

THE FINANCIAL SECTOR IN AFRICA: OVERVIEW AND REFORMS IN ECONOMIC ADJUSTMENT PROGRAMMES

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This paper has reviewed the structure of the financial sector in Africa, articulated the problems and discussed the nature of reforms adopted to overcome them. The overview shows that commercial and merchant banks and specialised lending institutions are key financial intermediaries in Africa, including stock exchanges and finance houses. However, the development of the institutions varies from country to country, depending on the dynamism of central banks and sophistication of economic agents. Although the financial sector in Africa has recorded notable progress, it has nonetheless been afflicted with a number of problems. The problems have arisen mainly from inhibitive policy environment, inadequate prudential regulations and supervision, capital inadequacy, widespread incidence of non-performing loans, inadequate legislation for dealing with insolvent financial institutions and inflation. Efforts towards tackling these problems emphasized financial liberalization undertaken alongside macroeconomic reforms. Among the key macroeconomic reforms are market-based approach to credit allocation, deregulated interest rates structure, complementary fiscal exchange rate and other monetary management policies. The appropriate sequencing of these reform measures and a progressive move towards indirect monetary control will strengthen considerably Africa's formal financial markets.

The financial sector is crucial to the development of any economy. The slow growth of the sector has been fundamental to the failure of African countries to develop faster and attract more foreign capital than has been observed. A great many academic economists and practical bankers have laid much of the blame for this failure on government policies. Government policy environment has varied from country to country and the contribution of the financial sector to GDP has ranged from 2.7 per cent for Morocco to 14.7 per cent for Mauritius. The relatively high proportion in Mauritius reflects the development of more sophisticated financial services and the country's success in attracting part of the lucrative international offshore banking business. While this paper is not specifically designed to apportion blame, the anxiety over the pace of development of the financial sector underscores the sector's importance as an engine of growth, particularly in terms of its role in financial intermediation.

In the intermediation process, financial intermediaries engage mainly in matching lenders and borrowers. Of course, the lending-borrowing process could take place without intermediation. Thus intermediation is an operation not merely that of being a middleman but that of actually generating a new type of assets, the securities. The securities are then held by the intermediaries in exchange for their lending. The point of emphasis, therefore, is that financial intermediaries use their own liabilities to create additional assets; mobilise funds and minimise the risks of the investor (Falegan, 1987).

The financial system encompasses a wide array of banking and non-bank

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financial intermediaries. The banking segment comprises commercial, merchant and development banks with the Central Bank as the apex institution. The non-bank financial institutions segment includes finance houses and all those institutions in the capital market. The mix of these financial intermediaries varies from country to country, reflecting the stage of development and the degree of sophistication of the country's economic agents.

The objective of this paper is to present an overview of the financial sector in Africa, articulate the sector's problems and reform efforts in economic adjustment programmes. For purposes of easy exposition, the paper is divided into four parts. Part I highlights the structure of the sector in Africa, reflecting, among other things, the dynamism of central banks in the continent. Part II focuses on problems facing the sector while Part III outlines the financial reforms undertaken so far, Part IV concludes the paper, indicating some lessons for policy.

PART I

THE STRUCTURE OF THE FINANCIAL SECTOR IN AFRICA

The financial system in Africa has undergone substantial changes over the last decade in terms of the number and variety of financial intermediaries, the depth and breadth of instruments in the money and capital markets. The observation equally holds good for the economic environment and the regulatory framework within which the system operates. Even so, the financial system remains by and large relatively underdeveloped as it is yet to acquire that degree of financial intermediation or financial deepening which the economy requires for rapid development.

The structure of the financial system may be viewed as consisting of many bank and non-bank institutions, instruments and markets. Financial institutions range from money lenders to banks, pension funds, insurance companies, brokerage houses, investment trusts, finance companies and stock exchanges. Financial instruments range from — coins, currency notes and cheques, mortgages, corporate bills, bonds, and stocks — to the more exotic futures and swaps in company finance. Markets for these instruments are usually grouped into money and capital markets, depending on the maturity of the instruments.

Banking Institutions

Commercial banking in Africa is well developed and concentrates in three countries — Nigeria, Egypt and Algeria — although Kenya, Cote d'Ivoire and Zimbabwe also have developed banking sectors. In most African countries, bank equity has grown, but not as fast as in other developing countries outside Africa.

Merchant banks have traditionally existed in only a few countries, notably Nigeria, Zimbabwe and Kenya. They have concentrated principally on trade finance and, to a lesser extent, on the mobilisation of medium to long-term investment finance through their activities in underwriting issues and equipment leasing to support capital investment.

Development banks were established by governments to finance development,

usually with minority share holdings by multilateral financial institutions or bilateral donors. Many development banks have had to finance large projects with low return simply at the prompting of government. However, a few such as NIDB in Nigeria, SOFIDE in Zaire, Zimbabwe Development Bank, National Development Bank, Botswana, are quite healthy financially, especially as they impose stringent project and loan assessment criteria.

Non-equity project financing is still in short supply. Few local private lenders, apart from banks, are prepared to consider project financing. In most cases, local entrepreneurs can provide capital in the form of land, buildings and services, but have to seek foreign co-financing which is dependent on foreign project assessment and results in a foreign exchange debt obligation. The principal sources of co-financing in the 1980s, and of all foreign project loans, are the ADB Group, OECD government development finance corporations, World Bank's International Finance Corporation (IFC) and the European Investment Bank (EIB), and private international finance institutions such as SIFIDA. Pre-investment facilities are also available to carry out feasibility and other technical studies, including the African Project Development Fund (APDF) and UNIDO/UNDP funds.

However, the major obstacles to greater foreign participation in expansion of African capital markets, and in project lending are the exchange risk and transfer risk. While the former risk is due to currency devaluation, the latter arises from potential foreign exchange shortage.

Stock Exchanges

There are six principal stock exchanges in Africa: these are located in Cote d'Ivoire, Egypt, Kenya, Morocco, Nigeria and Zimbabwe. The largest of these exchanges is the Nigerian Stock Exchange. The listing on the Nigerian Stock Exchange stood at 217 securities at the end of 1990. These comprised 131 equities, 43 Government Stocks and 43 industrial loans and preference stocks. Total market capitalisation rose to ₦16 billion in 1990 from ₦11.6 billion in 1989 and ₦9.7 billion in 1988. Equities accounted for more than 50 per cent total capitalisation in 1990. The Zimbabwe Stock Exchange and Casablanca Bourse had capitalisations of US \$500 million in 1987. In that year, Kenya's Stock Exchange had a total capitalisation of US \$200 million.

However, since 1980 market capitalisation had fallen on all African exchanges except Casablanca Bourse. The number of quoted stocks in each market is very limited and only Zimbabwe had a significant turnover of stocks and a percentage of capital. This derives from the fact that shareholders, largely individuals rather than institutional investors tend to hold on to stocks which pay dividends. There are no listed investment funds in Africa. Few African stocks are quoted on overseas markets. The main stocks on the London market are Kenya's Kaduzi tea plantation, Zambia Consolidated Copper Mines, and Zimbabwe's Falcon Mines¹, Mhangwa Cooper Mines and Wankie Colliery Company. Those quoted on the Paris course are Banque Commerciale du Maroc and Establishments Gonfreville of Cote d'Ivoire.

The factors inhibiting foreign and local investment in stocks include low fiscal incentives, lack of market information, insufficient investment protection, lack of participation by financial institutions as underwriters, brokers, and restrictions on profit and dividend repatriation by foreign investors. However, the sweeping wave of privatisation, e.g. in Nigeria, now encourages a rise in foreign equity holding in Africa.

A number of finance houses, insurance companies and stock broking firms have

sprung up in Sub-Saharan Africa, especially in Nigeria, Egypt and Algeria. The activities of these non-bank financial intermediaries are gradually being brought under the surveillance of the monetary authorities through appropriate enabling legislative changes.

PART II

PROBLEMS

Having articulated the importance of the financial sector in the economy and highlighted the structure of the sector in the preceding section, the paper attempts in this section, an overview of the sector's problems. In most economies of Sub-Saharan Africa (SSA), the financial sector is in distress. The distress has emanated from a number of factors, including the inhibitive policy environment, inadequate prudential regulations and supervision, capital inadequacy, widespread incidence of non-performing loans, inadequate legislation for dealing with insolvent banks, and inflation. These issues are discussed below in that order.

Policy Environment

The financial sectors of most African economies in the 1970's and early 1980's prior to adopting comprehensive economic reform programmes could be described as repressed and highly regulated. Although government administrative rules and regulations of the financial sector tended to vary in intensity and types across countries, there existed certain elements which were common to the regulated structure. Among these are ceilings on credit expansion and interest rates, which encouraged capital flight, restrictions on entry into the banking industry, extensive controls on both inflow and outflow of capital, high liquidity and reserve ratios as well as outdated laws and accounting procedures.

The ceilings on lending and deposit rates were often justified on the grounds that uncontrolled interest rates would lead to usury rates and also exacerbate the cost of government borrowing from the financial system. Ceilings on interest rates often resulted in highly negative real interest rates and a wide spread between lending and deposit rates. These apart, the rates were rarely adjusted to changing economic circumstances, and thus remained fixed for a prolonged period of time, and consequently provided little or no incentive to the accumulation of domestic financial assets. Ceilings on lending rates also fostered disintermediation of funds by banks and proved to be formidable obstacles to the control of credit through financial markets — the so-called indirect approach to credit control. Credit ceilings are widespread as the monetary authorities set annual targets for credit expansion by banks — the so-called direct approach to credit control.

The restrictions on portfolio selection include required lending to specific activities, central bank rediscounts of credit to key sectors, notably agriculture, at

¹ For further details see *ADB, Africa, Euromoney Publications, London 1989.*

subsidized rates, and the control of financial intermediaries through direct ownership by government. These rationing schemes have led to inadequate resources for most productive investments, financing of government deficits largely by the banking system, large excess demand for credit and general inefficiency in resource allocation.

While the imposition of high liquidity ratios provided a ready demand for government debt instruments which were issued at low fixed interest rates to reduce the cost of financing of government deficits, portfolio choices of financial institutions have consequently been limited. The limitation on entry into the banking industry, coupled with restrictions on foreign ownership of domestic financial institutions, have created an oligopolistic structure for the regulated banking industry, resulting in only very few big banks controlling a large proportion of the industry's activities.

Inadequate Prudential Regulation And Supervision

Given the inadequate prudential regulation and supervision of banks in many countries, there has been a persistence of mismanagement and speculative behaviour by banks. In most countries, inadequate regulation has permitted risky lending, and ineffective supervision has permitted banks to ignore their losses. In many countries, apart from focussing on compliance with monetary policy circulars, bank supervisors make no independent assessment of the quality of assets and give scant regard to accounting procedures and management controls — major cause of bank insolvency.

Capital Inadequacy

In many countries of SSA financial institutions were significantly undercapitalised even before portfolio and other losses were recognised. Government-owned banks, in particular, often operate with little capital.

Incidence of Non-Performing Loans

Reflecting the problems raised above, namely those emanating from the policy environment, inadequate prudential regulations and supervision, virtually all banks in SSA experience the incidence of non-performing loans. The incidence, however, is of varying degrees of intensity in countries as such loans range from 2 to 20 per cent or more of banks' assets.

A few examples may suffice. In Ghana the net worth of the banking system by mid-1988, was negative, having been completely eroded by large foreign exchange losses and high proportion of non-performing loans. In the same period, in Madagascar, 25 per cent of all loans were irrecoverable and 21 per cent more were deemed "difficult to collect". Given the low level of reserves (less than 5 per cent of assets), the banking system as a whole in that country was insolvent. A recent World Bank study² of the financial sector in Mauritania estimated that non-performing loans extended by deposit money banks in that country accounted for 60 per cent of the banks' total credit outstanding. Besides, the study indicates that it would cost UM 6.2 billion to write off unrecoverable loans from the balance sheets of the banks and to reimburse foreign creditors. In Cote d'Ivoire banks have been able to avoid bankruptcy only through the blocking of deposits, the non-payment of taxes, the accumulation of arrears, and their recourse to "temporary"

overdraft facilities at the BCEAO. In the UMOA countries as a group, more than 25 per cent of bank credits are non-performing. At least twenty primary banks were bankrupt: non-performing credits are almost six times the sum of their capital, reserves and provisions. Banks in Nigeria also experience the problem of non-performing loans but the disease is not wide-spread as yet.

The problem of non-performing loans has been exacerbated by the seeming inability of banks to foreclose on defaulting borrowers and the continued granting of loans to "infant" state-owned industries which were profitable only as long as they were protected. By the 1980s many such enterprises were unable to service their debts. Finally, the monetary authorities in most countries in Africa seem to lack clear legal procedures for dealing with insolvent banks. In recent years many state-owned banks in SSA have actually become insolvent and are in the process of being liquidated or restructured. The difficulties encountered have been associated with mismanagement, corruption, inadequate central bank supervision and a breakdown in debtor morality.

Inflation

Of importance to the financial system is the problem of inflation. Currently most economies in SSA are afflicted with rapid and persistently high inflation. Under such an environment physical assets tend to be more attractive as investment outlets than portfolio investments. If investment in physical assets assumes increasingly large proportions as a result of inflation, it could lead to financial disintermediation, thereby frustrating the overall objective of the system.

Fortunately, however, price level developments in 1990 indicated a general abatement of pressures, especially in the high-inflation countries of Sierra Leone, Guinea, Ghana and Nigeria, following the restrictive monetary policy and the supply-stimulating measures put in place in those countries. The inflation in Nigeria declined from 50.5 per cent in 1989 to 10 per cent in November 1990 and was estimated to have declined further to 7.5 per cent in December 1990. In Ghana inflation rate was estimated to have declined from 25 per cent in 1989 to about 18 per cent while Guinea managed to reduce its inflation rate from 43 to 26 per cent in the same period. In the UMOA group of countries, already low levels of inflation were further brought down during 1990 following significant cutbacks in government spending as well as the restrictive management policies. Inflation rate in that group of countries was estimated at about 2 per cent, down from 2.7 per cent in 1989. In The Gambia inflation declined from 70 per cent at the beginning of its economic recovery programme in 1985, through 10 per cent in 1989, to 6 per cent in 1990.

Despite these heart-warming developments, it is still true to assert that inflation rates in SSA have contributed to increases in liquidity against the general background of low real output growth. Figures for broad money growth for most of Africa ranged from 15.6 per cent in 1982 through 17.1 per cent in 1985 to 19.1 per cent in 1990. The growth was highly inflationary, having regard to real output growth of no more than an average of 2.5 per cent a year.

PART III

REFORMS IN ECONOMIC ADJUSTMENT PROGRAMMES

In the preceding section, the paper highlighted most of the distortions and rigidities in the financial sector of most countries in SSA. The problems of the sector have ranged from a weak infrastructural base to those emanating from government intervention in the form of interest rate controls and regulations influencing the size and allocation of bank credit. Thus by the mid-1980s the financial imbalances in African countries had become serious constraints to orderly development. With the persistent current accounts deficits, low levels of foreign exchange reserves and rising external debts and liquidity problems also afflicting a great many African countries, structural adjustment reforms/programmes became necessary in these countries. Thus, between 1980 and 1988, not less than 33 African countries had concluded standby arrangement facilities and 12 had Extended Fund Facilities (EFF) with IMF, and 15 had structural adjustment loans from the World Bank.

In this section, the paper seeks to articulate the reform measures already underway or proposed in the financial sector of the countries of SSA. Thus the paper is silent on reforms not directly focussed on the financial sector. The objectives of the financial sector reforms are broadly the same in most countries of SSA and include:

- (a) improvement in the efficiency in resource allocation through greater reliance on market forces;
- (b) greater mobilization of domestic savings for investment and growth through market-based interest rates;
- (c) improvement in regulatory procedures;
- (d) promotion of greater competition in the provision of banking services;
- (e) laying the basis for a sustainable non-inflationary or minimal inflationary growth.

The main policy instruments of the economic adjustment programmes for financial sector, which feature in most SSA include:

- (a) deregulation of foreign exchange market and interest rates;
- (b) adoption of market-based approach to the allocation of credit;
- (c) restrictive monetary and credit policies;
- (d) institutional development and legislative changes; and
- (e) active use of prudential regulations and capital adequacy requirements.

Components of Financial Sector Reforms

Many countries of SSA have embarked on the arduous task of reforming their financial systems. Progress, however, in this regard has varied among countries, depending both on economic circumstances and political expediency.

The progress achieved in financial sector reforms has reflected a determined effort of the monetary authorities to make the financial system more conducive to growth by improving savings mobilisation and allocation and minimising inefficiencies generated by structural rigidities. The measures implemented had several thrusts. Apart from the continuation of flexible interest rate policies and regular adjustments of exchange rates that had been resorted to side by side with the conduct of monetary policy since the mid-1980s, several countries took steps towards diversification of financial instruments and application of indirect methods of monetary control. A few countries also put in place measures designed to reduce arrears on domestic debt servicing and improve domestic debt management. Other strands in the reform effort include the opening of the banking system to increased competition, the restructuring of banking institutions and procedures, the creation of new institutions to take over the management of ailing ones and the adoption of measures to improve bank supervision and regulations. The details of most of these reform efforts are sketched as follows:

Financing Fiscal Deficits

Data on central government deficits for a large sample of countries in SSA in recent years indicate that about 50 per cent of such deficits have been financed by credit from central banks. The resulting monetary expansion largely contributed to high inflation in many countries. Thus part of the reform efforts focusses on reducing the extent of financing by the central banks. Although, success in this direction has been little, governments in most countries in SSA are increasingly conscious of the dangers posed to monetary stability by undue reliance on central bank financing. In the 1991 Budget of the Federal Government of Nigeria, for example, government planned for fiscal viability while keeping borrowing from the central bank to the barest minimum. In Ghana, government has refrained since 1988 from borrowing from central bank. In the UMOA group of countries governments have kept borrowing from the BCEAO to not more than 20 per cent of the government's previous year fiscal revenue.

Interest Rate Policy

The growing recognition of the harm that administered interest rates can cause has recently led many governments in SSA to deregulate interest rates especially in the last quinquennium of the 1980 decade. Indeed, many countries, including Ghana, Kenya, Madagascar, and Nigeria, have recently allowed interest rates to reflect market conditions and have even begun to reduce credit controls. Senegal and other countries in UMOA group have undertaken comprehensive financial sector reforms anchored on liberalisation. The empirical evidence on the effects of such reforms indicates that, although the impact on saving was generally small, the measures succeeded in channelling a larger proportion of savings through the domestic banking system toward productive investment, including savings that had previously been invested abroad. The experience of such countries and The Gambia and Senegal suggests that positive real interest rates encourage the

transfer of remittance from abroad.

Directed Credit

In most countries in SSA, government intervention in the allocation of credit, through the imposition of credit ceilings has been extensive and date back to the 1970 decade. Although a degree of intervention may have been useful during the early stages of development, many countries have come to recognize that the prolonged use of credit ceilings has had an adverse effect on industrial and financial development. Directed credit programmes have led to inefficiencies, misallocation of resources and a distortion of the interest rate structure and even financial disintermediation. Most governments have sought to remove obstacles on their way to implementing market-based approach to credit control.

In Ghana, for example, part of the preparatory work that needed to be undertaken prior to implementing the market-based approach to credit control has been the mopping up of excess liquidity in the system and the recapitalising of problem/insolvent banks. While currently maintaining credit ceilings, the Bank of Ghana already conducts open market operations and seeks to control the banking system through its net domestic assets (NDA). Soon the Bank of Ghana will be in a position to allow market forces allocate credit while dismantling credit ceilings. Nigeria is also planning to dismantle credit ceilings in the near future. Nevertheless, many governments are unwilling to eliminate directed credits entirely but are, however, increasing the flow of credit to the private sector and reducing their own role in credit allocation.

Institutional Restructuring And Development

The financial sector in most countries in SSA is afflicted with the problem of insolvent banks. Efforts are being made in those countries to recapitalize the insolvent banks and review the entire financial system. But progress along these lines has been slow. In many countries, prudential regulations and supervision have been put in place for compliance by banks. Such regulations have been designed to ensure safe and sound banking practices and secure depositor protection and the stability and efficiency of the banking system. Prudential regulation is accomplished through prescriptions on capital adequacy, liquidity, provisioning for non-performing assets, restrictions on banking business, and licensing requirements while prudential supervision is carried out through off-site surveillance and on-site examination in accordance with central bank guidelines. The scope of monitoring by the central bank is often quite wide, including the extent of adequacy of a bank's capital, the standards as well as the level of provisions for non-performing assets, the quality and performance of management, staff development, standards of book-keeping and the effectiveness of internal control arrangements.

New institutions are also being created. In Ghana, for example, government has established the Non-Performing Assets Trust and the Bank of Ghana has encouraged a consortium of banks and insurance companies to establish a discount house. In Nigeria, guidelines have been issued by the Central Bank on the operation of discount houses and efforts are being made to solve the problem of insolvent banks. The Central Bank of Nigeria and the Federal Government of Nigeria have jointly established the Nigerian Deposit Insurance Corporation as part of the reform efforts designed, among other things, to assist with problem

bank restructuring and recapitalisation.

An important ingredient in institutional restructuring has been the growing computerization of functions in the financial sector in a great many countries in SSA. Data processing, as a result, is being done more speedily and with greater efficiency than was possible in the pre-computerization era when most transactions were done manually with desk calculators.

An institutional development worthy of note has been the establishment of foreign currency deposit schemes by some countries in SSA. Such schemes were designed to induce a greater flow of remittances into the country and to discourage and, if possible, reverse capital flight. Success in this area depends, among other things, on achieving macroeconomic stability with positive real rates of interest and realistic exchange rates.

PART IV

CONCLUDING OBSERVATIONS: ISSUES AND LESSONS

This paper has sought to give an overview of the structure, characteristics and reforms of the rather fledgling financial sector in SSA. Generally, the financial sector has experienced notable improvements since the 1980 decade although progress has varied from country to country depending on the degree of sophistication of economic agents. However, the sector's money and capital markets lack breadth and depth. Also, a lot of distortions and rigidities characterise the financial sector, a situation largely explained by excessive government intervention in the sector through administered interest rates and directed credit.

Recently, there has been concerted efforts by governments of the countries in SSA to liberalise or de-control the sector, for a more effective resource allocation. Towards this end, measures are being put in place to allow market forces determine exchange rates, interest rates and credit allocation.

In the UMOA countries, for example, the action programme for 1990 had three main thrusts. First, there was the determination by those countries to minimise the capital flight from the Union to France as interest rates were raised to levels that were higher than those prevailing in France. Second, the need to improve credit allocation in favour of more productive sector of the economy, was emphasized. To this end, guidelines were put in place to channel a minimum level of credit to borrowers in the productive sectors as well as development financing for identified projects. Third, the institutional reforms that had begun in 1989, were reinforced. The banking supervision unit, established in 1989 to harmonize that function in all UMOA countries, started operations. The programme of restructuring, through liquidation, mergers and rationalisation of the banking enterprises that had faced serious difficulties in the previous three years, was nearing completion. With the completion of these reforms, it was expected that by 1991 UMOA's banking system would consist of banks that were liquid, solvent and profitable.

Reform efforts were also visible in the non-UMOA countries of Nigeria and Ghana. In Nigeria, interest rates have been deregulated, banking legislations reviewed (Decrees 24 & 25) and measures have been put in place to recapitalize banks, ensure adherence to prudential guidelines particularly those on capital adequacy and provision for loan losses, revise and harmonize accounting systems, and reinforce banking supervision and rationalise operational procedures of the

Central Bank. It was also brought to the attention of banks that the medium-term efforts of the Nigerian Deposit Insurance Corporation (NDIC) to assist problem banks would soon come to a halt, and that commercial banks struggling under heavy debt portfolios and inadequate liquidity should reassess their operations.

In the second phase of its economic recovery programme, the Monetary Authorities of Ghana concentrated on financial sector reforms. Reform measures, already launched in 1989, became consolidated during 1990 as regulations were promulgated early in the year requiring banks, among other things, to submit monthly statements to the Bank of Ghana showing assets and liabilities, on which the Bank send reports to the Ministry of Finance on trends in the banking sector, with appropriate recommendations.

Credit ceilings are still widely in force and, have been found to be counter-productive for allocation purposes, posing problems for macro-economic control, especially problems of non-compliance with monetary policy guidelines. The deficiencies of control systems based on credit ceiling have increased the attractiveness of proposals for indirect controls of credit through the use of reserve requirements, liquidity ratio and open market operation by the central bank.

Although most countries in SSA have recognised the advantages of indirect control of credit, implementation of the scheme seems lacking. The inability of most central banks in SSA to introduce the policy derives from the fact that the successful operation of the policy requires the completion of a number of banking reforms and the commitment by government to:

- fiscal responsibility and disciplined control of money and credit required for macro-economic stability;
- a market-oriented financial system;
- a working relationship between the central bank and the Ministry of Finance which allows the central bank day-to-day operational control without political interference³.

The government's commitment must be matched by changes in the operation of the financial markets. These include:

- restructuring of insolvent and illiquid banks;
- effective enforcement of reserve requirements;
- elimination of interest rate ceilings;
- effective financial supervision;
- development of competitive markets for short-term securities;
- removal of barriers to entry and other restrictions on bank competition;
- a realistic exchange rate. ⁴

³ *Ibid.* J. S. Duesenbury and M. F. Mcpherson p. 31.

⁴ *Ibid.* J. S. Duesenbury and M. F. Mcpherson p. 31.

Many countries in SSA have taken action to improve their financial systems along these lines and some, such as Nigeria and Ghana, have made considerable progress. But the road to indirect control of credit is rather long, with governments apparently at their wits' end in the control of budget deficits.

Lessons

The experience with structural reforms in countries in SSA provides a number of important lessons. First, stable macro-economic conditions, cautious financial policies, and a competitive real exchange rate have proven to be essential for sustainable structural reforms, particularly in the external and financial sectors. Second, when rigidities and distortions are pervasive, isolated measures in a few sectors are unlikely to yield significant benefits and may actually reinforce distortions in other areas. Third, a careful sequencing of reforms is called for given the different speeds of adjustment in goods and financial markets and the limited administrative capacity of most countries in SSA. Fourth, movement to indirect control of credit should not be undertaken unless preceded by financial sector reforms and other steps that ensure a smooth functioning of markets.

APPENDIX

The effect of financial intermediation on an economy may be dramatised through the following version of the Keynesian model:

1. Market for Goods and Services

$$C(Y, r) + I(Y, r) + G = Y \dots\dots\dots (1)$$

$$\frac{dc}{dy} > 0, \quad \frac{DI}{dy} > 0, \quad \frac{dc}{dr} < 0, \quad \frac{dI}{dr} < 0 \quad)$$

2. Money Market

$$M(Y, r, \&) = M \dots\dots\dots (2)$$

$$\frac{dm}{dy} > 0, \quad \frac{dm}{dr} < 0, \quad \frac{dm}{d} < 0 \quad)$$

3. Government Securities Market

$$GS(Y, r) = \underline{G} \dots\dots\dots (3)$$

$$\frac{dGS}{dy} > 0, \quad \frac{dGS}{dr} > 0 \quad)$$

where

- & = a shift parameter affecting the demand for money
- C = aggregate demand for consumer goods per period
- G = government demand for goods and services per period
- GS = the demand for government securities per period.
- GS = the supply of government securities per period (exogenous)
- I = aggregate demand for investment goods per period
- M = demand for money (demand deposits and currency per period).
- M = supply of money per period (exogenous)
- r = rate of return on government securities period, and
- Y = total income, expenditure, and value of output per period).

The money market equation (2) states that in any time period the total demand for money must equal the corresponding supply. The function $M(Y, r, \&)$ is a composite money demand function which includes both the transactions demand for money and the demand for idle balances for purposes such as speculation. The condition $\frac{dm}{dy} > 0$ primarily reflects transactions demand, while $\frac{dm}{dr} < 0$ primarily reflects demand for ideal balances. The shift parameter, $\&$, is included to a recognize changes in the public's demand for money that are not due to changes in income or interest rates. The parameter is defined so that

$\frac{dM}{d\&} < 0$, i.e. an increase in the parameter results in a decrease in the demand for money for every level of Y and r .

Intermediation causes an increase in the shift parameter, and thus a decrease in the demand for money which stimulates aggregate demand.

Since the effects of intermediation on the economy are reflected through the shift parameter, $\&$, and explicit mathematical statement of these effects may be derived. Differentiation of equations (1) and (2) with respect to $\&$ yields:

$$\frac{dC}{dy} \frac{dy}{d\&} + \frac{dC}{dr} + \frac{dr}{D\&} + \frac{DI}{dy} + \frac{dI}{dr} \frac{dr}{d\&} = \frac{dr}{d} \dots\dots\dots (4)$$

$$\frac{dM}{dy} \frac{dy}{d\&} + \frac{dM}{dr} \frac{dr}{d\&} + \frac{dM}{d\&} = 0 \dots\dots\dots 0 \dots\dots\dots (5)$$

Expressing equations 4 and 5 in matrix form

$$\begin{pmatrix} \frac{dC}{dy} + \frac{dI}{dy} - I \\ \frac{dC}{dr} + \frac{dI}{dr} \\ \frac{dM}{dy} + \frac{dM}{dr} \end{pmatrix} + \begin{pmatrix} \frac{dY}{d\&} \\ \frac{dY}{dr} \\ \frac{dY}{d\&} \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ \frac{dM}{d\&} \end{pmatrix}$$

Solving this expression by Crammer's rule for $\frac{dy}{d\&}$ and $\frac{dr}{d\&}$ produces the following expressions:

$$\frac{dy}{d\&} = \frac{dM}{d\&} \left(\frac{dC}{dr} + \frac{dI}{dr} \right) / D \dots\dots\dots (6)$$

$$\frac{dr}{d\&} = \left(I - \frac{dC}{dy} - \frac{dI}{dy} \right) \frac{dM}{d\&} / d \dots\dots\dots (7)$$

Where $D = \left(\frac{dC}{dy} + \frac{dI}{dy} - I \right) \frac{dM}{dr} - \left(\frac{dC}{dr} - \frac{dI}{dr} \right) \frac{dM}{dy}$

Thus

$$\frac{dy}{d\&} > 0 \text{ and}$$

$$\frac{dr}{d\&} < 0$$

That is, a decrease in the demand for money, which is the same thing as an increase in the shift parameter, $\&$, stimulates aggregate demand and reduces the interest rate. Intermediation increases the level of economic activity.

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