Report No. 13423-GH

Ghana
Financial Sector Review:
Bringing Savers and Investors Together

December 29, 1994

Country Operations Division
West-Central Africa Department

CURRENCY EQUIVALENTS

Currency Unit = Cedi (₵)

Cedi/US$

Year	*Annual Average*	*End Period*
1987	202	230
1989	270	303
1990	326	345
1991	368	391
1992	437	521
1993	649	820
1994 (November 30)	--	1050

Monetary Aggregates

Monetary Base	Currency in Circulation + Reserves at BOG
M0	Currency outside Banks
M1	M0 + Demand Deposits
M2	M1 + Savings and Demand Deposits

ABBREVIATIONS AND ACRONYMS

ADB	-	Agricultural Development Bank
AGC	-	Ashanti Goldfields Company
ASEAN	-	Association of South East Asian Nations
BCCI	-	Bank for Credit and Commerce International
BHC	-	Bank for Housing and Construction
BOG	-	Bank of Ghana
COCOBOD	-	Cocoa Board
COOP	-	Ghana Cooperative Bank
CUA	-	Credit Union Association
ERP	-	Economic Recovery Program
FINSAC	-	Financial Sector Adjustment Credit
GCB	-	Ghana Commercial Bank
GLSS	-	Ghana Living Standards Survey
GOG	-	Government of Ghana
GSE	-	Ghana Stock Exchange
GSS	-	Ghana Statistical Service
HFC	-	Home Finance Corporation
IFC	-	International Finance Corporation
NBFI	-	Non-Bank Financial Institution
NGO	-	Non-Governmental Organization
NIB	-	National Investment Bank
NIC	-	National Insurance Commission
NPART	-	Non-Performing Assets Recovery Trust
NSCB	-	National Savings and Credit Bank
RPED	-	Regional Program on Enterprise Development
SCB	-	Standard Chartered Bank
SIC	-	State Insurance Corporation
SOE	-	State-Owned Enterprise
SSA	-	Sub-Saharan Africa
SSB	-	Social Security Bank
SSNIT	-	Social Security and National Insurance Trust

FISCAL YEAR FOR THE GOVERNMENT OF GHANA

January 1 - December 31

ABSTRACT

After 10 years of successful adjustment, with real economic growth averaging 5 percent per year, Ghana's recorded savings and investment rates remain very low—even by Sub-Saharan African standards. The prevailing view is that continuation of this trend could prevent Ghana from achieving accelerated growth.

However, survey evidence suggests that actual savings and investment rates are much higher than recorded rates. National accounts statistics do not capture a large part of the underlying savings and investment activities of the household, rural, and informal sectors. This finding points to the potential for increased growth from bringing a larger share of actual savings into the financial system as a basis for financing productive investments.

Comparative financial indicators confirm that Ghana's financial system is not very deep and as a result not fully contributing to economic growth. Ghana's broad money holdings are small relative to GDP when compared to other countries with similar per capita income. Also, currency holdings are relatively large, suggesting that Ghanaians prefer cash to bank accounts. Meanwhile, the bulk of financial savings has financed public sector deficits, leaving little for private investment finance.

While much self- or kin-financed investment takes place, Ghana suffers from the limited degree to which markets for savings work—there is no assurance that the most productive investments are undertaken. Indeed, there is considerable evidence that many household savings are invested in real assets yielding zero, or negative, returns. Widespread lack of trust in formal financial channels makes these nevertheless the preferred form of investment.

Ghana can grow faster with existing savings by improving the efficiency of investments through enhanced financial intermediation. This will require sustaining policies that encourage bringing more of the existing savings into financial intermediaries and ensure that competition for funds allocates resources to their most productive use. The returns to such policies would be high. Channeling 16 percent of savings currently held outside the financial system into financial intermediaries could raise the rate of economic growth by 1 percentage point. A faster uptake of outside savings would mean even faster growth. This would allow for a rapid increase in investment finance—especially when the projected decline in the public sector borrowing requirement is taken into account.

The basic institutional foundations for enhanced financial intermediation are already present in Ghana. Its bank financial institutions include the central bank—the Bank of Ghana—9 commercial banks, 3 merchant banks, and over 100 rural unit banks. Non-bank financial institutions include a stock exchange, 21 insurance companies, the Social Security and National Insurance Trust, two discount houses, the Home Finance Company, numerous building societies, a venture capital company, a unit trust, and a leasing company. Informal financial arrangements include "susu" collectors, who engage in mobilizing short-term savings, rotating credit groups, and traders and money lenders.

A number of steps have already been taken to strengthen the financial system. Ghana's commercial banks have gone through a financial repair exercise. Further steps need to include measures to build savers' confidence and create a more competitive market environment. Proposed measures include maintaining a stable and viable macroeconomic environment, aggressively phasing out government ownership of financial institutions, broadening the role of non-bank financial institutions, strengthening rural financial institutions and the linkages between the formal and informal sectors, and improving the financial infrastructure, including the legal and administrative framework.

ACKNOWLEDGEMENTS

This report sets out key issues, strategic directions, and recommendations intended to serve as a framework for guiding the Government of Ghana in furthering the development of the financial sector over the medium term. The report's findings, conclusions, and proposed measures are the result of numerous workshops and intensive policy discussions that took place over the past 14 months. The recommendations are set within the context of the ongoing Structural Adjustment Program and build on the progress made since the inception of the Financial Sector Adjustment Program in 1987. Implementation of these measures would support Ghana's move towards private sector led growth.

This report was prepared, under the overall direction of Joanne Salop (AF4CO), by a joint team comprised of Government of Ghana and World Bank officials.

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EXECUTIVE SUMMARY

1. Under the Economic Recovery Program (ERP) adopted in 1983, the Ghanaian economy emerged from a state of near collapse to achieve consistently positive growth rates. In contrast with losses of 2 to 3 percent per year in the preceding decade, real GDP grew, on average, 5 percent per year in the decade following the introduction of the ERP. On a per capita basis, furthermore, real income grew by 2 percent per year, and the benefits of growth were widely distributed.

2. Starting in 1988, the government also began to implement financial sector reforms, strengthening the prudential and regulatory framework as financial markets were liberalized. The sector is still dominated by state-owned financial institutions, however, which prevent it from contributing fully to economic growth. As long as the government maintains majority ownership of financial institutions and influences their operations, development of the financial system is likely to be deterred.

Macroeconomic Environment

3. Even by Sub-Saharan African standards, Ghana's recorded savings and investment rates are low. Evidence from household surveys suggests that actual savings are much higher than records show, but that most are kept in such nonfinancial form as inventories or building materials, which are generally not captured in Ghana's national accounts statistics. It is clear, however, that individuals are reluctant to save with formal financial institutions, which hinders effective financial intermediation and depresses the rate of return on capital.

4. Comparative financial indicators confirm that Ghana's financial system is not very deep. Broad money holdings (M2) are equivalent to about 17 percent of GDP, as compared with 79 percent in Malaysia, 46 percent in Indonesia, 37 percent in Kenya, and 30 percent in Zimbabwe. Reflecting their mistrust of banks, Ghanaians keep a good half of their total money in currency rather than in bank deposits, as compared to about 10 percent in Indonesia, Thailand, and Malaysia, and 20 percent in Kenya, Zambia, and Zimbabwe. Currency holdings outside of banks are also large relative to total monetary aggregates.

5. A number of factors have contributed to the low level of participation in the formal financial system. Confidence was undermined when the confidentiality of bank accounts was violated in the early 1980s and later bank-portfolios underwent large scale restructurings. In addition, during the 1970s and 1980s, inflation drove individuals to shift their financial assets into real form to avoid losing the value of their resources. Until recently, low or negative real deposit rates and high transaction costs offered few incentives for holding wealth in banks or otherwise dealing with the formal financial system.

6. Meanwhile, almost all savings entering the formal financial system served to satisfy the public sector borrowing requirement, with less than a third of outstanding credit going to the private sector. The incentives created by macroeconomic policy have thus maximized the banks' role as financiers of the government and minimized their role as financiers of the private sector. In view of the credit demand generated by an accelerated pace of divestitures and stronger private sector growth, it is imperative for the government to shift to a fiscal surplus over the next several years. As this happens, the stock of government debt will fall and the financial system will play a much larger role in investment finance, thereby further strengthening confidence in the financial system.

Financial Institutions

7. The banking system in Ghana has gone through a financial repair exercise. Bank portfolios were restructured and stronger prudential guidelines are now being enforced. Yet, intermediation costs, and spreads between lending and deposit rates, remain large. Dominated by state-owned institutions, the sector shows few signs of competition. Nor is there much genuine intermediation between savers and investors. Demand deposits are the main source of funds for banks, but loans and advances account for a relatively small portion of their assets. High reserve requirements have prevented banks from building up their loan books, while hefty returns paid on government securities have afforded bankers an easy life. Privately managed banks have been more adept and efficient at financial intermediation.

8. Non-bank financial institutions (NBFIs) have yet to emerge as significant players in the Ghanaian financial system, in large part because of macroeconomic uncertainty, pervasive state ownership, and—until recently—the absence of defining legislation and adequate supervision arrangements. The (mostly state-owned) contractual savings institutions have undertaken reverse term-transformation by investing in short-term government securities. Other than for real estate, NBFIs have provided very little medium- and long-term finance to the economy. But there are signs of life. Although still in the early stages of development, leasing companies, building societies, and savings and loan associations have been innovative in serving savers and borrowers. While the stock exchange has only 17 listed companies and low trading volumes, recent success in placing Ashanti Goldfields Company shares has sparked new interest. With the emergence of the Home Finance Company, housing finance also shows potential for rapid growth, and prospects for establishing primary and secondary mortgage markets are promising.

9. Rural financial markets in Ghana consist of formal institutions (such as branches of commercial banks and rural banks) and informal institutions, such as susu collectors. Both can play an important role in intermediating between savers and investors, but thus far Ghana's rural financial markets have not been able to provide people in the countryside with adequate savings opportunities or access to credit—particularly in the agricultural sector. The development of rural financial markets has been limited by factors that are typical for Sub-Saharan Africa—asymmetric information and an absence of credit histories, high transaction costs involved in lending to smallholders and rural microenterprises, and lack of acceptable collateral. In addition, an unstable macroeconomic environment, along with relatively high inflation compared to low past levels, and lack of confidence in formal financial institutions, has led people and banks alike to shun formal financial arrangements in rural markets, and thereby to lose the benefits of intermediation.

10. Although Ghana's informal financial sector is large, with an estimated 45 percent of all private sector financial savings mobilized initially through informal channels, its capacity to intermediate between savers and investors is limited, in part by people's savings behavior, and in part by the absence of strong links with the formal sector. There may be considerable opportunity for profitable contacts between the informal and the formal sectors such as bringing the savings generated by susu collectors into the formal system, and allowing traders to draw on formal credit by simplifying the use of collateral. The informal sector's capability to mobilize savings and its information base for lending are assets. Formal institutions, may, under pressure of increased competition, wish to harness these capacities.

11. Today, the main challenge for the financial sector is to bring more savings into the financial system in order to finance more productive private investments. The resultant financial

savings and lower projected public sector borrowing requirements would allow private investment finance to increase sharply.

12. Ghana has a number of options for enhancing financial intermediation. A critical starting point will be to achieve a fiscal surplus in order to stabilize the macroeconomic environment, thereby ensuring lower inflation. Other proposed measures include increasing competition and investing in the financial infrastructure. This report proposes the following:

- **Policy Measures**
  - To revive confidence in the banking system and send a strong signal favoring private participation in the financial sector, the government should proceed with the divestiture of state-owned banks along its agreed timetable for 1995.
  - To promote competition in the non-bank financial sector, measures should be taken to remove the virtual monopoly positions of the Social Security and National Insurance Trust and the State Insurance Corporation; a level playing field should be created where the private sector can compete effectively.
- **Legislative Measures**
  - To support informal financial intermediaries, the proposed regulations governing NBFIs should be approved; the government should clearly state that it encourages informal operators to join the formal system through an expansion of their business activity in order to qualify for registration under the Law.
  - To increase access to formal credit, the legal infrastructure for debt recovery should be strengthened and the range of usable collateral expanded.
- **Human Resource, Information, and Institutional Measures**
  - To maintain high professional standards and improve the financial system's ability to mobilize financial resources creatively and intermediate effectively, investments in building human capital should be made.
  - To enhance intermediation by rural financial institutions, and in particular rural banks, Bank of Ghana (BOG) supervisory capacities should be enhanced and changes made in the institutional design of rural banks.
  - To improve information flows, investments should be made in efforts to collect reliable nation-wide economic data and to ensure a high degree of professionalism in financial reporting.
  - To expedite cash transmissions through the economy and significantly reduce transaction costs, a nation-wide payments system should be developed.

13. Given the relatively small share of total savings that now passes through the financial system, the scope for enhanced intermediation is large. Conservatively estimated, if 16 percent of existing nonfinancial savings were brought into the system, the increase in real GDP growth would be on the order of 1 percentage point, as financial resources would be channeled into more productive investments. With a faster uptake, even larger gains could be achieved. With greater

financial intermediation and the accompanying financial sector growth, the supervisory and monitoring functions of the BOG and other regulatory agencies would become more important. Market growth of this magnitude, furthermore, would also accommodate the entry of new bank and non-bank financial institutions. With government ownership phased out, new entrants would help foster the competition which is essential to achieve enhanced financial intermediation.

I. INTRODUCTION

1.1 Under the Economic Recovery Program (ERP) adopted in 1983, the Ghanaian economy moved from a state of near collapse to achieve consistently positive growth rates. Reforms initially focused on stabilizing the economy. Fiscal deficits were reduced through improved revenue collection and monetary growth was restrained. The government lifted price controls, liberalized both interest rates and the exchange rate system, and rehabilitated infrastructure. To improve the mobilization of financial resources for investment, reforms in the financial system were undertaken.

1.2 As a result of these reforms, real GDP growth averaged 5 percent per year during the decade following the introduction of the ERP in contrast to losses of 2 percent to 3 percent per year during the preceding decade. On a per capita basis, real income grew by 2 percent per year, and the benefits of growth were widely distributed. Most farmers and rural workers gained from improved producer prices for cocoa and from liberalization in the trading of other cash crops. In the initial years of the ERP, government spending on social programs rose significantly, leading to improvements in basic social services and social indicators.

1.3 Before the ERP, the Ghanaian financial system was highly controlled. Interest rates were set by the Bank of Ghana (BOG); banks were subject to sectoral lending guidelines; and the bulk of credit went to the government or to state-owned enterprises. Banks were required to hold government instruments that paid little or no interest. Real interest rates were negative. As a result of the economic crisis of the late 1970s and early 1980s, the mobilization of financial resources declined precipitously.

1.4 In 1979, the government undertook a currency conversion. In 1982, it demonetized the ₵50 note, froze bank deposits in excess of ₵50,000 pending investigation for tax liability, restricted bank loans for the financing of trade inventories, and required that business transactions in excess of ₵1,000 be conducted by check. Whatever the government's intentions had been, these restrictions greatly undermined private sector confidence in the banking system and prompted substantial financial disintermediation. Although all financial restrictions that had been imposed prior to the ERP were subsequently lifted, public confidence in the financial system was slow to recover.

1.5 Under the ERP, the government began implementing a program of wide-ranging financial reforms. It abolished interest rate controls and sectoral credit ceilings. By introducing a weekly auction of Treasury Bills, it began to lay the foundations for a system of indirect monetary control. Under the first Financial Sector Adjustment Credit (FINSAC I), prudential regulations were strengthened and actions taken to improve bank supervision. Seven banks were restructured, with some non-performing assets transferred to a newly created government agency, the Non-Performing Assets Recovery Trust (NPART). Banks were allowed to set lending and deposit rates freely, and the new banking law guaranteed client confidentiality.

1.6 Under the ongoing FINSAC II, the focus has been on reducing policy distortions in the financial system by encouraging positive real interest rates. Competition in the banking system is to be increased through the divestiture of public sector shareholdings in banks. To improve the legal and regulatory framework applicable to non-bank financial institutions, a new Non-Bank Financial Institutions Act has been introduced, although this subsector has so far played a relatively insignificant role in the financial system as a whole.

1.7 Despite these financial reforms, further actions are needed to strengthen confidence in the sector—and therefore increase the level of savings in and intermediation by formal financial institutions. Incentives created by macroeconomic policy—particularly the large public sector borrowing requirement—have maximized the banks' role as financiers of the government. To strengthen public confidence and to become an effective financial intermediary, the financial sector must promote investments in the private sector rather than purchase government paper.

1.8 Ghana's financial indicators confirm that the financial system is not very deep. When compared with other countries with similar per capita income, broad money holdings are small relative to GDP. Also, until recently, real interest rates on deposits have been negative, giving individuals little incentive to hold savings in bank accounts. People prefer to keep their money in cash, so that currency holdings are proportionately large when compared with monetary aggregates. Meanwhile, a proliferation of high-return, low-risk government paper has been crowding out bank lending to the private sector. This leads to high interest-rate spreads, a low rate of financial innovation, and poor-quality service throughout the financial sector.

1.9 Recent research has confirmed that financial depth and a well developed financial sector are prerequisites for sustained, long-term growth (see Box 1.1). Financial intermediaries improve resource allocation by evaluating prospective entrepreneurs and selecting the most promising projects, mobilizing resources to finance these projects, providing a vehicle to diversify risks, and fostering technological innovation to enhance productive efficiency. More developed financial systems, therefore, can stimulate economic growth and raise productivity.

1.10 By bringing existing savings, both in the form of cash held outside banks and nonfinancial savings, into the financial system and creating the right incentives for intermediating these funds, Ghana can reap significant economic gains. According to estimates based on the Ghana Living Standards Survey (GLSS), private savings in Ghana are probably much higher than the national accounts data would suggest, because many are nonfinancial savings. While private household savings may amount to 20 to 25 percent of income, only 5 percent is held in financial savings. This means that—because a large portion of savings does not enter the financial system—intermediation is lower than it could be. It also means that investment is much higher than national accounts data suggest, but that much of this investment is in areas of low productivity.

1.11 It is important to understand the economic costs of low intermediation in terms of lost productivity and economic growth. Encouraging individuals to hold their resources in financial form could improve prospects for growth tremendously. For even using conservative assumptions, if 16 percent of existing nonfinancial savings were brought into the system, the increase in economic growth would be in the order of 1 percentage point, were these resources channelled into more productive investments. Recent research also suggests that increasing the depth of Ghana's financial system to levels comparable with those in other countries of similar per capita income would further increase long-term growth by improving the financial system's ability to identify and lend to innovative entrepreneurs.

1.12 This report proposes a three-pronged approach to enhance financial intermediation in Ghana: restoring macroeconomic stability, increasing competition, and investing in the financial infrastructure. Macroeconomic stability, including a sustained fiscal surplus, is a prerequisite for enhanced intermediation. Increased competition—through the privatization of state-owned banks and the liberalization of licensing policies for private financial institutions, both bank and non-bank—would encourage more aggressive intermediation and also help to restore confidence in the financial system. Improving the management and viability of rural financial institutions would help mobilize savings and provide savers with opportunities to earn positive real interest rates on

Box 1.1: Contribution of Financial Systems to Growth

Recent research has focused on the link between financial development and economic growth. In their earlier papers, King and Levine analyzed data from over 80 countries and found that higher levels of financial development were significantly and robustly correlated with faster rates of physical capital accumulation, improvements in economic efficiency, and stronger current and future economic growth. They also found that financial development preceded growth. Beginning in 1960, financial depth (broad money to GDP) was positively and significantly correlated—after controlling for a variety of factors and policy indicators to each country—with real per capita GDP growth over the next 30 years. When other measures of financial depth and growth were used, the same results were obtained (see King and Levine, 1992a and 1992b).

King and Levine's more recent work has focused on the mechanisms through which financial systems improve growth (see King and Levine, 1993a, 1993b, and 1994). They found that financial systems affect entrepreneurial activities by evaluating prospective entrepreneurs and choosing the most promising projects, mobilizing resources to finance these projects, allowing investors to diversify the risk associated with uncertain economic activities, and revealing the potential rewards for supporting innovative projects. More developed financial systems foster productivity improvement by choosing higher quality entrepreneurs and projects, more effectively mobilizing resources for these entrepreneurs, providing superior vehicles for diversifying risk, and revealing more accurately the profits and risks associated with the uncertain business of innovation—all of which accelerates the rate of productivity enhancement and stimulates economic growth.

In addition, King and Levine note that in case studies, indicators of financial sector development rose in a number of countries following financial sector reforms. Surveys further showed that financial sector liberalization was associated with a redirection of the flow of credit to more efficient enterprises, confirming the hypothesis that financial intermediaries add value by improving the selection and funding of entrepreneurs.

In a cross-country comparison, Ghana had one of the least developed financial systems. While the mean current ratio of M2 to GDP for the sample was 36.4 percent, Ghana's was 17 percent. The mean ratio of private sector credit to GDP in the sample was 25.6 percent, while Ghana's in 1992 was 4.6 percent.

This suggests that Ghana would have much to gain by encouraging the development of its financial system. King and Levine's results suggest that, everything else being equal, if Ghana were able to increase its ratio of M2 to GDP from the current level to its 1977 level of 30 percent, per capita growth would increase by 1.1 percent per year, while improving the financial system's ability to identify and lend to innovative entrepreneurs could improve growth even more.

their deposits. Strengthening the links between formal and informal financial intermediaries would lower the cost of funds and increase investors' access to financial resources. The government's primary role will be to make the financial system more efficient by investing in the development of information flows and human capital, and by strengthening the legal infrastructure. Such action would lay the foundation for accelerated growth in Ghana.

Part 1. Macroeconomic Environment

By any standard, Ghana's recorded savings and investment rates are low. However, evidence suggests that actual savings and investments are much higher, but are not captured in Ghana's national accounts statistics. Comparative financial indicators confirm that Ghana's financial system is not very deep, putting it at a much lower stage of development than countries with similar levels of per capita income. Meanwhile, almost all savings that enter the formal financial system serve to satisfy the public sector's borrowing requirement. The financing of the deficit and accompanying monetary policy have led to a situation where the government competes with the private sector for financial resources. The incentives created by macroeconomic policy have thus maximized the commercial banks' role as financiers of the government and minimized their role as financiers of the private sector.

II. SAVINGS AND INVESTMENT

2.1 Financial systems mobilize financial resources (in the form of savings) and help distribute these resources to other sectors of the economy. According to available data, private savings in Ghana are probably higher than the national accounts data suggest, for Ghanaians often save in nonfinancial forms. This means that—because a large portion of savings does not enter the financial system—intermediation is lower than it might otherwise be. Measurements of investment in the economy may also be underestimated as a result of difficulties in obtaining data. Nevertheless, both savings and investment are low relative to levels in other developing countries. Savers hesitate to keep their assets in financial form, instead they prefer to hold them in forms that provide a very low (and perhaps even negative) rate of return, but are perceived to be less risky. It is important to understand why individuals are reluctant to participate in formal financial markets. It is even more important to understand the cost that low intermediation poses to the economy in terms of lost economic growth. There is a tremendous capacity for improving growth prospects by encouraging individuals to hold their resources in financial forms.

A. Measuring Aggregate Savings

2.2 Ghana has national accounts data on gross domestic and national savings since 1960.[1] As can be seen in Figure 2.1, gross national savings have never been high, peaking at just under 15 percent of GNP in 1964. By 1983, savings had fallen to under 5 percent of GDP. Gross national savings began to rise with the implementation of the ERP in 1983, but fell back to 4.4 percent of GNP in 1992 when the fiscal deficit widened sharply (see Chapter III). These figures are lower than the average for Sub-Saharan Africa, and significantly lower than the gross national savings of the Association of South East Asian Nations (ASEAN) countries, which has continued to rise over time to reach about 30 percent of GNP in the late 1980s and early 1990s. Figure 2.2 reflects the unweighted averages for the ASEAN comparators (Indonesia, Malaysia, and Thailand) and for the Sub-Saharan African comparators (Kenya, Zambia, Zimbabwe).

2.3 Caution is called for when considering the gross national savings figures. These are calculated as a residual in the national accounts data. Once total GDP is estimated, net factor payments are subtracted to give an estimate of GNP. Savings are then determined by subtracting total final consumption from net national disposable income.[2] While figures on government consumption exist in the national accounts, they are not consistent with published fiscal accounts. Private consumption is also calculated as a residual, which means that savings figures derived from the national accounts carry the accumulated measurement errors.

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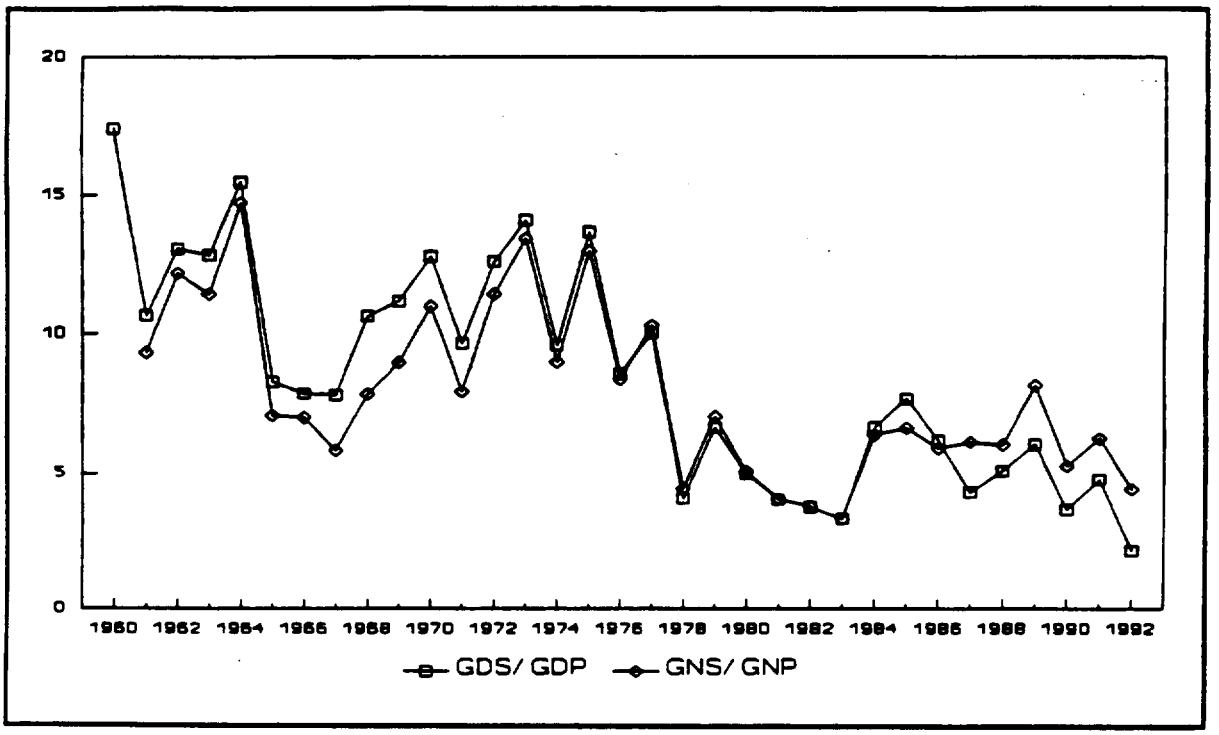
[1] Gross national savings is defined as national disposable income (excluding official transfers) minus total consumption. Gross domestic savings is GDP minus total consumption. The figures used here are the most recent available and may differ slightly from previous reports.

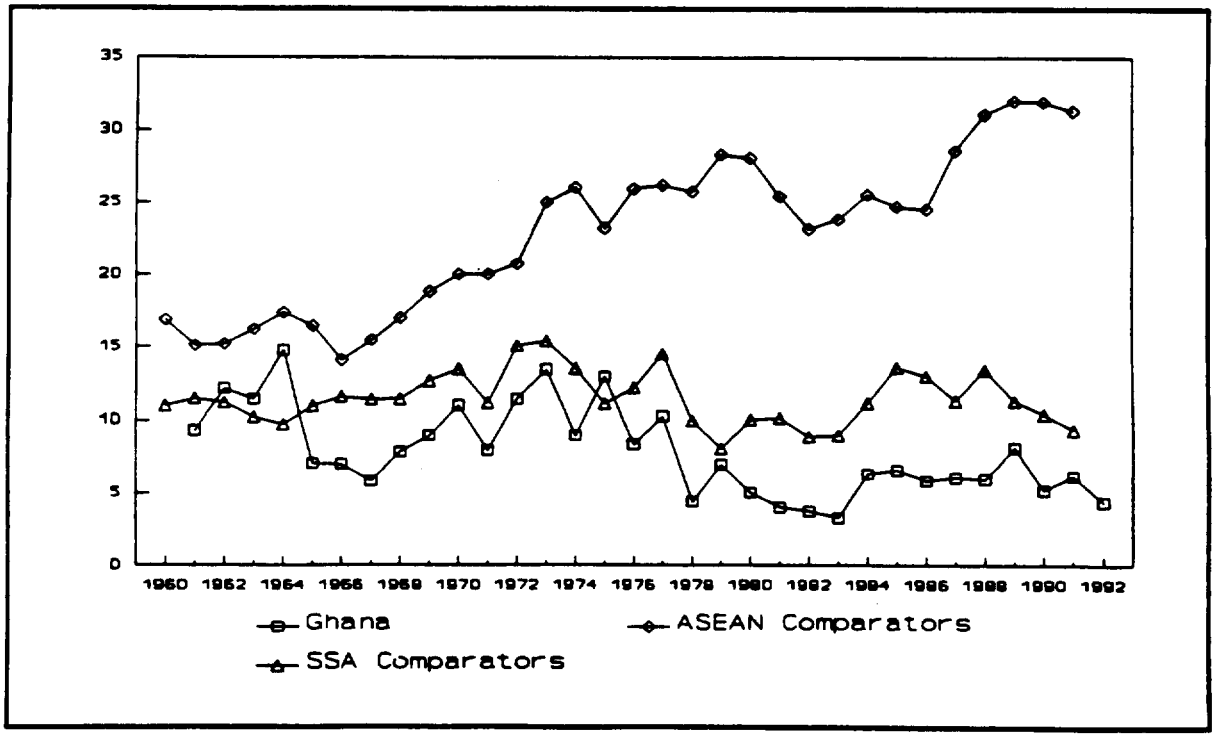
[2] Consistent with World Bank practices, official transfers were excluded from net national disposable income.

Figure 2.1: Gross Domestic and Gross National Savings, 1960-92
(In Percent)



Source: Quarterly Digest of Statistics (QDS) data.

Figure 2.2: Gross National Savings: Ghana, Sub-Saharan Africa, ASEAN, 1960-92
(In Percent of GNP)



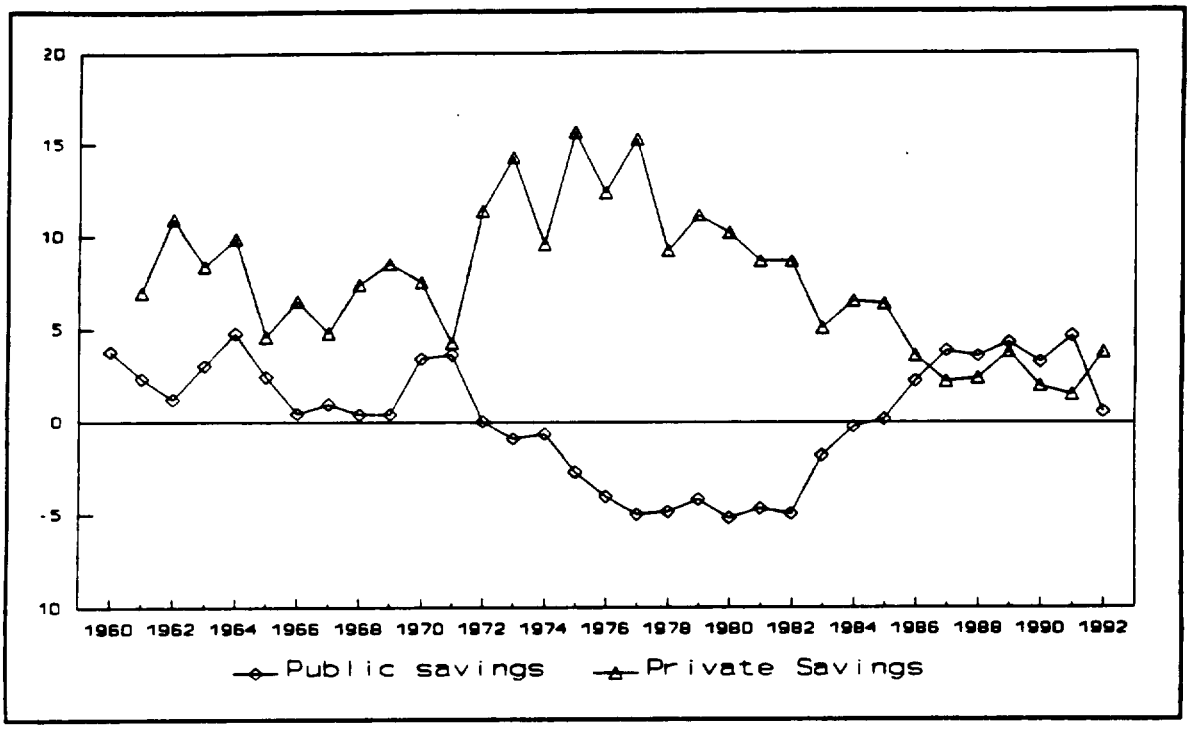
Source: QDS and World Bank Economic and Social Database (BESD).

2.4 Furthermore, the national accounts themselves may be subject to some measurement error (see Annex, "National Accounts Statistics in Ghana"). With no figures on gross capital formation

for small and medium land improvement, the replanting of cocoa trees by small and medium farmers is not reflected in the official estimate of gross fixed-capital formation. In a 1990 study, Bateman et al (1990) cited survey results indicating that new plantings of cocoa under 5 years old cover 33 percent of all land under cocoa. Since the average size plot in Ghana is 4.4 acres, much of this is excluded from official figures on capital formation.[3]

2.5 Private and public savings are shown in Figure 2.3. Following negative savings rates for most of the 1970s, public sector savings increased during the ERP period to about 4 percent of GDP, before falling sharply in 1992.[4] Private savings have fallen significantly since the mid-1970s. Low public and private savings are a serious source of concern. Are Ghanaians no longer saving, or are existing saving not identified in the national accounts? To assess private savings accurately, the information available on the savings of both households and enterprises must be considered.

Figure 2.3: Private and Public Saving, 1960-92
(In Percent of GDP)



Source: QDS, World Bank data.

Measuring Private Savings

2.6 Although the distinction between households and enterprise savings is not always straightforward, household savings can be estimated from survey data, while enterprise savings are normally based on companies' retained earnings. In the absence of comprehensive survey data on private businesses' retained earnings, the savings patterns of parastatals (although by no

[3] Research on the extent to which gross fixed capital formation is underestimated due to the absence of small and medium cocoa planting will be carried out over the coming year.

[4] Based on fiscal data, public savings is calculated as the central government's total revenue and grants minus current expenditure. Private savings is calculated gross national savings minus public savings.

means representative of private enterprise) and the results of a recent survey of manufacturing firms have been considered.

2.7 Using data from the 1988-89 GLSS, household expenditures were subtracted from income, which yielded the relatively high household saving rate of 30 percent of income. Of 3,184 households surveyed,[5] expenditures were made for housing (including rent, water, garbage disposal, and electricity), education, health, consumer durables, food (including home-grown produce), and remittances paid. Income included earnings from primary and secondary occupations, payments in kind, receipts for sale of crops and livestock, and remittances received (less taxes). While 30 percent of income was saved, only 5 percent was channeled into financial assets,[6] and the other 25 percent was channelled into unidentifiable assets.

2.8 A measured household saving rate of 30 percent of income in both urban and rural areas compares reasonably well with the results of a survey of over 3,000 households in rural Ghana in 1988 (see IPC 1988). This survey suggested that limited opportunities for consumption in rural areas have lead to substantially higher savings rates in those areas, in some cases as high as 50 percent. A 1991 survey of a thousand urban market women (Aryeetey et al 1991), estimated that 20 percent of urban household incomes were saved. There is no reason to believe that the savings rate among households has changed significantly in recent years, although 1991 brought increased uncertainty due to the election, this may have been offset by the substantial increase in civil servants' wages in 1992.

2.9 A 1989 survey of public enterprises by the State Enterprises Commission indicated that, out of a turnover of ₵362,161 million, ₵76,094 million—or 21 percent—was not consumed, despite financial balances that indicated a mere ₵5,453 million, or 1.5 percent of revenues saved. (Investments exceeded total turnover by 50 percent, financed almost entirely by borrowing and grants and a small contribution from retained earnings.)

2.10 A recent survey of 200 manufacturing firms (private and public, ranging from microenterprises to large firms) found that retained earnings averaged 19 percent of the value of capital stock at the beginning of 1991 (adjusted for depreciation).[7] The survey also found that only 9 percent of the financing for firm start up came from borrowing (through banks or informally). While the optimal debt/equity ratio is difficult to determine, it is likely that Ghanaian manufacturers are faced with tight borrowing constraints. Lack of adequate financing instruments is also often cited as an obstacle to debt financing. As a result, much larger amounts of equity are required to start a business than would otherwise be the case. The same is true for new investments in existing firms, which are financed by as much as 80 percent through retained earnings, suggesting that new investments are postponed until sufficient funds have been accumulated. The RPED survey suggests, therefore, that the bulk of investment (both for start up and addition of capital) is not financed through the financial system, but through the disposal of existing assets or by non-financial portfolio switching.

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[5] Only households for which all data necessary data were available were included in these calculations. Of the entire sample of supply households, complete data was available for 3,184 households.

[6] Households supplied information on bank accounts and other financial assets.

[7] This is the first wave of information from the Ghana case study undertaken for the Regional Program on Enterprise Development (RPED), organized by the World Bank, and carried out by the Centre for the Study of African Economies in Oxford and the Economics Department of the University of Legon in Ghana.

2.11 If firm investment is financed by portfolio switching, the entire portfolio of the firm owner becomes relevant. According to the RPED survey, 57 percent of Ghanaians who own medium- and large-sized firms have also owned other firms, and over a third currently own another business. Portfolio switching could take place either by the liquidation of a business to use the proceeds for investment, or by the use of liquid resources from one business to finance investment in another. The same was true for start-up financing. Ghana's business owners, therefore, often run "business conglomerates," accumulating nonfinancial assets they can use to support other activities. The major source of financial intermediation for them, therefore, would be their own conglomerates rather than the banking system.

2.12 The large discrepancies between the national accounts and independent survey data stem in part from the difficulty of measuring national income accurately (see Annex). When durable goods are involved, it is also difficult to differentiate among savings, investment, and consumption in developing countries. Also, a lot of household income-generating activity is not captured in the national accounts (as, for example, the income earned by unregistered watchmen at thousands of homes and construction sites).

2.13 There may also be difficulties in separating consumption from saving in the national accounts. For example, when households store several million cedis worth of concrete blocks and other construction material in their compounds for 5 to 10 years without expectation of any returns, or when they begin the construction of homes that will take 10 or more years to complete, expenditures recorded as consumption may in fact be a form of savings. Household surveys, too, often overlook savings items or categorize them as investments or as consumption. In any case imputing monetary values to such assets is extremely difficult.

B. Structure and Composition

2.14 From the evidence above, it appears that savings is not as low as suggested by both the national accounts and financial aggregates, but that the bulk of it is not in financial assets.

Private Financial Savings

2.15 The household survey data discussed above suggest that Ghana's households channel about 5 percent of their income into financial assets. This is equivalent to about one fourth of total savings, based on conservative estimates of total household savings. The usual indicators of financial depth also indicate that, since financial-sector liberalization began, the financial system has been relatively weak at mobilizing resources with only marginal achievements. The ratio of M2 to GDP was 17 percent at end 1993. Yet, while both the ratio of M2 to GDP and domestic credit to the private sector are not growing significantly, the monetary base has remained relatively high, and the currency/deposit ratio was 51 percent at end 1993. Time and savings deposits are about half of total deposits.

2.16 Currently, the most important financial savings instruments defined by Ghana's banks are savings deposits, time deposits, treasury bills, and government stocks. Most private financial savings (40.3 percent) were in savings deposits at end-1993 (see Table 2.1). The next largest share of private sector savings with formal financial institutions is in stocks (26.4 percent), then treasury-bills (20.2 percent) and finally time deposits (13.2 percent). Private sector savings may also be held in BOG bills but no data is available on the public/private distribution of outstanding BOG bills.

Table 2.1: Allocation of Private Savings with Formal Financial Institutions

Year	Treasury bills	Stocks	Savings deposits	Time deposits	Total
		(in million cedis)			
1989	18,900	29,680	44,196	10,722	103,497
1990	27,918	25,721	55,721	10,564	119,924
1991	18,653	28,466	79,007	15,762	141,888
1992	38,991	47,110	116,392	37,310	239,803
1993	66,931	87,443	133,371	43,570	331,316
		(in percent of total)			
1989	18.3	28.7	42.7	10.4	100.0
1990	23.3	21.4	46.5	8.8	100.0
1991	13.1	20.1	55.7	11.1	100.0
1992	16.3	19.6	48.5	15.6	100.0
1993	20.2	26.4	40.3	13.2	100.0

Source: Calculated from Bank of Ghana figures.

2.17 Until the 1980s, non-monetized savings in Ghana were predominantly a rural phenomenon (see Table 2.2). The IPC survey estimated that in rural Ghana over 80 percent of total household savings was held in real assets. In northern Ghana a larger proportion of these savings was held in the generally liquid forms of stored produce and live animals, a choice that was attributed to seasonality in production, as it allowed them to smooth consumption. In rural southern Ghana where incomes were generally perceived to be less seasonal and cyclical, larger portions of household savings were held in such less liquid forms as building material, partially completed construction projects and cleared land. As a structural feature of the rural economy, the occurrence of non-monetized savings or the holding of real assets may be related to the low degree of monetization. There are simply not enough facilities for channelling unconsumed income into worthy financial assets.

Table 2.2: Structure of Rural Savings
(In Percent of Total)

	Overall	Northern	Other[a]
Total Savings	100.0	100.0	100.0
Real	80.9	91.8	76.4
Stored product value	42.5	89.6	23.5
Financial	19.1	8.2	23.6
Kept in banks	7.3	1.2	9.8
Informal	11.8	7.0	13.8

Note: Total savings = real savings + total financial savings; total financial savings = bank savings + informal savings.

[a] Includes Ashanti Brong Ahafo, Eastern, and Volta regions.

2.18 In urban Ghana, the holding of real assets is also important. An assertion often made by Ghanaians is that savings in construction materials are more secure than savings in financial assets. In the last decade, therefore, there has been tremendous expansion in uncompleted new home construction all over the country. In Accra, about 100 home construction projects are approved each month, and even more are estimated to have sprung up illegally. On average, these projects take 6 to 10 years to complete and belong to men and women in the age group 30 to 50. Many are public servants or employees in middle- to high-income brackets who live in houses provided by their employers. For most, there is no urgent need to complete the new houses, which are intended for retirement. For many households, the construction program is tied to the schedule toward retirement. These financial commitments actually amount to saving toward retirement as under the life cycle hypothesis. This is probably the most significant form of nonmonetized saving in Ghana today, and in the larger cities, thousands stay uncompleted for years.

2.19 Certain households also act as small business conglomerates. Rather than keeping their assets in banks, they hold them in nonfinancial form, liquidating and cross-subsidizing as necessary.[8] Unfortunately there is insufficient data on small-business conglomerates to allow for quantification of this type of saving.

2.20 There is some evidence of a tendency towards dollarization. While it is not possible to obtain data on the extent of dollarization, an incentive to do so has been the recent rapid depreciation of the cedi. The first four weeks of 1994 saw the cedi depreciate 10 percent against the dollar—an unprecedented rate in the new, financially liberal climate. While the monetary authorities attributed this to an "invasion" of dollar purchasers from neighboring countries following the devaluation of the CFA franc, there appears to be a general consensus that Ghanaians are increasingly saving in dollars.[9]

C. Financial Savings and Portfolio Choices

Why Are Formal Financial Savings in Ghana So Low?

2.21 Formal financial savings have not grown as rapidly as expected. In addition to uncertainty about the economy in general, which will be discussed below, Aryeetey et al (1991) found that a major factor discouraging formal savings is high transactions costs. In urban centers, customers complain of long queues for making deposits or withdrawals, and in rural areas travel time poses high costs. Once a client reaches the counter, transactions require a lot of time because low-denomination notes have to be counted manually. It can take up to two hours to cash a check, and many bank customers (especially if they are illiterate) complain about poor treatment by bank personnel. It has been shows (IPC, 1988) that households closer to banks tend to save more than those farther away.

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[8] The RPED survey found that in Ghana, approximately half of business assets were in the form of equipment, with the other half split fairly evenly between working capital, land, and buildings. Equipment, however, is usually enterprise-specific, and can be sold only at a heavy discount. The most liquid firm asset was working capital—about a fifth of which is made up of inventories of output. The rest is inputs, invoices, payments in advance, and cash held for transactions purposes, all readily realizable.

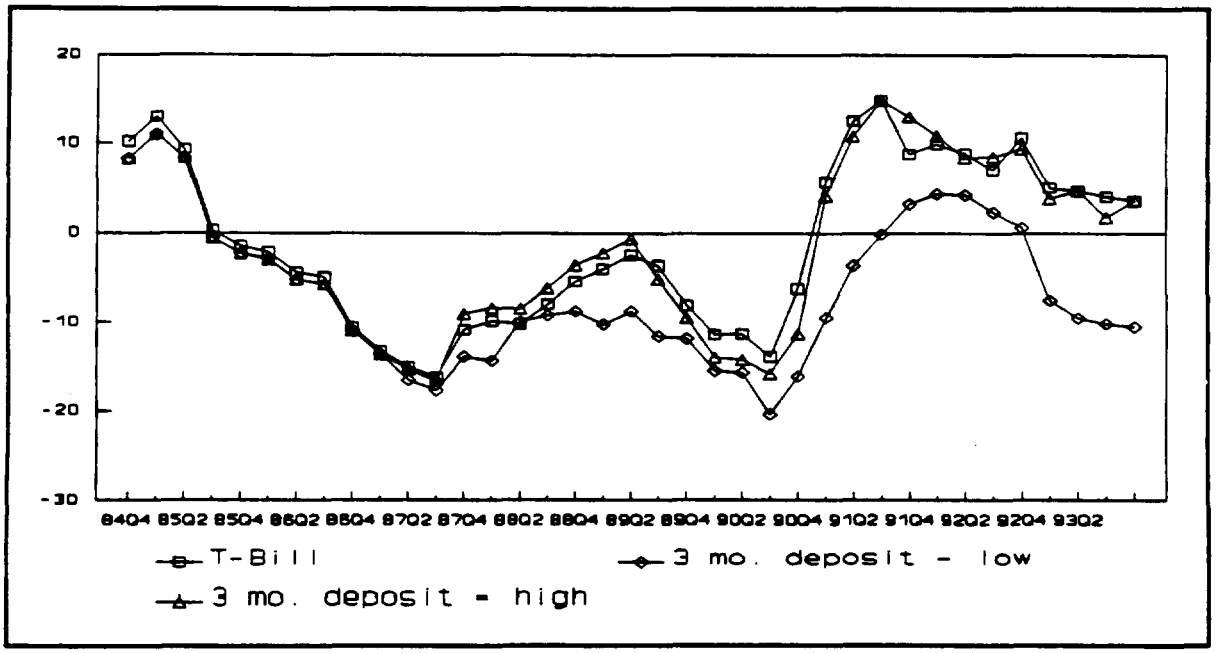
[9] The *Ghanaian Chronicle* of Monday, January 31, 1994 interviewed a number of Ghanaian economists who attributed the rapid depreciation of the cedi to panic buying of dollars.

2.22 In rural areas, checks are usually not accepted as a means of payment and people have difficulty withdrawing balances. Furthermore, the level of confidence in bank solvency is low—although the number of rural depositors grew steadily and significantly between 1985 and 1988, the size of their deposits did not. Between 1987 and 1988, the number of account holders went up by 20.4 percent (Bank of Ghana, 1988), but the average deposit per rural bank increased by only 13.8 percent. Similar trends were observed up to 1991, and IPC's 1988 study suggested that "transaction cost and mistrust seem to have an overwhelming impact on demand for deposit facilities."

2.23 In a 1989 survey of a thousand urban market women (Aryeetey and Gockel, 1991), over 40 percent indicated they would not save with banks because: (a) their incomes were too low, (b) banks had too many formalities and paper work, which made transactions unnecessarily long, (c) banks discouraged small, frequent deposits of torn notes, and (d) traditional banking hours did not meet the market women's needs. According to the survey, these women preferred to save informally, for convenience. More recently, however, institutions were established to meet such potential savers' needs.

2.24 While the above aspects are difficult to quantify, it appears that returns have only recently turned positive, and for small savers—who generally cannot negotiate good rates—they may still be negative. Quite obviously, a history of negative return does little to encourage people to save in formal financial assets (see Figure 2.4).

Figure 2.4: Real Interest Rates
(In Percent)



Source: Bank of Ghana.

What Determines Portfolio Choices?

2.25 Turning to the more quantifiable evidence on portfolio choice, empirical evidence using quarterly data since 1983—the year in which the ERP began—to analyze the demand for real M0,

real M1, and real M2 suggests that individuals' holding of financial assets are most affected by inflation and the black market exchange rate.[10]

2.26 In long-run equations, the strongest effect is that of the black-market exchange rate. When the informal rate increases, there is a proportional increase in all three monetary aggregates—presumably because of the desire to hold increased money balances for both transactions and speculation purposes.

2.27 Inflation's long-term effect is also strong but in the opposite direction: as inflation rises, there is a movement out of financial assets into real assets. (The long-run elasticity of M0 with respect to inflation is -0.7). Since inflation remains high in Ghana, this may be part of the reason why the rate of savings held as financial assets remains relatively low.

2.28 Increases in real income, on the other hand, appear to have a negligible effect on the desire to hold money balances. There is no significant relationship between M0 and real GDP. As income rises, individuals may be moving into foreign exchange, house construction, and other real assets. Others may fail to save with formal financial institutions for fear of interference by the government. This result is not consistent with the relationship between income and money that one ordinarily expects to find, i.e., a positive correlation between income and money demand. Further work will be needed to determine what is driving these results.

2.29 Over the long run, the nominal interest rate had no significant impact on relationships among the monetary aggregates. Although interest rates were decontrolled in 1987, until recently banks have not been aggressive in offering attractive returns on deposits. The real rate of return on deposits, moreover, has been mostly negative since 1983.

2.30 Short-term savings are also greatly influenced by changes in inflation and in the black market exchange rate. The quarter after the consumer price index increases, money balances go down. In the equations for M0 and M1, there is the additional effect that, in the second quarter following an increase in inflation, there is a rise in desired money holdings. When inflation rises, individuals concerned about the falling value of their assets move out of financial into real assets. Then, in the second quarter after inflation has risen, higher prices require potential savers to keep higher transactions balances. These effects are twice as strong with cash as they are with M1. Because a smaller portion of M2 than of the other aggregates is held for transaction purposes the effect is dampened and, the increase in the second quarter after an increase in inflation does not occur for M2.

2.31 In the same quarter that the black-market exchange rate increases, money balances in all of the monetary aggregates increase.[11] The effect is strongest for cash (coefficient of 0.885), then for M1 (coefficient 0.732) and then for M2 (coefficient of 0.689). As the black-market exchange rate increases, individuals need to hold higher money balances (particularly cash) both because they are likely to have higher transactions costs and because they may want to increase

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[10] See Wetzel (Background Paper). These variables are both highly correlated and individually significant. When the black market exchange rate is excluded from regressions, the results are weak and indicative of omitted-variable bias. Addition of the black-market exchange rate lowers the standard error of the regressors and improves the statistical results.

[11] Although the difference between the black-market rate and the official rate was fairly large at the beginning of the ERP, over the past 10 years, the two rates have converged. Though the rates are now close, renewed increases in the black-market rate would have a strong impact on money balances.

the liquidity of their assets should they wish to buy foreign exchange. An increase in the black-market rate, therefore, prompts people to move out of demand and time deposits and into cash. (For M0, the effect of an increase in the black-market rate is also carried into the third and fourth quarter after the increase.)

2.32 In the short run, both M0 and M2—unlike M1—show a significant relationship with the nominal deposit rate, although the effects are small and occur only after three quarters. Overall, in the period up to 1992, the economy was not particularly responsive to changes in interest rates.

2.33 After two quarters, an increase in the return on foreign assets is followed by an increase in M1. With M2, the increase is immediate and also after two quarters. This positive effect may stem from the fact that foreign exchange accounts held in banks may be given rates tied to the foreign rate. Changes in foreign interest rates affect M0 in the second and third quarters after the change, but these effects offset each other.

2.34 In the short term, changes in real income do not affect M1 and M2. By contrast, with a one- or two-quarter lag individuals tend to adjust M0 downward in response to a growth in real income, suggesting a switch out of cash and into financial assets with a higher return.

2.35 Finally, analysis of the data suggests that, after a shock the adjustment speed for M0 is about 40 percent per quarter, for M1 it is 77 percent per quarter, and for M2 it is 69 percent per quarter. Thus the effect of a shock on M0 will take approximately seven and a half months to feed through, while for M1 and M2, the effects will take four and a half months.

2.36 The black-market rate and inflation, therefore, are the key factors influencing decisions regarding the amount and kind of financial balances or real assets they will hold. Pursuing policies that keep inflation down and do not contribute to an increased black-market exchange rate will therefore help to improve mobilization of financial savings.

D. Aggregate Investment

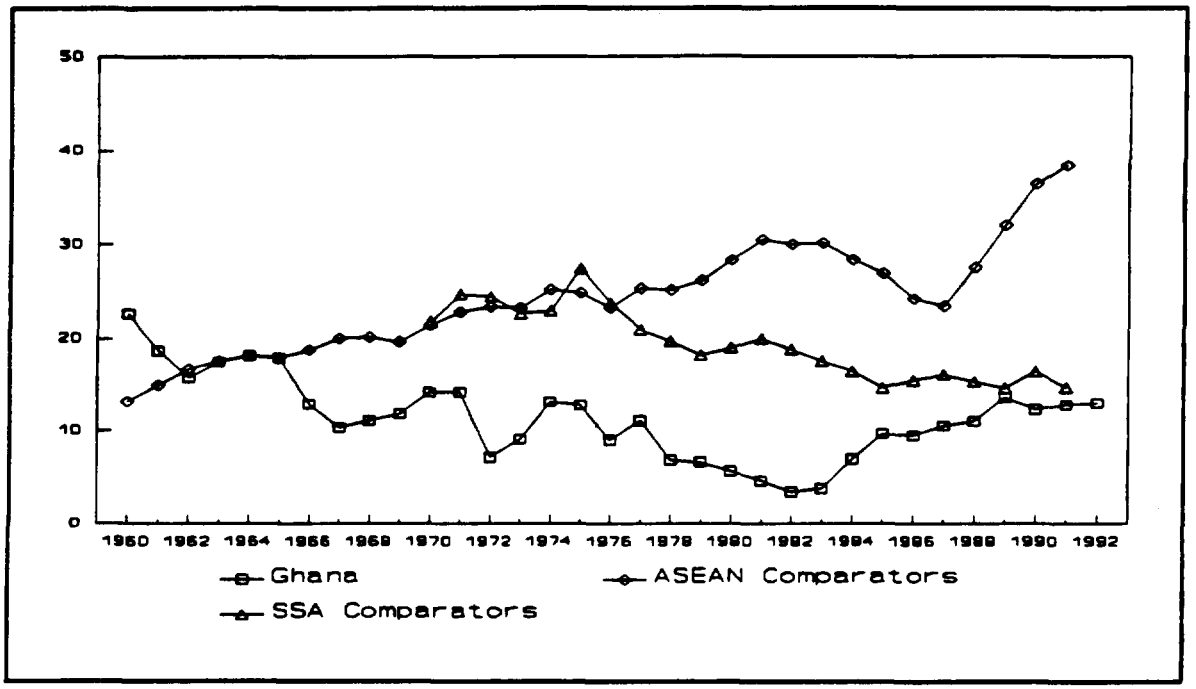
2.37 Ghana's ratio of investment to GDP is lower than the ASEAN and Sub-Saharan African (SSA) comparators (see Figure 2.5). This was not always the case, however. In the mid-sixties, Ghana, the ASEAN comparators and the SSA comparators all had investment levels just below 20 percent of GDP. The ASEAN investment/GDP ratio has continued to rise since the 1960s. The SSA comparators matched ASEAN investment levels until 1976 when the effects of commodity shocks began to be felt.

2.38 In Ghana, investment fell sharply in 1965 and 1966, most probably as the result of the fall of Nkrumah. Political uncertainty continued to have a negative impact on investment. Investment fell sharply in 1972, the year of a coup; in 1976 the year of a purge of the Acheompong regime, and in 1978, when there was another change in government. The political instability that continued from 1978 to 1983 saw investment dropping to extraordinarily low levels. Investment has recovered since the ERP began, but is still far below the levels of the ASEAN countries. Through the years most of this has been public investment (including externally financed capital expenditure and net lending to public enterprises), which now stands at about 9 percent of total investment. Private investment is about 4 percent of GDP.

2.39 As was the case with savings, survey data suggest that both savings and investment may be higher than recorded in the national accounts (see Annex). The planting of cocoa trees by small- and medium-sized cocoa farmers, for instance, is not included in the official calculation

of gross fixed-capital formation. Information on building construction, furthermore, comes from large construction companies and excludes construction by small firms and individuals. While there is insufficient data to build upon and re-estimate the national accounts data, the RPED survey provides some useful firm-level information on Ghanaians' rate of investment in manufacturing.[12]

Figure 2.5: Investment in Ghana
(In Percent of GDP)



Source: QDS data.

Measures of Firm Investment

2.40 The study analyzes investment behavior of firms for two periods: 1991—the most recent year for which complete information could be provided by the firms, and 1983 to 1991.[13] In 1991, the investment rate of existing firms was 1.1 percent; for 1983 to 1991 it was 0.4 percent per annum. These rates are extremely low, but increase dramatically if start-up investment is also considered. On average, start-up investment augmented the 1983 capital stock by 9.3 percent a

[12] The sample size for this part of the survey was 200 firms in four sectors: food processing, woodworking, and textiles and garments. These account for about 70 percent of Ghana's manufacturing activity. The sample was drawn from the Industrial Census of 1987, with some replacement for firms that had exited. Of the firms interviewed, 44 were microenterprises (employment of 1 to 4 people), 90 were small (5 to 29 employees), 40 were medium (30 to 99 employees) and 26 were large (over 100 employees). The firms also reflected the regional distribution of economic activity: 114 of the firms are in the Greater Accra area, 8 are in Cape Coast, 67 are in Kumasi, and 11 in Takoradi.

[13] The survey recorded information on the three most recent investments. A firm recording less than three investments is therefore providing a complete record of its post foundation investment. Values of the investments made at different dates were converted into 1992 prices to allow for inflation. They were then summed to yield gross investment by the firm over the observed period. This is then expressed as an average annual rate of addition to the firm's capital stock since 1983 or during 1991, depending on whether the measure is for the 1983-91 period or for 1991. See the study (page 172) for details on how capital stock was valued.

year, so that start-up plus post start-up investment in manufacturing were about 10 percent per year.

Determinants of Investment

2.41 In assessing decisions regarding investments, the study considered firm profits, access to finance, infrastructure, tax allowances, access to information, and the age and size of the firm. Profit was found to be a significant and powerful determinant of when and how much to invest, suggesting that a macroeconomic environment conducive to profits contributes to increased private investment. The age of the firm (and its square) were also found to be powerful determinants of investment. Post start-up investment is negligible among young firms, peaks when the firm is 15 years old and declines thereafter. The capital/labor ratio is also a positive determinant of firm investment. Finally, the perceived intensity of finance as a constraint was also found to be a determinant of the probability of investment.

2.42 The analysis suggests three reasons for why investment in manufacturing may be low. Investment may be low because shedding excessive capital and accumulating employment (an appropriate response to the removal of subsidies in favor of capital, implicit in the overvaluation of the exchange rate) is a slow process. If this is the case, investment should recover once firms have reduced their capital/labor ratios. Investment may also be low because the manufacturing sector remains fairly unprofitable. Finally, an offstage constraint, such as impending elections or uncertainty, might also be contributing to low manufacturing investment.

2.43 Macroeconomic policy can set the right incentives for investment. In Ghana, while the incentive structure is largely in place, the government still needs to emphasize policies that promote businesses' profitability and help reduce uncertainty, and therefore promote higher investment. In addition, policies need to encourage movement out of low return forms of investment into high return investments that will contribute to accelerated growth.

The Pattern of Financial Flows

2.44 Using national accounts data on investment and savings,[14] it is possible to get a sense of the savings-investment balance among the various sub-sectors of Ghana's economy. Table 2.4 shows balances for both the central government and the private sector. Note that state-owned enterprise (SOE) investment financed by net lending from the government will be included in public investment, but SOE investment financed by other means is included in private investment.

2.45 Up to 1991, the government's savings-investment balance was negative but fairly steady. In 1992, however, it deteriorated sharply. In 1987, the private sector moved from a position of positive financial balances to one of negative financial balances, although by 1992 it had reached up to a slight negative of -0.2 percent of GDP. Steady increases in foreign savings since 1985 have allowed both the public and private sector to hold negative financial balances, although the economy's heavy reliance on foreign savings is cause for concern, making it more vulnerable to external shocks and world economic conditions.

2.46 Table 2.4 shows the origin and destination of financial flows in Ghana between 1988 and 1992. Because complete balance sheets are not available for all sectors, changes in the assets and

[14] Because survey estimates provide only a snapshot of savings and investment behavior, they do not reflect changes over time. Despite the problems with measurement error, we have used the national accounts data in Table 2.4 to calculate trends over the longer term.

Table 2.3: Estimated Financial Balances by Sector
(In Percent of GDP)

	1986	1987	1988	1989	1990	1991	1992
Central Government							
Savings[a]	2.2	3.9	3.6	4.3	3.3	4.7	0.6
Investment[b]	7.0	7.8	7.6	7.4	6.8	7.7	8.8
Balance	-4.8	-3.9	-4.0	-3.1	-3.5	-3.0	-8.2
Private Sector							
Savings	3.6	2.2	2.4	3.8	2.0	1.5	3.8
Investment	2.4	2.6	3.3	6.1	5.4	5.0	4.0
Balance	1.2	-0.4	-0.9	-2.3	-3.4	-3.5	-0.2
Foreign Savings	3.6	4.3	4.9	5.4	6.9	6.5	8.4

[a] Total revenue and grants minus recurrent expenditures.
[b] Capital expenditure, including that financed by foreign project lending, and net lending to state-owned enterprises.

Source: Quarterly Digest of Statistics, national accounts data, fiscal data.

liabilities of each sector do not always match. The matrix, therefore, does not present a complete flow of funds, but gives a broad idea of who provided funds to whom.

2.47 The first issue that arises from the table is the large increase in government liabilities in 1992. In most years, government liabilities to the external sector increased, but in 1992 the increase was substantial. Financing came from all sectors other than the banks. Government assets increased by ₵99.7 billion against a total rise in liabilities of ₵397.4 billion. This increase in liabilities could have been used to increase reserves, transfer resources to the private sector, or to finance expenditure on nonfinancial assets (desks, cars, etc.) or consumables (such as petrol). In contrast to other sectors of the economy the government gets much more out of the financial system than it puts in.

2.48 The BOG dramatically increased its financing of the government in 1992, but BOG claims on banks, SOEs and the external sector fell. The BOG's "other" category was very large, representing changes in the revaluation account and unclassified assets including net fixed assets, check clearing, suspense accounts and miscellaneous assets. As far as liabilities go, liabilities to the private sector increased significantly in 1992, reflecting an increase in currency outside the banks. External liabilities also rose, but "other" liabilities, which includes BOG bills, were substantial in both 1991 and 1992.

2.49 Banks increased their deposits and cash balances with the central bank and in 1992 increased lending to state-owned enterprises and the private sector as well as increasing foreign liabilities. Lending to the SOEs went primarily to the Cocoa Board (COCOBOD)—of ₵41.3 billion in claims 36.3 billion were used to finance cocoa bills.

2.50 The data indicate, however, that in recent years the increase in bank lending to SOEs is matched by an increase in SOE deposits in the banks. Data from the State Enterprise Commission indicate, however, that SOE assets have been increasing fairly substantially in recent

Table 2.4: Financial Flows in Ghana, 1988–92
(In Billion Cedis)

		Origin							
		A	B	C	D	E	F	G	H
Destination/year		Govt.	BOG	Banks	SOEs	Private	External	Other	Total increase in liabilities
1. Government	1988	—	-1.5	-0.1	—	5.0	83.0	—	86.4
	1989	—	-8.3	-1.8	—	6.2	102.5	—	98.6
	1990	—	4.8	-3.4	—	9.4	136.1	—	146.9
	1991	—	3.0	-2.1	—	4.2	176.9	—	182.0
	1992	—	138.5	-0.6	—	37.8	221.7	—	397.4
2. BOG	1988	5.3	—	19.3	10.7	18.9	173.0	-34.3	193.0
	1989	3.3	—	-7.9	-4.0	15.0	66.1	50.4	123.0
	1990	16.5	—	-2.4	5.5	-2.9	-15.7	72.1	73.2
	1991	39.5	—	20.1	-2.9	9.9	45.8	106.7	219.1
	1992	30.6	—	22.9	-10.9	93.6	92.4	-17.1	211.5
3. Banks	1988	3.1	1.4	—	14.7	24.4	4.4	-1.9	46.1
	1989	8.0	2.9	—	20.8	16.2	11.3	32.9	92.1
	1990	3.6	1.4	—	4.1	36.3	3.7	29.7	78.8
	1991	1.2	-2.2	—	3.2	31.6	2.6	68.5	104.9
	1992	4.8	-4.0	—	42.2	69.4	19.2	64.0	195.6
4. SOEs	1988	5.9	2.8	8.4	—	—	—	83.8	100.9
	1989	7.7	7.4	4.6	—	—	—	104.8	124.0
	1990	9.5	-18.5	5.9	—	—	—	81.0	77.9
	1991	11.3	13.5	3.0	—	—	—	110.7	138.5
	1992	12.1	-16.5	41.3	—	—	—	—	—
5. Private	1988	—	—	25.9	—	—	—	—	33.8
	1989	—	—	2.9	—	—	—	—	13.8
	1990	—	—	2.2	—	—	—	—	16.9
	1991	—	—	19.8	—	—	—	—	37.8
	1992	—	—	55.4	—	—	—	—	78.4
6. External	1988	45.2	20.1	14.1	—	—	—	—	79.4
	1989	50.2	67.9	22.4	—	—	—	—	140.5
	1990	46.4	-32.0	61.5	—	—	—	—	75.9
	1991	54.5	101.5	6.3	—	—	—	—	162.3
	1992	52.2	-35.4	52.9	—	—	—	—	69.7
7. Other	1988	—	170.1	-21.5	75.5	—	—	—	—
	1989	—	53.1	71.9	107.2	—	—	—	—
	1990	—	117.5	14.9	68.3	—	—	—	—
	1991	—	103.3	57.8	138.2	—	—	—	—
	1992	—	129.0	23.7	—	—	—	—	—
8. Total increase in assets	1988	59.5	193.0	46.1	100.9	48.3	251.6	720.7	—
	1989	69.2	123.0	92.1	124.0	37.4	192.7	666.6	—
	1990	76.0	73.2	78.7	77.9	42.8	155.9	547.3	—
	1991	106.5	219.1	104.9	138.5	45.7	247.1	912.7	—
	1992	99.7	211.5	195.6	—	200.8	329.2	—	—

Notes: Increase in assets may not equal increase in liabilities due to incomplete sectoral balance sheets.

A2: Change in central government deposits and counterpart funds at BOG.
A3: Change in central government deposits at domestic money banks.
A4: Central government net lending to Public Boards, Corporations, Institutions and Companies from QDS. June 1993, pp. 51. Note that government transfers to SOEs for 1988-92 have been 13.5, 17.3, 28.1, 32.9 and 41.9 billion cedis respectively. because these are transfers, there is no offsetting liability.
A6: Repayment (amortization) of MT and LT debt. From Balance of Payments data (QDS).
B1: Change in BOG claims on government from BOG/IFS.
B3: Change in BOG claims on domestic money banks from BOG/IFS.
B4: Change in BOG claims on nonfinancial public enterprises.
B6: Change in BOG's foreign assets.
B7: Includes changes in the revaluation account and unclassified assets including net fixed assets, checks clearing, suspense account and misc. assets.
C1: Change in domestic money banks claims on the central government.
C2: Cash and balances of domestic money banks with BOG.
C4: Change in domestic money bank claims on nonfinancial public enterprises (incl. CMB).
C5: Domestic money bank claims on private sector.
C7: Changes in other assets—includes real estate and equipment, BOG bonds, and FINSAC bonds.
D2: Changes in public enterprise deposits with BOG.
D3: Changes in public enterprise deposits with domestic money banks.
D7: Calculated as a residual.
D8: Increase in net assets of 17 core SOEs, data from State Enterprise Commission.
E1: Financing of fiscal deficit by social security and "other." IMF-RED.
E2: Changes in currency outside domestic money banks.
E3: Change in private-sector deposits with banks.
F1: Net external financing of the government excluding grants, from BoP.
F2,F3: Changes in BOG and DMBs external liabilities.
G2: Change in BOG other liabilities (includes capital, reserves and provisions, undistributed profits, profit and loss account, special deposits, adjustment fund accounts, and misc. liabilities including BOG bills, and the FINSAC bonds).
G3: Change in DMB other unclassified assets.

Source: Bank of Ghana data, and *Quarterly Digest of Statistics*.

years. This increase in assets could be financed by transfers or by retained earnings. Both are categorized under "other" for lack of more detailed information.

2.51 Not much information about private sector financial flows is available. The private sector helped the government to finance the large increase in liabilities in 1992 (note that of the ₵37.8 billion ₵13.8 billion came from SSNIT, since SSNIT's contributions constitute private savings). The private sector has continued to keep some portion of its assets as deposits with the banks—these more than doubled in 1992. Note that the private sector has always kept more deposits in the banks than it has received in loans. The fact that both SOEs and the private sector have placed more in deposits with the banking system than they have received in loans in recent years indicated that the banks are not engaging the real side of the economy.

2.52 In sum, the bulk of flows are going to the government. This may explain why the private sector may not want to keep its assets in financial form. Limited mobilization of savings by banks means that investment in high return private sector activities is lower than it could be. The analysis indicates that economic growth is likely to be depressed as a result. A key objective for policy makers is to find ways to intermediate savings through the financial system. The savings effort can be improved overall with improvements in public savings, which will require a sustained fiscal surplus. Measures to maintain macroeconomic stability, particularly as related to inflation, can also help improve the incentive to hold financial assets.

III. FINANCING THE DEFICIT

3.1 Fiscal policy determines how much of the supply of financial resources will be allocated among the public and the private sector. The method of financing the deficit and its sustainability also have an important impact on the incentives to hold financial assets. In Ghana, the government is still receiving the bulk of credit in the system, even though private sector credit has been expanding. In recent years, government financing requirements have led the government to compete with the banking system as a mobilizer of funds and to crowd out private sector borrowing. Open market operations, which should only be used to smooth out fluctuations in the money supply, have been used to mobilize private savings for the financing of the fiscal deficit. Large fiscal deficits, and the printing of money, have led to high inflation and high real and nominal interest rates. Questions about the sustainability of the deficit also increase uncertainty about future policies and the economic outlook and have a significant impact on the level of investment.

A. Revenue, Expenditure, and Fiscal Balance

3.2 Following the path of Ghana's fiscal deficit from 1960 to 1993 (see Figure 3.1), one can observe that—since the low point of extreme fiscal imbalance in 1975—the country has made an enormous fiscal adjustment. For most of the ERP period (1983-92) the narrow budget has been in balance[15] and 1992's sharp deterioration in the fiscal balance was improved upon in 1993. Currently the balance remains roughly the same as it was at the beginning of the ERP, although fiscal balance is projected to be restored at the end of 1994.

3.3 The broad deficit measure, which includes externally financed capital expenditure, presents a larger deficit because the bulk of the government's capital expenditure is externally financed. The third measure shown excludes grants from the revenue side and includes them as part of financing. This measure shows that, on average, the equvalent of 5 to 6 percentage points of GDP have been financed by external loans and grants.

3.4 Substantial improvements in the fiscal balance over most of the ERP were initially the result of strong increases in revenue (see Table 3.1). Tax revenues rose from 6.6 percent of GDP in 1984 to 12.8 percent of GDP in 1987. Improvements in the collection of fees and grants also helped. In 1989 total revenue and grants reached a peak of 16.8 percent of GDP. Since that time, however, performance on the revenue side has been erratic. In 1990, late rains and reduced growth meant that returns in most tax categories were lower than in previous years. Grants also fell in 1990. Tax revenue improved in 1991, then fell back in all categories. 1993 has seen improvement in all tax categories and there has also been a large increase from income and fees, partially from divestiture of shares in the Ashanti Goldfields Corporation. There was also a large increase in grants.

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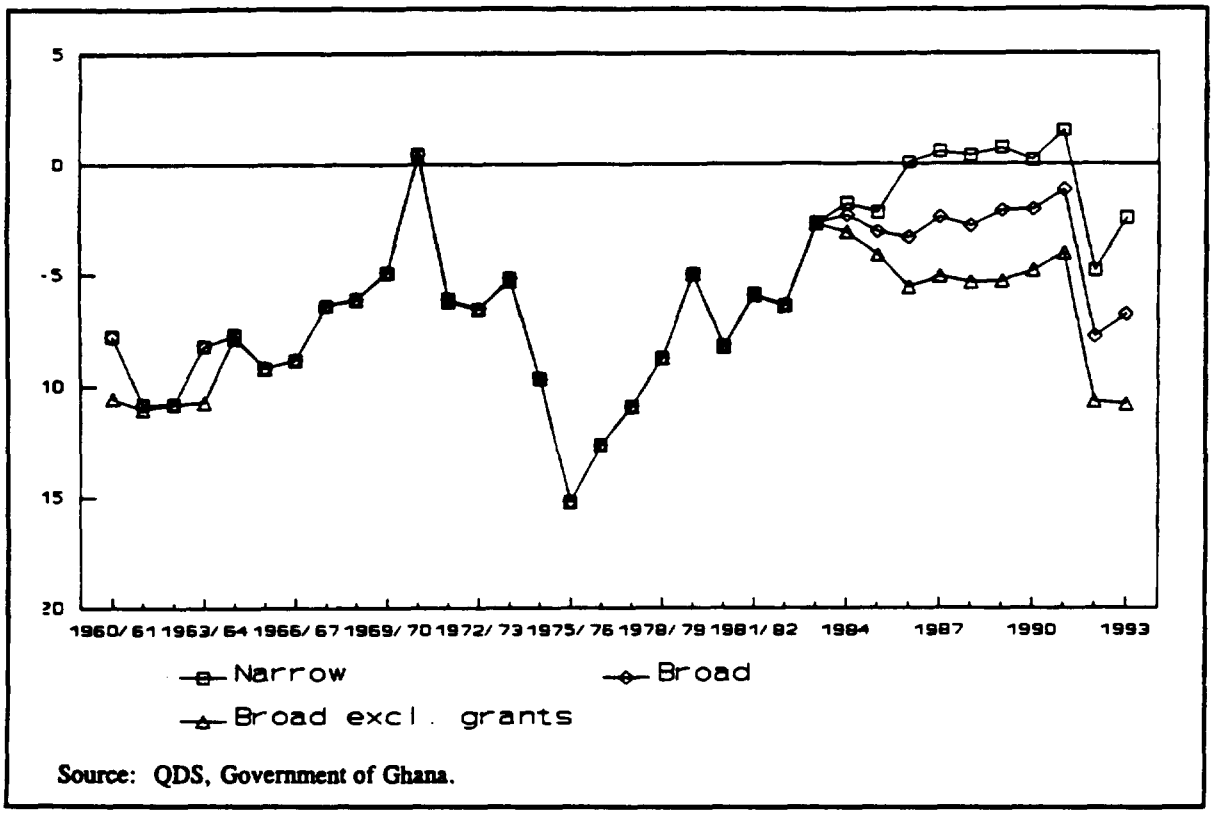
[15] "Narrow" deficit coverage after 1984 is equal to revenue and grants minus expenditure but does not include project grants or capital expenditure financed through external assistance. The "broad" measure includes both project grants on the revenue side and externally financed capital expenditure on the expenditure side. In the "broad excluding grants" measure (shown in Figure 4.1) grants, which are ordinarily considered as part of revenue, are moved "below the line" and considered as financing.

Figure 3.1: Fiscal Balance, 1960-93
(In Percent of GDP)



Source: QDS, Government of Ghana.

3.5 During the early years of the ERP, expenditures increased along with revenue. Expenditures in 1990-91, however, were lower than in 1986-89. In 1992, total expenditure and net lending increased by 4 percentage points of GDP, while revenue and grants fell by 2.6 percentage points of GDP. In 1993, recurrent expenditure on its own increased by 4.3 percentage points of GDP, so that large revenue gains were offset by increases in expenditure. Between 1991 and 1993, expenditure on wages increased, interest payments doubled, and subventions increased by an equivalent of 2.2 percent of GDP. Recently, capital expenditure—financed both domestically and externally—has also increased slightly.

3.6 Ideally, one would like to consider a consolidated public sector deficit that includes the central bank, state-owned enterprises, and other public-sector and subvented agencies. Unfortunately, the information required to create such a consolidated picture is not available. The after-tax profits of the core state-owned enterprises[16] and the surplus of SSNIT were included as memo items in Table 3.1. In all years except 1991, the combined core SOEs showed an after-tax profit, which peaked in 1986 at 4.6 percent of GDP. SSNIT's surplus has remained under 1 percent of GDP ranging from 0.1 to 0.9 percent. Added to the fiscal deficit, these surpluses give somewhat larger coverage, and in all years but 1991, improved the fiscal balance. Unfortunately, information regarding other state-owned enterprises, many of which may not have

[16] Electricity Corporation of Ghana, Tema Oil Refinery, Ghana Oil Company, Ghana Ports and Harbours Authority, Ghana National Procurement Agency, Ghana Supply Commission, Volta River Authority, State Shipping Corporation, State Transport Corporation, City Express Service, Omnibus Service Authority, Ghana Water and Sewerage, Ghana Railways Corp., Post and Telecommunications Corp., Ghana National Petroleum Corporation, Ghana Airways Corporation, and the Ghana Cocoa Board (COCOBOD).

Table 3.1: Revenue and Expenditure (Broad), 1984-93
(In Percent of GDP)

Revenue and expenditure	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total revenue and grants	8.8	12.3	15.9	16.7	16.1	16.8	14.5	16.6	14.0	20.7
Tax revenue	6.6	9.3	12.0	12.8	12.3	12.3	10.8	12.4	10.0	12.9
Taxes on income	1.5	2.2	2.9	3.1	3.9	3.2	2.7	2.4	2.1	2.8
Taxes on domestic goods	2.1	2.4	3.9	3.6	3.7	3.7	3.5	5.4	4.3	5.6
On petroleum	0.0	0.0	1.3	0.7	1.1	1.1	1.3	3.1	2.3	3.8
Taxes on international trade	3.0	4.6	5.3	6.0	4.8	5.4	4.6	4.6	3.7	4.5
On cocoa	1.7	2.6	2.7	3.6	2.3	2.2	1.3	1.4	0.7	0.9
Income and fees	1.4	2.0	1.6	1.3	1.2	1.3	1.0	1.4	1.1	3.8
Grants	0.7	1.0	2.2	2.7	2.5	3.2	2.7	2.8	2.9	4.0
Project aid financed	0.4	0.6	1.5	1.8	1.4	1.7	1.4	1.4	1.8	2.4
Others	0.3	0.5	0.8	0.8	1.1	1.5	1.4	1.4	1.1	1.7
Total expenditure and NL	11.1	15.4	19.2	19.1	18.9	18.9	16.6	17.8	21.8	27.5
Recurrent expenditure	8.6	11.2	11.9	11.2	10.8	11.2	10.1	10.7	13.3	17.6
Wages and salaries	2.0	4.2	5.1	4.8	4.7	4.4	4.0	4.1	5.7	5.8
Goods and services	3.8	3.8	2.5	2.5	2.5	2.5	2.1	2.2	2.2	2.4
Interest payments	1.3	1.5	2.2	1.4	1.1	1.3	1.3	1.7	2.0	3.4
Domestic	0.6	0.6	1.1	0.9	0.6	0.6	0.9	1.2	1.2	2.4
External	0.7	0.9	1.2	0.6	0.6	0.8	0.5	0.5	0.9	1.0
Subventions	1.0	1.2	1.4	1.3	1.3	1.3	1.3	1.3	1.4	3.5
Transfers	0.6	0.5	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.2
Special efficiency	0.0	0.0	0.0	0.4	0.3	0.7	0.4	0.4	0.9	1.3
Capital expenditures	2.5	4.2	7.3	7.9	8.0	7.8	6.5	6.9	8.5	9.9
Development expenditure	1.9	3.3	5.0	5.4	5.8	4.9	4.7	5.0	6.5	7.7
Financed from Government	1.2	2.1	1.9	2.5	2.8	2.7	2.3	2.4	3.3	3.0
Financed from external	0.7	1.1	3.1	2.9	3.0	2.2	2.4	2.6	3.3	4.6
Net lending	0.6	0.9	2.3	2.6	2.2	2.8	1.7	1.9	1.9	2.2
Financed from Government	0.3	0.6	0.5	0.7	0.6	0.5	0.5	0.4	0.4	0.2
Financed from external	0.3	0.3	1.8	1.9	1.7	2.3	1.3	1.5	1.5	2.0
Fiscal balance (broad)	-2.3	-3.1	-3.3	-2.4	-2.8	-2.1	-2.1	-1.2	-7.8	-6.8
Excluding grants	-3.1	-4.1	-5.5	-5.1	-5.3	-5.3	-4.8	-4.0	-10.7	-10.8
Primary balance[a]	-1.0	-1.6	-1.1	-1.0	-1.7	-0.8	-0.8	0.5	-5.8	-3.4
Excluding grants	-1.8	-2.6	-3.3	-3.7	-4.2	-4.0	-3.5	-2.3	-8.7	-7.4
Current savings	0.1	1.1	4.0	5.5	5.2	5.6	4.4	5.9	0.7	3.1
Excluding grants	-0.6	0.1	1.7	2.9	2.7	2.5	1.6	3.1	-2.2	-0.9
Memo items										
Profits/losses of SOEs[c]	0.4	2.1	4.6	1.9	0.4	1.7	0.4	-0.03	na	na
Surplus of SSNIT[d]	0.2	0.4	0.9	0.8	0.8	0.6	0.3	0.1	na	na
Fiscal balance + SOEs + SSNIT	-1.7	-0.6	2.2	0.3	-1.6	0.2	-1.1	-1.1	-7.8	-6.8

Note: Differences between totals and the sum of subcomponents due to rounding. Figures correspond to QDS and budget documents.

[a] Fiscal balance plus interest expenditure.
[b] Total revenue and grants minus recurrent expenditure.
[c] Data from SEC on profits (after tax) of 14 core SOEs (see footnote 16 in text).
[d] SSNIT surplus from IMF, RED Statistical Annex, some of which was used to buy government bills.

Source: Government of Ghana.

fared so well during this period, is not available. For this reason, the central government deficit, rather than the "consolidated" measure, was chosen for the analysis.

3.7 To get a sense of how Ghana's fiscal position compared with other developing countries, it is useful to consider the fiscal position of the comparator countries (see Table 3.2). In 1984, Ghana's revenue as a percent of GDP was very low—half that of Thailand and a third of Malaysia's. By 1988, Ghana's revenues had doubled, yet they were still lower than those obtained elsewhere (except in Zambia). In 1984, Ghana's expenditure was also much lower than that of other countries. It has increased to a level similar to that of Indonesia and Thailand but still much lower than that of Malaysia, Kenya, or Zambia. Until 1992, furthermore, Ghana's deficits were lower than those of Kenya and Zambia. The Asian countries show sustained fiscal adjustment and all moved into surplus by 1992. Although Ghana's central government deficit was less than those of the ASEAN countries in 1986, Ghana was not able to implement as strong an adjustment as occurred in those countries. In recent years, Ghana's deficit has been significantly larger than those found in the ASEAN countries.

Table 3.2: Cross-Country Fiscal Comparisons
(In Percent of GDP)

Budgetary items	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total revenue and grants									
Indonesia	20.8	21.0	20.8	19.9	17.0	17.4	20.2	18.8	NA
Malaysia	25.9	30.2	30.0	25.4	25.7	25.7	27.2	28.5	28.7
Thailand	16.2	16.4	16.2	16.3	17.1	18.2	20.0	NA	NA
Ghana	8.8	12.3	15.9	16.7	16.1	16.8	14.5	16.6	14.0
Kenya	20.2	20.0	20.3	21.0	21.1	21.8	20.6	NA	NA
Zambia	22.6	22.3	24.7	22.0	18.8	13.1	NA	NA	NA
Total expenditure and net lending									
Indonesia	19.5	22.0	24.3	20.7	20.0	19.4	19.8	18.3	NA
Malaysia	32.3	32.7	39.2	32.1	27.1	27.2	28.4	28.8	28.4
Thailand	19.6	21.9	20.6	18.6	16.4	15.1	15.2	NA	NA
Ghana	11.1	15.4	19.2	19.1	18.9	18.9	16.6	17.8	21.8
Kenya	25.2	26.4	24.9	28.6	26.7	30.7	28.1	NA	NA
Zambia	31.0	37.4	46.3	34.9	30.3	17.7	NA	NA	NA
Central government deficit									
Indonesia	1.4	-1.0	-3.5	-0.8	-3.1	-2.0	0.4	0.4	NA
Malaysia	-6.5	-2.5	-9.2	-6.6	-1.4	-1.5	-1.2	-0.2	0.3
Thailand	-3.5	-5.5	-4.4	-2.3	0.7	3.1	4.8	NA	NA
Ghana	-2.3	-3.1	-3.3	-2.4	-2.8	-2.1	-2.1	-1.2	-7.8
Kenya	-4.8	-6.2	-4.4	-6.3	-4.1	-6.5	-5.6	NA	NA
Zambia	-8.4	-15.2	-21.6	-12.9	-11.5	-4.6	NA	NA	NA

Source: Government Financial Statistics (GFS) for information on countries other than Ghana, government authorities for information on Ghana.

B. Financing the Deficit

3.8 Experience in developing countries has shown that the way a deficit is financed is as important as its size in determining its impact on the economy and the financial sector. governments can finance deficits in three ways: borrowing from the central bank (money

creation), borrowing from the domestic bank and non-bank system, and borrowing abroad. Excessive reliance on any one of these areas is likely to lead to imbalances (see Box 3.1). Prior to the ERP, the government relied principally on central bank borrowing to finance its deficit. This led to a high rate of inflation, which when combined with controls on interest and the exchange rates—contributed to the country's economic decline.

3.9 From the beginning of the ERP until 1992, the deficit was largely financed externally (see Table 3.3). From 1987, moreover, foreign finance even allowed the government to pay back some of its debt to the banking system.[17] This changed in 1992, when the increased deficit required substantial recourse to domestic finance. Most of the domestic financing in 1992 came from the central bank.[18] In 1993 foreign financing covered the bulk of the deficit, and the domestic banking system financed about a fifth.

Table 3.3: Financing the Deficit
(In Percent of GDP)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Ghana total financing	2.3	3.1	3.3	2.4	2.8	2.1	2.1	1.2	7.8	6.8
Domestic	1.1	1.2	1.0	-0.4	-0.6	-1.1	-1.4	-2.0	4.8	1.1
BOG	0.7	0.9	0.5	-1.0	-1.1	-1.5	-1.0	-2.0	3.4	NA
Other	0.4	0.3	0.5	0.6	0.5	0.4	-0.4	0.0	1.4	NA
Foreign	1.2	1.9	2.3	2.8	3.4	3.2	3.5	3.2	3.0	5.6

Source: Government of Ghana.

3.10 From 1984 to 1992, Ghana had gradually reduced the stock of central government domestic debt (this includes treasury bills and government stocks but excludes FINSAC bonds) from 12.8 percent to 1.9 percent of GDP (see Table 3.4). Between 1991 and 1993, however, the ratio moved back up to 11.9 percent of GDP.

3.11 In 1991, the central government's outstanding debt was fairly low and was relatively evenly distributed between the monetary authorities, the Social Security Fund, and others. (Note that commercial banks are not allowed to hold Treasury Bills—the figures in the table represent long-term stocks.) In 1992, the outstanding stock of central government debt rose dramatically and was financed through a central bank overdraft. At end-1992, 13 percent of the central government's debt was issued as short-term treasury bills, 16 percent was issued as medium-term bills, 9 percent was in the form of long-term government stocks. The remainder was held as an overdraft. In the last quarter of 1993, this overdraft and part of the revaluation accounts were transformed into long-term government stocks to be held by the BOG at 4 percent interest, representing 72 percent of the government's outstanding debt. Ten percent of the central government debt was issued as short-term treasury bills, and 14 percent as medium-term treasury bills. Borrowing from the central bank is essentially the equivalent of printing money and therefore is highly inflationary. As credit from the monetary authority to the government rose, the BOG issued bonds to mop up this liquidity.

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[17] Because grants do not create a liability for the government, Table 4.3 shows financing for the "broad" measure of the deficit in which grants are treated as a revenue rather than a financing item.

[18] Note that data on financing from the fiscal accounts are not entirely consistent with data on stocks provided by the BOG.

Box 3.1: Sustainable Deficits

Fiscal deficits are not inherently bad, but they can pose problems. In general, deficits may be financed by printing money, borrowing from the banking system, or borrowing abroad. Printing money may lead to high inflation. Reliance on the banking system can push up interest rates and crowd out private borrowers. Reliance on external finance may have implications for the current account and the exchange rate.

Van Wijnbergen et al (1992)[1] have set out a framework for considering the sustainable deficit given the financing constraints faced by the government. The approach relies on the budget identity:

$$PD + iB + Ei^*F^* = \Delta H + \Delta D + \Delta EF^*$$

where PD is the nominal primary deficit, i is the domestic nominal interest rate, B is the domestic public debt stock, E is the nominal exchange rate, i^* is the foreign interest rate, F^* is the stock of external debt in foreign currency units, H is total base money, and D is credit to the government from the banking system. Δ is the difference operator. This equation can be rewritten as:

$$PD = \Delta H + H(\beta + \gamma) + \Delta B + B(\beta + \gamma) + \Delta EF^* + EF^*(\gamma - r^* - \hat{e})$$

where r and r^* are real domestic and foreign interest rates, γ is the real growth rate, β is the inflation rate, and $\hat{e}$ is the real exchange rate. With information on base money, the domestic and external stock of debt and assumptions concerning the principal macroeconomic variables, it is possible to calculate the primary deficit (the fiscal deficit minus expenditure on interest) that is "sustainable" under the given assumptions.

It is assumed that the government maintains real growth at 5 percent, inflation at 10 percent, and a constant real exchange rate. The real interest rate is expected to fall from 5.4 to 5.0 percent. Foreign inflation is expected to remain at 3 percent and the foreign interest rate, calculated implicitly based on actual interest payments and the stock of foreign debt, is also expected to remain at 1.9 percent. Using these assumptions, four cases were considered. First, the current lending program to Ghana is maintained, with foreign liabilities falling as a result of amortization of external debt and somewhat smaller external financial flows. In this case, the stock of external liabilities falls from 81.4 percent of GDP in 1993 to 51 percent of GDP in the year 2000. Base money and the stock of domestic debt remain unchanged as a proportion of GDP. Second, foreign lending drops by one third through the year 2000. Third, foreign lending follows the current lending program and the stock of domestic debt is reduced in 1994 by the equivalent of US$140 million dollars. This is based on the possibility that proceeds from privatization might be used to retire domestic debt. Finally, the fourth case considers the sustainable deficit given substantial repayment of public debt. In 1993 the stock of public debt stood at about 12 percent, between 1986 and 1992, however, it had been much lower. Case four sets out the deficit given the current foreign lending program and assuming that domestic debt stocks are reduced from 11.9 percent of GDP in 1993 to 3.8 percent in the year 2000. The sustainable deficits that result range from 5.2 percent of GDP in case 1 to a surplus of 1 percent in case 4.

Sustainable Fiscal Deficits[a]
(Percent of GDP)

	1996	1998	2000
Case 1: Current lending program (no change in domestic liabilities)			
Fiscal deficit	5.2	4.6	3.8
Primary deficit	2.2	1.7	1.1
Case 2: one third reduction in foreign lending (no change in domestic liabilities)			
Fiscal deficit	2.5	2.7	2.4
Primary deficit	0.0	0.0	0.0
Case 3: Current lending program (US$140 M reduction in domestic liabilities in 1994)			
Fiscal deficit	5.2	4.7	3.9
Primary deficit	2.4	1.9	1.2
Case 4: Current lending program (domestic liabilities reduced to 3.8 percent of GDP by 2000)			
Fiscal deficit	2.4	1.7	-1.0
Primary deficit	1.0	1.0	1.0

[a] The measure used here corresponds to the "broad" fiscal deficit (see footnote 15 in text).

Changes in the macroeconomic variables will have an impact on the sustainable deficit. For example, higher inflation implies that more financing will be available through the inflation tax (βH). In case 4, an increase in inflation from 10 percent to 20 percent and a corresponding increase in the nominal interest rate, results in an increase in the sustainable deficit of about 1 percent. In contrast a fall in real growth from 5.0 percent to 3.5 percent results in a reduction of the sustainable deficit of about 1 percent.

The measures above offer some rough guidelines on the appropriate magnitude of deficits, given the sources of finance, and desired macroeconomic variables. Deficits greater than the sustainable level imply that the assumed macroeconomic targets will not hold. They therefore contribute to increased uncertainty about the macroeconomy and may have a negative impact on both investment and growth. A recent cross-country study that examined the effect of fiscal deficits on macroeconomic performance, found that those countries maintaining fiscal balances well above their sustainable levels performed best.[2]

[1] Van Wijnbergen et al. (1992).
[2] Easterly and Schmidt-Hebbel (1994).

Table 3.4: Distribution of Outstanding Central Government Debt, 1984-93
(In Billion Cedis, End of Period)

Debt	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Outstanding stock of central government debt	34.6	40.7	56.1	51.9	53.4	61.2	53.8	48.4	227.0	473.0
Monetary authorities	19.9	21.6	27.3	23.5	22.0	13.7	13.7	16.7	155.1	306.9
Commercial banks	6.2	8.1	10.9	10.5	8.2	6.4	2.9	0.9	0.3	0.3
Social security fund	2.4	2.4	6.1	7.3	14.5	11.9	18.4	18.4	32.3	94.5
Financial intermediaries[a]	1.5	3.5	8.0	6.0	0.0	5.2	10.9	12.5	39.3	71.3
Nonfinancial sector	4.6	4.5	4.1	4.4	8.9	24.0	7.9	..	..	..
Of which private sector	3.1	3.1	2.9	3.4	6.6	15.3	..	..	..	..
Of which public sector	1.5	1.4	1.2	1.0	2.3	8.7	..	..	..	..
Memorandum items:										
Domestic debt/GDP	12.8	11.9	11.0	6.9	5.1	4.3	2.6	1.9	7.5	11.9
BOG bills	NA	NA	NA	NA	NA	NA	NA	142.3	148.6	334.5

Note: Stock data provided by the BOG are not entirely consistent with financing-flow data provided by the Ministry of Finance.

[a] Data from 1991 include financial intermediaries and the non-financial sector.

Source: Bank of Ghana.

3.12 The government's need for credit from the financial system has had implications for the distribution of credit in the Ghanaian economy. As can be seen from Table 3.5, the bulk of the financial system's credit has gone to the central government and other public sector institutions. From 1988 through 1991, the private sector received about half of total credit. With the increase in financing needs in 1991 and 1992 even this share fell.

3.13 Low levels of credit to the private sector may also be impeding growth. In those countries that have been successful, credit to the private sector has been a sizeable share of GDP (see Table 3.6). In Malaysia, private credit/GDP rose to 75.5 percent. In Indonesia it rose from 22 percent in 1986 to 48.5 percent in 1992. In Kenya, the ratio has hovered at about 20 percent. The ratio of private credit to GDP in Ghana, however, has been extraordinarily low, even by African standards, at only 5.3 percent in 1993. Reducing government deficits so that more domestic financial resources can be funneled to the private sector may therefore be an important ingredient in improving growth.

3.14 Since the onset of the ERP[19], the Government of Ghana (GOG) has relied primarily on foreign borrowing to finance its broad deficit. As seen in Table 3.7, Ghana's total external debt increased to 71 percent of GDP in 1987, leveled off at about 60 percent until 1992, then jumped to 83 percent in 1993 due to the rapid depreciation of the cedi. These figures reflect Ghana's total external debt, but since less than one percent of the debt is strictly private (i.e., has no government guarantee), it also reflects the government's debt and the debt servicing it faces.

[19] Note that the data available on stocks of external debt cover both public and publicly guaranteed debt. The flows resulting from this data are therefore different than those given in the fiscal accounts. In addition, interest payments on external debt as recorded in the debt statistics and the balance of payments are higher than external interest payments in the budget. This most likely reflects the payment of interest by SOEs and publicly guaranteed companies, which is not recorded as part of the budget.

Table 3.5: Credit via the Financial System, 1986-93
(Stocks, In Billion Cedis)

Credit	1986	1987	1988	1989	1990	1991	1992	1993
Credit to the Central Government (gross)[a]	38.1	33.9	30.1	20.0	16.6	17.5	155.4	307.2
Bank of Ghana	27.2	23.4	22.0	13.7	13.7	16.6	155.1	306.9
Commercial banks	10.9	10.5	8.1	6.3	2.9	0.9	0.3	0.3
Credit to public enterprises (excluding cocoa)	5.3	8.6	10.3	19.6	13.7	27.6	23.9	NA
Bank of Ghana	0.2	0.9	1.2	2.3	2.9	5.9	3.4	NA
Commercial banks	5.1	7.7	9.1	17.3	10.8	21.7	20.5	NA
Credit to cocoa	16.8	161.5	21.0	23.7	17.0	27.6	48.1	28.7
Bank of Ghana	15.8	14.2	16.7	22.9	3.8	14.4	0.0	8.2
Commercial banks	1.0	2.3	4.3	0.8	13.2	13.2	48.1	20.5
Credit to private sector	37.4	46.9	58.2	61.1	63.3	88.8	138.5	209.8
Bank of Ghana	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Commercial banks	37.3	46.8	58.1	61.1	63.3	88.0	138.5	209.8
Total credit	97.6	105.9	119.6	124.4	110.6	161.5	365.9	545.7
Private credit/total credit	0.38	0.44	0.49	0.49	0.67	0.55	0.38	0.38

[a] Excludes revaluation losses.

Source: Bank of Ghana.

Table 3.6: Cross-Country Comparisons: Private Sector Credit
(In Percent of GDP)

Credit	1986	1987	1988	1989	1990	1991	1992	1993
Ghana	7.3	6.3	5.5	4.3	3.1	3.4	4.6	5.3
Indonesia	22.3	23.8	28.5	35.7	50.6	51.1	48.5	NA
Kenya	19.3	18.4	18.6	19.1	18.7	20.3	22.7	NA
Malaysia	71.6	64.4	61.4	66.5	71.5	76.9	75.5	NA
Thailand	45.9	49.1	52.9	58.9	68.7	NA	NA	NA
Zambia	15.0	12.9	15.1	15.2	12.7	11.2	NA	NA
Zimbabwe	9.0	11.4	13.9	15.8	17.5	NA	NA	NA

Source: Bank of Ghana, IFS database.

3.15 The stock of debt has increased, but more important are the term structure and its implications for debt service obligations. The ratio of debt service to exports has fallen from about 60 percent in the late 1980s to about 25 percent in 1992. In 1993, the ratio increased because of an increase in principle repayments due. Interest payments as a percent of total exports also fell over the ERP period, although less rapidly than total debt service.

3.16 An additional indicator of the sustainability of a country's external debt position is a comparison between the growth in external debt to the growth of exports. Between 1984 and 1993, the average annual rate of growth for Ghana's debt was 12 percent, whereas that for exports was 9 percent. Between the end of 1990 and the end of 1993, external debt grew at an

annual average of 10 percent, whereas exports grew during the same period at an annual average rate of 7 percent.

Table 3.7: Indicators of External Debt
(In Percent)

Indicators by country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Ghana										
Total debt/GDP	25.8	35.3	56.7	71.0	58.7	62.8	61.1	61.3	63.9	82.5
Debt service/exports	66.6	61.7	48.6	61.7	68.1	59.0	37.0	28.6	25.5	36.6
Debt service/GDP	2.6	5.7	8.0	10.6	11.7	9.0	5.6	4.6	4.1	7.3
Interest/exports	13.1	16.0	12.7	13.2	13.4	12.8	10.7	10.4	9.0	9.1
Interest/GDP	1.1	1.7	2.1	2.6	2.4	2.1	1.7	1.7	1.4	1.8
Growth of ext. debt*	17.6	14.7	22.5	19.7	-6.6	8.1	14.1	11.9	4.5	13.7
Export growth*	18.6	11.1	19.9	12.3	5.5	-8.1	11.7	11.8	1.3	8.2
Indonesia										
Total debt/GNP	38.3	43.8	55.9	72.6	67.5	62.5	68.2	69.6	65.4	65.6
Debt service/exports	21.8	28.8	37.3	37.0	40.2	35.4	31.0	32.6	30.8	30.8
Interest/exports	11.6	11.9	16.8	15.6	15.6	13.9	12.5	13.1	11.7	11.3
Interest/GNP	3.1	2.9	3.5	4.1	4.2	4.0	3.7	3.9	3.4	3.4
Kenya										
Total debt/GNP	58.9	71.1	67.7	76.9	72.3	73.8	88.1	94.3	88.6	138.5
Debt service/exports	34.3	39.2	35.7	40.8	41.0	38.0	36.5	33.0	33.1	26.3
Interest/exports	13.7	15.0	13.5	16.9	17.3	15.2	15.5	14.4	12.5	10.6
Interest/GNP	3.9	4.0	3.7	3.8	4.0	3.7	4.3	4.3	3.6	5.1
Malaysia										
Total debt/GNP	59.2	69.9	84.5	77.1	56.7	45.6	39.3	39.6	36.2	38.0
Debt service/exports	14.1	30.4	21.8	21.2	24.8	15.1	10.3	7.7	6.6	7.9
Interest/exports	7.9	9.0	9.3	7.9	6.7	4.6	3.6	3.1	2.5	2.4
Interest/GNP	4.7	5.5	5.8	5.6	5.0	3.7	3.0	2.8	2.1	2.1
Thailand										
Total debt/GNP	36.3	45.9	43.8	40.9	35.7	32.9	33.4	39.0	36.4	37.6
Debt service/exports	25.7	31.9	30.1	22.0	20.2	16.3	16.9	13.1	14.1	18.6
Interest/exports	11.7	13.3	11.0	8.4	7.1	6.0	6.5	7.0	6.4	5.7
Interest/GNP	3.0	3.6	3.2	2.7	2.5	2.3	2.4	2.9	2.5	2.3
Zambia										
Total debt/GNP	155.1	226.3	417.3	377.3	211.8	187.0	240.8	242.1	242.5	231.9
Debt service/exports	25.3	14.4	50.9	18.5	15.5	13.6	15.1	51.1	29.5	32.8
Interest/exports	11.6	6.9	19.2	8.0	6.4	5.0	5.7	26.2	14.1	14.8
Interest/GNP	4.5	3.3	10.6	4.2	2.4	2.1	2.5	10.2	5.9	5.4

* Growth rates based on nominal US dollar amounts.

Source: World Debt Tables for all countries other than Ghana. Ghana from World Bank data.

3.17 Ghana's external debt position compares reasonably well to that of the other countries shown in Table 3.7. Its position most resembles that of Indonesia, although before 1993 Ghana's debt service and interest payments as a share of GDP were less than Indonesia's. While Kenya's stock of debt has increased over the 1980s its debt service has fallen. In 1992 and 1993, it was about the same as Ghana's. Malaysia's external debt fell sharply over the 1980s. By the early

1990s both Malaysia and Thailand had a much lower total debt-to-GNP ratios than Ghana and also a lower debt service ratio. At the other extreme, Zambia's total debt-to-GNP ratio has consistently remained around or above 200 percent. Zambia's debt service, however, remained relatively low given the size of the debt. When compared to the debt indicators of other countries, Ghana's external obligations appear manageable, although the stock of external debt continues to grown faster than exports.

C. Implicit Taxation of the Financial System

3.18 In addition to the effect that financing the deficit may have on the financial system, the government is also in a position to pursue policies that may tax the financial system through implicit taxes. While the current tax rate on income of financial institutions is 35 percent, the government can also tax the financial system implicitly through the use of controls and restrictions. For example, if interest rates on government loans are controlled, then the difference between the market rate and the rate actually paid on the loan can be considered a subsidy to the government or a form of indirect revenue. A study of taxation on financial intermediation estimated that Ghana's average implicit taxation of the financial sector between 1978 and 1988 was equivalent to 4.7 percent of GDP (see Chamley and Honohan, 1990). Using the same framework, it is possible to assess to what extent the financial system is still being implicitly taxed, following financial sector liberalizations. Four principal types of implicit taxation are considered: inflation tax on currency, tax on reserves, and tax on government and non-government loans.

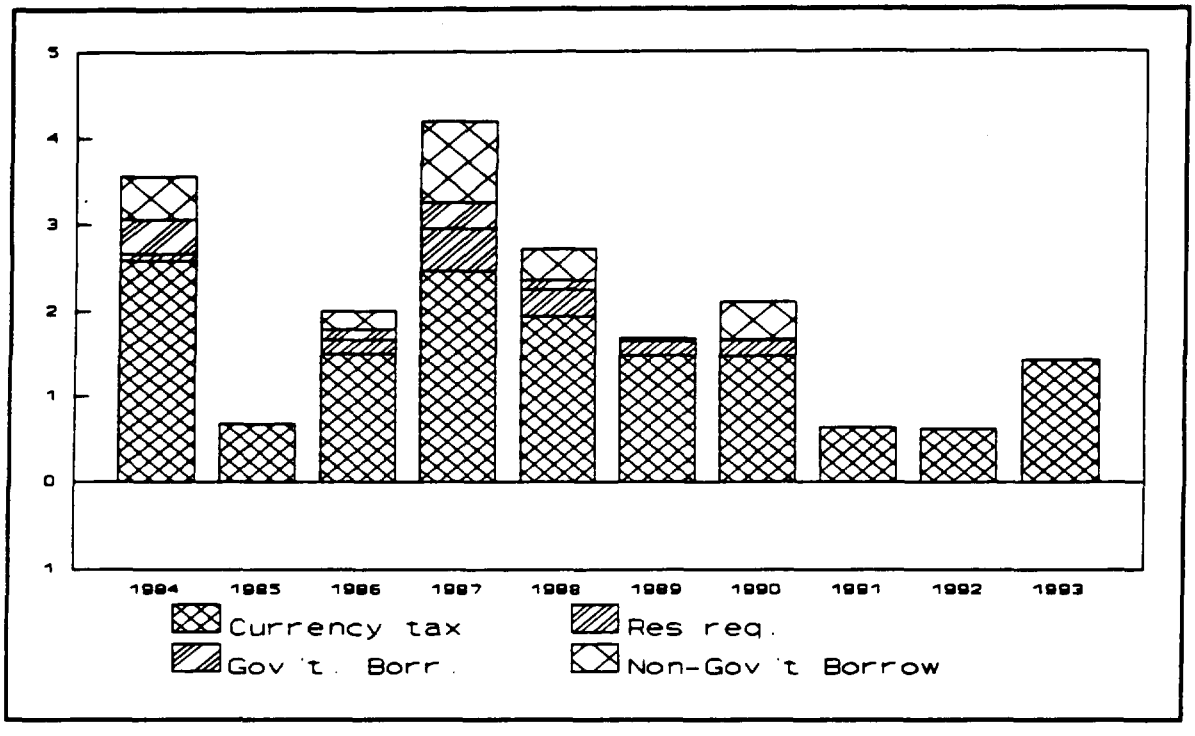
3.19 The inflation tax is based on the fact that there is no interest, or return, paid on currency. The higher the inflation, therefore, the higher the rate of nominal interest being avoided. The amount that the government does not pay is an implicit tax on the holders of currency. However, any tax on currency holdings that results from inflation being above low and sustainable levels, comes at a high cost. The damage to economic growth resulting from high rates of inflation, and the lost explicit tax revenue, is far greater than any benefits arising from an inflation tax. The latter is not a viable policy option for financing fiscal deficits.

3.20 For the purpose of these estimations, the market rate of interest is assumed to be the inflation rate plus 1 percent.[20] The tax on currency is calculated as the market rate minus one percent (to cover the costs of issuance and maintenance) multiplied by total currency outside banks (currency at banks comes under reserve requirements). The tax on reserves is calculated as the difference between the market interest rate and the rate actually paid on reserves (both cash and secondary) multiplied by the amount of reserves (including the excess), reduced in recent years by the introduction of market rates on secondary reserves. The implicit tax on loans to the government and non-government loans is calculated as the difference between the market rate and the rate paid multiplied by the stock of government or non-government loans. Since loans in Ghana are paid a variety of rates, the T-Bill 91-day rate is used here as the rate on government loans. The rate on manufacturing loans is used as the rate on non-government loans. Since other lending rates tend to be lower, the use of the manufacturing rate implies an underestimation of the tax. These are intended as order-of-magnitude estimates that help indicate trends.

[20] Chamley and Honohan (1990) estimated the market rate a number of ways and found this approach to be the most desirable. In cases when interest rates paid were above inflation plus one percent the rate paid was assumed to be the market rate. This measure gives a suitable proxy for the market rate and is therefore a good approximate measure of trends in implicit taxation.

3.21 Figure 3.2 shows these measures of implicit taxation of the financial system. In recent years, overall implicit taxation was highest in 1987, at about 4 percent of GDP. It has fallen sharply since then. The bulk of implicit taxation has been the tax on currency, and other implicit taxes have virtually disappeared as the financial system has been liberalized. Since 1991 the largest form of implicit taxation has been the currency tax, and as inflation is brought down this too will be reduced.

Figure 3.2: Implicit Taxation of the Financial System, 1984-93
(In Percent of GDP)



3.22 While the government has made important strides in reducing implicit taxation of the financial system and in introducing financial liberalization, the government's requirements for financial resources in recent years have also had an important impact on the economy and on the financial system. Given a limited pool of savings, the proportion of credit to the private sector has fallen as the public sector's financing needs rose. Both the magnitude and method of financing the deficit led to concerns about its sustainability and to increased uncertainty. The reliance on borrowing from the central bank led to an increase in inflation, which in turn required tighter monetary policies. These monetary policies created incentives for the banks to channel what resources they had available away from the real economy.

IV. MONETARY POLICY AND THE FINANCIAL SYSTEM

4.1 Monetary policy aims to achieve two important objectives: managing liquidity, so that the banking system can provide for cash and payments needs in the short term, and promoting steady economic growth by keeping monetary and credit expansion in line with the economy's non-inflationary output potential. There is a tension between these two objectives over how much liquidity is sufficient in the short run and at the same time appropriate for keeping inflation down in the medium and long run. Monetary policy is also important in transmitting signals about credit conditions to the rest of the financial system and has an important role in the development of efficient and fluid capital markets. These functions contribute to greater mobilization and more efficient allocation of financial resources. Monetary policy thus has an important impact on the financial system.

4.2 In January 1992, the BOG began the transition from direct to indirect monetary controls through open market operations. Strong inflationary pressures resulting from the increase in the fiscal deficit (see Chapter III) necessitated tight monetary policy, which in turn affected the financial system. As the fiscal deficit falls and the government gains more experience with open market operations, efforts to refine the tools of monetary policy may have important payoffs in terms of greater financial depth and improved functioning of the financial system.

A. Monetary Indicators

4.3 Comparison with other countries indicates that Ghana has not made much progress in deepening the financial system over the course of the ERP. The ratio of M2 to GDP remains very low at 17 percent in 1993 (see Table 4.1). This level is significantly lower than those in the ASEAN and other Sub-Saharan African countries. Kenya's M2/GDP ratio reached 37 percent in 1992 and Zambia's M2/GDP ratio was at 24 percent in 1991. In addition, Ghana remains a cash-based economy. Currency as a percentage of M2 was at least twice as high as in Kenya and Zimbabwe in 1992 and is at least three times as high as in Indonesia, Malaysia and Thailand. The currency/deposit ratio is more than twice as high as even the closest comparator. One important reason (the rest of the report will address other reasons) why individuals will want to hold such large cash balances may be in order to have liquidity in the face of economic uncertainty—during 1990 and 1991 when the economy had experienced stability for a few years the above ratios fell significantly. With the increase in uncertainty in 1992, the ratios rose again. Monetary policy's role as a stabilizing force can therefore help to promote financial deepening.

4.4 The BOG carries out the two objectives discussed above by adjusting monetary aggregates in order to meet a target inflation rate. In a theoretical world, real M2 should grow at about the same rate as real GDP. In 1989 and 1990, real M2 actually fell, contributing to a sharp drop in inflation the following years (see Table 4.2). Nominal growth in M2 was substantial in 1992, but inflation did not pick-up until the following year, which meant that real M2 growth was about ten times the rate of real GDP growth. In contrast, when the inflationary effects of the 1992 monetary expansion were being felt in 1993, real monetary growth was slightly negative at the end of the year. The experience of the comparator countries show that those countries that were able to keep real money expansion relatively close to real output growth, experienced the lowest rates of inflation.

4.5 Finally, Ghana's real interest rate and spreads are compared to those in other countries (see Table 4.3). The 3-month treasury bill rate is chosen as a benchmark. In Ghana, the real T-bill rate remained negative until 1991. At the end of 1992, the real rate was not only positive

Table 4.1: Selected Monetary Indicators—Cross-Country Comparisons, 1986–93
(In Percent)

	1986	1987	1988	1989	1990	1991	1992	1993
M2/GDP								
Ghana	16.5	17.1	18.0	16.9	13.9	13.2	17.3	16.8
Indonesia	26.9	27.2	29.6	35.0	43.3	44.0	46.4	NA
Kenya	30.4	30.2	28.3	28.2	29.7	31.5	37.4	NA
Malaysia	75.8	70.8	66.2	67.6	66.3	69.2	78.8	NA
Thailand	61.3	64.5	63.4	68.0	74.5	NA	NA	NA
Zambia	17.8	16.3	33.7	27.9	21.5	23.7	NA	NA
Zimbabwe	27.0	31.0	31.8	32.8	32.8	NA	NA	NA
Currency outside banks/M2								
Ghana	36.9	36.3	34.4	34.5	28.3	26.5	35.3	33.6
Indonesia	19.3	17.1	14.8	13.5	10.7	9.4	9.6	NA
Kenya	17.8	19.4	19.9	20.0	18.6	18.4	17.8	NA
Malaysia	13.2	14.1	15.0	14.3	14.6	13.5	10.5	NA
Thailand	10.6	10.7	10.3	9.9	9.0	8.1	8.5	NA
Zambia	25.8	30.2	17.4	13.4	18.9	19.0	NA	NA
Zimbabwe	16.8	13.5	14.5	14.3	15.5	17.6	15.2	13.1
Currency outside banks/total deposits								
Ghana	58.5	56.9	52.4	52.8	39.4	36.1	54.6	50.6
Indonesia	24.0	20.6	17.4	15.6	12.0	10.4	10.7	NA
Kenya	21.7	24.0	24.9	24.9	22.9	22.5	21.7	NA
Malaysia	15.2	16.5	17.7	16.7	17.2	15.6	11.7	NA
Thailand	11.8	12.0	11.5	10.9	9.9	8.9	9.3	NA
Zambia	34.7	43.3	21.0	15.5	23.3	23.5	NA	NA
Zimbabwe	20.1	15.6	16.9	16.7	18.3	21.4	17.9	15.0

Source: Bank of Ghana and IFS Database.

but the highest among comparator countries, as monetary policy was tightened sharply in response to strong growth in the money supply, but inflationary pressures only came through the following year. The real rate had fallen substantially by the end of 1993 on account of higher inflation. The real rate of interest has varied over the years in all countries. The rate averages between -4.8 and 9.4 percent in the ASEAN countries. In Kenya, the real rate is negative and in Zimbabwe it is about 4 percent. The spread between the posted lending and deposit rate has fallen in Ghana, but remains about 5 percent. This seems to be slightly higher than the spreads in the other comparator countries except for Zambia. Higher spreads might reflect a perception of higher risk, or higher intermediation costs.

B. Monetary Instruments

4.6 The BOG has two principal instruments that it uses to carry out monetary policy. The first is setting reserve ratios, the second is the auction of securities in order to adjust monetary aggregates.

4.7 Reserve requirements are ordinarily used for prudential purposes to ensure that banks will have enough funds to meet short-term needs. In some circumstances, however, reserve requirements may be used as a liquidity management tool. There are two types of reserve requirements: cash, or principal requirements, and secondary requirements. The cash

Table 4.2 Growth of Real M2, GDP and Inflation, 1986–93
(In Percent, End of Period)

	1986	1987	1988	1989	1990	1991	1992	1993
Ghana								
Real M2 Growth	15.3	14.0	13.0	-2.8	-13.2	8.7	35.0	-0.2
Real GDP Growth	5.2	4.8	5.6	5.1	3.3	5.3	3.9	5.0
Inflation (CPI)	33.3	34.2	26.6	30.5	35.9	10.3	13.3	27.7
Indonesia								
Real M2 Growth	9.2	12.4	17.5	31.1	26.1	6.9	14.0	NA
Real GDP Growth	5.9	4.9	5.8	7.5	7.2	6.9	6.3	NA
Inflation (CPI)	9.1	9.3	5.6	6.1	14.7	9.9	5.1	10.1
Kenya								
Real M2 Growth	27.2	4.3	-2.1	-0.6	0.0	4.4	4.0	NA
Real GDP Growth	7.1	5.9	6.2	4.7	4.2	1.4	0.4	NA
Inflation (CPI)	4.3	6.6	10.4	13.6	20.1	14.5	33.7	NA
Malaysia								
Real M2 Growth	9.4	3.4	3.1	12.8	7.0	12.1	23.1	NA
Real GDP Growth	1.1	5.4	8.9	9.2	9.7	8.7	8.5	NA
Inflation (CPI)	1.4	0.4	3.5	2.1	3.4	4.2	4.9	NA
Thailand								
Real M2 Growth	11.3	16.1	14.6	19.0	18.8	14.5	12.2	NA
Real GDP Growth	4.9	9.5	13.2	12.1	10.0	NA	NA	NA
Inflation (CPI)	1.7	3.7	3.2	6.1	6.6	4.7	3.0	4.6
Zambia								
Real M2 Growth	43.6	2.5	-1.5	-37.6	-29.6	-7.4	NA	NA
Real GDP Growth	0.7	2.7	6.3	-1.0	-0.5	-1.8	NA	NA
Inflation (CPI)	34.6	50.5	64.1	164.8	107.0	114.1	191.8	135.6
Zimbabwe								
Real M2 Growth	-10.3	-15.6	12.6	7.1	-3.1	-11.0	-32.0	35.4
Real GDP Growth	2.6	-1.0	9.2	5.1	3.4	NA	NA	NA
Inflation (CPI)	15.8	9.8	8.2	15.7	18.4	30.3	46.3	18.6

Source: Bank of Ghana and IFS Database.

requirement has varied over the ERP period (see Figure 4.1). Recently, it has been reduced in steps from 27 percent in 1990 to the present level of 5 percent. Between 1990 and 1993 the cash requirement was remunerated at 3 percent. This rose to 5 percent for 1993. With the drop in cash requirements in 1994, the BOG decided not to remunerate the cash requirement. From 1983 through 1990, banks held significantly more cash than was required, implying that banks were not even making use of the financial resources they had available to them. Since the implementation of financial sector reforms, holdings of excess cash have fallen to a level justified by uncertainties about cash needs. Penalties for insufficient cash reserves are charged at an annualized rate that is 2 percentage points above the discount rate. There is also a fixed charge for late submission.

4.8 While the cash requirement has been falling, the secondary reserve requirement has been rising (see Figure 4.2). Eligible instruments for secondary reserves are government and BOG securities, commodity bills and call deposits at the discount houses. Secondary reserve

requirements have risen from a low of 10 percent in late 1987 to the current 52 percent. The significant increase in early 1993 reflects the use of reserve requirements as one instrument to deal with the increase in liquidity caused by the rising deficit. Banks were required to hold more of the BOG bonds issued to offset the impact of government borrowing from the central bank. These securities are remunerated at market rates and the penalties for late payment are the same as for primary securities. Moreover, because of the attractive rates offered on BOG securities, the banks continue to hold a significant excess over the quantity required. In late 1993, over 60 percent of total deposits was held in secondary reserve instruments. In Kenya, minimum required secondary reserves for the banks are 20 percent and banks hold about 10 percent of total deposit liabilities in excess. In Indonesia, Malaysia and Thailand reserve requirements are even lower: 2 percent, 7 percent and 18 percent of total deposit liabilities, respectively. Excess holdings in these countries are negligible.

Table 4.3: Real Interest Rates and Spreads
(In Percent)

	1986	1987	1988	1989	1990	1991	1992	1993
Real interest rates (3 month T-bills)								
Ghana	-4.3	-14.4	-8.9	-4.2	-7.1	7.1	13.9	5.4
Indonesia	7.1	2.2	8.5	5.3	9.4	3.1	3.7	NA
Kenya	5.8	4.7	0.2	1.0	-3.0	0.5	-13.3	NA
Malaysia	3.6	2.7	0.3	2.3	3.7	3.4	-4.8	NA
Thailand	3.8	-0.1	2.1	NA	NA	NA	NA	NA
Zambia	-9.1	-24.7	-24.0	-57.8	-34.7	-49.4	NA	NA
Zimbabwe	-4.9	-3.3	0.9	-4.2	-7.6	-8.1	NA	4.3
Interest rate spreads								
Ghana	3.6	6.6	6.8	10.4	8.1	5.5	2.0	5.3
Indonesia	5.0	3.2	2.9	2.8	2.6	3.7	3.8	NA
Kenya	2.5	3.6	3.3	5.4	3.9	NA	NA	NA
Malaysia	3.4	4.9	3.6	1.9	0.6	NA	NA	NA
Thailand	5.0	5.0	5.0	5.0	3.1	NA	NA	NA
Zambia	5.9	6.4	6.2	6.2	9.3	NA	NA	NA
Zimbabwe	2.5	3.1	3.0	3.8	2.7	NA	NA	5.3

Note: Real interest rate calculated as $((1 + i_{t,mm})/(1 + p)-1)*100$, where i is the nominal interest rate on 91-day t-bills and p is the cpi inflation rate. Spreads are calculated as $((1 + i_{lend})/(1 + i_{dep})-1) *100$, where i_{lend} is the posted lending rate for manufacturing in Ghana and the rate provided by IFS for other countries and i_{dep} is the posted upper range on 3 month deposits for Ghana and for other countries is the deposit rate provided in IFS.

4.9 Concerns arise over the effects of such high reserve requirements on the banking system. These requirements create a captive market for BOG debt which may allow the rate of interest paid on such instruments to be lower than it otherwise might be. High reserve requirements also create a disincentive for banks to innovate, to aggressively seek good projects and to develop new instruments. They thus hinder the development of secondary markets. Are these concerns valid if the banks choose to hold even more reserves than they are required to?

4.10 In many banking activities there are certain economies of scale that may be required. Developing a loan portfolio requires the development of certain skills and the collection of information on potential borrowers. There may be a threshold of loan activity beyond which the

Figure 4.1: Cash Reserve Ratio

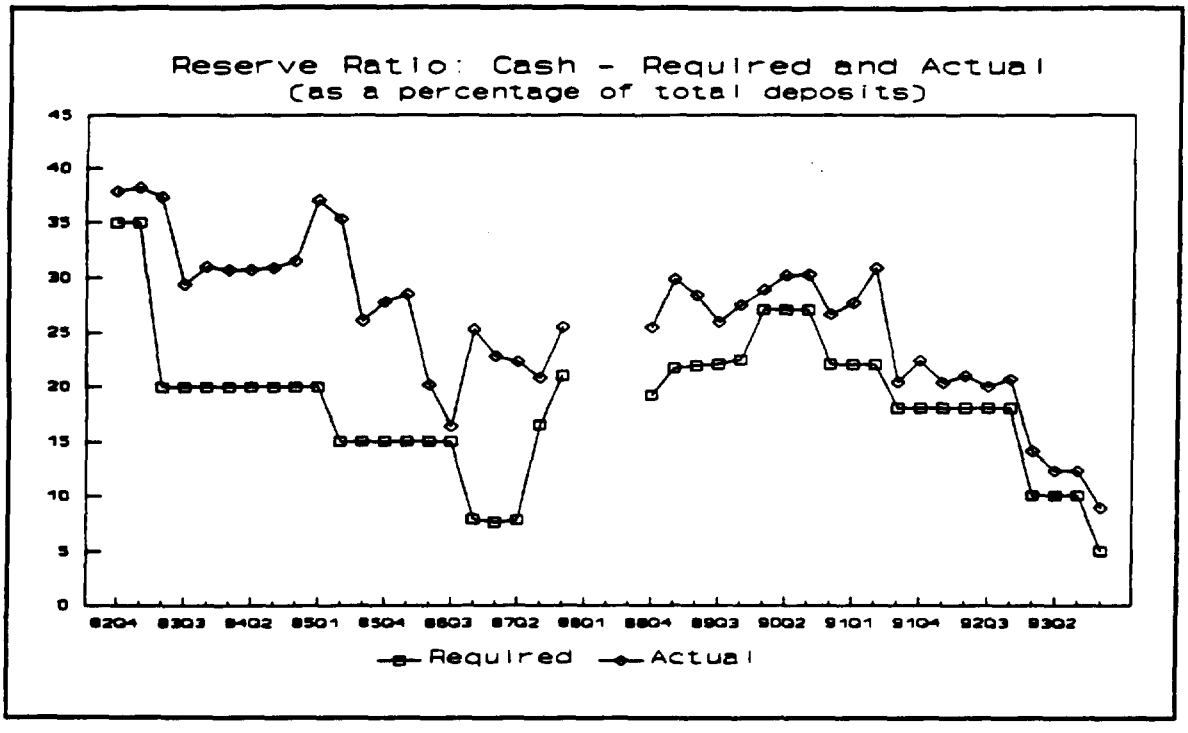
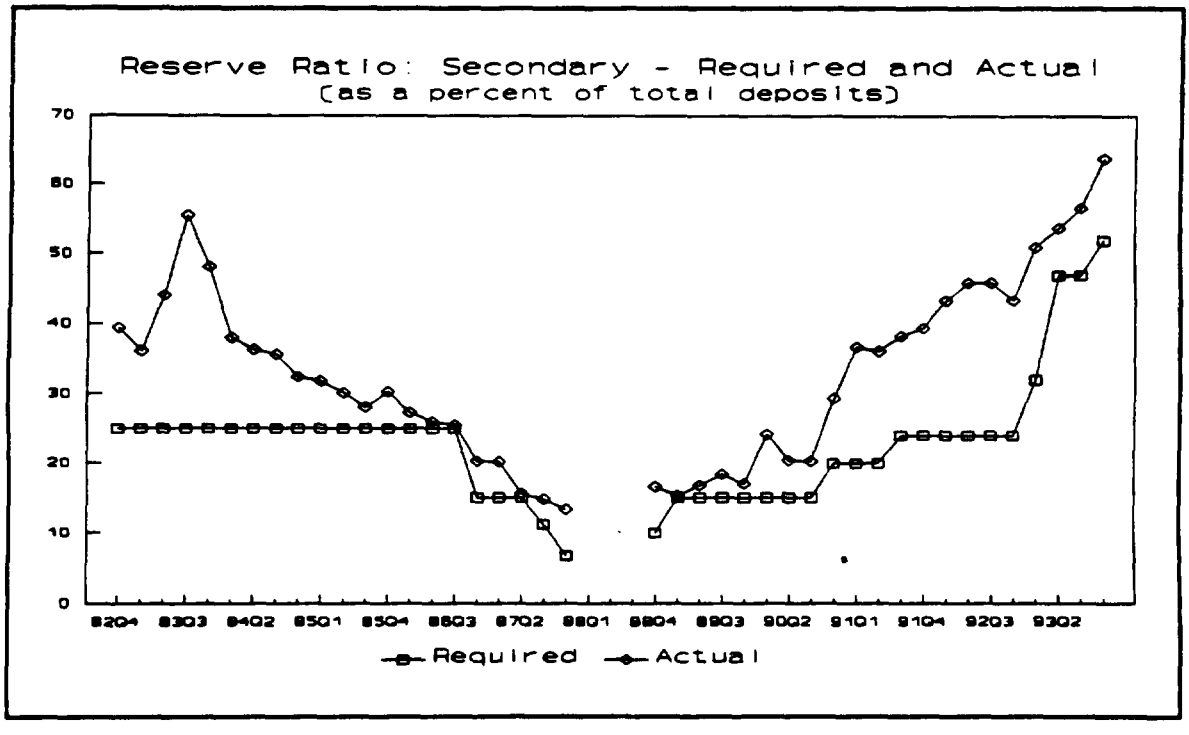


Figure 4.2: Secondary Reserve Ratios



returns do not merit the costs and reserve requirements may leave insufficient capital available to meet this threshold. If banks are earning high interest on 52 percent of their deposit base, the return to be gained in developing the loan portfolio may simply not be worth the trouble, relative to what could be earned in government securities. If the banks are indeed willing to hold the required amount and more, say for lack of good lending opportunities, than the need to even have such a reserve requirement is put into question.

4.11 Given the limited development of capital markets in Ghana, the demand for government instruments will remain strong. This suggests that secondary reserve requirements might be gradually reduced to levels consistent with other developing countries, as was done between 1987 and 1991.

4.12 Since early 1992, the government has used auctions for government securities to carry out its monetary policy. In part, these auctions have also been used to place government debt instruments that were issued to finance the fiscal deficit. In coming years it will be necessary for the government to run fiscal surpluses to accommodate private sector credit expansion. As this happens, newly issues government securities will not fully replace maturing ones.

4.13 The Open Market Committee meets once a week and examines data on monetary aggregates and important macroeconomic variables. From this data, monthly and then weekly targets for monetary variables (Monetary Base and M2) are calculated, which in turn determine the amount of securities to be offered in the auction. The auctions take place each Friday. As long as banks meet the BOG's supervision requirements, they have access to the auction. Banks may submit multiple bids of both prices and quantities. The Auction Committee records each bid in ascending order and the cut-off rate in theory is determined by the volume of sales desired. However, a bid may be rejected if it is "out of line" with the majority of bids and it is not of significant volume. After collating information on the quantities and rates, the Auction Committee makes a recommendation regarding the cut off rate, which is finally determined by the Governor. On the following Monday, the range of bid rates, the rates allotted in full and the weighted average interest rate for the week are reported, as well as the value of the securities available for the next auction. During the course of the week some securities are offered on tap at the weighted average rate. This was initially meant for small investors, but larger institutional investors have also been using the tap.

4.14 While the auction has functioned smoothly over the past two years, there are indications that the interest rates determined at auction may not completely reflect the market equilibrium. In practice, the auction has set cut-off rates so that the total volume of securities is *not* sold. Each week the discount houses take on the unsold portion of the auction at the auction rate. While it is understandable that the BOG may not want small bids at rates that vary considerably to skew the market, it is important given the government's choice to pursue indirect monetary policy through open market operations that the interest rate be allowed to clear the market so that the full quantity of securities is sold. A "managed" auction is in effect the equivalent of targeted interest rates. This is indeed a policy option, but the BOG could save itself much effort by simply targeting the interest rate explicitly and selling securities on tap.

4.15 There are some measures that the BOG could take to reduce "frictions" in the auction and to help promote an equilibrium outcome. When the results of the auction are announced it would be useful to include the amount of securities actually sold as well as the total amount of tap sales over the week. This would improve information available to bidders and assist the development of a pure market mechanism. The BOG might also assess the number and maturity structure of bids, to ascertain whether all of the instruments available are meeting a need. Reducing the range of securities available, may prevent markets from being too thin. Also, increasing the information available on conditions in both credit markets and the economy in general and the relationship between monetary aggregates and inflation would assist the Open Market Committee in refining the method for determining the quantity of securities to be sold in order to attain a specific inflation target.

4.16 There is much to be gained from promoting the fluid functioning of the auction market. In developed capital markets, rates on treasury bills are the benchmark from which all other rates are determined. These rates offer vital information on the supply and demand of credit in the market. To the extent that they are not allowed to clear the market they will not be providing useful information to the rest of the economy. Such information is vital for innovation and development in capital markets, both for innovation in short-term instruments and for the development of long-term market that can help to pool and dissipate risk. The key to these developments, however, is letting the equilibrium interest rate prevail.

C. Interest Rate Determination

4.17 Interest rates reflect the cost of capital. In a frictionless world, interest rates will represent the true opportunity cost of capital. In economies where many market imperfections prevail, however, interest rates may reflect high transactions costs, concerns over risk and even market structure as much as the cost of capital. In most capital markets, the benchmark rate is that on government securities, since they are generally the lowest risk and the least costly to administer. Rates rise from the benchmark depending on perceived costs and risks. In fluid capital markets, adjustments to the basic rate cause knock-on effects throughout the system. In Ghana, capital markets are thin and not very fluid. Until 1987, interest rates were directly controlled by the government, so experience in reading market signals and adjusting rates accordingly is still being acquired.

4.18 In theory, interest rates are influenced by a number of factors. In open capital markets, the base interest rate is by and large influenced by the world market rate. Constant arbitrage implies that the domestic rate must remain reasonably close to the world rate (adjusted for depreciation). Ghana still imposes capital controls,[21] so rates are not closely related to world rates (see Figure 4.3). In closed capital markets, the nominal interest rate will be close to the real rate plus the expected rate of inflation.[22] The real rate, in turn, is determined by the excess of the supply of money over its equilibrium level. This implies that there will be a strong relationship between inflation and nominal interest rates. This relationship seems to exist in Ghana (see Figure 4.4), but an econometric estimation shows that, the relationship is not statistically significant. The results must be taken as indicative since the statistical properties of relationship are very weak (the errors are not normal because interest rates were controlled up until 1987). The results do suggest, however, that the most important influence on the T-bill rate is the rate in the previous period.[23]

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[21] The following capital controls are in place: 1) all outgoing capital movements need approval from the BOG; 2) loans and overdraft facilities to resident companies controlled by non-residents require approval of the BOG; 3) private and commercial bank borrowing abroad should be approved by the BOG; and 4) foreign borrowing by Ghanaian nationals is subject to control.

[22] See Edwards, S. and M. Khan. " Interest Rate Determination in Developing Countries: A Conceptual Framework." National Bureau of Economic Research (NBER) Working Paper No. 1531, 1985.

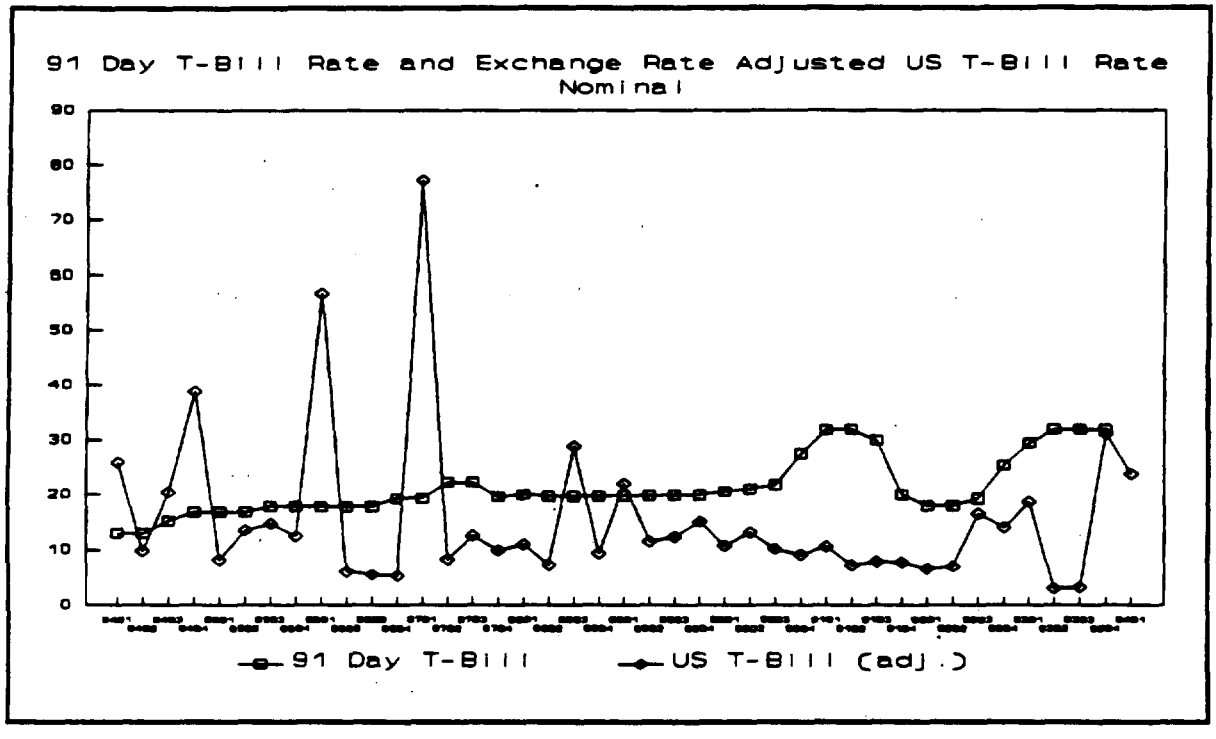
[23] Following Edwards and Khan's framework, the results of econometric estimation were as follows:
Modelling TBILL by OLS: 1984 (2) to 1992 (4)

Variable	Coefficient	Std.Error	t-value	PartR²
Constant	-13.446	16.149	-0.833	0.0233
USTBILL	-0.0042631	0.030091	-0.142	0.0007
INFL	0.045324	0.039785	1.139	0.0428
LGDP	1.4049	1.7845	0.787	0.0209
LM1_1	0.97685	2.2886	0.427	0.0062

(continued...)

4.19 This suggestion is confirmed by participants in Ghana's government securities markets. According to them, the two most important factors in determining the bids made are the rate determined in the previous week's auction and the BOG discount rate. In principle, the discount rate should reflect the rate at which the BOG will discount paper presented by the discount houses or by the banks if the BOG chooses to discount for the banks. In practice, there is limited activity at the discount window (reflecting the generally liquid state of the market) and the discount rate has come to play an important signaling role of the BOG's views on interest rates. For example when the discount rate was raised from 30 percent to 35 percent in March 1993, the rate on the 91-day Treasury bill increased from 25.4 percent to 29.5 percent and in January when the discount rate was lowered back to 30 percent, the 91-day rate fell from 32 percent to 27 percent. It is normal for bidders to follow market signals. The concern arises when the market is not clearing and interest rates remain constant for long periods. This implies that the rate is not responding to changes in the supply and demand of financial resources. When auctions are undersold at a given interest rate, it also suggests that the government's monetary objectives are not being met.

Figure 4.3: T-Bill Rates—US and Ghana
(In Percent)



4.20 Commercial bank rates have until very recently been relatively rigid in responding to changes in government interest rates (see Table 4.4). In addition, the structure of interest rates in Ghana shows some odd characteristics. For example, deposit rates ordinarily increase with the duration of the deposit. This was the case in the first and second quarters of 1992, but the third quarter 1992 through the first quarter of 1993 the opposite held. Since then, 3-24 month time deposit rates have been identical. Regarding lending rates, it is usually expected that riskier lending will gain the highest return—certainly a return higher than that to low-risk government

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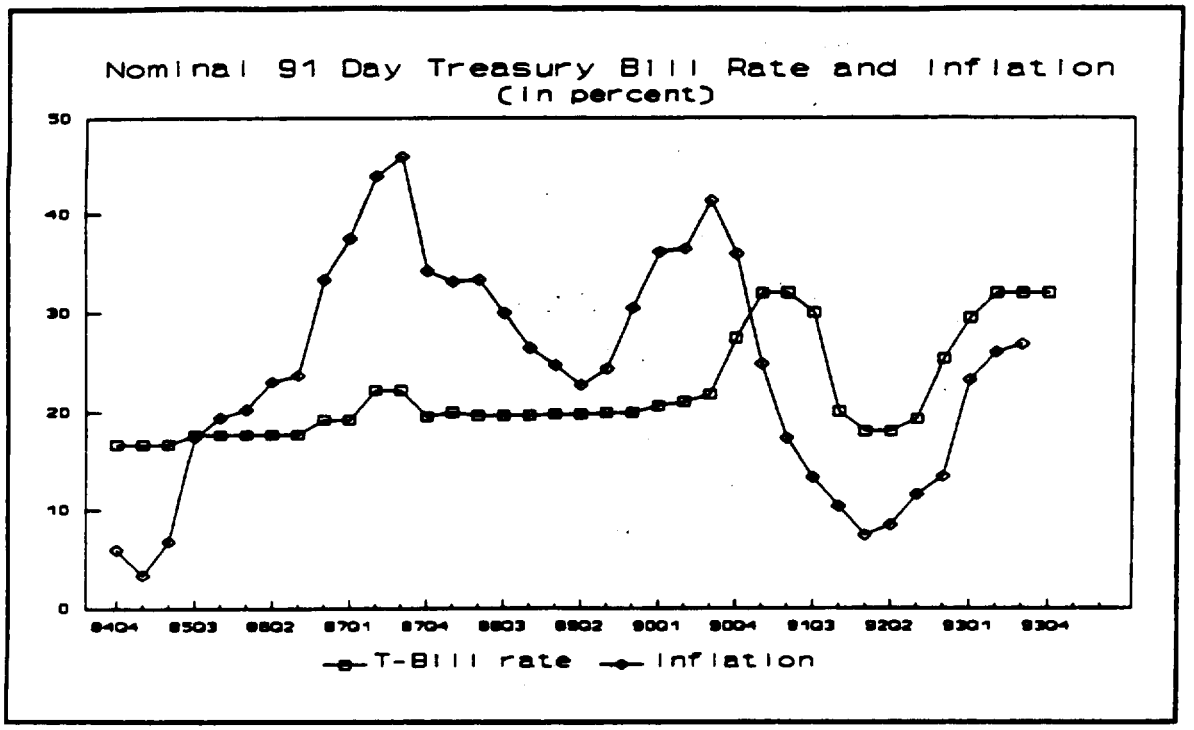
[23](...continued)

TBILL_1	0.73371	0.11877	6.178	0.5682

R^2 = 0.708035 F(5, 29) = 14.065 [0.0000] σ = 2.49985 DW = 1.17

Figure 4.4: T-Bill Rate and Inflation



treasury bills. While this was the case since 1992, the spread between the 91-day T Bill rate and unsecured loans has fallen from 11 percentage points in early 1992 to only 2 percentage points in the first quarter of 1993, providing the banks with a clear incentive to hold government securities as opposed to lending. By March 1994, the spread had once again widened to 6.5 percentage points.

4.21 It is possible that the banks were unwilling to raise lending rates, because few projects were able to borrow at such rates. Indeed, many banks negotiate rates significantly lower than the posted rates with their best clients, with whom they have had banking relationships for many years. Discussions with bankers indicate that they did little new lending during this period, preferring to place their funds in treasury bills and rolling over credit to existing clients.

D. Money Market Development

4.22 Well-developed money markets are essential to the development of the financial system. In the first instance, the BOG cannot control the monetary base if it does not have a monetary market in which to intervene in order to control the level of bank reserves. An active money market helps the financial system adjust to shocks by quickly transmitting signals on changes in market conditions. The development of secondary markets encourages trading of financial assets and the development of longer term markets, by providing an outlet for placing unwanted securities. The development of efficient and unfettered monetary markets has an important contribution to make in encouraging both individuals and institutions to keep their assets in financial rather than in non-financial assets. The assurance that financial assets are liquid improves confidence in the financial system.

4.23 As shown above, interest rates determined in competitive markets are one ingredient of well-developed financial markets. There are other factors that also need to be included. In general, the transition from a directly controlled financial system to one based on markets takes

Table 4.4: Interest Rates
(In Percent)

	1992 Q1	1992 Q2	1992 Q3	1992 Q4	1993 Q1	1993 Q2	1993 Q3	1993 Q4	1994 Q1
Central Bank									
Bank rate	20.0	20.0	26.0	30.0	35.0	35.0	35.0	35.0	30.0
91-day T-bills	18.0	18.0	19.3	25.4	29.5	32.0	32.0	32.0	27.0
Commercial banks									
Demand deposits	6.5	6.5	6.8	6.9	7.3	9.0	9.0	15.0	10.5
Savings deposits	16.0	16.0	16.0	16.0	19.0	22.0	22.0	22.5	21.5
Time deposits									
3 months	19.0	17.5	21.0	24.0	28.0	32.0	29.0	32.0	27.5
6 months	19.0	19.0	20.0	23.5	27.5	32.0	29.0	32.0	27.5
12 months	19.0	20.0	20.0	22.5	26.5	32.0	30.0	32.0	27.5
24 months	20.0	20.0	20.0	22.5	26.5	32.0	29.5	32.0	27.5
Lending rates									
Agriculture, forestry & fisheries	30.0	30.0	30.0	26.5	31.5	35.5	36.5	39.0	32.0
Export trade	26.5	26.5	26.5	26.5	31.5	35.5	36.5	39.0	32.0
Manufacturing	29.8	29.8	29.8	26.5	31.5	36.0	36.5	39.0	32.0
Others (unsecured)	29.0	29.0	29.0	29.0	31.5	36.0	36.5	39.0	33.5

Note: Rates presented are the upper boundary of the posted range.

Source: Bank of Ghana.

time. Market participants need to build up the skills necessary to understand and respond to market signals. This comes with experience in dealing with such markets. In addition, the development of such markets occurs most rapidly in a stable macroeconomic environment.

4.24 The government has tried to assist the development of money markets by creating the Consolidated Discount House in 1987 and the Securities Discount House in 1991. These institutions stand ready to act as market makers in the interbank market for reserves, trading a variety of approved reserves which the banks use to adjust their reserve position. They operate between the banks and the BOG rediscount window, and thus help to prevent the credit expansion that would occur if the banks had to borrow reserves from the central bank. The discount houses also have some important operating advantages over the banks—they have until 3:00 pm to lodge payments for transactions with same day settlement with the BOG, whereas the banks have until 2:00 pm. They also may borrow from the discount window up until 3:00 pm when the banks may only borrow up until 2:00 pm. This gives the discount houses an important role in settling balances within the system. The discount houses have introduced into the system a number of new techniques and they have aggressively marketed their services, but some constraints remain. The need to sell considerable government paper has led to a domination of the money market. The discount houses make bids in the auction, but have also committed themselves to pick up unsold portions of the auction. This indicates some lack of competition in the auction as discussed above. Other regulations have also been introduced by the BOG to discourage the sale of bills before maturity. Discussions with the discount houses suggested that one of the largest constraints to the development of their business was the lack of financial instruments other than those provided by the government.

4.25 As the volume of government debt runs down, the discount houses will be well placed to help create a more broadly based money market. In particular the development of private sector money market assets could make a big contribution to the system. The technical arrangements of the development of bankers acceptances are already in place, and a few of these instruments have already been marketed. The requirement to hold a 100 percent contingent liability has inhibited their further development and this requirement might be evaluated in the light of the credit risk involved. In addition, allowing banks to hold bankers acceptances in order to meet secondary reserve requirements and their acceptance as collateral at the discount window would help to develop the bankers acceptance market.

4.26 Secondary markets could also be encouraged by gradually removing the access of large institutional investors to the tap for government treasury bills. As it stands, institutional investors can go to the tap at any time during the week. This not only discourages competition in the auction but inhibits secondary market since the banks can obtain bills at that going rate at any time directly from the BOG.

4.27 A final factor that could assist the development of money market activity is the improvement of information on financial markets. All of the major institutions claimed that lack of information was a serious hindrance to participation in markets and the development of new and innovative ideas. The lack of information plus uncertainty has dampened interest in the development of longer term markets that are essential in helping to develop the depth and breadth of the financial system.

4.28 The government has made important changes in the way it carries out its monetary policy and in the functioning of money markets. These can be further complemented by renewed efforts to improve the flow of financial information and by reconfirming the importance of competitive markets. As the volume of government debt comes down, the development of private financial instruments can improve the liquidity of the financial system. All these measures are an important element of building confidence in the financial system so that investors with resources now held outside of the system might be encouraged to place them within the system.

Part 2. Financial Institutions

The basic institutional foundations for enhanced financial intermediation are already present in Ghana. Its bank financial institutions include the central bank—the Bank of Ghana—9 commercial banks, 3 merchant banks, and over 100 rural unit banks. Non-bank financial institutions include a stock exchange, 21 insurance companies, the Social Security and National Insurance Trust, two discount houses, the Home Finance Company, numerous building societies, a venture capital company, a unit trust, and a leasing company. Informal financial arrangements include "susu" collectors, who engage in mobilizing short-term savings, rotating credit groups, and traders and money lenders.

V. BANKS

5.1 The banking system is the core of the Ghanaian formal financial system. It contains 13 banks—6 commercial, 3 development, 3 merchant, and 1 cooperative bank. At the end of 1992, these banks accounted for almost 80 percent of assets in the financial system, excluding those in the BOG (see Table 5.1). The distinction between commercial, merchant, and development banks in Ghana is mainly historical (see Box 5.1). While the 1989 Banking Act distinguishes development banks from commercial banks in terms of paid-up capital, the two provide virtually identical banking services and are subject to the same regulatory provisions.

Table 5.1: Assets of the Financial System, 1992

Institution[a]		Billions of cedis	Percent	Percent, excluding BOG
Bank of Ghana		980.2	49.2	—
Banks	(13)	775.8	38.9	76.6
SSNIT		118.6	5.9	11.7
Ghana Stock Exchange		43.7	2.2	4.3
Discount houses	(2)	38.8	1.9	3.8
Insurance companies	(16)	22.0	1.1	2.2
Others (estimated)		14.5	0.8	1.4
Total		1,993.6	100.0	100.0
Assets as percent of GDP			50.6	25.7

[a] Figures in parentheses refer to number of institutions.

5.2 Since the implementation of the reform program in 1988, bank portfolios have been restructured, prudential regulations have been improved, and the regulatory framework has been strengthened. Further development of the sector is inhibited, however, by the dominance of state-owned banks, which limit competition and the introduction of innovative savings and financing instruments. As a result, there is little genuine intermediation between savers and investors. While banks rely on demand deposits for the mobilizations of resources, they extend only a small fraction of assets as loans to the private sector. According to the most recent data, Ghana's banking system as a whole allocates about 15 percent of its assets to loans and advances, while that figure is only 8 percent for commercial banks.

5.3 At end-1992, the Ghana Commercial Bank, the country's largest bank, accounted for 44 percent of the total assets of the banking system, excluding BOG. Between 1988 and 1992, the entry of three new private banks, more market-oriented policies, and a reduction in directed credit helped reduce market concentration, but the top four banks still accounted for 72 percent of the system's total assets (see Table 5.2.)

5.4 Ghana's two largest banks are wholly state owned, and at end-1992, the country's seven state-owned banks accounted for 70 percent of the banking system's assets, 76 percent of capital, 65 percent of deposits, and 63 percent of net loans and advances. The government also maintains significant minority holdings in private banks.

Box 5.1: Historical Perspective

Before independence, the West African Currency Board was responsible for central banking functions, and two British-owned banks provided commercial banking services. The Standard Chartered Bank (SCB) was established in Ghana in 1896, followed by Barclays Bank, established in 1917. In 1953, the Ghana Commercial Bank (GCB) became Ghana's first indigenous commercial bank. At the time of independence, the BOG was established to take over central banking functions.

Since independence, the initiative for expanding the banking system has come mainly from the Government. To provide long-term credit, three banks—National Investment Bank (NIB), Agricultural Development Bank (ADB), and Bank for Housing and Construction (BHC)—were established as development banks. The commercial Social Security Bank (SSB), established in 1977, is wholly owned by SSNIT. Its original objective was to provide banking services to workers. The Post Office Savings Bank, in business for many years before independence, was reorganized in 1975 as the National Savings and Credit Bank (NSCB), and has recently been merged with SSB. The Ghana Cooperative Bank (COOP) was established in 1975 to consolidate cooperative banking; it has been operating under a new, government appointed, management since 1991. The Government also holds a significant minority position in Standard Chartered Bank and Barclays Bank.

During the 1970s, two private banks were also established. Merchant Bank (Ghana) Limited was established as a joint venture between National Grindlays Bank of UK (now ANZ Bank), the GOG, the NIB, and the State Insurance Corporation (SIC). The Bank for Credit and Commerce International (BCCI), Ghana, was established in 1978 as a joint venture between BCCI and BOG to provide merchant banking services, but with the collapse of BCCI world-wide, the operations of BCCI in Ghana were also suspended.

No new banks were established during the 1980s, but in 1990 Ecobank Limited and Continental Acceptances Ltd. were established as merchant banks. In 1991, Meridien Bank was granted a license to operate as a private commercial bank.

Table 5.2: Banking System Indicators, 1988–92
(In Percent)

	1988	1989	1990	1991	1992
Size of Sector					
Number of banks	10	10	12	12	13
Banking system assets/GDP	21	22	19	19	23
Asset Concentration (% of total)					
of largest bank	55	57	54	52	44
of 4 largest banks	81	83	82	77	72
Public Sector Share					
of total asset	79	81	77	73	70
of total capital	NA	NA	78	77	76
of total deposits	73	79	73	71	65
of total advances	71	85	67	70	63

Source: Bank of Ghana.

5.5 At the end of 1992, Ghana had 328 commercial bank branches, resulting in a branch density of 2.11 per 100,000 people.[24] This branch density is similar to that in other developing countries. Also following the pattern of other developing countries, Ghana's commercial bank branches are concentrated in urban and semiurban areas, and only 89 branches are in rural areas. With 145 branches, 65 located in rural areas, Ghana Commercial Bank has the largest branch network. Overall, state-owned banks account for 84 percent of the branch network, compared with their 70 percent of the banking system's assets. Since the commencement of the financial sector reform program in 1988, there has been little branch expansion, and the distribution of bank branches is uneven across administrative regions. Consequently, access to commercial banking facilities is much easier in urban areas and in the southern part of the country.

5.6 In 1988, based on a major review of the financial system, the GOG began a comprehensive bank-restructuring program designed to improve the system's saving mobilization and resource allocation. The program sought to improve the supervisory and regulatory framework, to restructure banks financially, to institute liberal financial policies that fostered competition, and to invest in financial infrastructure (Box 5.2).

5.7 The reform exercise included the comprehensive financial rehabilitation of state-owned banks. Based on detailed diagnostic audits, a package of measures was introduced to restore each bank to solvency and rebuild its capital. During 1990 and 1991, some ₵62 billion in non-performing loans to state-owned enterprises and private companies were partially offset or replaced by interest-bearing FINSAP bonds, which totalled some ₵47.5 billion. With the assistance of a team of experts from Switzerland, each state-owned bank prepared a five-year business plan. These plans required banks to adopt new organizational structures, improve management information systems, reduce staff, close unprofitable branches, and reduce operating costs. Monitorable targets were set up for key financial indicators (such as capital adequacy, portfolio quality, deposits, loans and advances, profits, and costs. The top management of the banks was changed, and the Board of Directors reconstituted. The government, with the assistance from the Swiss team, now monitors operations in state-owned banks regularly.

A. Regulatory Framework

Before Financial Sector Reform

5.8 Before 1989, norms for minimum capital adequacy and prudential lending were not clearly defined by law. Banks failed to apply uniform accounting standards based on accepted accounting principles and had considerable discretion in their treatment of losses and income from loans. They had no legal obligation to build up loan-loss reserves, and as a result, virtually all of Ghana's banks had excessive concentrations of risk, insufficient capital, unrecognized loan losses, and reported inflated profits.

5.9 The BOG's ability to supervise banks was undercut both by omissions in the banking laws and by limited manpower. Legal penalties were insufficient to deter banks from imprudent financial behavior. Off-site supervision (which could have provided early signals of distress) was lax and on-site examinations were sporadic. The Banking Supervision Department was understaffed, and most examiners had no formal training in bank examination. The result was that Ghana's three largest banks had never undergone a comprehensive examination, and the BOG

[24] When combined with its 123 rural banks, there are some 2.85 branches per 100,000 people, or 1 branch per 35,000.

Box 5.2: Financial Sector Reforms

1986	
September	Introduced weekly foreign exchange auction.
1987	
September	Decontrolled maximum lending rates and minimum deposit rates.
October	Introduced weekly auction of treasury bills.
November	Established the Consolidated Discount House.
1988	
February	Decontrolled the minimum bank savings rate. Removed sectoral credit controls except for agriculture.
April	Established Foreign Exchange Bureaus.
September	Introduced 90-day BOG Bills for banks.
1989	
July	Adopted a comprehensive restructuring plan for banks.
August	Enacted a revised Banking Law providing for minimum capital, disclosure, and prudential lending guidelines.
September	Enacted the Insurance Law.
December	Introduced non-rediscountable, medium-term BOG instruments for banks with 180-day, 1-year, and 2-year maturities.
1990	
January	Appointed new bank managers for public sector banks; licensed two new merchant banks.
March	Unified bank cash-reserve requirements on demand, savings, and time deposits.
April	Unified the foreign exchange market.
May	Began restructuring three state-owned banks; SOE non-performing loans swapped with BOG FINSAP Bonds.
September	Enacted Non-Performing Assets (Loans, Investments) Recovery Law to expedite recovery of non-performing loans; created the Non-Performing Asset Recovery Trust and Non-Performing Asset Recovery Tribunal.
November	Opened Stock Exchange; introduced 30-day BOG bills, and 180-day, 1-year and 2-year T-Bills; introduced 5-year government stock; made BOG instruments available to the non-bank sector; abolished lending targets for the agricultural sector; prescheduled bank charges and fees; reduced cash reserve ratio to 22 percent; increased secondary reserves ratio to 20 percent; extended bank restructuring to three additional banks.
December	Remunerated cash reserves at 3 percent; swapped private sector non-performing loans of state-owned banks with BOG-issued FINSAP bonds; enforced capital adequacy standards.
1991	
March	Swapped private sector non-performing loans in sound banks for BOG-issued FINSAP bonds.
June	Opened second Discount House; established a private commercial bank.
July	Reduced cash reserve ratio to 18 percent; increased secondary reserves to 24 percent; and increased remuneration on cash reserves to 5 percent.
1992	
January	Licensed a leasing company.
October	Enacted a new BOG Law providing for stronger supervisory and regulatory powers.
1993	
March	Reduced cash reserve ratio to 10 percent; increased secondary reserve ratio to 32 percent.
May	Enacted Financial Institutions (Non-Banking) Law to provide the supervisory and regulatory framework for non-bank financial institutions and to encourage competition among commercial banks; enacted Home Mortgage Finance Law to support development of housing finance.
June	Enacted Finance Lease Law to further the development of leasing industry.
September	Reduced cash reserve ratio to 5 percent; imposed temporary additional 15 percent secondary reserve ratio bringing it up to 52 percent.

was too poorly informed about the financial condition of the country's banks to detect financial and managerial weaknesses.

After Financial Sector Reform

5.10 In 1989, seeking to improve the country's regulatory and supervisory framework, Ghana enacted a new banking law. This law specifically defines capital adequacy and minimum capital requirements, prudential lending guidelines, and financial reporting procedures. It imposes sufficient and explicit safeguards against and penalties for excessive risk taking. It standardizes and broadens requirements, which are now far more rigorous. Together, these provisions have enabled the regulatory authorities to monitor the financial condition of banks (Box 5.3).

5.11 As part of banking sector reform, the BOG's examination and supervision functions were upgraded and a new, comprehensive, systems of returns was introduced. Bank are now required to submit 12 separate returns at varying intervals (Box 5.4). These returns provide the BOG with sufficient information to undertake systematic off-site analysis of commercial bank performance and financial condition.

5.12 To date, Ghana's bank examiners have been receiving and analyzing returns regularly. Their computerized analysis is used to formulate an inspection strategy for each bank. Staffing in the Supervision Department was increased from the pre-reform level of about 33 to 85, 63 of whom are field examiners. Through twinning arrangements and specialized training, bank examination skills have also improved considerably, as the commercial banks acknowledge. Ghana's Banking Law requires the BOG to examine each bank at least once a year, and this requirement, too, is being met.

5.13 In order to standardize accounting practices, the BOG has prepared a *Manual of Accounting* for banks. By and large, the manual conforms to international accounting standards. A standardized system of loan classification, provisioning, and income recognition with explicit criteria has also been introduced. Commercial banks are required to recognize loan losses early. The much higher level of loan-loss provisioning that has prevailed in Ghana's banks since the reforms reflects substantial progress in the supervisory and regulatory system.

5.14 Other than minimum capital requirements, Ghana imposes no explicit entry or exit restrictions on its banking sector. Banking laws and regulations also do not attempt to segment the sector, and actual exit and entry is controlled by the BOG in consultation with the GOG.

5.15 Since 1989, three new banks have been licensed. While data on applications for bank licenses received and rejected by the BOG are not available, the authorities have indicated their willingness to license banks promoted by financially sound investors. Following the parent company's world-wide collapse, BCCI (Ghana) is operating at minimal levels under the supervision of lthe BoG. Ghana Cooperative Bank, which had a very high level of non-performing loans, a negative net worth, and nonviable operations, is now under new management appointed by the government.

5.16 Branch closure also requires the prior approval of the BOG. Reflecting cost-reduction efforts, commercial bank branches decreased in number from 405 in 1988 to 328 in 1992. Recognizing the importance of branch profitability, regulatory authorities in principle maintain a flexible approach toward branch closure. But data on branch profitability is not available, and some banks contend that they are still operating unprofitable, or marginally profitable, branches, implying that further branch closings may be needed.

Box 5.3: Ghana's 1989 Banking Law

Capital Requirements

The 1989 Banking Law prescribes minimum capital requirements. For commercial banks with at least 60 percent Ghanaian ownership, minimum paid-up capital is ₵200 million. For foreign banks (where Ghanaian ownership is less than 60 percent) minimum paid-up capital is ₵500 million. Banks in the "development banking business" must have minimum paid-up capital of ₵1 billion.[1]

Capital Adequacy

The Banking Act prescribes a minimum capital adequacy ratio of 6 percent. At the discretion of BOG, the ratio can be increased for a particular bank or in general. The 6 percent is lower than recommended under the Basle Guidelines. However, the lower ratio is offset by a more conservative risk-weighting method than is suggested in the Basle Guidelines (see below).

The Banking Act prescribes a method for computation of capital adequacy based on adjusted capital and adjusted asset base. It itemizes the adjustments in capital and assets required for computing the ratio and defines the meaning and relationship between primary and secondary capital. In keeping with international practice, secondary capital cannot exceed 50 percent of primary capital in the adjusted capital base. The criteria for risk-weighting assets is conservative. Unlike the Basle Guidelines, which recognize a spectrum of risk assets, the Banking Act in Ghana recognizes only two classes of risk assets—assets that require no capital backing and assets that require full capital backing. Besides cash, risk-free assets are mainly BOG and GOG securities, overnight balances at discount houses, and a few other items excluded from both the asset and liability sides of the balance sheet. All loans and advances and off-balance sheet engagements are required to be fully backed up by the required amount of capital. No distinction is made among types of loans and advances.

General Provisions

- Banks must establish a Reserve Fund from annual profits. The extent of funding ranges from 50 to 12.5 percent of net profits, depending on the ratio of Reserve Fund Balances to paid-up capital. The Reserve Fund is equivalent to a General Loan-Loss Reserve Fund.
- Banks cannot lend more than 25 percent of their net worth by way of secured loans and not more than 10 percent of net worth by way of unsecured loans.
- Banks may not undertake non-bank activities directly but can do so through a subsidiary company. The law also regulates equity and loan exposure of a bank in its subsidiaries, thus providing safeguards against connected and insider lending.
- The BOG has extensive powers to examine banks, issue cease-and-desist orders, and if necessary to assume control of banks that are financially weak or not in compliance with provisions of the Banking Law.
- Bank auditors must prepare a long-form audit report and must analyze and comment on the management, accounting, and audit controls in force in banks under review.
- Client information may be revealed only against a court order or at the request of the client.
- Penalties for noncompliance with the 1989 Banking Law were increased.

[1] Presumably, the higher minimum capital requirement for development banks was based on the notion that development banks undertake medium and long-term lending and are therefore exposed to greater loan-loss risks. However, the definition of "development banking business" is not clear. The section prescribing minimum capital for development bank appears to suggest that development banking means medium or long-term financing of trade, industry, commerce or agriculture. However, this definition does not appear to be exclusionary since the general definition of "business of banking" includes medium and long-term loans. It is, therefore, not clear whether or not a bank with minimum paid-up capital of less than ₵1 billion can undertake medium- or long-term lending.

Box 5.4: Prudential Returns Submitted to the Bank of Ghana

Liquidity reserve ratio	Weekly
Statement of assets and liabilities	Monthly
Large exposure on advances and deposits	Monthly
Analysis of overdrafts, loans, and advances	Monthly
Capital adequacy returns	Quarterly
Maturity profile of assets and liabilities	Quarterly
Current year operating results	Quarterly
Classification of non-performing loans	Quarterly
Consolidated balance sheet	Quarterly
Capital expenditures	Half yearly
Statutory audit returns	Half yearly
Branch closing and/or relocation	As necessary

Source: Bank of Ghana.

5.17 At present, Ghana's banks have no explicit deposit-insurance scheme. However—to the extent that most banks are state owned and that the BOG has provided support to restore their solvency—a government-financed deposit insurance implicitly exists.

B. Financial Performance

5.18 Assessing the efficiency of the Ghanaian commercial banking system in general is difficult because of the wide variety of services offered by individuals banks and because of differences in capital structure, branch networks, and accounting practices. To analyze banks' financial performance, sound accounting data is needed from which ratios on operating assets, income, and equity can be constructed. Since data on average shareholder funds is not available for most banks, this report will deal with only the first two.

Trends in Financial Ratios

5.19 Since the inception of the Financial Sector Reform Program, Ghana's bank accounts have been audited according to standards that generally conform to international accounting conventions. Together with the country's uniform system of loan classification and provisioning, this provides a basis for meaningful analysis of financial banking sector performance between 1988 and 1993.[25]

5.20 As measured by operating assets and income ratios, the financial performance of Ghana's banks suggests that there has been considerable success in restoring the viability of the banking system. Despite the need to undertake massive loan write-offs, for instance, the turnaround in the financial performance of state-owned banks has been significant.

[25] Comparison with financial performance prior to 1988 is less meaningful because no proper system for auditing or standardized system of accounting was then in place. Before 1988, banks reported interest income on non-performing loans on an accrual, instead of a cash basis, and little provision was made for bad or doubtful loans.

5.21 Operating-asset ratios show the relation of revenues and expenses to total assets. Table 5.3 shows the key operating-asset ratios for the entire Ghanaian banking system (excluding COOP and BCCI) from 1988 through 1993. During this period, the after tax profits to average assets ratio—which relates net profits to total resources under management—improved considerably. Operating expenses and loan-loss provisions declined substantially relative to average assets. Since the profit after tax ratio is affected by changes in tax policies, a more trustworthy measure of performance is the ratio of net operating income to average assets. This ratio also suggests that the banking system's financial performance improved because operating expenses (as a percentage of average assets) were reduced.

Table 5.3: Operating Asset Ratios, 1988–93
(Percentage of Total Average Assets)

Year	Operating income	Operating expenses	Net operating income	Loan loss provision	Taxes	Profit after tax
1988	8.2	6.9	1.3	5.3	0.8	-4.8
1989	7.5	7.0	0.5	6.6	0.3	-6.4
1990	9.2	5.2	4.0	3.5	1.2	-0.6
1991	10.9	4.9	6.0	2.8	1.9	1.3
1992	9.0	4.9	4.1	1.5	1.2	1.5
1993	9.3	4.8	4.5	1.2	1.7	1.6

Source: Bank Monitoring Reports, and World Bank staff estimates.

Causes for Improvement

5.22 Perhaps most significant for Ghana's financial turnaround was the removal of a substantial portion of non-performing loans. In 1990 and 1991, as part of the government's Financial Sector Reform Program, non-performing loans were offset against monies owed to the BOG and the GOG, or swapped with government-guaranteed, interest-bearing bonds issued by the BOG, to get them off the books of the banks. The non-performing loans removed at that time represented about 41 percent of total outstanding credit extended to state-owned enterprises and private firms since 1988. Of this ₵62 billion total, about ₵47.5 billion was replaced with bonds set to mature in two to five years and earning 7 percent to 9 percent in interest. (In most instances, these bonds have since been rolled over for bonds with interest rates of about 15 percent.) Though the interest rate on these bonds is much lower than rates paid on other BOG securities, the impact of these bonds on assets and profitability has been considerable. Ghana's banks were able to swap nonincome-earning, bad loans—which required substantial loan-loss provisions from profits—into risk-free assets offering a low but steady interest income. If this asset swap had not occurred and banks were required to make loan-loss provisions according to the new guidelines, state-owned banks would have continued to show losses and negative net worth.

5.23 The phased reduction in the cash-reserve ratio from 28 percent to 5 percent and increased yields from risk-free assets qualifying as secondary reserves also helped to improve pre-tax performance. A large portion of secondary reserves is invested in BOG bills and overnight deposits with Discount Houses (which in turn invest these funds in BOG and GOG securities).

5.24 Between 1988 and 1992, returns on these investments ranged from 18 percent to an attractive 30 percent. Secondary reserve requirements (as a share of deposit liabilities) increased from 15 percent in 1989 to 52 percent by the end of 1993. At the end of 1993, total actual reserve assets accounted for 72 percent of total assets of banks (see also Tables 4.1 and 4.2). As a result, there was a substantial increase in interest income from risk-free assets, which now account for a growing share of total interest income (see Table 5.4). Because assets qualifying as secondary reserves do not require any capital backing or loan-loss provisions, increased remuneration from secondary reserves results in significantly higher operating income.

Table 5.4: Share of Interest Earnings from Loans, 1988–92
(In Percent of Total Interest Earned)

Year	Bank A	Bank B	Bank C	Bank D	Bank E
1988	55	80	83	84	90
1989	27	74	70	82	81
1990	22	25	70	56	51
1991	21	20	36	30	28
1992	21	35	43	38	29

Source: Bank Monitoring Reports.

5.25 Financial performance was further spurred by the liberalization of lending rates and elimination of the requirement that loans to state-owned enterprises or to the agricultural sector be granted at effectively subsidized interest rates. While before these reforms average yields on loans were estimated to have been 15 percent, they were estimated at 22 percent to 45 percent between 1990 and 1992. (Yields varied from bank to bank and began declining in 1992.) Yet even where loans and advances did not increase as a percentage of total assets, banks were able to use the liberalized interest rate environment to increase their incomes from loans and advances, partially offsetting the cost of meeting more stringent requirements for loan-loss provisioning.

5.26 While the cost of deposits increased substantially following reform, more than half of total deposit liabilities were still demand deposits with low interest rates, and interest rates on demand deposits are still lower than those on time or savings deposits. Between 1988 and 1992, the weighted average cost of funds for banks did not increase significantly, ranging from 10.7 percent to 12 percent.

5.27 Finally, while staff salaries did increase in real terms in state-owned banks, staff rationalization helped decrease costs as a percentage of average assets. In state-owned banks, staffing levels declined by 38 percent (from 12,902 to 7,962) between 1988 and 1992, and staff productivity improved substantially throughout the entire banking system (Table 5.5).

C. Capital Adequacy and Liquidity

5.28 Between 1988 and 1992, Ghana's banking system as a whole went from holding negative shareholder funds of ₵6.9 billion to a positive position of ₵85 billion. Negative after-tax returns on shareholder funds increased to a nominal 15 percent in 1991 and 18 percent in 1992 (the real rate of return was -3 percent in 1991 but rose to 7 percent in 1992). At end-1992 the ratio of shareholder funds to total assets was a healthy 10.9 percent and the ratio of shareholder funds to net loans and advances was 63 percent.

Table 5.5: Indicators of Staff Productivity, 1988–92

	1988	1989	1990	1991	1992
	(in millions of cedis)				
Assets per employee	16	23	45	59	74
Operating income per employee	1.2	1.5	3.5	5.9	6.8
	(in percent)				
Staff-cost share of operating income	27	30	25	21	28

Source: World Bank staff estimates.

5.29 The revised Banking Law set the minimum capital adequacy requirement at 6 percent of adjusted capital to adjusted assets (see Box 5.3). Capital is classified into primary and secondary. Primary capital includes equity capital, disclosed free reserves, and the Reserve Fund created from transfer of profits. Deductions from primary capital include good will, intangible assets, fixed assets, and revaluation surpluses. Secondary capital includes hybrid capital instruments (such as unsecured subordinated debt, fixed term capital instruments, and redeemable preference shares) with terms in excess of five years. Under the law, for the purposes of capital adequacy calculations, secondary capital cannot amount to more than half of primary capital. The "adjusted asset base" includes total assets plus off-balance sheet engagements (less cash), GOG and BOG securities, call-money at discount houses, investments in capital of other banks, connected lending of a capital nature, investments in unconsolidated subsidiaries, good will, and intangibles.

5.30 There has been considerable progress in ensuring compliance with the capital adequacy norms since the beginning of the bank restructuring program. With the exception of the two banks taken over by the BOG (COOP and BCCI), all banks are now in compliance with capital adequacy norms, and most have capital adequacy ratios higher than required (see Table 5.6).

Table 5.6: Capital Adequacy Ratios of Banks, 1989–92

	Number of banks			
	1989	1990	1991	1992
Below 0 percent	6	1	1	2
1-6 percent[a]	1	1	1	0
7-12 percent	3	4	6	6
13-18 percent	0	3	2	3
19-24 percent	0	3	1	1
25 percent and above	0	1	2	1

[a] A 6 percent minimum capital adequacy ratio is required by the 1989 Banking Law.

Source: Bank of Ghana.

5.31 Because of the high reserve requirements—combined primary and secondary reserve ratios between 1988 and 1992 have ranged from 36 percent to 42 percent—banks in Ghana are very liquid. Currently, the total reserves ratio stands at 57 percent, made up of 5 percent in cash reserves, 37 percent in secondary reserves, and 15 percent in temporary secondary reserves. By

and large, banks have complied with and even exceeded government reserve requirements. While higher than required holdings of secondary reserves probably stem from the risk-free yields offered by BOG bills, the reason for higher than required cash-reserve ratios is less clear. Most financial transactions in Ghana, however, are on a cash basis, and it is likely that banks have had to maintain high working cash balances and to forego interest and investment income.[26] A more efficient payments system based on greater use of checks and bank transfers would reduce the need for large working-cash balances, although these would still be needed to cover large cash withdrawals at the end of the month. Cash reserve ratios based on month-end figures are higher in Ghana than those based on average daily balances.

D. Banking Services and Efficiency

Deposit Mobilization

5.32 Between 1988 and 1992, Ghana's bank deposits grew at an average annual rate of 31 percent, or 6.6 percent in real terms. The ratio of bank deposits to GDP changed only marginally, from 15.1 percent to 16.5 percent. Banks still rely mainly on demand deposits; long-term savings are not entering the banking system (see Table 5.7).

Table 5.7: Structure of Deposit Liabilities, 1988–92
(In Percent)

	1988	1989	1990	1991	1992
Total deposits/GDP	15.1	17.1	15.7	16.7	16.5
Structure of deposits:					
Demand	56.2	65.6	67.4	59.7	55.5
Savings	29.6	27.7	27.3	32.9	32.7
Time	14.1	6.7	5.3	7.4	11.8

Source: Bank of Ghana.

5.33 Until recently, high cash-reserve requirements on banks reduced their incentive to mobilize long-term savings at high interest rates. Real interest rates on savings and time deposits, therefore, remained negative until 1991. Ghana's predominantly state-owned banking system, furthermore, effectively limited competition for savings. Lending opportunities in the real sectors of the economy were limited by credit ceilings and uncertain macroeconomic conditions, while potential savers mistrusted the quality and confidentiality of financial services offered by banks. Finally, attractive returns on short-term BOG and GOG securities diverted savings away from time and savings deposits.

Lending

5.34 Although credit to the private sector has increased in recent years to 4.5 percent of GDP in 1992, this ratio is still very low by international standards, and, in fact, is below the level of

[26] At times, about one quarter of M2 is effectively sterilized as float because of delays in transmission and check clearance. Up-country checks take several weeks to clear. The public, therefore, relies heavily on cash, which raises the currency/deposit ratio to levels that can create seasonal monetary management problems for the BOG.

1988 (see Table 5.8). The same is true for net loans in relation to total assets which is still very low, and actually declining between 1988 and 1992 despite the liberalization of lending rates.

Table 5.8: Loans and Advances, 1988–92
(In Percent)

	1988	1989	1990	1991	1992
Private Credit/GDP	5.1	2.9	2.8	3.1	4.5
Nominal growth rate	12	-21	37	36	72
Real growth rate	-16	-46	5	7	61
Net loans/total assets	21	13	12	12	17
Gross loans/total assets	37	30	21	19	23

Source: Bank of Ghana.

5.35 Although high reserve requirements took up a large portion of bank deposits, banks could still have lent more of their deposits (see also Tables 4.1 and 4.2). They did not expand lending for other reasons. Squeezed by credit ceilings for individual banks (not removed until 1991) on the one side and capital adequacy requirements on the other, state-owned banks did not have lending headroom. Risk-free interest from BOG bills and good rates from short-term placements with the discount houses reduced the relative attractiveness of loans. The economy, furthermore, was still adjusting; inflation was high; and the government attitude toward the private sector was ambivalent, so that banks were not willing to undertake these risks. Finally, the legal and information infrastructure in Ghana makes it hard to expect adequate security for loans and to enforce contracts.

5.36 Although it has not grown substantially, there has been considerable improvement in the quality of Ghanaian banks' loan portfolio. System-wide, the ratio of net loans and advances to gross loans and advances increased from 60 percent in 1988 to 76 percent by end-1992. This was largely because state-owned banks had removed non-performing loans from their books in 1990 and used conservative lending policies (buttressed by stronger BOG supervision) to contain fresh loan losses.

5.37 A sectoral breakdown of Ghana's outstanding bank loans and advances indicates a diversified portfolio. Short-term loans to existing customers make up the bulk of credit extended by Ghana's banking system. Because of the short-term nature of their deposit liabilities and the uncertain macroeconomic environment, banks have been reluctant to extend medium-term credit. For long-term funds Ghanaians have had to depend primarily on external lines of credit. Loan losses under these lines of credit, however, have been high, and the cedi depreciation adversely affected the viability of projects.

5.38 Operating expenses and intermediation costs in Ghana's banks are still high. Breaking down the intermediation costs for five state-owned banks, they appear slightly lower than those in long-established, privately owned banks, primarily because state banks have lower staff costs (see Table 5.9). Banking intermediation costs in Ghana are higher than in other countries, particularly when considering the fact that the majority of the assets held by banks are reserve assets that require little maintenance. Costs are raised by the use of low denomination currency and the use of cash for financial transactions.

5.39 Under normal competitive conditions (and given lower levels of secondary reserves) operating expenses are likely to be higher relative to operating income as interest income from loans and other financial services replaces income from risk-free assets. Building a loan portfolio and providing nonloan financial services is more expensive, requiring higher information and maintenance costs. Increased competition among banks, however, should, over time, reduce these costs.

Table 5.9: Intermediation Costs in Five State-owned Banks, 1988–92
(In Percent of Total Assets)

	1988	1989	1990	1991	1992
Staff expenses	3.47	3.64	2.14	2.63	3.63
Office expenses	0.50	0.56	0.46	0.53	0.37
Other operating expenses	0.85	1.13	0.71	0.75	0.85
Depreciation	0.50	0.27	0.26	0.28	0.23
Total Operating Costs	**5.32**	**5.60**	**3.57**	**4.19**	**5.08**
Loan loss provisions	4.77	6.85	3.31	4.52	2.85
Taxes	0.67	0.03	0.77	1.50	0.25
Total intermediation cost	**10.76**	**12.48**	**7.65**	**10.22**	**8.18**
Intermediation Cost by Private Banks					
Bank A	7.23	7.91	6.80	9.76	9.85
Bank B	6.95	8.39	7.75	6.63	6.62

Source: Bank Monitoring Reports.

5.40 A key ingredient of efficient financial intermediation is financial innovation—the ability to adapt financial products and services to customer needs and thereby to capture a larger share of the market. Financial innovation flourishes in a competitive environment and centers on four key characteristics of financial contracts—price risk, liquidity risk, credit risk, and transaction costs. To date, Ghana's banking system made few innovative efforts to respond to the needs of potential savers and borrowers.

5.41 Ghanaian lending is done chiefly with overdrafts and loans collateralized by fixed assets, principally house and land. Inventory financing is limited and receivable financing virtually nonexistent. Not much has been done to diversify the types of collateral that are acceptable. Forward foreign exchange cover, for instance, is only available on a case-by-case basis. Such lending techniques as asset securitization, commercial paper, bankers acceptances, and warehouse warrants are, by and large, not used in Ghana. Whatever innovations have occurred in these areas has come from non-bank financial institutions or private banks.

Savings Instruments

5.42 The range of financial instruments Ghana's banks offer both savers and borrowers is limited. Banks offer only the basic types of deposit accounts as separate, stand-alone facilities, although Ghanaian savers would prefer accounts that also offer liquidity, checking facilities, and good returns. Recently, some private banks introduced savings products with these features, but their availability is limited to established customers who maintain large deposits.

5.43 Despite relatively high and variable rates of inflation, the banking system has not introduced financial instruments offering rates indexed to inflation. To compete with high interest rates available on BOG and Treasury bills, some banks have started offering negotiable certificates of deposit that match the tenor and rate available on government securities. But the minimum subscription amount is large, ranging from ₵50,000 to ₵100,000, the instrument has not been actively promoted, and most banks still rely on demand deposits.

5.44 Since 1985, banks have provided facilities for operating foreign exchange accounts. Funded from foreign remittances and denominated in foreign currency, these accounts protect savers from currency risk. Banks have not been eager to promote these accounts and to assume the exchange risks and investment problems they entail. But while they are available in only a few branches, and there are restrictions on the disposition of funds and on the interest they may earn, foreign exchange accounts have facilitated the flow of private, foreign savings into the country from Ghanaians residing abroad.

Private Versus State Banks

5.45 As Table 5.10 shows, operating expenses ratios and performance have improved for all state-owned banks and two of the private banks operating in Ghana before 1989 since the introduction of financial-sector reforms. But performance differs significantly between state-owned and private banks.

Table 5.10: Operating Asset Ratios of Selected State and Private Banks, 1988–92
(In Percent of Average Assets)

	Operating income	Operating expenses	Net operating income	Loan loss provisions	Taxes	Profits after tax
1988						
State	7.4	6.8	0.6	5.7	0.6	-5.6
Private	10.0	7.5	2.5	1.4	0.1	1.0
1989						
State	6.0	6.6	-0.5	7.3	0.1	-7.9
Private	8.9	7.7	1.2	3.9	0.5	-3.2
1990						
State	8.5	4.7	3.7	3.8	0.7	-0.7
Private	10.8	6.2	4.6	2.2	1.2	1.3
1991						
State	9.8	4.1	5.7	3.0	1.4	1.2
Private	14.3	8.3	6.0	1.2	3.5	1.3
1992						
State	7.5	4.2	3.3	1.7	0.5	1.1
Private	13.5	7.9	5.6	0.7	2.7	2.2

Source: Bank Monitoring Reports, and Annual Reports.

5.46 Before restructuring—despite higher operating expenses (as a share of average assets)—for instance, private banks had a higher after-tax return on average assets because they had higher

quality assets that yielded higher returns. State-owned banks carried low-return, high-risk assets from the pre-reform era, when the development objectives of the government rather than commercial reasons guided bank lending. After restructuring allowed them to shed many of these accounts, state-owned banks' net loans (as percent of total assets) came down considerably. Conversely, the liberalization of lending rates allowed for higher interest income from loans so that private banks maintained a higher share of their total assets as net loans. State-owned banks also provided free financial services to the government, depleting non-interest income, and did not encourage staff to seek out the most profitable uses for bank money. Private banks are better insulated against noncommercial considerations and have more control over their choice of investments and the setting of fees on financial services. The private banks' higher operating costs apparently paid off in higher net operating income and profits.

Old and New Banks

5.47 Table 5.11 shows key performance indicators for seven banks operating before 1989 and two private banks established during the 1990s. Differences in performance are considerable.

Table 5.11: Performance Indicators for Old and New Banks, 1991 and 1992
(In Percent of Operating Income)

	Interest margin	Net interest income	Operating expense	Loan loss provision	Profit after tax[a]	Net advances[b]	Demand deposits
1991							
Old banks	55.0	68.3	41.4	27.2	14.9	12.9	63
New banks	47.0	45.3	39.3	8.4	39.5	23.3	48
1992							
Old banks	65.8	74.6	52.6	17.3	22.1	14.4	57
New banks	58.4	63.9	37.0	4.2	38.9	24.2	39

Note: Old banks exclude Merchant Bank and Coop Bank; New banks exclude Meridien.

[a] Percentage shares of total assets.
[b] Percentage shares of total deposits.

Source: Bank Monitoring Reports, and Annual Reports.

5.48 Despite a lower interest margin, the newer banks have lower operating expenses and loan losses. Their much lower level of loan-loss provisions leads to considerably higher profits after tax. Although the higher share of loans to total assets derives mainly from one bank, the new banks have in general lent more. They can also maintain a lower share of demand deposits to total deposits because they have been more successful than other banks in mobilizing longer-term savings from the public.

VI. NON-BANK FINANCIAL INSTITUTIONS

6.1 By extending the range of available options, non-bank financial institutions (NBFIs) enhance the ability of savers and investors to manage economic risks. NBFIs typically target specialized niches of savers and investors, developing their comparative advantage, in areas where commercial banks have limited ability to provide adequate services (such as equity, long-term credit for industry or housing, and small-scale savings). By extending financial services beyond the range typically offered by commercial banks, NBFIs also increase competition and efficiency in the financial sector as a whole.

6.2 In Ghana, the NBFI sector is relatively undeveloped, yet by the end of 1992, the sector accounted for 24 percent of the total assets in the financial system, excluding BOG (see also Table 5.1). As it now stands, the Social Security and National Insurance Trust (SSNIT) accounts for about 46 percent of NBFI assets, the Stock Exchange for about 18 percent, the insurance sector for 9 percent, and two discount houses for about 16 percent. The remaining 11 percent includes such NBFIs as the Home Finance Company and the Ghana Leasing Company.

6.3 The NBFI sector faces many of the same obstacles as the formal banking sector. Before 1993, state dominance and a poor regulatory environment limited the role of private NBFIs, which in turn inhibited the development of new financial instruments that could have allowed portfolio managers to hedge risks in an unstable macroeconomic environment. Macroeconomic instability and lack of confidence in the formal financial system have also limited the NBFIs' ability to mobilize savings. As a result, NBFIs have been largely unable to provide long-term finance to the private sector.

6.4 Yet there are now promising signs that NBFIs are beginning to play a more active role in the economy. Although still in the early stages of its development, the Ghana Stock Exchange has received international attention and attracted significant amounts of foreign portfolio investments. The NBFI Law of 1993 also paved the way for greater private sector involvement in NBFIs (with the exception of insurance NBFIs, which continue to suffer from an inadequate regulatory environment).

A. Contractual Savings Institutions

6.5 In many countries, savers use contractual savings institutions (life insurance companies, occupational pension schemes, national provident funds, and funded social security systems) to diversify risks. Because of their size, the portfolios of these institutions are typically managed by professional investors. Small-scale savers thus benefit from the expertise provided by fund managers and often achieve returns on their savings in excess of commercial bank deposit rates. Because of their long term—and generally predictable—liability structure, contractual savings institutions can also be a good source of long-term financing for private investment. In many countries where commercial banks are unwilling to extend the maturity on credits, private sector corporations can nevertheless raise funds through the issuance of corporate bonds and equities. In Ghana, however, contractual savings institutions have not yet sufficiently developed to perform these functions effectively.

Social Security and National Insurance Trust (SSNIT)

6.6 SSNIT is a statutory body governed by the 1991 Social Security Law. It is charged with the responsibility for collecting social security contributions and making social security payments

to participants upon their retirement. Before 1991, SSNIT administered the National Provident Fund under the 1972 Social Security Decree. The 1991 law, however, transformed the provident fund scheme into a pension scheme. SSNIT is now set up as a social insurance scheme that:

- has a defined (partially funded) benefit;
- funds benefits with employer and employee contributions;
- is compulsory for corporate and government employees;
- accumulates contributions in excess of current benefit outlays in a fund;
- secures individuals' rights to benefits without means testing; and
- links contributions and benefits to salary.

6.7 All establishments with five or more employees (except members of the armed forces who are exempt and self-employed individuals whose participation is voluntary) are required to become members of SSNIT. Under the 1991 law, the total contribution rate is 17.5 percent of basic salary and allowances. Of this, 5 percentage points are payable by employees and 12.5 percentage points by employers. Compared with other developing countries, the current contribution rate payable to SSNIT is on the high side. The average contribution rate in public pension schemes in Sub-Saharan Africa, for example, is 9.1 percent, while in Asia it is 11.6 percent, and in South America 10.5 percent. The maximum pension under the scheme is based on the average of the best three years' salary and the duration of contributions. Benefits payable under the scheme are exempt from taxes. Box 6.1 summarizes details of the benefits and contributions under SSNIT.

6.8 The operation of a social insurance fund has economic implications that extend far beyond the financial system. Analysis of the economic performance and further impact of the scheme requires detailed information on its operation (such as an age profile of contributors, actuarial analysis of the capacity of the scheme to service its obligations, analysis of expected real returns, and so on).

6.9 At present, the government is in the process of completing a comprehensive evaluation of SSNIT's operations, but the results of this analysis are not yet available. The analysis in this section, therefore, is restricted to examining the impact of SSNIT on the financial system. It should be noted that SSNIT's operating expenses are high by international standards, and that the real rate of return on its portfolio was -5 percent in 1991 before improving to a modest 1 percent in 1992. Real returns in 1993 are likely to have been higher due to high real returns on government securities (see Chapters II and III).

6.10 At the end of 1992, about 629,000 members had contributed to the SSNIT scheme, generating large annual cash flows. Annual gross contributions received by SSNIT went up from ₵13.2 billion in 1989 to ₵32.3 billion in 1992. At present, and for the foreseeable future, benefits paid out under the scheme are low, which means that a large pool of long-term funds is available for investment. As the single largest investor in Ghana, SSNIT can play a major role in providing long-term financing to the economy.

6.11 Until 1990, SSNIT's role in stimulating the development of financial markets was restricted by government regulations. SSNIT was required to invest in special government securities that yielded negative real rates of return. This requirement was rescinded in late 1990, and SSNIT is now free to determine its domestic portfolio composition. This is in stark contrast to most other countries where—in an attempt to limit exposure to risk, and ensure liquidity and solvency—prudential guidelines are established regarding the social security fund's investment choices.

Box 6.1: The SSNIT Pension Scheme

Contributions	17.5 percent of salary (of which 5 percent is payable by the employee, and 12.5 percent payable by the employer).
Normal retirement age	60 years (55 years for employees in hazardous jobs such as mining and quarrying).
Pensionable salary	Average annual salary for the best three years of a member during his working life.
Pension benefits	If the minimum contribution period has been 240 months then pension payable is (a) 50 percent of pensionable salary plus (b) 0.125 percent of pensionable salary for each month of contribution in excess of 240 months. Where contributions have been for a period less than 240 months, a lump sum payment equal to accumulated contribution plus interest at half the T-Bill rate will be payable. There is no minimum benefit amount but maximum benefit will be lower of (a) 80 percent of final pensionable salary or (b) 80 percent of the average of the highest salaries of the top 5 percent of contributing members.
Option to commute	25 percent of the pension can be taken as a lump-sum payment plus a reduced pension payment.
Invalidity pension	A member who has contributed for not less than 12 months within the last 36 months and has been certified by a Medical Board to be incapable of normal gainful employment is entitled to a pension equal to the higher of (a) 50 percent of the member's final pensionable salary or (b) the accrued entitlement based on the salary at date of invalidity.
Taxability of benefits	Benefits are exempt from taxes.

Source: SSNIT.

6.12 SSNIT's net assets increased from ₵60 billion in 1990 to ₵118 billion in 1992, and investments increased from about ₵53 billion in 1990 to ₵105 billion in 1992. The two largest categories of investments (GOG or BOG bills and real estate) account for more than 80 percent of total investments. SSNIT, like pension funds in other developed countries, has large holdings of government paper. But unlike other countries, SSNIT mainly holds short-term government securities. (In Malaysia the Employees Provident Fund, by contrast, holds as much as 80 percent of its investments in government securities with maturities ranging from 5 to 15 years.)

6.13 SSNIT's real estate investments are in housing for government employees that SSNIT itself develops and manages. The marketability of these residential properties appears to be very limited, and most of the income SSNIT earns from its real estate portfolio is rental income. SSNIT's investments in commercial real estate are negligible. In the future, prudential regulations to ensure adequate liquidity and solvency of the institution will have to be introduced, particularly in view of the expected emergence of private pensions funds. Steps also need to be taken to enable SSNIT to shift the term structure of its assets toward longer maturities, for despite being the largest single source of long-term contractual savings in Ghana, SSNIT has not so far increased the supply of long-term capital to the private sector.

6.14 Investments in the private corporate sector constitute a negligible portion of SSNIT's total assets. The stock market is still small and offers limited investment opportunities. As it is, however, SSNIT holds 10 percent of quoted equities and 50 percent of tradable equities, and therefore exercises considerable influence on share prices. SSNIT, therefore, has limited flexibility to operate on the Stock Exchange or to increase its share in quoted companies. The level of private investment financed through the formal financial system has also been low, thus limiting the supply of private debt and equity instruments available to SSNIT. Given the uncertain macroeconomic environment and the high variability of corporate profits, SSNIT has been cautious in investing in private sector equities and acquiring debt in new enterprises. (Because SSNIT wished to maintain the real value of its assets and earn a positive real rate of return on its investments, it has invested mostly in short-term government bills).

6.15 While SSNIT has not done much to stimulate the securities markets, it has been instrumental in promoting such new financial institutions as the Home Finance Company (HFC), Ghana Venture Capital Company, Export Finance Company, Ecobank, and Securities Discount House. By purchasing HFC long-term bonds indexed to inflation, SSNIT has assisted HFC in securing a long-term sources of funds for mortgage financing.

6.16 The dominant position accorded to SSNIT under the 1991 Social Security Law has deterred the emergence of private pension funds and stifled competition in the sector that could have improved savings mobilization. Because contributions to SSNIT are mandatory, it does not have to actively compete for members, and has earned low returns on its investments and sustained high operating costs. A more competitive environment could lead to greater efficiency within SSNIT, enhanced savings mobilization, and a greater range of financing instruments for the economy as a whole.

Insurance Industry

6.17 The insurance industry provides coverage against future risks by collecting premiums from the insured and accumulating (technical) reserves for estimated future payouts based on statistical and actuarial analyses. Because of the short-term nature of their liabilities, general insurance companies must keep their reserves in short-term marketable investments (such as treasury bills and commercial paper). As a result, they play an important role in the development of the securities and capital markets. Life insurance companies, on the other hand, accumulate long-term reserves and seek to place them in relatively long-term investments. While some short-term policies do not generate significant savings, most term policies do, and life insurance companies can potentially contribute to the growth of bond, long-term government securities, and corporate equity markets.

6.18 The insurance industry in Ghana was established early in this century by British insurance companies, trading houses, and banks to support their trade with the UK. The focus of the industry, therefore, was generally on commercial-risk coverage. The life insurance industry did not develop until much later. This long history notwithstanding, Ghana's insurance industry is relatively underdeveloped, and affected by macroeconomic and industry-specific factors that skew the demand for and supply of insurance products.

6.19 On the macroeconomic side, the insurance sector, just as the financial system as a whole, has been subject to considerable uncertainty. Prior to the ERP, macroeconomic instability led people to shun the insurance industry. Not only did real financial savings decline, but maturities of financial assets shortened dramatically. In that market, maturities of over 90 days were considered long term, discouraging the growth of capital market instruments.

6.20 Because Ghanaians have relatively little disposable income and wealth, household demand for insurance products is low. Traditionally, agrarian-based societies like Ghana's develop their own social safety nets based on family and tribal networks. People rely on traditional risk-protection arrangements, and there is little demand for any formal insurance products, especially life insurance. Because mandatory contributions to SSNIT are relatively high, furthermore, few people feel the need for additional private insurance.

6.21 In contrast to other NBFIs, which are covered by the NBFI Law of 1993, the insurance industry still suffers from inadequate regulation and supervision. The National Insurance Commission (NIC), Ghana's supervisory agency, is widely acknowledged to be in need of strengthening and restructuring. Absence of skilled insurance adjusters has limited both product and market development, and barriers to entry and exit have deterred the development of competition in the industry.

6.22 The Ghanaian insurance market is highly concentrated. The State Insurance Corporation (SIC) controls 67 percent of the overall market (63 percent of the life market and 68 percent of the nonlife market) because it has a monopoly in the government sector, which accounts for two thirds of its total business. With the top five companies handling nearly 93 percent of the total market, only 7 percent is left for the remaining 11 companies. There appears to be little competition based on rates, and policyholders rarely seek alternative competitive quotes. While large companies have accepted SIC as a market leader in setting insurance rates and premiums, small companies often lack the technical skills (such as the ability to conduct actuarial analysis) and the market expertise to gain credibility in the market and compete effectively.

6.23 In 1992, the insurance industry as a whole collected gross premiums of approximately ₵13 billion, up from ₵6 billion in 1988. This reflected a nominal average growth in cedis of about 29 percent per year. But in US dollar terms, gross premiums stayed flat at approximately US$30 million despite real growth in GDP of 5 percent per year during this period. In 1992, responding to the high rate of inflation in the economy, life insurance contributed only about 10.6 percent of total income premiums, a substantial decline from its 17.5 percent share in 1988. Inflation has made traditional, non-inflation indexed life insurance policies unattractive, whereas, with general economic growth over the last five years, the nonlife insurance sector has expanded.

6.24 The major problem in designing new life insurance products has been the absence of appropriate long-term investment opportunities that would provide an adequate hedge to policyholders. Thus, the development of suitable long-term instruments (using equities, indexed loans, dollar-linked policies, and real estate products) is important for the evolution of the industry as a whole, and particularly of life insurance.

6.25 Inflation has been a major obstacle to the development of Ghana's insurance business, and an important reason for its weak financial condition. In the absence of hedging instruments, the real value of insurance companies' portfolios deteriorates when the insured fail to adjust the face value of their policies to reflect the increased nominal value of their risk assets. Delays in revising tariffs to reflect inflation lead to a decline in real tariffs, and by the time the new tariffs are approved, they are frequently outdated. Furthermore, inflation results in claims that exceed values estimated at the time policies are issued, and insurance companies incur losses because the premiums they charged are insufficient. To mitigate the adverse effects of inflation, hedging and other modern techniques of financial management are necessary.

6.26 In both life and nonlife sectors, the insurance industry should seek to ensure adequate liquidity, manage risk by maintaining a diversified portfolio, hedge inflation to avoid erosion of

capital, and hedge currency to reduce exposure to foreign exchange risks. The investment profile of the non-life and the life industries is given in Tables 6.1 and 6.2, respectively. Income from investments has become an increasingly important source of profit for the nonlife insurance industry, rising from 30 percent of pretax profits in 1988 to 67 percent in 1991. Yet most companies still do not have defined investment strategies for the management of their investment portfolios.

Table 6.1: Investment Profile: Nonlife Insurance Industry, 1991

Investments	₵ million	Percent
Properties	711	10.9
Mortgages, debentures, and other term-loans	1,676	25.7
Quoted and unquoted shares	345	5.3
Long-term government securities	41	0.6
Total long-term investments	2,772	42.5
Short-term government securities	1,741	26.7
Bank term deposits	1,892	29.0
Other short-term investments	116	1.8
Total short-term investments	3,749	57.5
Total Investments	6,522	100.0

Table 6.2: Investment Profile: Life Insurance Industry, 1991

Investments	₵ millions	Percent
Properties	270	21.5
Mortgage loans	536	42.7
Quoted and unquoted securities	12	1.0
Government securities	286	22.8
Other	20	1.6
Bank and term deposits	131	10.4
Total Investments	1,255	100.0

6.27 In the nonlife insurance industry, investments constitute approximately 37 percent of total assets. Government regulations require that 25 percent of funds be invested in government securities, that all funds be invested in Ghana, and that special permission be obtained before foreign currency investments are made overseas to cover foreign exchange risks. Income from all investments yielded an average return of 16 percent in 1991. Short-term investments (which account for about 58 percent of total investments) were generally secure, liquid, and offer reasonable returns. Long-term investments (42 percent of the portfolio), however, generated poor returns, and their capital worth was eroded by inflation. Finally, avenues for investment were limited and diversification inadequate. Equities and investment properties (which tend to be inflation hedged), for instance, were only a very small portion of the portfolio. For the financial health of the sector in the future, it is essential that these avenues be developed.

6.28 Total funds available in the life insurance industry were reported to be ₵1,223 million at the end of 1992, but total investments attributed to the life insurance business were ₵1,405 million. (This discrepancy could either be caused by a revaluation of assets or by inaccurate segregation of life and non-life accounts.) Income from investments amounted to ₵204.8 million, representing a return of about 15 percent. Short-term investments (15 percent of the total) yielded a reasonable return, but the return on long-term investments (85 percent of the assets) did not. With mortgage and debenture loans earnings less than 8 percent, and other investment properties earning almost nothing, average returns were lower than inflation, and both the holders of life insurance policies and shareholders in life insurance companies received poor returns.

6.29 Competition has to be strengthened to development the insurance industry in Ghana. Removing SIC's hold on the government market would allow other insurers to expand their business and to compete with SIC on the basis of rates and premiums. Increased competition would also induce greater efficiency within firms and improve returns on their assets. A healthier insurance industry could also provide the financial system with new and innovative tools for financing. Rather than imposing more restrictions on the insurance industry, which protect inefficient enterprises from competition, the sector should be opened to competition to promote the development of better ways to deliver service, more products, and more risk-management options for the economy as a whole.

B. Securities and Capital Markets

6.30 Well-developed securities markets promote financial intermediation. Short-term money markets compete with banks in supplying credit to larger corporations, and under certain conditions can provide long-term financing to private corporations. By enabling savers to maintain control over the use of their funds and linking them to real assets, capital markets also help to channel private savings through the formal sector.

Discount Houses

6.31 The Consolidated Discount House was established in 1987 by commercial banks and insurance companies in Ghana. The Securities Discount Company was established in 1991 with support of the International Finance Corporation (IFC) and SSNIT. Established with a view toward creating a secondary market in money market instruments and facilitating the introduction of indirect monetary control, these two discount houses specialize in tradeable financial assets.

6.32 The discount houses have been only marginally successful in creating a secondary money market. Trading in the secondary market is thin. Some efforts have been made to deal in bankers acceptances and commercial paper, but the large volume of BOG and GOG bills that the discount houses have to manage has largely prevented them from developing other money market instruments. At end-1992, the combined assets of the two discount houses was about ₵39 billion with more than 90 percent of the assets being accounted for by GOG and BOG bills. The main source of financing was deposits placed by commercial banks.

Money Market

6.33 At end-1992, outstanding GOG and BOG securities totalled about ₵263 billion, accounting for about 83 percent of all of Ghana's tradeable securities. Maturities for these securities range from 30 days to five years, with maturities of less than 180 days accounting for about 60 percent of all outstanding securities. In the private sector—other than equities issued

by the 17 companies listed on the stock exchange—no other form of private security is traded. Securities collateralized by receivables, mortgages, plant and machinery, or other physical assets are not available. In Ghana, the only acceptable asset-backed security is a one-time issue of securities collateralized by consumer loans extended by a bank. Commercial paper and bankers acceptances have been issued from time to time for private placements, but—because of their limited use as money market instruments compared with BOG and GOG paper—are rarely traded.

Ghana Stock Exchange

6.34 The Ghana Stock Exchange (GSE) was established in 1989 for trading in corporate equities and bonds, and government securities. Operations commenced in November 1990. The GSE received international attention following recent sales of government shares, especially in the Ashanti Goldfield Company (see Box 6.2). Key features of the GSE are:

- Four new companies have been listed on the GSE since it opened, bringing the number of listed companies to 17 as of June 1994.

- During its first two years, total market capitalization rose from ₵30 billion to ₵43 billion at end-1992. The offloading of government-owned shares in 1993 and the listing of Ashanti Goldfields Company (AGC) shares significantly deepened the market. By end-May 1994, total capitalization reached ₵1,972 billion (about US$2.1 billion)—equivalent to 34 percent of GDP. Shares of AGC alone, however, accounted for ₵1,700 billion (about US$1.8 billion), or over 85 percent of this capitalization. Nevertheless, the capitalization of the GSE now exceeds that of most other Sub-Saharan African countries, including Kenya (US$1.8 billion) and Zimbabwe (US$1.8 billion). (By comparison, capitalization in the fast-growing East Asian economies amounts to US$131 billion in Thailand, equivalent to 107 percent of GDP, and US$33 billion in Indonesia, equivalent to 23 percent of GDP.)

- Although the GSE was originally intended for the trading of a multitude of financial instruments, only equity shares are currently listed. Private corporate debt and government paper are not yet traded.

- After modest performance in 1992, yields on equities picked up sharply in 1993. While dividend yields of most listed companies were around 10 percent, capital gains pushed the total yield for all listed stocks to 123 percent. At the same time, for most listed companies price-earnings ratios have remained below 10, which is low by international standards.

- Liberal foreign investment regulations for portfolio investment have attracted significant foreign inflows. Over half of listed shares are in the hands of foreign direct investors. The balance is held by domestic investors.

6.35 Supported by about 40 due-paying members, the GSE has regulations for listing membership, trading, and settlement. But the GSE has few listed securities, its trading volume is low, and its exposure to corporate issuers and potential investors is inadequate. This has resulted in operating losses for GSE, which—if not suitably addressed—could threaten its viability.

Box 6.2: Recent Developments on the GSE

In 1993, the GSE received a major boost from the Government's decision to offload its minority holdings in seven listed companies.

	Government holding before offloading (percent)
Accra Brewery Ltd.	40.0
Enterprise Insurance Company Ltd.	20.0
Guinness Ghana Ltd.	20.0
Kumasi Brewery Ltd.	40.0
Pioneer Tobacco Company Ltd.	25.0
Standard Chartered Bank Ghana Ltd.	27.5
Unilever Ghana Ltd.	18.0

The decision to list AGC shares on the GSE also boosted market capitalization. Since most of AGC shares are held by Lonrho (45 percent), GOG (30 percent), or are traded on the London Stock Exchange (20 percent), however, and only 5 percent were placed domestically through the GSE, trading volumes did not increase proportionately.

To a large extent, these offerings were taken up by foreign investors and SSNIT. The interest generated in these shares, however, was substantial and contributed to a sharp rise in the Databank Stock Index (DSI). At the end of 1992, the index stood at 79.06 (Base November 1990=100). It rose 116 percent during 1993 to reach 170.8 by year's end. Interest in Ghana's new offerings continued unabated during the first five months of 1994, pushing the index to 412.2—a further gain of 141 percent.

Daily turnover is dominated by the seven companies listed above and by AGC. Through the end of 1992, daily trading volumes averaged about 20,000 shares per session, low by any standards. The average for 1993 rose to 380,000 shares traded per session, 81 percent of which was accounted for by government offloading. Turnover increased further during the first three months of 1994 to average 1.7 million shares per trading session. Nevertheless, turnover on the GSE is still small, with trading volumes per session accounting for only 0.3 percent of shares outstanding.

6.36 The 1993 Securities Industries Law largely governs securities transactions and the operations of the GSE. This law provides adequate protection to ensure that securities transactions are fair and transparent. The law established a Securities Regulatory Commission vested with powers to maintain surveillance over securities transactions; register and license dealers, investment advisors, etc.; monitor the solvency and business operations of license holders; prevent insider trading and minimize conflicts of interest; and review, approve, and regulate mergers and acquisitions.

6.37 In addition, the 1990 Stock Exchange Listing Regulations provided the criteria for acceptance of original and supplementary listings; methods for listing securities, and requirements for listing prospectuses, continuing listing, and the disclosure of material information. The 1991 Stock Exchange Membership Regulations cover eligibility and conditions of GSE membership. It also prescribes a code of conduct for dealing with the public and regulates prudential behavior on part of the members.

6.38 It is still early to judge the efficacy of Ghana's laws and regulations governing the GSE. As written, securities industry regulations are comprehensive and, if enforced, should ensure fair and transparent securities transactions. Disclosure requirements also provide investors with sufficient information to assess financial conditions and risks. Growing domestic and international interest is a promising sign for the future of GSE.

C. Other Non-Bank Financial Institutions

6.39 A number of other NBFIs exist in Ghana: the Home Finance Company (HFC), a leasing company—Ghana Leasing Company, a venture capital company—Venture Management Capital Corporation, building societies, and two savings and loans associations. Largely established since 1991, these institutions are still small and play only a limited role in the country's financial system.

Home Finance Company (HFC)

6.40 HFC was established in 1991 (under a World Bank-assisted project) to increase the supply of housing finance available in Ghana. Jointly owned by GOG, SSNIT, insurance companies, and the Merchant Bank of Ghana, HFC operates and manages a fund for the provision of long-term home mortgage financing; issues and deals in bonds and other financial instruments; and undertakes the business of housing finance. As a non-bank, secondary, housing-finance institution, HFC purchases indexed mortgages that originated with and are serviced by other financial institutions.

6.41 HFC's principal activity is the administration of a pilot housing-finance scheme designed to help regular salary earners finance the acquisition of residential units. The scheme is designed to overcome the following traditional barriers that make mortgage finance difficult to obtain in Ghana: relatively high and variable rates of inflation that affect long-term mortgage financing rates and availability, weak foreclosure procedures that increase repayment risks on housing loans, and the absence of a secondary mortgage market to provide a regular flow of long-term funds for housing finance.

6.42 HFC mediates between primary providers of mortgage finance and institutional investors. It raises long-term funds through mortgage-backed, indexed bonds issued to SSNIT and GOG. Under the World Bank project, the GOG has set aside US$8 million as credit to be extended to HFC for home mortgage financing. (HFC borrows this money through 30-year mortgage-backed bonds, which are fully indexed to the CPI and attract an interest rate of 1 percentage point over the CPI.) At end-1993, HFC had issued to the Government of Ghana bonds totalling about ₵1.14 billion. In addition, under the project, SSNIT is committed to lend HFC the cedi equivalent of US$16.2 million in exchange for mortgage-backed bonds repayable over 20 years and with an initial moratorium period of five years. (These bonds, too, are fully indexed to the CPI, and carry an interest rate of one percentage point over the CPI.) By end-1993, HFC had issued to SSNIT bonds amounting to ₵2.97 billion.

6.43 Proceeds from the bond issue are used to purchase eligible mortgages from approved primary mortgage-originating and servicing institutions (OSIs). The OSIs also pay HFC a nominal interest rate (equal to the CPI plus 1.5 percentage points). The OSIs then extend mortgage finance to individuals, charging a one-time origination fee of 1 percent to 2 percent and an annual servicing fee of 1 percent to 2 percent on principal outstanding, in addition to their own cost of borrowing, bringing the effective real borrowing cost to individuals to about 2.5 percent to 3.5 percent.

6.44 The mortgage-originating institutions are mainly banks, insurance companies, and building societies regulated to ensure that prudential lending and capital adequacy standards are maintained. They must also have adequate organization, staffing, and administrative capacity to handle mortgage origination and servicing. Lending operations are funded through the sale of mortgages to HFC and not by lending OSI funds. OSIs, however, are liable for up to 10 percent of the repayment amount. In case of shortfall in collections, OSIs will also have to forego the servicing fees. These incentives prompt OSIs to be efficient and diligent in originating and servicing home mortgages.

6.45 An innovative feature of the pilot housing-finance scheme includes innovative repayment terms for the individual borrower, structured to afford borrowers protection against a severe decline in real income and yet to maintain the real value of debt for the lender. By adjusting the outstanding principal on the basis of the CPI, the real value of debt can be maintained against inflation. At the same time, the real burden of repayment is fixed at a maximum of 25 percent of nominal salary income. To accommodate these two requirements simultaneously, loan terms vary. If real wages decline, the term of the loan is automatically extended, up to a maximum of 30 years. This ensures that the burden of debt repayment does not overwhelm the borrower. The terms of the loan are so structured, however, that only in the extreme case (income growth of -1 percent for 30 years plus inflation of 30 percent or more) will the lender run the risk of the loan's not being paid off in 30 years.

6.46 At the time this pilot housing-finance scheme was designed, the Mortgages Decree of 1972 required court action to enforce mortgages and the process was slow and costly. In order to make mortgage finance more attractive to investors and lenders, the Home Mortgage Finance Law of 1993 allowed this procedure to be bypassed under certain circumstances. If the amount outstanding is at least 85 percent of the original loan amount, for instance, the law provides HFC and HFC-approved primary mortgage finance institutions the right to foreclose on properties mortgages to them under the housing-finance scheme. This modification significantly reduced the legal hurdles preventing the enforcement of loan contracts.

6.47 The pilot scheme has been successful in introducing mortgage financing in Ghana. By the end of 1993, ₵4.64 billion worth of mortgages were outstanding and HFC had issued mortgage bonds totalling about ₵4.15 billion.

6.48 At present, HFC's bond issues are directed almost exclusively at GOG and SSNIT, but in due course the pilot housing scheme's experience will assist HFC to issue bonds to private institutional investors and savers.[27] For this to happen in significant volume, however, a secondary market will have to be established. The fact that the government bears the ultimate risk for the repayment of mortgages may encourage investors to accept HFC bonds. Meanwhile, HFC has already taken steps to diversify its funding and finance its operating costs. In order to build up the margin money required for an HFC loan, it has instituted a deposit program under which prospective borrowers will be given priority in financing if they open deposit accounts with the HFC Unit Trust. As of end-1993, HFC Unit Trust had mobilized ₵1.38 billion.

Ghana Leasing Company

6.49 Among all NBFIs, the most successful and fastest growing is the Ghana Leasing Company established in 1991 with the support of IFC. At end-1992, the company had generated

[27] By the end of 1993, HFS Bonds in the amount of ₵400 million were issued to one insurance company and the HFC Unit Trust.

net financial leases totalling about ₵736 million. By the end of 1993, it had committed leases amounting to about ₵7 billion, largely in the services and construction sectors. Very few leases, however, have been written for the manufacturing sector to acquire plants and machinery.

Savings and Loan Associations

6.50 Under the NBFI Law of 1993, two savings and loan associations were established to cater to specific financial niches and bring savers from the informal into the formal financial sector. They are already making a mark in the provision of financial services to clients who traditionally stay away from the formal financial system.

6.51 One financial institution, Citi Savings and Loan, has developed a niche for itself by providing innovative and responsive services to market women and other small trading businesses. This institution's innovations include flexible banking hours, collection of cash deposits at the markets where the women work, deposit accounts tailored to the cash-flow needs of the clientele, and the provision for short-term overdrafts. As a result of these innovations, Citi Savings and Loan has grown rapidly since its 1993 inception and has managed to mobilize deposits amounting to ₵135 million and extended loans amounting to ₵86 million (see Box 6.3).

Box 6.3: Ghana Citi Savings and Loan Innovative Financial Services

The Citi Savings and Loan Association is a non-bank financial institution established by the former CEO of Ghana Commercial Bank. Established to cater to the needs of sections of the public normally ignored by the formal banking system, it now serves market women, petty traders, hawkers, bakers, taxi drivers, and other small enterprises.

Citi Savings and Loans policy is to make banking services accessible and convenient for its particular clientele. To accomplish this it introduced the following innovations:

- Banking hours were extended and are now from 7:00 AM to 6:00 PM. This makes it convenient for market women to deposit their cash at the end of each business day and withdraw it before commencement of business the next day. Citi Savings is now planning to introduce other forms of cash custodial services that will make it even more convenient for its clients to deposit business proceeds into their bank accounts.

- Citi Savings' employees travel to their clientele to collect daily deposits, thus solving the problem of depositors having to interrupt business to deposit cash receipts.

- Clients are offered combined checking and savings account deposit facilities to ensure liquidity of funds as well as some interest-earning potential.

- To smooth their cash flows, Citi Savings extends short-term loans to market women.

- The institution works closely with market "queens," the powerful, informal regulators of market women. With their assistance, Citi Savings has been able to keep close track of its loans and ensure a low default rate.

- Citi Savings accepts life insurance policies as collateral for its loans, thereby getting around the problem that land (which few of its clients can offer) has heretofore been the only collateral acceptable in Ghana.

Credit Unions

6.52 The first credit union on the African continent was established by Canadian Catholic missionaries, in Jirapa, Ghana's Upper West Region. The credit union movement grew rapidly, expanding from 141 largely parish-based unions in the northern part of the country in 1971 to 480 community-based and work-place credit unions popular throughout Ghana. Then, in the early 1980s, the movement went into a decline from which it has yet to recover. In December 1993, Ghana had 250 credit unions. About 150 are said to be active and viable, with only 30 in rural areas.

6.53 Established in 1968, the Credit Union Association (CUA) is the umbrella body for all credit unions, providing essential services for the establishment and operation of savings and credit societies/unions (such as education, formulation of bylaws, standardization of accounts, legal advice, and the establishment of a central fund to secure surplus funds from individual societies for interlending among members). The CUA also receives donor assistance for capacity building from the Canadian Cooperative Association and the Canadian International Development Agency.

6.54 The total stock of savings in credit unions is estimated at ₵3.2 billion, out of which half are from rural areas. Since, historically, unions lend out over 70 percent of the savings they mobilize, their liquidity position is weak. Like other financial institutions, credit unions are also struggling to overcome the further weakening that took place during Ghana's economic crisis.

6.55 Credit union interest rates on loans and savings are significantly lower than prevailing bank rates. Their lending procedures also differ from those of other financial institutions. One must first be a member or shareholder to qualify for a loan. A loan applicant then only needs another member with adequate savings to guarantee his or her loan.

6.56 Despite this safeguard, loan delinquencies are high and follow-up and supervision inadequate. There has never been a classification of Credit Unions, and it is therefore difficult to assess precisely the health of this sector. The CUA and the Department of Cooperatives are charged with supervising credit unions, but the CUA has not been effective in this or in enforcing regulations and sanctions, and the Department of Cooperatives, too, lacks supervisory capacity. Although credit unions come under the NBFI Law, there has been no supervision from the BOG.

D. Laws and Regulations for NBFIs

6.57 With the exception of SSNIT, GSE, and insurance companies, the operations of NBFIs are governed by Ghana's NBFI Law, 1993. Enacted as part of financial sector reforms, this law provides an adequate framework for diversifying the financial system and creating competition for banks. It confers on the BOG the power to license and regulate the conduct of NBFIs (see Box 6.4).

6.58 Under the NBFI law, BOG also has executive powers to issue subsidiary legislation and rules to regulate the operations of NBFIs in general, or of a particular category of NBFI as listed in the Law. BOG has drafted a set of regulations, therefore, to flesh out some of the general provisions of the 1993 Law. Key features of the proposed regulations include:

- A standardized set of explicit and transparent terms and conditions of license covering all requirements mentioned generally under the NBFI Law. The licensing terms allow BOG the right to conduct on-site inspection, which was not

Box 6.4: The NBFI Law of 1993

The key features of the 1993 Financial Institutions (Non-Bank) Law are:

I. Coverage

NBFIs covered under the law are discount companies, finance houses, acceptance houses, building societies, leasing and hire purchase companies, venture capital funding companies, mortgage financing companies, savings and loans companies, and credit unions.

II. Capital Requirements

Minimum NBFI capital requirements are set at ₵100 million.

III. Prudential Regulations

The minimum capital adequacy ratio is set at 10 percent of risk assets and BOG has the power to prescribe the minimum level of liquid assets. Exposure limits are set at 15 percent of net worth for secured advances and 10 percent for unsecured advances.

IV. General Provisions

- BOG is the designated licensing and regulating agency for NBFIs, with executive powers to prescribe rules and regulations for general or specific application.
- NBFIs can invite deposits from the general public, but only for fixed periods. NBFIs cannot offer checking deposit facilities.
- NBFIs are required to submit statutory audit reports and a long-form audit reports to BOG.

stated explicitly in the NBFI Law.

- While the 1993 Law sets minimum capital at ₵100 million, BOG's operating guidelines reduced the minimum capital requirements to ₵20-₵50 million for savings and loan companies, and ₵5–10 million for credit unions, depending on size of total deposits. This reduction in minimum capital requirements was welcome because it eases entry into the NBFI sector at this early stage of its development, and encourages competition.

- To establish the distinction between banks and non-banks, the BOG proposes that, in accordance with the law, banks only handle demand deposits and offer checking facilities, and that NBFIs impose a minimum period of deposit of three months unless prior exemption is obtained from BOG.

- NBFIs must put transfers from net profits into a reserve fund and maintain mandatory levels of funding identical to that required of banks. This prudential requirement contributes to the financial safety and soundness of NBFIs.

- NBFIs must follow the same procedures for loan-loss provisioning and the recognition of income on non-performing loans as banks. This assures soundness without giving either an unfair lending advantage.

- BOG suggests a basis for computing risk assets identical to that prescribed under the Banking Act, and requires a capital adequacy ratio of at least 10 percent. The capital adequacy ratio of 10 percent, however, is much higher than the 6 percent capital adequacy ratio required of banks.

6.59 The proposed regulations leave the legal status of non-bank financial enterprises that fall below the minimum capital requirements unclear. It is, however, not in the interest of the authorities to regulate and supervise small scale financial activities below a certain threshold. At the same time, the authorities recognize that these activities are an integral part of the informal financial system, as will be discussed in the subsequent chapters. It is the government's position to encourage informal operators to join the formal system by supporting their efforts to build up their business in order to qualify for registration under the Law.

6.60 Other legislation covers specific types of transactions undertaken by NBFIs. For example, the 1993 Finance Lease Law lays down a procedure for executing financial leases and establishes explicit rights and obligations of lessor and lessee. By providing adequate protection to the lessor, the law promotes leasing activity in Ghana. A key feature of this law is the mandatory registration of lease agreements with an authority designated by BOG. At present, all finance leases have to be registered in the Deeds Registry under the control of the Registrar General, so that the lessor's prior claim on the leased asset is properly recorded and publicized.

VII. FORMAL RURAL FINANCIAL INSTITUTIONS

7.1 Ghana has both formal rural financial institutions such as rural banks and branches of commercial banks, and informal institutions such as susu collectors. While both play an important role in intermediating between savers and investors, neither has yet been able to provide the rural population with adequate savings opportunities or access to credit—particularly the agricultural sector. The development of Ghana's rural financial markets has been limited by factors typical of rural markets throughout Sub-Saharan Africa—asymmetric information, the absence of credit histories, high transaction costs for lending to rural smallholders and microenterprises, and the lack of acceptable collateral.

7.2 Ghana's unstable macroeconomic environment, relatively high inflation, and a general lack of confidence have also caused people to shun formal financial institutions and to forego potential benefits from intermediation. Financial intermediation is further limited by the absence of strong linkages between the formal and informal sectors. Poor supervision and a lack of competition left Ghana's formal institutions too weak to expand their services and attract savings from the informal sector. Strengthening formal rural financial institutions and improving intermediation between the formal and informal sector will be critical for drawing more savings into the formal financial system and improving the efficiency of resource allocation.

A. Structure and Performance

7.3 The formal financial sector in rural Ghana offers better access and coverage than those in most other countries of Sub-Saharan Africa.[28] Ghana's variety of rural banks and credit unions also makes its rural financial market more private in character than its urban counterparts.

7.4 Formal rural financial institutions divide into: (i) branches of primary commercial banks (GCB and Barclays Bank); (ii) branches of such secondary banks as the ADB, SSB, and NSCB; (iii) rural banks; and (iv) branches of credit unions (see Table 7.1).

7.5 Primary and secondary banks first opened branches in rural areas to comply with government regulations related to cocoa marketing.[29] At the end of 1992, 89 out of 327 branches of commercial banks were located in rural areas: GCB maintained 65 of its 145 in rural areas, SSB had 13 rural branches, ADB had 8 rural branches (but is the most active in rural Ghana), and the rest had 3 rural branches.

Agricultural Development Bank

7.6 Established by an Act of Parliament in 1965 as the Agricultural Credit and Cooperative Bank, and changed to the Agricultural Development Bank in 1979, ADB was to lend mainly to agriculture. Its capital is now valued at ₵1,433 million, which is fully owned by the GOG. This

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[28] A study of 11 countries of Sub-Saharan Africa conducted by the World Bank shows that—except for Kenya—Ghana's formal rural financial institutions are better developed than those in nine other countries. (See Technical Department, Africa Region, World Bank, June 29, 1993, *Development of Rural Financial Markets in Sub-Saharan Africa*, two volumes.)

[29] Under this policy, which the Government introduced in November 1982, all banks were required to participate in the "Akuafo check payment" system (see Box 7.3), forcing some banks to maintain offices in cocoa, coffee, and sheanut-growing areas.

Table 7.1: Bank Branches, End-1992

	Urban branches	Rural branches	Total
Commercial Banks			
Ghana Commercial Bank	80	65	145
Barclays Bank of Ghana	24	2	26
Standard Chartered Bank	21	0	21
Social Security Bank	21	13	34
Ecobank	1	0	1
Bank for Housing and Construction	11	0	11
Continental Acceptances	2	0	2
National Savings & Credit Bank	16	1	17
Merchant Bank	4	0	4
National Investment Bank	10	0	10
Ghana Cooperative Bank	25	0	25
Agricultural Development Bank	22	8	30
Meridien Bank	1	0	1
Total Commercial Banks	238	89	327
Rural Banks	0	123	123
Credit Unions	189	69	258

sum is much larger than the capital assets of the 123 rural banks together—which amounts to only ₵424 million. The Board of Directors is composed of nine members appointed by the Minister of Finance. The Managing Director is Chairman of the Board, and the representatives are from the BOG, Ministry of Finance and Economic Planning, Ministry of Food and Agriculture, and a representative of the staff union. The ADB operates in every region of the country and has 30 branches (of which 8 are rural), 3 regional offices and 1 foreign exchange bureau in Accra.

7.7 The ADB was created to provide credit facilities for the development of agriculture and allied industries, identify and promote agricultural enterprises in Ghana, and mobilize resources for developing agriculture. But inappropriate lending policies, inadequate loan appraisal, poor supervision and loan-recovery arrangements, and the impact of the 1983 drought led to a high percentage of non-performing loans. Insolvent in 1988, ADB had to be restructured. Since its restructuring, however, the ADB's operating results have been largely positive and it can now be considered as one of the best performing rural financial institutions.

7.8 While being able to attain a 623 percent real growth rate in total lending between 1990 and 1992, ADB was able to reduce staffing by 44 percent to under 800. Lending operations are now fully funded by deposits which amount to twice the outstanding loans and advances. The capital base is very sound with capital adequacy standing at 33 percent of assets—over five times the required minimum.

7.9 Today, ADB's assets are dominated by short-term liquid assets, which account for almost two thirds of its total assets. ADB attracted these assets with a vigorous deposit-mobilization

drive and highly attractive rates on treasury bills. A new banking Act, furthermore, now requires ADB to hold 42 percent of all deposit liabilities in liquid assets.

7.10 From 1990 to 1992, however, the share of lending to agriculture in ADB's portfolio declined from 51 to 30 percent, in part as a result of the elimination of sectoral allocations under the Financial Sector Adjustment Program. In 1992, lending to small farmers amounted to only ₵1.2 billion—much less than the aggregate lending of rural banks to small farmers. While total ADB lending was ₵8 billion, the smallholders' share was only about 15 percent. Indications from 1992-93, however, are that ADB's share of agricultural credit has once again sharply increased.

7.11 The African Development Bank, the European Economic Community (EEC), and the World Bank have been key supporters of the ADB. The African Development Bank first granted a line of credit to the ADB in 1980, then again in 1985, and another is expected to become effective this year. In the 1980s, the EEC also gave a line of credit to the ADB. The most recent line of credit, which was accessible to all banks, was from the World Bank-financed Rural Finance Project. Evaluation of these various lines of credit is not yet complete.

Rural Banks

7.12 With their broad-based private ownership, rural banks allow for significant private participation in the formal financial system.[30] Rural banks in Ghana today are widely distributed and accessible to the farming community. Though the BOG promoted the establishment of a rural banking system by commissioning the first rural bank in 1976, most rural banks were started with capital contributions from farmers. With the additional contribution of salaried workers (all government workers are paid through rural banks) the capital base of these banks has expanded. Their number also increased from 20 banks by the end of 1980, to 105 in 1984, and 123 in 1991 until today.[31]

7.13 Rural banking's significant success in its early stages was due in large measure to nurturing by BOG and donors (see Box 7.1). Savings grew rapidly, and loan repayment rates were good. But with the system's rapid expansion, rural banks faced growing management difficulties and loan recovery faltered.

7.14 Though rural banks have been more successful in mobilizing deposits than branches of commercial banks (including ADB), they have had relatively high administrative costs and poor loan recoveries. At the end of 1992, deposits were 27 times the paid-up capital, and 12 times the size of deposits in ADB. Rural banks, on the other hand, have relatively more savings deposits (60 percent of total deposits). With their cost of funds averaging about 5 percent and an average interest yield of 30 percent, rural banks enjoy wide interest rate margins. The weakest aspect of financial intermediation by the rural banks is lending; sixty percent of the loan portfolio is currently in arrears. Average loan recovery ranged from as low as 34 percent in

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[30] Earlier, some attempt was made to forestall concentration of ownership and encourage broad-based community participation, and individual participation was limited to 10,000 shares. That ceiling has since been abolished.

[31] As of December 31, 1993, there were 34 pending applications for new rural banks, of which 10 have been approved. At least 100 rural banks are located in cocoa-growing areas. Before 1986, BOG contributed 25 percent of share capital to most rural banks. Few, however, have fulfilled their obligation to repay this money.

Box 7.1: Donor Assistance to Ghana's Rural Banks

Since 1980, the EEC has financed two projects to strengthen rural banks and provide a line of credit for the purchase of farming and fishing equipment. Heavily subsidized, the credit lines did not achieve all of their original objectives, but the 11 rural banks financed under the project experienced a sustained period of growth in their customer base during the project years. The number of account holders increased from 28,000 to 45,000 within a year. An excellent *Manual of Operations* was prepared under the technical assistance and is still in use.

The success of the first project gave rise to a follow-on project. The operation was expanded to cover 60 rural banks, but the performance of the project was not satisfactory. The project was planned to be executed within 2 years, but actual implementation took over seven years. Many items could not be sold for cash or credit due to a several—fold rise in prices (due to devaluation) while prices of food crops, most of them being non-tradeable, did not increase proportionally. The slow pace of training resulted in minimal overall impact compared to the first project. The level of overdue loans increased weakening the position of many banks.

The on-going World Bank-financed Rural Finance Project has also two components; a line of credit at market interest rates for eligible rural banks (with adequate capital) and technical assistance to all rural banks. The line of credit has been fully disbursed but it is too early to assess loan recovery. Initially, there was a very slow uptake of credit, but removal of sub-loan ceilings and adjustment of the reference interest rate increased credit demand sharply. It was, however, used almost entirely for short-term purposes like farm improvements for cocoa, internal marketing of cocoa and export finance. Very little use of the line of credit has been made for medium- and long-term investment.

Since 1990, a major restructuring program of rural banks has been supported by the Rural Finance Project. The main actions in the program are: (i) diagnosis of the financial and prudential status of rural banks and correction of deficiencies; (ii) launching of special deposit mobilization, loan collection and equity contribution efforts; and (iii) upgrading of the management skills of rural bank staff through on-the-job training and the provision of local technical assistance. The restructuring program has progressed satisfactorily. In 1990, there were 11 rural banks meeting the capital adequacy criterion while this year there are 34 rural banks which meet the criterion—out of a total of 123.

1986 to as high as 52 percent in 1990.) About 42 percent of deposits are loaned out—of which over 80 percent went to agricultural production, processing, or trading, and less than 20 percent to satisfy rural household needs.

7.15 The Banking Law of 1989 requires that all banks—including rural banks—maintain a minimum capital adequacy ratio of 6 percent at all times (see also Box 5.3). In 1991, the World Bank financed a Rural Finance Project which conducted diagnostic audits of rural banks' capital adequacy (see Table 7.2). Most—98 out of 122—proved to be capital deficient, due to the high level of provisions required to support poor loans, over-investment in fixed assets (such as buildings and vehicles), operating losses due to high administration costs, and a very thin capital base. While share capital grew in nominal terms from ₵95 million in 1987 to ₵313 million in 1992, even this three-fold increase was not sufficient to prevent capital deficiency. Distressed rural banks, furthermore, do not allow deposit withdrawals, so that BOG has had to pay out ₵525 million to cover the banks' ₵826 million worth of deposit liabilities. The total capital deficiency of rural banks, however, amounts to only ₵1.85 billion. This is still less than the deficiency of ADB, which has also been assisted by the BOG to meet its capital adequacy requirement.

7.16 Rural banks generally suffer from:

Table 7.2: Capital Adequacy of Ghana's Rural Banks by Region, as of March 1991

Region	Total number of rural banks	Capital deficiency (million cedis)				
		None	Less than 5.0	5.0-9.9	10.0-19.9	20 and over
Ashanti	22	2	9	8	1	2
Brong-Ahafo	18	4	9	5	-	-
Central	22	5	8	5	4	-
Eastern	22	5	7	4	4	2
Greater Accra	6	4	1	-	1	-
Northern	2	1	1	-	-	-
Upper East	2	-	1	-	1	-
Upper West	2	-	2	-	-	-
Volta	13	1	4	3	3	2
Western	13	2	2	2	2	5
Total	122	24	44	27	16	11

Source: SGV and Co.: *Rural Finance Policy and Bank Restructuring*, Volume II. Accra, Ghana. September 1991.

- *Poor Information.* Because of the lack of solid collateral in rural areas, the credit relationship is based on information from members and on trust. In the past, lending to the general public (without the precondition of membership) has often resulted in poor selection of clients, in part because borrower information is poor.

- *Profit-Sharing.* The tax authorities' decision that rural banks cannot pay dividends as long as they are exempt from paying income tax has limited owner's interest in running profitable institutions.

- *Low Volume.* Because rural banks are organized at the community level, their scale of operations is relatively small and unit transaction costs are high. This exposes them to risks by making it difficult for rural banks to absorb shocks—one large bad loan or a short period of poor management can lead to collapse.

- *Democratic Control.* In rural banks, each member has only one vote, regardless of the number of shares held. With everyone given equal power, no dominant owner or group of owners can emerge, therefore, to protect the financial welfare of the bank as a whole. Banks' governing bodies are selected more for their popularity than their financial stake in the enterprise, paving the way for abuses of power, overstaffing, corrupt management and staff, and under-capitalization.

- *Inadequate Supervision.* Responsibility for overseeing the rural banks is presently divided among BOG's Rural Finance Inspection Department, Bank Supervision Department, and the Research Department, which creates confusion. The Rural Finance Inspection Department's task is to inspect only rural banks, while the Bank Supervision Department and the Research Department are supposed to supervise all banks. In reality, none of these departments are equipped to carry out their responsibilities. This has led to endemic information bottlenecks regarding which banks now meet the capital adequacy requirements; which are ready for license; and so on.

7.17 Early detection of problems in the management of rural banks is absolutely essential. The transformation of the Rural Bank Department (once fully responsible for the development of rural banks) into the Rural Finance Department and the transfer of 30 field inspectors to the Bank Supervision Department has diffused the focus on rural banks and weakened the lines of responsibility for the development of rural banks.

7.18 The recently concluded technical assistance program (conducted as part of the Rural Finance Project) helped to improve the management of several rural banks. Such programs should be made available to all banks until they either meet capital adequacy requirements and have become viable financial institutions, or are liquidated. As it now stands, many rural banks are in financial distress too deep for them to be able to resuscitate themselves. Unless a major training and recapitalization effort is made, therefore, there will be only a few successful banks left amid many failed ones. Private rural financial institutions and rural finance are too important to ignore, and economic and social costs of not undertaking remedial measures are too high.

7.19 Earlier policies (based on the assumption that small-scale farmers required cheap credit sources to free themselves from the clutches of manipulative moneylenders) undermined the ability of banks to operate with profits (see Box 7.2). BOG guidelines, furthermore, required rural banks to allocate at least half of their lending portfolio to agriculture, and many rural banks rushed into bad loans attempting to meet the guidelines. This requirement has now been abolished, and liberalization of interest rates now make it possible for rural banks to give loans that are financially viable.

B. Financial Intermediation

7.20 From estimates regarding agricultural sector financial dealings with commercial banks, rural banks, and credit unions (Table 7.3), it can be seen that agriculture's share in total deposits is only about 12 percent of the formal sector, despite the fact that it accounts for 47 percent of GDP. In spite of this low deposit mobilization, agriculture is a net contributor to the rest of the economy, having borrowed only ₵25 billion against the ₵33 billion it deposited in formal institutions.

Table 7.3: Volume of Deposits from and Lending to the Agricultural Sector as of March 1993
(In Million Cedis)

Formal institutions	Deposits[a]	Loans[b]
Commercial banks (including ADB)	22,132	18,739
Rural banks	8,900	4,500
Credit unions	2,200	1,800
Total for agriculture	33,232	25,039
Total for all sectors	276,663	133,838

[a] Data on commercial bank deposits in rural areas are estimated from the deposits generated by their rural branches. That for all sectors together are taken from the quarterly reports of BOG.
[b] Derived from the quarterly reports of the BOG.

7.21 Among the three types of formal financial institutions, the commercial banks dominate in the field of financial intermediation. There are several geographic areas, however, where only

Box 7.2: Problems with Subsidized Credit in Sub-Saharan Africa

Subsidies are transferred in the financial markets through administered interest rates—below market interest rates allowed to depositors, concessionary refinance facilities offered by central banks, below market rate of interest stipulated for loans to targeted sectors or clientele, high transaction costs absorbed through subvention payments, and loan losses reimbursed from the national budgets. Attempts to provide special help to the needy and the poor through subsidized credit programs are known to have been subject to abuse and mismanagement in many SSA countries and not to have yielded the expected benefits. Apart from benefiting rent seekers, the financial intermediaries themselves have been weakened, in many cases beyond redemption. Subsidies, once introduced, tend to balloon and are generally difficult to phase out quickly, if at all possible.

Credit is not the most appropriate instrument for subsidizing any economic investment or operation even if priority sector needs warrant such special support. The extent of subsidies involved in policy-based credit schemes is not always explicit or evident—it generally takes the form of unserviced equity and loans provided by the state, subvention payments, etc. (Yaron 1992). Subsidies when deemed essential should preferably be made as direct explicit assistance and not through the credit instrument. Explicit and implicit subsidies involved in any credit scheme or in the operation of financial institutions should be computed at the planning stage, monitored on an ongoing basis, and appropriately funded to avoid cross-subsidization and gradual weakening of the institutions involved.

Care is required to ensure that the subsidies do not compound the distortions in the financial market which prompted their introduction in the first place. Subsidies offered to end-beneficiaries should not impinge on the operational and financial autonomy of the financial intermediaries. To minimize further distortion of the financial markets, end-users should be charged interest on loans in keeping with market rates, and any subsidies, where considered essential, should be passed on to the financial intermediaries so as to ensure their viability.

Source: S. Thillairajah, "Development of Rural Financial Markets in Sub-Saharan Africa," World Bank Discussion Papers No. 219, 1994.

rural banks and credit unions provide financial services, and few smallholders and fishermen use the services of commercial banks. At present, farmers contribute only 32 percent of rural financial institutions' total deposits, while traders contribute 24 percent and salaries workers 19 percent. There is a lot of liquidity in rural areas, therefore, that has not yet been captured by formal institutions.

Rural Savings and Deposits

7.22 Studies of savings consistently show that the rural population saves a greater fraction of their income than the urban population. The manner in which they save, however, is different. Rural savings are most often in the form of nonfinancial assets (such as building, cattle, storage, land improvements, or new plantations). Out of monetized rural incomes of ₡1,192 billion, annual savings amounted to some ₡45 billion, yet the total stock of agricultural deposits in rural commercial banks (as of March 1993) was only ₡22 billion (see also Chapter II on Savings and Investment).

7.23 A comprehensive 1988 study (IPC, 1988) of 377 bank depositors found that, in Ghana, only 5 percent of financial savings are deposited in banks. In the rural branches of banks, moreover, more than 80 percent of depositors resided within a 5-km radius of the branch whose

putative catchment area was supposed to be at least 30 km. A large number of households in rural areas, therefore, do not use services offered by formal financial institutions.

7.24 In terms of the various possible types of deposits (such as demand, savings, and term), term deposits play an insignificant role in rural banks. Time-series data on deposits from the rural sector as a whole are not available, but that available for rural banks from 1988 to 1993 show that deposits of rural banks have increased by 54 percent—much less than the overall rate of inflation. This increase, moreover, is much smaller than for banking deposits overall, which increased by 182 percent. Since the agricultural sector has grown by 2.5 percent a year in real terms over the same period, it is clear that the level of financial intermediation by rural financial institutions has declined.

Agricultural Sector Credit

7.25 Time-series data on commercial bank credit to the agricultural sector show that lending to the sector has dropped sharply from 31 percent of total lending in 1983 to 9 percent in 1993. Before liberalization of the financial markets, commercial banks were required to allocate at least 20 percent of their total credit to the agricultural sector, which means that at least half of present loans outstanding are actually past loans that have been non-performing for some time. If these loans are excluded, commercial bank lending to the agricultural sector is at most 5 percent of new loans. In terms of sectoral distributions, agricultural credit now occupies third place after manufacturing and construction.

7.26 Recent studies also suggest that agriculture's demand for medium- and long-term credit from formal institutions is much less than its demand for short-term credit. Participating financial institutions, too, prefer short-term loans, largely because of Ghana's high rates of inflation. A recent review of the Bank-financed Rural Finance Project showed that the average maturity of agricultural loans is 12 months. High interest rates discourage borrowers, and rural banks do not generally offer long-term credit.

7.27 The only institution offering sizeable long-term loans is ADB. But most of ADB's term lending goes to big traders, large farmers, and processing units. Even in ADB, moreover, short-term loans account for 80 percent of all lending.

Financing Cocoa Marketing

7.28 The biggest user of agricultural credit has been the public sector agency, COCOBOD. Before the internal marketing of cocoa was liberalized, COCOBOD borrowed from BOG to buy cocoa, financing the purchase of about 80 percent of the total crop. In FY91, for example, about US$175 million, or ₵72 billion, were needed for this purpose. This was at least four times the amount of credit formal financial institutions provided to the rest of the sector. In Ghana, therefore, cocoa dominates formal rural financing (see Box 7.3).

7.29 Starting with FY93, the government began allowing private traders to buy cocoa, and BOG stopped lending to COCOBOD for cocoa purchases. COCOBOD then secured a syndicated loan facility of US$140 million (equivalent to ₵126 billion) from the Euromarket. This amount was placed in commercial banks and used piecemeal as COCOBOD's commitments matured. This exercise was repeated when COCOBOD borrowed US$150 million through a syndicated loan in October 1994.

Box 7.3: Cocoa Akuafo Check System

Under the Akuafo check system, COCOBOD or any buyer of cocoa is required to pay farmers by checks for their produce instead of by cash or "chits." The farmers have to open an account in a designated bank but are free to cash the full value of their check or to deposit a portion in a savings account opened with the designated bank. To minimize travel time for dealing with banks, the Government required banks to open branches so that in principle no farmer in the cocoa growing areas had to travel more than 25 miles to a designated bank. The network of banks rapidly expanded between 1982 and 1984, creating for the first time an infrastructure of banks spanning the rural sector and making this market more accessible to financial institutions. There are, however, still several cocoa growing areas in the Western Region where farmers have to travel beyond 25 miles to cash Akuafo checks.

The system has special features suitable to farmers' needs, including an easy-to-use identification method, flexible and extended banking hours (corresponding to the farmer's schedule), convenient locations, specially trained bank officials, etc. The Akuafo system includes a sound marketing program, including participation of rural households in the identification of the types of banking services to be offered. The Akuafo check system continues to exist after liberalization of the internal marketing cocoa in 1992 in which the Produce Buying Company of COCOBOD (now autonomous) and five private firms compete.

Farmers, however, do not have much confidence in the banks. They cash their Akuafo checks on receipt, and keep most of the proceeds at home.

7.30 Foreign currency received in Ghana from the foreign loan contracted for cocoa purchases was sold on the interbank market, giving licensed Ghanaian buying agents access to the cedi proceeds. This year, out of the US$50 million COCOBOD used from this offshore facility, about US$15 million went to four private traders and the remaining US$35 million to the public sector Produce Buying Company, which is now an autonomous agency.

7.31 Private traders' entry into the financial market is so significant that—out of ₵8 billion disbursed from the line of credit under the Rural Finance Project—about ₵5 billion were used by cocoa traders to cover both short-term financial needs and long-term investments in vehicles, equipment, and warehouses.

7.32 Cocoa finance dominates Ghana's formal financial institutions because it comes entirely from the formal trade sector and has high seasonal demand. With 80 to 85 percent of the cocoa crop purchased between October and December, there is limited occasion for rapid turnover. Although total financial needs for the marketing of monetized crops other than cocoa are estimated to be at least three times those needed to market cocoa, these crops impose relatively few demands on formal financial institutions. Trade takes place mostly in the informal sector over a long period, giving ample opportunity for turnover of financial requirements year round. Studies have shown that farmers spread out sales over many months and take care of their own needs for storage. (Traders engage in some interseasonal storage of grains, but usually for not more than about two weeks.) They seek a quick turnover and store far smaller quantities than are stored by farmers (Coulter and Asante, 1993).

C. Obstacles to Financial Intermediation

7.33 This section focuses on what has prevented Ghana's formal rural financial sector from mobilizing more deposits and expanding agricultural credit. While other countries have developed institutions that operate profitably despite these difficult environments (see Box 7.4),

Ghana will have to take great care to make sure that any solutions it adopts are appropriate to the specific conditions of the country.

Deposit Mobilization

7.34 Various studies have found that people will not place their savings with the formal financial sector because they lack access to banks; do not wish to incur high transaction costs; have no confidence in these institutions; and do not respond to the marketing strategies adopted by them.

7.35 In Ghana, however, bank branches are well enough distributed that, on the whole, the rural population has relatively easy access to formal banking services (at least in the southern part of Ghana), especially when compared with other countries in Sub-Saharan Africa. But rural savings behavior depends on the pattern of rural incomes. In the north of Ghana, the income stream is fitful and unevenly distributed over time, so that households attempt to save a large portion of their income in relatively liquid form like stored farm produce, cattle, etc, as precautionary balances. In the south and Ashanti/Brong Ahafo regions, better rainfall and different farming systems produce a steadier and more even income stream, and rural households are more willing to hold financial assets in formal institutions. For this reason, Ghana's banking sector—ever conscious of the high cost of operating in the rural sector—has opened very few branch offices in the northern region, and even in the middle and southern regions has concentrated its offices in urban centers.

7.36 In the northern, upper east and upper west regions—an area covering 97,702 sq km—there are only 45 branch offices, mostly located in urban centers. This is an average of one bank to every 2,171 sq km, serving about 60,000 households. In the south, one branch office serves about 19,000 households in, on average, a 100 sq km radius. Because of the restructuring program, branches of commercial banks decreased from 405 in 1988 to 328 in 1992, and most closures occurred in rural areas.

7.37 Surveys have shown that travel time is a very important determinant of demand for deposit facilities in rural areas. Data collected from 2,414 individual savings accounts (in 37 rural branches of commercial banks, ADB, and rural banks) show that about 91 percent of the total deposits were made by individuals living within a mile of the bank, although relatively more people were willing to travel from faraway places to deposit their money in rural banks than in commercial bank branches (see Table 7.4).

7.38 Because commercial banks have historically served the well-to-do, the rural population largely mistrusts them. The perception is that commercial banks are only for rich people and treat others unfairly. In fact, in Ghana's commercial banks today, current accounts and overdraft facilities are rarely made available to smallholders, petty traders, rural craftsmen, and owners of microenterprises. Even if they have regular, recurrent-demand accounts and have established a good credit record, these people have difficulty obtaining loans.

7.39 Contributing to this mistrust is the fact that most farmers know little about finance. The distinction between genuine savings accounts with restricted withdrawal rights and current accounts, for example, is not well understood. Farmers see that a wage-earning, salaried neighbor can present a passbook and make the fourth withdrawal in a month, while the farmer is refused a second withdrawal. There have also been cases where payments to depositors could not be made because passbook entries were not reflected in ledger entries.

Box 7.4: What Makes Rural Financial Institutions Work?

Four public rural financial institutions (RFIs) in Asia are widely perceived as having been successful at achieving financial self-sustainability and substantial outreach to the rural population. These RFIs are the Bank for Agriculture and Agricultural cooperatives (BAAC) in Thailand, the Grameen Bank in Bangladesh (GB), and the Badan Kredit Kecamantan (BKK) and Bank Rakyat Unit Desa (BUD) in Indonesia.

Financial self-sustainability is achieved when an institution is not dependent on state subsidies for its operation. This is attained when the return on equity, net of subsidies, is equal to the opportunity cost of funds. Outreach is assessed on the basis of the clientele served and the variety of services provided. Since the aim of these RFIs is to provide credit to the rural population, the outreach of the institution is measured by how effectively they have channeled credit to the rural population.

All four institutions have decreased their dependence on subsidies over time, and in the case of BUD subsidies have been eliminated altogether. Also, all of them have mobilized substantial savings, which is an important component of self sustainability. At the same time, all four of these institutions have firmly entrenched themselves at the village level. Annual growth rates of loans and savings of over thirty percent were reported for the GB and BUD, indicating significant success at increasing the deposit base and expanding their outreach.

The success of these institutions can be attributed to the development of sound financial policies, efficient loan processing facilities, incentives for timely loan repayment, and the use of existing social mechanisms to select borrowers and ensure their compliance with repayment terms.

Financial Policies. All four institutions are charging positive real interest rates on their loans, with nominal rates ranging from 11 to 130 percent a year. This confirms the hypothesis that access to credit, rather then high interest rates, poses the greatest obstacle for rural borrowers. All four institutions have provided saving services with varying degrees of success. While each started as a supply-led credit delivery institution, the mobilization of rural savings quickly became the most rapidly growing financial resource. At the same time they developed a wide array of incentive instruments to ensure financial discipline and enhance the relationship with borrowers. The two Indonesian RFIs have offered a monthly interest rebates on the original loan value for timely repayments (0.5 percent by BUD and 1 percent by BKK). In contrast, BAAC imposes a penalty of 3 percent a year on arrears. These institutions have also found ways to solve the loan security problem without collateral requirements. BKK uses character references while GB uses joint liability or peer monitoring. BAAC asks for collateral when loans exceed $2,400, while BUD requires co-signers and evidence of asset ownership.

Loan Processing Facilities. All four RFIs have processed loans efficiently, although each has applied a procedure tailored to its specific clientele. For example the flexible repayment pattern in the Indonesian institutions has meant that loan repayments could be adjusted to a wide variety of activities financed and their typical cash flow patterns.

Social Mechanisms. By using existing social structures or forming social peer groups there institutions ensure that borrowers are selected appropriately and repayments made in time. The Indonesian RFIs use official leadership in the village to help screen loan applicants and secure prompt loan collection. In case of a default, access to additional credit was promptly eliminated. In contrast, a sound collection record boosted the prestige of the village head who became the link between formal institutions and the village. The GB and BAAC have leaned heavily on self help groups to promote and deliver the loans. The groups are small and hence the free riding problem is avoided. The joint liability of group members for repayment provides adequate incentive for "peer monitoring."

Loan Repayment. Under all programs borrowers who made timely repayments gradually increased the amount of credit they were eligible to receive. In fact, timely repayment became the only assured way to gain access to repeated loans at the lowest financial cost. They all used components of mobile banking to provide savings and lending services. For example, a BKK field staff member visits a different village every day, on market day, to collect savings deposits and loan repayments.

Any attempt to replicate the achievements of these successful RFIs must recognize that a workable solution in one socioeconomic environment may not necessarily work in the other. However, the general principles of these successful institutions can still be applied. The success of an RFI ultimately depends on its ability to lower transaction costs, plan and monitor loans effectively, and mobilize rural savings to replace state subsidies.

Source: Yaron, J. "What Makes Rural Financial Institutions Successful?" *World Bank Research Observer*, Vol 9, No 1, 1994.

Table 7.4: Analysis of Deposit Base of Rural Institutions

Institution	Number of Depositors in Sample	Depositors living within one mile of bank	Percent of Sample
Commercial banks	1,340	1,218	90.9
ADB	125	106	84.8
Rural banks	796	528	66.3
All banks	2,414	1,972	81.7

Source: GTZ, 1988.

7.40 Bureaucratic inefficiency and incompetence also combine to alienate rural customers. Because BOG's clearing-house functions are centralized in Accra, cashing checks in rural banks takes at least three weeks. Because the currency in circulation in the countryside is often old, torn, and in small denominations, bank clerks find counting bills at banks bothersome, especially where large sums are involved, and small depositors are often asked to wait until customers with larger denominations have been served. Banks often find that even the expense of supplying new passbooks is sometimes not justified by the small amounts farmers deposit. Yet in a typical rural bank, there may be as many as 2,000 small depositor accounts, but only 100 large accounts.

7.41 In some areas, the introduction of rural banks with direct equity participation by the community has helped change rural people's attitudes toward banks. The flexible loans these banks offer, coupled with their own involvement in the workings of the bank, helped build local confidence in these institutions and made them less alien.

7.42 Even rural banks—which are much closer to the people than the rural branches of commercial banks—have had discouragingly poor performance. In 1991, only 18 out of 123 rural banks were in good condition financially. Thirty-six were distressed—that is, completely unable to pay their deposit liabilities—and the remaining 79 were only mediocre. Poor management is largely to blame. Those who benefit from the banks, moreover, are large, influential farmers who obtain loans but maintain a smaller share in total deposits than do smallholders. In a typical medium-sized rural bank in Ghana, for instance, 1,000 small farmers will deposit a total of about ₵10.0 million while 100 big farmers will borrow ₵7.0 million and deposit only ₵4.0 million.

Agricultural Credit

7.43 Patterns of income also affect people's willingness to take on financial obligations, and therefore the demand for credit. In general, individuals uncertain about their income are reluctant to commit themselves to definite repayment schedules. Small-scale farmers (often in that situation) consider debt as a last resort, when all other plans for surviving from one harvest to the next have failed. Consequently, in a country where 95 percent of farmers are smallholders the effective demand for credit in the agricultural sector as a whole is limited. In Ghana, therefore, a well-functioning rural financial system would provide both deposit facilities for smallholders and prudent credit facilities for a much smaller number of financially stable farmers

and investors, whose stronger financial position would expose smallholder savings to less risk (see Box 7.5).

7.44 Until now, the traditional approach has been to estimate the presumed demand for investment credit based upon certain assumptions about technological potential and rates of return on the related investment. Based on those estimates, several lines of credit were then provided under donor-funded projects. But loan recovery (and hence sustainability) of those lines of credit has been generally poor. Moreover, the assumption that there is excess demand for medium- and long-term loans (adhered to by the Bank-financed Rural Project) is not true at market interest rates. People actually used almost 80 percent of the Rural Project's line of credit for short-term loans, proving that the demand for short-term credit is as great and must be filled before long-term credit is even considered.

7.45 For those with demand for credit facilities, such as smallholders, microenterprises, and rural petty traders and craftsmen, access to current account and overdraft facilities is often denied. Loans granted to smallholders, moreover, are frequently late and in lesser amounts than requested. This means that most of Ghana's rural population has inferior access to credit, both in quantity and quality.

7.46 Farmers in Ghana cannot obtain credit from formal financial institutions if their only security is livestock, crops, or equipment. Unless farmers can mortgage land or show evidence of ownership of land without encumbrances, in fact, they may be unable to obtain any credit at all. While this situation is taken for granted in Ghana, under different credit and collateral systems, movable property readily serves as collateral. For example, in Ghana, cattle owned by a farmer operating on rented land are unacceptable collateral, because Ghanaian lenders mistrust livestock's ability to hold recoverable worth over the 6- to 24-month collection period. In some areas of the US, however, cattle are preferred collateral for bank loans, machinery stands second, and real estate is a poor third. These American lender preferences arise from the ease of repossession and sale, which can take place in less than five days without judicial intervention.

7.47 Yet even for farmers who own land, access to credit is severely limited. Under Ghana's existing land-tenure system, land ownership and rights of use are unclear, which makes it difficult to use land as collateral. In any case, as studies throughout the world have shown, peasants everywhere are reluctant to use land as collateral, because they do not want to risk losing it.

7.48 In Ghana, lending farmers working capital to finance crops is rare. This then blocks the flow of credit from intermediaries—such as feed lot and grain silo operators—to farmers and ranchers. In other countries, intermediaries often obtain credit from financial institutions and then pass it down the production line. Without this transmission mechanism, farmers have to obtain credit directly from banks, which in Ghana is extremely difficult.

7.49 The experience with rural finance projects has not been good. Inadequate project appraisal based on inadequate information has led to disbursements unsynchronized with production, diversion of funds, and defaults. Inadequate supervision, monitoring, and evaluation have led farmers to believe that loans granted from formal institutions are government grants and not meant to be repaid. Moreover, the kind of intense supervision required to recover loans from scattered smallholders and smaller cooperatives quickly becomes financially infeasible, demanding as it does high administrative and operating costs.

Box 7.5: Innovative Approaches to Rural Credit in Ghana

SG 2000

SG 2000—short for "Sasakawa Global 2000"—is a non-profit NGO. Its project's main objective is to demonstrate that simple technological improvements, like improved seed and fertilizer, can increases crop production substantially. In 1986, participating farmers were required to set aside a one-acre plot—the "production test plot"—to demonstrate the improved technologies. This allowed for a meaningful comparison of crop yield with the rest of the farm.

The program's success (in most cases, maize yields more than doubled) made SG 2000 quickly popular among farmers and extension staff. The number of participating farmers increased from an initial number of 40 to 20,000 in 1988, when Ministry of Agriculture decided to adopt the approach in other areas. The credit side was manageable in the initial years, but credit recovery fell to less than 40 percent when the program was expanded in 1989. In 1990, it became clear that the financial institutions, input traders and farmers had to play a much stronger role in supplying credit. In 1991, SG 2000 started the Farmer Production Plots program as a pilot effort to link small-scale farmers to formal financial institutions.

Farmers who repaid credits fully became eligible for further credit in 1991, when they were grouped together to form small associations. SG 2000 contracted private dealers to supply fertilizer to the groups, while seeds were supplied by SG 2000. The cost per acre per farmer was equivalent to $40 at 1991 prices. SG 2000 opened remittance accounts at 17 ADB branches into which groups repaid their credit. A total of 128 groups, covering 1,544 farmers, were formed. The credit recovery rate—87 percent in the major season, 69 percent in the minor reason—was found to be directly related to the effort made to carry out recovery and extension. Crop failure and farmer's unwillingness to repay had little influence. In 1992, those who had fully repaid their loans were introduced to the ADB for credit and the ADB accepted them as creditworthy. The credit recovery this year has been almost 100 percent. Only those who had established a realistic repayment record were allowed to rejoin groups.

Linking farmer groups to input dealers and financial institutions solves the collateral problem. Repeat credit is granted only to eligible groups and not to individuals. Credit in subsequent years is granted only to those who prove creditworthy. The issue of cost recovery, however, remains. While it is not clear how long the SG 2000 program will be sustainable, its Ghana experience shows that there is no quick way to establish sound programs for agricultural credit.

Technoserve

Since 1975, Technoserve has endeavored to replicate successful business strategies throughout Ghana. Its first cooperative palm oil mill established 7 years ago at Ntinanko has fully repaid all its loans. Cooperative members were required to contribute equity, while Technoserve provided training in business management and loans at market interest rates, which—it stressed—would not be forgiven. After the Ntinanko oil mill proved successful, Technoserve established another mill at Prestea which also worked out well. Now Technoserve has been contracted to establish 60 cooperative palm oil mills under the World Bank financed Agricultural Diversification Project.

The first inventory credit project for maize was implemented by Technoserve in 1989. Instead of immediately selling maize after harvest when prices are very low, farmers shell, dry and store it in a cooperative store. Using this stored maize as collateral, commercial banks give them a loan valued at usually 70 to 80 percent of the prevailing market value of the produce. The stored crop is managed by the group to which Technoserve provides technical assistance in business management practices. Several months later, during the lean season, when prices have risen due to relative scarcity of maize, the farmers sell the stored maize, using the sale proceeds to repay this credit. This inventory credit program is relevant in the context of sharp intra-year price fluctuation for food crops as well as on technical grounds because, if organized in groups, farmers can afford to own a better storage facility compared to the one used by individual smallholders. After the initial success in the inventory credit project, Technoserve was invited to replicate the idea in Upper West and Brong-Ahafo regions under the World Bank financed Rural Finance project.

Source: *Ghana 2000 and Beyond*, World Bank (1993)—and Sakyi, Donkor and Tetteh, "Farmer Production Plot (FPP) Groups." Paper presented at Conference on Credit to Micro-Enterprises in Accra on March 2, 1993.

VIII. INFORMAL FINANCE

8.1 Although it is estimated that the informal financial sector in Ghana mobilizes some 45 percent of all private sector financial savings, its capacity to intermediate between savers and investors remains limited (see Aryeetey and Gockel, 1991). In part, this stems from clients' savings behavior and in part from the absence of links with the formal sector. The two sectors could work together, however, to the advantage of both. Savings generated by susu collectors, for instance, could be brought into the formal system for more productive investments; types of collateral could be expanded to allow traders to draw on formal credit. The informal sector has considerable ability to mobilize savings and a sound information base for lending. Under the pressure of increased competition, Ghana's formal institutions may want to harness their assets and expand intermediation.

8.2 Experience in many other countries, however, has clearly shown that the informal financial sector is not merely the result of market failure in the formal sector. Informal arrangements have distinct advantages in limiting risk and lowering transactions costs. Therefore, public policy should be directed not at replacing informal with formal arrangements, but at lowering the cost of funds by giving informal intermediaries access to formal financial institutions and lowering their transactions costs.

A. Structure of Informal Finance

8.3 Susu collectors are the most important of four informal channels for savings mobilization in Ghana: susu collectors, susu groups, moneylenders and traders, and savings and credit cooperatives (see Box 8.1). Susu collectors visit shops, workplaces, market stalls, and clients' homes each day and collect funds toward a savings plan. Individual savers place with the collector an agreed amount for a specified period of time—usually a month—after which the deposits (less a commission typically equivalent to one day's deposit out of a monthly total) are returned to the depositor. The depositor may, in an emergency, request that his or her money be paid out earlier than agreed. Susu collectors can deposit the money they mobilize with a bank (the most popular option), invest in their own business, or lend to others.

Box 8.1: Informal Finance Channels

- *Susu Collectors* are mobile bankers who engaged primarily in mobilizing savings. Lending is limited by the short-term nature of the deposits.
- *Susu Groups* are engaged primarily in mobilizing savings, but the arrangements for collection and payment are organized collectively. The expression susu is used for both susu groups and susu collectors.
- *Savings and Credit Cooperatives* are registered cooperative organizations whose main activity is lending to a limited number of members from regular dues.
- *Money Lenders/Traders* are mainly rich cocoa farmers and businessmen who have their own surplus cash to lend and access is the formal financial system. The cash is generated from activities other than money lending. Money lenders are not typically involved in mobilizing deposits and often have a narrow capital base.

8.4 Rotating susu groups are more common in urban areas, where there are community-based or worker-based groups. These groups are mainly patronized by wage earners on a monthly basis, who generally seek to smooth out their own investment and consumption capabilities over a limited period. Colleagues at a government office, for instance, might put an agreed amount of savings into a pool just after they got paid. The number of participants usually equals the number of months the group is set to operate. The group then randomly (probably by casting lots) selects the month in which each individual will receive the full lump sum deposited in the pool by the whole group. Once each participant has received an entire month's deposits, the group may opt to continue, change its size, or fold. Most work-place savings groups have 12 members and operate for one year. The system operates completely on the basis of trust.

8.5 Despite the fact that the system of rotating susu groups is older than that of susu collectors in Ghana, the susu collector system is now much more popular as a savings facility. This was also confirmed by the IPC's 1988 study of rural households in Ghana. The susu collector's popularity stems in part from the liquidity of their financial assets which are returned each month as opposed to the susu groups' annual or six-month returns. Small traders in particular, cannot wait many months for the cash they need for daily operating expenses.

8.6 But while susu collectors largely amass savings, susu groups and savings and credit cooperatives also undertake some financial intermediation. Though the ability of susu collectors to expand is dependent on their ability to meet their depositors' credit demand, the lending side of their operations is severely limited by the short-term nature of the deposits. Since they must return the deposits of all their clients to them at the end of one month, they cannot lend for a longer period and can only lend to a small number of clients at a time.

8.7 In the informal sector, units operate independently and with little interaction among them. Although some households save with, and borrow from, two or three different types of informal units at the same time, cost structures at each unit and pricing are hardly influenced by general market conditions. In essence, the conditions under which a susu *group* would accepts new members have little to do with her having made regular deposits to a susu *collector*, and vice versa.

8.8 While informal finance in Ghana appears to be dominated by men, women feature prominently in the running of savings and credit cooperatives and susu groups. Only 16 percent of moneylenders identified in a recent survey were female, but 46 percent of susu group leaders were female. The susu collector business, on the other hand, is almost entirely controlled by men, even though the majority of their clientele are women. These operations, furthermore, attract fairly literate and educated persons, for most of Ghana's informal financial operators have spent a minimum of 12 years in school (Aryeetey, background paper) and keep records of their activities.

B. Informal Savings

8.9 Informal savings arrangements have proven to be better suited to mobilize savings in rural areas than formal institutions. Informal collectors are known to the depositors, members of the community, and trusted—something that can not be said for formal institutions. The IPC's 1988 study of the informal sector found that, while 12 percent of total household savings went to informal units, only 8 percent went to banks, and the remainder went into real assets (see Box 8.2).

Box 8.2: Savings Characteristics of Urban Market Women

Why do a large number of households and market women prefer to save informally? A survey of 1,000 market women in 3 cities showed poor confidence in the security of their deposits at banks as a primary concern. But over 40 percent of respondents would not save with banks because (a) they thought their incomes were too low—suggesting that they expected only those with high incomes to deal with banks; (b) there was too much formality at banks; and (c) banks were not interested in little frequent deposits with torn notes, and discouraged market women from making them. In smaller communities and rural areas, travel time and costs played a more important role in transactions costs than was found in large urban communities.

Income and Savings		
Proportion of respondents who saved		79.5 percent
Proportion of respondents with income		76.2 percent
Average weekly earnings		₵9,864
Savings Allocation		
Average proportion of monthly income saved		19.1 percent
of which:	savings at home	18.2 percent
	savings at bank	18.3 percent
	savings with susu	50.1 percent
Geographic Factors		
Average distance from nearest bank		0.7 km
Average distance from usual bank (if applicable)		4 km
Proportion of bank savers who saved with nearest bank		44.2 percent
Savings Characteristics		
Respondents with bank account before 1982		49.1 percent
Respondents with bank account in 1989		36.4 percent
Usual reason for never saving in bank		Income too low
Usual reason for stopping bank savings after 1982		Lack of confidence
Respondents operating a susu savings account		77 percent
Borrowing Characteristics		
Respondents who never borrowed from bank		14.7 percent
Usual use of credit from bank		Expand business
Usual reason for never borrowing from bank		Never needed loan; no collateral

Source: Aryeetey, E. and F. Gockel (1991).

8.10 The primary motivation for household saving is to meet short-term goals. The distinct preference for susu collectors over banks stems in part from the personalized relationship between the saver and the susu collector. The collector is generally sympathetic when the depositor cannot meet a day's payment and will come back another time without much fuss. If given adequate (typically one day's) notice, the collector might even allow the depositor to withdraw the money before the end of the month. Other important reasons for preference are: easy access to the collector, who comes around regularly; the fact that collectors readily accept small sums, often made up of torn notes and coins; and some, albeit limited, access to credit facilities.

8.11 Most informal depositors save toward short-term goals rather than lifetime goals. Market women and street vendors saving with susu collectors, for instance, generally have short-term plans to expand their business activities. Market women who have no permanent stalls save to buy one; street vendors selling tins of milk save to increase their inventory, so that they will be able to meet peak demands and raise their profits. For the very short term, susu collectors allow people to put their savings into useful investment. What is lacking is a wider intermediation system to ensure that savings are financing the most productive investments.

8.12 While much of the literature on financial systems attributes the growth of informal financial units to the existence of repressive formal financial sector policies (see Fry, 1988), informal deposits remained buoyant in Ghana even after financial liberalization (see Aryeetey, background paper). In Ghana, the informal financial system is preferred for its flexibility and cost effectiveness, rather than as a response to repression in the formal system. Even if financial liberalization makes the formal sector more efficient, Ghana's informal sector will probably continue to have better client information and lower enforcement costs.

8.13 Between 1990 and 1992, in both urban and rural Ghana, savings through informal financial channels (and especially with susu collectors) increased significantly. In greater Accra, for instance, the mean number of depositors per collector each month rose from 220 in 1990, to 275 in 1991, and to 305 in 1992 (see Table 8.1). In rural areas, growth was more restrained. In the Eastern Region, for instance, where most susu collectors live in small towns and rural areas, the mean number of depositors rose from 119 in 1990, to 129 in 1991, and then fell to 125 in 1992, for a total increase of only 5 percent over the period. The lowest number of depositors per collector was observed in the Ashanti Region, where the mean averaged 70 over the three-year period.[32]

8.14 Among nonrotating susu groups and savings and credit cooperatives, an average membership size of 37 has been observed for the same period. Groups that were dormant in the years of economic decay, however, were being reactivated. For rotating susu groups, a size of 12 (corresponding to the number of months in a year) was most common.

Table 8.1: Mean Number of Depositors a Month per Susu Collector

Region	1990	1991	1992
Greater Accra	220	275	305
Eastern	119	129	125
Volta	157	183	191
Central	90	60	176
Ashanti	62	69	84
Brong Ahafo	145	154	167
Upper West	95	110	150

Source: Aryeetey, E. (background paper).

8.15 Of all the informal savings channels, susu collectors mobilized the most resources. Their overall monthly collections rose from ₵540,000 in 1990, to ₵886,118 in 1992. In 1992, Accra

[32] The Ashanti region has strong, traditional socioeconomic institutions dominated financing arrangements. Often these were non-lending arrangements, where family members provided mutual assistance to each other.

collectors averaged ₵4,117,500. The average daily deposits also grew from ₵300 in 1991 to ₵450 in 1992-a real growth rate of 35 percent.

8.16 Susu collectors also did better than the formal credit unions during this period. In Accra in 1992, the average deposit with susu collectors was ₵13,500, significantly larger than the average deposit of ₵5,000 with credit unions.[33]

C. Informal Lending

8.17 Informal lenders—traders and moneylenders—are an integral part of rural finance. Adverse selection and moral hazard problems are inherent in credit contracts, but the informal lender is able to circumvent these problems by possessing an intimate knowledge of his clients. The use of social sanctions and other methods of persuasion are often more effective and less costly than legal measures to force repayment.

8.18 Although susu collection has grown significantly, lending has not. Susu groups or companies are better equipped than individual collectors to lend. This is mainly because groups and companies hold their deposits for at least six months with although with this short time period it is still difficult to match the time-profile of savings deposits, loans and credit repayment schedules.

8.19 Aryeetey and Steel (1992) indicate that about 60 percent of susu collectors' clients request advances each month, but only about 13 percent are extended loans. On average, 9 percent of the average monthly deposits are lent out, with an average loan size of about ₵6,000. Amounts granted are rarely greater than half of the recipient's expected monthly deposit, and the fee charged is one day's deposit.

8.20 An important aspect of the susu business—one that can be tapped in the development of the financial system—is the fact that most deposits are placed with banks. While Aryeetey and Steel (1994) estimate that the proportion going into such accounts has declined to about 45 percent, bank deposits remain the single largest destination for holding depositors' savings (see Box 8.3).

8.21 The advantages that make susu collectors excellent mobilizers of deposits should make them good lenders as well. They include close proximity to and personal knowledge of clients, which keeps transaction costs low, and significant daily information on their clients' activities keep the lending risk low. Given that deposit interest rates are negative for susu collectors and lending rates are high, the spread works out to be substantial.

8.22 The inability of informal savings mobilizers to intermediate effectively is derived partly from the savings characteristics of their clients and possibly from the nature of the links between susu collectors and banks. Though spreads between deposit and lending interest rates are substantial, the absence of adequate short-term financial instruments mean that susu funds can hardly be intermediated within the limited period they remain with the banks. The large-scale placement of susu savings into bank accounts for security reasons nevertheless suggests considerable potential for a linkage between the formal and the informal segments of the financial market. Informal savings collectors can expand the size of their activities with support from

[33] Susu collector depositors usually raise (or even double) their deposits in November, anticipating higher expenditures for Christmas. Rural deposits tend to be more seasonal and are linked to the August harvest (Aryeetey, background paper).

Box 8.3: Innovations in Susu Arrangements

Changes in the structure and functioning of susu groups reflect the changing financial requirements of its users. Between 1975 and 1983, Ghana suffered from high levels of inflation and severe shortages of basic consumer goods. In such situations, consumers try to keep as much wealth as possible in liquid forms. Traders, too, need to be able to purchase items from wholesalers as soon as they become available. With high inflation, putting aside income for future use makes little sense. Similarly, as real incomes fell, the ability to withhold consumption became limited, and most people will want to hold more money. As a result, system that obliged one to save for a specified period became unpopular, as has also been observed with bank savings. Susu group members thus often sought less rigid ways of generating large sums. Furthermore, the ability of members to make timely contributions into the pool was limited during that period, making it difficult for the associations to operate effectively. This was when susu collectors gained most prominence.

Since 1985, when Ghana's economy started growing again, susu groups once more adapted to changing macroeconomic conditions. Inflation came down considerably and real incomes rose. Among civil servants, new forms of susu groups sprang up. For instance, members of a group could refrain from collecting funds for a certain period (usually one year). During that period, the group lends funds with interest to members and non-members. At the end of the period, the fund plus interest is shared among the members.

Since the introduction of the ERP, the financing needs of small businesses have grown while formal institutions failed to provide funding. In response, new forms of the susu collectors emerged—referred to here as Susu Companies. In a more sophisticated and larger form, they operate as savings and loan companies. Susu companies have been observed since 1985 in Ghana, operating on similar principles as susu collectors. The difference is that the saver is "guaranteed" credit. Instead of returning deposits after a month, as is customary for susu collector, they are held for at least 6 months, at the end of which savings may be withdrawn in addition to an equivalent amount of loan.

For the susu companies, most depositors are traders and small and medium enterprises. What makes them unique is the credit allocation that is "guaranteed" by membership. In the absence of any prudential regulations governing their operations, however, the guaranteed disbursement of credit by these companies depends on their ability to mobilize new savings at any time in order to operate a sort of "pyramid scheme." The difficulty in matching savings mobilization with credit allocation in a financial system that does not attempt to keep reserves has resulted in liquidity problems, which have affected their "relations" with depositors. Some of them have had difficulty returning deposits to savers and have subsequently closed down.

However, the difficulty of susu companies does not suggest that self-regulation within informal units is not possible. Rather, authorities should supervise the self-regulation process. Susu companies can effectively assist in savings mobilization if they are made to enforce acceptable self-determined prudential guidelines.

formal institutions in the same way that credit unions have done with donor grants in recent years. Such linkages would help avoid the problems encountered by 'susu companies' that attempted to use susu methods to mobilize and intermediate savings, but without adequate prudential safeguards (see Box 8.3).

8.23 Because the informal sector can mobilize savings cheaply, it could potentially be a low cost lender, should formal financial institutions use their own resources to promote such activities. Restoration of macroeconomic stability and promotion of increased competition in the

Table 8.2: Characteristics of Susu Collection in Accra, 1991

Deposit Mobilization	
Average number of clients per *susu* collector	300
Mean daily deposit per client	₵500
Modal daily deposit per client	₵200
Total deposits mobilized per collector per day	₵87,000
Total deposits mobilized by GASCCS members per day	₵43,500,000
Average proportion of *susu* deposits saved with banks	45 percent
Credit Provision	
Proportion of clients requesting loan each month	60 percent
Average loan requested	₵15,000
Proportion of clients receiving loan each month	13 percent
Average loan granted	₵6,000
Average total loans from *susu* collector per month	₵240,000
Average monthly *susu* loans/deposit ratio	5 percent

Source: Aryeetey and Steel (1994).

formal financial sector, should push banks to explore new avenues for intermediation. It is in the interest of banks to support susu collectors in their role as financial intermediaries to mobilize deposits and make loans.

8.24 In view of the better local information networks, informal lenders could be agents of commercial banks, reducing the burden of risk on banks—since they share this with the informal lender—and improving the management of credit—since susu lenders possess superior knowledge of clients. Susu collectors may need some incentives, such as application of preferential deposit rates by banks; assignment of "special" clerks or tellers by banks to lower susu collectors' transactions costs; waiving of all charges and fees on demand deposits of susu collectors by banks (see background paper by Aryeetey).

8.25 The formal financial sector is likely to move in this direction only after it becomes more competitive and macroeconomic stability is restored. Without those developments, there is little pressure on commercial banks to lend to the private sector or to mobilize savings aggressively—and thus the fact that susu collectors and other informal units can mobilize savings efficiently or that they can effectively lend will not propel banks to forge the links cited above[34].

8.26 In rural Ghana, informal trade finance has been the backbone of petty and small traders. These traders—who are usually from the same community as the farmers—often give farmers short-term credit (with a maximum duration of the crop cycle) to meet their needs for working capital and consumption. In exchange, the trader receives first rights on the farmer's crops up

[34] Aryeetey and Steel (1992) have proposed a pilot project linking GCB with the Greater Accra Collectors' Cooperative Society (GASCCS), to be implemented only if it is profitable for both collectors and GCB. In theory, GASCCS would gather the contributions and invest them in treasury bills. The collector would pay a certain amount each week toward a security fund for emergencies. GCB would then provide an overdraft facility to GASCCS (not to its individual members) up to the value of the treasury bills, which would serve as collateral. This line of credit would help susu collectors make loans without risking depositors' money. If GCB and GASCCS found this arrangement mutually profitable, they could then strengthen the links.

to the amount of the loan.[35] The recent entry of private cocoa traders, who are currently buying some 20 percent of the total crop, will place additional demands on trade finance in the future, as their resources are limited compared with COCOBOD.

8.27 Trade finance transactions are widespread in Ghana and occur for nearly all crops. These transactions generally have no explicit interest charged; a price for the output that is negotiated at the time of crop sale; a purchase price well below the market price; an immaterial purpose of the credit; and traders monitor farmers to whom they have made loans to ensure that crop sales are made to them.

8.28 Most trade finance—whether it be for the provision of purchased inputs, for other working capital needs, or for consumption purposes—is secured by the borrower's future crop. Although no explicit interest is charged on any of these loans, the farmgate prices of crops are depressed well below the retail prices, so that the implicit interest rate is often quite high. While it is not possible, however, to derive a single rate of this implicit interest since it differs with each contract, estimates suggest that rates are well in excess of 100 percent a year.

8.29 High interest rates, however, do not necessarily imply exploitative practices by informal lenders or monopolistic market structures. Numerous studies, for instance, have shown that South Asian moneylenders charge very little monopoly rent—high lending rates simply reflect the high cost of funds and a risk premium (see Table 8.3).

8.30 Output traders get financing either from informal sources (such as moneylenders—usually at very high interest rates) or from banks. The incidence of bank borrowing, however, remains limited because collateral restrictions make it difficult to secure formal credit. Evidence of debt cannot in itself serve as collateral for loans from banks or non-bank financial intermediaries. Nor in granting loans to farmers do traders accept pledges of standing or stored crops.

8.31 In the absence of useable collateral, the informal market remains separate from the formal market. Clearly, traders familiar with their clients have an information advantage over banks. This—and social enforcement mechanisms that ensure repayment—reduces their administrative costs substantially. But, because they have to finance themselves or rely on expensive informal sources, their cost of funds is high. Public policy needs to recognize that the informal lender is actually desirable by catering to agents that are outside the formal credit sphere. Policies should be directed toward lowering lending costs while simultaneously improving the creditworthiness of potential rural borrowers.

[35] Traders, who in the Ghanaian context are usually market women, have formed groups, whose common factor is the crop they sell. Thus, enforcement of the "right to purchase" is not difficult. The farmer would have a very difficult time finding a potential buyer as the market women usually know who the clients of their other group members are and do not buy form those farmers until their loans are paid off.

Table 8.3: Characteristics of Rural Credit Markets in South Asia

Survey regions and period	Share of formal in total credit (value)	Mean interest rate by sector[a]		Average transaction (dollars)	
		Formal	Informal	Formal	Informal
Nakthon Rachasima Province, Thailand					
1984-85	44	12-14	90	254	440
India					
1951	7	3.5-12.5	7-35	400[b]	200[b]
1961	17				
1971	30				
1981	61	10-12	22	n.a.	80-345[c]
Chambar, Pakistan					
1980-81	25	12	79	n.a.	284

n.a. = not available.

[a] All interest rates are nominal and annual except Pakistan's which are real annual rates charged. See listed source for details on the calculation of these rates.

[b] Annual borrowings.

[c] Low figure for Bihar; high figure for Punjab.

Source: Hoff K. and Stiglitz, J. (1990), "Introduction: Imperfect Information and Rural Credit Markets-Puzzles and Policy Perspectives", *World Bank Economic Review*, Volume 4, Number 3.

Part 3. Enhancing Financial Intermediation

Ghana can grow faster with existing savings by improving the efficiency of investments through enhanced financial intermediation. This will require measures to bring more existing savings into financial intermediaries and ensure that competition for funds allocates resources to their most productive use. The returns to such measures would be high. Channeling 16 percent of savings currently held outside the financial system into financial intermediaries could raise the rate of economic growth by 1 percentage point. A faster uptake of outside savings would mean even faster growth. This would allow for a rapid increase in investment finance—especially when the projected decline in the public sector borrowing requirement is taken into account.

IX. IMPLICATIONS

9.1 In Part II of this report, it was shown that formal financial savings in Ghana account for less than one fourth of total savings, and that much of the remainder is stored in real assets or in informal financial institutions. There is only little evidence of mutual cooperation between the formal and informal financial sectors, suggesting that the financial system has not yet reached the state where marginal rates of return on investments are equalized across the entire financial system.

9.2 Nor is there evidence of an active curb market that could substitute for the formal financial system and provide efficient financing. While there are some means for investors to raise money outside the formal financial system, most informal savings are stored in real assets or—for lack of other opportunities—in forced investments. The intermediation function in the informal sector appears to be limited, which turns savers into involuntary investors while potential investors are starved for funds.

9.3 This analysis suggests that private investments financed through the formal sector have, on average, a higher rate of return than those financed through the informal sector. In fact, the evidence suggests that a substantial fraction of informal savings end up in investments that have a zero, or even a negative, rate of return. In contrast, private investments financed through the formal sector have to compete for limited funds, and their rate of returns is therefore significantly higher.

9.4 Under these circumstances, the formal financial sector could gain substantially from an expansion of the deposit base and increased lending. This report, however, has identified a number of obstacles (such as the dominance of state-owned enterprises, which limits competition, and the people's lack of confidence in the formal financial system) in the path of market growth.

9.5 It is assumed here that actions can be taken to enhance financial intermediation and that financial intermediation will help divert savings from low-return investments in the informal sector into higher-return private investments in the formal sector. In addition, the projected decline in the fiscal deficit, and with it, the decline in government borrowing requirements, makes this plausible. Until the financial system reaches a market-clearing equilibrium, however, the projected increases in the rate of economic growth may be only transitory. However, while it is not clear that enhanced financial intermediation necessarily increases the long-run rate of economic growth, such an effect seems likely.

A. Implications for Growth

9.6 In this section, it is assumed that on the basis of the analysis presented in Chapter II, only one fourth of Ghana's total savings enter the formal financial system. It is further assumed that the real rate of return on savings intermediated through the financial system is 4 percent. Savings outside the system earn a real rate of return of either 4 percent or 0 percent, for a simple average of 2 percent. With these relative rates and proportions, the average real rate of return economy-wide would be 2.5 percent.

9.7 Assuming the marginal rate of return on capital does not change, if some savings held outside the formal financial system are brought inside, the average return will rise to the extent

that the composition of new investments is shifted toward higher-return projects.[36] (For the purposes of this analysis it is assumed that the increase in savings channeled through the formal system would occur over a five-year period, beginning in 1996. Over that absorption period, growth rates would be boosted and then return to normal levels for the long term.)

9.8 Table 9.1 offers three possible scenarios should financial intermediation be increased. Assessing what share of existing nonfinancial savings needs to come into the formal financial system to raise cumulative economic growth rates for five years, it shows that absorption of 16 percent of outside savings would increase the economy's real rate of growth by one percentage point over five years, while absorption of 33 percent of outside savings would increase the growth rate by two percentage points.

B. Implications for the Financial Sector

9.9 Table 9.1 also provides a starting point for analyzing the impact of increased intermediation on the financial sector. As shown, a posited absorption of 16 percent of outside savings would entail a 50 percent rise in the inflow of savings into the financial system.[37]

Table 9.1: Impact of Enhanced Financial Intermediation—Three Scenarios
(Percentages)

Scenario	Share of existing nonfinancial savings brought into the financial system	Increase in in growth rate of financial savings	Improvement in efficiency of investment	Increase in economic growth rates
1	16	50	10	1.0
2	33	100	20	2.0
3	42	150	25	2.5

Source: World Bank staff estimates.

9.10 The implications of greater intermediation for the financial depth of the system can be seen in an analysis of M2 as a share of GDP (Table 9.2). Assuming that any increase in financial savings would be split into bank and NBFI deposits in the same proportions as exist in the current portfolio, the proportion of M2 to GDP would increase. Current projections assume a reduction in Ghana's fiscal deficit. This would result in a 50 percent increase in financial savings over the five-year period.

9.11 The conclusion is that M2/GDP would be around 30 percent in 2000, and financial savings would have risen 50 percent. By comparison, Table 4.1 showed that the M2/GDP ratios for Indonesia, Zimbabwe, and Kenya were already in the 30 percent range in the late 1980s, and that Ghana achieved such a ratio briefly during the 1970s, before confidence in the financial

[36] Assuming that the marginal rate of return on investments financed through the formal financial system would decline as more savings are channeled through the financial system, more nonfinancial savings would need to be brought into the financial system to achieve the same level of economic growth rates.

[37] This projection is based on the assumption that one fourth of actual savings are kept "inside" the financial system, and three fourths "outside."

Table 9.2: Impact of Increased Mediation on M2/GDP, 1995-2000
(Percentage)

Financial savings	1995	1996	1997	1998	1999	2000
Little change (base run)	17.3	16.8	16.8	17.8	19.7	22.4
50 percent increase by 2000 (relative to base run)	17.3	17.1	17.8	19.6	22.8	27.5

Source: World Bank staff estimates.

system was undermined by government actions.

9.12 Building further on these projections, growing financial savings and a shrinking government deficit should increase the volume of credit available for private investment (Table 9.3). Analysis suggests that this growth in private sector credit could be as much as 16 percent a year for the next five years in real terms, simply from the decline in the fiscal deficit. Should financial savings also be increased by 50 percent, the annual growth rate of private sector credit could amount to 20 percent. Such increases would promote substantial private sector growth.

Table 9.3: Implied Impact of Deficit Reduction on Private Sector Credit

Financial savings	Credit to private sector[a] (cedi billion)	GDP share of private sector credit (percentage)	Compound annual growth rate[b] (percentage)
No change	885.8	6.8	15.9
50 percent increase by 2000	1,053.2	8.1	20.4

[a] Current prices.
[b] Real terms.

Source: World Bank staff estimates.

X. MEASURES TO ENHANCE FINANCIAL INTERMEDIATION

10.1 To enhance financial intermediation, this report proposes measures in three areas: restoring macroeconomic stability, increasing competition, and investing in financial infrastructure. While macroeconomic stability is a prerequisite for developing the financial sector, a stronger financial system based on private ownership and competition, will place great demands on human capital and require early attention to the development of professional skills.

A. Macroeconomic Stability

10.2 By increasing economic uncertainty and crowding out lending to the private sector, macroeconomic instability hampers the development of the entire financial system. Lending to the government at high interest rates ensures large profits for banks at little risk, giving banks and non-bank financial institutions little incentive to seek out innovative financing instruments. As a consequence, a substantial fraction of Ghana's financial savings now goes toward financing the fiscal deficit. The restoration of macroeconomic stability is thus key to enhancing financial intermediation.

10.3 Achieving a fiscal position consistent with available external financing eliminates both domestic borrowing and money financing, and frees up credit for the private sector. Ghana's fiscal deficit rose sharply in 1992. But while the narrow fiscal balance moved from a deficit of 5 percent of GDP in 1992 to one of 3 percent in 1993, a fiscal surplus is necessary to reduce outstanding government debt. Based on new initiatives to increase revenue collection and restrain recurrent expenditures, the 1994 budget envisages a fiscal surplus of 1.3 percent of GDP. Private sector credit demand (projected to grow over the next several years, in part to finance new investments in divested SOEs) can only be accommodated through a sustained fiscal surplus.

10.4 Together with sound fiscal management, containing money supply growth is needed to restore price stability. In Ghana, the money supply grew by 30 percent in 1993, adding to the 50 percent growth in the last quarter of 1992. As a result, inflation rose from an average of 10 percent for 1992 to over 24 percent in 1993. If the government continues its efforts to bring domestic inflation down to world levels, annual inflation rates of no more than 10 percent could be achieved by 1996.

B. Competition

10.5 To increase competition in the financial sector, the government will need to privatize state-owned banks and institute liberal licensing policies for private financial institutions. SSNIT's monopoly position must be reduced and the regulatory and supervisory framework for the insurance sector must be improved to encourage the development of competitive, contractual savings institutions.

10.6 Increased competition would exert pressure on banks to increase their deposit base and therefore to draw on savings generated through informal channels (such as susu collectors) thus leading to greater intermediation. Similarly, banks could be encouraged to employ rural traders and moneylenders as intermediaries to help satisfy the demand for rural credit. The expansion of rural credit, however, also depends on the progress the government makes in strengthening the legal framework for debt recovery—including the use of collateral—which would lower the cost of funds to the informal sector.

10.7 Despite recent signs of increased participation by private banks and non-banks, the formal financial sector remains heavily dominated by state-owned financial institutions which account for 70 percent of Ghana's formal financial assets. Existing evidence shows that private ownership has a significant positive impact on efficiency and innovation in the financial system, and stronger private bank ownership is likely to promote greater competition:

- Private banks generally perform better than state-owned banks, showing better after-tax returns on average assets and requiring lower provisions for bad loans, which suggests better portfolio quality. Because private ownership has a strong incentive to seek profitable business investments, private banks tend to stay away from lending based on noncommercial considerations.

- Private banks have lower intermediation costs than state-owned banks, which require higher spreads, resulting in lower rates to depositors and higher rates to borrowers (often by way of various types of non-interest fees on borrowers). With the entry of more private banks and NBFIs, however, all banks have been offering higher deposit rates to attract depositors, so that interest spreads declined somewhat during 1993.

- Financial innovation—to the extent it has occurred in Ghana—has come from private financial intermediaries. Private banks have invested more in on-line transaction-processing systems and electronic money counters than have state-owned banks. New, privately managed NBFIs, furthermore, serve a class of savers traditionally ignored by official banks, thereby playing a critical role in formalizing the informal financial sector.

State-Owned Banks

10.8 Because of these recognized advantages of increasing private ownership in the financial sector, the government should proceed as quickly as possible with the first phase of state-owned bank divestiture as envisaged under IDA's Second Financial Sector Adjustment Credit. This would send a strong signal of official support for private participation in the financial sector and would help strengthen public confidence in the commercial banking system.

10.9 The government's interim target—reducing public sector ownership to a minority position of no more than 40 percent in each wholly owned bank—should be pursued rigorously. Under FINSAC II, the agreed upon program provides for a first phase to divest GCB and SSB, which has been merged with the smaller NSCB. The second phase will cover the remaining banks (NIB, ADB, BHC, and Coop Bank). Completion of the first phase was to take place by end 1993, but for complex reasons, the timetable has slipped 12 to 18 months.

10.10 While domestic investment in the financial sector is to be encouraged, it is crucial that after divestiture, the new owners maintain a high standard of financial management and prudential operations. For this reason, foreign direct investment in the financial sector is probably to be preferred, along with provisions for transferring financial expertise to native Ghanaians. Those reforms could facilitate the introduction of innovative financial instruments, such as deposits indexed to inflation and foreign currency deposits.

10.11 As the privatization of state-owned banks proceeds, an explicit deposit insurance scheme may become increasingly important. In the past, the government has bailed out distressed banks, thereby implicitly guaranteeing the safety of deposits. The introduction of a deposit insurance scheme, however, would help build confidence in a privately run financial sector. Insurance

premiums tied to the riskiness of the banks' portfolios, furthermore, would reduce moral hazard problems associated with deposit insurance.

10.12 Furthermore, a sound financial system based on private ownership will require the adoption of internationally recognized prudential regulations. At present, Ghana's banks must satisfy a minimum capital adequacy requirement of 6 percent. Over time, progress should be made toward bringing Ghana's prudential regulations in line with those recommended by the Bank for International Settlements.

Social Security and National Insurance Trust

10.13 At present, SSNIT accounts for nearly all the pension fund assets in the formal sectors of the economy. SSNIT's dominant position arises from the Social Security Law under which statutory contributions by employees and employers have to be made into the SSNIT pension fund, effectively preventing the emergence of other, private pension funds that could mobilize savings. At the same time, the investment portfolio of SSNIT has not been able to generate positive, real rates of return and, in comparison to pension funds in other countries, SSNIT's operating expenses are high.

10.14 The government needs to take steps to remove the monopoly position of SSNIT to allow private pension funds to compete effectively, and to generate higher real returns on savings. At present, the number of contributing members is much lower than would be expected given the number of people employed in the formal sector. A more competitive environment and the concomitant expectation of improved returns would lead to an increased number of contributing members.

10.15 SSNIT, however, should remain as one element of a multi-pillar system, with the objective to alleviate old age poverty. As is currently the case, contributions to SSNIT should remain mandatory. A second pillar, where mandatory contributions are made to privately managed funds, could serve primarily as a means to generate savings. Finally, voluntary contributions to privately managed funds, in excess of mandatory contributions, would allow for additional protection and insurance.[38]

10.16 Before privately managed pension funds can be relied upon to provide a viable alternative to SSNIT, however, prudential regulations have to be put in place to ensure adequate liquidity and solvency of the institutions. To create a level playing field in which private pension funds can actively compete with SSNIT, all institutions would have to be brought under the same regulatory framework.

The Insurance Industry

10.17 Without free competition between the state-owned State Insurance Corporation (SIC) and private insurance firms, the insurance industry will continue to operate in an uncompetitive environment. The government presently requires all government insurance needs to be channeled through SIC, with SIC paying no brokerage commission. As a result of this monopoly, pressures to improve operating efficiency continue to be low, as evidenced by the fact that SIC's gross premiums per staff member are only half of what the two leading private companies offer. Under current conditions, rate competition is limited and there is little product innovation.

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[38] More detailed information on designing multi-pillar old age security systems can be found in "Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth," World Bank, 1994.

10.18 To create a more level playing field, SIC's monopoly on government insurance must be removed. Even if no other action is taken, this in itself is likely to boost activities of private insurance firms and generate competition, which would lead to greater rate competition, product innovation, and operating efficiency.

10.19 At the same time, if a strategic investor can be found, privatization of SIC should be considered. Privatization, in conjunction with a more competitive environment, would lead to more efficient, market-oriented SIC management. Should privatization of SIC not be a viable alternative in the medium term, SIC would still benefit from the commercialization of its operations to compete effectively in a new environment.

10.20 The following measures would help to further promote greater competition in the insurance industry:

- Preparing all government-owned, primary underwriters for divestiture and selling government's shareholding in private insurance companies.

- Providing actuarial support to life insurance companies (as well as to nonlife business) to assist in the formulation of competitive rates and risk assessments.

- Permitting banks and other financial intermediaries to distribute insurance products, thereby taking advantage of Ghana's existing branch network. This could help extend the range of services offered to the rural population and would also be consistent with the ongoing consolidation of the banking industry itself.

The Ghana Stock Exchange

10.21 A facility for secondary trading in listed securities, the Ghana Stock Exchange can help make the financial system more efficient and competitive by making the listing and trading of financial instruments more attractive.

10.22 In the current environment, the Stock Exchange should attempt to develop and exploit the excellent opportunities presented by the proposed divestiture of state-owned enterprises and of state-owned financial institutions. To permit more efficient settlement, however, the share-transfer mechanism has to be revised, and listing requirements for start-up companies should be considered. In strengthening the role of the GSE, specific attention should be paid to giving local small scale investors broad access to investment opportunities.

10.23 In the future, the GSE should become active in trading new instruments and mechanisms (such as forward trading, commodities, futures, etc.), possibly in cooperation with other international exchanges. The listing and trading of government debt instruments on the GSE should also be made more attractive. Other reform measures—particularly those relating to the regulation, monitoring and supervision of the Exchange and its operations—should be given priority in order to develop the confidence of issuers and investors alike.

Rural Financial Institutions

10.24 In Ghana, rural financial institutions are generally weak, rarely competitive, and offer savers low rates of return on their deposits. Rural banks, which are most accessible to the farming community, need to be strengthened to provide savers with reliable formal savings arrangements that yield positive real returns. For this to happen, it is necessary to strengthen the

supervisory capacity at the BOG—specifically the Rural Finance Inspection and Bank Supervision Departments—by training staff, for instance, in the newly established Banking College. It may also be necessary to clarify supervisory responsibilities between Departments, or to consolidate responsibility within a single department.

10.25 Before recapitalization of distressed rural banks can be considered, management capacities within all rural banks need to be upgraded. Many will require major training and recapitalization efforts before they can become self-sustaining and viable enterprises. Rural banks' inability to pay dividends further reduces any incentive to form financially strong institutions. In fact, the institutional design of rural banks should be revisited. For as long as each member has only a single vote, no strategic owners or groups of owners will emerge to protect the financial integrity of rural banks. Corruption by management and staff will persist, and financial viability remain elusive.

10.26 Further measures to strengthen rural financial institutions, such as credit unions and cooperatives, are needed to achieve effective intermediation in rural areas. Specific recommendations regarding these institutions will be based on the up-coming Rural Institutions Study, which aims at providing a comprehensive assessment of the capacity, role, and function of rural—including financial—institutions.

10.27 The government recognizes the informal sector as an integral part of the financial system. Its policies should be directed at promoting more efficient intermediation within the informal sector as well as lowering the cost of funds for the rural population. Both can be facilitated by promoting linkages between the formal and informal sectors. A critical step in this direction is to pass the proposed regulations accompanying the NBFI Law (see Chapter VI), which lowers the capital requirements for a number of non-bank financial intermediaries. Furthermore, the government should state clearly that it encourages informal operators to join the formal system by supporting their efforts to build up their businesses in order to qualify for registration under the Law.

C. Financial Infrastructure

10.28 Over the past few years, the financial system has undergone many substantial changes. While banks are in the process of being privatized, the government can promote a more efficient financial system by investing in the development of human capital and information flows, and strengthening the legal infrastructure.

Investing in Capacity Building

10.29 The successful transition from government to private ownership of financial institutions can only be accomplished by paying early attention to the development of the required human capital to operate financial enterprises in a highly professional manner and ensure a sufficient level of supervision by regulatory agencies. Inherently complex, financial systems require substantial human capital: accountants, economists, credit analysts, financial analysts, statisticians, traders, and many more.

10.30 In collaboration with commercial banks, therefore, BOG has been putting into place a training program to address the sector's preliminary needs. Training for bank employees has been further enhanced within particular banks. In addition, a number of relevant courses are offered by such entities as the Ghana Stock Exchange.

10.31 The Chartered Institute of Bankers (which has ties with the London Institute of Bankers) has prepared localized bank-training materials and conducts its own skills training and certification. Currently, some 3,500 students are studying for its various levels of certification. Arrangements have also been put into place for a Banking College, whose ownership is divided equally among the government, BOG, and commercial banks. The College plans to offer courses to a wide variety of bank managers. But, although it is preparing courses and is due to begin classes shortly, the financing of its operating costs is still under discussion.

10.32 While these developments show promise, they may not be adequately funded to carry out their tasks. Donor agencies frequently offer start-up funding but not operating costs. An assessment of funding programs currently under way, therefore, should be undertaken to assess their sustainability and the extent to which they are constrained by a shortage of finance. Another problem is delivering training to the appropriate levels. Most frequently, senior managers are nominated for training programs, but it is equally important that young people be trained early in their careers—training that will allow them to function well in a market economy and to make appropriate responses in a changing financial environment. Assuring that the bulk of those in financial line jobs receive appropriate training can go a long way toward making the financial system creative in mobilizing new resources and intermediating those resources to make the highest possible return.

Investing in Information

10.33 Currently, although both the Statistical Service and the BOG are charged with collecting information on the economy, this information is frequently neither current nor widely available. Yet the free flow of information is crucial to the development of a financial system. To develop money markets, investors need both economy-wide and borrower-specific information to assess risks and determine the appropriate response. Because such information is a public good that promises little private return, firms rarely expend time and money on collecting detailed information on the economy. The government, therefore, should invest in programs to develop its own ability to collect and disseminate current and projected information on the state of the economy. Improved collection, analysis, and dissemination of information is the oil in the engine of both the financial system and the economy. Without it, both financial and economic interactions grind to a halt.

10.34 Banks, in particular, need information on borrowers to assess their credit risk and establish appropriate collateral. Because no registries now exist for recording secured debts of individuals and sole proprietorships, for instance, banks find it difficult to assess risks. Lending decisions are therefore based as much on the availability of easily realizable collateral as on the quality of the project.

10.35 At high interest rates, the problem of adverse selection also arises, because only high-risk projects that promise high returns can afford to borrow at high interest rates. Banks tend to reduce lending rather than offer loans to projects about which little information is available. Lengthy credit analysis also increases loan processing times and costs.

10.36 Although credit information on borrowers is not easily available in Ghana, proposals for starting an interbank credit data bank have not gotten off the ground. Given events in the past, it is crucial that any such credit bureau, or rating agency, be run independent of the government. It is also necessary that information on the secured indebtedness of firms and incorporated partnerships maintained in registries by the Registrar General's Office is easily accessible. Government actions to improve registries and extend their coverage to sole proprietorships and

other private agents can help banks to make informed credit decisions. Over time, the development of an independent, private, credit-rating agency by a firm well established in the field could substantially improve banks' ability to intermediate, which will be increasingly important as the private banking sector develops.

10.37 Ghana has a number of statutes and regulations that set out the requirements and standards for financial reporting and auditing (see the Financial Administration Decree, 1979, and the Audit Service Decree, 1972). The 1979 Decree lays down organizational arrangements and procedures for government transaction accounts. The 1972 decree defines the structure for monitoring the discharge of the duties and responsibilities outlined in the earlier decree. Financial reporting for state-owned enterprises is governed by the Statutory Corporations Act (1964) and by enabling legislation for each particular enterprise. For the private sector, the main legislation governing financial reporting is the Companies Code (1963) and such specific enabling legislation as the Banking Law (1989), and the Securities Industries Law (1990). The Institute of Chartered Accountants, Ghana (ICAG), generally applies UK accounting and auditing standards.

10.38 The basic framework for information disclosure exists in Ghana. In practice, however, the quality of financial disclosure varies between companies and from year to year. (For example, there is considerable variation among banks as to the extent of their financial disclosure.) While well-established accounting firms and companies tend to follow internationally accepted accounting practices, the fact that the law provides considerable leeway in the content and manner of financial reporting results in considerable ambiguity in the interpretation of Ghana's financial data. As a result, it is difficult to come up with meaningful analyses or comparisons of financial performance. This inability, in turn, reduces the willingness of potential investors in Ghana to enter into extensive financial relationships.

10.39 The Institute of Chartered Accountants of Ghana (ICAG), which represents the accounting profession, has not been effective (primarily because of lack of funds). The stock of qualified accountants in Ghana is low in relation to the economy's needs. As early as 1988, the demand for qualified accountants was estimated at 1,500 as against the present stock of some 700. Lack of funds for training at the Institute and failure to coordinate with other teaching institutions has continued the shortage of qualified accountants.

10.40 In 1993, the Ghana Accounting Standards Board (GASB) was established to bring Ghana in line with international accounting standards. The GASB is separate from the ICAG and has its own constitution. The ICAG, the Bar, the Bankers' Association, the Auditor General, the Accountant General, the stock exchange, tax authorities, the Chamber of Commerce, and the Ministry of Finance all have representation on the GASB. It could potentially play an important role, therefore, in establishing a sound basis for financial reporting. For the time being, however, it has little financial support to formulate and no statutory backing to enforce financial and accounting standards.

Payments System

10.41 The government needs to help integrate banks' payments systems and to expedite the transmission of payments throughout the economy. It also needs to expedite its own financial communications system to support public sector expenditures and national cash management. This will be a critical element in support of the planned public financial management program.

10.42 Payments systems normally result from the development of private, branch banking networks. While patterns differ from country to country, in most cases payments at the primary level are shuttled among branches using systems internal to the banking firms. Broader integration generally depends on private contracts among banks. The central bank can sponsor, regulate, or provide elements of the overall network (such as the Federal Reserve wire system used for large transactions in the US).

10.43 In Ghana, the only bank with a branch network large enough to be the basis for a national payments system is the Ghana Commercial Bank, but its internal computer systems and accounts are in need of modernization. It is conceivable that the two formerly colonial banks could be used to build up a rump system, but this is neither commercially nor politically satisfactory. The fact is that none of Ghana's banks generates enough profit to be able to build a modern payments system for itself, let alone one that could serve as the basis for a national system.

10.44 A workable approach should be developed soon to facilitate and expedite the transmission of payments through the economy. One option is for the BOG to invite bids from qualified contractors to design and install the communications and processing capacity needed to establish a payments system. The winning bidder would then be permitted to sell services on a fee basis to commercial banks and back to the BOG itself.

Legal Infrastructure

10.45 To function well, a financial sector requires reasonable transaction costs associated with contract monitoring and enforcement. Low transaction costs in contract enforcement spur financial innovation by allowing financial instruments to be tailored to specific needs of savers and borrowers. If debts are collected effectively and expeditiously, moreover, the acceptability of a wide range of collateral is increased. Because the willingness of institutions to lend depends, in large part, on their ability to recover from delinquent borrowers, this substantially enhances access to credit. But if legal systems are outdated, laws and procedures for enforcing collateral and foreclosure are poorly drafted and enforced, and monitoring is costly, both lenders and savers are unwilling to enter into financial contracts.

10.46 As a general proposition, Ghana enjoys a fundamentally sound legal framework governing debt recovery. The operation of this framework, however, is undermined by institutional inefficiencies which hamper the ability of lenders to recover delinquent debts in a timely manner, thereby reducing the willingness to lend. As a result, poor enforcement of the legal system adversely affects the development of the financial sector in Ghana.

10.47 This weakness is particularly evident in rural areas, where access to formal credit is virtually impossible without large landholdings as collateral. Even though it would offer a large number of farmers access to relatively inexpensive credit and is often accepted as collateral in other countries, movable property is almost never accepted. Where it is accepted, moreover, an additional premium of 8 to 20 percentage points is charged, indicating that transactions costs and risks associated with this form of collateral are high.

10.48 These limitations lead to segmentation of the financial system. Traders in rural areas are unable to draw on credit in the formal sector because they lack collateral. Other intermediaries—such as owners of storage and processing facilities, whose business is not directly based on the size of their landholdings—also cannot increase their access to formal credit to expand their business. As a result, credit is, in reality, obtained primarily through informal channels, where the efficiency of intermediation is limited.

10.49 Under Ghanaian law, lenders are accorded a variety of tools to seek repayment from delinquent debtors. These include taking possession of and auctioning off land, buildings, and personal property. Recourse often must be made to a receiver to administer the defaulting debtor's assets. Lenders can also move to attach the assets of defaulting borrowers or to garnishee payments due by third parties to the debtor, whether or not they have received a mortgage or other pledge of assets.

10.50 As in most other jurisdictions, Ghanaian law requires lenders to seek various court actions to enforce a security interest. These include requesting a court hearing to establish the default of the debtor, the right of the lender to take possession of the debtor's property, and the lender's right then to sell the debtor's property. But Ghanaian law also permits the lender to proceed in certain instances without recourse to the courts. Because involvement of the courts generally delays lender recovery of claims against defaulting debtors, consideration should be given to expanding the instances in which lenders can foreclose through extrajudicial means.

10.51 While the judiciary should play a critical role in debt recovery, the administrative, information, and personnel systems currently in place in Ghana's judiciary do not operate efficiently. As a result, lenders face serious delays (from six months to two years) in recovering on their loans, during which time the value of the collateral is wasted. it is necessary to improve the efficiency of the judiciary by strengthening information systems, improving the operational efficiency of the bailiff and of other administrative offices, by improving the physical infrastructure, and by allocating adequate resources for training judiciary personnel and for recurrent expenditures.

10.52 Uncertainties regarding land title and the inefficient operation of the property registries also slow the pace of business transactions in Ghana. It often takes months to register the transfer of land ownership, which reduces the number of such transactions and the demand for land purchase financing.

10.53 In addition, there exists significant uncertainty regarding title to many tracts of land, which limits the number of sales transactions. Ghana is currently revamping the legal regime governing land ownership, moving from a system of registration of priorities (under the Land Registry Act) to a system of registered indefeasible title (under the 1986 Land Title Registration Law. Uncertainty as to title reduces the willingness of lenders to provide loans secured by land. This may be reflected in higher borrowing costs, but often renders transactions collateralized by land too risky for the potential lender. Strengthening the operation of the land-transfer system and improving title certainty should improve the pace of business, and by extension, increase the amount of financing transactions.

10.54 Land transactions in Ghana are complex and sensitive, and involve various important issues that are beyond the realm of economic analysis. While a reform of land laws is already under way, a consensus on these issues is not likely to emerge in the near future. However, a land titling and recording system that would formalize individual ownership would help enable borrowers to use that ownership as collateral for loans, thereby giving them access to credit and reducing borrowing costs.

Annex

National Accounts Statistics in Ghana

1. The preparation of national accounts in Ghana has remained virtually unchanged since the onset of the ERP. The annual survey of industries uses the same sample of industries used in the mid-1970s. While there was substitution for firms that had gone out of business, some of the economic activities that evolved under the ERP may not be covered in the national accounts. The industrial survey also continues to exclude small-scale enterprises.

2. The Ghana Statistical Service (GSS) is keen to rebase the national accounts, to develop new sample frames for their industrial survey, and to improve their methods of data collection. They have commissioned a study on the informal sector, by Warwick University (in collaboration with the GSS). They also hope to use information from the GLSS to complement the information that they collect for the national accounts.

A. Gross Domestic Product

3. The first official GDP by output series covered the 1950-57 period and was published in the 1957 *Economic Survey*. Revisions were undertaken as part of the 1961-62 *National Household Expenditure Survey*. In 1971, the GSS (with the assistance of the United Nations Development Programme) began using the System of National Accounts as the basis for the collection and presentation of its national accounts data.[1] The constant-price series developed at the time was based on 1968 prices. The constant-price series used at present is in 1975 prices.

Agriculture

4. **Food Crops**. Data on food crops comes from the Ministry of Agriculture, which estimates the areas under particular crops (based on the information from the 1984 population census and a 1985 agriculture census). Ministry of Agriculture officials monitor crops and assess yields-per-acre by actually weighing and measuring the output from selected areas (the "crop-cutting" technique). Production is valued at the average price prevailing in the rural and suburban areas where the farmers sell most of their produce. Value added is estimated by deducting various inputs of seed, implements, fertilizers, and other current production costs from gross output (based on a survey of agricultural production costs undertaken in 1981 and adjusted by the CPI index). Subsistence farming is implicitly included, since estimates are based on area planted. Agricultural prices are collected at both the wholesale and retail levels in locations throughout Ghana. The constant-price series is estimated by deflating the current price series with the rural-consumer price index.

5. **Livestock and Poultry**. To determine domestic additions to the stock of animals in a year, the Ministry of Agriculture collects data on the number of animals, percentage of animals, and imports of animals. Veterinary services, medicine, the cost of feed, and other costs are subtracted to give the value added of livestock. Value added in poultry includes egg production estimated from data supplied by the Ministry of Agriculture and by State Poultry Farms. Poultry production is evaluated at retail prices. Net output in the poultry sector is estimated by deducting the cost of feed and other inputs. The constant-price series is estimated by evaluating current-

[1] See M.S. Singal and J.D.N. Nartey, 1971, *Sources and Methods of Estimation of National Income at Current Prices in Ghana*, Accra: Central Bureau of Statistics.

year production quantities (at 1975 prices) and then using 1975 ratios of input to output to determine value added.[2]

6. **Cocoa Production and Marketing.** Data on cocoa production and marketing are provided by the Cocoa Marketing Board. The Cocoa Marketing Board provides estimates of acreage planted, gross yields (also estimated by the crop-cutting method), and the average producer-cost per metric ton of output, which the statistical service then uses to calculate value added. (Although the issue of including cocoa-marketing under agricultural output rather than wholesale and retail trade was raised in a 1984 Bank report, it is still classified under agricultural output.)

7. **Forestry and Logging.** The principal source of data on forestry and logging is the Ministry of Lands and Forests. Information collected includes areas under forest; physical outputs of forest products by end-use; value of forest products; the export and import of forest products. The physical output of logs is estimated by using trade statistics on exports and physical output data from the Ministry of Lands and Forests. Sawmills provide information on the use of logs. The physical output of firewood is based on a 1963 benchmark estimate extrapolated to the present using the population growth rate.

8. The valuation of timber logs is estimated by adjusting the free on board (fob) price (excluding harbor dues, transport costs, handling charges at the port) and on the basis of estimates from the large timber establishments. It is estimated that, on average, only 35 percent of the fob price of logs is the gross share of the forestry sector, the 65 percent remaining being costs incurred outside the boundary of the forests. The valuation of charcoal and firewood have been made from retail price estimates adjusted for trade and transport margins to calculate gross output. Data is also collected by the consumer price unit on the average price of charcoal and firewood. Value added is determined by subtracting intermediate consumption from gross output.[3]

9. **Fishing.** Information on fishing comes from the fisheries department and is based on quantity and value information for both marine and freshwater fishing. The information on output is collected by a survey of commercial concerns and by a sample survey of canoes. Freshwater fishing is estimated by a Food and Agricultural Organization methodology developed in 1969. Prices are collected by important species of marine fish at landing centers. Operating costs are estimated by analyzing the income and expenditure statements of the fishing companies. Costs-estimates for canoe fishing are derived from the sample surveys.

Industry

10. **Mining and Quarrying.** Data on mining and quarrying comes from questionnaires sent directly to the mineral companies. Coverage of the sector includes gold, diamonds, bauxite, manganese, and stone quarries. Until recently "African diggers" (individual prospectors), were excluded from the statistics but these have since been legalized and are now incorporated into the data. Value added is estimated by the production approach: gross output is estimated from the

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[2] Unless otherwise indicated, this is the method used to determine the constant-price series.

[3] Intermediate consumption is assumed to be 40.3 percent of gross output for industrial wood, 6 percent for firewood, 14 percent for charcoal, and 1 percent for minor forest products. Depreciation is assumed to be 10 percent for industrial wood, 2.5 percent for firewood, 2.5 percent for charcoal, and 0.5 percent for minor forest products.

quantities mined and current material inputs and depreciation are estimated at pit-head prices[4] from an analysis of returns submitted by the mining establishments.

11. **Manufacturing**. Manufacturing data on output, inputs, and depreciation are collected on a sample of firms with employment of 10 persons or more. Firms that have gone out of business are replaced with close substitutes. Although there has been some introduction of new firms, the sample frame for the survey is the same as in the mid-1970s, suggesting that output in nontraditional sectors of the economy may not be entirely covered in the national accounts data. Small- and medium-sized firms are also not included in the annual survey. Their gross output was originally estimated by assuming that it was a proportion of the large scale firms output (based on 1963 benchmark data). Since 1986, however, the value added of small scale firms has been estimated by adjusting the preceding year's figure by the wholesale price index. An industrial census was completed in 1987, and the GSS has compiled a register of firms that includes new firms, which it is planning to use as the sample frame for its industrial survey in the future. The GSS has also commissioned a study of the informal sector in order to gain more information on this area of the economy.

12. For both large- and small- scale manufacturing, gross output is deflated at the 3-digit ISIC classification by an index of wholesale manufacturing prices. Value added of the constant series is then estimated by applying the ratio between value added and gross output of 1975 to the respective estimates of gross output at constant prices.

13. **Electricity and Water**. Data on electricity and water come from the income and expenditure statements of the Volta River Authority, the Electricity Company of Ghana, and Ghana Water and Sewerage Corporation. The GSS determines value added using the information provided on total production and intermediate consumption.

14. **Construction**. The value added of the construction sector includes public, private, and own account construction. Estimates are derived using both an assessment of construction inputs (the commodity-flow approach) and expenditure methods. The sector is divided into four sub-sectors: repair and maintenance of buildings, construction of nonpermanent buildings, construction of permanent buildings,[5] and public construction works. The four subcomponents are aggregated to give total value added for the construction sector.

15. Originally, repairs and maintenance were estimated to be equivalent to one month's rent for both permanent and nonpermanent buildings. Since 1982, however, the prime building cost index has been used to adjust the previous year's figure. Estimated costs for repairs and maintenance are divided as follows: The cost of materials is estimated to be 50 percent of the total value of repairs and maintenance for permanent buildings and 35 percent for nonpermanent buildings. Labor charges are estimated to be 45 percent for both permanent and nonpermanent buildings. Transport charges are assumed to be 5 percent for permanent buildings and nil for nonpermanent buildings.

16. The estimate of the total value of nonpermanent buildings (in 1965 prices) was originally made by taking the average value of houses (whose number was obtained by the 1960 census) and by type and frequency of distribution and assuming a growth in the number of houses of one-

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[4] The pit-head price of a mineral represents its value per unit of quantity in the state in which it is extracted from the earth, together with any processing that is carried out by the establishment before marketing it.

[5] Permanent buildings are those made out of concrete that are meant to have a life-span of 20 years or longer.

half the rate of population growth. Building-cost indices were then applied to the number of homes. Since 1988, a growth rate between 7.5 and 10 percent has been applied to the value of the previous year's price estimate (in 1965 prices) and building-cost indices are used to determine the current value. Intermediate costs are determined by estimating the average share of material components in gross output. (The value of materials other than split wood, sand, bamboos, etc., is assumed to be 35 percent of gross output and the value of materials such as split wood, sand, etc., is assumed to be 20 percent of gross output.)

17. The estimate of the total value of permanent buildings was originally derived from data on imported and locally produced building materials. Since 1987, however, it has been determined by applying between 3.99 to 4.05 times the total value of material cost components for repair and maintenance, nonpermanent buildings, and other construction works. Intermediate consumption is calculated as 65 percent of gross permanent building construction.

18. Other construction activities include roads and bridges, airports and harbors, railway road-beds, sewerage and drainage, posts and telegraph installations, electricity-generation and distribution works, water-supply constructions, other construction works, and land improvement. Gross output is estimated from capital-expenditure data (from the public accounts) and from information from the Volta River Authority, the Electric Company of Ghana, P&T-Telecom, the Ghana Ports and Harbour Authority, the Ghana Railways Corporation, the Ghana Water and Sewerage Corporation, and the Ghana Civil Aviation Authority. Estimates of construction materials used are based on ratios set originally in 1971 and revised in 1987. To give intermediate consumption, materials are marked up by 20 percent. Value added is then estimated by deducting intermediate consumption from total expenditure as reported in the capital account of the government and by the above-listed public authorities.

Services

19. **Transport, Storage and Communications.** This sector includes: (i) transportation by railway; urban, suburban and inter-highway passenger transport; freight transport by road; ocean, coastal and inland water transport; supporting services to water transport; air transport; storage and warehousing; and communications through Post and Telecommunication.

20. Sources of information on the sector include: Ghana Railways and Ports, the Office of Omnibus Authorities, State Transport Corporation, Private Shipping Companies, Ghana Airways, P&T-Telecom, and data collected by the GSS. The census on which the sampling for this sector was based was carried out in 1968-70 and thus excludes some of new firms. There is more recent information from the Ministry of Transport from a 1988 road survey and a registry of the number of road vehicles in use. Value-added estimates are derived from analysis of revenue and expenditure data in survey questionnaires and on tax returns.

21. The constant series is estimated differently for various subsectors. For transportation, the 1988 data is taken as a benchmark and adjusted with the use of an index that incorporates changes in the price of petrol. For communications, the numbers of letters and phone calls are used to extrapolate the gross output from 1968, input to output ratios from 1975 are used to arrive at value added in constant prices.

22. **Wholesale and Retail Trade, Restaurants, and Hotels.** This sector covers retailers of raw and used goods and the commercial restaurant and hotel industry. The sector is subdivided into: imported goods; locally manufactured goods other than petroleum products, petroleum products, agricultural products (other than cocoa), fish, forest products, minerals and hotels and

restaurants. End-use classification indicates that 55 percent of imports is destined for the distributive trade sector. The mark-up added to obtain gross figures is 80 percent.

23. For locally manufactured goods and petroleum, information on output and gross mark-ups is acquired by survey of the largest trading companies and the Ghana National Petroleum Company. It should be noted that, because the surveys generally go out to larger firms, under-representation of medium, small, and informal participants is likely in this part of the economy. Estimates for restaurants and hotels are also based on surveys. Additional data is obtained from tax returns of the large establishments and from a small-sample survey. The constant price series for wholesale and retail trade is estimated by adjusting the previous year's figure by the increase in wholesale prices. Value added in constant prices is obtained by adding the 1975 ratio of value added to gross output in current prices to the estimated gross output in constant prices.

24. **Finance, Insurance, Real Estate and Business**. This sector includes BOG, banks, non-bank financial institutions, insurance companies, rental (and the imputed rental of ownership) of dwellings (real estate is assumed to be insignificant), legal services, accounting and auditing services, engineering, and machinery rental.

25. For banking, value added in current prices is calculated as gross output (sum of interest, miscellaneous income, and investment income) less intermediate costs of rent and other operating expenses. Before 1979, the constant price series was extrapolated from the base year by the number of checks cleared. After 1979, a simple average of the number of checks cleared and persons employed was used. Value added is estimated by applying the ratio of value added and gross output at current prices in 1975 to gross output at constant prices.

26. For insurance, the constant series is extrapolated by an index of employment. In later years this was changed to deflating the current series by the wholesale price index. Real estate information is based on the 1984 census. The housing growth rate is based on the rate of growth of urban and rural housing between the 1970 census and the 1984 census. Information on rents is collected by the consumer price section. The constant series is currently determined by deflating the value of houses by the housing price index.

27. Finally, business service data is based on surveys to firms. The choice of firms surveyed is based on a list, which is updated using information from associations related to these services and from the registrar general's office. (This may be another area in which the survey-sample used can lead to underestimation of output.) The price series for auditing and engineering services is estimated by deflating gross output (taken from survey information) by the CPI. Value added is taken to be the ratio of the 1975 input/output of 1975 current price estimates. For rental of machinery and equipment, information is acquired from four major firms involved in the rental business. In the case of lawyers, information is obtained from tax returns.

28. **Government Services**. This sector covers all nonenterprise activities of public authorities involved in the administration, defense, and regulation of public order; promotion of public welfare or technological development; provision of health, education, cultural, recreational and other social and community services provided free of charge or at a sales price that does not fully cover the cost of production; other nonprofit organizations supported by public funds; and social security arrangements. The sources of data are central and local government accounts and the accounts of various nonprofit organizations. Value added is estimated using the income-to-expenditure approach. The constant price series is extrapolated using the 1975 ratio using the number employed in government services.

29. **Community, Social and Personal Services and Producers.** This sector includes private health, education, and recreational services traditionally provided by the government until recently. Estimates of value added are made on the basis of questionnaires sent to the participants in the sector. Value added estimates for private doctors and dentists are from information on income and expenditure submitted to the Income Tax Department. Information on the number of registered nurses is taken from the Ministry of Health, and average income per nurse is estimated based on postal surveys. Postal surveys are also used to obtain information on recreational services. The constant series for educational and recreational services is estimated by deflating gross output by the CPI.

30. **Private Nonprofit Services.** This sector includes various personal services carried out by religious organizations, trade unions, bar associations, the Red Cross, etc. The 1984 population census is used as a benchmark for the number of people engaged in personal services. Figures are projected to later years on the basis of population growth. Average income per person is based on postal surveys. Data on religious organizations is obtained by survey. Data on the Red Cross and trade unions comes from income and expenditure statements. To obtain the constant series, estimated of gross output are deflated by the CPI, and then the 1975 ratio of value added to gross output was applied to the constant series.

GDP by Expenditure Category

31. **Government Consumption.** Figures for government consumption are based on central government data. Before 1979, the basic source of data was the unpublished record of the Office of the Accountant General and the Office of the Chief of Defence Staff. Since 1979, government consumption figures have been based on data on recurrent expenditures in the budgetary documents adjusted for depreciation and sales. The constant price-series estimation is determined by deflating by a weighted average of the CPI and the civil service (minimum) wage index.

32. **Private Consumption.** This is calculated as a residual in both current and constant prices based on the income accounting-identity (GDP-Cg-I-(X-M)=Cp). It therefore includes any statistical discrepancies or errors due to measurement problems.

33. **Gross Fixed Capital Formation.** Estimates of gross fixed-capital formation are determined by the type of good: buildings, other construction works (except land improvement), land improvement and plantation, transport and equipment, and machinery and equipment. In the case of buildings, information from construction companies is used to build composite indices of the cost of construction based on labor and various material inputs. For other construction works, data on transport equipment, machinery and other equipment come from import statistics. Data on land improvement and plantation come mainly from public-sector sources and therefore exclude private-sector land-improvement or planting by small or medium plantations. The constant price series is determined by deflating by the index of prime building costs.

34. **Changes in Stocks.** Data for calculation of the changes in stocks comes from the annual surveys of firms deflated by the index of prime building costs.

35. **Exports and Imports of Goods and Nonfactor Services.** Data on exports and imports come from external trade statistics adjusted to include the imports and exports of the Volta Aluminum Company (VALCO) (which are not ordinarily considered in balance-of-payments data on the grounds that VALCO is a non-resident company). Information on the imports and exports of nonfactor services comes from the BOG.

36. **Net Factor Income Paid Abroad.** Data on net factor income paid abroad come from the balance of payments.

37. **Consumption of Fixed Capital.** Information on the consumption of fixed capital (depreciation) comes form surveys of firms. Depreciation for items such as bridges and roads is calculated according to a schedule (not made available).

38. **Net Current Transfers from Abroad.** Data are from the balance-of-payments account.

B. Principal Issues of Coverage

39. Given the resources that it has at its disposal, the GSS is doing the best it can to apply the System of National Accounts. But with the substantial economic changes that have occurred in the Ghanaian economy over the past 10 years, in some areas national accounts coverage has not been able to keep up.

40. Coverage of agriculture on the production side is generally good. The issue of whether cocoa marketing should be considered under agriculture or under wholesale and retail trade, raised in a 1984 report, was not raised by authorities currently in charge of national accounts. Reserved forests are closely monitored and information on them is satisfactory, but forestry and logging activity in unreserved forests needs to be looked into. In 1971, for instance, unreserved forests were not included in the statistics. The GSS states that coverage of these areas is now incorporated. But while exports from unreserved forests is certainly covered, it is less clear to what extent forestry and logging for domestic use are covered. The output of firewood may have also changed significantly. Current figures are based on extrapolation from a 1963 survey based on population growth.

41. In industry, mining and quarrying data are quite good, while manufacturing is likely to be underestimated. The survey of firms concentrates on firms of 10 or more employees using a sample frame from the mid-1970s. As firms have gone out of business they have been replaced with substitutes. Although information from a register of new firms is used as well, the 1987 industrial census has not been used to update the sample frame for the survey. (The GSS is hoping to do this within the next year or so.) As currently prepared, therefore, the national accounts may well miss manufacturing activity that evolved under the ERP, making it difficult to determine the extent of structural change in the economy.

42. Ghana's industrial statistics also include only limited information on small-scale firms. A benchmark ratio of small-scale to large-scale industry was determined in 1963. Since 1986, the small-scale component has been determined by adjusting the 1986 figure by the wholesale price index assuming that small-scale industry growth will mirror the wholesale price index. This may not be the case, however, given the country's fundamental changes in economic policy. Work is presently under way to assess small-scale and informal industry.

43. In the construction sector, many calculations assume particular growth rates and ratios for the sector's various components. (For example, the growth rate of nonpermanent buildings is assumed to be between 7.5 and 10 percent per year.) There is a need to determine, however, whether these rates are still applicable given the large amount of construction that seems to be going on.

44. Under services, transport coverage is good but communications coverage needs to be broadened to include the value added of more recent services (such as cellular telephones, fax

machines, and couriers). For the wholesale and retail trade sector, there is bound to be some underestimation, because the surveys used generally cover only the large trading firms, and there are numerous small-scale traders (such as the market women) not incorporated into the national accounts. Estimates of restaurants and hotels may also be underestimated. Surveys go out to the large establishments but may not cover recently established small hotels and restaurants. Given that business consulting services are not yet incorporated into the annual surveys, there will also be some underestimation of new business services.

45. The other estimates of economic activity seem to have reasonably thorough coverage. On the expenditure side, the principal area of concern is coverage of gross fixed capital formation. The land improvement and plantation component is constructed based on information from largely public-sector sources and from the large private plantations. This implies that planting undertaken by medium and small-scale farmers is not included in gross fixed capital formation. Given the perception that small-scale cocoa farmers began to replant when the produce price was increased under the ERP, land improvement and plantation may be significantly under-estimated.

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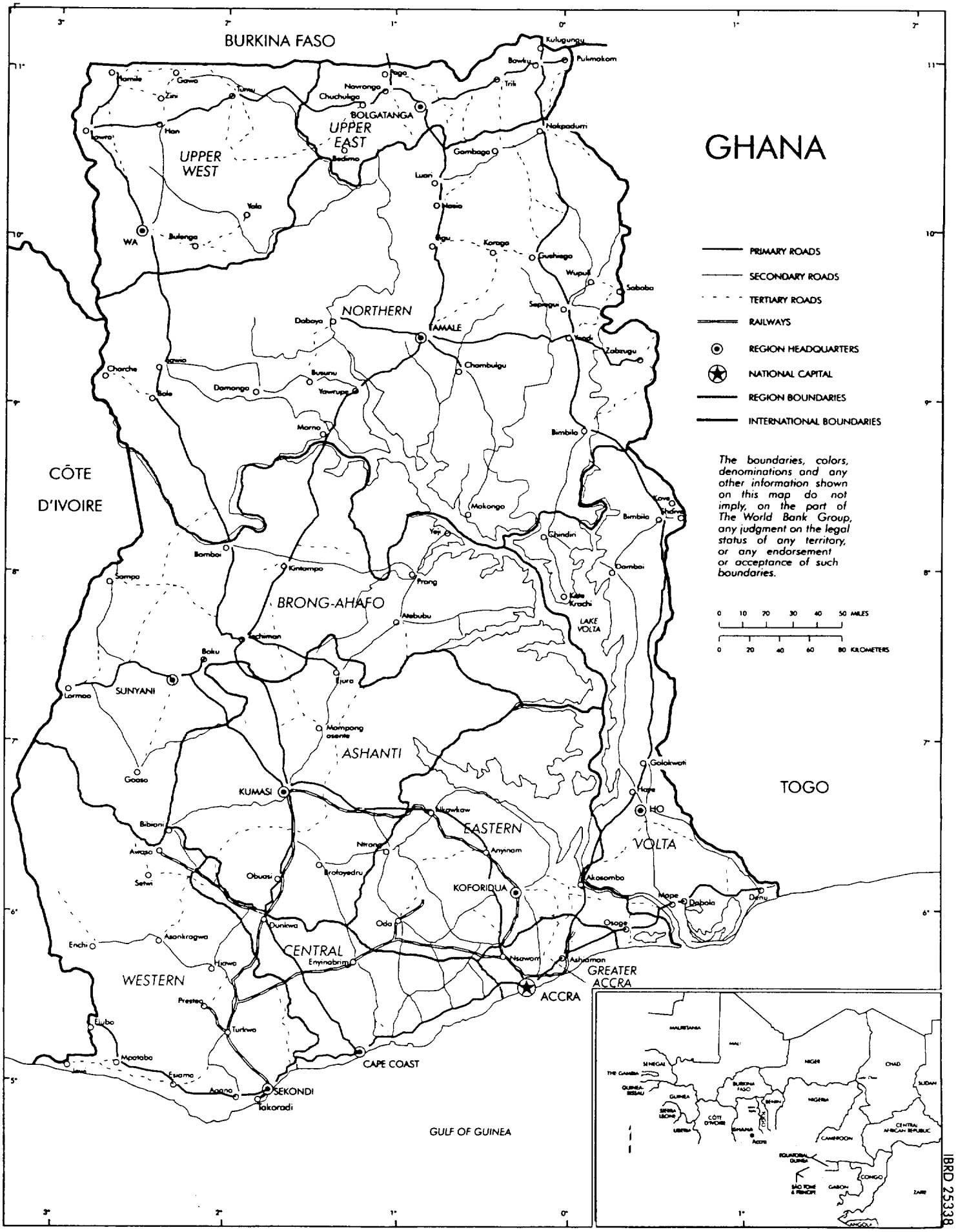
MAP SECTION



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