AFRICAN FINANCIAL SYSTEMS

DURING POLICY REFORMS

Overview of the Issues

Jo Ann Paulson

Department of Agricultural and Applied Economics

Prepared for the
U.S. Agency for International Development
Washington, D.C.

December 1988

University of Minnesota
Institute of Agriculture, Forestry and Home Economics
St. Paul, Minnesota 55108

,1'

AFRICAN FINANCIAL SYSTEMS

DURING POLICY REFORMS

Overview of the Issues

Jo Ann Paulson

University of Minnesota

Prepared for the
U.S. Agency for International Development
Washington, D.C.

December 1988

- 2 -

AFRICAN FINANCIAL SYSTEMS

DURING POLICY REFORMS

Table of Contents

Executive Summary

Financial Sector Problems

This survey focuses on financial sector problems common to many Sub-Saharan African (SSA) countries.[1] These problems include very thin financial markets with significant market power for the larger banks and no organized equity markets, perverse government regulations and intervention in the financial sector, and the broader structural characteristics of the economy, such as costly information, imperfect and missing markets, uncertain property rights, which inhibit intermediation. Most countries have inefficient high-cost systems of intermediation with low levels of resource mobilization and obvious problems in credit allocation and collection. These problems have led to national financial structures biased towards short-term debt financing and vulnerable to changes in interest rates, credit contraction, and credit quality problems in financial institutions. Past inappropriate macroeconomic policies and concentrated lending to inefficient import-substitution ventures left the formal financial systems vulnerable to the economic problems of the 1980s which are now manifest in poorly performing portfolios and rising bad debt. Since many countries are facing financial instability, interest has focused on financial reforms, particularly liberalization of the financial system.

There are still many unresolved theoretical issues on financial and economic reforms in small open economies and almost no empirical work on financial reforms in Africa. The prevailing paradigm on financial reforms is the repression model introduced by McKinnon and Shaw. The problems of perverse government regulations, especially interest rate controls, in the repression models match the stylized facts of most financial systems in Africa. In the repression framework interest rate deregulation increases the supply of financial savings and in some models the borrowing rate falls. While the proposition that higher deposit rates will increase the funds available for intermediation is generally accepted, Van Wijnbergen (1982) and other structuralists challenge this view. They raise the possibility that deregulation of the banking sector only moves funds from informal markets to less efficient banks and aggregate savings may not increase. There are serious data and technical problems with testing aggregate savings relationships and very little research on this topic has been attempted in Africa.

---

1 In general, franc zone countries are not covered in this survey.

In addition, little is known on the nature of real-financial linkages e.g. how the quantity and quality of financial services effects investment and growth in the economy. The benefits of financial market liberalization will depend on the broader restructuring efforts to improve incentives and the rate of return on investment and the incentives for using capital markets. Structural adjustment programs assume benefits to the economy when investment moves towards the growth sectors. However, there are constraints which may be more important for investment than the credit constraints. Gulhati and Datta discuss the possibility that the decline in investment in the late 1970s in eastern and southern Africa was due to strains on absorptive capacity, reflected in lack of projects, shortages of trained personnel, emergence of bottlenecks, and delays in decision making. (Gulhati and Datta, 1983)

There also is little theoretical or empirical work on the other common problems in African financial systems such as imperfections in financial and other markets. Even with deregulation, there may be credit rationing with imperfect information (Stiglitz and Weiss). Credit rationing also can result from missing equity markets so that deregulating the banking system is not enough to obtain an efficient allocation of credit in the absence of functioning equity markets (Cho).

In spite of the unresolved issues and weak empirical base on financial sector deregulation, the case for more flexible interest rates is strong and there is an informal consensus, especially in donor agencies, that even partial reform of the financial sector will be welfare improving. This raises the practical questions of designing and implementing financial reforms. This survey first discusses the issues of coordinating financial sector reforms with broader macroeconomic policies and reforms in other sectors. The discussion then turns to two important issues of reform within the financial sector, reregulation and restructuring financial institutions.

Financial and Macroeconomic Reforms

Much of the current literature on coordinating reform programs, the so-called sequencing literature, points to a general strategy for reform of cutting the budget deficit, reforming labor markets, liberalizing goods markets including trade liberalization, and then tackling domestic financial markets. The generalization that financial markets should be liberalized late in a reform program is based on the observation that financial markets can adjust more quickly than most other markets.

The most important contribution of the sequencing literature, rather than the specific recommendations, has been the focus on costs of adjustment, externalities, market imperfections, and possible inconsistencies in designing economic policies. These issues leave any standardized prescription for a reform program open to challenge because of the structural issues which arise in African economies. For example there is wide variation in the market structure, degree of competition, importance of informal credit markets, existing financial problems, as well as the progress, or lack of progress, in the restructuring and stability of the economy.

Reforms in the Financial Sector

Two components of a generalized strategy towards financial reforms, reregulation and restructuring financial institutions will be necessary in most African economies. Rationalizing the incentive structure in the financial system with flexible interest rates, reducing reliance on the banks for deficit financing, and encouraging competition and innovation are necessary parts of reforms. Whether these changes in government regulation and behavior precedes or follows restructuring of weak financial institutions will depend on the degree of financial distress.

The need for rehabilitation of the financial sector will vary by country from comprehensive to selective restructuring of the banks and parastatal financial institutions. Several African financial systems are very weak. The financial sectors of Kenya, Madagascar, Ghana, Cote d'Ivoire, Mauritania, Senegal and Liberia have been troubled by potential or actual insolvencies. The banking system of Guinea collapsed in 1985 and there are looming financial problems in UMOA. Further deterioration in portfolio performance is expected during economic reform programs in other countries. For countries with severe problems in the financial sector, a realistic goal in the medium-term is to slow or halt the decline in the quality of the portfolio. Improvement is a long-term prospect.

Examples of Financial Reforms in Africa

Of the four countries surveyed for this review, both Mauritania and Guinea started reforms by restructuring and recapitalizing financial institutions. The reforms in Ghana and Zambia started with reregulation. Ghana has gradually reduced restrictions in the financial sector over five years and is now beginning rehabilitation and restructuring. Zambia had a very brief period of interest rate decontrol at the beginning of their liberalization program, followed by a period of inconsistent regulations, and finally the reintroduction of interest rate controls and high reserve requirements over the last half of the reform period.

1

AFRICAN FINANCIAL SYSTEMS

DURING POLICY REFORMS

I. Introduction

Overview of African Financial Issues

The formal financial markets in many SSA countries are thin and fragmented with few institutions and instruments and do a poor job of intermediation. The banking systems, dominated by multinational and government banks, provide only short-term credit for international trade, commercial agriculture, domestic industries and commerce. The systems are inflexible because of perverse government regulations, outdated banking and contract laws, thin concentrated market structure and conservative banking practices, etc. Weak specialized development finance corporations (DFCs), dependent on donor and government funds, are the only source of term financing. There are few options for equity financing.

Government regulations typically combine negative real interest rates with lending targets for priority sectors. Negative real interest rates with overvalued exchange rates and trade restrictions, direct cheap credit to non-traded activities e.g. uneconomic import substituting industries, real estate development and domestic marketing. Credit targets or guarantees are used to cushion adverse relative prices in priority sectors such as agriculture, and are frequently intended to assure funding for unprofitable parastatals e.g. agricultural marketing parastatals.

As relative prices and profitability change during macroeconomic reforms, the quality of bank portfolios may deteriorate. This problem can become acute if the financial sector use credit subsidies or guarantees to cushion the decline in profitability of the former favored sectors. Bank efforts to save failing customers block or cushion transmission of new incentives and become an obstacle to shifting resources. Banks may continue lending to sick industries if not properly supervised. This frequently continues until unstable and insolvent financial institutions are incapable of intermediating and the allocation of resource is perverse.

Most experiments in Africa with financial sector liberalization have been undertaken as part of broader policy reform programs. There is still little information and analysis on the linkages so the coordination of financial sector reform within the broader policy program is open for debate. The complexity of the linkages between the real and financial sector and the sweeping policy reform programs now being attempted suggest close coordination of the reforms in the financial sector and other sectors of the economy.

The financial system can facilitate economy-wide reforms through efficient intermediation including mobilization and reallocation of resources from contracting to expanding sectors. The financial system also plays a role in resource mobilization and term transformation for investment funds. There are two reasons given to delay liberalization of financial markets until other sectors are liberalized. First, financial markets usually adjust more quickly than other markets so liberalization should begin in other markets before in financial markets. Second, other sectors need to adjust to changes in relative prices to give correct price signals to the financial sector. These factors must be weighed against the need to have the financial sector change credit allocation to accommodate reforms in other sectors, potential portfolio problems, the need to maintain profitability in the banks, and the possibility of instability in the financial sector during reforms.

Outline of the Discussion

There is very little analysis available on the dynamics of African reform programs so the objectives of this paper are to review the issues of sequencing reform programs, emphasizing the role of the financial sector in an economy-wide reform program, and linkages among financial and other sectors during reforms.[2] Section II reviews the issues raised in the sequencing of stabilization and liberalization measures. In most cases the issues raised on costs of adjustment and dynamics cannot be answered outside the context of a specific country. Section II includes a conventional description of the issues that are expected to arise during the initial stages of reforms to set the stage for the problems in the financial sector. Section III

---

2 This discussion does not cover the franc zone countries, Benin, Burkina Faso, Cote d'Ivoire, Niger, Senegal, Togo, and Mali (since 1984) from the Union Monetaire Ouest Africaine (UMOA) and Cameroon, the Central African Republic, Chad, Congo, Gabon and Equatorial Guinea (since 1985) in the Banque des Etats de l'Afrique Centrale (BEAC). The franc zone countries have less flexibility in adjusting exchange rates and financial policies and financial liberalization within a currency union will involve a different set of issues.

turns to the sectoral and microeconomic issues of financial reform such as the limitations of thin markets, the expected decline of the financial sector during macroeconomic reforms; implementation of regulatory reforms; and lack of financial innovation. The final section gives a brief overview of the financial reforms programs in Ghana, Zambia, Guinea, and Mauritania.

II. Macroeconomic Policy Coordination

Reform Programs in Africa

During the late 1970s many African countries used international borrowing and reduced level of domestic capital formation to maintain consumption within highly distorted domestic policy regimes. External economic conditions deteriorated in the early 1980s with a slump in commodity prices, high oil prices, slow foreign aid flows, drought, high international interest rates, and highly-indebted countries lost access to international commercial credit markets. Domestic rigidities constrained adjustment and countries accumulated large fiscal and current account deficits. Economic performance in Sub-Saharan Africa declined relative to the performance of the late 1970s and relative to other developing countries. With high debt servicing obligations in relations to export earnings and foreign reserves depleted, many countries have been forced to implement stabilization programs. Prescriptions on economic reforms embedded in IMF and World Bank conditionality include trade liberalization, foreign exchange devaluation, loosening controls on foreign exchange allocation, removing relative price distortions and subsidies, market discipline or privatization for parastatals, and raising agricultural producer incentives.

The short-term results of reform programs in Sub-Saharan Africa have not been encouraging. The reality of reforms in many SSA countries has been forced stabilization by restricting imports, contributing to a decline in production in the sectors dependent on imported intermediate inputs. While the current account deficits have been squeezed, the domestic budget deficits and inflation have risen, and growth rates have been stagnant or declined in many countries, at least in the first few years of the stabilization programs. Declining real incomes and investment have hurt medium-term growth prospects. For example, Cote d'Ivoire started a stabilization and structural adjustment program in 1981 and reduced the fiscal deficit sharply in 1982. Real growth was stagnant in 1981 and fell for the three following years. The debate continues on the reasons for poor performance in SSA. With a shallow research base, it is difficult to determine all of the factors contributing to the disappointing results.

Dynamics of Reform Programs in Latin America

The concern over sequencing, timing, and inconsistencies in reform programs was heightened by the failed programs in Chile, Uruguay, and Argentina in the late 1970s. A body of research now shows that the order of introducing the reforms led to policy inconsistencies. The theoretical, analytical, empirical, and historical basis for evaluating the dynamics of reform programs is weak. Economic theory offers little guidance on the transition path between equilibriums, the speed of adjustment in different sectors, needed coordination among markets, adjustment lags and costs, and the effects of full or partial liberalization with imperfect markets or externalities. These questions must be examined within the political, institutional, and economic framework of a given country. The generalizations from Latin American experience will have to be reexamined with African cases.

Stabilization and Liberalization

The sequencing literature, in a simplification of the dynamic issues, draws a distinction between liberalization and stabilization policies. The distinction will be used here as a conceptual tool even though the distinction is artificial and becomes blurred in examining specific policies since policies can have both stabilization and liberalization dimensions. The framework developed in the sequencing literature is useful for discussing linkages among sectors with varying speeds and costs of adjustment and interaction among policies.

Stabilization refers to policies used to achieve external or internal macroeconomic balance, such as reducing domestic absorption, specifically aggregate demand in the public sector, and reform of the revenue system to cut reliance on inflationary finance, borrowing from the domestic financial system, or unsustainable levels of external borrowing. Liberalization covers policies to increase the efficiency of resource use such as greater reliance on market forces, correcting relative prices, and removing distortions in economic signals and production incentives.

The early sequencing literature argued that it is desirable to achieve macroeconomic stability before attempting liberalization of markets because of potential inconsistencies between these goals and the need to control inflation before liberalizing markets.[3] Another argument for stabilizing before liberalizing is that agents will adjust more quickly to changing relative prices in a stable, sustainable, and credible macroeconomic environment.

The lesson from the Southern Cone countries was that the fiscal deficit must be controlled early in a reform program because monetizing large public sector deficits contributes to inflation. Corbo and deMelo generalize that stabilization should precede

---

[3] e.g. Krueger, (1986, p. 29), McKinnon, (1986 p. 222), and Selowsky, (1986).

liberalization in countries with annual inflation of 25 percent or more and countries with inflation from 15 to 25 percent should give priority to reducing inflation but can also introduce liberalization measures. They focus on three detrimental effects of inflation. High inflation makes relative prices volatile, reduces the information content of relative prices[4], and distorts the price signals for efficient resource use. Second, rapid inflation with nominal interest rate controls leads to negative real rates, credit rationing, a shrinking formal financial system, and distorted investment decisions. Uncertainty about future inflation will reduce the supply of long-term investment finance. Third, inflation increases the incentives for governments to appreciate the official exchange rate which leads to balance of payment difficulties and capital flight. (Corbo and deMelo, 1987, p. 116 and p. 117)

The sequencing literature reflects the strong anti-inflation measures needed in Latin America. Inflation has been higher in the African countries during the 1980s, but is still moderate by Latin American standards. Of the twenty-four SSA countries outside the franc zone, four (Sierra Leone, Somalia, Uganda, and Zaire) had inflation rates over 50%, two (Sudan and Tanzania) had rates between 25 and 50%, and the other rates were either unknown (Guinea and Guinea-Bissau) or less than 25% in 1985. (Pinto and van Wijnbergen, July, 1987, p. 10-12). The inflation tends to be variable rather than stable, compounding the information problems.

Inflation may become more of a problem in Africa during liberalization. Many African countries have repressed inflation with overvalued exchange rates, price controls, rationing regimes, and government subsidies on food and consumer essentials. Liberalization measures such as reducing price subsidies or lifting price controls may reduce the budget deficit but may also fuel inflation, forcing new stabilization measures. This shows that the interaction of stabilization policies to control the budget deficit and liberalization measures to promote more efficient resource use are potentially in conflict.

The recommendation that stabilization should proceed liberalization is now under debate. Fischer has noted that the Israeli and Argentinean experiences of 1985 raise the possibility that stabilization and structural adjustment can be carried out simultaneously and may even be mutually reinforcing. (Fischer, 1986, p. 173.) A recent World Bank publication argued for simultaneous stabilization and liberalization for the following reasons: careless structural adjustment can make stabilization more difficult because structural distortions are often a source

[4] Evidence on this point for African countries is given in Pinto and van Wijnbergen, July, 1987.

of revenue to the government; structural reforms are unlikely to command credibility unless stabilization policies are in place; fiscal stabilization can hamper structural adjustment e.g. cuts in public infrastructure spending to reduce the deficit may cause private investment to fall or raising tariffs to increase public revenues may distort relative prices; stabilization is often associated with a recession so structural adjustment is needed to increase output. (World Bank, 1988 World Development Report, p. 59-60).

Most countries in Africa have undertaken liberalization measures early in reform programs. Most African countries under IMF programs are asked to reduce aggregate demand and liberalize economy-wide prices, e.g. exchange rates, interest rates, etc. early in reform programs. In countries where subsidies are an important part of the budget deficit, it may be necessary to reduce subsidies before it is possible to stabilize. In highly distorted economies there may be significant efficiency gains from liberalization to counter contractionary stabilization policies.

Stabilization

The efficacy of conventional stabilization policies embodied in IMF conditionality are hotly debated. Almost every generalization made about the likely outcomes of stabilization programs are under challenge on theoretical and empirical grounds. The importance of parallel markets, low rates of substitution between domestic and imported inputs, reliance on undiversified primary exports, etc. for the policy prescriptions have not been fully investigated in the African context. The sketchy data, short time frame, and thin research base for African programs make it difficult to evaluate the critiques. It is beyond the scope of this paper to review the intense debate on stabilization policies in Africa. Instead a brief review is given of the conventional stabilization programs used by the IMF to set the stage for the expected changes in the financial sector.

The mandate of the IMF is to move countries under IMF programs toward sustainable current account positions. When a rapid reduction in the current account deficit is mandatory, the IMF focuses on reducing absorption because this is faster than increasing production. Demand management policies are used to reduce aggregate expenditure and achieve internal balance. Expenditure-switching policies, such as exchange rate adjustments or lifting domestic price controls, are used to achieve external balance. (IMF, 9/87.) The three main instruments used for stabilization are monetary and fiscal policy and devaluation. The core of stabilization programs in most African countries is fiscal restraint which is often contractionary.

Countries in SSA have few options other than contraction for achieving stabilization. (Nelson, 1984). There is very little possibility of increasing exports so stabilization means cutting government expenditures to reduce aggregate demand. This is rarely enough to stabilize, and must be supplemented with inflows of foreign aid and debt rescheduling. Stabilization is usually contractionary in the short-run, associated with recession, rising unemployment, falling real wages and incomes, contraction in imports, lower investment, and repayment problems in financial institutions. [5]

Fiscal Restraint

There is little scope for increasing tax revenue in the short run in most SSA countries because the tax burden is already average or high by the standard of developing countries and much comes from external trade tax. (e.g. Shalizi and Squire, 1987 and Kitchen, 1986) Most countries have tried to reduce the reliance on export taxes and increase export incentives in liberalization; another possible inconsistency between the demands of stabilization and liberalization. In the short-run attempts to increase domestic taxes with user charges and cost recovery and attempts to broaden the tax base have yielded little because of lack of administrative capacity to collect income and company taxes and the difficulty of levying taxes on many transactions. Because of the problems with increasing tax revenue, fiscal discipline in the short run means cutting government expenditures.

Linkage Fiscal and Monetary Policy

With access to international commercial capital markets limited and thin domestic capital markets, most SSA governments have few options for financing the budget deficit. Governments have, therefore, resorted to extremely distorting ways to finance the budget deficit domestically like the seignorage tax collected through inflationary financing or overvalued exchange rates and foreign exchange rationing. Banks have been forced to finance government debt in a variety of ways e.g. high reserve requirements and involuntary holding of government securities.

---

[5] The timing and implementation of stabilization policies is also open for debate. For example, Frenkel makes the case for drastic versus gradual application of stabilization policies arguing that a major policy shock will minimize the total output costs of reducing inflation, a gradual approach may not be credible, and needed budget cuts are difficult to implement gradually. (Frenkel, 1983, p. 15-16) Hanson also argues for rapid implementation of a stabilization program. (Hanson, 1983)

Other financial institutions such as social security funds, post office savings banks, insurance companies are also forced to invest in government securities which monopolize the long-term savings.

Very few African countries have tried market-oriented approaches to marketing government debt instruments or persuading domestic financial institutions to purchase government securities. While some countries have recently introduced limited Treasury Bill auctions e.g. Zaire in April 1983, Kenya, and Ghana, these markets are extremely thin and fragile. Zambia introduced a Treasury Bill auction in Sept. 1985 but abandoned the system after a few weeks because of skepticism about the interest-responsiveness of financial savings and the fiscal burden of higher interest rates on domestic debt servicing.

'Involuntary' domestic bank borrowing and inflationary finance of the fiscal deficit are not compatible with financial market liberalization. To protect the stock of base money which is the inflation tax base, the reserve requirements on banks must be kept high and deposit interest rates low. Financial liberalization erodes the inflation tax base so the inflation rate must be increased. This happened in Argentina in the late 1970s and early 1980s when domestic capital markets were liberalized but the fiscal deficit was not under control. As the tax base declined the rate of inflation increased. (Edwards, March 1987, p. 27) If the government is still dependent on borrowing from commercial banks, the fiscal implications of higher interest rates will be destabilizing. Also the government must give up forced borrowing from commercial banks and compete for funds in order to rationalize lending between public and private sectors.

Monetary Control

Most African countries can't use open-market operations because of thin undeveloped markets in government securities and are dependent on instruments like the reserve requirement, discount policy, interest rates, and credit ceilings to affect the money supply. The dilemma is that it is difficult to run monetary policy in thin financial markets and it is difficult to develop financial markets with the type of monetary policy used. Controlled interest rates set by the Central Bank make the banking system inflexible. High reserves requirements used to collect seignorage and tax intermediation through banks avoids the inflationary consequences of printing money but raise the spread between lending and deposit rates. In some countries, use of rediscount facilities has reduced the incentives of commercial banks to mobilize deposits and contributed to capital flight. The cost of tightening monetary control in undeveloped financial markets is higher than in developed markets. Using higher reserve requirements or forcing the banking system to hold more government bonds may have a large impact on interest rates or credit rationing in thin financial markets. The absence of well-functioning money and financial markets means a weak system of monetary control and makes it difficult to have a coherent monetary policy. The Central Banks can destabilize the economy and inflationary expectations with inconsistent policy controls e.g. credit targets, interest rates, and monetary base.

IMF conditionality restricts seignorage through limits on monetary growth and the form of government reliance on the commercial banks. The logic of the IMF financial programming exercise is that the combination of limits on public borrowing and the money supply command a reduction in the fiscal deficit and absorption. An IMF survey of 94 economic reform programs supported by Stand-By Arrangements or the Extended Fund Facility between 1980 and 1984 showed that 53% had limits on bank credit to the central government and 91% had restrictions on government current expenditures. (IMF, 1986)) The degree of disaggregation of the targets from IMF financial programming exercises varies by country.[6]

Exchange Rate Policies

Many African countries have maintained overvalued exchange rates with rationing and administered allocation systems. Overvalued real exchange rates contributed to the growing import dependency of the 1970s and increased the incentives for international borrowing since overvalued exchange rates reduce the burden of the foreign debt. Devaluations are central to IMF reform programs[7] to adjust the composition of absorption and production between traded and non-traded goods. Devaluation is supposed to cushion the negative impact of demand contraction on production and employment during stabilization by switching demand towards

---

6 This raises the issue of the sectoral implication of credit restraints. Either credit rationing or an increase in the cost of credit will create problems for those sectors and firms dependent on credit. If the sectors which are suppose to expand under reforms are more dependent on credit, contractionary credit policies may counteract the incentives of the reform program and hurt growth. Sectoral problems are likely to cause pressure for accommodative monetary and exchange rate policies. Frenkel stresses using fiscal policy to address sectoral issues and deal with the problems of disproportion intersectoral burden during reforms. Frenkel argues that monetary and exchange rate policies are aggregate policies and should not be guided by intersectoral considerations. (Frenkel, 1983, p. 15)

7 The IMF use of devaluation is critiqued in Katseli (1983).

domestic products by increasing the relative price of imports and improving the profitability of exports.

There is an unresolved controversy on whether devaluation is contractionary or neutral rather than expansionary in the short run because of structural rigidities. Krugman and Taylor (1978) argue that the price movements caused by devaluation will reduce real income and contract the real demand for domestically produced goods in the short run so devaluation can reduce real output and employment. Van Wijnbergen (1986) argues a devaluation can have a contractionary impact on aggregate supply through increased local currency costs of imported intermediate inputs, higher domestic labor costs when wages are indexed to the price of imported food, and when firms demand less working credit for production.

Devaluation and the Trade Balance

Devaluation has not been a panacea for the African countries. Most African countries have limited short-term potential for export expansion and devaluation in many African countries coincided with weak international performance in the industrial countries and low commodity prices through the mid-1980s. African countries only contributed 1.9 percent of world exports in 1983, down from 2.7 percent in 1970. Exports are from a limited range of primary commodities and during the 1970s the continent became even more dependent on resource-based exports. Resource-based exports rose from 68% of total exports in 1970 to 72% in 1978. (UNCTAD and UNIDO, cited in Hawkins, 1986, p. 281)

Primary commodity prices are quoted in foreign currency so devaluation does not change the international export price of primary commodity. This makes the export elasticity of demand is less important. Devaluation does raise the domestic currency price and the profitability of exporting so the effect depends on the elasticity of supply. While supply may be fairly inelastic in the short run, elasticity tends to be higher for products with a short production period, a strong existing domestic market, and excess capacity. Supply elasticities will also be greater if investment funds are available and resources are mobile. (Bird, 1983)

While the effects of devaluation on exports and the reallocation of resources into exporting sectors may be slow, the impact of devaluation will be evident quickly on most import prices. Any short-run adjustment in the current account is likely to come from contracting imports. Rising import costs with low elasticity of domestic substitution may also have an impact on inflation.

Fiscal Implications of Exchange Rate Reform

The affects of devaluation on the fiscal accounts can also be felt quickly. The fiscal implications will depend on the elasticity of tax revenue with respect to the exchange rate and the elasticity of export supply. Exchange rate reform may mean loss of tax revenue because dual and overvalued exchange rates tax exports and the tax will be lost through exchange rate unification and devaluation. Tax collections also can decline with the loss of customs and tariff duties if imports decline. While revenue from the trade tax may decline, the domestic currency cost of international debt servicing and all public-sector imports will increase with devaluation.

Devaluation must be accompanied by fiscal correction to control inflation and translate a nominal devaluation into a real devaluation. It is the real exchange rate as the relative price of non-traded and traded goods that is important for resource allocation. Fiscal cum monetary control is also necessary to avoid a depreciation-inflation spiral which will make it difficult to sustain the reform program. O'Connell cited the relative success of Ghana in adopting more flexible exchange rates compared to problems in Zambia and Sierra Leone to demonstrate the importance of accompanying or prior fiscal control. He also cited the successful move to a relatively stable market-determined exchange rate in Zaire. A fiscal austerity program was in place nine months before the initial devaluation and move to a dual exchange rate regime. The deficit fell from 10% to 4% of GDP in 1983. The exchange rate was successfully unified in Feb. 1984. (O'Connell, 1988, p. 30) (The policy program faltered in 1988).

Exchange Rate Management

The effects of exchange rate management and devaluation is an area of intense research for Africa. No attempt will be made to outline this literature except to cite the main areas of debate. Managing the negative impact of a devaluation is one of the most controversial issues in stabilization. A range of transition exchange rate regimes have been tried in Africa. Fischer (1986, p. 168) allows for the possibility of using differential exchange rates for imported consumption goods and inputs to ease the effects of real devaluation on domestic production costs, but stipulates that the subsidy must be temporary so that the required substitution will take place.

The research project led by Pinto and van Wijnbergen has raised the problems of devaluation without unification of official and parallel markets. (Pinto and van Wijnbergen, July 1987). That research also challenged the generalization that poorly developed financial markets precludes the option of floating exchange rates. (Williamson, 1982) Pinto and van Wijnbergen discussed the adoption of floating exchange rates in several African countries without fully developed financial markets. Several countries are using interbank foreign exchange markets, e.g. as of Sept.1986, Nigeria adopted an interbank float and the administrated development of an interbank foreign exchange market was used in the unification of the exchange rate in Zaire. Pinto and van Wijnbergen generalized that a competitive banking system with an adequate level of banking expertise and free from interest rate and credit allocation regulation was a prerequisite in using an interbank market for a floating exchange rate. (Pinto and van Wijnbergen, July 1987, p. 48-55)

Liberalization

Liberalization policies are designed to increase efficiency of resource use e.g. moving to more reliance on market signals rather than administered allocation of resources, lifting price controls, removing distortions between market prices and scarcity values, removing quantitative restrictions and liberalizing trade. Liberalization may also involve transferring more economic power and decision-making to the private sector, encouraging competition, and subjecting parastatals to market discipline. Generalized prescriptions must be altered under country-specific conditions of imperfect competition, weak market infrastructure, costly and unreliable market information, nonenforcement of contract law, externalities and market imperfections.

Speed of Liberalization

The timing and order of liberalization are important for markets which adjust at different speeds. The choice on the order of decontrolling markets will depend on the performance and linkages among the capital and current accounts, domestic financial markets, the government sector, and the traded and non-traded sectors as well as price distortions and externalities.

Several frameworks have been proposed for analyzing the speed of liberalization, and a sample of the arguments are given below. Krueger uses a cost minimization framework to analyze transition with the objective of minimizing the present value of the expected costs of the transition. (Krueger, 1986, p. 29) Mussa uses a two-sector two-factor model to investigate the speed of liberalization given different assumptions of market imperfections or deviations between social and private costs. (Mussa, 1986, pp. 68-124.) Michaely analyzes the questions of implementing a reform program as that of maximizing the present value of the net addition to the economy. He raises the issues of sector-specific unemployment of capital goods and human capital during reforms and the effects on the distribution of income. The guidelines offered by Michaely on the speed of implementation are that the process should be faster the fewer rigidities in labor markets, and the less sector-specific physical and human capital, the more flexible and adaptable are the responses of entrepreneurs, the shorter is the life-span of the physical capital in the contracting activities, and the higher are the elasticities of substitution in production among various activities. He also discusses stages of policy implementation including policy instruments to gain more control for a multi-stage liberalization and treatment of different sectors. (Michaely, 1986, pp. 41-59.)

Edwards analyzes the sequencing problem drawing on trade theory and political economy. From free trade theory, equiproportional reduction of all distortions is welfare-improving in the absence of externalities and adjustment costs so it would be optimal to maximize the present value of welfare gains and liberalize rapidly. This result may not hold in the presence of externalities. With externalities there might be a case for liberalizing slowly if one cannot act on the primary distortions. There are other issues raised by the political economy of reform, e.g. feasibility and credibility. It has been argued that a reform program, to be feasible, must proceed without generating strong opposition and therefore should proceed slowly. However a slow reform program may not be credible. If the reform program is not credible agents will not adjust their actions. (Edwards, 1986, p. 33.)

Partial Reform

An important issue that arises during reform is which policy reforms are likely to be welfare-improving even in the presence of other controls and regulations. From the theorem of second best, the welfare effects of partial liberalization are not generalizable and this question can not be answered outside the country context.

While there is considerable agreement that partial liberalization can be beneficial, there is not agreement about all scenarios. For example, Krueger concludes that there is a large number of partial reforms which could improve welfare. The two possible exceptions are liberalization of agricultural prices with overvalued currency and the liberalization of the capital account in the presence of trade and domestic financial distortions. (Krueger, 1986)[8]

---

[8] Edwards argues that these generalizations may not hold. (Edwards, 1986 p. 32)

Liberalization of External Transactions

Current and Capital Accounts

One of the generalizations made in the sequencing literature is that trade should be liberalized before lifting restrictions on external capital transactions.[9] Michalopoulos summarized two arguments for liberalizing the current account of the balance of payments before the capital account. The first argument, attributed to Krueger, is that trade liberalization is needed to adjust assets prices. Asset prices are determined by the present value of income streams and income streams are distorted by trade restrictions. Under trade restrictions, capital inflows may be channelled to inefficient protected industries. The second argument, attributed to Frenkel, is that asset markets generally adjust faster than commodity markets so the effects of capital inflows will be realized more quickly than the impact of trade liberalization. Because asset markets adjust more quickly, it is easier to harmonize current and capital accounts adjustment by slowing down capital flows than by accelerating current account liberalization. Liberalization of the capital account in Southern Cone countries resulted in large capital inflows with unwanted consequences for the real exchange rate which were detrimental to trade liberalization. (Michalopoulos, 1987, p. 17-18) A more relevant argument for maintaining capital controls until late in a reform program in Africa is that the opportunity for domestic residents to diversify into foreign assets with a concomitant capital outflow would strongly influence the exchange rate.

Trade and Financial Liberalization

The standard prescription for trade liberalization is to replace quantitative restrictions with equivalent tariffs and then compress the range of tariff rates and reduce the average level to a low uniform tariff structure. The switch from quantitative restrictions to tariffs will help reduce the budget deficit with increased revenues. Lack of alternative revenue sources will make it difficult to reduce tariffs. The speed of trade

---

9 Edwards and van Wijnbergen propose the use of the following analytical devices for these sequencing problems: the effects of a capital account liberalization in the presence of trade distortion can be analyzed as a transfer problem; and the opening of the trade account in the presence of capital account restrictions can be done in an intertemporal optimization model of an open economy. (Edwards and van Wijnbergen, Feb. 1986, pp. 141-148.)

liberalization will depend on how quickly resources can be transferred between sectors or the political tolerance for increased unemployment during adjustment. Trade can be liberalized more quickly in countries with a higher initial investment-GNP ratio and more competitive and flexible labor markets. (Corbo and deMelo, 1987, p. 128)

The coordination of financial and trade liberalization must consider several linkages: the changing signals for credit allocation and investment from trade liberalization; the need for credit and new investment to accommodate the shift in production away from non-traded to traded goods; how reduced profitability and capital losses of former favored sectors will affect the financial sector after trade reform; distortions in credit markets; and the change in the price and allocation of credit after financial market liberalization. Countries vary in whether banks were regulated to support or offset import substitution policies.

It is difficult to generalize about the effects of trade liberalization and devaluation on prices, profitability, and inflation and on the financial sector when dismantling a rationing regime with wide-spread distortions, subsidies, and price controls. Integration of domestic and international goods markets should reduce inflation when international tradable goods prices are below domestic prices, which would be true for many import substituting industrial products in Africa. But many countries have directly subsidized these ventures with explicit and implicit budgetary transfers while enforcing low consumer prices. Price controls must be lifted before introducing foreign competition. Depending on the distortions in the pre-reform regime and the interaction of trade liberalization and devaluation and domestic price decontrol, prices and profitability may rise or fall. The demand for credit after liberalization will depend on the capital intensity of production in expanding sectors, the elasticity of substitution of capital for labor, the change in production patterns, etc. Many African countries have excess capacity in the industrial sector with an immediate need for working capital, and most also need investment funds for rehabilitation.

The declining profitability of former favored sectors hurt by trade liberalization and devaluation, e.g. real estate, inefficient domestic industries, will deteriorate the quality of financial intermediaries' portfolios and limit their flexibility in shifting resources from old to new projects or entrepreneurs. Changing relative prices from trade or goods market liberalization may decrease asset values in previously protected activities so collateral will no longer cover the value of the loan in the event of default forcing high loan losses onto the banks. If other reforms have inflicted large losses and profitability falls, banks may not be willing to support new ventures even when financial markets are liberalized. This combined with the increase in the real cost of capital, may have a strong negative impact on investment and growth prospects.

These changing incentives for resource allocation and profitability in the economy must be considered in the transition strategy on trade and financial liberalization. One cannot generalize about whether partial or complete liberalization of financial markets should precede, accompany, or follow trade and goods market liberalization.[10]

Capital Accounts and the Financial System

The lesson from Latin American experience was that capital account liberalization resulted in capital inflows from foreign investment and foreign borrowing which appreciated the real exchange rate and eroded the trade position. In addition capital account liberalization in Latin America raised a host of issues for the banking sectors such as the influence of the international interest rate on domestic interest rates, direct competition from offshore banks, and domestic bank intermediation of international borrowing.

Since most African countries, with the exceptions of the Gambia and the currency zone countries, have retained capital restrictions to prevent capital outflows, this issue will not be discussed in detail except to outline the linkages between the domestic and international financial markets. For countries that intend to liberalize capital accounts, domestic capital markets must be liberalized first to raise domestic interest rates to prevent an outflow of capital to respond to higher international interest rates and domestic interest rates can be raised only after the fiscal deficit is under control. (Edwards, March 1987, p. 27) Opening the capital accounts will expose domestic banks to more direct foreign competition[11] and domestic banks may have difficulty competing with international interest rates, especially if other reforms have inflicted large loan losses. Opening the capital account will probably encourage some businesses to bank off-shore because of high costs in the domestic banking system.

---

10 Some of the arguments on the relationship between trade and financial liberalization are reviewed in Balassa (1986, p. 61), Mussa (1987, pp. 72 and 76), and Michaely (1986, pp. 53-4).

11 Blejer and Sagari (1987) discuss the coordination of domestic financial and external capital account liberalization with imperfectly competitive financial markets.

There are costs of maintaining capital account restrictions and trying to keep domestic insulated from international capital markets.[12] First international competition can not discipline the market power or introduce needed innovation in African financial markets. Second, African banks have only limited options for diversifying portfolios within small specialized economies when diversification into foreign assets is restricted or distorted by exchange and capital controls. Dooley and Mathieson suggest some possible restrictions on commercial banks which cannot diversify with foreign assets. Since the liability structure will reflect the instability of domestic asset values it may be necessary to limit the share of par-value in total liabilities. Also, financial institutions must be permitted, and perhaps required, to cover their foreign currency position. (Dooley and Mathieson, 1987, p. iv.)

Domestic Market Liberalization

Liberalization programs in the short-run have concentrated on removing distortions in the incentives for efficient resource use e.g. removing or adjusting price controls, changing relative prices through devaluation to reflect scarcity values, equalizing tax burdens across sectors, bringing financial returns into line with social returns, lowering minimum wages in the formal sector and removing employment targets, etc. With highly distorted initial conditions, it is difficult to predict a transition path or interaction among markets during liberalization. It is even difficult to predict the final outcome because of market imperfections. The standard prescription is to start liberalizing markets with rigid prices or long-term contracts which adjust slowly e.g. the formal labor market.

Industrial Sector Liberalization

Industrialization in SSA has been a response to government import substitution policies, preferential access to overvalued foreign exchange for intermediate inputs, and trade protection on competitive imports which allowed tremendous inefficiency in both the parastatal and private industries.[13] Industrial sector

---

12 For example, inability to use international financial markets to insure against risks leads to changes in the sectoral allocation of production, levels of investment, labor supply and other changes in real resource allocation in order to achiave some degree of self-insurance. These issues are reviewed in Stockman (Aug. 1988).

13 While the pattern is similar, the resources committed to industrialization will vary across the continent. The manufacturing sector is under 10% of GDP in most African

surveys frequently find that up to half of domestic industries are producing with negative value added at world prices. The combination of overvalued exchange rates, negative real interest rates, and relatively high urban wage rates skewed choices towards capital-intensive technology and imported inputs leading to low capacity utilization and output during foreign exchange shortages. Price controls are pervasive, especially on items considered essential, such as processed food, tobacco, and beverages.[14] Loss-making parastatals have been subsidized through direct budgetary transfers, inter-enterprise transfers within the parastatal sector, and financial policies, such as credit guarantees, directed credit, interest rate subsidies.

The short-run effects of reforms on profitability and liquidity will be difficult to predict for individual industries because the initial conditions are highly distorted. In Zambia, the decontrol of domestic prices necessary before subjecting domestic industries to international competition in 1985 gave a strong initial boost to the industrial sector. While some of the boost was due to access to foreign exchange under the auction, many industries also were able to exploit domestic market power. Decontrol of domestic prices will be delicate since the market structure is highly imperfect with little domestic competition. Over time efficient import-substituting industries may benefit from devaluation, rationalized tariffs on imported inputs, and domestic price decontrol. The profitability of inefficient firms with strong foreign or domestic competition or dependent on imported inputs will decline and some of the losses will be transmitted to creditors.

Much of the industrial sector, especially the private sector, is dependent on retained earnings for financing. The range of corporate financing instruments available is extremely limited. Equity finance is almost completely absent in most countries so

---

countries so manufacturing capacity on the continent is concentrated in a few countries. In 1981, five countries, Nigeria, Zimbabwe, Ivory Coast, Ghana, and Kenya, accounted for more than 60 percent of manufacturing value added in SSA, 17 countries accounted for 31.5 percent of manufacturing value added, and the remaining 21 countries 7 percent. (Hawkins, 1986, pp. 279-280)

14 African manufacturing is dominated by firms producing simple consumer goods for the domestic market, products that are relatively income inelastic. Foodstuffs, beverages, and tobacco, account for 31 percent of manufacturing value added, followed by clothing and textiles contributing 21 percent. (Hawkins, 1986, p. 281-2)

the corporate financial structure is skewed towards debt financing, much on inflexible terms. The large industrial parastatals in Africa are highly leveraged with term debt either to domestic financial parastatals or to foreign donors, some older international commercial loans, and international trade finance. Because of dependence on imported intermediate inputs, African industries are heavy user of foreign exchange and international borrowing. Real devaluation will cause severe valuation losses to the industrial firms that borrowed in foreign exchange.

Most SSA countries have excess capacity in the industrial sector which was overbuilt for limited domestic demand exacerbated by declining per capita incomes and foreign exchange shortages during the 1980s. With excess capacity the immediate need is for working capital from the commercial banks e.g. firms need liquidity to secure foreign exchange for imported intermediate goods. The next step of investment funds for rehabilitation will be even more difficult with the dearth of corporate finance instruments such as primary and secondary markets for negotiable equity, stocks, or long-term debt instruments, and bonds.

The less capital-intensive segment of the industrial sector may expand after import substitution subsidies are removed and devaluation. It is estimated that about 20% of total manufacturing output comes from small-scale manufacturing (Hawkins, 1986, p. 279) and this segment has had little contact with formal financial markets. Reporting on studies from Nigeria, Tanzania, Sierra Leone and Uganda done between the late 1960s and mid-1970s, Liedholm and Mead found that the most important source of capital for establishing or expanding small firms was personal savings, relatives, or retained earnings. Less than four percent of the funds came from formal sources such as commercial banks or the government. (Liedholm and Mead, 1986, p. 312-313) The resources available to fund new credit programs for small-scale industries are scarce.[15] There are not many success stories for small-scale industrial credit programs in either commercial banks or parastatals. Liedholm and Mead offered some generalization from two recent reviews of small industrial credit schemes in Africa. The most successful schemes focus on working capital rather than fixed capital. Second, loans are evaluated on character rather than project feasibility and/or collateral, the lending institutions are local and decentralized, initial loans are small and short term, and loan volume per loan officer is high, and interest rates are high

---

[15] Zambia and Malawi have recently started new parastatal credit programs for small enterprises but these are poorly funded.

enough to cover the cost of funds and operating expenses. (Liedholm and Mead, 1986, p. 321-322)

Liberalization of the industrial sector is likely to cause a marked deterioration in the quality of the portfolio of financial institutions as inefficient companies become illiquid and then insolvent. Allocation of the losses from restructuring is discussed further in Section III.

Agricultural and Financial Reforms

The agricultural sector is expected to benefit from depreciation of the real exchange rate which will improve the price and producer incentives of tradeable agricultural output relative to non-tradeables. The effect of trade liberalization will depend on whether international prices are above or below domestic producer and consumer prices. Most reform programs have also incorporated reforms in agricultural policy towards higher producer support prices for commercial grains, decreased fertilizer subsidies, reducing consumer subsidies, and reform of marketing parastatals. The distribution of burden and benefits of these changes will depend on use of purchased and imported inputs, technology, whether households are net seller or buyer of food and the mix of food and export crop production, relevant elasticities of supply, and use of parallel markets. The evidence is only started to come in on the effects of agricultural reforms with considerable variation among SSA countries under reform programs. In some, the improved production since 1985 has been sufficient to halt the decline in per capita food production experience from 1975 to 1984. It is not clear yet whether this was simply better weather after the drought in 1983-4 or the effect of improved producer incentives and greater efficiency in parastatal performance.

Large scale commercial agriculture is reliant on working capital from banks and imported inputs.[16] Small scale agriculture, frequently without land titles for collateral, is much less reliant on debt financing from formal financial institutions and uses few purchased inputs. The financing problems in small-scale agriculture are extremely difficult, involving issues of land tenure and ownership systems and lack of agricultural collateral.

Most agricultural reform programs have started by reducing the subsidies on imported fertilizer and raising output prices. While the price reforms may be designed to make production more

---

16 In some countries, e.g. Kenya, many large-scale African farms are highly leveraged because departing colonists' assets were transferred with long-term loans.

profitable, it will create a greater demand for seasonal working capital. This change may be coupled with reform of marketing boards which usually supply seasonal credit. A few SSA countries have tried to reform the monopolistic grain marketing agencies to allow more private competition. (e.g. NAMBoard in Zambia) Since the grain marketing agencies also provided, or at least collected, production credit, reform of the marketing agencies may disrupt credit flows to agriculture. In some countries the alternative credit supply routes such as input supplier's credit, cooperative credit, or informal rural credit market are very limited. Many of the agricultural credit parastatals are weak or insolvent and inflexible and unable to expand credit services at this time.[17]

Summary Macroeconomic Policy Coordination

The guidelines that emerge from the sequencing literature on macroeconomic policy coordination are:
(1). the fiscal deficit must be controlled early in the reform program because African countries have limited deficit financing options;
(2). trade should be liberalized before external capital transactions because capital inflows would appreciate or slow the depreciation of the real exchange rate and capital inflows might go to import-substitution industries;
(3). the recommended strategy for trade reform is to move from quantitative restrictions to uniform tariffs and then reduce the level of tariffs;
(4). liberalization should begin with the markets that are slowest to adjust e.g. labor rather than domestic financial markets;
(5). extensive financial reforms should be delayed until inflation is under control;
(6). domestic financial markets must be liberalized before opening the external capital accounts.

Therefore the general strategy recommended for reform is to cut the budget deficit, reform the labor market, liberalize goods markets including trade liberalization, tackle the domestic financial markets, and delay liberalizing capital accounts. Perhaps of more importance than the specific recommendations, has been the focus on costs of adjustment, externalities, market imperfections, and possible inconsistencies in planning economic policies.

---

17 The weakness of agricultural credit parastatals will make the transition to more diversified rural financial institutions difficult.

III. Financial Sector Reforms

Expected Benefits of Liberalization

The theoretical issues on the role of money, credit, debt, and intermediation in economic performance and growth and real-financial linkages are largely unresolved. There is not a consensus on the expected benefits of financial market liberalization, or even on the theoretical framework for analysis. The theoretical revolution shaking the study of macroeconomics and finance in developed countries, incorporating uncertainty, information and expectations explicitly in models (see Gertler (1988)), has not touched research on Africa for several reasons including the paucity of data and uncertainty about how to model expectations on macroeconomic variables since the flow of relevant economic information is spotty and unreliable in most countries. Other research topics on the financial markets of Asia and the industrial countries, e.g. the interaction of innovation and deregulation, globalization of financial markets, securitization, the adoption of new technology for information processing and communications, are not directly relevant to Africa at this time. In applied financial sector analysis for developing countries, the effects of government control and regulation are usually analyzed in the framework associated with McKinnon and Shaw. The major challenge comes from the structuralist critique. The debate is only discussed briefly below because it is covered in other sources. (See Fry, 1988) Little new has been added to the debate on analysis of financial systems from the African experience.

Repressed Financial Markets

McKinnon and Shaw turned attention in 1973 to the problems of perverse government regulations, especially interest rate ceilings, in slowing financial market development.[18] In the McKinnon-Shaw repression framework, lending and investment are constrained by lack of financial savings because of interest rate controls and viable investment projects exist in the economy and would be undertaken if financial savings were available. Low

---

[18] The differences between the Shaw and McKinnon approaches and the extensions of their work are outlined in Fry (1982 and 1988).

deposit rates are an implicit tax on savers and subsidy for borrowers. The policy implication of this view is to lift restrictions on deposit rates to increase financial savings which would expand lending and investment.

The repression model of financial markets has proved durable because perverse government regulations are pervasive in developing countries.[19] The literature has extended the basic repression framework with different mechanisms for liberalization to generate the resources required to raise interest returns to depositors and by which higher deposit rates translate into greater investment or more efficient credit allocation. Some have argued that it was not inevitable that firm profits fall with higher lending rates if the greater availability of loans is used to finance high-yielding assets. Some have argued that a higher deposit rate may not lead to higher lending rates because of improved efficiency of resource use, perhaps because liberalization allows resources to shift from the public to the private sector with a fall in lending rates to the private sector. (Fry, 1982) For this strategy to work the demand for resources in the public sector must fall so financial liberalization must be coupled with fiscal control or tax increases. Galbis (1977) developed a two sector repression model with a traditional and modern sector to show greater modern sector capital accumulation arising from higher deposit rates. Higher deposit rates attract funds released from inefficient uses in the traditional sector into financial savings. These funds are channeled through bank loans into higher yielding investments in the modern sector and enhance modern sector capital accumulation. Firms increase leverage and earn higher returns on equity.

The Structuralist Approach

An alternative view of financial markets, the structuralist approach, has been proposed by van Wijnbergen (1982 and 1983) and Taylor (1983 and 1987) who focus on the structural characteristics of financial markets. In the McKinnon-Shaw models there are two assets in savers portfolios, monetary assets and inflation hedges and total financial savings increase with higher official interest rates. The structuralist model introduces a third asset in the market, private loans in the unofficial curb or free market. With a third asset, there is a possibility that higher official interest rates will shift funds from curb or free markets to bank deposits and total

19 The repression framework has been applied to several financial markets in Africa, including work on banking in Senegal and Mali by Hickok and Gray and on rural financial markets in Niger by agricultural economists at Ohio State University.

intermediation will not increase. Taylor (1987), within a structuralist macroeconomic model, argues that with two assets, deposits and loans, a higher deposit rate leads to a higher loan rate and stagflation. With a third asset, possibly an inflation hedge, the response to an increased deposit rate is not clear. There is not a clear case for higher deposit rates in the structuralist treatment of financial markets.

Sundarajan (1985), in the structuralist tradition, investigates the effects of higher bank lending rates on borrowing and modern sector capital accumulation. He argues that the ultimate impact of an increase in the administered interest rate depends on how this affects the cost of capital through the cost of equity and the share of debt. The effects of interest rate policy on savings and investment varies with the financial structure of firms and the reduction in investment demand after an increase in the administered interest rate would be larger with a high debt ratio. After the banking system has reached a certain size and sophistication, he argues that the scope for raising the debt ratio would be governed by decision of firms and the debt norms used by banks and finds the financial repression view of a supply-determined debt ratio unlikely. He further argues that high debt-equity ratios in the corporate sector of many developing countries is detrimental to macroeconomic stability.

Imperfect Information

The recent microeconomic credit literature stresses the importance of imperfect and costly information in credit markets. Much of that literature has tried to explain credit rationing in competitive markets such that lenders continue to lend at a lower interest rate and ration credit rather than respond to excess credit demand by raising interest rates. One line of this research has argued that banks can't raise expected profits with higher interest rates because of the relationship between interest rates and default risk. In the Stiglitz and Weiss (1981) model the interest rate is a screening device. Borrowers willing to pay a higher interest rate may be, on average, worse risks. As Stiglitz and Weiss have shown the expected returns of the lender go down as interest rates increase so that credit will continue to be rationed in competitive markets.

Furthermore, with imperfect information, credit allocation even in a competitive credit market may be inefficient. (Stiglitz and Weiss (1981) and Ordover and Weiss (1981)) Under imperfect information, some groups may be totally excluded from credit markets even with higher expected returns than the groups that get credit. According to Stiglitz and Weiss the return for the bank from lending to a specific group of borrowers may not be monotonically increasing function of the interest rates to borrowers for two reasons. Because of the adverse selection effect, safe borrowers who would be more profitable clients, may not borrow when rates are high. Because of the incentive effect, borrowers will favor projects with higher returns but a higher probability of default when the interest rate is increased. This line of research suggests that credit allocation may not be efficient, even when banks are deregulated, if information is costly.

Incomplete Financial Markets

Cho's research (1984 and 1986) leads to the conclusion that with asymmetrical information, liberalization of the banking sector would not achieve efficient capital allocation in the absence of well-functioning equity markets because of the incentive problems with banks contracts. Under fixed fee bank contracts the interests of lenders and borrowers conflict since borrowers keep the whole excess of outcome over their loan liabilities when the investments is successful. Lenders are restricted to the lower tail of the distribution with a claim only on the principal plus interest rate specified if the project succeeds or the entire loss if the project fails. There is not a problem of adverse selection under equity contracts even with asymmetric information. Under pure equity contracts, the expected return to the shareholders is nothing more or less than the expected return of the projects. The limited returns on a debt contract means that banks avoid financing innovative borrowers, who may be perceived to be risky, even though the banks are risk neutral and free from interest rate ceilings. This means banks, even when unregulated, are generally unable to match the allocative efficiency of a stock market.

A lack of risk-bearing capital in the system may result in inefficient credit allocation even with reforms in the banking system. Cho's analysis suggests that development of an equity market is a necessary condition for complete financial liberalization. Until a country has an active equity market, it may have to settle for a second-best approach to financial liberalization with some government intervention in credit markets. (Cho, 1986, p. 192)

The debate on the impact of financial liberalization must be subjected to empirical testing.[20] There has been very little empirical testing or even monitoring of the financial liberalization experiments in Africa which would shed light on the expected effects of financial liberalization.

---

20 Fry (1982 and 1988) reviews the empirical evidence on this debate, but much of the work has been done in Asia.

Experience with Financial Reforms and Applicability to Africa

Only a few developing countries have successfully liberalized financial markets e.g. Brazil and Korea. Attempted reforms in Argentina, Chile, Uruguay, and Turkey were not successful and the reasons are still open for debate. Most analysis on the Southern Cone countries suggest that financial liberalization failed because it was coupled with inconsistent macroeconomic and exchange rate policies. Reforms to reduce government controls of interest rates and credit allocation have frequently been followed by very high interest rates leading to financing problems for the corporate sector. Various reasons have been suggested for the high interest rates including uncontrolled fiscal deficits, inflationary expectation, expectation of exchange rate depreciation, contractionary monetary policy, and concentrated bank lending to failing industries. The failed reform efforts reinforced the lesson that financial reforms must be coordinated with macroeconomic and trade reforms and highlighted several issues and linkages to be discussed in following sections.

Political Economy of Financial Reform

Two important forces for financial deregulation in the industrialized countries, international competition and domestic financial innovation, are weak in Africa. Most countries in Africa have maintained restrictions on capital accounts dampening the forces of international competition so that international competition is felt with capital flight rather than directly. Because of government restrictions and multinational banks are anxious to limit risk exposure, resident multinational banks have only been weak force for change in African markets and domestic financial innovation is weak.

Financial reforms in Africa have been undertaken as part of macroeconomic reform programs rather than a response to market forces such as competition or innovation. For example, financial reforms in Zambia and Ghana were part of a broader macroeconomic adjustment package. Some reform efforts can be traced to instability or insolvency as in the mild reforms in Kenya and the radical reforms in Guinea. The current emphasis on financial reforms partly reflects the preferences of donors. Any country with an IMF program is going to have pressure to adjust interest rates and monetary control. The World Bank has been active in financial sector work in Africa. The World Bank has done financial sector reviews in Benin, Cameroon, Mauritania, Ghana and Senegal, and Cote d'Ivoire. There have been World Bank-supported reform programs in Ghana, Mauritania, and Guinea. The World Bank is preparing packages of policy based lending with financial sector components in at least five countries, Ghana, Madagascar, Guinea, Tanzania, and Zaire.

The financial sectors in Africa are highly politicized and reforms are going to come up against sensitive political issues e.g. closing insolvent public institutions, sale of public institutions to foreign or private investors, reallocation of resources away from formerly protected interests to new entrepreneurs.

Financial Reform Issues

One generalization to emerge from the discussion of macroeconomic policy coordination in the first section was that the fiscal deficit and inflation must be under control before financial sector liberalization can succeed. The coordination of financial with other market reforms remains a matter of debate. Since financial markets adjust more rapidly than other markets, it is usually argued that financial markets should be liberalized after other markets. There are several counter arguments depending on the economy. The arguments will be discussed in the following sections along with issues that might arise in financial liberalization. The discussion is organized as follows:

First, there are problems of thin imperfect financial markets. The banking sector is the only organized segment of capital markets in most African countries. Many countries have only a few banks, many foreign and a few government banks, and a history of collusion among banks. Parastatal financial institutions are weak and offer only a limited range of services. Market discipline through competition is not reliable.

Second, problems of imperfect market structure and missing or imperfect markets in other parts of the economy, costly information, high transaction costs, and uncertain property rights act as endogenous or structural constraints on the operation of African financial markets. Financial market liberalization is to improve intermediation, credit allocation and resource mobilization, but in the short-run, liberalization will not remove the endogenous or structural constraints.

Third, declining profitability of non-traded activities with changing domestic relative prices and contractionary economic policies will be transmitted to financial institutions. During macroeconomic reforms, many countries face the possibility of unstable or insolvent financial institutions because of deteriorating credit quality. This raises the issues of the ability of the Central Bank to supervise banking risk and the options for restructuring financial institutions.

Fourth, African countries introduced low interest ceilings and controls on credit allocation to encourage investment and capital formation in 'priority sectors' and to counter the concentrated credit allocation by foreign banks. Interest rate and lending restrictions, and other perverse regulations have undoubtedly slowed development and impeded functioning of African financial systems, but liberalization may not be straight-forward. There may be transition problems after reforms in highly distorted weak financial markets. Of special concern is interest rate decontrol since the likely savings response is small but the effects on the performance of the portfolio can be devastating.

Fifth, while reregulation of the financial sector, a stable macroeconomic policy environment, and sustainable incentives for growth will improve the incentives for financial innovation, but the short-term prospects for innovation remain bleak because of market imperfections.

The following discussion of financial reforms outlines the major issues that are expected to arise in reforms and must be considered in designing a country-specific reform strategy. At this time there is too little information available to offer comparative analysis on the sequencing and implementation of the components of financial reforms i.e. stimulating competition and entry or modifying regulation for lack of competition, rationalizing the limits of competition among different types of institutions, reducing repressive regulations, restructuring financial institutions, strengthening supervision and regulation for safety and stability, and encouraging innovation, etc.

Market Structure

Financial markets in Africa are thin and fragmented with few institutions or instruments. Most countries have only a few banks and parastatal financial institutions and in several countries the financial sector is dominated by a single institution. For example, BDM has about 70% of the total assets of the financial system of Mali, and BDRN in Niger has 60-70%, the National Bank of Commerce controls over 95% of the total short-term credit in Tanzania. Existing institutions have considerable market power which limit the short-run options for deregulation since competition will not discipline markets. Outside the franc zone, few African countries are considering liberalizing capital accounts and integrating domestic with international capital markets to force competition on domestic banks.

Banks

Ownership patterns vary from the African countries that allowed foreign banks to continue operation e.g. Ghana, Zambia, Botswana, and Kenya, countries with early experience with a mix of foreign and indigenous banks e.g. Nigeria[21], to countries that nationalized the foreign banks e.g. Tanzania and Somalia. The banking systems are dominated by one or more large government banks and the established foreign banks. Most of the older foreign banks are conservative, lending to established clientele for limited activities and are mistrusted by the governments.

Aggressive competition among major banks is extremely rare. There are still explicit banking cartels in several countries e.g. Zambia and Botswana, and implicit collusion in others. Some South Asian and American banks entered African markets in the early 1980s as did a few (Arab) Islamic banks. The newer foreign banks specialize in multinational business. In recent years a small competitive fringe of indigenous banks has developed in several countries.[22] The new indigenous banks are small and do not represent credible competition. There may be justifiable hesitancy to decontrol domestic financial markets with oligopolistic banking sectors. Competition among the major banks may be limited even if markets are decontrolled. Entry, especially of foreign banks, is strictly controlled, so the threat of entry will not discipline established banks.

With little active competition, African banks have been slow to improve services and introduce new instruments. Commercial banks offer only a limited range of services, usually deposit-taking and short-term lending for primary export activities, import-substitution industries, some retail trade, and commercial agriculture. Liability instruments are short-term and banks do very little term transformation, leaving term lending to

---

21 There was a banking boom in Nigeria in the 1940s and early 1950s with the entrance of several indigenous private banks. Most were troubled by high loan losses and forced to close. In 1976 the state took a 60 percent equity share in the expatriate banks but left management policy with the expatriate shareholders.

22 Several indigenous non-bank financial institutions have been started in Kenya since the mid-1980s and there are a few in Nigeria, one was started in Uganda in 1988, and several in Zambia. A new private bank in Mali, Bank of Africa, was reportedly financed by return flight capital.

parastatals. In most countries outside West Africa, commercial banks cannot take equity positions.

Specialized Financial Institutions

Government parastatals control practically all term debt and equity finance. The problems of specialized development finance corporations are well known. DFCs are nondepository institutions and therefore dependent on donor or government funds[23], poorly diversified and vulnerable to sectoral risk[24] and crippled by poor repayment rates. In addition, DFCs that have taken the foreign currency risk of donor funds are vulnerable to exchange rate adjustments. DFCs have not been disciplined against excessive risk taking by depositors, donors or governments. The portfolios of these institutions deteriorated after the emphasis of World Bank programs changed from development of the intermediaries to using credit programs to encourage investment in the mid-1970s. Many development financial corporation are insolvent and restructuring will drain government resources.

The record of DFCs in serving a clientele who would not have access to commercial banking services is spotty but these institutions do play a unique role in term financing. The future of these institutions will be a dilemma because the DFCs are still the only source of term funds even though DFC and banks overlap in commercial banking services.
Market structure considerations will be central to regulation on boundaries on allowable activities, competition among types of financial institutions, the mix between multipurpose and specialized banks, scope for bank privatization, and regulation of new entry. Efforts to stimulate competition may compound problems of instability. For example, lowering the capital requirement for new entry to encourage competition may increase the possibility of failure of undercapitalized de novo banks. The low paid-up capital requirement on non-bank financial institutions in Kenya spawned many new indigenous institutions but the strategy proved risky. This experiment ended with the failure of six financial institutions and Central Bank intervention to restructure the weak financial institutions. Market structure considerations will also limit the options on

---

23 However, housing finance parastatals take deposits in most countries.

24 The benefits of sectoral expertise may outweigh the problems of sectoral risk when the government risk portfolio is diversified across sectors. However, in practice, the government is not a reliable source of funds during economic reforms.

deregulation since market outcomes may not be reliable in very thin markets.

Efficiency of Financial Intermediation

African financial institutions appear to be inefficient at some of the primary functions of financial intermediation e.g. static and intertemporal allocation of resources, credit monitoring and recovery, diversification, information processing, and asset transformation. Costs are high and interest spreads large. It is not clear yet how liberalization of the regulatory framework or increased competition will effect the efficiency of intermediation and how this will impact on the rest of the economy.

Credit Allocation

An early study raised the possibility that credit allocation is so inefficient in Africa that financial markets have not played a positive role in development. Bhatia and Khatkhate questioned whether the benefits usually attributed to the growth of financial intermediaries would accrue under the conditions presently found in developing countries with indigenous entrepreneurs disadvantaged vis-a-vis foreign or immigrant firms. The larger expatriate enterprises are usually perceived to have lower risks than indigenous entrepreneurs. In this situation credit allocation is guided by perceived risk and the value of the security, not by productivity. Bhatia and Khatkhate failed to find a conclusive relationship between indicators of financial development and overall economic growth using macroeconomic data from eleven African countries. They attributed this to the less than optimal distribution of loanable funds by financial institutions and conclude that credit flows in the less developed countries, characterized by unequal distribution of assets, fail to perform their essential function of contributing to the growth process. (Bhatia and Khatkhate, 1975, p. 152.)

Some of the constraints on credit allocation are exogenous, such as interest rate restrictions, selective credit controls, and the political role played by subsidized credit programs and can be eased during liberalization. Several of the constraints are endogenous or structural, e.g. costly information, high transaction and monitoring costs, imperfect and incomplete markets, uncertain property rights and competing legal systems, and lack of collateral substitutes.

The spatial and structural characteristics of many areas limit the options on financial contracts and lead to inefficient credit allocation. Factor markets and markets for risk sharing and intertemporal allocation are incomplete which has immediate consequences for financial intermediation. Imperfect factor markets, especially for land and labor, make complex contracts difficult and distort production, investment, and intertemporal allocation decisions. (e.g. Livingstone, 1981, p. 5:10 and Collier, 1983)

The relationship among collateral, credit markets, and collection is a major constraint to rationalizing credit allocation in most African countries. Work by Binswanger and Rosenzweig on rural financial markets point to the problems of incomplete insurance and credit markets for risk diffusion, costly information, the special problems of financial intermediation among spatially dispersed producers in rural areas, and the relationship between collateral and the existence of credit markets. Collateral can act as a substitute for the interest rate in raising the expected return on a loan from the vantage of the lender because it shifts a portion of the potential capital loss from the lender to the borrower if the project fails. The trade-off between raising expected returns with the interest rate and collateral depends on the risk-aversion of the lender. The three conditions for assets to be acceptable as collateral are appropriability, absence of collateral-specific risk, and accrual of the returns to the borrower during the loan period. (Binswanger and Rosenzweig, 1982 p. 15) These characteristics explain why there are few viable substitutes to land collateral. Credit market may not exist for individuals without assets to serve as collateral even if those borrowers are willing to pay high interest rates since the expected return to the lender may go down as the interest rate increases. Also the credit market may disappear for persons with no collateral from the demand side. The expected return of the investment may be lower than the interest rate. (Binswanger and Rosenzweig, 1982.)

Traditional (unregistered) tenure systems in some areas of Africa precludes using land collateral and makes it difficult to identify suitable collateral or collateral substitutes. Many countries have linked seasonal agricultural production credit to operations of a monopolistic parastatal marketing board which can enforce loan repayment by controlling all marketing. Donors have asked African countries to legalize alternative private marketing systems so marketing boards will not be able to guarantee repayment. The spatial characteristics, especially in rural areas, make unsecured lending programs very risky. High monitoring, transportation, and collection costs with low population density make financial intermediation in rural areas costly and risky. High information and monitoring costs, uncertain property rights and weak enforcement mechanisms, may also explain why most credit goes to repeat borrowers. One of the only credible threats for banks is to cut off service to a repeat borrower. Clients slowly build up credit standing with renewed credit facilities. Reliance on past borrowing history in credit appraisal is going to make reallocation of credit under structural adjustment very difficult since a change in relative prices should stimulate lending to new clients and enterprises.

Resource Mobilization

The record of domestic resource mobilization through the financial system in African countries has not been good[25] and the prospects severely constrained by low per capita income. In most SSA countries, the net domestic savings rates is under 10 percent of GNP. In the low income SSA countries, the domestic savings ratio fell from 10.9 percent in the 1960s to 8.8 percent in the 1970s, and is expected to drop to an average of 8.6 percent over the next decade. (Hawkins, 1986, p. 300) Low domestic savings translate into dependence on foreign capital and falling investment. A review by the African Development Bank of development programs in 16 SSA countries found that dependence on foreign capital for investment is as high as 80 to 100 percent for some of the least developed states, averaging 56 percent for the entire sample. Only Guinea, Sudan, Uganda, Botswana, and the Gambia had investment plans where the bulk of financing was to be met from domestic sources. The African Development Band found that domestic savings ratios have stagnated, except in oil-exporting countries, and investment rates have declined. Net investment as a percent of GDP is estimated to have been below the 15 percent gross investment ratio of GDP estimated for 1984 because of the serious deterioration of capital stock in many parts of the region. (Hawkins, 1986, p. 300)

The low savings rate may be traced to stagnant or falling real income levels and rapid population growth, but the macroeconomic policy environment[26], low rates of return on investment and the weak financial sector also contribute. There may be a few handles in the financial sector to influence savings rates such as more flexible deposit instruments, lowering transaction costs and tax rates on interest-earnings, raising interest rates, reducing 'forced' savings in national social security or national provident funds, and maintaining security of small deposits.

Some propositions that could be entertained in Africa are that income is a more important determinant of savings than interest rates (see Khatkhate, 1980); an increase in the deposit rate will help capture more of the financial savings in

---

25 There are no reliable estimates on the savings rates in informal savings schemes.

26 In some African countries capital flight is significant with savings held abroad in foreign currency as a hedge against inflation and devaluation.

the economy in financial intermediaries[27] but the savings response will be quite small; that transaction costs for many depository institutions are high and savings instruments are inflexible; an important disincentive for savings is exposing income records to tax agencies; and that the savings response is likely to be small during a reform program.

Costs of Intermediation

It is extremely rare to find data on costs of intermediation in African financial systems. Few systems or even individual banks have reliable records on costs. Costs are believed to be very high by international standards[28] because of internal inefficiency and government policies. Costs have been driven up with rural branching requirements, directed lending to sectors with high loan losses, and taxation on banking. There may also be a large element of monopolistic profits in banking spreads.

Deterioration in the Financial Sector

The roots of the inefficiency and instability in African financial systems can be found in the broader problems of the economies, the structure of financial markets, and regulation of the financial sector. The combination of overvalued exchange rates and import substitution protection made production of non-traded goods profitable relative to traded goods. Bank portfolios are weighted heavily in non-traded and quasi-nontraded goods e.g. real estate, import substitution industries, and commerce. Lending to tradeables in SSA is concentrated in one or two primary commodity exports, coffee and tea in Kenya, oil in Nigeria, coffee in Uganda, copper in Zambia, cocoa in Ghana, commodities subject to volatile prices and a prolonged slump in

---

27 It is usually assumed that the elasticity of financial savings with respect to interest rates is positive, albeit small. The relationship between aggregate savings and interest rates is also assumed to be positive but this is controversial. (See Khatkhate, 1988 and Arrieta, 1988) Serious data limitations inhibit any attempt to investigate aggregate savings relations. (Giovannini, 1983).

28 For comparison, intermediation costs for large efficient commercial banks in developed countries are usually less than 3% of assets, and loan losses rarely exceed 1% over the business cycle, so the total cost of intermediation plus provisions is about 4% of assets. In many developing countries the cost of intermediation plus provisions in commercial banks exceed 5% and the costs of development finance corporations are much higher.

the early 1980s. Lending for primary exports is often done through marketing boards and parastatals, which have had financial problems with cuts in subsidies during reforms. The problems of the real economy have been transmitted to the financial sector and are likely to be exacerbated during restructuring.

Portfolio Deterioration during Reforms[29]

Stabilizing the economy necessitates monetary and fiscal contraction, but if this phase precedes liberalization, relative price signals will not be a reliable guide for credit allocation. During contraction lending policies should avoid squeezing sectors that need to expand, i.e. tradeables and efficient import substituting sectors, and reduce credit subsidies to previously favored sectors that will decline after liberalization. Liquidity becomes very important when moving from a highly distorted regime to a market price system, especially under credit constraints. Firms that could be profitabl' after relative prices change, may become insolvent during the initial contraction. If unsustainable distorted relative prices guide the allocation of credit during contraction or if bank regulations continue to direct subsidized credit to declining sectors, this will lead to more problems with bank portfolios after liberalization.

The reforms necessary to improve the long-term growth prospects of an economy, reduce aggregate demand to a sustainable level, adjust relative prices through trade liberalization and devaluation, remove economic distortions, and reduce subsidies to inefficient activities, will hurt traditional banking clientele and the performance of bank portfolios. Also firms with even a moderate level of debt may experience financial problems during credit contraction, relative price adjustments, and regulatory reforms to raise interest rates. Firms with foreign liabilities will be hurt by devaluation, and are frequently hurt by accumulating penalties on foreign arrears under continuing restricted access to foreign exchange for debt-servicing. As trade protection and preferential foreign exchange and credit allocation are withdrawn, some import substitution ventures will require restructuring and others will need to be closed.

Credit evaluation of public enterprises by government-owned banks is typically weak and the credit risk may have been acceptable only with an implicit or explicit government guarantees. Weak performance by state-owned enterprises have contributed to the rise in nonperforming assets in many banking systems including Benin, Cameroon, Madagascar, and Mali. The government frequently can not meet the contingent liabilities of credit guarantees for

---

29 See Hinds for a broad discussion of financial distress in developing countries.

failed public enterprises. In Benin, borrowing of state-owned enterprises accounted for more than one-third of outstanding domestic bank credit and 13 percent of GDP in 1986. When much of this credit became nonperforming, it created central government contingent liabilities to the domestic banking sector ten times larger than the direct net budgetary transfers from government to nonfinancial state-owned enterprises. This virtually paralyzed the banking system and put heavy demands on future government budgets. Similarly, when the former state agricultural marketing board in Senegal was liquidated in 1980, the government had to assume bank debts equivalent to 15 percent of GDP. (World Bank, World Development Report 1988, pp. 170)

The financial sector plays a critical role in determining which ventures to restructure and which to abandon. Unfortunately the incentives for bank allocation of credit may be perverse during stabilization. As loan problems mount, banks have incentives to disguise problems and try to save large borrowers because foreclosure will not recoup losses. Even though lending in Africa tends to be overcollateralized on paper, values are often overstated during loan evaluation. A sharp change in relative prices and a fall in asset values means that collateral may not be sufficient to cover loan-losses. The quality of bank portfolios frequently declines as banks try to save large borrowers and avoid loan losses.[30] Loan concentration frequently increases during reform programs as banks continue to channel credit to failing ventures. This problem was demonstrated during the reforms in the Southern Cone countries when banks continued to support weak industrial ventures in interlinking financial-industrial conglomerates. McKinnon (1986) and Harberger (1985) argue that the high real interest rates and financial instability of the Chilean financial system during the late 1970s and early 1980s represented a failure of the regulatory authorities to adequately monitor the creditworthiness of the industrial sector loans made by banks.[31] There are examples of similar problems in Africa. Insider loans to related businesses contributed to the failure of several non-bank financial institutions in Kenya in

---

30 There may be some justification for public intervention to avoid large-scale bankruptcies if there are inefficiencies in the bankruptcy process, but it usually should not be done through the banking system.

31 To contain the problem of perverse credit allocation, McKinnon proposed a financial reform strategy during the transition to lower inflation combining capital controls, maintenance of inflation-adjusted interest rate ceilings, limits on foreign exchange risk, restrictions on credit concentration to preferred borrowers, and requiring large reserves against loan losses. (Dooley and Mathieson, 1987, p. 18-19)

1985. The same kind of problems arise when banks, government-owned or private, continue to providing financing for failing parastatals.

Attempts to restructure the economy will be subverted when banks do not cut the link to failing industries and instead try to save failing companies by rolling over nonperforming loans while still accruing interest or increasing credit lines. This perverse management limits the credit available for expanding sectors and increases bank losses and risk when the industries finally do fail. Also, deteriorating conditions increases incentives for risky or illegal activities. There may be a considerable lag before insolvent bank becomes illiquid, with incentives for troubled banks to continue taking deposits, expand risky lending to try and recover losses, and finally to engage in fraud to take the equity capital out of the banks. Deposit-taking financial institutions are dependent on the confidence of the public and it is in their interest to hide problems. Auditors do not serve as an effective check on this tendency. Aggressive regulation and supervision of banks are critical for identifying and containing losses during reform programs, but even the rare on-site inspections frequently miss disguised risky practices. Banking problems are difficult to uncover, but left undiagnosed can exacerbate losses if banks engage in imprudent and risky lending in an attempt to stave off failure. Delaying the response to deteriorating conditions in the financial sector increases public-sector off-balance sheet liabilities if the government provides implicit deposit insurance.

As conditions in the banks deteriorate, banks will lose the ability to intermediate and instead will compound financial problems in the real sector. Failure to recognize the losses already incurred will be detrimental for companies that continue to accumulate interest or refinance debts that can not be serviced. Some of these companies might be saved if debts were capitalized and banks wrote off loan losses. Under these conditions, the banks may not be able to meet normal credit needs for growing companies and the economy will remain depressed.

Recovery and Restructuring

Recovery of the financial system may involve macroeconomic as well as sectoral reforms to facilitate the sl.w process of restructuring loans to the businesses that can be saved, reflecting bad debt in bank loan classifications, writing-off nonrecoverable debt, and restructuring, merging, or closing insolvent firms and banks. This process is constrained by limited ability to use the market solution of bankruptcy to work out portfolio problems in Africa. The restructuring process is highly country-specific depending on the government budget constraint and limitations on direct infusion of funds, political sensitivities about sale of failing firms and banks to private or foreign interests, the options for equity finance, the flexibility of the regulations on developing new quasi-equity instruments, use of long-term loans from the banks to support sale of bankrupt firms, etc.. Already weak banks may be asked to write-off large loan losses or restructure bad and doubtful debt. Growing nonperforming loans may push banks so that remaining performing assets are smaller than liabilities, equity capital is eroded, and the losses of the bank can not be recovered through normal operations, requiring restructuring of the financial institution.

When a country has had a radical reform program it is better to deal with all financial institutions systematically rather than working with only selected institutions.[32] Comprehensive audits of all financial institutions, DFCs and banks, will be necessary to identify the extent of the problem. It is helpful to do this after or in conjunction with reviews of public enterprises and the industrial sector. Since many firms have working credit lines with commercial banks and term loans with parastatals, information on the financial viability of the firm is needed to correctly evaluate outstanding loans. Also, the decision on whether to restructure, merge, or close weak financial institutions needs to consider the entire system.

Many financial institutions in Africa will need to be recapitalized to survive. The scope to recapitalize banks with private investment funds is limited by lack of equity instruments so that private involvement usually means selling a major share to a single investor. There are obvious limitations on recapitalizing banks through an infusion of government funds. In most cases losses are transferred to the Central Bank and financed by printing money or exchanging Central Bank bonds for bad debts. Recapitalizing banks by infusion of government funds can be inflationary. Transferring long-term bonds, at market interest rates to the recapitalized institutions, avoids a surge in liquidity and limits the monetary impact to the interest payments and gradual amortization of the bonds. Transferring the losses to the Central Bank to either cover by printing money or issuing bonds disguises, but does not change, the fiscal implications of bailing out the financial sector. Such transfers make the conventional definition of the fiscal deficits misleading. The World Bank has recommended that a more meaningful measure of the public deficit should include the losses of the Central Bank. (World Bank, <u>World Development Report 1988</u>, p. 66)

---

[32] For example, the World Bank has previously been involved in several single institution rehabilitations, BDRN in Niger, Sofisedit in Senegal, and institutions in Ghana and Mauritania, but it has been necessary to go back to some of those institutions as part of comprehensive rehabilitation programs in extreme cases such as Guinea, Mauritania, and Ghana.

Government expenditures need to be reduced by the amount needed to service the bonds used to recapitalize the banks to avoid expansionary pressure on domestic demand.

There is no standardized recommendation on management of nonperforming assets when restructuring banks. The strategy will also be highly country specific depending on risk, distribution, etc. Some general considerations are that if the old management is retained when the bank is restructured, the process should somehow make the old management at least partially responsible for collecting old debts. This must be balanced against the negative effects that collection efforts on bad debts may consume all the effort of the staff and continues perverse incentives to continue lending to bad credit risk. When there is a change in management during restructuring, an option is to place the nonperforming assets with a separate collection agency and have an outside infusion of funds into the bank. One problem that will arise if all nonperforming loans are assumed by the government is that the companies and banks don't adjust as needed to decrease aggregate demand.

Regulatory Reform

Sectoral Policies

Low nominal interest rate ceilings were infrequently adjusted in most African countries so the real rates varied with the inflation rate and became more negative in the early 1980s. In addition, institutional segmentation resulted in an inverted term structure with the yield curve poorly defined because of the paucity of instruments. While there have been few studies on interest rate restrictions in African markets,[33] the predicted effects are subsidizing borrowers at the expense of savers, concentrating credit in large loans, and discouraging rate competition and financial innovation and development. In many countries the regulations have not been strictly enforced so many institutions unofficially maintain lending rates above the official guidelines with fees and compensating balances. The regulations, with spotty enforcement, limit the growth and activities of financial institutions abiding by the regulations and allow rapid growth in financial institutions that ignore the regulations and create opportunities for "side payments" to loan officers.

---

33 Leite (1982) surveyed interest rates in ten West African countries and concluded that the interest rate policies were inappropriate.

Credit allocation restrictions are used widely throughout Africa either indirectly or directly through government intervention in government banks. Most West African governments set guidelines for sectoral credit allocation. Credit policies are used to counterbalance the undesirable difference between economic and financial returns in distorted price systems but using credit to compensate for distortions is ineffective since credit is fungible. In some cases the portfolio restrictions were to reinforce import substitutions policies, in others to counter the bias from import substitution policies e.g. the lending target for agriculture.[34] There are also lending restrictions on foreign businesses and non-African residents, e.g. Asian in East Africa, Lebanese in West Africa, and European residents in some countries.

It is not possible to establish theoretically, but it is usually assumed that partial reforms, such as greater flexibility in interest rates and lending patterns and reducing restrictions on the profitability of commercial banking, can be welfare-improving even in the absence of reforms in other sectors.[35] Most financial reform programs have allowed greater flexibility in interest rates and credit allocation early in the reforms. This must be coupled with regulation and supervision to protect safety and soundness of financial institutions.

Interest Rates

Interest rate reforms are practically always part of an IMF structural adjustment program and there is a strong case for more flexible interest rates but there is little agreement on the likely impact. The main areas of debate and research are the determinants of public sector savings and the relationship of the fiscal deficit, the real exchange rate, and the real interest rate; the interest rate responsiveness of household savings because of the income and substitution effect to higher interest rates; and the effects of higher deposit and lending rates on corporate savings. The few attempts to test aggregate savings response with African data have not been successful and the data problems are formidable.

---

[34] Lending targets and preferential interest rates for agriculture are frequently disguised subsidies to agricultural marketing parastatals.

[35] The argument for partial reform in financial markets is controversial. In a general equilibrium treatment, Kahkonen shows that partial reforms, even if beneficial in the long run, may result in welfare losses in the short and medium run if all markets are not liberalized simultaneously. The author further argues that raising the deposit rate in a financially repressed economy may adversely affect welfare. (Kahkonen, 1987, p. 547.)

The financial reform programs in Africa have not been systematically studied yet to determine the effects of different strategies of loosening interest rate restrictions. Ghana used discrete nominal interest rate adjustments during reforms while Zambia removed restrictions overnight and relied on the market, at least temporarily. Using discrete adjustments in nominal interest rates towards some target level raises a host of issues: whether deposit and lending rates are moved in tandem; timing of movement towards the target level; frequency of adjustments; whether the schedule of adjustments should be pre-announced; etc. Using market rates raises a different set of issues e.g. the possible distortions in market determined rates and the oversight powers of the Central Bank to monitor and adjust rates in thin markets. Market determined rates may not be reliable because of market power or because public financial institutions are not accountable for budget losses. When markets are uncompetitive or fragmented, the government will have to continue some regulation and monitoring of interest rates and credit allocation while working to increase competition. With closed capital accounts international interest rates will have less influence on domestic interest rates.[36] Several African countries, e.g. Ghana, Zambia, and Kenya, have used Treasury-Bill auctions to guide interest rates.

The effects of higher interest rates on the profitability of banks will depend on a host of factors including the public savings response and loan demand, the structure of assets and liabilities, contract provisions and the ability of financial institutions to renegotiate outstanding financial contracts, and changes in the spread between deposit and lending rates. The maturity of assets and liabilities and the ability to renegotiate outstanding contracts will be a major consideration in how restrictions are lifted and the possibility of using tax policy to adjust rates during the transition. For example, if deposit rates move quickly to market rates but average lending rates are pulled down by outstanding contracts, there may be an argument for raising the lending rate before the deposit rates. If existing financial institutions can not renegotiate outstanding contracts either international competition or competition from new domestic financial institutions after interest rate decontrol will disadvantage existing institutions. If banks are forced to hold low yielding government paper and large reserves at the Central Bank to finance the deficit, once decontrolled the banks may push lending rates very high to compensate for low-interest

---

[36] With capital market integration, the domestic interest rate would reflect the international interest rate and expected exchange rate movements (interest parity) and interest differentials would guide international capital flows.

earnings on government assets and the spread between deposit and lending rates could increase.

Higher interest rates will also effect the profitability of banks through the performance of the portfolio. After trade is liberalized and domestic goods markets become more competitive, firms will have less scope for passing higher borrowing rates on in higher product prices. Some funded projects may not be viable at higher interest rates and nonperforming loans will increase. Rising interest rates reduce the present value of expected profits of the portfolio. If development finance corporation rates are also raises, better customers may switch to commercial banks as the interest advantage of DFCs declines.

Interaction of Official and Parallel Markets

There has been little empirical work done on parallel and informal credit markets in Africa. Most studies of informal credit markets have focused on microenterprises or rural areas. Almost nothing has been documented on informal credit markets in the business community and it may be larger than assumed in some countries. In some countries a 'curb' market operates among immigrants e.g. the Asian community in Kenya and Malawi and this market may be tapped by the larger business community. In some countries non-bank financial institutions are less stringently regulated and play the role of a 'free market' e.g. some of the non-bank financial institutions in Kenya. The interaction of parallel or less regulated 'free' markets and official markets may be important in analyzing the impact of decontrol of the official market. The structuralist critique (e.g.van Wijnbergen, 1982) raised the possibility that decontrol of official markets will reduce the role of the parallel markets rather than increasing the total volume of credit. If established large clients use commercial banks while small clients rely on parallel markets, small clients may be rationed with decontrol of official markets even though average interest rates fall. As with decontrol of other markets with a sizeable parallel market, it is possible that the average price for the economy will decline rather than increase. For example, Liedholm and Mead quoted an average official interest rate of 10-20 percent, while the informal rates were frequently 100 percent or more in Sierra Leone in 1974. (Liedholm and Mead, 1986, pp. 318).

Regulation and Supervision

The banking laws in most African countries are outdated and inadequate for dealing with current problems of banking risk, regulation of entry and competition, rationalizing the incentives for public and private financial institutions, and maintaining safety and stability in the financial system.

The institutional framework, legal and supervisory, is not adequate for dealing with deteriorating portfolio quality, imprudent management practices such as mismatched maturity of assets and liabilities, exchange rate or interest risk, inadequate capital, and concentration in the lending portfolio and 'insider' loans. Even identifying problems in banks is difficult because of the pervasive weakness of the regulatory, auditing, and supervisory framework. Treatment of nonperforming loans is of particular concern since banks continue to accrue interest not collectible and non-performing loans are rolled-over rather than taking provisions or writing-off bad debt. Weak supervision, monitoring, and enforcement capacity in many Central Banks compound the problems of long-term established relationship between banks and the few private accounting firms which can result in audits that may not be rigorous.

Second, commercial banking regulations need to be rationalized in a broader legal framework setting boundaries on allowable activities and competition among investment, merchant, and commercial banks, non-bank financial institutions, and development finance corporations. Rationalizing the regulatory framework may involve imposing market discipline on government banks and parastatals. Market-determined rates and allocations will not be reliable unless public financial institutions are accountable for budgetary losses on activities in which they compete with private financial institutions.

Another issue that will arise in regulatory reform is implicit or explicit deposit insurance. Corbo and deMelo highlighted that the financial liberalization efforts in Argentina, Chile, and Uruguay failed to properly monitor financial institutions after deregulation leading to high-risk lending with defacto deposit insurance. (Corbo and deMelo, 1987, p. 137) Some African countries may be forced to confront the issue of maintaining public confidence in the financial sector after bank failures. Kenya established a limited deposit insurance scheme after the failure of several non-bank financial institutions. The problem will be more acute in countries where trust in the financial system has been so eroded that the public does not respond to marginal adjustments in economic incentives as in Ghana. While the case for deposit insurance can be made to bolster public confidence deposit insurance is expensive and there are incentives problems.[37] Explicit government deposit insurance may reduce the incentives for depositors to monitor bank

[37] There are a variety of proposals under investigation in the U.S. to combine market discipline with deposit insurance e.g. insurance premiums or capital standards adjusted for risk. While these schemes avoid some of the incentive problems of flat deposit insurance premiums, these are hard to implement because of the difficulties in assessing bank risk.

behavior. With deposit insurance, the public can safely deposit funds with the highest interest rates regardless of perceived risk which places more burden on the government to monitor risk in financial institutions. This argument is probably weak in countries with little reliable information about bank behavior so that depositors can not monitor bank risk. The second counter-argument is that market discipline is not a credible check on market behavior since governments rarely allow financial institutions to fail.

Financial Sector Development and Innovation

Many institutions and instruments are missing in African financial markets and some banking practices are going to be hard to change even after lifting government controls, because of structural and endogenous constraints on credit allocation.

Institutions

Capital and Money Markets

The short-term prospects for developing money or capital markets are limited. There are few money market instruments.[38] The few exception are some issues of short-term Treasury Bills and interbank markets. Only a few countries use commercial paper, negotiable certificates of deposits, and bankers acceptances.

There are almost no organized equity markets or venture capital facilities. The lack of functioning equity markets limits efficient allocation of resources. An alternative that may receive more attention during restructuring is the option of allowing banks to take equity positions in companies. There are potential advantages since banks would share in the upper tail of the distribution of potential profits and allocate credit more efficiently (Cho, 1984 and 1986) and offer an alternative to bankruptcy for highly leveraged businesses. Other possible advantages in universal (multipurpose) banking would be incentives for banks to develop the capability to monitor and advise business clients. However, universal banking requires a stock market for successful operation. (Khatkhate and Riechel, 1980) The advantages of allowing banks to take equity positions

---

[38] Money markets usually develop before equity markets. Short-term money market instruments should be lower risk than equity instruments, depending on the creditworthiness of the issuing institution. Money market instruments are usually large-denomination to minimize transaction costs.

would have to be weighed against the perverse incentives for over-commitment of resources in interlocking conglomerates.

Securities Markets

The only formal securities markets in Africa are in Kenya, Nigeria, Cote d'Ivoire, and Zimbabwe and these are either stagnant or contracting. Only Zimbabwe is fully-functioning.[39] Several countries, such as Senegal, are trying to establish capital markets but this must be viewed as a medium to long-term venture.

There will be significant start-up costs for security markets in most SSA countries. The regulatory environment must be improved, e.g. get rid of Capital Issue Committees that set the price of new issues, clarify the legal concepts of limited liability companies, establish effective regulatory agencies, improve public accounting standards, etc. There also need to be complementary institutions such as broker-dealers, underwriters, merchant and investment banks, market information services, and exchange facilities for listing, pricing and exchanging securities and secondary markets.

Raising bank interest rates will help to remove the past bias favoring debt over equity finance. Other possible measures that favor debt financing, such as credit guarantees or debt-forgiveness schemes for highly leveraged firms, and tax laws which make interest paid on debt tax deductible while dividends are double taxed and capital gains taxes also need to be rationalized. However, securities markets will still be constrained by the predominance of family businesses anxious to avoid the tax consequences of revealing financial records. Improved tax treatment of dividends and capital gains will not be sufficient inducement to go public until stock markets are functioning well and liquid.

---

[39] Size of the African Stock Markets

	billion US$	percent of GDP
Nigeria	2.5	3.0
Zimbabwe	0.4	7.4
Jordan	2.6	57.8

Note: Jordan is given for comparison.
Source: Wall Street Journal, 3/17/87.

Banking Instruments and Contracts

In the set of possible contracts, very few combinations of term, repayment conditions, risk, collateral, etc. are routinely used in African financial markets. Existing contracts are especially thin along the term and risk dimensions. More instruments could contribute to more efficient intermediation and financial stability.

One of the most apparent weaknesses in African financial system is the lack of term instruments. The liability structure of banks is overwhelmingly short-term. Past macroeconomic conditions made it difficult to develop medium or long-term liabilities to support term lending. Financial assets, especially term assets, are unattractive when inflation is high and the exchange rate is expected to depreciate against a controlled nominal interest rate. The institutions which could mobilize terms funds e.g. insurance companies, social security funds, and pension funds, are traditionally required to hold government bonds at below-market interest rates.

The risk dimension is also very thin. Most existing financial instruments are low return and low risk e.g. commercial bank deposits. There are few financial assets that would offer a higher return for greater risk, e.g. equities, preferred shares, and debentures.

There is very little flexibility in lending contracts on repayment schedules. Most banks lending is on overdraft for working capital or two to three year loans with uniform fixed monthly payments. Contract innovation might be as simple as tailoring the repayment schedule to the seasonality of agricultural income flows.

Financial Innovation

Attempts to develop African financial systems have usually focused on new institutions or offering credit guarantees on existing instruments to new clientele. African financial systems not only need to expand in size and depth, but also become more responsive to local conditions, develop new contracts, and experiment with new practices. While there has been some experimentation in African financial markets, change has been slow to come. Many of the reasons cited for lack of innovation in African financial markets have been discussed above: regulation; lack of competition; public institutions under mandate to support government development efforts and dependent on government funds; foreign banks; unstable macroeconomic policies; etc. Some of these conditions may be ameliorated during a reform program but in the near term liberalization policies will not touch some of the structural problems constraining African financial markets e.g. high transaction and monitoring costs because of weak infrastructure, costly information and risk, uncertain property rights and uncertain enforcement of contract laws, imperfect factor markets, missing markets for diffusion of risk, lack of public confidence in the financial sector, etc.. Two additional factors may contribute to slow innovation: lack of demand and the technology used in banking.

Older studies on capital markets in Africa discussed the lack of demand for financial services as inhibiting innovation and the development of financial markets. (e.g. Abdi, 1977, Jucker-Fleetwood, 1964, p. 118, Arowolo, 1971, pp. 422-423, Hickok and Gray, 1981, p. 72 and Schatz, 1965) Historically, British banks have waited for demand to emerge before developing appropriate instruments. (Patrick) The incentives for financial innovation in small markets may also be low since testing property rights on new contracts is costly, especially with unpredictable judicial rulings, and established legal precedent on a financial contract cannot be patented.

Finally, rapid technological progress in information processing and communications offered significant cost savings for some financial transactions and services and sparked financial innovation in the industrial countries. Some of the new technology is divisible and therefore transferable to developing countries. For examples microcomputers have been adopted by some banking systems in Africa but given the shortage of trained personnel and the high cost of imported components and software, it is an open question whether the adoption of new computer technology reduces costs. Other components of the technology are not divisible, such as communication networks, and will remain obstacles to reducing costs in Africa in the near future. To date technology transfer has not led to a significant change in the structure of costs or innovation.

Linkage between Formal and Informal Credit Markets

Informal credit markets, with lower information and transaction costs and risk, frequently evolve contractual and institutional arrangements to compensate for incomplete markets and endogenous credit market constraints. This makes informal credit markets a possible source of financial innovation, some of which can be adapted for formal financial markets. However, the linkages between formal and informal credit markets are weak in Africa.

Sharecropping and linked land-labor-credit contracts are used in other parts of the world to compensate for missing markets and are an important source of credit. Some examples of complex production contracts have been documented in western[40] and central Africa, but sharecropping and linked production-credit arrangements evidently are not common. (Robertson, 1987) Land tenure systems that grant user claims may prohibit the use of some types of interlinked contracts. Also land abundance, low population density, and high monitoring costs in some areas make complex contracts difficult.

There is too much diversity across and within countries to generalize about informal credit markets on the continent but communal savings clubs are found in many areas.[41] In addition, the flow of funds within the family and friendship network may be extensive.[42] Hyden (1983) argues that the social and economic network, which he terms the "economics of affection" plays an important role in basic survival, social maintenance, and performs some credit and insurance functions. Some areas have a specialized indigenous money-lending group [43] This seems to be more common in West Africa than in the East. Miracle, Miracle and Cohen (1980) described traders who provided mobile banking and moneylending services in the larger marketplaces of West Africa. Studies have documented some private supplier credit in rural

---

[40] Kozel reported a sharecropping system in Cote D'Ivoire with 27 percent of farm households in the survey reporting involvement in labor-purchasing sharecropping arrangements. The system was frequently used by immigrants from other rural areas to get established in areas with abundant land. (Kozel, 1987, pp. 31-32.)

[41] Miracle, Miracle, and Cohen (1980) include references to some of the earlier works on informal credit markets, especially in West Africa.

[42] The 1985 household survey done in Cote d'Ivoire found that the urban households were net debtors while the rural households were net creditors. According to the survey some 90 percent of rural households who borrowed money over the past 12 months received loans from private individuals, in comparison to only 56 percent of borrowing households in Abidjan. Kozel notes that the formal market is neither extensive nor well-developed in rural areas. (Kozel, 1987, p. 84)

[43] Abdi (1977, pp. 37 and 88) and Miracle, Miracle, and Cohen (1980).

areas but this will also be a function of the degree of government control of the marketing system.[44]

Efforts to build on tradition of informal savings clubs in organized financial markets have met with limited success. There have been attempts to use practices of informal credit markets, especially group responsibility, in parastatal or government credit programs Africa, particularly in cooperative credit programs. Adaptations of rotating savings clubs such as the organized savings and credit cooperatives in Kenya motivate savings with access to credit rather than paying interest. However, very few attempts to formalize or expand the informal savings and credit cooperatives have been successful because of limited management skills and potential for corruption. (African Development Bank, 1987, p. 36-9) There are exceptions. Miracle, Miracle and Cohen (1980) report the case of an informal association in Cameroon which in 1975 became LaBanque Unie de Credit, Cameroon's sixth largest bank. It apparently closed in 1979 when the government insisted on appointing the bank director.

There are institutions linking small enterprises to the banking system in the major market areas of West Africa. (Siebel, (1988) Siebel and Marx, (1987) and Miracle, Miracle, and Cohen (1980)) So-called mobile bankers provide small-denomination deposit and lending facilities in markets and deposit funds in non-interest bearing current accounts in banks. In Ghana 300 mobile bankers formed the Greater Accra Susu Collectors Association. The Susu Association is trying to establish its own commercial bank because the existing banks consider susu accounts a nuisance. Managing susu accounts is expensive for the commercial banks because small daily deposits are made in small denomination bills so even though accounts do not pay interest, the use of susu funds may not cover costs. The mobile bankers play an important role in intermediation for microenterprises, but so far there has been little linkage between this segment and the commercial banks. Siebel describes several on-going attempts to strengthen these linkages.

While the cooperative system has used some mechanisms found in informal markets, it is hard to find examples of informal market practices adapted by commercial banks. The weak linkages between informal and formal credit markets may be because there ara no incentives for the banking systems to lend to the traditional sectors, because the informal contractual arrangements cannot be easily adapted, the contracts forms used in the unorganized sector are not legally enforceable, and the system of

---

[44] e.g. for Kenya see Kanoga, 1978, Hagerud, 1981, and von Pischke, 1974.

accountability in informal markets breaks down when linked to impersonal institutions.

Policy Options and Innovation

The process of financial innovation is still poorly understood. Some of the theories posit financial innovation as a response to a change in the incentive structure such as restrictions that become binding, a change in relative prices in the economy, technical change that lowers costs, while other theories rely on the human factor as in the Schumpeterian version, or argue that innovation is the coincidence of forces that are poorly understood. To the extent that innovation can be induced by changing relative prices, the process may be stimulated by liberalization if banks have economic incentives to develop new contracts. However, other measures to stimulate innovation by reducing costs or risks, e.g. deposit insurance, credit guarantees, and government subsidies for new services or new branches, may be low priority under fiscal constraint. These measures have failed in the past when used to encourage lending to unprofitable sectors. It is not clear if these measures could be effective if used selectively with favorable relative prices to encourage innovation. As a final consideration, financial innovation can concentrate more risk in financial institutions and be destabilizing.

Summary Financial Reforms

This survey has been long on generalities in trying to highlight some problems common to many SSA countries. One common problem is very thin financial markets with significant market power for the larger banks and no organized equity markets. The financial structure of the economies is biased towards short-term debt financing and very vulnerable to changes in interest rates, credit contraction, and credit quality problems in financial institutions. Perverse financial sector regulations have contributed to this financial structure but so have endogenous and structural constraints such as costly information, imperfect and missing markets, uncertain property rights, etc..

Financial sector reforms must be designed recognizing the imperfections in the financial markets and structural and endogenous constraints in the economy as well as functions performed by the public sector, level of sophistication of instruments needed, etc. This survey has highlighted two parts of a generalized strategy towards financial reforms, reregulation and restructuring financial institutions. Rationalizing the incentive structure in the financial system with flexible interest rates, reducing reliance on the banks for deficit financing, and encouraging competition and innovation are necessary parts of reforms. This review has also focused on longer-term issues of market structure, competition, innovation, and development. In some countries, extremely high information and transaction costs, uncertain property rights, unenforceable contract law, etc. will constrain financial market operations even after reregulation and restructuring.

The predictions of what will happen after financial reform range from the repression models where interest rate deregulation increase the supply of savings and in some models the borrowing rate falls. Van Wijnbergen (1982) raises the possibility that deregulation of the banking sector only moves funds from the curb markets to banks. Other broad effects of financial liberalization are even more uncertain, such as the possibility of innovation and the effects of loss of seignorage. Also little is known on the nature of real-financial linkages i.e. how the quantity and quality of financial services will effect investment and how this influences growth in the economy.

Structural adjustment programs assume benefits to the economy when investment moves towards the growth sectors. However, there is little theoretical or empirical work on investment decisions in Africa or on the relationship between investment and growth. Gulhati and Datta discuss the possibility that the decline in investment in the late 1970s in eastern and southern Africa were due to strains on absorptive capacity, reflected in lack of projects, shortages of trained personnel, emergence of bottlenecks, and delays in decision making. (Gulhati and Datta, 1983, p. 15.) The benefits of financial market liberalization will depend on the broader restructuring efforts in the economy to improve incentives and the rate of return on investment and the incentives for using capital markets.

The generalization that financial markets should be liberalized late in a reform program is based on the fact that financial markets adjust more quickly than most other markets. The financial markets in Africa are imperfect and not disciplined by competition and in most countries the curb market is thin which may slow the speed of adjustment. The speed of financial sector recovery will depend on speed and success in restructuring the economy and the financial sector, establishing relationships with new clientele, developing new financial instruments, and recovery from credit quality problems.

African financial systems were very weak by the mid-1980s. The financial sectors of Kenya, Madagascar, Ghana, Cote d'Ivoire, Mauritania, Senegal and Liberia have been troubled by potential or actual insolvencies. The banking system of Guinea collapsed in 1985 and there are looming financial problems in UMOA. Further deterioration is expected during economic reform programs. The need for rehabilitation of the financial sector will vary by country from comprehensive reforms to selective restructuring of parastatals. For countries with severe problems in the financial sector a realistic goal in the medium-term is to slow or halt the decline in the portfolio. Improvement is a long-term prospect.

In some countries improvement in the financial sector must be held as long-term goal. The benefits to the economy of financial reform may not be great in the short-run but costs of not reforming are high.

IV. African Financial Reforms

Several African countries have undertaken financial sector reform measures as part of broader restructuring efforts in recent years. None of the cases have been studied in detail yet. At this time it is only possible to describe the approaches taken in the reforms. The financial reform programs in Guinea, Mauritania, Ghana and Zambia are described below.

In both Mauritania and Guinea the immediate concern was restructuring to be followed later with regulatory reform. Zambia experimented with deregulation as part of a drastic liberalization program started in the fall of 1985. The reforms in the financial sector were short-lived and the entire reform program was abandoned in May 1987. Ghana has had a more gradual reform program reducing restrictions in the financial sector over five years beginning in 1983 and by 1988 was beginning comprehensive rehabilitation of the financial sector.

Guinea

Guinea has had one of the most dramatic financial restructuring ever undertaken. Under the Sekou Toure government all banks had been state-owned and almost all credit was to inefficient parastatals. The financial system collapsed in 1985 when the government could not continue to support the bankrupt parastatals. The IMF-guided reforms included liquidating the four insolvent state banks in 1985. This was possible only because there were no voluntary deposits and all lending was to government-owned enterprises so the banks were functioning as funds instead of banks before the reforms. A new Central Bank was established and foreign banks were brought in to rejuvenate the financial sector.

Three private (French model) banks have been started with joint government ownership since 1985 and one existing Islamic Bank formed in 1983 continues to operate. The government has majority ownership in one bank, has half ownership in another but plans to sell up to one-fourth of the bank to private Guinean investors during the next few years, and one bank is jointly owned by private Guinean investors and foreign banks. The government also has part ownership in the Islamic bank.

There is still a vacuum in regulation and supervision since the Central Bank has yet to establish an effective system of control over the commercial banks and new financial regulations are being formulated. Reforms in the financial system are running parallel to dramatic reforms in all parts of the economy.

Mauritania

The financial sector of Mauritania consists of a Central Bank, six commercial banks, and a government development fund. The government is the majority shareholder in three of the commercial banks. At the beginning of the financial sector reform program several problems were evident. There has been pervasive government interference in the banks including the banks with part foreign ownership. Public enterprises had about 20% of total bank credit but most of the parastatals were insolvent. All the banks were plagued with chronic liquidity shortages and high arrears.

Mauritania has started macroeconomic reforms under an IMF program but many economy-wide prices, such as the exchange and interest rates, are still controlled. Restructuring the banks was given priority before restructuring the corporate sector. The financial sector reform program, with World Bank support under a SAL, has focused primarily on restructuring the Central and commercial banks rather than regulatory reform. The interest rate is set and there are still priority lending targets but the number has been reduced.

Several problems in the financial sector were revealed or confirmed during extensive audits undertaken at the beginning of the reforms. Financial regulations were weak and the Central Bank exercised very little control over the commercial banks. The Central Bank had continued to rediscount papers of the bankrupt banks so that all banks, including those managed by foreign shareholders, were heavily in debt to the Central Bank and foreign banks. Four of the six banks were virtually insolvent with almost half of the outstanding loans doubtful or unrecoverable.

The government was unable to recapitalize the banks, so private and foreign capital had to be found. The restructuring included debt-equity swaps, an infusion of some government funds through Treasury Bonds, and a discount settlement on outstanding lines of credit from foreign commercial lenders. A domestic entrepreneur initiated the privatization by buying out Egyptian shareholders of one failing bank. To find other private investors the government took over the bad loans and debts of the banks and replaced some of the bad assets of the banks with Treasury Bonds to bring the net worth of the bank to zero. The bonds pay seven percent, the same interest rate as term deposits. Some of the bad debts stayed with the new management under instructions to collect on behalf of the government. The private owners reportedly initiated innovative collection procedures. Also the Egyptians, French, and Middle Eastern banks with lines of credit to these banks settled for large discounts on the amount due. By the end of the restructuring the banks were almost totally privatized with ownership of three of the banks was transferred to local private investors or associated with foreign banks and management was given to the foreign partners.

Zambia

Overview

The Zambians launched an ambitious liberalization experiment in the fall of 1985 after a timid stabilization program from 1983 to 1985. A Treasury Bill auction was introduced and domestic interest rates were decontrolled in Sept. 1985 as the first step in the reforms. Many parts of the economy were liberalized overnight when the foreign exchange auction was introduced in Oct.. Domestic price controls were lifted on all but three goods. Parastatals were given autonomy in management, including the right to reduce employment, and were to be subject to market discipline. The dual system of trade restrictions, import and foreign exchange licensing, was scrapped. After this dramatic beginning there was significant administrative intervention to try and moderate the effects of the new policies over the following 18 months. Inconsistent economic policies, loss of fiscal and monetary control, shortfalls in export earnings and foreign aid, and rising unemployment became evident during late 1986 and the program was abandoned on May 1, 1987.

After initial decontrol, financial regulation became progressively more restrictive over the 18 month experiment. The daily Treasury Bill auction was to play a role in monetary control, move towards market-oriented deficit finance, and guide domestic interest rates. The commitment to the Treasury Bill auction was half-hearted from the beginning. Very few banks were polled for bids while most banks were quoted a rate. The T-Bill rate was adjusted upward from 9.5 to 14.5 in Sept. when interest rate controls were lifted, and then moved to 20 in Oct. and 24 in Nov. and Dec. Within a few weeks the Bank of Zambia lost confidence in the interest responsiveness of financial savings and the interest rate strategy to encourage the commercial banks to hold more Treasury Bills. The Bank of Zambia returned to the previous practice of setting the rate on Bills. The T-Bill rate was reduced to 23.5 from Jan. to June 1986.

The introduction of the foreign exchange auction was followed quickly by strong demand for commercial bank credit to enter the auction. Deregulated rates on commercial overdrafts rose to 5 to 6% above the T-Bill rate. The banks continued to hold excess liquidity in T-Bills as part of their cash management policies, but with strong demand, lending was more attractive than holding T-Bills.

The Treasury Bill auction was not useful in monetary control. The sales and purchases of T-Bills were not guided by monetary or fiscal targets and the Bank of Zambia was not able to sterilize funds because the government could switch into an overdrawn position with the BoZ to finance the deficit. The funds from the sale of Treasury Bills went directly to finance the budget deficit, leading to further monetary expansion.

In April 1986 the economic leadership of the country rotated, including a new governor of the Bank of Zambia. There was renewed concern about high nominal interest rates even though with inflation from 30 to 70% during the reforms, real lending rates were always negative, and sharply negative in some periods.[45] Monetary control shifted to the reserve requirement, which was raised three times during the remainder of 1986. IMF credit ceilings had not been met since the beginning of the program and during the summer of 1986 the commercial banks were unofficially released from credit ceilings by the BoZ.

The Bank of Zambia also began to take a more activist role in foreign exchange auction intervention attempting to halt the continuing depreciation of the kwacha. The intervention of the BoZ probably exacerbated rather than eased the depreciation. By the end of 1986 the viability of the reform program was under active debate in Zambia. The foreign exchange auction was suspended in Jan. 1987 and interest rate restrictions were reintroduced the next month. The Bank Rate was reduced from 30% to 20% and the commercial lending rate was limited to five percent above the new Bank Rate. In March 1987 GRZ, under considerable pressure from the donors, reactivated the foreign exchange auction. A supplementary reserve requirement was introduced on commercial banks in March 1987 in the hope that tighter liquidity would help support the value of the kwacha. The liquidity of the commercial banks tightened and banks reported that many commercial borrowers were reaching their lending limits because of the high cost of entering the foreign exchange auction in April. It seems this potentially self-righting mechanism for stabilizing the kwacha was overridden by BoZ overdraft privileges to some commercial banks. The auction was abandoned on May 1, 1987.

From the few details available at this time about the Zambian

---

[45] Negative real deposit rates, the expectation of continuing depreciation, and doubts about sustainability of the reform program provided strong incentives for capital flight. The reforms offered more opportunities for capital flight with looser foreign exchange and trade restrictions even through capital accounts remained closed.

reform program, it appears that loss of fiscal control for a variety of reasons including the impact of the sharp depreciation and the fiscal drain of some of the parastatals led to rapid monetary growth and inflation. Under rapid inflation and strong credit demand fueled by the demand for foreign exchange in the auction, the BoZ pulled back from the plan for a liberalized financial sector.

Partial Liberalization

It is not clear how decontrol of the Zambian banking sector would have impacted on the reform program. The eleven commercial banks[46] have a banking cartel which sets the fee schedule and disciplines bank competition. With decontrol the banks were free to vary interest rates, but not fees, and there was little competition on interest rates and services. The analysis has not been done yet to show the impact of partial deregulation of the banking sector but a few trends can be suggested.

The profitability of commercial banks increased dramatically under the reform program because of higher nominal rates on Treasury Bills, greater interest rate spreads and more freedom to hold foreign exchange offshore for themselves and for their clients. Lending and borrowing rates were decontrolled simultaneously but this did not become a problem because most lending is on overdraft and lending rates could be adjusted quickly and the spread between deposit and lending rates increased. This may have reflected market power of the banking cartel.

Many firms used bank credit at negative real rates to 'cushion' the discipline of market-determined foreign exchange rates. The BoZ tried without success to restrict use of commercial credit to bid in the foreign exchange auction. The banks argued that the regulation was not enforceable since credit is fungible and many of the larger firms had credit lines with several banks. The regulation was withdrawn.

Also the parastatals used credit guarantees to 'cushion' the discipline of market autonomy. Banks ask for charges over real assets when lending to parastatals but it is standard practice to supplement this collateral with credit guarantees from the Ministry of Finance, ZIMCO, or INDECO. This increased the credit-line for some parastatals and blunted the 'market-discipline' of the foreign exchange auction and autonomy of cash

---

[46] Seven of the eleven commercial banks have been established since 1979 with three foreign banks entering between 1979 and 1985 and four private Zambian banks established since 1985. The four older banks, three foreign and one government-owned, still dominate the banking sector.

management. Nominal profitability of many industrial parastatals increased dramatically in 1986 under rapid inflation and price decontrol and the use of commercial credit supplemented other mechanisms used to shelter the weak parastatals. Many of these mechanisms were implicit, such as subsidization within ZIMCO or INDECO, or ad hoc, showing up as exception expenditures in the budget of 1986. The reform program was abandoned before the economy was restructured and weak and insolvent parastatals were closed.

Credit Allocation and Quality

A detailed analysis of the Zambian case is not available yet but two stylized facts need to be investigated. First, the lending pattern did not change significantly during the reform program. Second, only one bank seemed to have credit quality problems during the reforms and these problems started before the reforms.

Bankers reported that the established clientele continued to receive credit services and the client pool changed little. Unfortunately the Bank of Zambia is revising the reporting requirements on the sectoral allocation of credit and data were not collected during the reforms. If the bankers were correct that credit allocation did not change significant, there are several possible explanations. Inflation may have distorted price signals and relative domestic prices may not have changed as expected after the nominal depreciation. It may also be that bankers did not consider the reform program credible and did not adjust the allocation of credit during the brief reform program. Given the continuing commitment to public ownership in the economy, the banks may have preferred the protected lending strategy possible with the rate structure and the system of Ministry of Finance, ZIMCO, and INDECO guarantees on parastatal lending. It may also have been that the clientele of most banks continued to be viable under the reforms and that the less creditworthy parastatals were borrowing exclusively from the government bank, ZNCB, which did experience some credit quality problems. A final possibility is that many firms in Zambia have borrowed internationally and were in arrears on their international debt so that servicing domestic debt was less of a problem. While this situation was beneficial because Zambia averted the problems of insolvent financial institutions, it also meant that the lending pattern did not respond to the reforms.

Ghana

Overview

The Ghanaian reform program, now in the fifth year, has used drastic devaluation of the official exchange rate, domestic price decontrols, and fiscal and monetary control to restrain aggregate demand. The supply response has been disappointing although real GDP growth of about 5% per year has stayed ahead of population growth of 3%. Most sectors are constrained by continuing shortages of credit, foreign exchange and imported inputs and deteriorating infrastructure.

The ability to sustain the reform effort in Ghana is frequently attributed to the moderate success in stabilization through fiscal restraint. The main thrusts of fiscal policy under the reforms have been eliminating subsidies, increasing revenue by enforcing tax collection and selectively raising taxes, providing for adequate maintenance for infrastructure and capital expenditures. Fiscal restraint has been coupled with tight monetary policy, but there has been considerable slippage. For example, broad money expanded by 53% in 1986, compared with the program target of 19% and efforts to contain inflation have not been very successful. There has been a systematic effort to reduce reliance on the banking system for deficit finance.

Transition Liberalization Policies

The Ghanaian economy was highly distorted in 1983. The Ghanaians have used specific transition policies to gradually remove distortions. For example, the Ghanaian authorities used a series of discrete devaluations over three years to adjust to a lower exchange rate before adopting a foreign exchange auction with a two-tier exchange regime in Sept. 1986. Between 1986 and 1988 the authorities unified the exchange rate so most current account transactions were conducted at the auction rate and expanded the range of transactions eligible to enter the auction. Capital transactions remain outside the auction system. Ghana has recently taken steps to expand foreign exchange markets by licensing private dealers. There has also been progress in dismantling the comprehensive price control system used before 1983. The number of goods under price control was reduced to 23 in 1983, 17 in 1984, then eight in 1985 and 1986.

Management of state-owned enterprises is one of the key issues that has not been dealt with yet. State-owned enterprises have been short on both liquidity and profitability and a substantial drain on the fiscal budget. In 1985 total transfers to state enterprises in the form of subventions, equity, and loans through the budget were equivalent to nearly one percent of GDP, twice as high as in the previous year. Three stages are planned to reform public enterprises. The first is to put the management of public enterprises on a commercial basis. The second is to rehabilitate priority enterprises and the third to divest some enterprises. The process of privatization does not have strong political support and implementation has been slow.

The Financial Sector

The financial sector in Ghana is extremely weak with few institutions and few instruments. The problems caused by perverse government regulation accelerated during the late 1970s and early 1980s when financial policies were politicized. Policies such as demonetizing the 50 cedi notes, the freeze on bank accounts of over 50,000 cedis for investigation of possible fraud, the recall of bank loans financing trade inventories, and compulsory payment of all financial transactions over 1,000 cedis by check eroded confidence in the banking system. Many transactions were moved onto parallel markets. The government has attempted to rebuild confidence in the financial sector since 1983, but the process is slow. As the following review shows the government has followed a strategy of gradually lifting restrictions on interest rates and credit allocation, reducing reserve requirements, and introducing a few new institutions and instruments. The response to these financial policies has been sluggish. The World Bank and the Government of Ghana have identified the financial sector as a key obstacle to growth since 1985. The initial concern was sparked by a shortage of export credit. The World Bank recently approved a credit of SDR 72.1 million to help the Government of Ghana implement further financial sector reforms.

Market Structure

The banking system dominates financial markets. There is a three-tier banking system with three primary commercial banks, seven secondary banks, and about 110 unit banks in rural areas. The three primary banks dominate the system with about 57% of total assets while the rural banks control only 3% of total deposits.

Credit Allocation

Most bank credit is short-term. In 1986 it was estimated that only about 15% of commercial loans outstanding, including the development finance institutions, were for maturities over three years. Credit to the manufacturing sector has grown during the reform program from about 15% of total bank credit to the private sector and public enterprises at the end of 1983 to over 30% by Sept. 1987. Agriculture credit has returned to the share of the early 1980s of about 20% of the total after reaching a high of over one-third in 1983. Export finance is only 2-4% of total bank lending and import finance has increased but is still less than 10% of the total. The share of credit to the government dropped from about 9% of GDP in 1984 to 6% in 1986. The government launched an effort in 1987 to repay domestic banks to increase credit available to the rest of the economy.

Interest Rate Policy

Regulated interest rates were raised in discrete steps after 1983, all interest rates except on savings deposits were liberalized in the second half of 1987, with total decontrol in Feb. 1988. With the exception of a period during 1985, the increases in rates during the transition were not sufficient to offset inflation and real rates remained negative.

Real Interest Rates

	1983	1984	1985	1986
(percent)				
Short-term Deposit Rate (6 month)	-51.1	-20.4	6.0	-6.1
Lending Rate	-49.5	-16.8	8.7	-3.3

Interest rates have been slow to respond to decontrol. After lending rates were decontrolled in Sept. 1987 there was some upward adjustment for riskier loans, but average lending rates changed little and remained negative in real terms. The reasons are not clear but it has been suggested that this may have been because binding credit ceiling precluded further expansion of credit even with excess liquidity in the banking system.

Credit Control

The lending limits on banks are set quarterly by the BoG. The BoG uses quarterly projections of real economic growth and inflation to determine the limits for overall credit expansion and for individual banks. Before 1988 banks also had sectoral credit guidelines set according to sectoral development goals. Sectoral guidelines for the individual banks were based on the outstanding loans at the beginning of the period. For most sectors the guidelines were maximums but agriculture had a minimum lending target of 20% of total lending. As of Feb. 1988 the sectoral guidelines were lifted, with the exception of a broadly defined target for agriculture. There are still credit ceilings for each bank as an instrument of monetary control but this practice will be reexamined as reforms continue. This has become a problem since excess bank liquidity cannot be lent even with high demand because of credit controls.[47]

New Financial Institutions

The attempt to introduce money market services has not taken off yet. The Consolidated Discount House Ltd., owned by banks and insurance companies, was opened 30 Nov. 1987 to offer money market services such as interbank intermediation for short-term assets, Treasury Bills, short-dated government securities, bankers' acceptances, cocoa bills, negotiable short-term certificates of deposit and commercial paper. After an initial spurt of business, institutional shortcomings became evident. It was also hurt in the beginning by BoG funding of cocoa and excess liquidity in the banking system in late 1987.

Late in 1987 Ghana introduced a Treasury Bill auction to foster market-determined interest rates. Since there was excess liquidity in the banking system in late 1987 the rate in the auction fell below the minimum savings rate and the rediscount rate.

Remaining Problems

The progress in financial sector reform includes decontrol of interest rates, limiting credit controls to those necessary for monetary control, reducing reserve requirements, and limiting government reliance on the banking system for deficit finance. However, some fundamental problems remain including weak monitoring and supervision of the banking system, outdated banking laws, credit quality problems, high arrears with inadequate provisions for losses, inflated profits, high operating costs, significant foreign exchange exposure, inadequate accounting, management information and internal control systems, insufficient bank capital, and potential insolvency. The structural adjustment program added credit risk from shifting relative prices and devaluation to the already weak portfolios in the financial system, so that by 1988 the picture was bleak.

A high proportion of currency is still held by the public outside the banking system and rebuilding confidence in the banking system is proving to be a slow process. With higher interest rates and lower inflation, the velocity of circulation decreased from 7.7% in 1984 to an estimated 6% by the end of 1986 as the

---

47 The IMF-mandated credit controls are the immediate reason that banks cannot expand lending, however, analysis has not been done yet on other potential explanations such as general creditworthiness in the economy, risk exposure and management problems in the banks, etc.

willingness of the public to hold financial assets rose. Nevertheless, velocity is still substantially above the rate of the 1970s.

The rural areas are served by over 110 units banks and many are insolvent. While this does not represent a threat to the stability of the banking system since the rural banks are a tiny proportion of all deposits, this does signal potential problems for redirecting investment into agriculture. The rural areas are dependent on informal credit markets and this system may not be capable of handling non-marginal investment projects.

The current system of monetary control interferes with the intermediation process. The excess liquidity of the banking sector cannot be lent even with strong demand in the manufacturing sector because of credit controls. This points to the need to develop indirect instruments for monetary control capable of absorbing or injecting liquidity as required. In addition, the financial sector needs a secondary market in government securities and commercial paper. The GoG is trying to address this problem, including the sale of cocoa bills to commercial banks, a better monitoring of bank cash reserves, and the timely issuance by BoG of short-term paper.

The weak financial sector restricts the options for reform in other sectors. The Government has cited uncertainty about decentralized financing of cocoa marketing as one reason to continue reliance on the cocoa marketing parastatal, Cocobod. Similarly, undeveloped capital markets limit the options for selling parastatals.

Thin and poorly functioning financial markets cannot support either the working capital or investment needs of rehabilitating and restructuring the economy. Commercial lending is short-term. The three government-owned development banks, which provide term financing, have had to absorb huge foreign exchange losses and erosion of net worth and carry a substantial burden of non-performing loans. The development banks need to be restructured and probably recapitalized. It is reportedly difficult for the private sector to raise sufficient working capital for operations and imports. While this is partially attributed to conservative bankers holding large excess reserves, it is also true that most companies have weak balance sheets. The World Bank has an industrial sector adjustment credit so the corporate sector will be restructured simultaneously with the financial sector.

The Financial Sector Adjustment Project

The government of Ghana, with the help of the World Bank, has designed a financial sector project for the period 1988 to 1990 to address remaining problems in the financial sector. The project will be financed by donor aid. The objectives of the program are to enhance soundness of banking institutions through an improved regulatory framework, strengthen bank supervision by the Bank of Ghana, restructure financially distressed banks, improve deposit mobilization, increase efficiency in credit allocation, and develop money and securities markets. There will also be a rural finance project. International audits of the banks have been done. The three development banks and some of the commercial banks will have to be restructured and the BoG and IDA have agreed on the principles for restructuring the banks. At this time the banks are still responsible for collection but the option of transferring bad debts to a debt-collection agency is under consideration. The GoG hesitancy to accept privatization and foreign ownership of banks is under discussion. There has also been a thorough review of the banking law. New banking laws addressing risk exposure and lending concentration and bolstering the supervisory power of the Central Bank are to be enacted in mid-1988. The World Bank has supported technical assistance for the Central Bank to design new commercial bank reporting procedures and new auditing requirements consistent with international guidelines and standards.

Summary

A specific strategy for reforming the financial sector must be formulated by country recognizing the imperfections in the financial markets and endogenous constraints. Of the countries surveyed for this review, both Mauritania and Guinea started reforms by restructuring and recapitalizing the financial institutions. The reforms in Ghana and Zambia started with reregulation. Ghana has gradually reduced restrictions in the financial sector over five years and is now beginning rehabilitation of the financial sector. Zambia had a very brief period of interest rate decontrol at the beginning of their liberalization program followed by a period of inconsistent regulations and finally the reintroduction of interest rate controls and high reserve requirements over the last half of the reform period.

Bibliography

Abdi, Ali Issa. Commercial Banks and Economic Development: The Experience of Eastern Africa. New York: Praeger Publishers, 1977.

Anderson, Dennis. "The Public Revenue and Economic Policy in African Countries: An Overview of Issues and Policy Options." World Bank Discussion Paper No. 19.

Argy, Victor and Joanne Salop. "Price and Output Effects of Monetary and Fiscal Expansion in a Two-Country World Under Flexible Exchange Rates." Oxford Economic Papers. Vol. 35, July 1983, pp. 228-46.

Arowolo, Edward A. "The Development of Capital Markets in Africa with Particular Reference to Kenya and Nigeria." IMF Staff Papers. Vol. 18, No. 2, July 1971, pp. 420-469.

Arrieta, Gerardo Gonzales. "Interest Rates, Savings, and Growth in LDCs: An Assessment of Recent Empirical Research." World Development. Vol. 16, No. 5, May 1988, pp. 589-605.

Bacha, Edmar L. "IMF Conditionality: Conceptual Problems and Policy Alternatives." World Development. Vol. 15, No. 12, Dec. 1987, pp. 1457-1467.

Balassa, Bela. "Comment" in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 60-64.

Balassa, Bela. "Structural Adjustment Policies in Developing Economies." World Development. Vol. 10, No. 1, Jan. 1982, pp. 23-38.

Balassa, Bela. "Adjustment Policies and Development Strategies in Sub-Saharan African Countries, 1973-78." Discussion Paper No. 41, Washington, D.C.: World Bank, 1982.

Balassa, Bela. "Policy Responses to External Shocks in Sub-Saharan African Countries." Journal of Policy Modelling. Vol. 5, No. 1, March 1983.

Barletta, Nicholas Ardito, Mario I. Blejer, and Luis Landau. (eds.) Economic Liberalization and Stabilization Policies in Argentina, Chile, and Uruguay: Applications of the Monetary Approach to the Balance of Payments. Washington, D.C.: The World Bank, 1983.

Batia, R. J. "Adjustment Efforts in Sub-Saharan Africa." Finance and Development. Sept. 1985.

Bhatia, Rattan J. and Deena R. Khatkhate. "Financial Intermediation, Savings Mobilization, and Entrepreneurial Development: The African Experience." IMF Staff Papers. Vol. 22, No. 1, March 1975, pp. 132-158.

Bhatt, V.V. "Financial Innovations and Credit Market Evolution." Economic and Political Weekly. Vol. 22, No. 22, May 30, 1987, pp. 45-54.

Binswanger, Hans P. and Mark R. Rosenzweig. "Behavioral and Material Determinants of Production Relations in Agriculture." Discussion Paper No. 5, Research Unit, Agriculture and Rural Development Department, World Bank, June 1982.

Bird, Graham. "Should Developing Countries Use Currency Depreciation as a Tool of Balance of Payments Adjustment? A Review of the Theory and Evidence, and a Guide for the Policy Maker." The Journal of Development Studies. July 1983, pp. 461-484.

Blejer, Mario and Silvia Sagari. "The Structure of the Banking Sector and the Sequence of Financial Liberalization." in Connolly, Michael and Claudio Gonzalez-Vega. Economic Reform and Stabilization in Latin America. New York: Praeger, 1987, pp. 93-107.

Blejer, Mario and Adienne Cheasty. "Using Fiscal Measures to Stimulate Savings in Developing Countries." Finance and Development. Vol. 23, June 1986, pp. 16-9.

Braverman, Avishay and J. Luis Guasch. "Rural Credit Markets and Institutions in Developing Countries: Lesson for Policy Analysis from Practice and Modern Theory." World Development. Vol. 14, No. 10/1, Oct/Nov. 1986, pp. 1253-1267.

Buffie, E.F. "Financial Repression, the New Structuralists and Stabilization Policy in Semi-Industrialized Economies." Journal of Development Economics. Vol. 14, No. 13, April 1984, pp. 305-322.

Buiter, Willem H. "A Guide to Public Sector Debt and Deficits." Economic Policy. Vol. 1, Nov. 1985, pp. 13-79.

Buiter, Willem H. "Some Thoughts on the Role of Fiscal Policy in Stabilization and Structural Adjustment in Developing Countries." NBER Working Paper No. 2603, May 1988.

Buiter, William. "Macroeconomic Responses by Developing Countries to Changes in External Conditions." NBER Working Paper No. 1836, New York, 1986.

Buiter, Willem H. "Measurement of the Public Sector Deficit and Its Implications for Policy Evaluation and Design." IMF Staff Papers, Vol. 30, No. 2, June 1983, pp. 307-49.

Chand, S.K. "Towards a Growth-Oriented Model of Financial Programming." IMF Working Paper 87/10, 26 Feb. 1987.

Cho, Yoon Je "Capital Market Structure and Barriers to Financial Liberalization." Unpublished manuscript, Development Research Department Discussion Paper No. DRD106, The World Bank, Sept. 1984.

Cho, Yoon Je. "Inefficiencies from Financial Liberalization in the Absence of Well-Functioning Equity Markets." Journal of Money, Credit and Banking. Vol. 18, No. 2, May 1986, pp. 191-200.

Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986.

Coates, Warren L. and Deena R. Khatkhate. "Money and Monetary Policy in Less Developed Countries: Survey of Issues and Evidence." in Coates and Khatkhate (eds.) Money and Monetary Policy in Less Developed Countries: A Survey of Issues and Evidence. New York: Pergamon Press, 1980, pp. 3-33.

Collier, Paul. "Malfunctioning of African Rural Factor Markets: Theory and a Kenyan Example." Oxford Bulletin of Economics and Statistics. Vol. 45, No. 2, May 1983, pp. 141-172.

Corbo, Vittorio and Jaime de Melo. "External Shocks and Policy Reforms in the Southern Cone: A Reassessment." in G. Calvo and others (eds.) Debt, Stabilization, and Development. London: Basil Blackwell, 1987.

Corbo, Vittorio and Jaime de Melo. "Lessons from the Southern Cone Policy Reforms." The World Bank Research Observer. Vol 2, No. 2, July 1987, pp. 111-142.

deMelo, J. and J. Tybout. "The Effects of Financial Liberalization on Savings and Investment in Uruguay." Economic Development and Cultural Change. Vol. 34, No. 3, 1986, pp. 607-640. ... or pp. 561-587.

deMelo, Jaime, Ricardo Pascale and James Tybout. "Microeconomic Adjustment in Uruguay During 1973-81: The Interplay of Real and Financial Shocks." World Development. Vol. 13, No. 8.

Dervis, Kemal and Peter Petri. "The Macroeconomics of Successful Development: What are the Lessons?" in NBER Macroeconomics Annual 1987. pp. 211-54.

Desai, M. and W. Low. "Financial Innovations: Measuring the Opportunity for Product Innovation." London School of Economics, Economic and Social Research Council, Discussion Paper No. A. 58.

Devaranjan, Shantayanan, and Jaime de Melo. "Adjustment with a Fixed Exchange Rate: Cameroon, Cote d'Ivoire, and Senegal." World Bank Economic Review. Vol. 1, No. 3, May 1987, pp. 447-87.

Diaz-Alejandro, C. "Good-bye Financial Repression, Hello Financial Crash." Journal of Development Economics. Vol. 19, No. 1-2, 1985, pp. 1-24.

Donovan, Donald J. "Macroeconomic Performance and Adjustment Under Fund-Supported Programs: The Experience of the Seventies." IMF Staff Papers. June 1982, pp. 171-203.

Donovan, Donald J. "Real Responses Associated with Exchange Rate Action in Selected Upper Credit Tranche Stabilization Programmes." IMF Staff Papers. Dec. 1981.

Dooley, Michael and Donald J. Mathieson. "Financial Liberalization and Stability in Developing Countries." Working Paper 87/19 of the International Monetary Fund, March 17, 1987. (paper prepared for the conference on Capital Market Development and Financial Stability, Ditchley Park, Dec. 5-7. 1986.)

Dornbusch, R. "Stabilization Policies in Developing Countries: What Have We Learned?" World Development. Vol. 10, No. 9, 1982, pp. 701-730.

Dornbusch, R. "External Debt, Budget Deficits, and Disequilibrium Exchange Rates." in G. Smith and J.T. Cuddington, (eds.) International Debt and the Developing Countries. Washington D.C.: World Bank, 1985.

Edwards, Sebastian. "Sequencing Economic Liberalization in Developing Countries." Finance and Development. Vol. 24, No. 1, March 1987, pp. 26-29.

Edwards, Sebastian and Mohsin S. Khan. "Interest Rate Determination in Developing Countries: A Conceptual Framework." IMF Staff Papers. Vol. 32, No. 3, Sept. 1985, pp. 377-403.

Edwards, Sebastian and Sweder van Wijnbergen. "The Welfare Effects of Trade and Capital Market Liberalization." The International Economic Review. Vol. 27, No. 1, Feb. 1986, pp. 141-148.

Edwards, Sebastian. "Financial Deregulation and Segmented Capital Markets: The Case of Korea." World Development. Vol. 16, No. 1, Jan. 1988, pp. 185-194.

Edwards, Sebastian. "Comment." in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 32-35.

Edwards, Sebastian. The Order of Liberalization of the External Sector in Developing Countries. Princeton, N.J.: Princeton Essays in International Finance, No. 165, Princeton University, 1984.

Fischer, Stanley. "Issues in Medium-Term Macroeconomic Adjustment." The World Bank Research Observer. Vol. 1, No. 2, July 1986, pp. 163-182.

Frenkel, Jacob A. "Economic Liberalization and Stabilization Programs." in Nicolas Ardito Barletta, Mario Blejer, and Luis Landau (eds.) Economic Stabilization Policies in Argentina, Chile, and Uruguay: Applications of the Monetary Approach to the Balance of Payments. Washington, D.C.: A World Bank Symposium, 1983, pp. 12-17.

Fry, Maxwell J. "Money and Capital or Financial Deepening in Economic Development?" Journal of Money, Credit, and Banking. 1978.

Fry, Maxwell. "Models of Financially Repressed Developing Countries. World Development. Vol. 10, No. 9, Sept. 1982, pp. 731-750.

Fry, Maxwell J. Money, Interest, and Banking in Economic Development. Johns Hopkins Press, 1988.

Galbis, Vincente. "Financial Intermediation and Economic Growth in Less-Developed Countries: A Theoretical Approach." Journal of Development Studies. Vol. 13, Jan. 1977, pp. 58-72.

Galvez, Julio and James Tybout. "Microeconomic Adjustments in Chile during 1977-81: The Importance of Being a Group." World Development. Vol. 13, No. 8.

Gertler, Mark. "Financial Structure and Aggregate Economic Activity." Journal of Money, Credit, and Banking. Vol. 20, No. 2, Aug. 1988, pp. 559-596.

Giovannini, Alberto. "The Interest Elasticity of Savings in Developing Countries: The Existing Evidence." World Development. Vol. 11, No. 7, July 1983, pp. 601-607.

Gulhati, Ravi and Gautam Datta. "Capital Accumulation in Eastern and Southern Africa." World Bank Staff Paper No. 562, 1983.

Gulhati, Ravi, Swadesh Bose, and Vimal Atukorala. "Exchange Rate Policies in Africa: How Valid is the Skepticism?" Development and Change. Vol. 17, July 1986, pp. 399-423.

Hanson, J. and J. deMelo, "External Shocks, Financial Reforms, and Stabilization Attempts in Uruguay During 1974-83." World Development. Vol. 13, No. 8, 1985, pp. 917-940.

Hanson, James A. "Policy Implications of the Monetary Approach and of Experiences in the Southern Cone." in Nicolas Ardito Barletta, Mario Blejer, and Luis Landau (eds.) Economic Stabilization Policies in Argentina, Chile, and Uruguay: Applications of the Monetary Approach to the Balance of Payments. Washington, D.C.: A World Bank Symposium, 1983, pp. 109-115.

Hanson, James A. and Craig R. Neal. "Interest Rate Policies in Selected Countries, 1970-1982." Industry and Finance Series, Washington, D.C., The World Bank, Vol. 14, 1986 and World Bank Staff Working Papers No. 753, 1985.

Harberger, Arnold C. "Lessons for Debtor Country Managers and Policy-Makers." Papers for a conference on international debt and developing countries, sponsored by the World Bank, 1984.

Haugerud, Angelique. "Development and Household Economy in Two Eco-Zones of Embu District." University of Nairobi, Institute for Development Studies, Working Paper No. 382, July 1981.

Hawkins, A.M., "Can Africa Industrialize?" in Robert Berg and Jennifer Seymour Whitaker (eds.) Strategies for African Development. Berkeley: University of California Press, 1986, pp. 279-307.

Hickok, Susan and Clive S. Gray. "Capital-Market Controls and Credit Rationing in Mali and Senegal." The Journal of Modern African Studies. Vol. 19, No. 1, March 1981, pp. 57-73.

Hinds, Manuel. "Financial Crises in Developing Countries," World Bank, INDFD, Aug. 1987.

Hutchinson, Michael M. "Financial Effects of Budget Deficits in the Pacific Basin." Cheng, Hang-Sheng (ed.) Financial Policy in Pacific Basin Countries.

Hyden, Goran. Beyond Ujamaa: Underdevelopment and an Uncaptured Peasantry. London: Heinemann, 1980.

IMF. "Fund Supported Programs, Fiscal Policy, and Income Distribution." Occasional Paper No. 46, Sept. 1986.

IMF. "Theoretical Aspects of the Design of Fund-Supported Adjustment Programs." International Monetary Fund, Occasional Paper No. 55, Sept. 1987.

Jeanneney, Sylviane Guillaumont. "Foreign Exchange Policy and Economic Performance: A Study of Senegal, Madagascar, and Guinea." in T. Rose (ed.) Crisis and Recovery in Sub-Saharan Africa. Paris: Organization for Economic Cooperation and Development, 1986.

Kahkonen, Juha. "Liberalization Policies and Welfare in a Financially Repressed Economy." IMF Staff Papers. Vol. 34, No. 3, Sept. 1987, pp. 531-547.

Kanoga, Ephraim Mondia. Informal Credit in Mathira, Nyeri District, Central Kenya: A Case Study of Rural Informal Credit in Kenya. M.A. Thesis, University of Nairobi, June 1978.

Katseli, Louka T. "Devaluation: A Critical Appraisal of the IMF's Policy Prescriptions." American Economic Review. Vol. 73, No. 2, May 1983, pp. 359-363.

Khan, Mohsin S. "Macroeconomic Adjustment in Developing Countries: A Policy Perspective." World Bank Research Observer. Vol. 2, No. 1, Jan. 1987, pp. 23-42.

Khan, Mohsin S. and Malcolm D. Knight. "Some Theoretical and Empirical Issues Relating to Economic Stabilization in Developing Countries." World Development. Sept. 1982, pp. 709-730.

Khan, Mohsin S. and Malcolm D. Knight. "Fund-Supported Adjustment Programs and Economic Growth." IMF Occasional Papers No. 41. Washington, D.C.: International Monetary Fund.

Khan, Mohsin S. and Malcolm D. Knight. "Developing Country Exchange Rate Policy Responses to Exogenous Shocks." American Economic Review. May 1986, pp. 84-87.

Khan, Mohsin S. and J. Saul Lizondo. "Devaluation, Fiscal Deficits, and the Real Exchange Rate." World Bank Economic Review. Vol. 1, No. 2, Jan. 1987, pp. 357-374.

Khan, Mohsin S. and Roberto Zahler. "Trade and Financial Liberalization in the Context of External Shocks and Inconsistent Domestic Policies." DM/84/44. Washington, D.C., IMF, 1984. In IMF Staff Papers. March 1985.

Khan, Mohsin and Roberto Zahler. "The Macroeconomic Effects of Changes in Barriers to Trade and Capital Flows: A Simulation Analysis." IMF Staff Papers. June 1983, pp. 223-282.

Khatkhate, Deena R. "Analytic Basis of Working of Monetary Policy in Less Developed Countries." IMF Staff Paper. Nov. 1972.

Khatkhate, Deena R. "False Issues in the Debate on Interest Rate Policies in Less Developed Countries." Banca Nazional del Lavoro. Quarterly Review, No. 133, June 1980.

Khatkhate, Deena R. "National and International Aspects of Financial Policies in LDSs: A Prologue." World Development. Sept. 1982, reproduced in Khatkhate, Deena R. (ed.) National and International Aspects of Financial Development in LDC. Oxford: Pergamon Press, 1983.

Khatkhate, Deena R. (ed.) National and International Aspects of Financial Development in LDC. Oxford: Pergamon Press, 1983.

Khatkhate, Deena R. "Assessing the Impact of Interest Rates in Less Developed Countries." World Development. Vol. 16, No. 5, May 1988, pp. 577-588.

Khatkhate, D.R. and K.W. Riechel, "Multipurpose Banking: Its Nature, Scope and Relevance for LDCs." IMF Staff Papers. Vol. 27, 1980, pp. 478-516.

Kiguel, Miguel A. and Nissan Liviatan. "Inflationary Rigidities and Stabilization Policies." PPR Working Paper No. 4, Washington, D.C.: World Bank, Policy, Planning and Research Dept., 1988.

Killick, Tony. (ed.) The IMF and Stabilization: Developing Country Experiences. London: Heinemann, 1984.

Kitchen, Richard L. Finance for the Developing Countries. New York: John Wiley & Sons, 1986.

Kozel, Valerie Jean. Income, Consumption, and Savings Behavior in the Cote d'Ivoire. Ph.D. Dissertation, Dept. of Urban Studies and Planning, Massachusetts Institute of Technology, May 1987.

Krueger, Anne O. Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences. Cambridge, Mass.: Ballinger, 1978.

Krueger, Anne O. "Interactions between Inflation and Trade Objectives in Stabilization Programs." in W.R. Cline and S. Weintraub, (eds.) Economic Stabilization in Developing Countries. Washington, D.C.: Brookings Institution, 1981.

Krueger, Anne O. "Problems of Liberalization" in A. Harberger (ed.) World Economic Growth. San Francisco, CA: ICS Press, 1984.

Krueger, Anne O. "How to Liberalize a Small Open Economy." in M. Connolly and J. McDermott, (eds.) The Economics of the Caribbean Basin. New York: Praeger, 1985.

Krueger, Anne O. "General Issues in Economic Liberalization." in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 15-31.

Krugman, Paul and Lance Taylor. "Contractionary Effects of Devaluation." Journal of International Economics. Vol. 8, 1978, pp. 445-456.

Lal, Deepak. "Comment." in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 217-218.

Lal, Deepak. "The Political Economy of Economic Liberalization." The World Bank Economic Review. Vol. 1, No. 2, Jan. 1987, pp. 273-299.

Lanyi, Anthony and Rusdu Saracoglu. "Interest Rate Policies in Developing Countries." IMF Occasional Paper No. 22, Washington, D.C.: World Bank, Jan. 1986.

Leite, Sergio P. "Interest Rate Policies in West Africa." IMF Staff Papers. March 1982.

Leite, Sergio P. and Dawit Makonnen. "Savings and Interest Rates in BCEAO Countries: An Empirical Analysis." Savings and Development. Vol. 10, No. 3, July-Sept. 1986, pp. 219-231. (also International Monetary Fund Discussion Paper DM/84/43, 1984.)

Liedholm, Carl and Donald C. Mead. "Small-Scale Industry." in Robert Berg and Jennifer Seymour Whitaker (eds.) Strategies for African Development. Berkeley: University of California Press, 1986, pp. 308-330.

Lin, Ching-Yuan. "Latin America and East Asia: A Comparative Development Perspective." Washington, D.C.: International Monetary Fund, 1985.

Livingstone, Ian. Rural Development, Employment, and Incomes in Kenya. Addis Ababa: International Labour Office, 1981.

Mathieson, Donald J. "International Capital Flows, Capital Controls, and Financial Reform." in Cheng, Hang-Sheng (ed.). Financial Policy and Reform in Pacific Basin Countries. Lexington, MA: Lexington Books, 1986, pp. 237-263.

Mauri, Arnaldo. "Potential for Savings and Financial Innovation in Africa." Savings and Development. (Italy) No. 4, 1983, pp. 319-37.

McKinnon, Ronald. Money and Capital in Economic Development. Washington, D.C.: The Brookings Institution, 1973.

McKinnon, Ronald. "The Order of Economic Liberalization: Lessons from Chile and Argentina." Carnegie Rochester Conference Series on Public Policy, Vol. 17, 1982, pp. 159-186.

McKinnon, Ronald. "Comment." in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 219-223.

Michaely, Michael. "The Timing and Sequencing of a Trade Liberalization Policy" in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 41-59.

Mussa, Michael. "Macroeconomic Policy and Trade Liberalization: Some Guidelines." The World Bank Research Observer. Vol. 2, No. 1, Jan. 1987, pp. 61-77.

Michalopoulos, Constantine. "World Bank Programs for Adjustment and Growth." The World Bank. Discussion Paper Development Policy Issues Series, Report No. VPERS11, April 1987.

Miracle, M.P., D.S. Miracle, and L. Cohen. "Informal Savings Mobilization in Africa." Economic Development and Cultural Change. Vol. 28, No. 4, July 1980, pp. 701-724.

Mussa, Michael. "The Adjustment Process and the Timing of Trade Liberalization." in Choksi, Armeane M. and Demetris Papageorgiou. Economic Liberalization in Developing Countries. New York: Basil Blackwell for the World Bank, 1986, pp. 68-124.

Nellor, David C. L. "Tax Policy, Regulated Interest Rates, and Savings." World Development. Vol. 13, No. 6, 1985 pp. 725-736.

Nelson, Joan M. "The Political Economy of Stabilization: Commitment, Capacity, and Public Response." World Development. Vol. 12, No. 10, 1984, pp. 983-1006.

O'Connell, Stephen A. "Fiscal Policy in Low-Income Africa." World Bank, background paper for 1988 World Development Report, mimeo, May 1988.

Ordover, Janusz and Andrew Weiss. "Information and the Law: Evaluating Legal Restriction on Competitive Contracts." American Economic Review. Vol. 71, May 1981, pp. 399-404.

Patrick, Hugh T. "Financial Development and Economic Growth in Underdeveloped Countries." Economic Development and Cultural Change. Vol. 14, Jan. 1966, pp. 174-189.

Penati, Alessandro. "Expansionary Fiscal Policy and the Exchange Rate: A Review." IMF Staff Paper, Vol. 30, No. 3, Sept. 1983, pp. 542-69.

Petri, A. Humberto and James R. Tybout. "How the Financial Statements of Argentine Firms Reflected Stabilization and Reform Attempts During 1976-81." World Bank Staff Working Papers No. 706, 1984.

Pinto, Brian. "Fiscal Deficits, Inflation and Parallel Exchange Markets in Ghana: Monetarism in the Tropics?", The World Bank, mimeo, 1986.

Pinto, Brian. "Exchange Rate Unification and Budgetary Policy in SSA", The World Bank, mimeo, 1987.

Pinto, Brian. "Black Markets for Foreign Exchange, Real Exchange Rates and Inflation: Overnight vs. Gradual Reform in Sub-Saharan Africa," The World Bank, mimeo, 1987.

Pinto, Brian and Sweder van Wijnbergen. "Exchange Rate Regimes in Africa," The World Bank, mimeo, July, 1987.

Please, Stanley. "The World Bank: Lending for Structural Adjustment." in Overseas Development Council, Adjustment Crisis in the Third World. Washington D.C., 1984.

Riley, John G. "Credit Rationing: A Further Remark." American Economic Review. Vol. 77 No. 1, March 1987, pp. 224-227.

Robertson, A.F. The Dynamics of Productive Relationships: African Share Contracts in Comparative Perspective. Cambridge: Cambridge University Press, 1987.

Roe, Allan R. "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. 211-23.

Roemer, Michael. "Simple Analytics of Segmented Markets: What Case for Liberalization?" World Development. Vol. 14, No. 3, 1986, pp. 429-439.

Sachs, Jeffrey D. and Charles Wyplosz. "Real Exchange Rate Effects of Fiscal Policy." NBER Working Paper Series 1255, Cambridge Mass., 1984.

Saracoglu, R. "Expectations of Inflation and Interest Rate Determination." IMF Staff Papers. March 1984.

Schatz, S.P. "The Capital Shortage Illusion: Government Lending in Nigeria." Oxford Economic Papers. Vol. 17, No. 2, July 1965.

Seibel, Hans Dieter and Michael T. Marx. Dual Financial Markets in Africa----Case Studies of Linkages Informal and Formal Financial Institutions. Fort Lauderdale Fla.: Breitenbach Publishers, 1987.

Seibel, Hans Dieter. "Financial Innovations for Microenterprises: Linking Informal and Formal Financial Institutions in Africa and Asia." Paper presented at the "Support for Microenterprises" Conference, Washington D.C., June 1988.

Shalizi, Zmarak and Lyn Squire. "A Framework for Tax Policy Analysis in Sub-Saharan Africa." World Bank, Country Policy Department, March 1987 (mimeo).

Shaw, Edward. Financial Deepening in Economic Development. New York: Oxford University Press, 1973.

Snowden, P.N. "Financial Market Liberalization in LDCs: The Incidence of Risk Allocation Effects of Interest Rate Increases." Journal of Development Studies. Vol. 24, No. 1, Oct. 1987, pp. 83-93.

Stiglitz, Joseph E. and Andrew Weiss. "Credit Rationing: Reply." American Economic Review. Vol. 77 No. 1, March 1987, pp. 228-231.

Stiglitz, Joseph E. and Andrew Weiss. "Incentive Effects of Terminations: Applications to the Credit and Labor Markets." American Economic Review. Vol. 73, Dec. 1983, pp. 913-927.

Stiglitz, Joseph E. and Andrew Weiss. "Credit Rationing in Markets with Imperfect Information, Part I." American Economic Review. Vol. 71, June 1981, pp. 393-410.

Stockman, Alan C. "On the Roles of International Financial Markets and Their Relevance for Economic Policy." Journal of Money, Credit, and Banking. Vol. 20, No. 2, Aug. 1988, pp. 531-549.

Sundarajan, V. "Debt-Equity Ratio of Firms and Interest Rate Policy: Macroeconomic Effects of High Leverage in Developing Countries." IMF Staff Papers. Vol. 32, 1985, pp. 430-475.

Taylor, Lance. "Macro Policy in the Tropics: How Sensible People Stand." World Development. Vol. 15, No. 12, Dec. 1987, pp. 1407-1435.

Taylor, Lance. Structuralist Macroeconomics. New York: Basic Books, 1983.

van Wijnbergen, Sweder, Ritu Anand, and Roberto Rocha. "Inflation, External Debt, and Financial Sector Reform: A Quantitative Approach to Consistent Fiscal Policy." Washington, D.C., World Bank, EMENA Technical Dept., 1988.

van Wijnbergen, Sweder. "Fiscal Deficits, Exchange Rate Crises, and Inflation." Washington, D.C., World Bank, EMENA Technical Dept., 1985.

van Wijnbergen, Sweder. "External Debt, Inflation and the Public Sector: Towards Fiscal Policy for Sustainable Growth." Washington, D.C., World Bank, EMENA Technical Dept., 1988.

van Wijnbergen, Sweder. "Aid, Export Promotion, and the Real Exchange Rate: An African Dilemma." Development Research Dept. Discussion Paper, No. DRD199, Oct. 1986.

van Wijnbergen, Sweder. "Exchange Rate Management and Stabilization Policies in Developing Countries." Journal of Development Economics. Vol. 23, 1986, pp. 227-247.

van Wijnbergen, Sweder. "Credit Policy, Inflation, and Growth in a Financially Repressed Economy." Journal of Development Economics. Vol. 13, Aug.-Oct. 1983, pp. 45-65.

van Wijnbergen, Sweder. "Stagflationary Effects of Monetary Stabilization Policies: A Quantitative Analysis of South Korea." Journal of Development Economics. Vol. 10, April 1982, pp. 133-69.

Von Pischke, J.D. "Credit Use and Development on Nineteen Murang'a Farms, 1969-1973." University of Nairobi, Institute of Development Studies, January 1974.

Wai, U Tun. "The Role of Unorganized Financial Markets in Economic Development and the Formation of Monetary Policy." Savings and Development. Vol. 4, No. 4, 1980, pp. 25???

Wheeler, David. "Sources of Stagnation in Sub-Saharan Africa." World Development. Vol. 12, No. 1, 1984, pp. 1-23.

Williamson, John. "A Survey of the Literature on the Optimal Peg." Journal of Development Economics. Vol. 11, 1982, pp. 39-61.

World Bank. "Review of Financial Sector Work." Financial Development Unit, Industry Department, October 1983.

World Bank. Industry Department. "Financial Intermediation Policy Paper." July 8, 1985.

World Bank, "Guidelines for Financial Sector Operations," Financial Development Unit, Industry Dept., March 1987.

World Bank. World Development Report, 1988. New York: Oxford University Press, 1988.

Yagci, Fahrettin, Steven Kamin, and Victoria Rosenbaum. "Structural Adjustment Lending: An Evaluation of Program Design." Washington, D.C., World Bank Staff Working Paper No. 661, 1985.

Zulu, Justin B. and Saleh M. Nsouli. "Adjustment Programs in Africa: The Recent Experience," IMF, 1985.