

UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL



Distr. LIMITED

E/ECA/LDCs.9/EXP.8/4 26 January 1989

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Eighth Neeting of the Intergovernmental Committee of Experts of African Least Developed Countries

Addis Ababa, Ethiopia, 22-24 March 1989

ECONOMIC COMMISSION FOR AFRICA

Ninth Meeting of the Conference of Ministers of African Least Developed Countries

Addis Ababa, Ethiopia, 4-5 April 1989

THE GROWTH AND STRUCTURE OF FINANCIAL INSTITUTIONS IN AFRICAN LDCs

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I. Introduction

- 1. The relationship between real and monetary variables is undeniable. Yet, policy makers in African LDCs have failed to follow an active policy of developing the domestic monetary and financial sector. After nearly three decades of political independence, economic policy in African LDCs is still that growth can be maximized by ever increasing inputs of foreign aid. It is impossible to find a development plan or budget without any mention of foreign resource inflows. As a result, therefore, Africa has become increasingly reliant on foreign aid, which has led to a relaxation of internal resource mobilization efforts. There are, however, signs of increasing aid weariness among donors and of a hardening of aid terms.
- 2. No country is too poor to save if the available potential is effectively harnessed. Everwhere in Africa, however, the burden of taxation falls on the subsistence sector and Governments increasingly tailor their policies in favour of the modern sector, with strong fiscal and monetary incentives. Indeed, farm taxation is often used to develop urban-oriented infrastructure, rather than on agricultural development. More than in the rest of the world the urban sectors have benefitted at the expense of the subsistence sector. 1/
- 3. Most developing countries have formal plans for industrial development, public infrastructure, (telecommunications, roads, public utilities) foreign trade and agriculture, but regulation of the financial sector rather than its development seems to be the major objective of policy. 2/ In some countries, government intervention in credit markets has aggravated distortions. There are two main reasons for this. In countries characterized by poor income and investment levels, low interest rates have been justified on the grounds that they will enhance the level of fixed capital formation. Secondly, low interest rates are being deliberately maintained to counter balance the adverse effects of the unorganized money market. In the face of inflationary pressures, however, low interest rates in nominal terms often culminate in negative real interest rates. Thus, the financial markets are further distorted and this affects the efficiency and rate of growth of the economy. 3/

^{1/} Economic Commission for Africa, The Balance of Payments Problems of Developing Africa - A Reassessment, paper submitted to the Round Table of Governors of African Central Banks and Senior Officials of International Financial Institutions convened at ECA Headquarters, Addis Ababa, Ethiopia, 4-7 February 1985.

^{2/} Ronald McKinnon, "Financial Policies" in Policies for Industrial Progress in Developing Countries, (John Cody, Helen Hughes and David Wall edition). The Brookings Institution, Washington D.C. (1980), p. 93.

^{3/} Edward S. Shaw, "Financial Deepening in Economic Development", Oxford University Press (London, 1973) and Ronald McKinnon, Money and Capital in Economic Development (Washington D.C., 1973).

- 4. Furthermore, Africa's institutional infrastructure (insurance, banking, etc.) that was originally designed to meet the needs of the colonial powers, has done little to promote domestic growth. It is increasingly drawn to the urban seats of power, authority and financial patronage. It is the rich farmers, the foreign-owned firms and the immigrant population (who have easy access to knowledge of modern technology, marketing facilities, managerial expertise and large financial resources) who secure the available credit from the formal banking system. African entrepreneurship, therefore, instead of developing its full potential is denied access to credit. The plight of the African peasants is even worse, for they must continue to rely on the traditional money lender, charging exhorbitant interest rates.
- 5. Part II gives a theoretical account of the savings and investment process and examines its applicability to Africa. This is followed in Part III by detailed examination of the characteristics of the banking system of African LDCs. Part IV examines the extent to which mobilized funds have been used to finance investment (including the commercial banking system, post office savings bank and specialized credit institutions) while Part V examines the policy reforms necessary to make the banking system more operational and effective. Part VI contains the conclusions of the study.

II. Theoretical Framework

- 6. The level of savings and investment is only one determinant of the rate of economic growth. Other factors adversely influencing productivity include a shortage of raw materials, unutilized capacity in the industrial sector and the low availability of skilled manpower. "A country's rate of economic growth depends not only on how much it can save, but also on how productively it can invest this savings; this seems to depend on a complex of less easily measurable factors such as the skills and attitudes of its people, or the efficiency and flexibility of its economic organization". 4/
- 7. Although savings and investment do not of themselves bring about economic growth, it is important to stress that national savings are a pre-requisite for financing domestic investment, because of growing signs of aid weariness among donors, the hardening of aid terms and the limitation of private capital that can be secured from abroad.
- 8. In this context the process of financial intermediation the act of channeling funds from surplus to deficit units becomes of paramount importance. The process be clearly understood from an examination of the economic system. The economic units making up the economy differ in their initial endowments, abilities, skills and expectations, so saving and investment may not necessarily be undertaken by the same units; some may save more than they are willing to invest and vice versa.

^{4/} Hla Myint, The Economics of the Developing Countries (New York, Prager Publishers, 1965), pp. 15-16.

The distribution of savings differs from the most efficient distribution of investment because savings depend on the level of per capita income and its growth rate, while efficient investment depends upon enterpreneurial talents, knowledge and willingness to take risk. Savers are not necessarily enterpreneurs, and enterpreneurs may not save enough to finance their own investment. 5/ Thus some mechanism is needed to bridge the gap between the surplus units (savers) and the deficit units (investors). Two basic methods exist: one by the issue of primary securities (bonds, equities, etc.), whereby surplus funds are directly transferred to those whose investment demand is in excess of savings and the second by the issue of indirect financial claims through intermediaries which channel surplus funds to those wanting to make real capital investment. The latter indirect financial intermediation process is currently more common. 6/

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- 9. Financial intermediation helps the development process in three important ways. First, it increases the volume and rate of savings and also ensures that a rise in marginal savings is expressed in financial form. The rural African who is limited to traditional ways of capital accumulation and storage is thus assured of a reliable savings alternative. Secondly, the introduction of well functioning, financial intermediation could contribute to the creation of a wide variety of financial claims, differentiated by liquidity, yield, maturity, divisibility and safety, whilst also providing a specific utility. For example, money provides utility, as a means of payment, a unit of account and a store of value, while claims of life insurance provide a cover against accident, death, etc. Finally, financial intermediation ensures the most efficient transfer of funds to real capital formation.
- 10. A financial or a debt system is only one way of mobilizing savings; there may be many others, depending on net benefit and cost. For example, taxes may be imposed on households and businesses and the proceeds used by government for investment projects. In this case, there is less need for a financial intermediary to channel household savings to alternative investments. There is, therefore, no single financial structure and a given growth of output can be consistent with different developments of financial markets. The important aspect to the economy is that factors of production should always be employed to the point where the marginal social cost is equal to their marginal social benefit. 7/

^{5/} Hugh T. Patrick, 'Financial Development and Economic Growth in Underdeveloped Countries", Economic Development and Cultural Change, Vol. XIV, No. 2, January 1966, p. 182.

^{6/} Raymond Goldsmith, Financial Structure and Development, Yale University Press, 1969, pp. 1-48 and Rattan J. Bhatia and Deena R. Khatkhate, "Financial Intermediation, Savings Mobilization, and Enterpreneurial Development", The African Experience. IMF Staff Papers, Vol. XXII, No. 1, March 1975, pp. 132-138.

^{7/} John G. Gurley, "Financial Structures in Developing Economies" in Fiscal and Monetary Problems in Developing States, Proceedings of the Third Rehovoth Conference (Edited by David Krivine), Prager, 1967, pp. 99-116.

11. It has been alleged that "financial institutions can encourage a more efficient allocation of a given total amount of tangible wealth, by bringing about changes in its ownership and its composition through intermediation among various types of asset holders". 8/ Unfortunately, there are several ways in which financial intermediaries may fail to lead to greater efficiency of investment allocation. First, while some credit from the unorganized sector in underdeveloped economies finances expenditure which does not accelerate the rate of economic growth, some is used for financing productive often long-term investment. If, however, these savings are transferred to commercial banks, which lend only to credit worthy borrowers for low risk, short-term projects (or to government to finance current account budget deficits), the overall credit allocation may not be improved, in either a static or dynamic sense. 9/ Indeed, many potential borrowers may have socially desirable operations, but may be denied access to credit because of lack of collateral, or because they lack the knowledge, information and expertise of foreign immigrant firms which derives from their contact with developed countries. More serious is the reluctance of commercial banks to finance agriculture, mainly because of high loan administration costs. Financial institutions tend to direct their resources to enterprises of proven merit, ability and security, regardless of their productivity. 10/ These assertions will be discussed further in Chapter IV, following a descriptive account of the financial systems in African LDCs.

III. Some Characteristics of the Financial Systems in African LDCs

- 12. The financial systems in African LDCs are just as varied as their economic structures. The financial sectors in some countries for example, Lesotho, Botswana is dominated by branches or subsidiaries of foreign commercial banks. In others, government intervention is pervasive, for example, in Cape Verde, Guinea, Guinea-Bissau, Ethiopia and the United Republic of Tanzania, where the financial system is exclusively owned by the Government.
- 13. Although the objective of any financial development programme is to raise the quantity and quality of investment and to accelerate the rate of economic growth, the majority of African LDCs have emphasized the establishment of diversified financial infrastructures development banks, savings banks, postal savings institutions, housing finance institutions, etc. The benefits however, have not been

^{8/} Patrick (1966), op.cit., pp. 177-178.

^{9/} R.C. Porter, "The Promotion of the Banking Habit and Economic Development" in Money and Monetary Policy in Less Developed Countries - A Survey of the Issues and Evidence (Warren Coats and Deena R. Khatkhate eds.), Pergamon Press, 1980, pp. 61-62.

^{10/} Awad, Mohamed Hashim, "The Supply of Risk Bearers in the Underdeveloped Countries", Economic Development and Cultural Change, Vol. 19 (April 1971), pp. 461-468.

commensurate with the substantial resource costs involved. It has been alleged that these institutions are "no panacea for solving the basic problem of credit allocation" and that "the fragmentation of the financial sector that follows from legislated specialization tends to produce two undesirable consequences: a decline in everall efficiency and an increase in the degree of concentration". Writing on the drawbacks of banking laws which enforce specialization the study states that:

"In developing countries, demand for even basic financial services has often not yet been appropriately articulated. In such situations, it appears desirable to generate through official intervention such special sources of supply that can meet socially desirable, albeit partially dormant, private demand. For this purpose, developing countries have often established new specialized financial institutions to satisfy the previously unmet demand. Operations of such institutions are generally insulated from competition by appropriate legislation and are. even given substantial subsidies. Such actions are often defended by arguments that resemble those employed in the infant industry advocacy. However, the efficiency gains expected from such specialized and protected institutions are unlikely to be realized, because the necessary competitive conditions are often absent. In fact, a specialized institution created by special statute often assumes a monopoly position. The establishment of a special institution can be justified only if it will expand the overall size of the financial sector, widen its spectrum of financial services and reduce the degree of concentration. In order to accomplish these goals, the new institution needs to be broadly based and, after the infancy phase \sim is over, needs to be exposed to competitive forces acrosss the board", 11/

- 14. The financial systems are also characterized by a low financial interrelations ratio, the predeminance of indirect financial savings over equity securities, a relatively low share of financial institutions in all financial assets outstanding and the predominance of commercial banks over other types of financial institutions. 12/
- 15. A third striking feature is that the full savings potential of the household sector has not been effectively developed because the financial infrastructure is underdeveloped. The non-monetized sector is significantly large and the absence of money is detrimental to development since it cannot be used as a medium of exchange, a unit of account or a store of value (see Table I). Further, the non-

^{11/} D.R. Khatkhate and K.W. Riechel, "Multipurpose Banking: Its Nature, Scope, and Relevance for Less Developed Countries", IMF Staff Papers 27 (3); September 1980, pp. 504-505.

^{12/} Raymond W. Goldsmith, op.cit., p. 33.

monetization of savings inhibits the pace of economic development, since surplus wealth is hoarded in unproductive forms, such as cattle, jewellery and food reserves. It should be pointed out, however, that an increase in the supply of money does not necessarily mean an expansion of the money economy; it may well reflect an increase in the supply from the existing monetized sector, rather than an absorption from the non-monetized sector. 13/

- 16. Another key characteristic of the financial systems is the exceedingly large borrowing requirement of the public sector and the importance of the central bank as a primary source of funds to the economy and to the deposit money banks. Table II shows that in 1987, net claims on government exceeded 50 per cent of the total credit extended by the banking system in Burundi, Ethiopia, Lesotho, Malawi, Sierra Leone and the United Republic of Tanzania.
- 17. A further characteristic of the financial systems in African LDCs is that the excessive rules and regulations of the formal financial sector encourages the continued enlargement of the informal sector. 14/ Consequently, the financial institutions meet only small part of the household sector investment, while the majority of investment is financed by personal savings or from the unorganized money market. The rates of interest of the unorganized sector are exhorbitant and may be between 20 and 30 per cent per annum; informal markets handle high risk loans and require a high premium to cover repayment default losses. 15/ These high rates have two consequences: potentially productive worthwhile investment is not taken up whilst resources are diverted toward undesirable ends, such as speculative investment in land and buildings, scarce commodities and jewellery. As the unorganized sector is beyond the reach of central banking policy, credit and monetary management become impossible. 16/
- 18. Finally, the development of national financial institutions is stunted by foreign capital which eases any pressure to adopt and create banking institutions well suited to maximizing the use of scarce domestic capital. This laxity in the resource mobilization effort is clearly brought out when an analysis is made of the trends in domestic savings. There were thirteen African LDCs which registered negative domestic savings rates during 1981-1985 (see Annex 1).

^{13/} Anand G. Chandarvarkar, "Monetization of Developing Economies", IMF Staff Papers, Vol. XXIV, No. 3, November 1977, p. 677.

^{14/} Miracle, Marvin P. and others, "Informal Savings Mobilization in Africa", Economic Development and Cultural Charge, Vol. 28, No. 4 (July 1980). See also J.U. Holst, "The Role of Informal Financial Institutions in the Mobilization of Savings", Savings and Development, Denis Kessler and Pierre-Antoine Ullmo, ed., (Paris, Economica, 1985), pp. 121-149.

^{15/} Bhaduri, Amit, "On the Formation of Usurious Interest Rates of Backward Agriculture", Cambridge Journal of Economics (December 1977), pp. 341-352.

^{16/} Bhatt, V.V. "Some Aspects of Financial Policies and Central Banking in Developing Countries", EDI Seminar Paper No. 11, The World Bank, Washington D.C., August 1974, p.9.

19. For the African LDCs as a group, gross domestic savings were 4.7 per cent of GDP between 1986 and 1987, compared with 4.3 per cent between 1981 and 1985. These averages conceal disparities among countries; only seven of them exceeded the 4.7 per cent saving rate in 1986-1987, as compared to ten in 1981-1985. Furthermore, record savings gaps were recorded in Lesotho, Cape Verde and Sao Tome and Principe, estimated at 97.4, 27.8 and 20.0 per cent of GDP respectively.

Table I. Non-monetary output in relation to gross domestic product (GDP) and monetization ratios

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Country	Non-monetary output as a percentage of GDP a/	Monetization ratios b
	(a)	(b)
Benin	23	0.77
Botswana	21	0.79
Burkina Faso	38	0.62
Ethiopia	45	0.55
Malawi	39	0.61
Mali	33	0.67
Mauritania	29	0.71
Mozambique	23	0.77
Niger	42	0.58
Rwanda	49	0.51
Sierra Leone	22	o.78
Tanzania	28	0.72
Togo	20	0.80
Uganda	34	0.66

Source: a/ Adapted from Derek W. Blades, Non-Monetary (Subsistence)
Activities in the National Accounts of Developing Countries, Development Centre
Organization for Economic Co-operation and Development (Paris, 1975), p. 80.
(The non-monetary shares refer to the "Latest year available", which in most cases is 1969 or 1970.)

 $\underline{b}/$ The monetization ratios have been calculated on the basis of the percentages in column (a).

Table II. Net claims on government and central bank advances to economy and deposit money banks in selected African LDCs, 1987

Country	Net claims of government as a percentage of total credit extended to the economy	Central bank credit to economy 1/	Central Bank advances to deposit money banks 2/
Benin	11.26	60.81	48.4
Burundi	54.37	63.49	0.5
Central African Republic	38.60	71.02	44.1
Chad	4.75	64.45	51.7
Ethiopia	51.50	60.78	71.7
Lesotho	59.59	18.41	_
Malawi	60.24	68.07	_
Mali	44.36	64.60	36.6
Mauritania	18.50	45.02 a/	30.6
Niger	15.35	69.71	27.3
Rwanda	32.11	39.61	3.2
Sierra Leone	84.85	66.82 a/	J. 2
Somalia	43.71	95.87 a/	74.5
Sudan	46.02 <u>a</u> /	76.00 a/	0.3
Tanzania	59.91 <u>a</u> /	60.45 a/	1.9 b/
Uganda	43.87 a/	90.09a/	37.3

Source: ECA Secretariat calculations based on IMF, International Financial Statistical Yearbook, 1988.

 $[\]frac{1}{2}$ Total central bank advances as a percentage of total credit extended to the economy.

 $[\]underline{2}/$ Central bank advances as a percentage of total loans of deposit money banks.

a/ Refers to 1986.

b/ refers to 1985

- 20. Gross domestic savings accounted for 31.9 per cent of the investment made by the African LDCs between 1985 and 1987. The balance of the financing came from external sources, with a high component of unrequited transfers. The average resource deficit was equivalent to 10.1 per cent of GDP between 1985 and 1987. 17/
- 21. The record of financial savings has also been unsatisfactory. The ratio of financial savings to gross domestic product (defined as a change in broad money) has fluctuated, but shown no sustained tendency to increase (see Table III).

Table III. Ratio of financial savings to gross domestic product 1980-1986 in selected LDCs (in per cent)

Country	1980	1981	1982	1983	1984	1985	1986
	8.4	4.7	5.6	-0.3	2.9	0.2	N.A.
Benin Burundi	3.5	3.5	-0.4	3.8	0.6	2.8	0.1
Ethiopia	1.0	2.7	2.7	5.1	2.5	5.5	4.5
Gambia	2.0	4.6	3.8	6.5	1.5	11.6	1.9
Malawi	2.1	4.5	2.8	1.1	5.6	-0.2	4.5
Mauritania	2.1	5.4	0.3	1.1	2.8	N.A.	N.A.
Niger	2.5	2.7	~1.7	-0.0	2.9	1.0	N.A.
Rwanda	1.1	0.6	0.1	1.3	1.1	2.0	2.0
Sierra Leone	3.6	0.4	8.0	4.9	5.8	13.3	18.1
Tanzania	8.8	6.5	6.9	6.4	1.3	8.2	7.3
Togo	2.5	10.9	6.2	0.2	6.3	N.A.	N.A.

Source: ECA Secretariat calculations based on IMF International Financial Statistical Yearbook, 1988.

a/ Defined as a change in broad money (M2); that is, currency outside banks, plus demand deposits, plus quasi monetary savings.

^{17/} Economic Commission for Africa, Review of Economic and Social Conditions in African Least Developed Countries (1936-1987), E/ECA/LDCs/EXP.7/2, April 1988, p. 2.

IV. The Banking System and Loanable Funds

- 22. In the majority of African LDCs, open markets for primary securities are insignificant and the available data on financial assets other than currency, demand and quasi-monetary deposits is extremely limited. Data on the Gross National Product (GNP) for most countries is not readily available and GDP figures have been used to facilitate comparison.
- 23. Table IV shows the ratio of monetary liabilities to GDP (currency, demand and quasi-monetary deposits) for thirteen African LDCs. The M2/GDP ratio, giving an indication of real additions to the ongoing loanable capacity of the banking system, rose markedly in the Sudan (0.171 to 0.612) and in Togo (0.172 to 0.490), between 1970 and 1985. It may be seen that in the Sudan, the enormous relative growth of currency and demand deposits was responsible for the growth in M2 (money supply) whilst in Togo, both currency demand and quasi-monetary deposits grew enormously.
- 24. Between 1970 and 1985, the M2/GDP ratio averaged 0.326 in the United Republic of Tanzania and 0.253 in Ethiopia and the Gambia. In most other countries, however, the M2/GDP ratio, reflecting outstanding bank finance provided to both the government and the private sector, was abysmally low, ranging from 0.114 in Rwanda to 0.225 in Benin. These low ratios mainly indicate the existence of a large non-monetized sector and the virtual absence of corporate securities. 18/
- 25. Domestic credit as a proportion of GDP rose markedly in Ethiopia, Lesotho, Malawi, Mali, Sierra Leone, Mauritania, Sudan, Uganda, the Gambia, Somalia and the United Republic of Tanzania. The sharp rise in the credit-GDP ratio in these countries was caused by the fast borrowing requirements of the Government. In 1987, net claims of the Government accounted for over 40 per cent of the total credit extended to the economy.
- 26. In most African LDCs, quasi-monetary savings, which are the key element in achieving real growth in the banking system showed no sustained tendency to increase. Real interest rates remained negative, implying at least a tendency to substitute the hoarding of goods and self-investment for financial savings.
- 27. Apart from repressing the savings mobilization effort, the low/or negative rates of interest tend to generate excess demand for institutional funds, of borrowers, placing too much emphasis on collateral and assets. Moreover as interest rates drop, the banking system attempts to direct a larger proportion of its loan portfolio to the most credit worthy borrowers. Since interest rate subsidy is usually proportional to the amount of the loan, the well-off borrower benefits from larger subsidies, while

^{18/} In financially mature industrialized economies, the M2/GNP ratio could exceed the one per cent range because of a diversified set of financial institutions and instruments. In Japan, for example, the M2/GNP ratio stood at 1.1 per cent in 1987.

Table IV. The financial structure of African Least Developed Countries (Monetary and GDP data in undeflated billions of local currency)

		MONEY SUPP	PLY			
Country	Demand deposit & currency (M ₁)	Time & savings deposits	Total	domestic	Ratio of M ₂ to G D P	Domestic credit as % of G D P
Benin						
1970	9.6	0.4	10.0	69,7	0.144	10.4
1975	26.9	5.0	31.9	113.1	0.282	26.1
1980	45.4	16.0	61.4	245.6	0.25	28.4
1985	87.1	24.5	111.6	499.8	0.23	30.2
Burkina Faso						·
1970	9.1	0.2	9.4	98.7	0.095	1.8
1975	22.5	1.8	24.3	137.7	0.177	12.1
1980	41.7	11.6	53.2	272.0	0.196	20.8
1985	69.5	23.8	93.3	455.9	0.205	15.9
Burundi						•
1970	2.1	0.1	2.2	19.0	0.116	8.9
1975	3.3	0.1	3.4	33.2	0.103	6.9
1980	9.6	2.8	12.4	85.6	0.145	15.3
1985	18.2	5.7	23.9	141.3	0.169	19.1
Ethiopia						
1970	0.43	0.19	0.62	4.5	0.138	11.6
1975	0.88	0.30	1.18	5.5	0.215	15.2
1980	1.57	0.63	2.20	8.5	0.213	32.8
1985	2.70	1.29	3.99	10.0	0.399	49.0
Gambia			٠			
1970	0.02	0.003	0.02	0.082	0.244	10.0
1975	0.04	0.01	0.05	0.22	0.227	20.5
1980	0.06	0.03	0.09	0.42	0.214	46.6
1985	0.16	0.09	0.25	0.74	0.338	71.2
Malawi		•				
1970	0.03	0.02	0.05	0.27	0.185	10.8
1975	0.07	0.05	0.12	0.53	0.185	23.2
1980	0.1	0.09	0.19	1.0	0.19.	33.3
1985	0.17	0.22	0.39		0.193	
	V 1 1 1	V.22	V.33	2.02	A+123	33.9

Table IV. The financial structure of African Least Developed Countries (cont'd)

		MONEY SUP	PLY			······································
Country	Demand deposit & currency (M 1)	Time & savings deposits	Total	Gross domestic product	Ratio of M ₂ to G D P	Domestic credit as % of G D P
Mauritania	·		· · · · · · · · · · · · · · · · · · ·			· . · · · · · · · · · · · · · · · · · ·
1970	1.1	0.14	1.25	11 2		
1975	2.9	1.1	4.0	11.2 20.6	0.112	12.8
1980	5 .7	1.4	7.1		0.194	24.5
1985	12.1	1.7	13.8	38.1 44.5	0.186	30.7
Niger		_,,	43.0	44.3	0.310	45.4
1970	8.8	0.8	0.6			
1975	20.1	2.2	9.6	111.0	0.0 86	7.6
1980	64.6		22.3	157.7	0.141	10.8
1985	80.6	13.3 27.5	77.9	536.2	0.145	15.4
Rwanda	30.0	27.5	108.1	682.3	0.158	16.8
1970						
1975	2.2	0.4	2.6	37.7	0.069	5.2
1980	4.9	1.1	6.0	52.8	0.114	9.0
1985	12.0	3.2	15.2	108.0	0.141	3.2
	14.7	8.7	23.4	173.3	0.135	9.6
Sierra Leone	•					
1970	0.03	0.01	0.04	0.35		.
1975	0.06	0.03	0.09	0.57	0.114	7.4
1980	0.15	0.11	0.26	1.29	0.158	17.9
1985	0.9	0.31	1.21	3.8	0.202	32.0
udan				3.0	0.314	46.0
1970	0.12	0.01	0.13			
1975	0.28	0.05	0.13 0.33	0.76	0.171	23.1
1980	1.08	0.17	1.25	1.85	0.178	30.6
1985	4.14	1.96	6.1	4.95	0.252	35.7
anzania		_,,,	0.1	9.98	0.612	58.4
1970	1.68	0.54	2 22	2		
1975	4.28	0.54 1.27	2,22	9.17	0.242	16.6
1980	13.35		5.55	19.01	0.292	29.2
1985	25.51	4.17	17.52	42.12	0.416	44.3
ogo	بلال <u>.</u> د به	13.88	39.39	111.83	0.352	46.0
	• - E	•				
1970	10.2	2.5	12.7	73.7	0.172	4.9
1975	21.6	6.7	28.3	128.3	0.220	20.3
1980	55.3	17.2	72.5	238.4	Q.304	29.2
1985	82.7	60.5	143.2	292.1	0.490	21.2

Source: ECA Secretariat calculations based on IMF, International Financial Statistical Yearbook, 1988.

small-scale enterprises and farmers of limited means receive low amounts. The high degree of correlation between levels of income and access to credit perpetuates the unequal distribution of wealth. 19/ On the undesirable aspects of credit rationing, one study suggests that rationing tends to inhibit innovation, in that new enterprises, or those introducing technologies with which banks are unfamiliar, tend to be discouraged. 20/ Commercial banks in African LDCs are usually located in urban centers and concentration on funding large farming enterprises, consumer based industries and the foreign trade sector. As a result, small farmers and indigenous small-scale enterprises remain financially repressed, although they possess quite a large share of the deposit resources on which bank credit is based.

- 28. Table V shows the structure of commercial bank credit in selected African LDCs. The data is startling and shows clearly that commercial banks are loath to offer credit to the agricultural sector where over 80 per cent of the population work. The most notable exception is Malawi, where agricultural credit stood at 40.5 per cent of the total lcan portfolio and the growth rate was a compound annual average of 33.9 per cent, between 1973 and 1984. The Gambia and Uganda attained 47.5 and 35.8 per cent respectively of their portfolios in financing agriculture, but had much lower or even negative growth rates.
- 29. Another obvious effect of credit rationing in the formal markets and of discrimination against the traditional sectors, is an increased recourse to informal finance. In the rural areas of Niger, for example, access to institutional credit is extremely limited. The findings of a recent survey indicate that almost one-half of the rural households sampled had not obtained a single loan in the last five years; fifty four per cent secured at least one loan during the period and only four per cent had regular access to credit, receiving five or more loans in the same period. The average randomly selected rural household borrowed 30 thousand CFA francs, or about 19 per cent of the average agricultural income. 21/ (see Table VI)

^{19/} Adams Dale W. and G.I. Nehman, "Rural Financial Markets in Low Income Countries: Recent Controversies and Lessons", Occasional Paper No. 1170, The Ohio State University (10 October, 1984).

^{20/} Ronald I. McKinnon, (1980), op.cit., p. 104.

^{21/} Carlos Cuveas, Rural Finance Profiles in African Countries, The Case of Niger, edited by Mario Masini, FINAFRICA, Cariplo-Milan, Vol. I, 1987, p. 155.

Table V. Share and average annual compound growth rate of agricultural and trade credit in total loan portfolio of commercial banks

		· · · · · · · · · · · · · · · · · · ·	<u> </u>	<u> </u>	·	
Country	Period	Agricultural credit in total loan portfolio of commercial banks (% shares)	Agricultural credit ave- rage annual compound growth rates	Domestic and foreign trade in total loan portfolio of commercial banks (% shares)	credit average	,
Benin 1/	1982-84	24.5	4.5	46.7	-1.5	i
Botswana 2/	1982-84	10.0	-2.6	27.3	41.0	
Burkina Faso <u>1</u> /	1982-84	9.0	26.9	57.5	-2.44	
Ethiopia 3/	1980-84	4.3	-1.3	56.0	-2.3	
Gambia 4/	1973-84	47.5	7.7	22.2	23.4	
Lesotho <u>5</u> /	1980-85	1.1	5.0	53.5	19.0	
Malawi <u>6</u> /	1973-84	40.5	33.9	19.1	3.7	
Mali	1984	13.4	_	39.3	- '	
Niger 1/	1982-84	10.2	37.3	58.2	4.9	
Sierra Leone <u>7</u> /	1973-84	2.9	65.9	52.4	16.9	
Somalia 8/	1973-80	17.6	24.7	58.7	10.4	
Tanzania <u>9</u> /	1973-82	4.2	11.2	63.9	11.5	
Togo 1/	1982-84	6.0	1.4	65.4	-2.25	
Uganda <u>10</u> /	1980-84	35.8	-2.35	34.0	62.0	

Source:

- 1/ BCEAO, Annual Report 1984 (including short, medium- and long-term credit).
- 2/ Bank of Botswana, Annual Report (1981-84).
- 3/ Commercial Bank of Ethiopia, Annual Report (1980-84).
- 4/ Central Bank of Gambia Bulletin (1973-84).
- 5/ Central Bank of Lesotho, Quarterly Review, March 1985.
- 6/ Reserve Bank of Malawi, Financial & Economic Review, Vol. XVI, No.4, 1984.
- 7/ Bank of Sierra Leone, Annual Report and Statement of Accounts (1973-84).
- 8/ Central Bank of Somalia, Annual Report (1973-80).
- 9/ Bank of Tanzania, Annual Report (1973-84).
- 10/ Bank of Uganda, Annual Report (1980-84).

Table VI. Institutional and non-institutional borrowing by rural households in Niger

Source	Access per cent of households	Average amount CFA	Expected borrowing CFA	Per cent of agriculture income	Share of each source per cent
Institutional Non-institutional	22.4 83.9	15,916 31,757	3,565 26,65 1	2.2	11.8 88.2
Total			30,216	18.9	100.0

Source: Cuveas (1986) based on Ohio State University Survey, 1985.

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- 30. Credit rationing also inhibits economic flexibility. At low interest rates, non-price criteria are used to ration loan-funds. Credit may be allocated on the basis of political pressure by sponsors and consequently, projects that have easy access to bank loans are often neither the most productive, nor the most profitable. Expounding on the undesirable practice of public enterprises one study described subsidized loan rates as an assessment upon depositors, being biased against savers and labour, acting as a bonus for products and processes that utilize capital intensively. The projects assisted are often poor, in terms of anticipated rates of return and factor productivity. Foreign exchange is wasted because loans encourage imports of capital equipment or stimulate exports based on imported materials which realize small, even negative, value added in terms of international prices. "The subsidized loan rate represents repression at its worst". 22/
- 31. In the vast majority of African LDCs state-owned or state-managed enterprises constitute a large and a rapidly growing sector. One mechanism for financing these state-owned enterprises is by diverting resources from the commercial banks towards the subsidized uses placed by the central bank. In Mali, for example, reserve money rose from 6.3 per cent of outstanding demand, saving and time deposits, in 1978, to 26.3 per cent in 1987. Over the same period, the loan/deposit ratio of the deposit money banks stood at 145.1 implying central bank accommodation to meet the growing demand for bank credit from the public sector. In Chad, reserve requirements with the central bank almost doubled between 1978 and 1987, the loan/deposit ratio jumped to 262.7 per cent and central bank advances as a percentage of total loans by deposit money banks reached 50 per cent. (see Table VII)

^{22/} Edward S. Shaw, (1973) Op.cit., p. 87.

32. These exhorbitant reserve requirements, caused by uncovered budget deficits and political pressure to channel subsidized credits to particular borrowers through specialized credit agencies have become one of the prime causes of financial repression. 23/

Table VII. Trends in reserve money of deposit money banks

Country	Reserve mon demand + time per_c	deposits a/	Loan/deposit <u>b</u> / ratio	Central bank c/
50 22.02.7	1978	1987	1987	1987
Burundi	12.1	17.3	117.5	0.5
Chad	9.0	19.2	262.7	51.7
Mali	6.3	26.3	164.0	30.6
Niger	20.1	37.8	145.0	27.3
Rwanda	10.9	12.1	100.5	3.2

Source: ECA Secretariat calculations based on the IMF International Financial Statistics Yearbook 1988.

- a/ Reserve money in total outstanding demand + time deposits.
- b/ Credit extended to Government and Private Sectors as a percentage of total deposit resources (demand, time + saving deposits).
- c/ Central bank advances as a per cent of total loans of deposit money banks.
- 33. Furthermore, an effective low ceiling on real loan rates accentuates risk aversion and liquidity preference in the commercial banking system. Consequently, financial intermediaries have little incentive to explore new lending opportunities. 24/

^{23/} McKinnon, (1980), op.cit. p. 108.

^{24/} Shaw, (1973) op.cit., p. 86; see also Arnaldo Mauri "Savings Banks in African Countries", in The Mobilization of Savings in African Countries. Proceedings of an International Conference held in Milan, 20-23 September 1971, pp. 51-52.

The commercial banks in African LDCs have a sound resurce base, but prefer to deploy excess liquid assets in treasury bills and government bonds, where risks are marginal. Few African LDCs have deliberately directed the lending pattern of the commercial banks to generating development. In some countries, the banking system is heavily underlent, reflecting a reluctance to be committed to the national economic development effort.

34. Table VIII shows the credit/deposit ratios of the commercial banking sector in selected countries. It will be noted in particular, that when Government borrowing (treasury bills, etc.) is excluded, several banking systems are considerably under-extended.

Table VIII. Trends in loan/deposit ratios of commercial banks in selected African LDCs (1987)

Country	Credit/deposit ratio <u>l</u> /	Excluding government credit
Ethiopia	92.7	43.62
Lesotho	72.2	34.0
Malawi	66.9	49.07
Rwanda	100.5	74.67
Sierra Leone	74.4	30.74
Somalia	45.6	45.56 a/
Suđan	60.7	59.71 a/
Tanzania -	101.6	69.74 a/
	37.3	36.88

Source: ECA Secretariat calculations based on IMF International Financial Statistical Yearbook, 1988.

- 1/ Credit extended to the Government and Private Sectors as a ratio of total deposit resources (demand, time and savings deposits).
- a/ Denotes 1986.
- 35. The recored of the postal savings system has been equally disappointing, for resource investment is cofined to Government bonds and treasury bills, with no attempt to fulfil the credit needs of the rural populace. Table IX shows postal savings deposits as a percentage of total demand and quasi-monetary savings of the commercial banking system in the African LDCs. It can be seen that saving deposits declined steadily between 1970 and 1987 in Benin, Burkina Faso, Central African Republic, Chad, Mauritania, Niger and Togo mainly because of the low rate of interest offered, compared with the return on other types of investment. The increase in the number of branches of commercial banks in the rural areas has also contributed to the poor performance of the postal savings system.

Table IX. Share of post office deposits as a percentage of total demand, quasi-monetary savings of deposit money banks

Country	1970	1975	1980	1985	1987	
Benin	12.71	5.00	5.32	3.17	3.89	_
Burkina Faso	11.85	8.33	4.29	3.18	3.33	
Central African Republic	8.57	6.29	2.45	1.65	1.67	,
Chad	3.09	3.23	1.87	0.81	0.76	
Malawi a/	15.33	12.59	13.19	17.40	· · · ·	
Mali	-	0.07	2.03	6.35	9.14	
Mauritania	8.04	5.35	6.61	1.06	-	
Niger	8.67	4.90	2.69	2.23	2.13	
Tanzania b/	-	1.99	1.83	2.48	-	
Togo	9,15	2.68	1.70	1.21	0.87	

Source: ECA Secretariat calculations based on IMF International Statistical Yearbook 1988.

- a/ Financial and Economic Review, Vol. XIX, No. 2, 1987, Reserve Bank of Malawi.
- b/ A Kihwele, "The Future of Deposit Business by Post Office Savings Bank", Workshop on Savings Banks Services in Africa, Berlin (West) and Bonn, 15 to 22 January 1986.

36. The development banks have not performed well either. In the majority of African LDCs, development banks rely heavily on foreign loans and government contributions. They are financial intermediaries only in their credit extension activities for they rarely mobilize savings, even though many were empowered to do so in their statutes of establishment. It is cheaper to draw loanable funds from the central banks concessionary rediscount lines than to promote voluntary savings. 25/ The Banque de developpement du Mali portfolio is largely financed by the central bank through rediscounting, which accounted for 61 and 60 per cent of total outstanding credit in 1981 and in 1982 respectively. 26/

^{25/} Adams, Dale, W., "Do Rural Financial Savings Matter" Savings and Development Denis Kessler and Pierre Antoine, Ulmo eds. (Paris Economica, 1985), p. 10.

^{26/} Mario Masini, Rural Finance Profiles in African Countries, Volume 1, FINAFRICA (edited by Mario Masini), (Milan, 1987), p. 90.

- 37. Annex 2 shows the structure of development bank long-term liabilities in selected African LDCs. The implications of these rising debts is a cause for concern. Debt servicing and amortization absorb large proportions of any new resources allocated, thereby reducing the amounts available for new lending. Banks are obliged to service their foreign debts in the currencies of the loan. Depreciation of the local currency immediately raises the local currency value of the foreign currency debts so that foreign exchange risks are associated with foreign currency debts. 27/
- 38. The precarious state of development banks in African LDCs is clearly brought out in an analysis of debt/equity, liquidity and profitability ratios.
- 39. Annex 3 shows debt equity and liquidity ratios and the return on investment and equity in seven development banks. The debt/equity ratios, demonstrating the banks ability to meet short and long-term obligations, show a deterioration which is particularly marked in the Agricultural and Industrial Development Bank of Ethiopia (10.3:1 in 1980 to 17.6:1 in 1985) and the Investment Bank of Malawi (2.8:1 in 1980 to 5.0:1 in 1986). Over the same period, the liquidity ratios of the Agricultural and Industrial Development Bank of Ethiopia were 0.6:1 and 0.4:1 in 1981 and 1985 respectively, while that of the Malawi Development Corporation was 1.1:1 and 1.2:1 which implies a shortage of working capital. In contrast, the liquidity ratios of the Tanzania Rural Development Bank were remarkably high at 22.3:1 in 1982 and 14.2:1 in 1986, implying the existence of an idle non-productive cash balance.
- 40. The return on investment and equities was far from satisfactory and averaged below 10 per cent in the majority of the specialized credit institutions. This can be explained partly by fixed interest rates barely covering average operating costs, which are rarely revised in line with prevailing levels of inflation.
- 41. Credit subsidies are seldom paid by governments running a surplus of revenue over expenditures. Usually, the central bank is instructed to lend to (or discount the loans of) the credit agency at very low (or in real terms a negative) rates of interest. Monetary control thus becomes more arduous. If a central bank merely lends directly to the agency, the resulting excess supply of base money leads to price inflation. It would be less inflationary simply to tap the resources of the traditional deposit banks commercial and savings by raising their reserve requirements. The problem is, of course, that this increases the degree of repression in the rest of the financial system. Essentially, the subsidy to the new credit agency is at the expense of other potential borrowers and of bank depositors. 28/
- 42. Finally, there are two aspects of domestic policy to which attention should be continuously directed.

^{27/} Bourne, Compton and Douglas H. Graham, "Funding and Viability of Rural Development Banks", Savings and Development, No. 4-IV (Milan, 1980), p. 308.

^{28/} McKinnon, (1980) op.cit., p. 116.

- 43. Repressive influences on the domestic financial structure can encourage deterioration in the quality of foreign finance. If domestic rates of interest are below world levels, foreign enterpreneurs or transnational owners of domestic subsidiaries will be encouraged to resort to the domestic market and minimize the inflow of equity or other foreign capital. 29/ In Central Africa, for example, due to the transfers of capital within the Franc Zone, savings were transferred for deposit in France where the rates of interest were higher. Furthermore, French enterprises investing in the Zone preferred local financing rather than the most costly borrowings from native French Corporations. 30/ In the BCEAO countries, interest rates were increased in 1975 and 1980; the 1975 reform included not only an interest rate increase but also the establishment of an inter-bank call market. The main objective of this reform was to prevent excessive interest rate differentials from pulling funds from the BCEAO area and to provide profitable employment for the banks' surplus funds, which previously had been invested abroad. 31/
- 44. This assertion should, however, be interpreted with caution. To begin with, raising the discount rate in African LDCs does not automatically attract the floating capital flow, as in reality it is more senstive to political risks than to high gains. Even local savings are sensitive to these risks, and are syphoned off to a number of accounts abroad for protection. Secondly, the discount rate only affects banks when they lack liquidity. When there is an abundance of deposits or reserves, the banks can do without the refinancing from the central bank. Thirdly, the discount rate of handling has indirect effects which should be taken into account prior to decision making. A lowering can certainly increase the credit volume, but this, in turn, can cause imports to increase as well because of external dependence, which erodes currency reserves and decreases the basis of currency and credit. 32/ In addition, there is in some countries a lingering distrust of government and institutions associated with government, which dissuades people from exposing their assets in a way which, they fear, might invite interference, control, taxation or outright confiscation. The result is that African economies remain severely under-monetized, so depriving countries of the opportunity to make use of the large amounts of development capital available literally on their doorsteps. 33/

^{29/} Ibid., p. 117.

^{30/} Yondo, Marcel. "Finance Currency and Credit Policies in Central Africa, National Bank of Egypt Lectures Programme (Cairo, 1983).

^{31/} Sergio Pereira Leite, "Interest Rate Policies in West Africa", IMF Staff Papers, Vol. 29, No. 1, March 1982, p. 58.

^{32/} Yondo (1983), op.cit.

^{33/} Abebe Adera, "Agricultural Credit and the Mobilization of Resources in Rural Africa", Savings and Development, No. 1-1987-XI (Milan, 1987), pp. 29-67.

45. Lastly, an overvalued exchange rate makes imported goods and services, external borrowing and foreign exchange cheap options, which encourages their use. The subsidy implicit in an overvalued exchange rate accrues mainly to urban based importers, manufacturers and employees, while the rural based producers of primary products for export suffer an implicit tax. 34/ It has been argued that the net effect is a massive transfer of wealth from the rural to the urban areas - further reducing the agricultural base which is so important in developing countries whose main assets are mainly land and labour. 35/ The domestic financial system should not have to compete in an artificial international environment; the exchange rate should be consistent with the country's domestic financial requirements.

V. Suggested Policy Reforms

- 46. The effective functioning of a sound financial structure presupposes the existence of appropriate financial institutions and institutional philosophy; financial instruments that are consistent with savers' and borrowers' preferences; and a rational structure of postive real interest rates. 36/
- 47. The issue of interest rates is the most contentious subject on which there is no unanimity of opinion. Some authors have argued that a relatively high growth of output can coexist with negative real interest rates. 37/ In contrast, several studies have found no direct relation between the level of saving and the interest rate. 38/ In addition, a recent study states that the debate is far from being

^{34/} Michael Dacosta, Finance and Development, Westview Press (Boulder, 1982), p. 106.

^{35/} Lipton, M., (1977), Why Poor People Stay Poor: A Study of Urban Bias in World Development, (Temple Smith) London.

^{36/} V.V. Bhatt, "Improving the Financial Structure in Developing Countries", Finance and Development, Vol. 23, No. 2 (June, 1986), pp. 20-22.

^{37/} Agarwala, R.K., "Price distortions and Growth in Developing Countries", World Bank Staff Working Papers, No. 575 (Washington D.C.: The World Bank, 1983) and Lanyi, Anthony, and R. Saracoglu, "Interest Rate Policies in Developing Economies", Occasional Paper No. 22 (Washington D.C.: IMF, 1983).

^{38/} Chandarvarkar, Anand G., "Some aspects of interest rate policies in less developed economies: The experience of selected Asian Countries", IMF Staff Papers, March 1971; Mikesell, R.F. and James E. Zinser, "The Nature of the Savings Function in Developing Countries: A survey of the Theoretical and Empirical Literature", Journal of Economic Literature, Vol. II, No. 1 (March 1972), pp. 1-26; Brown, Gilbert T., Korean Pricing: Policies and Economic Development in the 1960s (Baltimore, M.D.: Johns Hopkins University Press, 1973), Khatkhate, Deena, "Assessing the Impact of Interest rates in Less Developed Countries; World Development, Vol. 16, No. 5, pp. 577-586, 1988.

settled and the prospects for future research with more conclusive findings in this field will depend heavily on improvement of data availability. 39/

- 48. The apparent unwillingness of governments to adjust nominal interest rates to changes in the rate of inflation is often seen as an attempt to keep the costs of financing the public sector deficit as low as possible. The second argument used to justify the policy of a low and stable interest rate structure is the Keynesian theory that a low interest rate will provide the necessary stimulus for increased capital formation. Even though this may be applicable to a mature industrialized economy, however, it is not applicable to the special circumstances of developing countries. These economies are characterized not by excess of savings but by numerous productive opportunities that cannot be effectively exploited because of the insufficiency of savings. Furthermore, the argument that lower interest rates will raise the rate of investment implicitly assumes that additional resources for investment will somehow be obtained. This depends on additional savings being created, as the initial investment results in an increase in output and income. In many developing countries, such a flexible response of supply in the short run may be impossible, because of shortages such as skilled labour, that are essential complements to increased investment. 40/
- 49. A third justification for maintaining a low interest rate structure is that it assists small farmers and indigenous small-scale industries, who cannot afford to borrow at high interest rates. Unfortunately, it is rare to find a situation in which subsidies for agricultural credit have resulted in any significant increase in productivity. The low productivity of agriculture may be a consequence of a number of structural rigidities rather; than of interest rate per se. Most farmers do not need the incentive of cheap credit to adopt profitable innovations so long as the market for farm output is satisfactory. 41/ They do not often ask that their production credit be cheap but rather that it be timely, expeditous and dependable. 42/

^{39/} A.G. Gerardom, "Interest Rates, Savings and Growth in LDCs: An Assessment of Recent Empirical Research", World Development, Vol 16, No.5 (May, 1988) pp.589-605.

^{40/} Anthony Lanyi and R. Saracoglu (1983), op.cit., p.9.

^{41/} Penny, David H., "Farm Credit Policy in the Early Stages of Agricultural Development", Australian Journal of Agricultural Economics, Vol 2, No.1 (June 1968).

^{42/} There are other reasons adduced for keeping the rate of interest low. For example, in countries whose banking system have not been nationalized, low ceilings on lending rates also promote the formation of "groups" of banking and industrial concerns. The result is that on the asset side there is an enormous concentration of credit in few companies associated with the groups, whereas on the liability side this leads not only to the exclusion of non-group (typical medium- and small-scale) companies and middle and lower class persons from access to credit facilities, but also produces large transfers from low to high income groups. See V. Galbis, Financial Sector Liberalization Under Oligopolistic Conditions and a Bank Holding Structure, Savings and Development, No. 2, 1986, p. 133.

- 50. A fourth reason behind interest rate repression emanates from the fear that higher interest rates may be inflationary, either through the direct impact on costs or the indirect effect through expectations. Unfortunately, this argument completely ignores the probable response of government to the lower level of investment which could result (for example at low interest rates savings may not be forthcoming, thus constraining fixed capital formation). The most likely response is that government dissatisfaction with low private investment will encourage an enlarged public investment programme. Given low financial savings, this must rely for financing on monetary expansion with its associated inflationary consequences. Furthermore, this process is self-reinforcing. The more financialized saving is repressed by low real interest rates, the greater the government's need to compensate by monetary expansion. 43/
- 51. If existing real interest rates are set at exceedingly low or negative levels, then there must be an appropriate level of interest rate structure which will contribute in the mobilization of savings and at the same time enhance the level of fixed capital formation. It is important to stress that interest rate policy formulation is an exceedingly difficult task, requiring a qualitative judgement of many factors, rather than the application of an interest rate formula. Given the complex and pervasive interrelationship between the real economy and financial markets, it is crucial that the government closely co-ordinates its monetary, fiscal, exchange rate and trade policies. Even the best financial sector policy could flounder in the face of contradictory signals coming from the real side of the economy, i.e. where financial and economic rates of return differ widely. 44/
- 52. Too high interest rates tend to lower economic growth by reducing investment demand. The consequences of paying a higher interest rate than the underlying productivity of the economy's capital will allow must be carefully examined. High interest rates on deposits depend ultimately on the opportunities available for utilizing those funds to gain a sufficiently high return. In the absence of such opportunities, the financial system must transmit its accumulated capital abroad for investment in high-yielding foreign financial assets. Thus, a high interest rate policy while helping to financialize savings does not contribute to domestic investment and hence to development. 45/ A study based on the Latin American experience suggests that uncertainties within the private sector, which will not disappear by freeing interest rates, reduce the scope for private long-term finance and stock market.

^{43/} Alan R. Roe, "High Interest Rates: A New Conventional Wisdom for Development Policy! Some Conclusions from Sri Lankan Experience", World Development, Vol. 10, No. 3 (March, 1982), pp. 211-221.

^{44/} Hanson James A., and Craig R. Neal, "Interest rate policies in selected developing countries, 1970-1982", World Bank Staff Working Papers, No. 753 (Wasington, DC., The World Bank (September 1965), pp. 35-36.

^{45/} Deena Khatkhate, "National and International Aspects of Financial Policies in LDCs. A Prologue, World Development, Vol. 10, No. 9 (September 1982), p. 611; see also Deena Khatkhate, "False Issues in the Debate on Interest Rate Policies in Less Developed Countries", Banco Nazionale Del Lovoro Guarterly Review, No. 133 (June, 1980), pp. 205-221.

The important aspects are that real interest rates should not be set at levels too far removed from realistic estimates of the shadow opportunity cost of capital. 46/

- 53. Imperfections of the financial markets have also to be considered in determining the appropriate level of interest rates. The lending operations of banks in LDCs are bedeviled by numerous risks absent in perfect credit markets, where there is full informatic about the borrowers, so that lending rates include a premium for bearing risk. As a result, the difference between the deposit rate and the loan rate is often larger than in developed countries. Unless market imperfections are modified significantly, the financial system will not be in a position to offer a real interest rate on deposits, which increases the rate of return to capital. 47/
- 54. In the subsequent paragraphs, an attempt will be made to test the assertions outlined above, in the context of the African LDCs.

Empirical Evidence

- 55. The paucity of data precludes any empirical analysis of the savings and investment patterns in African LDCs. During 1980-1987, it appears that the investment rate in African LDCs, as a group, was 15.1 per cent and the rate of domestic savings 6.4 per cent, which reflects the high dependence of the African LDCs on external resurces 57.6 per cent) to finance fixed capital formation.
- 56. The responsiveness of savings to interest rate changes and other factors are more significant in the private than in the public sector. It was not possible, however to find a significant example from the LDCs where private deposits can be separated from public savings. The lack of accurate price statistics also makes it difficult to estimate inflation rates and real interest rates.
- 57. Bearing in mind these constraints, some tests were run using time series data for the period 1980-1987. The list of variables includes: gross domestic savings; gross domestic investment; GDP; real interest rates (calculated using the GDF deflator); money supply broadly defined (M2) and quasi monetary deposits. The following equations were derived:

^{46/} Carlos Diaz-Alejandro, "Good-bye financial repression, hello financial crash" Journal of Development Economics, Vol. 19, No. 1/2, Sept-Oct. 1985, p. 20.

^{47/} Rce, (1982) op.cit.

- 58. Annex 4 (Table I) shows that except for the United Republic of Tanzania, the estimated equations have a high coefficient of determination (\mathbb{R}^2) .
- 59. The results, however, reveal some level of multicollinerity and a high dispersion of the estimated coefficients. The GDP real growth rate (g), in some countries (Burkina Faso, Malawi, Mauritania, Miger and Rwanda) has a positive impact on the level of savings and shows a low dispersion of the estimated coefficients. In Togo, Burundi, the Gambia, Sierra Leone and the United Republic of Tanzania, the impact of the growth of real GDP on the level of savings was insignificant, with very low estimated coefficients.
- 60. The impact of interest rate on the level of savings was not homogeneous and the coefficients were not significant. The per capita GDP showed the same traits.
- 61. Some broad conclusions can be drawn from these results. The impact of interest rate on savings is not direct and this is attributable to the low level of per capita income, the predominance of the subsistence sector, with low investment requirements and outmoded methods of production, and the limited access of the population to financial institutions.
- 62. To identify the main determinant of the investment function, the following equations were fitted for two groups of countries:
- Equation 2 I (r,YD) where r is the real interest rate; and YD is the real GDF. The tests were run on Burkina Faso, the United Republic of Tanzania and Sierra Leone and the results were homogeneous: the effects of both income and interest rate on the level of investment were positive but most of the estimated coefficients were not significantly different from zero. (see Annex 4, Table II) This shows the importance of exogenous investment as referred to above.
- Equation 3 I (r,v,g) where r is the real interest rate on deposits, v the real interest rate on lending and g, the real growth rate of GDP. The tests were run on Burundi, Gambia, Rwanda, Togo, Malawi and Niger. The income and interest rate effects on the level of investment were not homogeneous and the coefficients were not significantly different from zero. (see Annex 4, Table III)
- 63. These results would appear to cast doubt on the validity of neoclassical theory and its modern version propounded by the McKinnon-Shaw school. The positive interest rate is important but not as a policy instrument capable of reforming the economies of the African LDCs. This runs counter to monetary orthodoxy.

Institutional Reforms

64. The direction which the evaluation of the financial structure of African LDCs should take depends on specific country circumstances. Experience suggests, however that the commercial banking system will set the pace because of their principal function of credit creation. This is, however, only one element in the process for the manner in which bank credit is utilized is no less important in the growth process. The credit needs of agriculture, small businesses and industries and many traditional enterprises are still met by the non-banking traditional institutions, such as the money lender. The broadening

of the scope of the banking system, in geographical and functional coverage, is necessary to meet the credit needs of these strategic sectors. 48/ The efforts of many African LDCs to overcome marketing, technological, managerial bottlenecks of the small enterprises sector however must not be ignored. Many of these have helped indigenous enterprises, but the overall situation has not changed perceptively. Some countries show some predisposition towards the multipurpose banking system of the German type, which not only offers economies of scale, but also packages of credit combined with managerial and technical assistance. 49/

65. One aspect of the neglect by the organized banking system of rural and small industries is that banking business was essentially urban-criented. The commercial banking system has been criticized for making a reverse transfers of funds from less developed areas to the more prosperous ones. This pattern of credit allocation, however, could be overcome by effective credit planning. The Indian example is often cited to indicate the potential and possibilities of credit planning as an instrument of economic policy. The planned extension of banking facilities to bring about greater regional balance is known as the Lead Bank Scheme, under which, the emphasis is to locate growth centres, assess deposit potential, identify credit gaps and evolve a co-ordinated programme of credit development for each district, in cooperation with the various banks and credit agencies already operating in the area. 50/

^{48/} B.K. Madan, "Role of Commercial Banks in Developing Countries and Measures for Improving the Adequacy of Banking Facilities", Reserve Bank of India Bulletin, Vol. XVIII, No. 6 (June, 1964), pp. 750-764; Ali Issa Abdi, Commercial Banks and Economic Development: The Experience of Eastern Africa, (Prager, 1977), pp. 114-124.

^{49/} Maxwell J. Fry, "Financial Intermediation in Small Island Countries", Commonwealth Economic Papers: No. 16 (September, 1981), p. 83.

^{50/} M. Narasimhan, "Credit Planning in India: Its Rationale and Content", Warren L. Coats and Deena Khatkhate edition (1980), op.cit., pp. 617-628; James G. Copestake, "The Transition to Social Banking in India: Promises and Pitfalls", Development Policy Review, Vol. 6, No. 2 (June, 1988), pp. 139-161.

- 66. The banking system should pursue imaginative and flexible policies to bring about significant structural shifts in the employment of their resources, particularly in the areas of medium and long-term lending. The risks of illiquidity remain an impediment to banks participation in term lending. A solution may be to design an institutional arrangement which, can through refinancing facilities, eliminate or alleviate the illiquidity problem.
- 67. Development finance institutions are frequently financed from external sources. The concessionary interest rates are often lower than those paid to voluntary private savings, which discourages private deposits. Even if initially, all or part of the capital of development finance institutions is provided by the Central Bank, consideration should be given to financing the capital of such institutions from other sources.
- 68. The specialized financial institutions in African LDCs are greatly affected by high default rates. In some countries, guarantees on defaults are being given to encourage banks to lend to agriculture. The continuation of guarantees, however, may result in lax attitudes towards the recovery of loans and in the institutions failing to develop the capacity to deal with small farmers. For credit to be productive it needs to be supervised, so that while banks should move away from the security-oriented approach, they also should ensure that their credit appraisal is based on a realistic evaluation of anticipated income and repayment potential.
- 69. Central banking policy has done little to assist the financial system to support rural development. They do not adequately monitor the activities of commercial banks to encourage them to exploit the financial savings potential of rural areas. The role of a central bank cannot be restricted to that of a regulator; it should not be confined to passively adapting its techniques to suit the changing economic structure, but should actively modify the financial structure itself to promote development.

VI. Some Broad Conclusions

70. In most African LDCs, the role of the financial intermediaries in the growth process has been neglected. The power of credit as an instrument of development and potential role of credit policy techniques and institutions in the scheme of overall planning has also not received adequate attention. The official attitude to resource mobilization has been extremely lax partly due to foreign resource inflows and partly due to the inexpensive rediscounting terms and facilities provided by the central bank. If account is taken of the growing signs of aid-weariness among donors and the hardening of aid terms, it must be obvious that Africa's salavation cannot be won by proxy. Nor should it be. Economic development is basically a national enterprise, and development begins in the hearts and souls of those who aspire to greater mastery of their own destiny. 51/

^{51/} The excessive external orientation of Africa's development efforts are documented in Adebayo Adedeji. Africa and the New International Economic Order: A Reassessment, National Bank of Egypt (Commemoration Lectures Programme), Cairo, 1979.

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- 71. The central bank must be responsible for evolving the sound financial infrastructure required for rapid development by developing the credit institutions, instruments and yield structure that are essential for the efficient mobilization of savings and the allocation of resources that is consistent with development objectives.
- 72. The available evidence indicates that interest rate liberalization is not efficacious unless there is a competitive market. In countries where the banking system has not been nationalized, an oligopolistic financial system will have the opportunity to extract economic rents from the public, by effectively raising the asset and liability rates so as to increase its profits, while reducing the financial operations to a level below the optimum. The monetary authorities should then pursue a discretionary and flexible interest rate policy that takes into account the rate of inflation, the market conditions and the needs of the public when determining the interest rates level. 52/

^{52/} C.C. Agu, "Interest Rates Policy in Nigeria and Its Attendant Distortions", Savings and Development, No. 1-1988-XII, pp. 19.31.

Annex 1. Gross domestic savings rate of African LDCs

(Percentage of GDP at constant market prices, 1980 = 100)

1981 - 1985

			e esta de esta campa	en e
Negative rates	Growth rate O-5 %	Growth rate 5-10 %	Growth rate	Growth rate Over 15%
Benin, Burkina Faso, Cape Verde, Central	and the second s			and the second second
African Republic, Chad,	Ethiopia,	Burundi,	Comoros,	Botswana,
Djibouti, Equatorial	Sierra Leone,	Gambia,	Togo	Guinea
Guinea, Guinea Bissau,	Somalia	Niger,		
Lesotho, Mali	Uganda	Sudan,		<u> </u>
Mauritania, Rwanda,	- y	Malawi,	•	
Sao Tome and Principe		Tanzania	. *	
	<u></u>			
	1985 - 1986	_		
	፡ - የተኛ፤ - የተ			
Benin, Cape Verde,	Burundi,	- Equatorial	Comoros,	Botswana
Central African	Burkina Faso,	·	Malawi	Guinea, Togo
Republic, Chad,	Gambia,	Niger		
Djibouti,	Somalia,	Sudan,		
Ethiopia, Guinea	Uganda	Tanzania		
Bissau, Lesotho,	Sierra Leone	•		
Mali, Mauritania,	•			•
Rwanda, Sao Tome and	•			
Principe		•		
	1986 - 1987			
Benin, Cape Verde,	Burkina Faso,	Niger	Comoros,	Botswana,
Central African	Burundi, Mali,		Equatorial	Guinea,
Republic, Chad,	Mauritania,		Guinea,	Togo
Djibouti, Ethiopia,	Sudan,		Malawi	
Gambia, Guinea Bissau,	Uganda		• • • •	• • • •
Lesotho, Rwanda,				Notes
Sao Tome and Principe,			-	

Source: Economic Commission for Africa, Review of Economic and Social Conditions in African Least Developed Countries (1986-1987); E/ECA/LDCs/EXP.7/2.

Sierra Leone, Somalia, Tanzania

Annex 2. Structure of long-term liabilities in selected LDCs

to a supplied to the supplied of the supplied to the supplied	A	В	C	Market Market Control	
in Allendaria	Local long- term debts outstanding	Foreign long term debts outstanding	- Total outstanding liabilities	B as a % of C	
1.1. 1.1 de 1	ir	million of loc	cal currency	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
he Tanzanian nvestment Bank				er en	
1983	36.4	352.0	388.4	90.6	
1984	59.5.	567.7	627.2	90.5	
1985	37.5	719.0	756.5	95.0	
1986	35.9	1,451.2	1,451.2	97.5	
1987	34.4	1,671.3	1,705.7	98.0	
he Agricultural and	4.				
ndustrial Bank of Eth	iopia		:	. ·	
1981	350.5	66.5	417.0	15.9	
1982	58.2	90.2	148.4	39.3	
1983	50.9	82.3	133.2	38₊2	
1984	49.2	83.8	133.0	37.0	
1985	50.3	105.4	155.7	32.3	
he Investment and	and provided the second second			* * *	
evelopment Bank of Ma	lawi	•	·		
1981	9.0	6.0	15.0	40.0	
1982	9.6	7,.3	16.9	43.2	
1983 <u></u>	10.8	8.7	a 19.5	44.6	
1985	11.3	9. 8		46.4	
1986	11.3	8.8	20.1	43.8	
omali Development Bar	<u>ık</u>				
1980	26.3	20.2	46.5	43.4	
1981	16.8	35.4	52.2	67.8	
1982	25.8	44.4	70.2	63.2	
1983		96.8	143.5	67.5	
1984	43.5	115.0	158.5	72.5	

Source: Compiled from the Annual Reports of the banks concerned.

Annex 3. Debt and liquidity ratios including return on investment and return on equity in selected LDCs

	Debt equity ratio a/	Liquidity ratio <u>b</u> /	Return on investment c/	Return or equity c/
The Tanzania Investment Bank				
1983	0.9:1	3.4:1	1.5	3.0
1984	1.1:1	2.8:1	2.4	5.0
1985	1.0:1	3.0:1	2.9	
1986	1.7:1	2.3:1	Q.5	6.0
1987	2.0:1	2.7:1	0.3	0.1 0.8
The Tanzania Rural Development Banl	<u>c</u>			
1982	3.4:1	22.3:1	_	-
1983	3.5:1	14.2:1	-	~
1984	3.6:1	12.4:1	(0.1)	(0.5)
1985	3.7:1	13.3:1	(0.2)	(1.0)
1986	3.8:1	14.2:1	(0.2)	(1.0)
•				•
1981	10.3:1	0.6:1	(1.1)	(12.0)
1982	14.1:1	0.6:1	(0.9)	(14.0)
1982 1983	14.1:1 13.0:1	0.6:1 0.5:1	(0.9) (0.6)	
1982 1983 1984	14.1:1 13.0:1 16.1:1	0.6:1 0.5:1 0.4:1	(0.9) (0.6) (0.5)	(14.0)
1982 1983	14.1:1 13.0:1	0.6:1 0.5:1	(0.9) (0.6)	(14.0) (9.0)
1982 1983 1984	14.1:1 13.0:1 16.1:1	0.6:1 0.5:1 0.4:1	(0.9) (0.6) (0.5)	(14.0) (9.0) (8.0)
1982 1983 1984 1985 The National Development Bank of ierra Leone 1977	14.1:1 13.0:1 16.1:1	0.6:1 0.5:1 0.4:1	(0.9) (0.6) (0.5) 0.3	(14.0) (9.0) (8.0) 6.0
1982 1983 1984 1985 he National Development Bank of ierra Leone 1977 1978	14.1:1 13.0:1 16.1:1 17.6:1	0.6:1 0.5:1 0.4:1 0.4:1	(0.9) (0.6) (0.5) 0.3	(14.0) (9.0) (8.0) 6.0
1982 1983 1984 1985 The National Development Bank of ierra Leone 1977 1978 1979	14.1:1 13.0:1 16.1:1 17.6:1	0.6:1 0.5:1 0.4:1 0.4:1	(0.9) (0.6) (0.5) 0.3	(14.0) (9.0) (8.0) 6.0
1982 1983 1984 1985 he National Development Bank of ierra Leone 1977 1978 1979 1980	14.1:1 13.0:1 16.1:1 17.6:1	0.6:1 0.5:1 0.4:1 0.4:1	(0.9) (0.6) (0.5) 0.3 1.9 (3.6) (15.7)	(14.0) (9.0) (8.0) 6.0 5.0 (11.0 (88.0)
1982 1983 1984 1985 he National Development Bank of lerra Leone 1977 1978 1979	14.1:1 13.0:1 16.1:1 17.6:1 1.5:1 2.2:1 4.7:1	0.6:1 0.5:1 0.4:1 0.4:1	(0.9) (0.6) (0.5) 0.3	(14.0) (9.0) (8.0) 6.0
1982 1983 1984 1985 he National Development Bank of ierra Leone 1977 1978 1979 1980 1981 he Investment and Development Bank	14.1:1 13.0:1 16.1:1 17.6:1 1.5:1 2.2:1 4.7:1 4.7:1 2.5:1	0.6:1 0.5:1 0.4:1 0.4:1 14:1 10:1 1.2:1 1.3:1	(0.9) (0.6) (0.5) 0.3 1.9 (3.6) (15.7) (9.8)	(14.0) (9.0) (8.0) 6.0 5.0 (11.0 (88.0) (56.0)
1982 1983 1984 1985 he National Development Bank of ierra Leone 1977 1978 1979 1980 1981 he Investment and Development Bank	14.1:1 13.0:1 16.1:1 17.6:1 1.5:1 2.2:1 4.7:1 4.7:1 2.5:1	0.6:1 0.5:1 0.4:1 0.4:1 14:1 10:1 1.2:1 1.3:1 1.8:1	(0.9) (0.6) (0.5) 0.3 1.9 (3.6) (15.7) (9.8) (9.1)	(14.0) (9.0) (8.0) 6.0 (11.0 (88.0) (56.0) (32.0)
1982 1983 1984 1985 he National Development Bank of ierra Leone 1977 1978 1979 1980 1981 he Investment and Development Bank	14.1:1 13.0:1 16.1:1 17.6:1 1.5:1 2.2:1 4.7:1 4.7:1 2.5:1	0.6:1 0.5:1 0.4:1 0.4:1 14:1 10:1 1.2:1 1.3:1 1.8:1	(0.9) (0.6) (0.5) 0.3 1.9 (3.6) (15.7) (9.8) (9.1)	(14.0) (9.0) (8.0) 6.0 (11.0 (88.0) (56.0) (32.0)
1982 1983 1984 1985 The National Development Bank of ierra Leone 1977 1978 1979 1980 1981 The Investment and Development Bank of Malawi 1980 1981 1983	14.1:1 13.0:1 16.1:1 17.6:1 1.5:1 2.2:1 4.7:1 4.7:1 2.5:1	0.6:1 0.5:1 0.4:1 0.4:1 14:1 10:1 1.2:1 1.3:1 1.8:1 3.1:1 2.6:1	(0.9) (0.6) (0.5) 0.3 1.9 (3.6) (15.7) (9.8) (9.1)	(14.0) (9.0) (8.0) 6.0 (11.0 (88.0) (56.0) (32.0)
1982 1983 1984 1985 The National Development Bank of ierra Leone 1977 1978 1979 1980 1981 The Investment and Development Bank of Malawi 1980 1981	14.1:1 13.0:1 16.1:1 17.6:1 1.5:1 2.2:1 4.7:1 4.7:1 2.5:1	0.6:1 0.5:1 0.4:1 0.4:1 14:1 10:1 1.2:1 1.3:1 1.8:1	(0.9) (0.6) (0.5) 0.3 1.9 (3.6) (15.7) (9.8) (9.1)	(14.0) (9.0) (8.0) 6.0 (11.0 (88.0) (56.0) (32.0)

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Annex 3. Debt and liquidity ratios (cont'd)

Debt equity ratio a/	Liquidity ratio b/	Return on investment c/	Return on equity c/
			7 · · · · · · · · · · · · · · · · · · ·
3.2:1	1.1:1	0-9	4.0
3.7:1			7.0
			11.0
5.1:1	1.2:1	3.0	18.0
		···	
0.4.1	2 9.1	0.3	0.3
			0.3
			0.2
			0.3
0.6:1	2.0:1	0.5	0.4
	equity ratio a/ 3.2:1 3.7:1 3.0:1 5.1:1 0.4:1 0.4:1 0.4:1 0.7:1	equity ratio b/ 3.2:1 1.1:1 3.7:1 1.1:1 3.0:1 1.4:1 5.1:1 1.2:1 0.4:1 2.9:1 0.4:1 3.2:1 0.4:1 3.5:1 0.7:1 3.1:1	equity ratio b/ s 3.2:1 1.1:1 0.9 3.7:1 1.1:1 1.4 3.0:1 1.4:1 2.7 5.1:1 1.2:1 3.0 0.4:1 2.9:1 0.2 0.4:1 3.2:1 0.1 0.4:1 3.5:1 0.2 0.7:1 3.1:1 0.2

Source: Compiled from the balance sheets and income statements figures of the Development banks for the indicated years.

a/ Debt equity ratio connotes the bank's ability to meet its short and long term obligations. It is computed by simply dividing total debt by het worth. The lower the ratio the greater is the ability of the bank to meet its total debts.

b/ Liquidity ratio connotes the bank's ability to meet its short term obligations. The higher the ratio, supposedly, the greater is the ability of the bank to pay its short term liabilities. It is computed by dividing current assets by current liabilities.

c/ Returnon investment (ROI) and return on equity (FOE) connote the profitability of the bank and its efficiency of operation. They are computed by dividing net income by total assets to determine ROI and by dividing net income by net worth to determine ROE. The higher the rates of ROI and ROE the better is the bank in its profitability.

N.B. Figures in bracket denote a negative sign.

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0.049671 -0.77727 (0.55474) 0.5846F (2.74754) 0.17632 (0.66605) 0.34945) -0.19228 (0.13987) (0.25184)(3.40786)-0.41149 -0.69967 -29.649 (83.161) 1.6750 (35.056) -0.85805 (1.45191) 3.42838 (0.99256) (1.17935) -8.36934 (5.74321) -4.65739 (4.95581)-3.32873 (2.29788) (1.48153)0.80755 2.67310 $\frac{233.21}{676.59}$ (11.337)a 3 -0.13662 -0.066249 (0.88264) -0.021514 (0.10755) 0.41791 (0.11660) (0.073067 0.084597 (0.15475)(0.99233) 0.25960 0.37075 0.17775 0.31265 44.362) a₂ 26.803 -0.0305360.25717 $\frac{-0.79377}{(1.53691)}$ (1.66692)(0.18560)(1.21498)(0.19268)(0.33022 (0.29437 0.11578 -0.48929 0.34589 0.55703 -0.21533-126.71 (158.60) a Ja 5.45783 -135.720 (30.513) -46.148 (60.371) (15.897) (41.332)(142.370)-65,709 (14.221)25.719 27.966 19,386 -73.695 -23.869(262.44) -62.612 (10452.0) a_O 2.1470 1.9539 2.6468 3.1846 2,3335 2.9329 2.9671 2.1303 2.5451 a₂ 3 ۵ o_w 0.2801 0.5119 0.8678 0.9559 0.5964 0.8729 0.6401 0.9362 0.9547 0.9284 ² Annex 4 (Table 1). Burkina Faso Sierra Leone Country Mauritania Tanzania Burundi Rwanda Gambia Malawi Niger Togo

Annex 4 (Table 2). I (r, YD) = $a_0 + a_1 r + a_2 YD$

Country	R ²	DV!	a _O	a _l	a ₂
Burkina Faso	0.9202	1.0070	-494.5 7 (39 7. 96)	9.93436 (28. 0 22)	0.054775 (0.17423)
Tanzania	0.3588	2.1434	-1380.3 (1726.4)	70.339 (65.564)	0.45531 (0.32790)
Sierra Leone	0.9560	2.8465	-34.903 (45.532)	8.44638 (2.12579)	0.12737 (0.C51619)

Annex 4 (Table 3). $I = a_0 + a_1 r + a_2 v + a_3 q$

Country	R ²	DØ	^a o	a _l	^a 2	a ₃
Burundi	0.5385	2.7582	5.64992 (10.381)	1.68647 (1.97473)	0.59820 (0.64569)	-0.48429 (0.22898)
Gambia	0.6310	3.0273	27.668 (4.93035)	-3.03394 (1.29561)	1.13496 (0.44686)	-0.099338 (0.13946)
Rwanda	0.6444	3.1176	13.532	~8.71956 (6.98329)	3.97010 (3.10869)	0.38367 (0.30485)
Togo	0.7180	2.9523		-11.666 (6.67609)	10.541 (4.35787)	0.094922 (0.44875)
Malawi	0.9510	3.0917	-2.38179 (2.80731)	0.011562 (0.0028475)	1.17442 (0.22113)	0.54267 (0.15681)
Niger	0.8865	2.0539	-19.169 (11.827)	~17.569 (6.35605)	16.481 (3.93361)	0.37043 (0.19845)