

BANKING AND FINANCE IN AFRICA: A REVIEW ARTICLE

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1. Economic development usually leaves a wake of modernising institutions, and banking and financial institutions as archetypes of these do spring up during the development process; but whether these are the result of economic growth and development or are the cause of them is a moot point which has excited a good deal of controversy in the literature on economic development (1). Nevertheless, the fledgling economies of Africa have had their share of banking and financial institutions, some of which are directly descended from colonial institutions, and others which have only been set up during the last two decades on the attainment of political independence (2).

This review has been prompted by two recent publications, respectively, by Ali Issa Abdi, a Somali economist working with the International Monetary Fund, and Professor G.O. Nwankwo of the University of Lagos, Nigeria, now with the Central Bank of Nigeria (3). The two books, though differently motivated, are related in that they both deal with banking and financial structure in the initial stages of economic development. Abdi's book has as its purpose the evaluation of the commercial banking system in promoting saving and allocating investible funds efficiently in Kenya, Tanzania and Somalia in the first decade of independence from colonial rule in the early 1960s, while the aim of Nwankwo's is to provide a textbook for students, practitioners and professionals in economics, banking, accountancy, business studies and insurance. Their various purposes set the tone and style of analysis and presentation. The one is tersely written and leans on theoretical literature and an analytical style, emphasizing the role that commercial banks are theoretically expected to play in the development process and appraising the performance of the commercial banking systems in the East African countries against the theoretical expectations; while the other offers a highly descriptive, though sometimes analytical account of the evolution and present status of the financial system of Nigeria. The authors succeed in their respective aims. In this

(1) See Rondo Cameron: *Banking in the early stages of Industrialization*, Oxford University Press, 1967; John G. Gurley and Edward S. Shaw, *Financial Intermediaries and the Saving-Investment Process*, "Journal of Finance", May 1956, pp. 257-77; Hugh T. Patrick, *Financial Development and Economic Growth*, "Economic Development and Cultural Change", January 1966, pp. 174-189; E.S. Shaw, *Financial Deepening in Economic Development*, Oxford University Press 1973; Ronald I. McKinnon, *Money Capital and Economic Development*, Oxford University Press 1973.

(2) See Osman Hashim Abdel-Salem, *The Evolution of African Monetary Institutions*, "Journal of Modern African Studies", Vol. 8, No. 3, October 1970.

(3) Ali Issa Abdi, *Commercial Banks and Economic Development*, the Experience of Eastern Africa, Praeger, New York 1977 and G.O. Nwankwo, *The Nigerian Financial System*, London, Macmillan Press 1980.

review we look at the role of the commercial banking systems in East and West Africa in mobilizing financial resources for economic development. We do so by looking at the extent of financial deepening and financial repression in the economies of the three East African countries of Abdi's concern as well as in Ghana and Nigeria. The paper offers a comparative perspective on some of the financial phenomena that both Abdi and Nwankwo, respectively, describe.

2. The colonial monetary structure epitomised by the Currency Board System — the West and East African Currency Boards — provides a convenient starting point for both authors, but though all the countries had this common background in colonial banking, they have subsequently gone on to different paths of banking and financial development. Kenya and Nigeria have found an accommodation with the expatriate commercial banks which in the colonial era constituted the financial system and which still dominate the banking scene in these countries — in 1976 Nigeria did take 60 per cent equity share in the expatriate banks operating there but has left management and policy in the hands of these banks. Tanzania and Somalia have adopted a thorough-going socialist ideology and have nationalised the expatriate banks in order to minimise their foreign economic dependence.

The Currency Board System, as is well known (4), was a 100 per cent sterling exchange system because it involved essentially the convertibility of West and East African notes and coins on demand, into sterling balances in London. Since this convertibility was automatic, the System could not by any means be likened to a central bank with control over monetary parameters like the reserve ratio, and the power to vary the currency at will. Nor did the Currency Boards perform the functions of commercial banks in these territories; they were rather a mere money changer, obliged to receive London sterling — a superior money — in return for a token money, their own notes and coins. Commercial banking was therefore left to the expatriate banks with their head offices in London, and in consequence there was hardly any financial intermediation between the Currency Boards and the public except the little that was done by the expatriate banks, whose *raison d'être* was the financing of the export-import trade providing raw materials for the metropole and outlets for the latter's manufactured

(4) See Newlyn, W. T. and Rowan D. C., *Money and Banking in British Colonial Africa*, London Oxford University Press 1954.

products. The activities of the expatriate banks were thus peripheral to the financial needs of the indigenous entrepreneurs and the public generally. The lack of proper central banks denied the African countries one of the principal means of controlling their economies through monetary management and policy. While the conventional wisdom of the colonial times extolled the merits of the currency boards, it was felt during the twilight of colonialism that the system was not meeting African aspirations for rapid economic development. Central banks were therefore established at the earliest opportunity as these countries achieved sovereign status, and they have become the pivots of the financial system.

3. The establishment of central banks was a significant landmark in the financial development of the African countries and has freed monetary and economic management there from the strait-jacket which the colonial monetary structure imposed. Though the pace of financial development in a number of African countries has been glacial, the central banks in several of them have generally performed the functions traditional to central banks (5), such as managing the note issue, serving as fiscal agent for the government, supervising the commercial banks and managing the nation's foreign exchange reserves including the operation of foreign exchange controls; and also, as Nwankwo ably demonstrates, they have taken on developmental functions and have sometimes nurtured a modern financial system, including capital markets with a stock exchange such as Kenya and Nigeria have developed. Professor Nwankwo's book is very rich in institutional detail, especially in the description and analysis of the functions of the central bank, commercial banks, other non-banking financial intermediaries, and the money and capital markets. *The Nigeria Financial System* may not be superseded for a long time, being a definitive work of its kind. It will of course need periodic revisions as the system is still evolving.

4. However, in terms of raising questions which are immediately relevant to the debate on the role of a banking and financial system in the development process, Abdi's book is the more interesting, if only because he addresses himself specifically to this question. Abdi devotes his first two chapters to a brief review of the theory and literature on the role of financial intermediation in enhancing the saving and investment

(5) These functions are set out in R.S. Sayers, *Central Banking after Bagehat*, Oxford, Clarendon Press 1957.

process in developing economies and uses Kenya, Tanzania and Somalia as parade ground for putting the theory through its paces. For this an exercise he poses several questions: how successful have the commercial banks in East Africa been in mobilising financial saving; in allocating their loanable funds to priority sectors for development; and in reducing urban-rural financial dualism by increasing the availability of banking services beyond the major urban centres? To answer these questions he resorts to simple quantitative indicators such as the ratio of demand deposits of commercial banks to the money supply, that of time and savings deposits to the money supply, total commercial bank liabilities to the gross national product (GNP), and an increase in bank liabilities to GNP. His main conclusion is that mobilisation of financial resources through the commercial banks has not been adequate based on these simple criteria, and the banks have been even less successful in altering their asset portfolios to meet development priorities, and this despite nationalisation and other forms of governmental controls, especially in Tanzania and Somalia.

As for the spread of banking services, Abdi's treatment is rather perfunctory; his criterion for the spread of banking services, the number of bank branches and agencies, falls quite short of the density criterion which relates bank offices to total population and thus has an important bearing on bank accessibility and the degree of competition in banking as well as on what Walter Bagehot called 'habituating the people to the use of bank money'. Even so, his conclusion, based on the high concentration of bank branches in one or two principal towns, that the commercial banks in East Africa failed to spread out and touch the lives of the great bulk of the population, is valid as it is borne out by the use of the density criterion later in this paper.

Although Abdi's general conclusion that the commercial banking system, and by extension the financial system, in the East African countries failed up to the early 1970s to impinge on the development process to any significant extent is rather impressionistic and partly subjective (as there are no generalised, unambiguous criteria by which to measure the performance of banking systems) it would still be interesting to apply his criteria of the commercial banks' effectiveness to Ghana and Nigeria in juxtaposition to the East African countries in the 1970s. This would show how widespread the phenomena he describes are in Africa and how effective the commercial banks elsewhere in Africa have been in mobilizing financial resources for economic development. Professor Nwankwo's description of the Nigerian banking system provides a strong incentive for such comparative appraisal as he himself does not undertake it (it was outside his objective, though he touches on various aspects of the problem of commercial banks'.

effectiveness in the development process in Nigeria), and since his description and analysis of the Nigerian banking scene generally gives an impression of a successful, albeit limited, financial system.

5. A summary of the basic economic characteristics of the five countries is given in Table 1, from which it can be seen that all of them except Somalia are at a comparable stage of economic development; though by the strict criterion of GNP per capita, which takes countries with per capita GNP less than \$350 as low income, all the East African states in 1978 were low income countries, whereas Ghana and Nigeria were middle income countries. In 1978 Nigeria, thanks to the recent oil boom, had the highest per capita GNP — \$560 (US) — followed by Ghana \$390, Kenya \$330, Tanzania \$230 and then Somalia \$120. The latter is also the smallest country of the group in terms of population. But the growth rate of real gross domestic product in the 1970s has been highest in Kenya, with an average rate of 6.7 per cent, followed closely by Nigeria, 6.2 per cent, Tanzania 5.0 per cent, Somalia 3.1 per cent. Ghana's 0.4 per cent growth of gross domestic product during the seventies is indicative of the economic stagnation which has gripped that country. Gross domestic savings, as a proportion of GNP was highest in Nigeria — 28 per cent — then Kenya 18 per cent, Tanzania 7 per cent, Ghana 6 per cent, and Somalia 2 per cent. The East African countries had higher external debt/GNP ratios than Ghana and Nigeria. Generally, Kenya and Nigeria seem to have done better in their growth performance, by most of the economic indicators shown in table 1, than the rest of the group.

6. The method of analysis adopted to evaluate the banking systems in the two West African countries and to compare them with the East African systems is that used by Abdi, and the framework of analysis is in terms of financial deepening and financial repression. In any country, financial deepening represents an increased amount of financing of production and investment through specialised organised money and capital markets; and in developing countries it is associated with increases in the activities of financial intermediaries such as commercial banks, savings institutions and insurance companies. A distinction is usually made between banks, differentiated by their ability to accept demand deposits (chequeing accounts or current accounts) and thus to expand the money supply by creating demand deposits against themselves, and non-bank financial institutions which usually discharge their liabilities by drawing on their demand deposits at the banks. The latter include saving institutions, credit

Table 1
SUMMARY OF BASIC ECONOMIC CHARACTERISTICS

	Ghana	Nigeria	Kenya	Tanzania	Somalia
Population					
Amount in mid-1978, millions	11.0	80.6	14.7	16.9	3.7
Growth rate, annual average 1970-78 (per cent)	3.0	2.6	3.8	3.0	2.3
GNP per capita amount in 1978 (\$)	390	560	330	230	120
Growth rate, annual average 1960-78 (per cent)	-0.5	3.6	2.2	2.7	-0.5
GDP growth, 1970-78 (per cent)	0.4	6.2	6.7	5.0	3.1
Inflation, average annual rate (per cent)					
1960-70	7.6	2.6	1.5	1.8	4.5
1970-78	35.9	18.2	12.0	12.3	10.7
Gross Domestic Investment					
Growth rate 1960-70 (per cent)	-3.2	7.4	7.0	9.8	4.3
Growth rate 1970-78	-8.3	23.3	2.3	1.9	8.5
Share in GDP 1978	5.0	30.0	28.0	20.0	16.0
Gross Domestic Savings/GDP per cent 1978	6	28.0	18.0	7.0	2.0
Growth of Merchandise Trade					
Average Annual Growth rate (per cent)					
Exports 1960-70	0.1	6.1	7.2	2.5	2.3
1970-78	-0.1	0.5	0.8	-6.0	7.8
Imports 1960-70	-1.6	1.7	6.3	6.0	2.6
1970-78	2.7	25.0	n.a.	-1.0	13.7
External debt/GNP					
Percent 1970	1.1	0.7	2.6	2.1	0.5
1978	0.3	0.3	2.4	1.1	1.2
External public debt/Exports					
Percent 1970	5.0	4.1	7.9	8.2	2.1
1978	4.4	1.2	8.3	7.4	3.7

Source: World Bank, World Development Report August 1980. Annex tables.

unions, insurance companies and development finance institutions. The following analysis focuses on some of the ratios which Abdi uses as well as on interest rate policies pursued by each country's banks, because these are important in gauging the extent of the existence of financial repression in the economy.

Abdi of course concluded that the East African economies did manifest considerable levels of financial repression because real interest rates were generally low, but he

balked from the policy implications which this finding entailed, namely that interest rates should be freed from any officially imposed ceilings in order to make the return on savings attractive to savers. His reason for not recommending such a prescription is that of the "second best" argument, that because of the presence of other institutional and structural bottlenecks in these countries, freeing interest rates from the officially imposed ceiling would not necessarily lead to financial deepening as the theory envisages, but perhaps to further financial repression (6). Some of the institutional bottlenecks to which he draws attention are the general lack of indigenous entrepreneurship and thus the inadequate productive demand for commercial bank loans — hence the unchanging asset portfolio composition of the banks — and even for the loans of the specialised development finance institutions set up by the government to use specially provided government funds to provide long term loans for indigenous entrepreneurs. These institutions have had to cope with a substantial amount of bad debt and write-offs in the East African countries. Such experiences, however, have not been peculiar to these countries, and, as Nwankwo describes in the Nigerian situation, there have been numerous instances of them in Nigeria where, in reaction to the rather conservative lending practices of the expatriate banks, a number of indigenous banks went into business during the banking boom in that country in the forties and early fifties, but, in many instances, were forced to fold up for such reasons. The State banks which have been set up to promote indigenous banking and to help indigenous entrepreneurs have come up against the same or similar problems and the expatriate banks still surprisingly enjoy considerable popularity with the public.

7. Now we turn to the question of the spread of banking services in the selected countries. Abdi's finding that banking services in East Africa have not expanded fast enough into the country, is not surprising; indeed, banking and financial services in Africa have been largely an urban phenomenon, and the rural areas have been mainly served not by the modern commercial banks, but by the much maligned merchant/

(6) The theory of the 'second best' has been concisely expressed in an often quoted passage written by William J. Baumol, *In brief, this theory states, on the basis of a mathematical argument, that in a concrete situation characterised by any deviation from "perfect" optimality, partial policy measures which eliminate only some of the departures from the optimal arrangement may well result in a net decrease in social welfare*, in W.J. Baumol, *Informal judgement, rigorous theory and public policy*, Southern Economic Journal, Vol. 32, October 1965, pp. 137-146.

money lender with his sometimes usurious interest rates. The money lender has provided credit to the small scale farmer in the pre-harvest lean days to tide him over his financial needs till harvest time. In many parts of Africa, certainly in rural Ghana and Nigeria, there is an equity element in the loans to the farmer since in case of a crop failure the loan does not have to be repaid, and also there is generally a high risk of default. This provides some justification for the high interest rates charged by the rural money lenders. Rural banks have been introduced in Tanzania since the nationalisation of the expatriate banks in 1967, and in Ghana since 1976, but they are yet to make an impact on the saving-investment process, as the deposits they have attracted so far are very low. Thus, even in Ghana and Nigeria where there has been a longer tradition of indigenous commercial banking, the number of commercial bank offices per 10,000 of the population is still low (7), no higher than the ratios in the East African countries. In 1977 the ratio for Ghana was 0.204, that for Nigeria was 0.087, Kenya's was 0.209, Tanzania's was 0.188 and Somalia's was 0.087. Within this group of countries, Kenya and Ghana have a more widespread network of commercial bank branches. But to say this is to damn these two countries with faint praise because the ratios in all the countries are too low to stand any comparison with more developed countries. African countries have a long way to go in habituating the people to modern banking (8). These ratios are even more interesting when viewed against the background of nationalisation of banks in Tanzania and Somalia and that of indigenisation in Ghana and Nigeria, and, to some extent, in Kenya. One of the explanations given by the Minister of Finance for the take-over of the expatriate banks in Tanzania was that the state intended to expand the monetary sector to people "at the subsistence level,

(7) The index of bank density is constructed as follows:

$$\frac{\text{number of bank offices} \times 10,000}{\text{Total Population}}$$

A ratio of over 1 — that is, more than one office per 10,000 inhabitants — is high. A ratio of between 0.5 and 1.0 is "moderate", whereas one below 0.5 is low. A ratio of less than 0.1 is very low. See Rondo Cameron, *ibidem*.

(8) Comparative ratios for some developed countries in 1979 are: United Kingdom 2.5; West Germany 7.2, the USA 1.7, France (1978) 3.6, Japan 1.5, Switzerland 7.6 [The sources of the figures for the calculations are

(i) Swiss National Bank report 1980 for Bank branches and other outlets; and (ii) IMF: IFS 1980 yearbook for population]. The interesting point about these figures is that they are all above 1; and for Switzerland and West Germany reach as high as 7.6 and 7.2, respectively. The African countries are thus grossly "underbanked" in comparison with the advanced industrial countries.

and that the state planned to do this in 15 years, whereas the foreign banks could not be expected to do this in less than 50 years" (9).

Fourteen years after nationalisation, banking services do not seem to have spread out to the people nearly as fast as it was envisaged.

8. At this point we compare the financial deepening experiences of the selected countries by looking at the degree of financial intermediation that has occurred in them in the last decade. One can measure the degree of financial intermediation in a country by the proportion of national wealth held through financial intermediaries — this is the financial interrelations ratio, FIR (10) — but estimates of national wealth are lacking in these countries and therefore we assume that national output is proportional to national wealth and measure financial intermediation by the ratio of the consolidated assets (or liabilities) of financial intermediaries to national output (GNP). In our selected countries, since the assets of the commercial banks constitute the great bulk of the assets of the financial intermediaries, it is the ratio of commercial banks' assets to national output that we use to measure the extent of financial deepening. This measure is supplemented by the ratios of demand deposits to money supply and time deposits to money supply respectively, this the easier way to gauge the extent of the diversification of commercial banks' primary deposits. As Abdi points out, these 'banking ratios' may be flawed in financially mature economies where a shift in asset holders' preferences may determine the size of the banking system relative to the other financial intermediaries. The size of the assets of the non-banking financial intermediaries was too negligible in all the countries to invalidate our assumption that for all practical purposes the commercial banking system closely approximates the entire financial system. The commercial banks' assets/GNP ratios, and the ratios of demand and time deposits to the money supply for the 1970s are shown in Table 2. There are clearly defined trends in all the ratios in the countries of the group; in Ghana the total assets of the banking system (commercial banks) relative to GNP rose from 10 per cent in 1970 to 25 per cent in 1976, but fell to 15 per cent in 1977, the average for the

(9) Quoted from article *Banks Take-over legalized* in the East African Standard, Nairobi, 15th February 1967.

(10) The Financial Interrelations Ratio, FIR, was first used to measure the extent of financial intermediation by R.W. Goldsmith. See his *Financial Structure and Development*, New Haven, Yale University Press 1969. An elaborate discussion of this point is contained in E.S. Shaw's *Financial Deepening in Economic Development* (cited in Note 1) especially Chapter 4, and also in R.I. McKinnon, *ibidem*.

period 1970-77 is 17 per cent. Kenya's average is 28 per cent, Nigeria's is 22.4 but there were year-to-year fluctuations, except for the period 1974-78, when the trend was clearly upwards. Tanzania's average is 29.4 per cent. Somalia had the highest average for the group, 41 per cent, and shows the rapid growth of commercial banking assets over the period, from a very low base of 8.2 per cent of GNP in 1970 to 57 per cent in 1977.

Kenya had the highest demand deposit/money supply ratio, an average of 71.4 for the period. Now, since the money supply is here narrowly defined to include only currency in the hands of the public and demand deposits with commercial banks, a high ratio of demand deposits to money supply indicates a higher use of bank money than of currency, and in this respect Kenya is more habituated to the banking habit than any other country in the group; this confirms the earlier finding that it has a higher bank branches/population density than every other country in the group, and taken with the fairly high ratio of term deposits to money supply, 47 per cent on the average during the period, is further evidence of a higher level of financial intermediation. Tanzania's demand deposits/money supply ratio has been higher than its currency ratio, an average of 57 per cent, though its term deposits ratio has been relatively low, 31.5 per cent. Somalia and Ghana have both had higher currency ratios (lower DD/M ratios) with still lower term deposits ratios, 17.5 and 37 per cent respectively, and therefore lower levels of financial intermediation than Kenya and Tanzania. Nigeria's DD/M ratio has averaged 50 per cent over the period, but with above average ratios during 1974-79 (except 1975). However, Nigeria had higher term deposits ratios than all the other countries, 55.8 per cent, an indication, perhaps, of her newly acquired affluence; there is a higher degree of financial intermediation there than in Ghana and Somalia.

The growth of commercial bank assets relative to GNP is about the same in all the countries: Kenya, 4.7 per cent, Nigeria 4.9 per cent, Ghana 5.0 per cent and Tanzania 5.2 per cent, except Somalia which had the highest rate of growth, 11.4 per cent. Thus Ghana and Nigeria fall in line with Abdi's conclusion that comparison with high financial growth countries like South Korea, Taiwan, Japan and West Germany would show all the East African banking systems to be at a very rudimentary stage of development.

9. The financial deepening/financial repression hypothesis is ultimately reducible to interest rate policies, and one way of testing the hypothesis is to examine the behaviour of real interest rates over time. If the real interest rates, that is the nominal rates deflated by an appropriate price index — in this study, the consumer price index — have been positive over a period, then it could be said that there has been no financial

Table 2

COMMERCIAL BANK - ASSET/GNP, DEPOSITS/MONEY SUPPLY RATIOS.
BANKING RATIOS 1970-77

TD	GHANA				NIGERIA				KENYA				TANZANIA				SOMALIA			
	TA	ΔTA	DD		TD	TA	ΔTA	DD		TD	TA	ΔTA	DD		TD	TA	ΔTA	DD		
M	GNP	GNP	M		M	GNP	GNP	M		M	GNP	GNP	M		M	GNP	GNP	M		
1970	10	—	49.3	39.6	20.10	—	45.0	52.4		25	n.a.	69.4	45.4		24	—	51.3	32.2		
1971	12	2.649.6	47.8	18.0	1.8	42.6	55.5	25	2.5	70.8	45.6	28	5.552.1	27.5	23.7	15.946.9	17.5			
1972	14	3.447.5	44.3	19.0	2.1	45.1	61.1	236.7	69.541.8	27		2.748.4	32.7	31.3		8.746.7	16.1			
1973	14	3.252.0	41.1	20.0	3.7	46.5	62.9	29	8.5	73.2	38.7	27	3.856.4	31.9	45.2	16.547.1	19.9			
1974	22	11.246.4	44.6	17.0	6.1	51.5	69.6	28	3.8	71.7	44.9	33	10.356.1	29.1	61.7	21.146.3	16.6			
1975	23	4.449.5	37.8	21.0	7.4	48.8	60.6	27	2.8	71.6	50.1	34	6.859.0	29.6	57.2	6.446.0	21.7			
1976	25	6.247.6	33.5	25.0	8.4	58.2	52.7	27	5.4	71.9	49.0	33	5.261.2	30.3	44.2	4.947.6	20.5			
1977	15	4.546.9	27.3	30.0	7.7	57.2	43.5	30	9.1	73.4	47.3	29	2.463.7	30.8	57.1	15.844.3	16.1			
1978	n.a.	n.a.	43.5	30.7	32.0	2.0	51.2	49.4	30	4.1	73.8	51.8	30	5.257.3	37.6	n.a.	—	41.9	18.3	
1979	n.a.	n.a.	40.3	27.2	n.a.	—	53.2	60.3	33	5.1	68.9	54.1	n.a.	60.6	32.4	n.a.	—	47.2	20.3	
Average	17	5.047.3	37.4	22.4	4.9	50.0	55.8	28	4.7	71.4	46.9	29.4	5.256.6	31.5	41.1	11.443.1	17.5			

Sources: Computed from IMF: International Financial Statistics, Various Issues IBRD: World Bank Tables, 1980.

- TA - Total Assets
GNP - Gross National Product
ΔTA - Change in Total Assets
DD - Demand Deposits
TD - Time and Saving Deposits
M - Money Supply narrowly defined

repression; positive real interest rates maintained over a number of years invariably lead to financial deepening. Another way of testing the hypothesis is to look at the behaviour of the demand for money over a period of time, especially at whether the demand for money has been inflation elastic or not. The inflation inelasticity of the demand for money may be evidence of financial repression (11). These two tests are necessary, jointly or separately, but not sufficient to detect the existence of financial repression in an economy. There may be other contributing factors not reflected in these tests. The rest of the review focuses on these tests.

In each of the countries in the group there is a spectrum of interest rates covering the various types of financial assets and loan instruments. These range from the official discount rate (the central bank minimum lending rate) to the lending and borrowing rates of the non-banking financial intermediaries whose rates tend to be on the higher end of the scale. Table 3 shows the principal interest rates of commercial banks in the five countries for selected periods. An interesting aspect of the interest rate structure in these countries is its almost invariability over time. Interest rates did not vary much, if at all, in the decade before 1972-3. The rates in Nigeria remained the same for seven years from 1968 to 1975, as did those in Tanzania, Kenya and Somalia. Ghana's interest rates were increased during 1971-2 but they were not to be increased for some time thereafter. There would normally be nothing wrong with such fixed nominal interest rates if the rate of inflation had also remained static and there had not been changes downward in the real returns on the term deposits and savings. But there were considerable variations in the rate of inflation within each country and therefore the real returns on savings also varied, falling with high rates of inflation.

Abdi analysed the real return on deposits in Kenya and Tanzania and found that for Kenya, except for the three years 1966, '72-3 and for Tanzania except for 1965-6 and 1972-3, there were positive returns on one year time deposits at commercial banks. The 1970s, however, tell a different story. Inflation has been of a higher order in all the countries and accordingly there have been negative real returns on one year time deposits with commercial banks in all of them. Table 4 shows the rates of inflation (percentage change in the consumer price index), and the real return on one year deposits in the period 1970-79. In Ghana, apart from 1970, the real returns on deposits have been negative throughout the decade, and with accelerated rates of inflation the returns have been very low indeed. In 1977, the year of the highest rate of inflation, the real return on one year time deposits was -108.4 per cent. Nigeria had positive returns in only 1970 and '72, and the rest of the decade saw negative real returns on deposits. A similar picture prevailed in East Africa where real returns on deposits were negative throughout the decade. The question then is why have nominal interest rates been pegged so low in relation to the rate of inflation in these countries? To be sure, during the 1970s, especially after 1974 when the inflation rates more than doubled in every country, there were some increases in the nominal interest rates, but these were rather small compared to the annual rates of inflation. The answer to the question may lie in the poor perception of central bank policy of the damage that a financially repressed banking and financial system could do to the economy. One consequence

of financial repression in those countries is the cheapening of capital through the cheapening of credit to borrowers, and the engaging paradox of cheap capital and expensive cost of labour, due to high rates of inflation and the consequent trade union demands for higher minimum wages, in these capital scarce economies.

Table 3
COMMERCIAL BANKS PRINCIPAL INTEREST RATES

	GHANA			NIGERIA			PERCENTAGES KENYA		TANZANIA			SOMALIA
	1968-70, 71-72, 77-79			1968-75, 75-77, 78-79			1967-73, 1976-79		1967-72, 73, 77, 78			1972, 1978
Savings Deposits	3.75	8	7.5	3.0	4.0	5.0	3.0	5.0	3.50	4.0	5.0	0.75
Time Deposits												
3-6 months	3.25	3.75	7.625	2.5	3.0	5.0	3.50	5.25	4.0	4.0	4.0	2-3.5
6-9 months	3.25		7.875	2.5	3.0	5.25	3.75	5.625	4.25	4.25	4.25	n.a.
9-12 months, and over	3.75	8	8.0	3.0	5.0	5.50	4.0	5.875	4.50	4.50	4.50	3.50
Lending Rates												
Loans and Advances												
Minimum	5		7.75	7.0	6	7.0	7	Free	6.50	5.0	7.50	7.0
Maximum	8	12.5	12.0	10	77.0	n.a.	n.a.	10 4.37*	10	11.50	n.a.	
Minimum Rediscount				4.0			1.52	6.80				
Rate ¹ * (Central Bank)	5.50	8.0	13.50	4.50	3.50	5.0		4.6	4.27	4.27	4.27	n.a.

* These varied over the years 1976-79

¹ for Treasury Bills

Sources: Ghana: Bank of Ghana Annual Reports, Various Issues - Nigeria: Nwankwo - Nigerian Financial System - Kenya: Republic of Kenya, Statistical Abstracts, 1976, 77 - Tanzania: Bank of Tanzania - Economic Operations - Report June 1979.

Table 4
ESTIMATED REAL RATES OF INTEREST ON ONE YEAR TIME DEPOSIT

1970-1979. PERCENT PER ANNUM														
Period	GHANA			Δ% CPI	NIGERIA			Δ% CPI	KENYA			Δ% CPI	TANZANIA	
	Percent change in CPI Δ%	Interest Rate Nominal	Real Return		Interest Rate Nominal	Real Return	Interest Rate Nominal		Real Return	Interest Rate Nominal	Real Return			
1970	2.9	3.75	0.85	—0.60	3	3.6		2.2	4	1.8		3.4	4.50	1.7
1971	9.6	8.00	— 1.60	16.1	3	—13.1		3.8	4	0.2		4.8	4.50	—0.3
1972	10.1	8.00	— 2.10	2.8	3	0.2		5.9	4	—1.9		8.6	4.50	—4.1
1973	17.6	5.50	— 12.7	6.0	3	—3.0		9.3	4.5	—4.8		10.3	4.50	—5.8
1974	18.1	5.50	— 12.6	12.4	3	—9.4		17.8	5.875	—11.925		19.5	4.50	—15.0
1975	29.9	8.0	— 21.9	33.7	4	—29.7		19.3	5.875	—13.425		26.4	4.50	—21.9
1976	56.1	8.0	— 48.1	22.0	4	—18.0		11.4	5.875	—5.525		6.9	4.50	—2.4
1977	776.4	8.0	—108.4	21.4	5	—16.4		14.9	5.875	—9.025		77.5	4.50	—7.0
1978	73.1	n.a.	n.a.	24.4	5.5	—18.9		16.9	5.875	—11.025		11.6	4.50	—7.1
1979	54.4	n.a.	n.a.	11.7	5.5	—6.2		8.0	5.875	—2.125		13.6	4.50	—9.1

Source: Computed from table 3.

Changes in Consumer Price Indices, computed from IMF: International Financial Statistics: Yearbook 1980.

10. Turning to the demand for money in these countries, we estimate a simple demand for money function whose arguments are a scale variable which relates to the level of transactions in the economy, (we use the GNP), and the rate of change of prices, i.e. the rate of inflation, P_t/P_{t-1} , representing the opportunity cost of holding money relative to alternative real or financial assets: $M_d/P = f(\text{GNP}, P_t/P_{t-1})$, $f_1 > 0$, $f_2 < 0$. An interest rate variable is not included in the function because, as we have seen, these rates have been barely variable in the countries in the group. The function is estimated in the logarithmic form in order to enable us to interpret the coefficients as elasticities. Both the narrow and broad definitions of money have been employed, and the dependent variable, M_d/P , is respectively, M_1 (currency in the hands of the non-banking public plus demand deposits with commercial banks) deflated by the consumer price index, and M_2 (M_1 plus time and saving deposits - quasi-Money), also deflated. The estimates are obtained using annual data, since there are no quarterly or

even semi-annual data for GNP in these countries. The use of annual data obviates the need to measure the lag structure of the demand for money, a year being long enough for instantaneous adjustments to take place. The sample period is 1966-79 for Kenya, 1966-78 for Tanzania, 1960-76 for Ghana and 1960-78 for Nigeria. No estimates are presented for Somalia for lack of adequate data on the GNP of that country. The estimates are shown in Table 5.

It can be seen from Table 5 that the demand for money, on both the narrow and broad definitions of money, M_1 and M_2 , is inflation inelastic in all the African countries under discussion except Nigeria, where the elasticity is -1.64 in the case of M_1 and 1.63 in that of M_2 ; the estimates are all significant at the 5% level, and a better fit is obtained for M_2 than for M_1 in all cases, though in Ghana, Kenya and Tanzania the difference between M_1 and M_2 is barely perceptible whereas the difference between the two is very wide in Nigeria. Thus from the estimates of the demand for money the hypothesis of financial repression is confirmed in Ghana, Kenya and Tanzania, where the elasticities of the demand for money with respect to the rate of inflation are 0.8, 0.7 and about 0.3 respectively. The hypothesis is rejected in Nigeria where the elasticity is -1.64 (M_1) and 1.63 (M_2). The estimates for Ghana and Tanzania are of the wrong sign (positive instead of the theoretically expected negative) which implies that increases in the rate of inflation are followed by increases in the demand for money. This is theoretically perverse when one has the opportunity cost of holding money in mind, but may well reflect the empirical fact that during a period of rapid inflation, such as has occurred in the 1970s, more money may be held by the public in expectation of further increases in the rate of inflation, especially in situations where there are no alternative assets, financial or real, as has been the case in Ghana, and to some extent Tanzania, in recent years, owing to general shortages of goods. The inflation elasticity of the demand for money in Nigeria may be due not so much to the non-existence of financial repression in that economy, in fact there is some evidence of financial repression in Nigeria as per the low levels of the real return on deposits, but rather to the high increases in export revenues from oil and thus in income, during the 1970s. The right sign (negative) of the coefficient of the rate of inflation (with M_1) may be indicative of the public's sensitivity to inflation and its rational behaviour regarding money during inflationary periods, holding less money with higher rates of inflation.

The income elasticity of demand for money is also of considerable interest here. M_2 gives an income elasticity of 1.04 for Ghana, 1.73 for Kenya, 1.06 for Nigeria and 1.23 for Tanzania, and all the estimates are significant at the 1% level. Money seems to be

a luxury good in all the African countries, though the closeness of the income elasticity to unity in these countries should not be ignored.

Table 5

THE DEMAND FOR MONEY IN AFRICAN COUNTRIES

The equation that has been estimated is $\text{Log}(M_2/P) = a_0 + a_1 \text{Log } Y + a_2 \text{Log}(P_t/P_{t-1}) + U_t$

M ₁ narrow definition of money							
	Intercept	Y	P _t /P _{t-1}	R ²	DW		
Ghana	-1.01 (15.8)	0.76** (4.5)	0.82* (1.92)	0.77	2.35		
Kenya	-5.17 (-8.08)	1.68** (13.5)	-0.7* (-1.8)	0.97	1.98		
Nigeria	-6.84 (-10.1)	-1.09** (-3.5)	-1.64** (-4.2)	0.62	0.66		
Tanzania	-1.86 (-1.51)	1.04** (4.5)	0.38 (0.59)	0.69	1.28		
M ₂ broad definition of money							
	Intercept	Y	P _t /P _{t-1}	R ²	DW	Sample	size
	-1.82 (2.4)	1.04** (5.26)	0.83** (3.65)	0.78	1.45	17	1960-76
	-5.06 (-9.01)	1.73** (15.96)	-0.63* (-1.8)	0.98	2.40	14	1966-79
	-2.22 (-3.04)	1.06** (6.30)	1.63* (2.04)	0.91	1.11	19	1960-78
	-2.53 (-1.80)	1.23** (4.5)	0.17 (0.22)	0.70	1.10	13	1966-78

Notes:

t - value are placed in parentheses under their corresponding parameter estimates.

** significant at the 1 per cent level.

* significant at the 5 per cent level.

Source: Data from the IMF: International Financial Statistics, Yearbook 1980.

11. This review article has discussed in some detail the issues raised in the two books by Abdi and Nwankwo, respectively, elaborating and confirming the monetary characteristics of three developing economies in East Africa and two in West Africa. These African countries have financially repressed banking and monetary systems and a reform of interest rate policies is clearly called for, but since such a reform should be accompanied by other structural and institutional reforms of the system, it may well not be appropriate to do the one without the other. The authors raise important questions about the role of the banking system in the development process, and give interesting recommendations for the improvement of the performance of the banking system. The solutions to the problems which they canvass are not beyond the competence of these African countries to bring about. Reading these books will certainly enhance one's knowledge of the financial system in East Africa and Nigeria and the authors deserve our gratitude.

BANQUE ET FINANCE EN AFRIQUE: UNE REVUE

RESUME

L'article discute en détail les problèmes soulevés dans les livres de Abdi et de Nwankwo respectivement et donne une élaboration des caractéristiques monétaires de trois économies en voie de développement en Afrique de l'Est et de deux en Afrique de l'Ouest. Ces pays ont exercé un contrôle financier répressif sur le système bancaire et sur le système monétaire et maintenant il leur faut une réforme des politiques des taux d'intérêt, mais puisque une réforme dans ce domaine devrait s'accompagner d'autres réformes structurelles et institutionnelles, il n'est pas souhaitable d'en entamer une sans les autres. Les Auteurs soulèvent aussi d'autres questions concernant le rôle du système bancaire dans le processus de développement et proposent des recommandations intéressantes pour améliorer l'efficacité du système. La solution des problèmes dont on discute ne dépasse pas la compétence de ces pays africains. La lecture de ces deux livres va certainement aider le lecteur à élargir sa connaissance des systèmes financiers en Afrique de l'Est et au Nigéria et il faut en être gré aux Auteurs.
