institution may also behave differently over time with regard to its dividend and yield policies. Differences in the yields on deposits in various institutions and in yields within a given institution over time may not be effective indicators for the allocation of funds.

5. Government regulations on the interest rates which various institutions may offer to depositors, and on the composition of the portfolio which the institutions may hold, will prevent the use of interest rates as effective vehicles for the flow of funds.

The five points above indicate that, although substitutability in the public's portfolio may be a sufficient condition for efficient resource allocation, rigidities in the rates of return on financial assets may reduce its effectiveness. The effects of institutional arrangements and controls on the allocation of funds by the financial system will be examined in Section 3, below.

In the section above, a number of criteria for measuring the efficiency within the financial sector, and the allocative efficiency of the financial system were indicated. It was shown that competition in the financial sector in their acquisition of

securities and deposits is necessary for efficient resource allocation as well as for efficient intermediation. Efficient intermediation implies the minimization of the cost of intermediation, given by the differential between the lending and borrowing rates of interest. Efficiency in resource allocation relates to the ability of the intermediaries to vary their portfolio in response to interest changes and also the ability of the public to adjust its portfolio.

The direct measures of efficiency should be used wherever possible. However, the data requirements and the institutional structure makes it impossible to find measures of these indicators. For instance, in circumstances where interest rates on deposits and on loans are fixed by law, differentials between these rates have little bearing on efficiency in the intermediation process. And, if there is no competition in the financial system on the basis of interest rates offered and charged, it is impossible to establish measures of economic efficiency through the financial system.

Other measures of economic efficiency may be used to gauge the performance of the economy. But the relationship between the alternative measures of efficiency and the financial indicators is complex and depends on many other factors. Some of these

indicators are, the incremental capital/output ratio, and employment. What we seek to establish through these measures is in what way the financial system has affected them.

Section 2. The Composition of the Financial Sector in Kenya, 1963-1972.

In Chapter I, an outline of the development of financial systems in Kenya was provided. In this section, an attempt is made to discuss the Kenyan data in the light of the questions that were raised in Section 1, above. The principal question is whether the financial system has been an efficient mechanism for the allocation of resources in the Kenyan economy. But since a direct answer to this question is not possible in the absence of data on the cost structure of the financial system, the approach used is the one of studying the portfolio composition and the factors responsible for the observed composition. Section 2(a) is a discussion of the regulatory powers of the Central Bank and their use during the period. Section 2(b) is a study of the commercial banks' sources and uses of funds. Section 2(c) is a discussion of the sources and uses of funds in the non-bank intermediaries, private and public.

(a) Central Bank

The Central Bank was established in 1966, replacing the East African Currency Board. It is responsible for issuing

bank charters and supervising the financial system. The powers of the bank are laid out in two banking acts; the Banking Act (1966) which created the Central Bank, and the Banking Act (1968) which is an amplification on the powers and also includes new regulatory powers and clarifications as to the distinction between various financial institutions and the applicable regulatory powers.

The regulatory powers of the Central Bank can be divided into two broad categories; the quantitative controls, and the qualitative regulations. A finer division is used, below, in the analysis of specific policy instruments.

The quantitative regulations can further be separated into two groups, those whose primary purpose is to guarantee the security of deposits, and those primarily designed for stabilization purposes. The two policy groups do overlap in their effects on the portfolios of the financial institutions but it is important to keep the classification, especially since deposit security could be guaranteed without having to engage in conflicting policies.

The stabilization policies are primarily the reserve ratio and the liquidity ratio. The bank rate, a standard instrument of stabilization policy in developed countries, has not been used in Kenya because banks have not had reason to utilize the

advances from the Central Bank. The discount rate (bank rate) is an effective policy instrument when banks avail themselves of this lending of last resort often. The reasons why banks have not availed themselves of this service--as is clear in Table 4.1, will be clarified below. Under Section 38 of the Banking Act (1968) the Central Bank may require commercial banks to maintain minimum cash balances on deposit with it against their total liabilities. The Act provides that the minimum prescribed under this section not exceed 20 per cent. In spite of the fact that the bank did not apply this section until 1972 when a 5 per cent reserve ratio was required, the commercial banks voluntarily maintained reserve ratios in excess of 5 per cent and maintained this level after the application of the section. The regulation was put in force because the Central Bank was worried about the credit expansion that had been going on, and the pressure that was being exerted on balance of payments. Although the banking system as a whole had a cash ratio in excess of the minimum, some individual banks found it difficult to adjust their portfolios so abruptly. In order to reduce the amount of disruption that would have accompanied quick attempts to adjust, the measure was rescinded.

There is no statutory limit for the liquidity ratio. The Central Bank is free to define what liquid assets are, and to

impose the required ratio. For purposes of administering this section of the Act, liquid assets have been defined to include cash balances with the Central Bank, treasury bills and net interbank balances in Kenya and overseas. A minimum liquidity ratio of 12.5 per cent was imposed in 1969 and it was still in effect in 1972. As Table 4.2 shows, the banks have maintained a highly liquid position well in excess of the required minimum. Some reason for the 'excess' liquidity will be suggested in sub section 2 (b) below.

A more general stabilization instrument, open market operations, has not found use in Kenya because of the underdeveloped state of the money market.

The other portfolio restrictions provided in the Banking Act (1968) are primarily for deposit security. These are; (a) that loans to any one borrower may not exceed 5 per cent of deposit liabilities of the lending institution, or 100 per cent of its capital and free reserves, whichever is greater, (this applies to all institutions licensed under the Act), (b) that institutions may not engage in trading activities, but may invest in local business up to 25 per cent of the bank's locally held capital and free reserves, (c) that banks may not commit more than 15 per cent of deposit liabilities to real estate investment, and

finally (d) the liquidity ratio. These restrictions impose limitations on the portfolio flexibility of the institutions and it is doubtful if they are needed at all or if the same degree of security could not be obtained by a more neutral deposit insurance scheme. The doubt about the necessity of these restrictions is in view of the nature of banking firms in Kenya. All banks are either branches of large international banks which could hardly be expected to fail on the basis of operations in Kenya; or government banks which could be guaranteed in a different manner. Regular inspection and deposit insurance would seem to be adequate measures for security.

The qualitative controls are in the nature of general directives and depend on moral suasion for their success. The main problem of concern in this area has been the reluctance of the banks and other institutions to make credit available to small borrowers, mainly Africans, who are entering the business sector or those wishing to develop their farms; and to encourage the banks to make more crop finance available. The latter has been made attractive by granting liberal discounting facilities for crop-finance bills. The bank has also extensive powers to influence the volume of credit flowing into various sectors. Under this authority, the bank may impose "limits on any particular categories

finally (d) the liquidity ratio. These restrictions impose limitations on the portfolio flexibility of the institutions and it is doubtful if they are needed at all or if the same degree of security could not be obtained by a more neutral deposit insurance scheme. The doubt about the necessity of these restrictions is in view of the nature of banking firms in Kenya. All banks are either branches of large international banks which could hardly be expected to fail on the basis of operations in Kenya; or government banks which could be guaranteed in a different manner. Regular inspection and deposit insurance would seem to be adequate measures for security.

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TABLE 4.1

ASSETS AND LIABILITIES OF THE CENTRAL BANK

(as at 31st December)

(K £ MILLION)

	1966	1967	1968	1969	1970	1971	1972
<u>Liabilities</u>							
Capital	.7	.7	.7	.7	1.3	1.3	1.3
Currency							
Notes	14.8	23.1	25.0	30.0	36.9	41.7	50.2
Coins	-	1.0	1.5	1.8	2.1		
Deposits							
Government	5.0	2.7	2.4	6.8	17.0	9.5	12.1
Kenya Banks	1.3	5.1	11.6	23.7	21.4	14.7	11.5
External Banks*	.3	.3	.4	.6	.6	n.a.	n.a.
Others	-	.5	.1	.6	2.0	.8	1.5
Other Liabilities	.5	.4	1.2	2.4	5.6	3.5	8.4
Total Assets/ Liabilities	22.5	33.8	42.7	66.4	86.9	71.1	85.0
<u>Assets</u>							
Foreign Exchange:							
Balance with Banks+	2.4	9.8	16.4	36.7	41.7		
Treasury Bills	11.7	6.2	9.4	6.9	7.0		
Other Investments	2.9	9.3	8.0	14.7	22.8		
SDR	-	-	-	-	2.1		
Subtotal	17.0	22.3	33.7	58.3	73.7	54.6	64.4
Kenya Government Securities Received from E.A. Currency Board	3.5	3.2	3.2	3.2	3.2	3.6	5.6
Other Kenya Government Securities	-	.4	.4	.4	.4		
Advances to Kenya Gov't.	-	-	.9	-	5.0	10.0	10.0
Advances and Discounts	.2	-	-	.3	-	-	-
Revaluation Account	-	3.6	3.6	3.5	3.5	-0.7	1.3
Other Assets**	1.9	1.3	.9	.8	1.2	3.6	3.7
Subtotal	5.5	8.5	9.0	8.1	13.2	16.5	20.6

Source: Economic Survey (various issues)

* Excluding deposits from the Banks of Uganda & Tanzania

+ Including net balances with the Banks of Uganda & Tanzania

**Including balances with the Banks of Uganda and Tanzania

of loans and advances or investments."⁴

The bank also performs the usual functions of managing the money supply, supervising the foreign exchange reserves and acting as banker and financial adviser to the central government.

TABLE 4.2

ASSET/DEPOSIT RATIOS			
End of December	Total Advances/ Total Deposits %	Cash Ratio %	Liquid Assets to Deposits Ratio %
1967	80.0	9.4	11.7
1968	70.0	15.1	16.9
1969	62.0	24.3	32.5
1970	59.5	17.6	30.1
1971	75.4	12.3	20.0

Source: Money and Banking in Kenya: 1972.

(b) Commercial Banks.

Commercial banks were defined in the Banking Act (1968) as those institutions which provide checking services. Other deposit accepting institutions may not offer checking services.

⁴

The Central Bank of Kenya: Money and Banking in Kenya, 1972.

As of 1972, there were eleven commercial banks operating in Kenya. Eight of them are international in character, and the other three are either wholly government owned or partially government controlled. There is a high degree of concentration in that three of the banks control over 80 per cent of the total bank deposits and own most of the branch offices in the country. The flexibility provided by large international banking organizations was noted in Chapter I, but while this was highly desirable during the East African Currency Board regime when monetary control was non-existent, the establishment of a central bank and the need for greater monetary control forced the banks to reduce their dealings with the head office and to incorporate locally. The effects of local incorporation on the banks' portfolio will be discussed below.

Sources of Funds.

The most important sources of funds for the banking system are, the private and government deposits, advances and discounts from the Central Bank, and inter-bank balances. (See Appendix Tables A.1. - A.3.). In Kenya, up to 1967, another important source of funds was the overseas head office of each of the commercial banks. The introduction of exchange control and the

transfer of foreign exchange to the Central Bank together with the limitation of overseas inter-bank balances to working balances only, diminished the potential of this source. The head office funds were particularly important for crop finance during the harvest period; and as was noted in Chapter I, the banks preferred these funds to seeking advances from the East African Currency Board. The arrangements with the headquarters were also useful in minimizing the commissions paid to the currency board. For instance, an investor could negotiate a Sterling loan in London, get the proceeds of the loan in East African Shillings, and all that would be involved would be book entries at the head office and in Nairobi. The repayment of the loan could be done in local currency and books adjusted at the head office. With the establishment of the Central Bank and various controls, the discount window of the Central Bank is supposed to fill this need. However, the banks have not used this facility very much. Although central government deposits were transferred to the Central Bank, public sector deposits have continued to form a significant porportion of total deposits. The total government deposits including central government deposits represented 14.2 per cent of total deposits over the 1956-60 period. The average percentage for the 1966-72 period is about 17 per cent. The increased importance

in spite of a partial withdrawal of deposits, represents the growing importance of the government sector in the economy. Figures on the loans and advances to the public sector tend to support this view. Another important change in the relative importance of the sources of funds for the commercial banks is the growth of the time and savings deposits. Time and savings deposits--which might be labeled long-term funds, rose from 10 per cent of total deposits in 1950 to about 40 per cent in the 1967-72 period. One reason for this growth is the shift from using bank deposits as means of payment which is the main reason businesses use them, to the use of deposits as an interest-bearing asset. It also reflects the increased use of bank deposits by a large section of the population, and the blocked accounts. Increased use of banks by large employers such as the government to pay wages, is also a major factor and to a certain extent, the growth may reflect this compulsory use of the banking system. Another reason is that the pre-conditions for operating a checking account are stiffer than those for operating a savings account. Individuals that cannot qualify for checking accounts may therefore operate savings accounts in much the same way as a checking account except that there is the inconvenience of frequent trips to the banks and at time, restrictions on the frequency and on amounts

that may be withdrawn. The ease with which individuals may open accounts with commercial banks--at least for those employed in the principal sectors of the economy, accounts for the stagnation in the deposits with the Post Office Savings Bank. For a long time, this was the only institution that would accommodate small depositors and accept the rapid turnover in these accounts. It also had the advantage of having offices in a large number of locations. The expansion in commercial bank branches and the use of mobile bank units wiped out this advantage. Other factors that reduced the attractiveness of Post Office Savings Bank accounts were the raising of commercial bank interest and the reduction in its territorial coverage. (See Chapter I).

Use of Funds

The principal components of the commercial banks' portfolio are, loans and advances to government and to the public sector, treasury bills (since 1969), investments, inter-bank balances, and cash balances.

Up to the early sixties, an important distinction in the portfolio composition was the distribution of assets between local earning assets and Sterling balances held abroad. Since there was no local market for short-term securities--money market, banks

with temporary excess cash balances transferred these balances to their head office for investment in the London money market. In 1950, the Sterling balances accounted for 58 per cent of the banks' assets. Although the currency board levied commissions on the transfer of funds to and from the currency area, the interest differentials between London and the local channels were generally sufficient to more than compensate for the charges. With the expanding demand for credit, especially for import-export trade and internal crop financing, there were more avenues in which to employ the funds locally, and the proportion of local assets rose to about 90 per cent in 1960. (See Chapter I). It stayed at about this level through 1966. Another reason for the growth of the locally employed funds was the increase in the loans and advances which rose from about 30 per cent of total deposits in 1950 to over 70 per cent by 1960; and they averaged over 70 per cent in the 1967-72 period.

The paradox of a capital deficient country, like Kenya, exporting funds to London, needs some explanation, especially when we also take into account the fact that the territorial governments and municipalities were raising capital on the London capital market. Part of the reason is that the banks were not prepared to engage in the long-term lending such as governments

required; the other reason is that the standards of creditworthiness were kept extremely high, thus excluding many potential borrowers. Furthermore, the choice customers,--the large industrial and trading concerns, also had access to international capital markets and were not constrained to borrow locally. In certain cases, it was even more profitable to borrow abroad especially when the reason for borrowing was to finance imports and pay locally, since the transfer of funds was unrestricted.

The relationship between the local branches and the head offices was not all bad, however. Under the rigid regime of the currency board and the absence of a local lender of last resort, access to funds from the headquarters was a great source of flexibility.

As has been noted previously, the introduction of a discounting facility for crop-finance bills reduced the need to transfer funds. The establishment of the Central Bank and the subsequent requirement that banks surrender their foreign exchange holdings and reduce balances abroad to minimum working balances, eliminated Sterling balances as an important portfolio item. Thus, from 1967 we can ignore this entry.

The main issues in this section are, the direction of flow of bank credit vis-à-vis the real sector, the extent of liquidity

transformation, and the degree of substitutability in the banks' portfolio. The data requirements for a study of these issues are more than the available data and the analysis will consist of approximate inferences.

A major characteristic of commercial banks and the main reason for criticism is their tendency to specialize in short-term lending to guarantee their liquidity since it is generally true that their deposits are short-term in nature. Asset transformation by commercial banks is therefore rather limited. Tables 4.3 and 4.2 contain evidence of this tendency. There is a disproportionate flow of credit to the trade sector, compared to the sectoral composition of output in Table 4.5. The later decline in the proportion of credit flowing into the trade sector is due to a number of factors. These include the effects of selective controls by the central bank, the availability of long-term funds that was noted above, and the increasing number of individuals that are deemed creditworthy. It is really not possible to determine the term structure of loans from aggregate balance-sheet data since banks may categorize loans in a manner that pleases the Central Bank the most, and also some of the short-term loans may in effect be long-term loans by continually refinancing them.

The degree of substitutability in the banks' portfolio depends on the number of available assets and the variability in

TABLE 4.3

DISTRIBUTION OF BANK CREDIT
(£ K million)

Year End	Public Sector	Manufacturing	Trade	Agriculture	Personal	Other	Total K £ m.
1965	6.8(11.9)	5.9 (8.8)	22.2(38.8)	7.0(12.2)	(3.0)	(25.3)	57.4
1966	0.9 (2)	8.3(14.9)	23.0(41.3)	6.3(11.3)	(5.2)	(25.3)	55.7
1967	3.4 (5)	12.2(13)	29.9(44)	6.8(10.0)	(4)	(19)	68.0
1968	3.3 (5)	12.7(19)	28.0(42)	8.0(12.0)	(4)	(22)	66.8
1969	1.4 (2)	15.4(22)	25.9(37)	9.1(13)	(5)	(21)	70.0
1970	2.6 (3)	15.6(18)	33.8(39)	10.4(12)	(9)	(21)	86.9
1971	8.4 (7)	25.2(21)	38.4(32)	12.0(10)	(9)	(21)	120.1
1972	9.7 (8)	24.2(20)	24 (28)	12.1(10)	(10)	(24)	121.4

Percentage of total loans and advances in brackets.

TABLE 4.4
CAPITAL FORMATION BY INDUSTRY
(Current Prices £ K m.)

Year End	Public Sector	Manufacturing & Repairing	Wholesale & Retail Trade	Agriculture Forestry	Other Industry	Non-Monetary Economy	Total
1965	7.04	7.55	1.88	7.78	17.57	5.72	46.54
1966	8.90	9.51	2.35	10.50	23.48	6.47	61.21
1967	12.91	14.90	3.02	11.26	37.69	7.52	87.30
1968	15.44	12.70	3.69	11.36	38.50	8.37	90.06
1969	17.99	9.46	4.15	10.93	42.44	8.72	93.74
1970	21.9	12.9	4.4	12.6	n.a.	n.a.	112.7
1971	28.0	18.5	5.7	12.6	n.a.	n.a.	144.2
1972	31.7	28.7	5.6	12.6	n.a.	n.a.	159.9

TABLE 4.5

GDP BY KIND OF ECONOMIC ACTIVITY: SELECTED SECTORS

CURRENT PRICES

	1965	1966	1967	1968	1969	1970	1971	1972
Agriculture	115.5	144.3	148.2	150.0	160.4	173.1	179.8	211.9
Manufacturing	37.4	41.5	45.3	50.1	56.8	62.2	71.7	78.3
Trade	35.0	39.2	40.1	44.2	46.9	55.8	61.6	64.8
Public Sector	43.2	48.1	53.0	63.8	71.0	76.5	95.2	108.6
Per Cent of GDP								
Agriculture	35.4	38.0	36.6	34.2	33.8	33.2	31.2	32.8
Manufacturing	11.4	10.9	11.2	11.4	12.0	11.9	12.4	12.1
Trade	10.7	10.3	9.9	10.0	9.9	10.7	10.7	10.0
Public Sector	13.2	12.6	12.3	14.5	14.9	14.6	16.5	16.8

interest rates. While the range of assets has been increasing, the interest rates have remained more or less fixed. Therefore, the shifts in portfolio are largely due to changes in policy rather than in response to changes in interest rates.

Three major banks also operate investment banks that provide long-term credit but the figures on the flow of funds through these subsidiaries are not available.

(c) Non-Bank Financial Intermediaries.

The commercial bank system is the dominant sector in the financial system; controlling over 60 per cent of the financial assets. Over the last decade, there has been a rapid expansion in both the public and private non-bank financial intermediaries. Their assets rose from about K £ 39 million in 1964 to K £ 107 million in 1970. Most of the expansion was in public financial institutions whose assets rose from about K £ 18 million in 1964 to K £ 74 million in 1970.

(i) Private Non-Bank Financial Institutions.

Under the Banking Act, 1968, the distinction between commercial banks and financial institutions is that only the former may accept deposits subject to disposal by means of checks. The previous Act did not make this distinction, and only one kind of

operating license was issued. In practice, however, the institutions classified as financial institutions conducted a restricted and highly specialized business, and they did not provide checking facilities. Another difference was that they were not bound by the cartel arrangements of the commercial banks. (Chapter I) And they were able to offer more attractive interest rates. After the establishment of the Central Bank, these institutions and commercial banks must receive prior approval for changes in the lending rates.

Functionally, the private financial institutions may be classified into three groups; namely hire purchase companies concerned mainly with the financing of purchase of goods against hire-purchase agreements; building societies, or housing finance companies dealing mainly with the financing of real estate; the third category includes the Ismailia Institutions which are specialized mainly with respect to the community which they are supposed to serve, but carry on a diverse set of functions, and 'others' comprised of the smaller companies. Balance sheets for these institutions are presented in the Appendix, Tables A6-A15.

Sources of Funds of Private Non-Bank Financial Institutions.

For the entire sub-sector, deposits accounted for about a half of the total sources in 1964, this fraction rose to over

three-fourths in 1971. The high rate of growth of deposits which more than tripled in the 1964-71 period while the total assets rose about two-and-a-half times, was due to the higher rates of interest offered by these institutions, and also because it is easier to obtain loans from the institutions when one has an account with them. With rising demand for consumer durables which are often bought on installment plans, a loan from a hire purchase company involves lower costs than when the purchase is financed by the store. Urbanization and rising incomes also have led to higher demand for better quality housing, and since banks are restricted in the finance of mortgages, an account with a building society will reduce the waiting period for loan approval and it may also mean better terms of borrowing.

The effects of the Banking Act (1968) on the flow of funds from commercial banks to the private financial institutions are quite apparent. These loans dropped by almost three-fourths in 1967/68 and in 1971 they were about 10 per cent of what they were in 1966. If allowance is made for the wholly owned subsidiaries of commercial banks like Grindleys International Finance Company; the 'actual' commercial bank loans would be less. The banks' holdings of capital issue of the private financial intermediaries remained unchanged through 1970. The sharp rise in 1971 could

reflect an increase in the capitalization of the commercial bank subsidiary finance companies.

The Kenya government participation in the private financial institutions was confined to the housing finance companies. Both its holdings of equity capital and issue of loans are in this sub-sector. In 1972, the Kenya government was responsible for about half of the loans outstanding in the housing finance companies. The increased participation is mainly due to the disappearance of the banks as lenders to this sector. The rest of the world, particularly through such organizations as the Commonwealth Development Corporation, has also been important both as a holder of equity capital and as a source of loans. However, their participation has been declining over the period as indebtedness to the rest of the world has been declining. The only exception is the Ismailia Institutions, where the rest of the world holdings of equity capital have been increasing. The increase in the Ismailia Institutions is a reflection of the international nature of the community, while the decline elsewhere denotes a 'maturing' of these institutions, and other reasons noted in Section 3 below.

Uses of Funds of Private Non-Bank Financial Institutions

The uses of funds by these institutions are very well described

by the functional classification above. Mortgages and hire purchase together accounted for more than half of the assets in 1964, and although the fraction has been falling, it was still 35 per cent of the assets in 1971. 1971 was rather peculiar in that the rapid increase in deposits left the institutions in an unusually high liquidity position. After adjustments have taken place one would expect the mortgages and hire purchase to rise to about 50 per cent of the assets. The sharp rise in deposits was largely due to a shift out of bank deposits, both demand and time deposits. Although both types of deposits rose in the 1970/1971 period, the increase was less than half of the increase in the previous period. The increase may also be due to new accounts in the sense of new people entering the financial system. This, however, is rather unlikely since the intermediaries are generally more difficult to deal with and would require some prior familiarity with banking.

(ii) Public Financial Institutions.

The first public financial institution established in Kenya was the Land and Agricultural Bank (1931), for the purpose of providing medium and long-term capital to the settlers in the Highlands. In the 1940's and 1950's a number of statutory marketing boards were established, and they were an important intermediary for crop-finance from the banks. In 1955, the African Land

Development Bank (ALDEV) was established with the help of funds from USAID, to finance developments in the indigenous sector.

In the 1960's these institutions were restructured and several more were established with a more diversified coverage. Functionally, the institutions can be classified into four groups: namely, agriculture, industry, real estate and 'other'. 'Other' includes Social Security Fund and the smaller, difficult to classify institutions.

Sources of Funds of Public Financial Institutions, Tables A17-A23.

The main sources of funds for public institutions are the Kenya government through equity capital, grants and loans, and the rest of the world. These institutions have been particularly important in acting as channels for investments by foreign financial institutions and aid organizations. An important source of the deposits is the Cereals and Sugar Finance Corporation. Another important source of funds is the commercial banking system.

Uses of Funds of the Public Financial Institutions:

The main uses of funds are mortgage financing, equity holding and loans. The first two are generally long-term in nature, while the third includes short, medium and long-term loans. Equity holding in industrial undertaking provides the financial institution a right to be involved in the management and control of the business depending upon the proportion of the business owned.

It is expected that as these industries mature, the direct influence of the financial intermediaries will be reduced. This is important if a competitive industrial organization is to emerge.

Section 3. Efficiency of Allocation.

(a) Indicators of Economic Efficiency in Resource Use in Kenya, 1964-1972.

Economic efficiency means using resources in combinations that reflect the relative scarcity or abundance of such factors. That is, using technologies that are intensive in the use of the abundant factor. In Kenya, it would imply use of more labor-intensive methods and economizing on foreign exchange and other scarce factors such as skilled manpower. Financial liberalization has a direct impact on some of these indicators, since it helps to reveal the scarcity value of these factors, particularly capital and foreign exchange. On the other hand, policies that serve to make capital relatively cheap, make the use of capital intensive techniques attractive, thus producing very little employment and to the extent that most of the capital equipment is imported, placing a strain on the balance of payments.

Direct measures of efficiency in the financial system are not possible because the structure of the financial system has permitted very little competition and the fixing of interest rates by administrative fiat renders the differentials useless

as indicators of economic efficiency in the financial system. Nevertheless, by some of the indirect measures, Kenya has had a reasonably good record in some cases. For instance, the ICOR for the period has been one of the lowest among developing countries.⁵ The ICOR was 2.4 in 1966, but it had risen to 3.2 in 1970.⁶ The main question here, is whether this indicates a decline in efficiency or in a measure of some other structural changes. The answer is not at all clear. On the one hand there is evidence that there was a considerable amount of excess capacity in the economy in 1964 so that increasing output could have been provided with little additions to the stock of capital; as this excess capability was exhausted, more investment was required. On the other hand, there was a shift in investment strategy towards infrastructure-type investment, like communications, water and electricity, which are capital intensive but provide little direct output. This shift is noted in the World Bank report. It is also possible that interest rate and trade policies that undervalue capital and overvalue output, may have been responsible for the uneven pattern in the changes in industry ICORs. This might explain the decline in ICOR in manufacturing and repairs. These latter distortions would indicate inefficiency in resource use.

⁵See Streeten, P. (1974) for an analysis of problems associated with the use of capital/output ratios in international comparisons of efficiency.

⁶IBRD, Kenya, Into the Second Decade, the Johns Hopkins Press, 1975.

As regards employment, the economy has generated little employment in spite of the high rates of growth that were achieved. Inherited colonial salary structures and union pressure have kept labor costs high while preferential tariff structures tend to make capital relatively cheap. Both factors have made capital-intensive methods of production attractive, especially in the modern sector.

(b) Regulation and the Allocative Efficiency of the Financial System.

One of the functions of the monetary authority--the Central Bank--is to design and regulate the financial system in such a way that it satisfies the internal tests of efficiency, and also satisfies certain national economic objectives. For this purpose, the Central Bank has at its disposal a whole range of policies. The policies chosen may have serious effects both on the efficiency of the financial system and on the pattern of development.

The policy instruments can be separated into three categories, namely, the general monetary policy instruments, selective controls, and interest rate policies. General policies are open market operations and discount-policies. They are concerned with the rate of money supply and are generally considered to have the

least impact on the efficiency of the financial system. Selective controls include portfolio ceiling regulations, discriminatory discounting procedures and reserve requirements that specify different reserve ratios for different items in the banks' portfolio. Interest rate policies are those that establish ceiling rates on various portfolio items.

(i) Selective Controls:

The purpose of selective controls in Kenya has been two-fold; one, they have been used as substitutes for general monetary policy largely because the thinness of the money market does not permit use of the traditional monetary instruments; and two, because it was felt that the financial system was not responsive to the credit needs of particular sectors and sections of the community, mainly the African agricultural sector.

Saving (1972), in his review of the selective controls in the U.S., has shown that they are poor substitutes for general monetary policy, and that those designed to safeguard the soundness of the financial system, e.g. the restrictions on portfolio composition, could be replaced by deposit insurance together with competitive rates of interest to satisfy the public's desire for risk and yield. Such a switch would improve the competitiveness of the financial system without necessarily threatening its soundness. With the Central Bank already endowed

with powers to grant charters and to inspect the financial institutions, there seems to be little reason for the type of portfolio restrictions cited in Section 2(a) above.

The other reason for using selective credit controls is that "the private profitability (to commercial banks) and the social profitability differ with respect to the loans granted to different sectors."⁷ It is argued that financial institutions have not been responsive to the credit needs of certain sectors of the economy, and that therefore, there is need to apply moral suasion, or discriminatory discounting practices that favor securities arising from particular sectors, to divert credit to these sectors. In Kenya, the evidence of banks' tendency to concentrate on short-term self-liquidating loans, such as trade credit is presented in Table 4.3. However, the tax-subsidy aspects of reallocating credit introduce new costs and distortions that may be even worse than those previously alleged. As these problems are discovered and new priorities formulated, the repeated changes in the type of controls used may introduce an element of uncertainty that further diminishes intermediation. A case in point is one where banks, in their eagerness to demonstrate loan accommodation to preferred borrowers make loans to sectors and individuals, not because of their potential to utilize the loans

⁷Omotunde, E.G.J., "Credit Controls as Instruments of Development Policy in the Light of Economic Theory", Journal of Money, Credit and Banking, Vol.VI, No.1, 1974, p.87.

effectively, but because they want to please the authorities. Credit is thus denied to potentially productive enterprise. It is also possible that banks may concentrate the credit among a select group of customers not because of their proven ability to utilize the loans but rather because of their alternate sources of income.

The initial results of the "lend-to-Africans" policy in Kenya seem to be positive. More loans are being made available to Africans. But until data on the uses of loans and on repayment records are available, it is difficult to assess the success of the program.

Alternative approaches to selective controls used for purposes of catering to priority sectors are, tax-and-subsidy systems, and the creation of specialized financial institutions that are capable of investigating creditworthiness in the preferred sectors and act as intermediaries between the government, the banking system and these sectors.

There has been little use of the tax-cum-subsidy approach, and if anything, the tax system is weighted in favor of the modern urban sector which enjoys the preferential tariff treatment on imports and tariffs on domestic production.

Kenya has created a number of public specialized institutions. There are eight of these institutions, the Agricultural Finance

Corporation, the Agricultural Development Corporation, the Cereals and Sugar Finance Corporation, all providing medium and long-term capital to agriculture; the Industrial and Commercial Development Corporation, and the Development Finance Company of Kenya, providing term credit to industry and commerce; the Kenya Tourist Development Corporation, providing credit for tourist related industry; and the National Housing Corporation and the Housing Finance Company of Kenya, both granting mortgages for home building and heavy construction.

These institutions are heavily dependent on government funds, as Tables A.22-A.23 show. For instance, in 1970 the Kenya Government and National Social Security Funds accounted for more than half of their sources of funds. They are also under capitalized because of the resource limitations the government has. A notable feature is the small amount of funds arising from commercial banks and other private financial institutions. The failure of these institutions to mobilize funds from the commercial banks and other institutions may be related to the structure of interest rates (below). One way to improve their resource base, and possibly their effectiveness in the sectors they serve, is to accept deposits from the public, particularly that section of the public that they serve. This method is

mentioned in the World Bank report. In 1970, time deposits in these institutions accounted for under 1 per cent of total liabilities. There seems to be considerable scope for increasing these deposits especially if they are tied to the ability to borrow. This need not damage the deposit position in the banks since individuals might wish to diversify their portfolio to increase their sources of credit as well as for yield and convenience.

(ii) Interest Rate Policies.

Table 4.6 below presents the structure of interest rates in Kenya. Apart from the rates on Treasury Bills, a recent addition, interest rates have remained at about the same level for the last fifteen years.

Deposit rates, as was pointed out in Chapter I, were fixed by agreement among banks. They have changed only once in the last forty years, from 2.5 to 3.0 per cent on time deposits. Loan rates, on the other hand, during the colonial period, varied in phase with London rates, since London money markets were the alternative employment of funds.

However, with the establishment of the central bank and the fixing of various rates, this link has been broken. The break had two effects. One, with the rising interest rates in the developed countries, it is more attractive for international

companies operating in Kenya to borrow locally rather than from international markets. This places constraints on the credit available to indigenous entrepreneurs who have no access to world markets. Although local borrowing by subsidiaries of foreign companies is limited by some of the selective controls, there are ways to get around this restriction: such as local incorporation. Two, with the rising rate of inflation, real rates on most forms of deposits have become negative. This will diminish the attractiveness of financial assets and further limit domestic credit.

Furthermore, holding domestic interest rates at levels lower than world rates limits the ability of domestic financial institutions to borrow from abroad since they would have to lend the proceeds at a lower rate than they are paying. The limited inter-institution borrowing is perhaps due to this rigidity in interest rates since these institutions are hardly able to cover their operating expenses and bad debts given the risky nature of their loans. Public financial institutions are therefore forced to rely more heavily on government financing. The narrowing of the margin between lending and borrowing rates should evolve as a result of increasing efficiency. It cannot be administered. Attempts to administer interest rates serve to segment the financial

TABLE 4.6

PRINCIPAL INTEREST RATES AT 30 JUNE 1969

	Rate %
<u>Central Bank of Kenya</u>	
1. Rediscount Rate for Treasury Bills	4.4509
2. Advances against Treasury Bills	4.9509
3. Bills and Notes under Crop Finance Scheme	
- Discounts	5.00
- Advances	6.00
4. Other Bills and Notes	
- Discounts	5.50
- Advances	6.50
5. Advances against Kenya Government Securities	6.50
<u>Kenya Commercial Banks</u>	
1. (i) Time Deposits (a) Minimum 30 days (7 days notice)	
- K Shs. 200,000 - K Shs. 500,000	3.00
- K Shs. 500,000 and over	3.125
(b) 3 to less than 6 months	3.50
(c) 6 to less than 9 months	3.75
(ii) Savings	3.00
2. Loans and Advances (minimum)	7.00
<u>Other Financial Institutions</u>	
1. Kenya Post Office Savings Bank: (Deposits)	3.00
2. Agricultural Finance Corporation	
- Loans	7.50
3. Hire Purchase Companies	
- Deposits (various periods)	3.00-6.00
- Loans	10.00-12.00
4. Building Societies	
- Deposits (various periods)	4.00-6.50
- Loans	7.50-10.00

Source: Economic and Financial Review, 1970.

system and may even nullify the supposed benefits of specialized financial institutions, since they then begin to concentrate their loans among the 'safe' customers. The high liquidity ratios of commercial banks, particularly in the form of Treasury Bills may be further evidence of the disintermediation effect of disequilibrium rates of interest.

A further problem associated with low disequilibrium rates of interest is the need to devise credit rationing mechanisms. The extent of rationing is not known, but it is believed to be quite considerable.⁸ The effects of credit rationing on resource allocation have received good coverage in Jaffee's work.⁹ They depend on who the preferred customers are, and the availability of alternate sources of credit for the rationed firms.

The conclusion from this section, and also the one arrived at by the World Bank mission, is that there is need to raise rates of interest both on deposits and loans. The potential effects of raising the rates on productive efficiency, balance of payments and financial saving have already been explored above.

8

deWilde, J.C., (1967)

9

Jaffee, D.M., "Credit Rationing and the Commercial Loan Market", John Wiley and Sons, Inc., 1971.

SUMMARY AND CONCLUSIONS

The purpose of this study was to determine the influence of money on Kenya's economic development, and to describe the evolution of the financial system.

The traditional pre-colonial economy was gradually displaced by the increasing production in the "Scheduled Areas" and by the withdrawal of labor from the indigenous sector to work in the modern enclave. The growth of wage employment, the need to pay taxes and the rising demand for new consumption goods were the main methods for the promotion of modern currency in the economy. However, legal restrictions and various biases on the part of the financial system prevented the emergence of the African entrepreneurial class. The unattractive yields on financial assets and the tendency to concentrate the operations of the financial system in areas with large numbers of expatriates hindered the acquisition of financial assets by Africans. It was only after economic, political and social pressures threatened the viability of the settler economy that serious efforts to encourage African participation in production for the market were started. The first formal effort is incorporated in the Swynnerton Plan of 1954.

Some financial reforms were included in the Swynnerton Plan. These included the establishment of the African Land Development Bank with parallel functions to those performed by the Land Bank for the "Scheduled" Areas. However, it was only in the early sixties that the financial system was reorganized to obliterate the distinctions based on Scheduled and Non-Scheduled Areas.

The disadvantages of the Currency Board system in the early stages of development when flexibility in government policy might have been very important were stated. Nevertheless, the soundness of the financial system and the monetary stability in the currency board era, were very important in the promotion and acceptance of money as a medium of exchange. This alone might outweigh the disadvantages arising from not having an independent monetary system.

In Chapter II, the various theoretical approaches to the monetization were reviewed. The models, even those that claim special relevance to the developing countries were found to be inadequate for handling development problems. Their emphasis on the medium of exchange as the only channel for transmitting growth benefits was criticized. It was argued that while the existence of a medium of exchange is a pre-condition for the

development of credit and intermediation, these latter effects may be more important in the growth process. The approach chosen was to study the effect of monetization, incorporating all three aspects of the process of monetization, on the propensity of save and resource allocation.

The effects of monetization on saving arise from the use of money as a medium of exchange, money as an asset, and through intermediation. Although the growth of financial assets and the supply of savings in Kenya have been considerable, it was not possible to test specific hypotheses about the role of monetization in the savings function. The reason for this was the limitation imposed by available data. However, according to other studies that were reviewed in this chapter, monetization has a significant influence on the propensity to save. Interest rate policies and control strategies suggested in Chapter IV might further increase the propensity to save and the growth of the financial assets.

In Chapter IV, the basic hypothesis is that increased resource mobility improves the efficiency of resource allocation and that financial institutions, properly developed and managed, increase resource mobility. We then go on to investigate how the financial system has been used to facilitate the flow of resources. The finding here is that, although the creation of various financial

institutions has served to increase the integration of the Kenyan economy by directing funds to sectors that were previously excluded from the modern sector and collecting savings from previously untapped sources, the controls have tended to preserve many undesirable characteristics and introduced new ones, thus keeping the financial system inefficient. In particular, the portfolio restrictions and the relative fixity of interest rates, have served to direct funds into channels that may not be the most productive. In order to improve resource allocation, it is suggested that a deposit insurance scheme and greater variability of interest rates should be allowed. For instance, while the initial extension of credit to small scale agriculture was successful in raising output in this sector, further extension to marginal borrowers and those just entering the system is hampered by the inability to use interest rates to ration credit from the banking system to the ultimate borrowers, as well as the flow of funds within the financial system.

Initially, the monetary system was designed to facilitate production and trade in the enclave settler economy. The first actions towards integrating the wider economy were taken in the early sixties with the establishment of various financial institutions.

In order to derive the maximum benefit, regulations and controls ought to be modified to reflect the different characteristics in the broader economy. The tendency so far, has been to graft new institutions to old rules.

Source: From S. Datta, Financial Institutions in India, 1946-77: A Preliminary Analytical Review, Page 20, (BIRD: Institute for Development Studies, September 1977). Data was furnished by Dr. I. Chatterjee of the Reserve Department, University of Madras.

DATA APPENDIX

Portions of this appendix are drawn from B. Dillon, Financial Institutions in Kenya 1964-77: A Preliminary Analysis, Working Paper No.61 (Nairobi: Institute for Development Studies, September 1972). Other data was furnished by Dr. I. Gershenberg of the Economics Department, University of Nairobi.

Year	Financial							General				
	Official Bank	Commercial Bank	State	Finance Corp.	Government	Finance Corp. & Bank	Finance Corp.	Finance Corp.	Finance Corp.	Finance Corp.	Finance Corp.	Finance Corp.
1964	10.3	1.0	10.3									
1965	11.4	2.4	13.8									
1966	17.7	3.0	20.7									
1970	23.0	3.0	26.0									
1971	28.0	1.7	29.7									
1972	31.4	1.9	33.3									

TABLE 1
(page 2)

DETERMINANTS OF THE MONEY SUPPLY OF KENYA: CONSOLIDATED POSITION STATEMENT FOR THE BANKING SYSTEM
(K / MILLIONS) ASSETS

Year Period	FOREIGN			CENTRAL BANK					DOMESTIC						
	Central Bank	Commercial Banks	Total	Advances to Government	Advances and Rediscounts, Banks	Securities	Total	Other Net Assets	Float with Central Bank	Float Among Commercial Banks	Treasury Bills	Loans and Advances: Government	Loans and Advances Private Sector	Investments	Total (10)-(14)
1967 December	24.9	-1.9	23.0	.9	.3	3.6	3.6	3.8	- .2	.6	3.2	64.8	4.7	73.3	5.8
1968 December	33.4	2.4	35.8	.9	.1	3.6	4.5	2.6	-.2	.6	3.1	63.7	4.8	72.2	6.5
1969 December	57.7	3.0	60.7	6.8	.3	3.5	3.8	1.2	.5	.3	1.7	68.3	7.3	80.6	2.1
1970 December	73.0	4.0	77.0	5.0	2.0	3.6	8.6	-2.3	.3	1.1	5.1	81.8	15.7	113.7	2.7
1971 December	54.6	.7	55.3	10.0	.5	3.6	14.1	-1.9	.2	1.2	8.8	111.3	10.9	136.0	3.2
1972 December	64.4	-.7	63.7	10.0	1.5	5.6	15.6	-4.7	.1	1.5	9.2	112.2	21.9	159.1	1.7

TABLE 1
(page 1)

POST OFFICE SAVINGS, QUARTERLY, DECEMBER 1967 - 1972																	
Year	Period End	NON-MONETARY LIAB'S							MONEY SUPPLY								Discrepancy 17-23-30
		OTHER		TOTAL	CENTRAL BANK		COMMERCIAL BANK		TOTAL	M ₁			M ₂ TIME & SAVINGS DEPOSITS				
		Currency Board	Post Office Savings		Government Deposits	Other (Para-statal) Deposits	Government Deposits	Non-Monetary Liabilities		Currency Outside Banks	Private Demand Deposits	Total M-1	Commercial Banks	Post Office Savings	Total	Total M-2	
(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)				
1967	December	1.6	5.0	115.9	2.7	.5	12.6	15.8	22.7	41.1	63.8	31.3	5.0	36.3	100.1		
1968	December	1.1	5.0	127.5	2.4	.1	11.3	13.8	24.6	45.9	70.5	38.2	5.0	43.2	113.7		
1969	December	.5	5.2	154.6	6.8	.6	16.6	24.0	28.9	51.5	80.4	44.9	5.2	50.1	130.5	.1	
1970	December	.4	5.3	205.7	17.0	2.0	25.9	44.9	35.3	59.4	94.7	60.9	5.3	66.2	160.9	-.1	
1971	December	.4	5.5	212.8	9.5	.8	27.0	37.3	37.4	64.6	102.0	67.7	5.5	73.2	175.2	.3	
1972	December	.4	5.8	241.7	12.1	1.5	28.4	42.0	45.1	75.9	121.0	73.0	5.8	78.8	199.8	-.1	

TABLE 1
(page 2)

DETERMINANTS OF THE MONEY SUPPLY OF KENYA: MEMORANDUM ITEMS
(K £ MILLIONS)

Year	Period Ending	CENTRAL BANK "OTHER NET ASSETS"				
		Other Assets	Revaluation Account	Other Liabilities	Capital	Other Net Assets
1967	December	1.3	3.6	.4	.7	3.8
1968	December	.9	3.6	1.2	.7	2.6
1969	December	.8	3.5	2.4	.7	1.2
1970	December	1.1	3.5	5.6	1.3	-2.3
1971	December	3.6	-.7	3.5	1.3	-1.9
1972	December	3.7	1.3	8.4	1.3	-4.7

TABLE 1
(Page 3)

KENYA, QUARTERLY, DECEMBER 1967 - (K. £ MILLION)

DETERMINANTS OF COMMERCIAL BANK DOMESTIC RESERVES AND RESERVE/DEPOSIT RATIOS

Year	Period Ending	CENTRAL BANK					COMMERCIAL BANK		RESERVE DEPOSIT RATIOS								
		ASSETS			NON-RESERVE LIABILITIES		DOMESTIC RESERVES		Ratio % 9 + 10	Total Demand Deposits	Ratio % 9 + 12	Total Deposits	Ratio 9 + 14	Discrepancies 1-2-3-4-5			
1967	December	24.9	3.6	3.8	21.1	2.7	.5	3.0	5.1	8.1	41.1	19.7	51.2	15.8	85.0	9.5	-.1
1968	December	33.4	4.5	2.6	23.5	2.4	.1	3.0	11.6	14.6	45.9	25.3	56.2	26.0	95.4	15.3	-.1
1969	December	57.7	3.8	1.2	28.4	6.8	.6	3.3	23.7	27.0	51.5	46.0	64.4	41.9	112.9	23.9	-.1
1970	December	73.0	8.6	-2.3	34.9	17.0	2.0	4.1	21.4	25.5	59.4	36.0	80.3	31.8	146.2	17.4	-.1
1971	December	54.6	14.1	-1.9	37.0	9.5	.8	4.7	14.7	19.4	64.6	22.8	86.6	22.4	159.3	12.2	-.1
1972	December	64.4	15.6	-4.7	44.7	12.1	1.5	5.5	11.5	17.0	75.9	15.2	99.7	17.1	177.3	9.6	

TABLE 2

LIQUID ASSETS OF COMMERCIAL BANKS AND LIQUID ASSET RATIOS - (K £ MILLION)
KENYA, QUARTERLY, DECEMBER 1967 -

		COMMERCIAL BANK LIQUID ASSETS					LIQUID ASSET/DEPOSIT RATIOS			
Year	Period Ending	Domestic Reserves	Net Foreign Reserves	'Float'	Treasury Bills	Total Liquid Assets	Total Private Deposits	Ratio % 5 ÷ 6	Total Deposits	Ratio % 5 ÷ 8
1967	December	8.1	-1.9	.6		6.8	72.4	9.4	85.0	8.0
1968	December	14.6	2.4	.6		17.6	84.1	20.9	95.4	18.4
1959	December	27.0	3.0	.3	3.0	33.3	96.4	34.5	112.9	29.5
1970	December	25.5	4.0	1.1	10.0	40.6	120.3	33.7	146.2	27.8
1971	December	19.4	.7	1.2	3.8	25.1	132.3	19.0	159.3	15.8
1972	December	17.0	-.7		15.8	32.1	148.9	21.6	177.3	18.1

TABLE 3

HIRE PURCHASE COMPANIES - LIABILITIES/NATIONAL INDUSTRIAL CREDIT, CREDIT FINANCE CORPORATION,
AND UNITED DOMINION CORPORATION
(K £ '000)

	1964	1965	1966	1967	1968	1969	1970	1971
<u>Issued Capital</u>								
Commercial Banks	157	157	157	157	157	157	157	157
Financial Inst's	-	-	-	-	-	-	113	113
Other Kenyan	74	30	30	30	30	127	127	383
ROW	620	662	662	662	662	670	482	377
Total	851	849	849	849	849	954	879	1,030
Reserves	- 197	- 97	82	201	309	293	386	376
Total Capital and Reserves	653	752	931	1,050	1,158	1,247	1,247	1,376
<u>Deposits in Kenya</u>								
Savings	82	90	123	168	246	299	344	407
Demand and Time	646	798	1,033	1,101	2,485	2,742	2,992	4,439
Total	728	888	1,156	1,269	2,731	3,041	3,336	4,848
<u>Deposits in Uganda and Tanzania</u>								
Total Deposits	1,201	1,410	1,934	2,273	3,824	4,320	3,567	4,848
<u>Loans</u>								
Commercial Banks	1,040	1,154	1,715	1,368	474	434	304	176
ROW	-	-	-	-	66	149	-	-
Total	1,040	1,154	1,715	1,368	540	583	304	176
Other Liabilities	141	206	197	375	394	688	379	533
Total Liabilities	3,036	3,522	4,777	5,066	5,916	6,838	5,496	6,961

HIRE PURCHASE COMPANIES

	1964	1965	1966
Real Estate	21	20	9
<u>Hire Purchase</u>			
Kenya	1,933	2,225	2,952
Uganda & Tanzania	900	990	1,333
Total	2,833	3,215	4,285
<u>Other Loans</u>			
Kenya	21	10	5
ROW	-	1	4
Total	27	11	9
Bills	-	39	32
<u>Liquid Assets</u>			
Short-term Deposits	-	-	-
Cash & Bank Balance	89	157	367
Tax Reserve Cert.	-	-	-
Total Liquid Assets	89	157	367
Other Assets	66	80	75
Total Assets	3,036	3,522	4,777

- ASSETS - K ₹ '000

1967	1968	1969	1970	1971
9	5	-	9	8
3,538	4,383	4,174	4,426	6,053
953	908	1,082	107	-
4,491	5,291	5,255	4,533	6,053
5	17	21	12	8
2	-	151	161	-
7	17	172	173	8
26	26	5	-	-
-	-	400	550	700
465	498	932	96	69
-	-	-	63	50
465	498	1,332	709	819
68	79	73	72	73
5,066	5,916	6,838	5,496	6,961

A.7.

HOUSING FINANCE COMPANIES - LIABILITIES K£ '000								
Kitanda Mutual, First Permanent, Kenya Building Society, Savings & Loan Keyna Ltd., East African Building Society and Housing Finance Company of Kenya								
	1964	1965	1966	1967	1968	1969	1970	1971
<u>Issued Capital</u>								
Kenya Government	50	52	52	52	10	10	13	13
Housing Finance Co's	-	-	-	-	-	201	201	201
Insurance Companies	560	100	100	100	100	100	100	100
ROW	201	204	204	154	216	15	13	13
Total	811	356	356	306	326	326	327	327
Reserves	1,072	454	499	445	676	713	768	803
<u>Deposits in Kenya</u>								
Savings Accounts	2,691	2,781	3,372	3,799	3,315	3,218	3,302	3,320
'Deposit' Accounts	650	814	978	1,271	1,364	1,617	2,264	2,794
Time Deposits	737	985	457	364	897	985	1,391	2,740
Total	4,078	4,579	4,807	5,433	5,576	5,820	6,957	8,854
<u>Deposits in Uganda and Tanzania</u>								
Total Deposits	2,268	2,251	2,335	2,417	-	-	-	-
	6,346	6,830	7,322	7,850	5,576	5,820	6,957	8,854
<u>Loans</u>								
Kenya Government	250	200	100	-	-	325	325	514
Commercial Banks	337	199	118	44	6	-	-	-
Financial Inst's	207	682	210	149	123	123	123	-
ROW	2,313	1,965	1,712	679	1,012	615	791	558
Total	3,107	3,046	2,140	872	1,141	1,063	1,239	1,072
Other Liabilities	947	667	472	434	405	440	415	425
Total Liabilities	10,680	10,441	10,077	9,295	7,472	7,710	9,052	10,843

HOUSING FINANCE COMPANIES - ASSETS K/ '000								
	1964	1965	1966	1967	1968	1969	1970	1971
Real Estate	590	581	578	501	335	180	208	322
<u>Mortgages</u>								
Kenya	6,624	6,048	5,381	4,880	4,841	5,427	5,899	7,374
ROW	2,273	1,809	1,428	1,405	17	14	-	-
Total	8,897	7,857	6,809	6,285	4,858	5,441	5,899	7,374
<u>Loans</u>								
National Housing Corporation	-	-	-	-	34	100	150	-
Local Government	100	100	100	100	100	50	50	50
ROW	-	633	595	316	581	513	42	1
Total	100	733	695	416	715	663	242	51
<u>Investments in Pub.</u>								
<u>Securities</u>								
East African	282	427	546	454	322	196	132	83
Other ROW	48	48	48	48	25	25	12	3
Total	330	475	594	502	347	221	144	86
<u>Equity Investments</u>								
Financial Inst's	-	-	-	-	-	50	499	499
Other	-	36	133	177	194	248	355	327
Total	-	36	133	177	194	298	854	826
Total Investments	330	511	727	679	541	519	998	912
<u>Liquid Assets</u>								
Deposits	100	291	825	1,079	852	627	1,481	1,736
Cash & Bank Balance	481	379	303	219	152	181	148	294
Tax Revenue Cert.	36	25	19	26	3	-	3	3
Total	617	695	1,147	1,324	1,007	808	1,632	2,033
Unclassified	54	-	-	-	-	-	-	-
Other Assets	92	64	121	90	20	99	78	158
Total Assets	10,680	10,441	10,077	9,295	7,476	7,710	9,057	10,843

A.9.

ISMAILIA INSTITUTIONS - LIABILITIES - K.S.'000								
Ismailia Corp. Ltd., Ismailia Corp. of Kisumu, Diamond Jubilee Investment Trust (Kenya) Ltd., and Industrial Promotion Services (Kenya) Ltd.								
	1964	1965	1966	1967	1968	1969	1970	1971
Issued Capital								
Other Kenya	102	102	132	133	135	141	151	157
Other Ismailia								
Institutions	25	7	7	9	12	18	18	18
ROW	230	286	433	497	499	513	622	704
Total	357	395	572	639	646	672	791	879
Reserves	11	19	23	36	55	54	52	48
Total Capital and Reserves								
Deposits								
Savings Accounts	129	146	247	445	671	822	1,007	1,121
'Deposit' Accounts	179	151	297	234	187	108	123	152
Time Deposits	514	361	105	126	135	134	204	159
Unclassified Small Deposits	45	46	50	50	41	7	29	63
Total Deposits	867	704	699	855	1,034	1,071	1,363	1,495
Loans								
Commercial Banks	7	3	-	10	11	20	87	21
ROW	61	97	34	28	35	56	48	20
Other	-	21	-	1	-	57	59	72
Total	68	121	34	39	46	133	194	133
Other Liabilities	115	228	139	71	99	127	100	157
Total Liabilities	1,422	1,467	1,467	1,642	1,880	2,057	2,500	2,694

ISMAILIA INSTITUTIONS - ASSETS (K £ '000)

	1964	1965	1966	1967	1968	1969	1970	1971
<u>Real Estate</u>								
Direct	45	45	45	55	57	34	126	137
Equity	-	26	67	105	104	240	236	236
Loans	-	-	-	20	58	13	96	139
Total	45	71	112	180	219	287	458	512
Mortgages (Net)	831	708	585	460	426	216	388	382
<u>Loans</u>								
ROW	-	-	-	-	2	128	214	233
Other	70	58	31	37	65	156	132	303
Total	70	58	31	37	67	284	346	536
<u>E.A. Stocks</u>								
Equity								
Ismailia Inst.	25	25	-	-	-	9	9	9
ROW	-	-	25	27	27	210	210	210
Other	37	241	309	391	447	445	457	461
Total	62	266	334	418	474	664	676	680
<u>Liquid Assets</u>								
Cash & Bank Balance	14	26	58	52	34	63	58	67
Deposits	298	204	194	349	484	379	431	357
Total	312	231	252	401	518	442	489	424
Other Assets	102	134	153	147	199	164	143	72
Total Assets	1,422	1,467	1,467	1,642	1,88	2,057	2,500	2,694

OTHER 'PRIVATE' FINANCIAL INSTITUTIONS - LIABILITIES								
Overseas Finance Ltd., East African Acceptances, Grindleys International Finance & Kenya Commercial								
	K / '000 Finance							
	1964	1965	1966	1967	1968	1969	1970	1971
<u>Issued Capital</u>								
Commercial Banks	-	-	-	-	50	50	75	725
Other Kenyan	100	100	100	100	2	20	30	30
ROW	-	-	-	30	50	30	45	45
Total	100	100	100	130	102	100	150	800
Reserves	7	7	11	12	14	7	16	65
Total Capital and Reserves	107	107	111	142	116	107	166	865
<u>Deposits</u>								
Demand & Time Dep.	-	-	-	240	982	1,607	241	9,335
Due to Banks and Fin. Inst'ns.	-	-	-	-	n.a.	n.a.	2,775	5,310
Total	-	-	-	240	982	1,607	3,016	14,645
<u>Loans</u>								
Commercial Banks	31	25	24	190	-	-	-	-
Other	-	-	-	4	5	-	-	-
Total	31	25	24	194	5	-	-	-
Other Liabilities	3	3	3	20	348	74	94	255
Total Liabilities	141	135	138	592	1,456	1,788	3,276	15,765

OTHER 'PRIVATE' FINANCIAL INSTITUTIONS - ASSETS								
N.B. Mid 1972 data on Kenya Commercial Finance has been included in the 1971 figures - K.£ '000								
	1964	1965	1966	1967	1968	1969	1970	1971
Real Estate	-	-	-	11	13	12	6	6
Loans and Advances	70	69	89	471	633	1,397	2,204	2,227
Bills	70	66	49	20	250	-	-	100
<u>Equity</u>								
Fin. Institutions	-	-	-	5	5	5	5	388
Other	-	-	-	-	-	-	11	537
Total	-	-	-	5	5	5	16	925
Due from Banks & Fin. Inst'ns	-	-	-	5	302	371	457	8,128
Other Assets	1	-	-	82	253	8	593	4,379
Total Assets	141	135	138	592	1,456	1,788	3,276	15,765

PRIVATE FINANCIAL INSTITUTIONS - LIABILITIES

Aggregate of Sectors A through D. K ₦ '000.

	1964	1965	1966	1967	1968	1969	1970	1971
<u>Issued Capital</u>								
Kenya Government	50	52	52	52	10	10	13	13
Commercial Banks	157	157	157	157	207	263	175	842
Financial Inst'ns	585	107	107	109	112	319	432	442
ROW	1,051	1,152	1,299	1,343	1,427	1,318	1,162	1,139
Other	276	232	262	263	167	288	308	570
Total	2,119	1,700	1,877	1,924	1,923	2,198	2,088	3,006
Reserves	84	27	259	388	728	741	878	966
<u>Deposits Received in Kenya:</u>								
Savings Accounts	2,902	3,017	3,922	4,412	4,232	4,339	4,653	4,848
'Deposit' Accounts	829	965	1,275	1,505	1,551	1,725	2,387	2,946
Unclassified Small Deposits	45	46	50	50	41	7	29	63
Sub Total	3,776	4,028	5,247	5,967	5,824	6,071	7,069	7,857
<u>Demand and Time Deposits</u>								
Deposits	1,897	2,144	1,595	1,831	4,499	5,468	7,603	21,989
Total	5,673	6,172	6,842	7,798	10,323	11,539	14,672	29,846
<u>Deposits in Uganda and Tanzania</u>								
Total Deposits	2,741	2,773	3,113	3,421	1,093	1,279	231	-
	8,414	8,945	9,955	11,219	11,416	12,818	14,903	29,846
<u>Loans</u>								
Kenya Government	250	200	100	-	-	325	325	514
Commercial Banks	1,415	1,318	1,857	1,612	491	454	391	197
Financial Inst'ns	207	682	210	149	123	123	123	-
ROW	2,374	2,062	1,746	707	1,113	820	839	578
Other	-	21	-	5	5	57	59	72
Total	4,246	4,283	3,913	2,473	1,732	1,779	1,737	1,361
<u>Other Liabilities</u>								
Other Liabilities	416	620	456	592	929	857	727	1,080
Total Liabilities	15,279	15,565	16,460	16,596	16,728	18,393	20,333	36,263

PRIVATE FINANCIAL INSTITUTIONS -						ASSETS		
Aggregate of Sectors A through D.						K./'000.		
	1964	1965	1966	1967	1968	1969	1970	1971
<u>Assets</u>								
Real Estate	650	672	699	701	575	479	681	848
<u>Loans and Advances</u> <u>in Kenya</u>								
Mortgages	7,455	6,756	5,966	5,340	5,276	5,643	6,287	7,756
Hire Purchases	1,933	2,225	2,952	3,538	4,383	4,174	4,426	6,053
Other	267	237	225	613	849	1,724	2,548	2,588
Total	9,655	9,218	9,143	9,491	10,503	11,541	13,261	16,397
<u>Loans and Advances</u> <u>to ROW</u>								
Bills	3,173	3,433	3,360	2,676	1,508	1,887	524	234
Public Stocks	70	105	81	46	276	5	-	100
East African	359	517	661	562	444	260	184	130
Other ROW	48	48	48	48	25	25	12	3
Total	407	565	709	610	469	285	196	133
<u>Equity</u>								
Financial Inst's	25	25	-	5	5	64	513	896
ROW	-	-	25	27	27	210	210	210
Other	27	277	422	568	641	693	823	1,325
Total	62	302	467	600	673	967	1,546	2,431
<u>Due from Banks and</u> <u>Financial Inst's</u>								
Tax Reserve Cert's	982	1,058	1,747	2,169	2,322	2,953	3,221	11,351
Total	36	25	19	26	3	-	66	53
Other Assets	1,018	1,083	1,766	2,195	2,325	2,953	3,287	11,404
Total Assets	244	187	235	279	394	294	838	4,716
	15,279	15,565	16,460	16,596	16,728	18,393	20,333	36,263

DEVELOPMENT INSTITUTIONS - LIABILITIES								
Industrial and Commercial Development Corporations: Development Finance Company of Kenya and ICDC Investment Company. K £ '000.								
	1964	1965	1966	1967	1968	1969	1970	1971
Issued Capital								
Other Dev. Inst.	75	275	500	500	558	551	548	529
Other Kenya	-	-	-	-	42	49	52	71
ROW	150	550	1,000	1,500	1,500	1,500	1,500	1,500
Total	225	825	1,500	2,000	2,100	2,100	2,100	2,100
Grants								
Kenya Government	202	212	212	450	588	1,085	1,689	2,432
ROW	50	50	50	50	50	50	50	50
Total	252	262	262	500	638	1,135	1,739	2,482
Reserves	114	156	207	298	217	354	535	739
Loans								
Kenya Government	264	264	264	264	357	526	689	1,189
Other Dev. Inst.	-	-	-	25	51	130	161	277
Commercial Banks	-	-	400	429	473	411	770	1,631
ROW	-	-	-	75	297	618	915	1,561
Other	-	-	-	-	50	48	45	43
Total	264	264	664	793	1,228	1,733	2,580	4,701
Other Liabilities	4	8	1	52	14	56	139	219
Total Liabilities	859	1,515	2,634	3,643	4,197	5,378	7,093	10,241

DEVELOPMENT INSTITUTIONS - ASSETS								
(K £ '000)								
	1964	1965	1966	1967	1968	1969	1970	1971
Real Estate	6	6	6	6	6	28	61	306
Loans								
Large/Medium	370	632	1,092	1,489	2,046	2,340	2,507	2,705
Small Scale	23	51	141	215	363	980	2,050	3,595
Minus Loss Provision	7	11	32	35	200	231	146	174
Total	386	678	1,201	1,675	2,215	3,109	4,472	6,432
Equity								
Other Dev. Inst.	50	100	500	525	558	551	548	529
Other Fin. Inst.	-	6	9	9	9	13	11	10
Other	169	366	665	1,023	1,147	1,465	1,614	2,387
Total	219	472	1,174	1,557	1,714	2,029	2,173	2,926
Liquid Assets								
Cash & Bank Balances	56	23	41	105	21	4	153	130
Deposits	179	314	175	198	179	109	205	593
Total	235	337	216	303	200	113	358	723
Other Assets	19	28	37	108	68	127	90	160
Total Assets	859	1,515	2,634	3,643	4,197	5,378	7,093	10,241

AGRICULTURAL FINANCE INSTITUTIONS - LIABILITIES							
Land and Agricultural Bank, Agricultural Finance Corporation, Agricultural Development Corporation and Cereals and Sugar Finance Corporation. K. / '000							
	1964	1965	1966	1967	1968	1969	1970
Grants	6,158	6,534	6,543	6,643	6,856	6,861	6,888
Reserves	809	829	728	308	173	- 88	- 180
<u>Loans</u>							
Kenya Government	28	1,122	4,240	5,865	9,567	11,643	10,547
Other Agricultural Finance Institutions	-	-	97	334	54	76	74
Commercial Banks	-	52	104	69	400	114	209
Total	28	1,174	4,441	6,268	10,021	11,833	10,830
Time Deposits	6,744	6,572	6,319	7,740	7,375	0,084	12,748
Other Liabilities	79	143	125	255	646	601	348
Total Liabilities	13,818	15,252	18,156	21,214	25,071	27,291	30,636

AGRICULTURAL FINANCE INSTITUTIONS - ASSETS

K '000

	1964	1965	1966	1967	1968	1969	1970
Real Estate	115	84	183	511	1,004	500	494
<u>Loans</u>							
Loans to Farmers	8,722	9,752	10,126	12,307	14,164	15,327	17,138
Other Agricultural Org's.	942	1,249	2,022	2,124	3,063	3,537	2,831
Cereals & Sugar Purchases	1,565	1,150	2,544	1,981	1,975	1,500	-
	-	60	568	875	1,261	1,375	1,598
Other	7	15	27	25	33	-	39
Total	11,236	12,226	15,287	17,312	20,496	21,739	21,606
Equity	-	385	506	571	759	781	786
<u>Liquid Assets: Cash and</u>							
Bank Balances	101	246	394	129	340	455	599
Deposits	2,282	2,191	1,181	1,565	300	763	375
Total	2,383	2,437	1,577	1,694	640	1,218	974
Deposits with Treasury	-	-	-	-	-	677	4,441
Other Assets	84	120	593	1,180	2,172	2,376	2,335
Total Assets	13,818	15,252	18,156	21,214	25,071	27,291	30,636

A.19.

NATIONAL HOUSING CORPORATION - ASSETS AND LIABILITIES K Sh'000								
	1964	1965	1966	1967	1968	1969	1970	1971
<u>Liabilities</u>								
<u>Grants</u>								
Kenya Government	654	654	654	654	654	663	663	663
ROW	25	125	125	125	125	125	125	125
Total	679	779	779	779	779	788	788	788
Reserve	267	288	289	269	252	263	306	369
<u>Loans</u>								
Kenya Government	1,693	2,066	2,445	3,705	5,075	6,775	8,720	11,252
Commercial Banks	-	-	-	-	-	-	17	-
HFCK	-	-	-	-	34	100	150	-
ROW	1,600	1,520	1,440	1,360	1,280	1,200	1,120	1,040
Total	3,293	3,586	3,885	5,065	6,389	8,075	10,007	12,292
Other Liabilities	25	25	23	33	96	106	162	275
Total Assets/Liab.	4,264	4,678	4,977	6,146	7,516	9,232	11,263	13,724
<u>Assets</u>								
Real Estate	-	2	29	220	675	1,460	1,732	2,660
<u>Loans</u>								
Local Authorities	3,962	4,124	4,197	4,989	6,450	7,424	9,157	10,459
Other	73	69	65	63	57	58	125	152
Total	4,035	4,193	4,262	5,052	6,507	7,482	9,282	10,611
Deposits with Treasury	-	172	220	-	-	-	-	-
<u>Liquid Assets:</u>								
CSFC Deposits	120	80	200	440	-	-	-	-
Commercial Bank Dep.	-	-	-	100	-	-	-	-
Cash & Bank Balances	70	157	135	57	174	86	-	95
Total Liquid Assets	190	237	335	597	174	86	-	95
Other Assets	39	74	131	277	160	204	249	358

NATIONAL SOCIAL SECURITY FUND - LIABILITIES AND ASSETS K/'000						
	1966	1967	1968	1969	1970	1971
<u>Liabilities</u>						
Contributors						
Accumulated Funds	1,150	5,603	10,940	16,756	22,741	29,378
Interest Provision	-	34	145	277	426	426
Total	1,150	5,637	11,085	17,033	23,167	29,804
Reserves	49	48	172	706	1,454	2,769
Treasury Loan						
Other Liabilities	107	222	116	141	252	63
Total Assets/Liabilities	1,208	5,907	11,373	17,890	24,873	32,636
<u>Assets</u>						
Real Estate	-	-	-	2	319	363
<u>Public Stocks</u>						
Kenya Government	1,092	3,945	10,393	15,803	19,299	25,938
Nairobi	-	478	478	723	1,628	1,628
East African Railways	-	-	-	-	285	285
Total	1,092	4,423	10,871	16,526	21,212	27,851
<u>Equity</u>						
Loans to Treasury	-	17	-	-	8	-
Liquid Assets, Cash in Hand	4	12	17	12	209	148
CSFC Deposit	-	1,040	-	-	-	-
Bank Balance	68	210	9	231	1,420	588
Short-Term Deposits	-	-	-	-	-	750
Total	72	1,279	26	243	1,637	1,486
Other Assets	44	123	44	163	133	169

PUBLIC FINANCIAL INSTITUTIONS - LIABILITIES - AGGREGATE
K sh '000

	1964	1965	1966	1967	1968	1969	1970
Grants	7,014	7,400	7,409	7,474	8,098	8,098	9,240
ROW	75	175	175	175	175	175	175
Total	7,089	7,575	7,584	7,649	8,273	8,283	9,415
<u>Issued Capital</u>							
Other 'Public' Financial Institutions	75	275	500	500	558	551	548
Other Kenyan	-	-	-	-	42	49	52
ROW	150	550	1,000	1,500	1,500	1,500	1,500
Total	225	825	1,500	2,000	2,100	2,100	2,100
Reserves	1,190	1,273	1,175	923	814	1,235	2,115
<u>Loans</u>							
Kenya Government	1,985	3,452	7,049	10,049	15,090	19,076	20,084
'Private' Financial Institutions	-	-	-	-	34	100	150
Other 'Public' Financial Institutions	-	-	97	359	105	206	235
Commercial Banks	-	52	504	498	873	525	996
ROW	1,600	1,520	1,400	1,435	1,577	1,818	2,035
Other	-	-	-	-	50	48	45
Total	3,585	5,024	9,050	12,341	17,729	21,773	23,545
NSSF Funds	-	-	1,150	5,637	11,085	17,033	23,167
Time Deposits	6,744	6,572	6,319	7,740	7,375	8,084	12,748
Other Liabilities	108	176	197	619	782	1,492	776
Total Liabilities	18,941	21,445	26,975	36,909	48,158	59,800	73,865

PUBLIC FINANCIAL INSTITUTIONS - ASSETS - AGGREGATE
K.₹ '000

	1964	1965	1966	1967	1968	1969	1970
<u>Assets</u>							
Real Estate	121	92	218	737	1,685	1,990	2,606
Public Stocks	-	-	1,092	4,423	10,871	16,526	21,212
<u>Equity</u>							
Other Public Financial Institutions	50	100	500	525	558	551	548
Private Financial Institutions	-	6	9	9	9	13	11
Other	169	751	1,171	1,676	2,338	3,228	3,972
Total	219	857	1,680	2,210	2,905	3,792	4,531
<u>Loans</u>							
Other Public Financial Institutions	-	-	97	359	105	206	235
Other	15,650	17,091	20,653	23,744	29,107	32,144	35,054
Total	15,650	17,091	20,750	24,103	29,212	32,350	35,289
<u>Liquid Assets</u>							
Cash and Bank Balances	227	426	642	513	561	788	2,381
Other Deposits	2,581	2,585	1,558	3,343	479	872	480
Total	2,808	3,011	2,200	3,856	1,040	1,660	2,961
Deposits with Treasury	-	172	220	17	-	677	4,449
Other Assets	143	222	818	1,563	2,445	2,805	2,817
Total Assets	18,941	21,445	26,975	36,909	48,158	59,800	73,865

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