

Yale University

## EliScholar – A Digital Platform for Scholarly Publishing at Yale

---

YPFS Documents (Series 1)

[Browse by Media Type](#)

---

2000

### Financial sector reforms and bank performance in Ghana

T.O. Antwi-Asare

E. K. Y. Addison

Follow this and additional works at: <https://elischolar.library.yale.edu/ypfs-documents>

---

#### Recommended Citation

Antwi-Asare, T.O. and Addison, E. K. Y., "Financial sector reforms and bank performance in Ghana" (2000). *YPFS Documents (Series 1)*. 10451.

<https://elischolar.library.yale.edu/ypfs-documents/10451>

This Document is brought to you for free and open access by the Browse by Media Type at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in YPFS Documents (Series 1) by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact [elischolar@yale.edu](mailto:elischolar@yale.edu).

---

# **Financial Sector Reforms and Bank Performance in Ghana**

**T.O. Antwi-Asare  
E.K.Y. Addison**

**Overseas Development Institute  
University of Ghana**

---



# **Financial Sector Reforms and Bank Performance in Ghana**

**T.O. Antwi-Asare and E.K.Y. Addison**



ODI Research Study

00018954



Overseas Development Institute

# Financial Sector Reforms and Bank Performance in Ghana

T.O. Antwi-Asare and E.K.Y. Addison

University of Ghana  
Overseas Development Institute

**A CIP Publication data record for this publication may be obtained from the British Library**

ISBN 0 85003 456 6

© Overseas Development Institute 2000

Published by the Overseas Development Institute  
Portland House, Stag Place  
London SW1E 5DP

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

Printed by The Russell Press Ltd, Nottingham

# Contents

List of institutions and abbreviations	viii
Foreword	x
Acknowledgements	xi
Abstract	xii
<b>1 Introduction and Background</b>	
Introduction	1
Background to financial sector reforms	1
Aims of the financial sector reforms	6
Objectives and plan of the study	7
<b>2 Literature Review and Methodology</b>	<b>9</b>
Literature review	9
Methodological issues	17
<b>3 The Ghanaian Banking Sector</b>	<b>20</b>
The pre-financial sector reform period	20
The banking sector after the introduction of the financial sector	
Reforms	29
Non-bank financial institutions	32
<b>4 Macroeconomic Developments and Financial Deepening</b>	<b>34</b>
Introduction	34
Trends in selected macroeconomic indicators	35
Financial sector reforms and financial deepening	39
Bank crisis situation	43
Conclusion	43
<b>5 Bank Performance</b>	<b>45</b>
Introduction	45
Measures of profitability	46
Measures of intermediation	51
Indicators of operational efficiency	59
Correlation between profitability, market structure, and demand for banking services	64
State-owned banks and private banks 1990-96	66
Summary and conclusions	67



<b>6</b>	<b>Perceptions of Financial Sector Reforms</b>	<b>69</b>
	Perceptions of bank reforms by clients	69
	Bank customer services	71
	Perceptions of financial sector reforms by banks	74
<b>7</b>	<b>Conclusions</b>	<b>81</b>
	Summary and conclusions	81
	Recommendations	86
	<b>References</b>	<b>89</b>
	<b>Tables</b>	
Table 1.1	Selected macroeconomic and financial indicators	3
Table 1.2	Selected macroeconomic and financial indicators	4
Table 2.1	Behaviour of selected indicators	15
Table 3.1	Evolution of the banking sector in Ghana	22
Table 3.2	Bank ownership, 1989	24
Table 3.3	Bank ownership, 1997	26
Table 3.4	Initial focus of banking activity	27
Table 3.5	Prudential returns submitted to the bank of Ghana	31
Table 3.6	Distribution of licensed NBFIs	33
Table 4.1	Trends in selected macroeconomic and financial indicators	35
Table 4.2	Test of significance for financial deepening	41
Table 5.1	Measures of profitability	47
Table 5.2	Annual changes in profits (%)	49
Table 5.3	Measures of profitability for Big Four banks	50
Table 5.4	Four-Bank concentration ratios	51
Table 5.5	Measures of intermediation	52
Table 5.6	Reserves of banks	53
Table 5.7	Composition of banking sector balance sheet	54
Table 5.8	Intermediation by the Big Four banks	55
Table 5.9	End-Use allocation of bank advances to public and private sector	56
Table 5.10	Rankings in sectoral shares of bank credit	57
Table 5.11	The ratio of deposit types to total liabilities	57
Table 5.12	Shares of deposits in total liabilities by sector	58
Table 5.13	Measures of operational efficiency	60
Table 5.14	Shares of interest income	61
Table 5.15	Indicators of operational efficiency for Big Four banks	63

Table 5.16	Correlation between ROA and other bank performance indicators	65
Table 5.17	Average performance of state-owned and private banks	66
Table 6.1	Perceptions on the quality of bank staff	73
Table A3.1	Size of selected NBFIs	107
Table A4.1	Interest rate spreads and real interest rates	107
Table A4.2	Selected macroeconomic indicators	108
Table A4.3	Growth in nominal income and credit to private sector	109
Table A4.4	Behaviour of the real credit to private sector-real GDP ratio	109
Table A5.1	Bank profitability (% of Total Assets)	110
Table A5.2	Composition of deposits	110
Table A5.3	Composition of interest expenses	110
Table A5.4	Annual changes in interest income, income expenses and net interest margin	111
Table A5.5	Performance of private banks	111
Table A5.6	Performance of state-owned banks	112
Table A5.7	Non-Performing Assets Recoveries by NPART	113

## Appendices

Appendix I.	Chronology of Financial Sector Reforms and other Monetary Measures	93
Appendix II.	Questionnaire for Banks	96
Appendix III.	Questionnaire for Bank Clients	103
Appendix IV.	Tables	107
Appendix V.	Non-Performing Assets	113
Appendix VI.	Accounting Issues	114

## List of institutions and abbreviations

GOG	Government of Ghana
BOG	Bank of Ghana
GCB	Ghana Commercial Bank
SCB	Standard Chartered Bank
BBG	Barclays Bank
SSB	Social Security Bank
NSCB	National Savings and Credit Bank
MBG	Merchant Bank
CAL	CAL Merchant Bank
ADB	Agricultural Development Bank
PBL	Prudential Bank
TTB	Trust Bank
EBG	Ecobank
FAMBL	First Atlantic Merchant Bank
MAB	Metropolitan and Allied Bank
COOP	Ghana Cooperative Bank
BHC	Bank for Housing and Construction
NIB	National Investment Bank
MBBG	Meridian Bank BIAO
ICB	International Commercial Bank
SIC	State Insurance Corporation
SSNIT	Social Security and National Insurance Trust
WACB	West African Currency Board
BCC	Bank of Credit and Commerce
FINSAP	Financial Sector Adjustment Programme
CPS	Credit to the Private Sector
CBC	Credit to the banks from the Bank of Ghana
T.A.	Total Assets
OPREX	Operating Expenses

STEX	Staff Costs
OTPEX	Other Operating Expenses
OCCEX	Occupancy Expenses
NLLPR	Net Loan Loss Provisions (provisions for debt less recoveries)
PROV	Provisions for Bad Debts
OPI	Other Operating Income

Net Spread =  $[(\text{Interest Income}/\text{Advances}) - (\text{Interest Expenses}/\text{Interest Bearing Deposits})] * 100$

Net Interest margin = Net interest income/total assets

## Foreword

Throughout the developing world governments pursuing policies of structural adjustment have introduced reforms designed to raise the efficiency and strength of their financial systems. This case study is intended to throw light on how commercial banks respond to such measures and is thus of an interest well beyond Ghana.

Ghana's banks have performed poorly in the past, offering but a narrow range and inefficient delivery of financial instruments, being strongly biased in their reach to the urban formal sector and, in particular, to the holding of low-risk government paper, and being largely non-competitive in structure. In consequence of these features – and of the economic factors underlying them – financial sector development has been slight in Ghana, arguably contributing to the generally poor performance of the economy. To rectify these weaknesses, and to take further the liberalisation reforms commenced in the early-1980s, the government introduced financial sector reforms from the late-1980s. Based on original research, the authors conclude that measures such as the liberalisation of interest rates and credit allocations have indeed enhanced financial development. A wider range of financial services has become available and there is greater competition between banks. As they make clear, there are still weaknesses, however. State-owned banks remain inefficient, the sector is still oligopolistic and loan recovery remains a problem.

My own association with the University of Ghana's Economics Department goes back to 1961, when I joined it as the most junior of Assistant Lecturers. It has been a source of particular pleasure to be associated with this programme of research and in this way to be able to renew my links.

Tony Killick  
Overseas Development Institute, London  
January 2000

## Acknowledgements<sup>1</sup>

The authors are particularly grateful to the Overseas Development Institute for making available the resources needed to complete the study. We thank the Project Supervisor, Professor Tony Killick of the ODI for providing a host of valuable comments, and for his encouragement and patience until the submission of the final document.

We also thank Dr. Nii Kwaku Sowa, Core Fellow of the Center For Policy Analysis, Accra, for his advice, especially during critical periods when the going was tough. Our gratitude also goes to Mr G.K. Tsikata, the Local Coordinator of the two studies in this third phase of the research link between the Department of Economics, University of Ghana and the Overseas Development Institute. He played a fatherly role and read through the final draft report.

We also thank Abena Oduro and Dr K.A. Tutu of the Department of Economics, Legon. We are grateful to Dr Wampah, Dr Kwakye and other staff of the Research Department of the Bank of Ghana for their assistance, and Mr Amoako Atta of the Bank of Ghana, Mr Jude Arthur of the First Atlantic Merchant Bank and Mr Razak of the Metropolitan and Allied Bank for their comments at the policy seminar.

Mr Opoku Afari and the Rev. J. Djangmah provided excellent research assistance. Grace Annan, Mohammed Osumanu, Elfreda Donkor and Owusu Agyeman of the Dept. of Economics provided able secretarial assistance. We also thank our families and all other individuals, institutions and firms who responded to our questionnaires and requests. Finally, we state that any remaining errors are our own.

---

1. At the time of writing this report T.O. Antwi-Asare was a Lecturer in the Department of Economics, University of Ghana and E.K.Y. Addison was a Senior Economist in the Research Department, Bank of Ghana.

## Abstract

This study looks at how the financial sector reforms have influenced bank performance in Ghana. By common consent, Ghana's banking sector had performed poorly in the past, but from the late 1980s various reforms have been introduced which were intended to strengthen the sector. This study examines these institutional, legal and policy reforms.

The financial sector reforms have largely succeeded in terms of enhancing financial development and the expansion in size and diversity of the banking sector. The enactment of the new Banking Law brought more discipline to the banking sector. The Bank of Ghana with its greater power has improved its regulatory activities as compared with the pre-financial reform period. Nevertheless, we found some uneasiness in the banking sector about the Bank of Ghana's tardiness in reacting to specific breaches of the law by some financial institutions.

Since the introduction of the financial sector reforms, banks have derived considerable profit from their investments in government securities and Bank of Ghana securities. The share of private sector deposits in the banking sector portfolio declined between the two periods. The performance of the state-owned banks was found to be below that of the private banks in terms of profitability, intermediation and operations.

The survey revealed that specific policy reforms which enhanced bank performance were interest-rate liberalisation, decontrol of credit allocation and the removal of non-performing assets to the Non-Performing Assets Recovery Trust. The banks identified the major measures that depressed their performance as the unified cash reserve requirement on deposits and the generally high level of reserve requirements. This tight stance was part of the fight against inflation which was a serious problem in the 1990-96 period. Loan recovery appeared to remain a problem in 1994-96, even though loan applications were better appraised than in the pre-reform period. It was clear that a lot of work has to be done in this area through more pro-active monitoring and supervision of borrowers. Bankers were of the view that the problems encountered with loan repayment, apart from having to do with exchange-rate depreciation, weakness in the capital base and management in private sector firms, also had to do with attitudes to repayment. However, they recognised that better private sector behaviour was ultimately dependent on macroeconomic conditions which were poor between 1992 and 1997. On the whole, bankers felt that the reforms had created a better environment for the development of the banking sector.

The reforms injected more competition in the banking sector, with most banks increasing the range and diversity of their products and services. Nevertheless, the Big Four banks still dominate the sector and by holding about 68% of banking sector assets, 74% of the deposit base and 62% of loans and overdrafts in 1997, they still have powerful influence over pricing decisions in the sector.

Bank clients stressed that inflation and high lending rates were the most important factors impeding loan repayment after the financial reforms. Many intended outcomes of the financial reforms were not entirely achieved, mainly because of macroeconomic problems during much of the period when the reforms were being implemented.

The study also provides recommendations on bank regulation to reduce the possibility of bank distress, tax-based incentives for bank lending and the usefulness of differentiated reserve requirements to encourage deposit mobilisation.





# Introduction and background

## Introduction

This study is aimed at finding out how financial sector reforms have influenced bank performance in Ghana. The financial sector is of central importance for a country's growth and development, but its usefulness cannot be exploited unless there exists an efficient structure of intermediaries which will channel idle balances into more productive investments 'at the highest available rates of return, and with minimum transactions costs' (Killick and Martin, 1990). The relationship between financial structure and economic activities hinges, on the one hand, on the importance of savings and investment in the determination of a nation's output, and on the other, on the role of financial intermediaries in the saving-investment process. The financial system in Ghana is dominated by banks, with bank loans being the primary source of external financing for domestic companies.<sup>2</sup> Since 1987, alternative sources of financing such as equity through the stock exchange are developing.

The Government of Ghana, in association with the World Bank, introduced financial sector reforms with a Financial Sector Adjustment Programme in 1987. The Ghanaian economy in the period 1976-83 had experienced severe crises, in addition to poor economic growth and severe balance of payments problems. In 1983 an economic recovery programme was initiated, which sought to restructure the economy and reverse the trends of economic decay. It quickly became clear to the government that, if the economic reforms were to lead to a sustainable resumption of growth in the economy, a restructuring of the then distressed financial sector had to be undertaken.

## Background to financial sector reforms

The origins of the financial crisis in Ghana can be traced to the macroeconomic and financial sector policies that were implemented in the

---

2. The Ghana Stock Exchange began operations on 12 November, 1990 with 20 listed companies and ₵170 million capital.

post-independence period. However, the crisis in the sector and its timing can be attributed to the sharp decline in economic performance in the late 1970s.

The history of the development of the financial sector during the early years of independence was closely linked to extensive government intervention.<sup>3</sup> In an attempt at rapid industrialisation, the government intervened in every sphere of the economy. Financial policies were set within an overall import-substituting industrialisation strategy. By the 1970s, interest rate controls and credit ceilings ensured that cheap credit was available to government-imposed priority sectors such as manufacturing. Heavy taxation of the banking sector had become a major source of revenue for the government. High reserve requirements were placed on the banks. These restrictive policies created major distortions in the financial sector. In the presence of high inflation, real interest rates became negative.

The financial sector's development cannot be analysed without setting it in the context of the general macroeconomic environment. The Ghanaian economy, which at independence in 1957 had considerable foreign reserves, suffered a persistent decline until it hit its nadir in 1983. By then, all structures were under severe stress and the economy was in deep crisis. A deteriorating economy, characterised by per capita GDP growth of not more than -3% per annum during 1970-83, inflation which peaked at 123% in 1983, low levels of saving and investment, and a low volume of international trade, led to crisis in the financial sector.

By 1982 Ghana provided a classic case of financial repression. High inflation had eroded the capital base of most banks and demand deposits accounted for more than 76% of total private sector deposits, constraining long-term lending. Negative real rates of interest on deposits and lack of confidence in the banks had resulted in high levels of currency outside the banks, with the currency-deposit ratio at 70% at the end of 1983. In the same vein, the currency/M1 ratio rose from about 49% in 1970 to 58% in 1980 (Table 1.1).

Ghana began to experience some financial disintermediation as the M2/GDP ratio declined from about 19% in 1970 to reach about 13% in 1983 (Table 1.1). Ghanaians preferred currency holdings to making deposits at banks. In the late 1970s and early 1980s, there was a significant growth in informal financial arrangements which became a significant feature of the Ghanaian financial system (Aryeetey and Gockel, 1991).

---

3. The evolution of the banking sector is discussed in Chapter 3.

Table 1.1. Selected Macroeconomic and Financial Indicators

Year	1970	1974	1980	1981	1982	1983
M2/GDP (%)	18.9	21.6	20.0	18.8	18.6	13
Inflation (CPI)	3	18.8	50.2	116.522.3	123	
Real GDP growth	6.7	3.4	0.5	-3.5	-6.9	-4.5
Rate (1990 cedis)						
CPS/GDP (%)	8.3	5.7	2.2	1.8	1.8	1.5
Currency/M1 (%)	49	48	58	65	55	54
No. of Bank branches	n.a.	183	241	247	273	273
Paid-up Capital and reserves of banks						
to total assets (%)	4	4	6	5	5	9
Exchange rates (cedi/dollar)	1.02	1.15	2.75	2.75	2.75	8.83
Narrow budget balance/GDP (%)	-2.2	-4.2	-4.2	-6.5	-5.6	-2.7
Investment/GDP (%)	14	13	7	13	4	4
Interest rate spread (%)	7.5	5	6.5	7.5	6.0	8.0

Sources: Bank of Ghana, *Annual Reports* - (for M2, Paid up capital of banks, CPS (Credit to the Private Sector); Ghana Statistical Service, *Quarterly Digest of Statistics* various issues (for number of bank branches, interest rates); *IFS 1998 Yearbook* (for exchange rates, GDP in 1990 cedis)

Notes: CPS/GDP = Credit to the Private Sector/GDP ratio; interest rate spread = max. lending rate - min. deposit rate (excludes demand deposit rates).

Table 1.2. Selected Macroeconomic and Financial Indicators

Year	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
M2/GDP (%)	16.0	13.9	16.3	18.6	18	19.5	17.9	16.8	18.3	19.5 <sup>a</sup>
Inflation (CPI) 10.4	37.2		18.1	10.1	2.5	24.9	59.5	46.6	27.9	15.7 <sup>a</sup>
Real GDP growth										
(1990 cedis)	5.1	3.3	5.0	3.9	5	3.8	4.5	5.2	5.1	5.2 <sup>b</sup>
CPS/GDP (%)	3.1	3.1	3.4	4.9	5.1	5.5	5.3	6.4	7.6	9.9 <sup>a</sup>
Currency/M1 (%)	39	37	39	51	48	53	59	60	56	52
No. of bank branches	322	320	330	322	304	291	291	288	246	n.a.
Paid-up capital and reserves to total assets for banks (%)	10	12	15	13	13	17	14	14	14	12
Exchange rate (¢/\$)	54.37	326.33	367.83	326.33	649.06	956.71	1200.43	1637.23	2050.17	2314.15
Narrow budget balance/GDP (%)	-2.2	0.2	1.6	-5.2	-2.6	2.5	0.9	-3.2	-2.1	2.1 <sup>a</sup>
Interest rate spread (%)	6.5	17.25	20.9	18	24	23.8	26	23	19.5	40 <sup>a</sup>

Sources: Bank of Ghana Annual Reports - [for M2, Paid up capital of banks, CPS (Credit to the Private Sector)]; Ghana Statistical Service, Quarterly Digest of Statistics various issues - [for No. of Bank Branches, Interest rate, Budget Balance 1970 to 1997]. Narrow Budget balance for 1998 computed from Government Budget Statement 1999; IFS 1998 Yearbook - [for Exchange Rates, GDP in 1990 cedis].

Notes: CPS- Credit to Private Sector, Interest Rate Spread = max. lending rate - min. deposit rate (excludes demand deposit rates); (a) refers to provisional values; (b) The 1998 real GDP growth rate was given in the 1999 budget statement as 4.6% in 1993 cedis.

The Economic Recovery Programme (ERP) which began in 1983, sought to stabilise the economy and then promote growth. The economic reforms included measures to promote fiscal discipline, reforms of the trade and exchange system and other wide-ranging measures initiating price liberalisation and deregulation of many economic activities. The fiscal position improved under the ERP until 1991, while inflation declined after 1983 but persisted in double digits rising to a peak of 59.5% in 1995 (Table 1.2).

By the mid-1980s, most banks in Ghana were showing signs of distress. The severe inflation during the 1970s and early 1980s had led to severe undercapitalisation of the banks (Table 1.2). Moreover, widespread defaulting on bank loans by both parastatals and the private corporate sector burdened the banks with huge non-performing assets. The sharp devaluations of the domestic currency (under the ERP), during 1983-86 made, many foreign loans administered by the banks unserviceable). The situation was even more serious for the state-owned banks.

The effect of these problems was to erode all the norms for capital adequacy and prudential lending. Meanwhile, there were no clear quantified legal definitions relating to financial sector practices, and legal penalties were insufficient to deter imprudent financial behaviour. The Banking Act of 1970 was outdated in many areas and the supervisory capacity of the Bank of Ghana was questionable. To ensure sustained growth, it also became necessary to increase the domestic mobilisation of financial savings and promote investment.

The banking sector has at its apex the Bank of Ghana, which is responsible for monetary policy and overall supervision of banks and Non-Bank Financial Institutions (NBFIs). The Ghana Commercial Bank, the Social Security Bank and two foreign-owned banks namely Barclays Bank and Standard Chartered Bank, held about 67% of the assets of the banking sector in 1998.

The traditional distinction between types of banks is not rigid in Ghana and the tendency has been for them to shift towards commercial banking, except for the merchant banks which focus more on the corporate sector. The rural banks are also restricted to specific localities and have different equity requirements.

The NBFIs are supervised by a special unit within the Bank of Ghana. There are numerous informal or semi-formal financial arrangements including rotating savings and credit associations. There are also moneylenders operating under the Moneylenders Ordinance (1951), and traders who grant various types of credit. Most of these operators are

registered with district assemblies and/or are members of registered bodies such as the Greater Accra Susu Collectors Association in the capital Accra (Aryeetey et al., 1994: 57).

### **Aims of the financial sector reforms<sup>4</sup>**

The financial sector reform programme, referred to as the Financial Sector Adjustment Programme (FINSAP) was initiated in the last quarter of 1987. The reforms were pursued with very little national debate. Most of the discussions which took place were between sector participants, the government and the World Bank. The implementation of the major part of the programme took place in 1988–90; specifically the removal of the bad and doubtful debts of state-owned enterprises from bank balance sheets took place in 1990.

The financial reforms had the following objectives:

- a) to establish a sound prudential and regulatory framework for banking operations;
- b) to ensure uniform accounting and auditing standards for all banks;
- c) to put in place a more effective Banking Supervision Department (BSD) endowed with the requisite personnel and skills to enforce the prudential rules and regulations and a code of conduct for the banking sector;
- d) to create a framework for restructuring distressed banks with the intention of transferring their non-performing assets, which had choked their balance sheets and stunted initiative in credit operations, to a new government agency, the Non-Performing Assets Recovery Trust (NPART);
- e) to engage efficient top management for distressed banks;
- f) to develop fully liberalised money and capital markets in Ghana (Bank of Ghana, Annual Report 1989/90).

The reforms were expected to bring about benefits, such as the effective mobilisation of domestic savings and a more efficient allocation of loanable funds. They have established a more market-based system of bank intermediation and government financing through the financial system.

A new banking law was enacted in 1989, which specifically defined capital adequacy and minimum capital requirements, prudential lending guidelines

---

4. The financial sector reforms discussed refer essentially to the policies under Financial Sector Adjustment Project I, implemented with the support of the IDA.

and financial reporting procedures. No explicit entry or exit restrictions were imposed in order to foster competition. Foreign-exchange bureaux were authorised to operate in 1988, and the monetary authorities gradually moved away from credit ceilings and credit allocation policies to more indirect instruments of monetary control. Controls over bank charges were lifted and interest rates liberalised (see Appendix I).

The financially distressed banks were restructured, based on detailed diagnostic reports. Each bank was recapitalised by offsetting non-performing loans with interest-bearing FINSAP bonds offering between 7–9% per annum. The loans were transferred to the newly established Non-Performing Assets Recovery Trust (NPART) in 1990, which was charged with retrieving such loans. The top managements of most state-owned banks were replaced. Boards of directors were reconstituted and given autonomous decision-making powers, while management was supported by full-time foreign experts.

The reforms also involved the liberalisation of interest rates, with the aim of improving intermediation in the financial sector. It was assumed that, under the system of controlled interest rates, the financial intermediaries were prevented from optimising their portfolio management since they were all forced to apply the rate determined by central bank. Since 1989, interest rates at the banks are supposed to take their cue from the Bank of Ghana rate and money market rates.

Another major reform of the financial system was the formalisation of many legal NBFIs, the intention being to introduce more competition in the financial sector through alternative channels of intermediation.

## **Objectives and plan of the study**

The study is concerned with ascertaining the effects of the financial sector reforms on bank performance in Ghana.<sup>5</sup> It also provides information on institutional characteristics of the Ghanaian banking sector. The report is organised into six chapters. Chapter 2 deals with the literature review and methodological issues. Chapter 3 discusses the Ghanaian banking sector, in particular the legal framework relating to banking during the 1970–98 period. Chapter 4 considers the direction taken by various macroeconomic and financial indicators taken from the literature, in order to provide some

---

5. Rural and community banks are excluded from the study. They have different prudential requirements and will be considered in a subsequent study.



quantitative assessment of the financial sector reforms.

Chapter 5 deals with the banking sector's performance for 1980-6 or 1988-9, and 1990-96. The direction taken by averages of key indicators of profitability, operational efficiency, and financial intermediation is examined. This is done in order to relate them to what was expected from the literature as a result of the financial sector reforms. We have also tried to answer the question, of whether privatisation enhances bank performance, by examining the performance of state-owned and private banks.

In Chapter 6, the results of two surveys, one for bank customers and the other from banks, are discussed. These surveys were meant to ascertain the perceptions of bank customers (mainly from private sector enterprises and some state-owned enterprises) and banks about the sector reforms. For bank customers, their views on bank performance before and after the onset of the financial sector reforms were sought. We also dealt with their perceptions on specific reform measures. In respect of the banks, we were particularly interested in policy measures which had positive and negative effects on their performance. The final chapter contains our conclusions and recommendations.

## Literature Review and Methodology

### Literature review

The importance of banks has spawned extensive research on them. This, however, is not the case in Ghana. Very few studies on Ghana are available, including a World Bank study in 1994, and Obben's (1992) study on rural banks in Ghana. Brownbridge and Gockel (1996) provides some analysis of financial policies under the financial sector reforms. Sowa (1989, 1991) provides some discussion on banks although these studies were mainly on monetary policy in Ghana. Most of the literature on banks in Africa concern Kenya, Malawi and Zambia (Brownbridge, 1996) and the literature on financial sector reform tends to be heavily tilted towards experiences outside Africa, in particular in Asia and Latin America.

### *Financial sector reforms*

Financial sector reforms mainly derive their theoretical basis from the works of McKinnon (1973) and Shaw (1973), which stressed that financial sector policy in developing countries had led to financial repression. They argued for the liberalisation of the financial sector, as a good policy response to enhance its role in mobilising and raising the level of savings, investment and eventually economic growth in developing countries. Development policy in those days was heavily influenced by the dominant role of the state in economic activity and the import-substitution strategy adopted by most developing countries. Financial sector policy and indeed monetary policy were characterised by directed credit, administered interest rates, high reserve requirements, and state ownership of most of the financial institutions.

A series of papers on the benefits of financial sector reform followed, including Fry (1988) which argued that financial liberalisation and financial deepening enable interest rates and exchange rates to reflect their relative scarcities, stimulate savings and lead to efficient discrimination between alternative investments. Fischer (1993), Cho and Khakhate (1989) and World Bank (1989) all argue that reform of the financial sector could improve the level of financial savings, and by widening the range of available savings instruments could create the likelihood of higher real returns for savings. The resulting deeper financial markets would reduce the risks of holding financial securities and make them more liquid, leading to higher savings

mobilisation and investment.

Harris (1996) and Killick and Martin (1989) are, however, some of the studies that have pointed out the limitations of financial sector reform in developing countries. Many developing countries instituted financial reform programmes at the same time as their economies were undergoing macroeconomic stabilisation. The result was that such reforms led to high nominal lending rates, and a shift of financial flows to the government. Harris argues that the structural characteristics of many developing countries make the financing of high-yielding government securities and self-liquidating import transactions more attractive (see also Nissanke, (1993).<sup>6</sup> He cautions however that this may not be the direct result of financial liberalisation but a reflection of unsound macroeconomic policies in these countries. There is therefore a need for governments to reduce their demand for credit and for exchange-rate policies to be appropriate, otherwise financial liberalisation will only lead to a redirection of financial resources to the government and in favour of imports.

Some typical facts about financial sector reform taken from the experiences of countries in Asia and Latin America suggest the following:

- after interest rate liberalisation, domestic and international interest rates failed to converge, irrespective of whether capital controls were maintained or eliminated;
- liberalisation enhanced the mobilisation of financial savings but failed to lead to significant improvements in the availability of long-term savings;
- Financial liberalisation led to financial deepening, more competition and improved services;
- real interest rates in liberalised financial systems rise and interest rate spreads fall. Propositions (ii)-(iv) can be assessed with Ghanaian data and proposition (i) first when capital account controls are lifted.

Fry (1988) and Schiantarelli and others (1996) also provide some evidence on the expected macroeconomic impact of financial reforms in summary that

---

6. Nissanke (1993) observed that financial liberalisation in Ghana led to the concentration of banking activity in the market for government debt, thereby starving the private sector of credit.

financial reforms:

- increase credit availability and relax the credit constraints faced by private sector firms. This leads to increased investment and eventually output growth;
- allow interest rates to rise, encouraging saving which releases funds for investment to increase, and results in economic growth;
- development of the financial sector leads to economic growth;
- improve efficiency in production or the efficiency with which credit is allocated across firms.

### *Measuring progress in financial sector reforms*

Johnston and Pazarbasioglu (1995) suggested some suitable indicators to track the progress of financial sector reform, including the behaviour of real interest rates in the economy. They argue that positive real rates of interest on deposit, and loans indicate progress in the implementation of the reforms. They also stressed that measures of the volume of intermediation, such as M2/GDP and credit to the private sector/GDP should be assessed. A rise in either of these two indicators shows a positive response in the economy to the financial reforms.

The efficiency of intermediation of the banking system shown by the reserve money/total deposit and reserve money/quasi money ratios also provide information on banking sector performance (Jbili et al., 1997). These reserve money ratios include information on currency to deposit ratios, showing the effectiveness of banks in mobilising deposits, the excess reserves of banks which are a proxy for their efficiency in the use of deposits, and the required reserves which measure the implicit tax on the banking system. Lastly, the interest rate spread between the average lending and average deposit rates also shows the efficiency of the banking system. Apart from these macroeconomic measures of financial sector performance, microeconomic measures which focus on the banking sector can also be analysed.

*Measuring bank performance*

Empirically, bank performance has often been measured by either the use of a profitability index (Rose, 1981; Agu, 1992) and/or the stock price of the bank (Pettway and Sinkey, 1980; Simons and Cross, 1990). Bourke (1989), and Abdulla (1994) used return on assets as a measure of performance. McNaughton and Barltrop (1992) add to this return on equity. There are other measures of bank performance such as real growth in bank assets. Data availability helps in making the right choice.

In assessing bank performance, the literature provides factors that actually influence their performance. Economic conditions, managerial and operational factors, demographic factors, locational factors and market structure all tend to be important. Fraser et al. (1974) added urban rural population ratios and population density as additional factors, the reason given being that urban locations had higher levels of economic activity and consequently a larger volume of funds for intermediation and raising profitability. Economic factors used by these same authors were growth in aggregate bank deposits, taxable non-farm income and retail sales. Pantallone and Platt (1987) found growth in disposable income and residential construction to be relevant for bank performance. Agu (1992) found per capita income to have an important association with profits in the Nigerian banking sector.

Market structure variables relate primarily to market concentration, bank size, bank ownership, and number of branches. Market concentration, which is the extent to which most of the market's output is produced by a few banks, has been found to be an important determinant of bank performance (profitability). The most common measures of market concentration are the deposit concentration ratio (CR) and the Herfindahl index of deposits or assets.<sup>7</sup> Abdulla (1994) found significant positive evidence of bank assets being an important factor for bank performance in Bahrain. Agu (1992) found the profit-capital ratio to be positively correlated with the number of bank branches.<sup>8</sup> Molyneux and Thornton (1992), for example, found a significant positive relationship between the deposit concentration ratio and bank performance. Civelek and Al-Alami (1991) also confirmed such a relationship for Jordan's banks. Agu (1992), however, found no apparent

---

7. Deposit Concentration Ratio= Sum of Deposits of Big Banks/Total Deposits of Banking Sector.

8. Agu obtained a correlation coefficient +0.53.

effect for the Nigerian banking sector. Finally, Bourke (1989) found that the liquidity ratio, concentration ratio and growth in the money supply were significant in determining commercial bank profitability.

Arshadi and Lawrence (1987) used canonical correlation analysis to study the performance of new banks in the United States. Indices they selected to use as performance measures include: ratios of interest expense on time and savings deposits to total time and savings deposits; of net income to total assets; interest and fees on loans to total loans; and of total loans of sample banks to total loans in the market area.

Obben (1992) also used canonical correlation analysis to study the performance of rural banks in Ghana for the period 1976–87. His study examined performance in terms of profitability, liquidity management, asset-liability management, debt collection, and deposit and loan growth. Explanatory variables were divided into three groups: those under the control of the rural bank; location factors; and government regulations. It was found that:

- the then prevailing negative real interest rates and the ratio of staff costs to total assets were strongly associated with poor debt collection and declining annual deposit and loan growth;<sup>9</sup>
- the loan/deposit ratio had significant negative correlation to the excess reserve/total deposits ratio and was also positively correlated to the loan/total asset and capital/total asset ratios;
- the age of a rural bank had significant positive correlation with the capital/total asset ratio but was negatively associated with the deposit/total asset ratio;
- the return on assets after tax variable performed poorly. It also had significant negative association with the trading loans/total loans ratio;
- finally, deposit growth in real terms was declining during the sample period.

In assessing individual bank performance in terms of accounting information, useful financial ratios can be computed to study various aspects, although

---

9. Poor debt collection was measured as the ratio of realised to expected interest payments.

Siems (1992) has argued that when a host of financial ratios are examined it is still difficult to get a clear picture of performance. Nevertheless, when these ratios are used to examine a banks' comparative performance against similar banks in the same market and or trends in a particular bank's own data over time, the information becomes very valuable (McNaughton and Barltrop, 1992).

Statistical analysis of financial ratios such as testing the significance of differences in means according to some criteria (for instance, the difference in means for some period under financial repression from a similar period since the onset of financial reforms or liberalisation) can give an insight into bank performance for the two periods.

Soyigbo and Adekanye (1992) used growth rates on various deposits and descriptive measures to examine the impact of policies of financial regulation and deregulation on Nigerian banks. They compared growth in bank assets and bank branches in the two periods. Performance analysis was also done in terms of savings mobilisation using real growth rates. A study by Abdulla (1994) on commercial bank performance in Bahrain makes use of a cross-sectional time-wise autoregressive model (Kmenta, 1986: 621) to estimate a linear model. This method allows the estimation of elasticities, something which canonical correlation analysis (Obben, 1992) or multivariate discriminant analysis (Pettway and Sinkey, 1980) does not do. The usefulness of this method is limited by the availability of long time series of data and the need for a timely assessment of the impact of the financial reforms.

To distinguish between high and low performers in the banking sector some researchers have used probit and logit analysis (Hunter and Srinivasan, 1990; Pantallone and Platt, 1987. Finally the survey approach using questionnaires directed at bank management has been used (Oyewole, 1993).

### *Banking distress/crisis*

Studies on banking sector crises have also highlighted out the general behaviour of some macroeconomic and financial sector indicators before, during and after a banking crisis. Garcia-Herrero (1997) found that monetary and credit aggregates become more unstable during a crisis, depending on the number of banks affected and their share of total deposits; income velocity usually tends to fall before a banking crisis and increase afterwards though not to previous levels; the money multiplier tends to increase prior to a crisis and decline during it. However, the origins of this rise depend on whether there is a fall in the reserve-to-deposit ratio stemming



from a reduction in reserve requirements or from the reduction in excess reserves of distressed banks. The decline in the multiplier may be due to a rise in the currency-to-deposit ratio because the public lacks confidence in the banking system. In the Ghanaian context the currency-to-deposit ratio has traditionally been high, rising in the period 1975–83 and with more variability than in the period after the beginning of the financial sector reforms from 1987 onwards.

Demirguc-Kunt and Detragiache (1997) argue that banking crises tend to erupt when the macroeconomic environment is weak, particularly when growth is low and inflation is high. They went on to give the directions taken by some indicators (Table 2.1).

**Table 2.1. Behaviour of Selected Indicators**

Indicator	Before Crisis
Growth of GDP	decreases
Change in terms of trade	decreases
Inflation	high
Budget balance/GDP	negative
Quality of contract enforcement	poor

*Source:* Demirguc-Kunt and Detragiache, 1997.

Ghana's conditions between 1977 and 1983 showed negative real GDP growth, poor terms of trade, negative real interest rates, high inflation, negative annual budget balances, a low private sector credit to GDP ratio and poor debt collection by banks.

Dziobek and Pazarbasioglu (1997), after studying the experience of 24 countries, argued and found evidence that, after the onset of bank restructuring programs, bank performance improves a decline in the following indicators:

Non-performing loans/ total loans, loan loss provisions/total loans, and operating expenses/total assets, central bank credit to banks/ GDP. They also found that there will be an increase in: capital/total assets, interest income/total assets, and profits/total assets.

These indicators summarise the effects of improvement in bank solvency and profitability enhancement. In addition, Dziobek and Pazarbasioglu indicators which measure the scale of intermediation, that is, the volume of lending and deposit mobilisation and their associated financial securities,



together with those that measure the efficiency of intermediation. As regards the volume of intermediation, they argue that there would be increases in the ratios of the growth of credit extended to the private sector to GDP growth and of broad money to GDP.

Turning to the efficiency of intermediation, the decline of interest rate spreads and in the reliance of the banking system on the central bank (measured by central bank credit to banks as a percentage of GDP) 'is taken as an improvement Dziobek and Pazarbasioğlu, (1997: 9). A decline in real lending rates or a shift to zero or positive real deposit rates was also interpreted as an improvement.

Finally, after reviewing several studies on worldwide episodes of banking distress and banking crisis, Demirguc-Kunt and Detragiache (1997: 12) concluded that for an episode of banking distress to be classified as 'a full-fledged crisis... and of a systemic nature', at least one of the following four conditions had to hold:

- i) the ratio of non-performing assets to total assets in the banking system exceeded 10%.
- ii) The cost of the rescue operation was at least 2% of GDP.
- iii) Banking sector problems resulted in large-scale nationalisation of banks.
- iv) Extensive bank runs took place or emergency measures such as deposit freezes, prolonged bank holidays, or generalised deposit guarantees were enacted by the government in response to the crisis.

There are a large number of indicators and their observed behaviour before, during and after the two central issues of financial sector reforms and bank restructuring are worth examining. It is worthwhile grouping together the information from the literature, to pin-point those indicators that are relevant and for which data were available. For convenience, this is done in the following paragraphs.

The direction taken by various relevant indicators was studied and compared with what was predicted in the literature. In what follows, ↑ means rise, ↓ means decline.

### *Macroeconomic and financial indicators for a banking distress or crisis situation:*

Real GDP growth ↓; terms of trade ↓; real interest rates ↓; inflation ↑; credit

to the private sector/ GDP (in the case of a private sector induced crisis) ↑; government budget balance/GDP ↓.

The banking distress or crisis situation was also assessed in the light of the magnitudes of the ratio of non-performing assets/total assets, and the cost of the rescue operation as a percentage of GDP.

### *Banking sector specific indicators*

After the removal of non-performing assets from bank balance sheets and other restructuring measures; the literature predicts the direction the following indicators are expected to take as follows:

non-performing assets/total loans ↓; loan loss provisions/total loans ↓; operating expenses/total assets ↓; profits/total assets ↑; real lending rates ↓; real deposit rates ↑; interest income/total assets ↑; central bank credit to banks/GDP ↓; capital/ total assets ↑.

Finally after Financial Sector Reforms:

M2/GDP ↑; reserve money/total deposits ↓; reserve money/quasi-money ↓; real lending rates ↓; real deposit rates ↑ and Interest Rate Spreads ↓.

### **Methodological issues**

The study makes use of both quantitative and qualitative methods of analysis. Short of employing regression methods, it is difficult to distinguish the separate effects of Structural Adjustment Programmes (SAP) and the financial sector reforms on bank performance. This, indeed, was not possible because of the sample period of 16 years and the fact that data for most indicators are available only on an annual basis. Killick (1995: 40–43) provides a good discussion of various tests of SAP effects, namely: before-after tests, target-actual tests; comparison with a control group; comparison of simulations; generalised evaluation; the extent of programme completion and country-specific studies.

The lack of sufficient data points precluded simulations or any quantitative discussion to the counterfactual. Furthermore, the actual programme targets were also not publicly available. In view of this, more use was made of before-after analysis. A survey of some banks was conducted to seek information on their views about the reforms and on the factors that

influenced their performance (see Appendix II). In addition, underlying factors which led to the bank distress situation prior to the financial sector reforms, and perceptions on the financial reforms were investigated by interviewing some private sector and state-owned enterprises.

The quantitative analysis involved both descriptive indicators and statistical methods to evaluate bank performance. In order to examine the financial sector reforms in relation to the macroeconomy, use is made of some macroeconomic and financial performance indicators mentioned in the literature. Their trends and changes were studied for the period 1980–3, 1984–7, 1988–91, 1992–6, and 1997–8, corresponding respectively to pre-commencement of the ERP, the period immediately preceding the introduction of the financial sector reforms, and a period of relative macroeconomic instability (when there had been implementation of most of the financial reforms). In most of the analysis 1987 is omitted because the start of financial liberalisation occurred during the fourth quarter of that year. Finally, in the period 1997–8, inflation declined considerably.

For the banks, the investigation was undertaken in two equal sub-periods, 1980–6, 1990–6, roughly corresponding to the pre-financial reform period and the period when the Banking Law 1989 was in place. Depending on the availability of data (especially where 1980–86 data for comparable indicators are unavailable) 1988–9 data are used. During this period there was implementation of financial liberalisation and bank restructuring was earnestly pursued. A subsidiary quest was to find out from the consolidated data for the banks whether, as a result of the financial sector reforms there was significant growth in various loan and deposit types.

For each facet of banking sector performance, several candidates were available to be assessed but those used were chosen on the basis of data availability. These include for:

### 1. Profitability

Return on assets (profit/total assets), Return on shareholders' funds (profit/shareholders' funds), return on earning assets (profit/ investments + advances).

### 2. Intermediation

Advances/deposits, various deposit types/total assets, cash and short-term funds/deposits.<sup>10</sup>

---

10. Also for liquidity.

### 3. Operational efficiency

Ratios of various expenses to total assets, shareholders' funds/total assets, provision for bad debts/total assets, other operating income/total assets, net loan loss provisions/total loans, net loan loss provisions/total assets,

Net spread = ((interest income/net advances)-(interest expenses/deposits)),  
central bank credit to banks/GDP.

The relationship between bank profitability (measured by the return on assets before tax) and the extent of market concentration given by the deposit concentration ratio; the deposit-mix given by the ratio of time and savings deposits to total deposits; the advances to deposit ratio, the number of bank branches; income per capita, provisions for bad debt/total assets; net spread; shareholder's funds /total assets; net interest margin and balances with the central bank, was also investigated by calculating Spearman's rank correlation coefficients. This was to ascertain the degree and direction of their relationship with bank profitability (ROA) for the period 1988-96 during and after the removal of non-performing assets from the banks.<sup>11</sup> In addition, the performance of state-owned banks was compared with the others in terms of profitability, intermediation, operational efficiency and balance-sheet composition.

Data for the statistical analysis came mainly from the annual reports of the various banks, as well as data from the Bank of Ghana. We also observed that there are sometimes differences between the data issued by the Research Department of the Bank of Ghana (Annual Reports and Quarterly Bulletins) and those consolidated from the financial reports of the banks, as the former are based on end of month figures, while the latter are from audited end-of-year financial statements.

---

11. 1980-86 data are not available for many of these variables in the required form so 1988-9 data are used in these circumstances.

## The Ghanaian banking sector

In this chapter we describe the banking sector in Ghana. There is a discussion of the evolution of various banks, their focus and ownership. In addition, the legal framework under which the banking sector operated between 1970 and 1998 is discussed.

### The pre-financial sector reform period

The beginnings of the modern banking system in Ghana were in the late nineteenth century. The Post Office Savings Bank (POSB) began operations in 1888, using the facilities of post offices in the country. The British Bank of West Africa, now the Standard Chartered Bank (SCB), was established in the then Gold Coast in 1896, followed by Barclays Bank DCO, now Barclays Bank Ghana Ltd (BBG) in 1917. These banks were overseas subsidiaries of banks incorporated in the United Kingdom. Their operations were dominated by financing trade between the Gold Coast and the UK.

A Co-operative Bank was also established in 1935 by farmers' co-operatives and the colonial government. This bank, apart from commercial banking activities, was focused on financing cocoa purchasing and facilitating the activities of co-operative societies all over the country. Apart from the POSB, the banks maintained branch offices in major mining towns, commercial centres and major cocoa-buying centres.

Meanwhile, the British government established the West African Currency Board (WACB) in 1912 to issue currency of various denominations in the British colonies in West Africa (Gold Coast, Nigeria, Gambia, Sierra Leone) and redeem British currency. The colonial government was under considerable pressure from the locals because the two major existing banks (BBG and the British Bank of West Africa) favoured the European, Levantine and Asian communities in their operations. They advanced credit to indigenous entrepreneurs on only rare occasions. Sir Cecil Trevor was contracted in 1951 by the government to examine the whole field of banking in the Gold Coast, in particular, the question of setting up a National Bank on commercial lines. He recommended the formation of a bank partly owned by the government to be managed and staffed by locals. He emphasised that its aim should be to operate for the benefit of the indigenous private sector, while maintaining government accounts and acting as agent in the flotation of government bonds. Upon these recommendations the Bank of the Gold

Coast was established and began operations in 1953.

After independence, Ghana left the WACB and split the Bank of Gold Coast into two banks. Central banking activities were hived off to a newly created Bank of Ghana, while the Ghana Commercial Bank took on the commercial banking activities. In the period immediately after independence the socialist policy-bias of the government, together with the associated lack of a critical volume of private sector capital, led to a government-driven development of the banking sector. Making use of the Bank of Ghana (BOG), the State Insurance Corporation (SIC), the Social Security and National Insurance Trust (SSNIT) and in one case a foreign investor many state-owned banks were established (see Table 3.1).

Table 3.1. Evolution of the Banking Sector in Ghana

Bank	Year established	Initial Shareholders
1. Standard Chartered Bank	1896	UK parent bank
2. Barclays Bank of Ghana	1917	Barclays Bank UK.
3. Ghana Commercial Bank	1957	Government & private investors
4. National Investment Bank	1963	Government, State Insurance Co., Bank of Ghana, private investors
5. Bank for Housing and Construction	1973	Government, Bank of Ghana
6. National Savings and Credit Bank	1975	Government
7. Social Security Bank	1977	SSNIT
8. Agricultural Development Bank <sup>b</sup>	1965	Government, Bank of Ghana
9. Merchant Bank Ghana	1972	National Investment Bank, Government, State Insurance Co., National Grindlays Bank (UK)
10. Bank of Credit and Commerce	1978	Bank of Credit and Commerce International Luxembourg, Ghanaian private investors
11. Ghana Co-operative Bank <sup>c</sup>	1948	Cocoa co-operative societies, Government
12. CAL-Merchant Bank	1990	International Finance Co, Vanguard Assurance Co. Ltd., Private Investors
13. Ecobank Ghana	1990	ECOWAS Fund, Private Investors
14. Trust Bank <sup>d</sup>	1994	Meridian BIAO Holdings SA, transferred, Private Investors, Ghana Reinsurance Organisation, SSNIT
15. First Atlantic Bank	1995	Private Investors
16. Metropolitan and Allied Bank	1995	SSNIT, Business Focus Group-Malaysia & Ghanaian Private Investors
17. Prudential Bank	1996	Private Investors
18. International Commercial Bank	1996	Malaysian & Ghanaian Investors

Source: Adjetei, 1978; Bank of Ghana and various banks.

Notes: (a) NSCB merged with SSB in 1993; (b) Formerly called Agricultural Credit Co-operative Bank (ACCB). Its name was changed to Agricultural Development Bank (ADB) in 1967. (c) In 1948, the Gold Coast Co-operative Bank was established by the Association of Cocoa Co-operative Societies; (d) The Trust Bank came out of the Meridian Bank BIAO which was established in 1991. Financial difficulties in its overseas holding company in 1994 led to its takeover by local partners led by SSNIT. It was renamed Trust Bank.



The National Investment Bank was established as a development bank in 1963, with both government and local private capital. The main objective for its formation was to provide medium and long-term credit to the manufacturing and agro-business sectors and also technical assistance for clients. From 1975 onwards, it began commercial banking operations.

The next bank, formed in 1965, was the Agricultural Credit and Co-operative Bank with capital from the government and the Bank of Ghana. This bank was formed out of the operations of the Rural Credit Department of the Bank of Ghana, which had advanced credit and provided guarantees for agricultural loans through the commercial banks. The initial funding for loan-making came from the Bank of Ghana. The name was changed to Agricultural Development Bank (ADB) in 1967. In 1970, the ADB started commercial banking activities with the aim of increasing its deposit base and enhancing lending levels, for which demand had increased substantially between 1965 and 1970.

The National Savings and Credit Bank (NSCB) came out of the Post Office Savings Bank which in turn had been reorganised several times since its formation in 1888. Initially this bank was a savings-only unit within the colonial Department of Post and Telegraphs. It existed in most post offices throughout the country. The major change occurred in 1962 when the Savings Bank Act was passed to separate the POSB from the Department of Post and Telegraphs and change its name to Ghana Savings Bank. In 1972 the government passed legislation, NRCD 38, to change its name back to the POSB.<sup>12</sup> In 1975, when the Department of Post and Telecommunications (P&T) was made a parastatal, the name of the bank as well as its establishment decree were amended. It became the NSCB, fully autonomous from the P&T Corporation and with the power to operate as a commercial bank. It was fully owned by the Government of Ghana (GOG), and concentrated its activities on the small-scale business sector.

The last development bank set up by the government was the Bank for Housing and Construction (BHC), established by NRCD 135 in December 1973. Its main functions were to: provide mortgage financing; facilitate the participation of domestic or foreign private capital in the construction sector; and enter into joint venture projects in this sector. It began full operations in 1974.

Table 3.2 and 3.3 describe the ownership structure of some banks in Ghana, especially the holdings of government, foreign and domestic investors in 1989 and 1997.

---

12. NRCD - National Redemption Council Decree. The National Redemption Council was the ruling military regime in Ghana.



Table 3.2. Bank Ownership in 1989

Bank	Ownership
1. Standard Chartered Bank	GOG 27.5%, Standard Chartered UK 60%, Ghanaians 12.5%
2. Barclays Bank of Ghana	GOG 40%, Barclays UK 60%
3. Ghana Commercial Bank	GOG 100%
4. National Investment Bank	GOG 75%, BOG 6.3%, Ghanaians 14%, GCB 1.6%, Foreign Investors 3.1%
5. Bank for Housing and Construction	GOG 50%, Ghanaians 10%, SIC 10%, BOG 10%, NIB 10%, GCB 10%
6. National Savings and Credit Bank	GOG 100%, SSNIT 100%
7. Social Security Bank	GOG 82%, BOG 18%
8. Agricultural Development Bank	GOG 30%, NIB 25%, Grindlays 30%, SIC 15%
9. Merchant Bank Ghana	BOG 12.5%, BCCI Luxembourg 55%, Ghanaians 32.5%
10. Bank of Credit and Commerce	Co-ops. 22.9%, Ghanaians 37.6%, SIC 13.2%, SSNIT 26.3%
11. Ghana Co-operative Bank	

Source: Bank of Ghana, and bank survey.

The Social Security Bank (SSB), established in 1977, was initially wholly owned by SSNIT. It operates as a commercial bank. The unique aspect of its initial operations was the introduction of a hire purchase scheme as a unit within the bank. This was designed to allow salaried workers who had accounts with the bank to acquire consumer durables. This popular Consumer Credit Department, which is now a limited liability company within the SSB group, contributed to the rapid growth of the bank.<sup>13</sup>

The Merchant Bank Ghana, formerly National Merchant and Finance Bank Limited, was set up in 1972 with capital from the GOG, SIC, NIB, and National Grindlays Bank of the UK. This was the first merchant bank in the country.

The Ghana Co-operative Bank (COOP) had its genesis in the Gold Coast Co-operative Bank, which was established by the Association of Cocoa Co-operative Societies in 1948. Its main objective was deposit mobilisation and financing cocoa purchases by the co-operatives. This bank was closed down by the government in 1961 for political reasons, and its affairs were taken over by the Ghana Commercial Bank. In 1973, it was revived but it began operations only in 1975.

This bank has been bedevilled by a small capital base and a poor reputation. In 1986 a share flotation with a target of ₵500 million yielded only ₵135 million. It could not meet the statutory capital requirement of 6% of risk-rated assets set by the BOG during 1988 and 1989. It was also removed from the Bank Clearing House System because of liquidity problems, so it arranged to clear its cheques through the NSCB between 1989 and 1992. The Bank of Ghana suspended operations of the COOP on 30 June 1992 and for two weeks, during which the ownership structure was changed and its legal status changed into a limited liability company (from co-operative ownership). A new management and board were appointed on July 1992 (Ghana Co-operative Bank, Annual Report 1994). The bank was recapitalised by the Bank of Ghana, SSNIT and SIC, diluting the holdings of other shareholders.<sup>14</sup>

The only other privately sponsored bank set up in this pre-reform era was the Premier Bank, now the Bank for Credit and Commerce Ghana Ltd (BCC). This bank began operations in 1978 as a commercial bank with a strong bias for the corporate and trading sector.

Finally, government interest in rural finance has encouraged since 1974 the

---

13. Table 3.4 describes the initial focus of operations by the various banks.

14. BOG - 82%; SSNIT and SIC - 14%; Ghanaian individuals - 3%; co-operatives - 1%.

establishment of rural/community banks located in most districts in the country. The number of rural/community banks at the end of 1998 was 132.

The banking sector that existed before the mid-1980s was largely the result of a conscious government-driven effort to bring into being institutions which it felt could fill gaps within the financial sector. This process was largely financed by the government, either directly with the provision of capital or indirectly through public institutions such as the BOG, SSNIT, and the SIC.

**Table 3.3. Bank Ownership in 1997 (%)**

Bank	Government or public institutions	Private domestic	Private foreign
SCB	1.5	38.5	60
BBG		40	60
GCB	59.1	40.9	
NIB	86.4	13.6	
BHC	50	50	
SSB		48	52
ADB	64.7	35.3	
MBG	30	40	30
COOP	81	19	

*Source:* Bank of Ghana.

Table 3.4. Initial Focus of Banking Activity

Bank	Initial focus of banking activity
1. Standard Chartered Bank (SCB)	Commercial
2. Barclays Bank of Ghana (BBG)	Commercial
3. Ghana Commercial Bank (GCB)	Commercial
4. National Investment Bank (NIB)	Development of Industrial Sector
5. Bank for Housing and Construction (BHC)	Estate Development and Construction Sector
6. National Savings and Credit Bank (NSCB)	Commercial: Small-Scale Businesses
7. Social Security Bank (SSB)	Commercial; Consumer Credit/Hire Purchase
8. Agricultural Development Bank (ADB)	Agriculture and Allied Industries
9. Merchant Bank Ghana (MBG)	Merchant Banking
10. Bank of Credit and Commerce	Merchant Banking
11. Ghana Co-operative Bank (COOP)	Commercial Banking; Financing of Cocoa Co-operatives
12. CAL-Merchant Bank (CAL)	Merchant Banking
13. Ecobank Ghana (EBG)	Merchant Banking, Commercial Banking
14. Trust Bank (TTB)	Commercial Banking
15. First Atlantic Bank (FAMBL)	Merchant Banking
16. Metropolitan and Allied Bank (MAB)	Commercial Banking
17. Prudential Bank (PBL)	Commercial Banking
18. International Commercial Bank (ICB)	Ghana-Malaysia Trade Financing, Merchant and Commercial Banking

Source: Adjetei, 1978, and Banks.

*The regulation of banks 1970–87*

During the colonial period, regulations on the provision of banking services were carried out through the various enactments of Company Ordinances and directives of the WACB and the Bank of the Gold Coast. After independence the various Bank of Ghana Acts (1957, 1961, 1963, 1965 and 1969) contained provisions giving the central bank regulatory control over the financial system and extensive powers over: the composition of banks' liquid assets; the right to demand information from banks; changes in the structure of banks; restrictions on credit and investments; and the amount of paid-up capital and liquidity ratios. This was in addition to the Companies Code of 1963 which had to be complied with by all registered businesses.

One basic objective of regulation after independence was to ensure that the banks kept their surplus funds within the country. Another was to ensure that they complied with the government economic policy of rapid industrialisation, especially through the implementation of sectoral credit guidelines issued by the BOG.

The first explicit Banking Law for Ghana was Act 339 promulgated in 1970. It brought together the numerous references to banking institutions in various laws into one document, which specifically spelt out the assurance of bank solvency, bank liquidity and the Bank of Ghana's supervisory powers.

This landmark legislation contained the following provisions:

- it created the position of Chief Examiner of Banks at the Bank of Ghana, with the right to examine the affairs of any bank or bank branch. This officer, or his mandated representative, was to examine every bank at least once a year to ascertain whether the Banking Law (1970) was being complied with;
- it prohibited banks from engaging in non-banking activities except development financial institutions;
- it stipulates for the maintenance of a Reserve Fund from after-tax profits before the payment of dividends. This reserve fund was to be between 12.5% and 50% of net profits, depending on the ratio of the size of the Reserve Fund already existing to paid-up capital;
- it stipulated explicit minimum paid-up capital requirements of ₵750,000 (then worth about \$735,300) for a Ghanaian banking business and

¢2,000,000 (then about \$1,960,800) for a foreign-owned bank; and

- it gave the BOG authority to make legally binding regulations on interest rates and bank fees.

This Law was augmented by a Legislative Instrument (LI 1329) in 1988, which introduced capital adequacy requirements, and was then replaced in 1989 by the Banking Law (1989) or PNDCL 225, which gave more powers to the regulatory authority.<sup>15</sup>

### **The banking sector after the introduction of the financial sector reforms**

Table 3.1 shows the years of the establishment of the various banks. Clearly, many more banks have been licensed in the 1990s, especially in the area of merchant banking.

#### *Legal framework 1988–1998*

The legal framework provided by the 1970 Banking Act was not effectively enforced by the Bank of Ghana. It contained provisions for prudential lending in respect of secured or unsecured loans and advances:

- to businesses controlled or associated with bank directors or officials (Sections 10, 11 of Banking Act 1970);
- above a prescribed (at the discretion of the BOG) percentage of paid-up capital including reserves.

The banking sector was also seriously affected by the economic decline prior to 1983. From the 1970s it had built up a large portfolio of non-performing loans which were rolled over from year to year. However, adequate authority had been vested in the Bank of Ghana by the Banking Act 1970 to investigate and monitor the financial position of banks. The BOG failed to live up to its responsibilities in the area of on-site inspection.

---

15. PNDCL-Provisional National Defence Council Law. The PNDC was the ruling military government from December 1981 to January 1992.

Under Sections 18 to 23 and 25 to 28 of Act 339, the BOG had extensive powers to examine banks, to issue cease-and-desist orders, and where necessary Section 21 gave it power to take charge of banks which were in serious breach of the Banking Act. The World Bank reported that 'Ghana's three largest banks had never undergone a comprehensive examination... Most banks had high concentrations of risk, insufficient capital, unrecognized loan losses, and reported inflated nonexistent profits'. (World Bank, 1994: 51,53)

### *The banking law 1989 (PNDCL 225)*

As already noted at the end of 1988 the government enacted LI 1329 to enforce prudential guidelines and prevent further deterioration in bank solvency. This was a precursor to the 1989 law and was similar to it in all respects. The current legislative basis of the Ghanaian banking system is the Banking Law which was amended and promulgated in 1989.

It brought into play new features including the following key points:

- new minimum capital requirements— in the case of a commercial bank with at least 60% Ghanaian ownership, a minimum paid-up capital of ₵200 million (then worth about \$740,700); a foreign-owned bank ₵500 million (about \$1,851,850) and for a development bank ₵1 billion.
- A key feature for maintaining bank solvency was introduced in the form of a minimum capital adequacy ratio of 6% of risk-rated assets, which was made adjustable for a particular bank or all banks by the BOG with prior approval from the Minister of Finance. The formula for calculating this ratio was also laid down in the Law. It is measured as a percentage of the adjusted capital base of the bank to its adjusted asset base.
- secured and unsecured loans or advances or financial guarantees were not to exceed 25% or 10% of net worth respectively for any particular borrower.
- banks were explicitly allowed to engage in non-bank businesses only through subsidiaries, but their equity was not to exceed 15% of net worth for a subsidiary and 25% of net worth where there was more than one subsidiary. Lending to such entities was also restricted to a

maximum of 25% of a bank's net worth for a subsidiary and an overall total of 35% if the bank had more than one subsidiary.

- the office of Chief Examiner of Banks now became the Head of Banking Supervision of the BOG, performing similar duties to that spelt out in the 1970 law.
- banks were to comply with a Manual of Accounting issued by the BOG, which provided a standardised accounting system for all banks. Auditors were explicitly required to prepare a long-form audit report and provide comments on accounting, management, and internal controls of the bank in question.

In terms of prudential returns to be submitted to the BOG, these were increased to 12 and were of varying intervals (Table 3.5).

**Table 3.5. Prudential Returns Submitted to the Bank of Ghana**

Requirement	Frequency
Liquidity Reserve Ratio	Daily <sup>a</sup>
Statement of assets and liabilities	Monthly
Large exposure on advances and deposits	Monthly
Analysis of overdrafts, loans, advances	Monthly
Capital adequacy returns	Quarterly
Maturity profile of assets and liabilities	Quarterly
Current year operating results	Quarterly
Classification of nonperforming loans	Quarterly
Consolidated balance sheet	Quarterly
Capital expenditures	Half-yearly
Statutory audit returns	Half-yearly
Branch closing and/or relocation	As necessary

Source: World Bank (1994).

Note: (a) Formerly weekly.

A dramatic enforcement of the Banking Law occurred in 1992, when the Co-operative Bank was closed down because of its inability to meet the capital adequacy requirements and inter-bank settlements.

The various bank groups (rural banks and the rest) maintain associations, namely the Association of Rural Banks and the Ghana Association of Bankers. These associations are expected to represent members' interests to



the authorities and provide mutual assistance and advice.

## **Non-bank financial institutions**

The financial sector also includes several NBFIs which the Bank of Ghana supervises through a NBFI unit, which implements the Financial Institutions (Non-Bank) Law (1993). The NBFIs had a formal regulatory framework only after the financial sector reforms had begun. Most now operate under the NBFI Law of 1993. Previously such institutions were either in the informal sector or operated under the Companies Code, with special permission from the Ministry of Finance, or were established and governed by specific laws.

Using a broad classification, the non-bank financial sector comprises the following institutions: the Social Security and National Insurance Trust (SSNIT) (now operating under the Social Security Law of 1991); the insurance companies (operating under the 1989 Insurance Law ); leasing companies; mortgage financing companies; discount houses; the Ghana Stock Exchange (GSE) (operating under the Securities Industries Law); finance houses; savings and loans companies; hire purchasing companies; forex bureaux and credit unions.

Table 3.6 gives the distribution of licensed institutions (under the 1993 law) up to the end of 1998. These institutions can receive deposits from the public but cannot offer cheque accounts to their customers. The First Ghana Building Society was the only company dealing exclusively in lending for home ownership prior to 1991, when the Home Finance Company was established. The banks and insurance companies also provided some mortgage financing.

There was also a low volume of trading in equities, mainly through the National Trust Holdings Company (NTHC) before 1990. The Ghana Stock Exchange (GSE) was established in 1989. There were no savings and loans companies in 1990. At the beginning of 1998 there were 434 forex bureaux operating in Ghana. As many as 17 NBFIs were licensed in 1994.

The 1993 Financial Institutions (Non-Bank) Law sets minimum capital requirements at  $\text{¢}100$  million, with the capital adequacy ratio set at 10% of risk-rated assets. Exposure limits are 15% of net worth for secured advances and 10% for unsecured advances. The Bank of Ghana as the mandated regulatory body can set liquidity requirements at any time. It set up a NBFI unit to oversee the sector in 1995.

**Table 3.6. Distribution of Licensed NBFIS**

Type of NBFBI	Number licensed
Savings and loans company	7
Finance house	13
Leasing & hire purchase company	6
Discount house	3
Mortgage finance	1
Building society	2
Venture capital	1
<b>Total</b>	<b>33</b>

*Source:* Bank of Ghana, *Annual Report 1998*.

*Note:* (a) This refers to those operating under the Financial Institutions (Non-Bank) Law, 1993. Credit Unions operate under their umbrella body, the Credit Unions Association (CUA) which supervises their operations and reports to the Bank of Ghana.

There have been criticisms of the BOG's supervisory role vis-à-vis the NBFIs, because of its tardiness in dealing with the Securities Discount House scandal in 1996, when for a period of about three years this discount house operated unofficially as a bank and was rendered almost insolvent, with about ₵20 billion of unpaid debt. Although one could argue that there was no explicit law to guide NBFBI operations until 1993, the BOG has overall supervisory powers over the banking sector and could have taken action.<sup>16</sup>

16. Refer to Table A3.1 in Appendix IV for data on asset size of some NBFIs.

## Macroeconomic Developments and Financial Deepening

### Introduction

In this chapter we analyse the trends in major macroeconomic and financial sector variables in the period before and after the implementation of the financial reforms and assess the extent to which macroeconomic performance affected financial sector performance. Several studies (Demirgic-Kunt and Detriagiache, 1997; Garcia-Herrero, 1997; Kaminsky and Reinhart, 1996) have shown that financial sector performance is linked with general economic performance, and that financial sector problems are normally preceded by economic problems. However, Dziobek and Pazarbasioglu (1997) argue that even in countries where macroeconomic conditions have deteriorated, bank restructuring measures can be successful. The financial sector reform programme, and in particular the bank restructuring measures and their impact, must be placed in the context of overall macroeconomic performance for a better evaluation of the measures undertaken.

In the following section, we examine the trends in averages of: real GDP growth; interest rate spreads; real interest rates; inflation; credit to the private sector/GDP; government budget balance/GDP; M2/GDP; and credit from the central bank to banks/GDP. We also analyse the impact of the reforms on the reserve money/total deposits and reserve money/quasi-money ratios to judge the overall effectiveness of the reforms. The following chapter focuses more on bank-specific factors and the effect of the reform measures on bank performance.

## Trends in selected macroeconomic indicators

Table 4.1. Trends in Selected Macroeconomic and Financial Indicators

Indicator (%)	1980-83	1984-87	1988-91	1992-96	1997-98
<i>Macroeconomic Indicators</i>					
Real GDP growth	-3.6	5.9	4.93	4.48	5.2
Narrow budget balance/GDP	-4.75	-0.85	0.73	-1.52	-2.09
Exchange rate	2.75	83.32	291.63	976.1	2182.16
Inflation	77.98	28.73	27.95	33.22	27.9 <sup>a</sup>
<i>Macro-financial Indicators</i>					
CPS/GDP	1.83	3.7	4.08	5.44	9.05
Real CPS/real GDP	6.91	1.88	0.9	0.46	0.15
CBC/GDP	0.15	0.61	0.51	0.13	0.15
M2/GDP	18.03	15.53	16.28	18.16	18.9
RM/QM	243.5	235.88	189.23	150.36	140.5 <sup>a</sup>
RM/TD	113.53	88.78	69.5	74.22	73.7 <sup>a</sup>
<i>Interest Rates</i>					
Real lending rates	-58.73	-4.1	+2.61	+6.98	+23.1 <sup>a</sup>
Real deposit rates	-68.23	-12.1	-16.43	-15.97	-5.4 <sup>a</sup>
Interest rate spread	9.5	8.0	19.04	22.95	28.5 <sup>a</sup>

Source: Worksheets- taken from Table A4.2 in appendix IV.

Notes: (a) 1997 values only; CBC - Central Bank Credit to Banks; RM - Reserve Money; QM - Quasi-Money; TD - Total Deposits. GDP growth is calculated as a percentage change using 1990 cedis. The exchange rate is the period average exchange rate.

*Growth in real output*

As Tables 4.1 and A4.2 show, output growth deteriorated in 1980-83, averaging -3.6%, inflation was high and economic conditions were very poor. In 1984, GDP growth resumed significantly growing by 8.6%, although it continued at a lower average rate of 5.9% for the period 1984-7. The high growth in 1984 was largely the result of good food output (as a result of good weather) and the inflow of external funds because of the ERP (Sowa, 1993). This allowed the relaxation of some of the constraints facing production in the country. This period also showed strong growth in cocoa and non-traditional exports. The 1988-91 period had an average output growth of 4.93%, due to strong growth in 1988 and 1991 which was attributed to strong growth in the agricultural sector. Growth declined during 1992-96 to 4.48% in particular because of poor performance in 1992

and 1994. Agricultural output again was the main culprit in 1992, while industrial output was the major cause for the decline in 1994.

In terms of sectoral shares of growth, the services sector out performed the others. CEPA (1996:18) attributes this having been 'enhanced by the performance of the finance, insurance, real estate and business services sub-sector which has benefited from the financial sector reforms'. The upward growth of this sub-sector slowed in 1993-95.

In 1995 Ghana started another IMF ESAF arrangement (with a loan worth 164.4 million SDRs) which expired on 30 June 1999. The implementation of stabilisation led to a lowering of inflation to 27.9% in 1997. Real output growth resumed to an average of 5.2% (in 1990 cedis). This was fuelled by strong growth in 1997 from the services sector, in particular in communications, finance and insurance, tourism and tourism-related activities, and commerce (CEPA, 1998 :14). In 1998 the economy suffered a drought-induced electricity crisis which brought in power rationing. Measures to mitigate the effects of the rationing by diesel generation came on stream in the second half of the year, which helped the manufacturing sector to make up for reduced output in the first six months and resume growth. In terms of aggregate demand, increased cocoa, gold and non-traditional exports helped the growth of the economy in 1998. (1999 Budget Statement and Economic Policy of the Government of Ghana).

There is still no evidence that the financial reforms have led to increasing output growth, as real output was even lower on average in the period after 1988.<sup>17</sup> Furthermore, we have found no study on Ghana which suggests that the financial reforms have improved efficiency in production in the corporate sector.

### *Fiscal performance*

Fiscal discipline was poor prior to the introduction of the SAP in 1983. The government budget was in deficit during 1980-3 with an average share of GDP of -4.75%.<sup>18</sup> During 1984-7, the first budget surplus since independence occurred in 1986 (Sowa,1993) at 0.1% of GDP. A budget

---

17. As argued by Schiantarelli et al(1996) and discussed in Chapter 2.

18. This refers to the narrow budget balance which excludes capital expenditure financed by external project aid and the corresponding project grants and loans, but includes foreign programme grants. Since 1993 divestiture receipts have been added to its coverage.

surplus was achieved in 1987, and this performance was sustained till 1991. Between 1987 and 1991 the government made net repayments to the banking system averaging 1.5% of GDP (Amuzu, 1997: 3). The average budget balance/GDP was +0.73% of GDP for 1988–91.

Ghana's macroeconomic problems have mainly been rooted in recurrent lapses in fiscal discipline. In 1992, 1993 and 1996 there were serious reversals which also affected the distribution of credit between the private sector and the state. Fiscal problems from 1992 were caused by several factors, namely: excesses due to unplanned emergency expenditures for peacekeeping operations in Liberia; the parliamentary and presidential elections of 1992 with the attendant election year spending; and large wage increases in the public sector in 1992 (CEPA, 1996:28–32). Agricultural output also declined in 1992. These factors have been blamed as influencing the upsurge in inflation in 1993–5 (*ibid*: 28). Revenue collection was also poor in 1992–96. It has been observed that when the receipts of the divestiture of state-owned institutions are taken out of government revenue there is a fiscal deficit from 1992 to 1996 (CEPA, 1996; Amuzu, (1997).

As a way of strengthening monetary policy the government transferred all its accounts (and those of subsidised institutions) to the central bank in October 1997. This measure improved the financial position of the government with the Bank of Ghana reducing the need for borrowing from that institution. In nominal terms this borrowing fell by 53.7% between December 1996 and December 1997. By December 1998 the government was repaying previous debt and reduced its credit from the Bank of Ghana by about 314%.<sup>19</sup> However, borrowing from the commercial banks increased by 111% in nominal terms from December 1997 to December 1998. The overall fiscal deficit/GDP ratio fell only slightly from about 2.11% of GDP in 1997 to about 2.07 % in 1998.

### *Inflation and interest rates*

Inflation was a major problem in 1980–83. Good food production, foreign-exchange availability, and better fiscal policies under the ERP/SAP, helped to bring down inflation in 1984 and 1985 (Sowa and Kwakye, (1991). Table 4.1 shows the average to be about 78% in 1980–83 declining to 28.7% in 1984–7. The lowest level was 11.1% in 1985, but it rose from this level to 39.8% in 1987. The rise in inflation during 1986–87 has been mainly

---

19. The GOG had a net balance of 223.3 billion cedis with the Bank of Ghana.

attributed to poor agricultural output (Kapur et al., 1991). In 1988–91, good weather benefited food production and food prices declined in 1988 and 1989. Another supply factor, petrol, the price of which was raised significantly by the government, by about 45% in 1990, put upward pressure on the price level.<sup>20</sup>

Fiscal restraint and tighter monetary policies helped to reduce inflation in 1991 to 18%, but fiscal problems from 1992 onwards exacerbated inflationary pressures. Average inflation for 1992–6 was 33.2% and by 1996 had not yet been contained. It fell to 27.9% in 1997. In September 1997 a new series for the CPI was introduced which had major differences from the previous series.<sup>21</sup> Using this series inflation fell from 19.8% in January 1998 to 15.7% in December 1998. This decline has been explained as the result of improved food supply, a relatively stable exchange rate and slower growth in the money supply. The government resorted to increased borrowing from the commercial banks in contrast to the central bank to cover the deficit and reduce the growth of high-powered money.

In general, strong seasonal patterns have been observed in price developments. They tend to go up in the first five months of the year, decrease in the next four months and increase again during the last quarter of the year (Amuzu, 1997:6).

During the period 1980–1983 when all the indicators were worsening, both the real lending and deposit rates were negative (see Table A4.2 in Appendix IV). Although inflation was declining in late 1983 and in 1984, the bank rate was raised from 14.5% in 1983, to 18.0% in 1984. Real interest rates were positive in 1985, but became negative again in 1986 when inflation surged upwards to 24.3%. Interest rates prior to September 1987 had been administratively determined. The Bank of Ghana, in its administration of interest rates, first considered the expected rate of inflation and the current level of interest rates in order to set new levels. The central bank fixed the Bank rate, the Treasury Bill rate, and the maximum and minimum rates for both loans and deposits. Commercial banks, in turn, set their own rates within the prescribed range. This procedure led to wide swings in real interest rates. The negative real rates of interest posed a constraint on mobilising savings. In general, interest rate spreads have continued to widen since 1988, real lending rates were positive in eight years out of the 1988–97 period (see Table A4.1 in Appendix V). Real deposit

---

20. In 1990 the petroleum tax raised 20.4% of total government revenue.

21. It had a different basket of goods and different weights for its components. The old series was based on a 1977 basket of goods.



rates for the same period were positive only twice.

Financial liberalisation in Ghana has caused real lending rates to rise much more than deposit rates which could stifle intermediation. Gertler and Rose (1996:45) emphasise that a successful financial liberalisation requires a 'viable borrowing class, that is a sufficiently large cohort of borrowers for whom the premium for external finance is not prohibitive'.<sup>22</sup> This cannot be said to be the case in Ghana, and can only evolve when inflation continues consistently to decline and output growth improves. Studies on the effects of financial liberalisation on gross domestic savings or financial savings in Ghana have shown that interest rates have not had a significant effect on savings. Investment levels for seven years after liberalisation have also not risen significantly. Ayiku (1996) found a positive but insignificant effect of interest rates on gross domestic savings, while Asiama (1996) found a similar result for financial savings.

## **Financial sector reforms and financial deepening**

The financial sector reforms were introduced in the context of high inflation, and interest-rate liberalisation was accorded a pivotal role in the sequencing of the reform measures, primarily to reallocate capital to its most productive uses and also to encourage the mobilisation of deposits into the banking system. Together with the poor state of the economy, the repressive financial policies had resulted in a decline in the share of bank deposits in bank balance sheets, especially time deposits and strengthened the use of cash for payments.

Financial deepening means 'the accumulation of financial assets at a pace faster than accumulation of non-financial wealth' (Shaw 1973: vii). It refers to the growth in the size of the financial system and of the intermediation capacity of the economy. Financial deepening also goes hand in hand with the avoidance of negative real interest rates in order to give incentives to both savers and borrowers. It is usually measured by the share of liquid assets in national output, normally some monetary aggregate/GDP ratio such as M2/GDP.<sup>23</sup> Growth in M2/GDP also shows the increase in financial savings.

---

22. Namely borrowing from banks and other financial institutions.

23. Credit to the private sector/GDP has been used as a measure of financial deepening as it measures the relative access to credit by the private sector. (Gertler and Rose, 1994. CPS/GDP has been used to measure the volume of intermediation (Dziobek and Pazarbasioğlu, 1997). Johnston and Pazarbasioğlu (1997:6 and 9) argue that the stock



The M2 /GDP ratio declined up to 1985, when it began to rise slightly. The next low point was in 1990 after interest-rate liberalisation in 1987–8. The effects of the financial sector reforms pushed M2/GDP up slightly during 1990–92, after which it has declined slightly. Average M2/GDP for 1980–83 was 18.03% , in 1984–7 it fell to 15.53% and for 1988–91 it was 16.28%. In 1992–6 it was 18.16%, showing very little change between 1980–86 and 1990–96.

Applying a t-test on the difference in means value (Table 4.2) for the two equal periods before and after the major financial reforms and the enactment of the 1989 Banking Law, reveals that M2/GDP has risen only slightly. Nevertheless, this rise was not statistically significant even at the 10% level.

This has happened in spite of the larger number of financial institutions and instruments in the 1990–96 period. This was a reflection of the decline in the share of private sector deposits in total bank assets between the two periods and the stronger GDP growth in 1990–96 than in the previous period (see Table 5.12). The lack of faith in the confidentiality of the banks lingers on.<sup>24</sup> Negative real deposit rates resulting from high inflation during 1993–6 also influenced the M2/GDP ratio. It is clear that there has not been much change in terms of financial deepening as measured by the M2/GDP ratio, despite the financial reforms. M2/GDP averaged 18.9% in 1997–8. This rise since 1996 has been due to declining inflation and the positive real deposit rates in the period. As put by Caprio and Klingebiel (1996: 19) a ‘rising ratio of M2 to GDP indicates that the banking system has stabilized in the aftermath of the crisis, whereas a flat or falling ratio shows that some problems remain in the banking sector’.

---

of credit to the private sector GDP ratio is a better proxy for financial depth than the stock of liquid liabilities to GDP. Monetary Aggregates usually M2 or M3/GDP, are the commonly used measure, even though they give more emphasis to deposit mobilisation and the degree of monetisation.

24. In an attempt to reduce the public’s excess currency holdings and eliminate illegal hoards of the domestic currency outside Ghana, a major currency conversion exercise was undertaken in March 1979. All amounts up to ₵5000 were exchanged for a newly issued currency at a ratio 10:7, and those in excess of ₵5000 at the ratio 10:5. Bank deposits, government securities and other financial securities were not affected. This was an unpopular decision. A decree issued by the AFRC military government in 1979 opened private deposit accounts to government scrutiny. In 1982, a new military government demonetised ₵50 notes and asked the banks to provide information on accounts of individuals with deposits above ₵50,000, pending a probe into their origins and possible tax evasion. This led to a serious loss of confidence in holding bank deposits

**Table 4.2. Test of Significance for Financial Deepening**

%	1980-86	1990-96	t-statistic	Expected sign <sup>a</sup>	Significant at 10%
M2/GDP	16.73	17.29	+0.48	positive	No

Source: Worksheets.

Note: Critical values  $t_{12, 0.10} = 1.356$ .

(a) Expected sign = Sign expected of the difference in means between 1990-96 and 1980-86.

Nevertheless, data on monetary aggregates in Ghana tends to be biased downwards because the BOG issued monetary data based on a sample of 11 banks prior to the end of 1997, and since then data from 17 banks. It also excludes data from rural banks or savings and loans companies. A comprehensive survey of all such financial institutions could change the conclusions on financial deepening for Ghana. It was not, however, within the scope of this study.

### *Credit to private sector/GDP*

The growth in the CPS/GDP ratio gives an indication of how financial liberalisation is progressing. It indicates the ability of the financial sector to increase lending but 'it excludes the credit granted to the private sector by the central bank which is often high during financial repression' (Johnston and Pazarbasioglu, 1995: 9). Reference to the CPS/GDP series in Table A4.2 shows low points in 1983 and 1990; thereafter there has been a general upward trend reflected in the average values of 3.7% in 1984-7, 4.08% in 1988-91 and 5.44% in 1992-6 (Table 4.1). The upward trend was pronounced after major bank restructuring took place and most of their non-performing debt was removed (the period 1990-96).<sup>25</sup>

Taking the period since the removal of all interest-rate controls and most sectoral credit requirements (by February 1988), growth in credit from banks to the private sector has also outpaced nominal GDP growth in six years out of nine since 1988 (see Table A4.3 in Appendix IV). Despite this increasing trend in the CPS/GDP ratio, as will be found in Chapter 5, banks have not increased the share of advances in total assets which is an expected result

25. Applying a Spearman's rank correlation test for trend, the rank correlation coefficient of CPS/GDP with a linear time trend series gives a value of 0.8929, which reveals that CPS/GDP has a significant positive trend at the 0.5% level for 1990-96 (Kaniji, 1990 Table 26 Critical values for the Spearman rank correlation test for small samples.

following financial sector reforms after a long period of financial repression. Nothing conclusive can be said about the behaviour of this ratio. During 1997 it rose to 8.2% and at the end of the third quarter of 1998 it had risen to about 8.7%.

The CPS/GDP ratio is still low when compared with that of many other countries. Malawi, which undertook similar financial reforms from 1987, had a CPS/GDP ratio of 10.2% in 1990, Kenya had ratios of 16.6% in 1990 and 27.6% in 1996. Malaysia had a CPS/GDP ratio of 71.4% in 1990 and 93.6% in 1996.

### *Effectiveness of financial reforms*

The effectiveness of the financial reform measures was assessed by the use of two indicators, the ratios of reserve money to total deposits and to quasi-money for two equal periods, 1980–86 and 1990–96. Both were expected to decline with progress in the effectiveness of the financial reforms. As the reforms progress, ideally banks become more efficient, and it is expected that there will be better management of bank assets. This would show up in lower reserves, as banks try to minimise their holdings of excess reserves. These indicators also capture the impact of reductions in the currency deposit ratio as the financial sector reform progresses. Improvements in financial intermediation are expected to encourage the shift of monetary holdings away from cash to deposits by the non-bank sector. These arguments are dependent, however, on concurrent improvements in the macroeconomic environment.

The data in Table 4.1 and Table A4.2 show that both reserve money/quasi money and reserve money/ total deposit ratios declined between 1980–83 and 1988–91 after which they rose. It is quite clear that the financial sector reform impacted significantly on the efficiency of financial intermediation from 1987 till 1991 when it recorded the lowest reserve money/total deposit and reserve money/quasi money ratios. The upward trend thereafter has been attributed to the external financing of cocoa which began in 1993, central bank credit to the Ghana National Petroleum Corporation for oil imports, which was high in 1994, and reversals in fiscal performance from 1992, all of which negatively affected the ability of the central bank to influence and control the growth of high-powered money through open market operations. Another factor was the upsurge of inflation from 1992 which influenced the

non-bank public's holding of cash.<sup>26</sup>

## **Banking crisis situation**

Although most banking sector indicators are discussed in Chapter 5, referring to the study by Demirguc and Detragiache (1997) we assessed the extent of the banking sector problems. Non-performing assets in the banking sector in 1990 were estimated by NPART second Annual Report in 1991 at 50.433 billion cedis. This figure was made up of private sector bad debt of 26.488 billion cedis and state-owned enterprise debt of 23.945 billion cedis. This represented 10.5% of banking sector assets in 1990, and the cost of the rescue operation was estimated at 6 percent of GDP or \$300 million in 1988 (Sheng and Tannor, 1996:123). There was also more support available from the central bank for the banks as shown by the higher level of credit from the central bank GDP ratio from 1984 to 1990 which coincided with the major crisis period (see Table A4.2 in Appendix IV). From 1992 to 1996 there is evidence of less dependence on the central bank. However, relative to 1996, there was greater dependence of some banks on the central bank in 1997, as evidenced by the central bank credit to banks/GDP ratio rising to 0.23% in 1997, due to liquidity problems faced by NIB, COOP, and BHC.

## **Conclusion**

The overall picture given by the macroeconomic and financial indicators is that there was a clear relationship between the financial and the economic crises in the Ghanaian economy. The timing of the crisis, however, was triggered by exchange-rate adjustments which made many foreign loans unserviceable. The size of the carve-out of bad debt from the banks' balance sheets adequately reflects the crisis situation and the need for financial sector reform.

The reform impacted positively on some financial indicators. Real lending rates became positive and real deposit rates became less negative, considerably widening interest rate spreads. Despite these achievements, the overall impact of the measures was not impressive, as the financial depth of the economy remained negligible, and banks failed to mobilise savings significantly. Long-term funds did not flow to the banks and credit to the

---

26. The cash/M2 ratio rose in 1992-6 above its level of 1988-91.

private sector remained lower than the level found in many other developing countries.

We have found no evidence that the financial reforms have improved real growth rates, savings or investment. This can be partly explained by the policy reversals observed after 1992, which led to a resumption of inflation in the economy.<sup>27</sup> Ghana's financial sector reform could certainly have yielded better results if a more stable macroeconomic environment had been sustained.

The next chapter examines the effects of the financial sector reforms on bank performance. It makes use of the data from bank balance sheets and profit and loss statements.

---

27. The fundamental difficulty with making these assessments is that other changes have occurred side-by-side with the financial reforms, which have affected the outcome of these reforms. We do show the deterioration in the macroeconomic environment in this chapter.

## Bank Performance

### Introduction

So far we have considered macroeconomic-based indicators and examined the direction taken by them, assessing them in terms of what was predicted by the literature. In this chapter, the performance of the banking sector is examined by analysing key indicators of bank performance over the period 1980–96. Depending on data availability, this period is further broken up into two equal sub-periods, to correspond to the pre-financial sector reform period 1980–86, and the period from 1990 to 96 during which the Banking Law (1989) was in force. The period 1988–89 is included when data is not available for 1980–86.

The promulgation of the Non-Performing Assets Recovery Law, 1990 (PNDC Law 242) and the removal of non-performing assets from most banks in 1990 helped to improve bank profitability and overall performance in that year (see Table A5.1 in Appendix IV). It also meant that financial statements from banks for 1980–87 were flawed as they contained hidden losses resulting from the non-performing portfolio. The values of indicators, especially on advances and profits during this period, have to be treated with some scepticism.

In the banking sector, the returns on assets before tax showed that losses in 1988 and 1989 turned into profits in 1990, with a change from -2.83% in 1989 to +7.15% in 1990. The period 1988–89 therefore gives a good picture of the crisis situation. It was also the period during which the major financial and banking sector reforms took place. The period after 1990 was the period in which banks began operations with a cleaner slate.

The Ghanaian banking system has experienced significant changes since the onset of the financial sector reforms. First, the regulatory environment is tougher with the Bank of Ghana reinforcing its bank supervision activities and the number of staff at the Banking Supervision Department. The Banking Law of 1989 also gave the BOG specific quantifiable provisions which it could target at all banks (see Chapter 3). Banks have also had to face interest rate liberalisation and more competition both from existing banks and from new financial institutions. The Bank of Ghana stressed that it monitored banks closely in 1988–9 to ensure that they complied with its directives ‘for a more efficient and authoritative prudential supervision of banks hitherto virtually absent from the banking system in Ghana’. (Bank of Ghana Annual Report 1989/1990, page 5).

The following section will concentrate on analysing the key indicators of profitability, intermediation, and operational efficiency. Our objective here is to illustrate the performance of the banking system through the use of key financial ratios which were obtained from the annual financial statements of the various banks.

## Measures of profitability

The measures of profitability analysed are:

- return on assets before tax (ROA) = profits before tax/total assets (%);
- return on earning assets (ROEA) = profit before tax/earning assets. Earning assets are defined as the sum of investments (bills, bonds and other financial securities) and advances.<sup>28</sup>

The return on assets shows how well bank management has used the resources at its disposal to generate additional resources for the bank at the end of a year. Continued positive growth in this indicator is necessary for the viability of any bank. In view of the financial reforms, in particular the bank restructuring, ROA was expected to rise. Similar evidence is expected of the return on earning assets. Dziobek and Pazarbasioglu, 1997:8–9.

- return on shareholders funds (ROSHF) = profits before tax/shareholders Funds (%).<sup>29</sup>

The Banking Law of 1989 specifically increased minimum share capital to at least 200 million cedis, and the Bank of Ghana enforced the maintenance of a Reserve Fund of between 12.5 and 50% of profits after tax. This meant, that after the reforms this ratio could decline, but this depended on the growth of profits. The expected direction of ROSHF after the major financial reforms is ambiguous and is an empirical issue.

Table 5.1 summarises the results on these profitability measures. The results for each profitability indicator and the underlying factors influencing

28. Advances includes loan and overdrafts less provisions for debts.

29. Shareholders' funds = stated capital+ capital surplus (surplus on revaluation of landed properties and equity investments) + income surplus (reserve fund and statutory reserve Fund).



the change between the two periods are discussed in turn. The changes in ROA and ROEA are statistically significant between the periods 1980–86 and 1990–96.

As stated earlier, most bank income statements prior to 1988 included interest on all advances, without the removal of interest from bad and doubtful advances from their calculations. Funds set aside for Loan Loss Provisions were not explicitly stated and were kept from public knowledge. This inclusiveness meant that bank profits were biased upwards. Thus data, especially those prior to 1988 gave a misleading impression about the state of bank profitability.

**Table 5.1. Measures of Profitability**

Variable	1980–86 average	1990–96 average	t-ratio	Expected sign of change	Actual sign of change
ROA	2.47 (0.65)	5.88 (2.12)	+4.07 <sup>a</sup>	positive	positive
ROSHF	51.64 (16.75)	45.5 (17.84)	-0.62	?	negative
ROEA	4.82 (1.76)	11.72 (4.05)	+4.13 <sup>a</sup>	positive	positive

*Source:* Annual Reports of Banks excluding BCC, ADB (1984–1989) and COOP. 1980–1986 data uses results from SCB, BBG, GCB, SSB, BHC, ADB (as stated), BHC, and NIB.

*Notes:* Values in brackets are standard deviations; t-statistic is for the difference of means between the pre- and post reform periods, 1980–86 and 1990–96; (a) significantly different from zero, under a one tailed test, at the 0.5% level.  $t_{12,0.005} = 3.055$ .

The major factors underlying the improvement in the profitability indicators were the following:

- the transfer of most non-performing assets from the banks to the Non-Performing Assets Recovery Trust (NPART) in 1990–91;
- widening interest-rate spreads;
- more avenues for short-term financial investments and more income from such investments, especially higher returns from Treasury Bills, Bank of Ghana bills, and the availability of discount house instruments;
- low operating expenses of below 7% of total assets for 1990–96 and lower shares of net loan loss provisions for bad and doubtful debts in total assets during that period. (see Table A5.1 in appendix IV)

During 1988 and 1989 when some banks began to use the standard format for reporting their results (because of the passage and enforcement of



Legislative Instrument No. 1329 of 1988), the true picture became clearer.<sup>30</sup> Banking sector ROA was -4.2% in 1988 and -2.83% in 1989 because of substantial provisions for bad debt. As soon as most of the bad debts of the state-owned enterprises were removed from the balance sheets of distressed state-owned banks during 1990, bank performance in terms of profitability improved.<sup>31</sup> These bad debts were replaced by FINSAP bonds which provided returns of 7-9% per annum.

These measures, together with the decontrol of interest rates, commissions and fees, provided the foundation for the dramatic changes when 1988-9, and 1990-96 results are compared.<sup>32</sup> When annual changes in bank profits are examined they show high growth in 1980-86 peaking in 1984 with a value of 110.6% (Table 5.2). The lowest growth was recorded in 1990 when profits before tax declined by 487%. Growth in profits then resumed strongly to a maximum of 109% in 1993, after which it declined.

Profits grew strongly in 1993 as a result of bank behaviour when the bank rate was increased from 31.5% to 35% in March 1993. Banks increased their maximum lending rates by 7.5%, while minimum savings deposit rates grew by 2.5% and the minimum three-month fixed deposit rate was increased by 4.5% during the course of the year.

The spread between bank lending and deposit rates widened. Banks also enjoyed a substantial growth of net interest income of 81% in 1993. Though this year did not witness the highest value of ROA, strong growth in gross earnings from 1990 to 1995 led to growth in ROA for the same period (see table A5.1 in Appendix IV). The decline in profitability (ROA) in 1996 was due to strong growth in interest expenses. A major fraud problem came to light in 1996 involving GCB, BHC and COOP.<sup>33</sup>

---

30. LI 1329 contained most of the features of the 1989 Banking Law.

31. The bad loans of the private sector were transferred to NPART in 1991.

32. Banking sector ROA for 1988-9 was -3.52% and for ROEA-10.47%. The average ROSHF for the same period was 126.87%.

33. There was a breach of bank regulations on exposure limits when between 135 billion and 200 billion cedis were dispensed by GCB, BHC and COOP in unsecured lending to A-life Co. Ltd (a supermarket chain) by delaying cheque clearing.

Table 5.2. Annual Changes in Profits

Year	Profit <sup>a</sup> (%)
1981	80.9
1982	41.7
1983	107.0
1984	110.6
1985	56.7
1986	88.6
1987	80.9
1989	-11.0
1990	-487.1
1991	-34.7
1992	16.7
1993	109.2
1994	79.6
1995	68.6
1996	33.3

*Source:* Calculated from consolidated bank data.

*Notes:* Some banks did not provide data for 1988; (a) = Profit before tax

Profits have remained positive with a strong growth in gross earnings since 1990. Operating expenses/total assets have generally declined (see table A5.1). Older banks (formed prior to the financial reforms) retrenched workers as part of restructuring, to reduce staff costs. Other types of operational costs all declined between the 1988-9 and 1990-96 periods (see Table 5.13).

Referring back to Table 5.1, the return on shareholders' funds did not change significantly between the two periods 1980-86 and 1990-96, although there were new and higher minimum capital requirements under the 1989 Banking Law and banks had to keep the appropriate level of reserve funds. In addition, there was the need to comply with the minimum capital adequacy requirement of 6% of risk-rated assets on the part of all banks in 1990-96.

*Measures of profitability for Big Four Banks*

The Big Four banks (GCB, SCB, SSB, BBG) showed about the same levels of profitability as the banking sector in relative terms for the periods 1980–86 and 1990–96 (Tables 5.3 and 5.1). The results for 1980–86 were depressed by the poorer performance of GCB.<sup>34</sup> The sign of the actual change between the two periods was in the same direction as that for the banking sector—positive for ROA and ROEA, negative for ROSHF.

**Table 5.3. Measures of Profitability for Big Four Banks**

Indicator	1980–1986	1990–1996	Expected sign of change	t-statistic
ROA	2.42 (0.70)	5.04 (3.33)	positive	+2.03 <sup>a</sup>
ROEA	5.24 (2.27)	10.47 (6.27)	positive	+2.08 <sup>a</sup>
ROSHF	58.85 (13.6)	40.36 (29.43)	?	-1.51 <sup>b</sup>

*Source:* Annual Reports of GCB, BBG, SCB, SSB. Values in brackets are standard deviations.

*Notes:* t-statistic is for the difference of means between the pre- and post reform periods, 1980–86 and 1990–96; (a) = significantly different from zero, under a one tailed test, at the 5% level.  $t_{12,0.05} = 1.782$ ; (b) = significantly different from zero, under a one tailed test, at the 10% level.  $t_{12,0.10} = 1.356$ .

The performance level of the four big banks was obtained, despite the changing concentration structure in the banking sector. This dimension of structural change manifests itself when the two periods 1980–86 and 1990–96 are compared. There has been a decline in concentration in the banking sector especially in terms of assets, deposits and loans (Table 5.4).

34. The ROA for GCB was 1.03% for 1980–86 and 5.1% for 1990–96 .

Table 5.4. Four-Bank Concentration Ratios (%)

Year	Assets	Deposits	Advances
1980	83.7	89.8	79.1
1981	82.9	88.0	78.9
1982	84.8	89.9	80.0
1983	78.8	85.7	74.4
1984	88.2	92.5	84.6
1985	86.3	93.2	80.1
1986	84.9	87.0	77.7
1987	84.9	85.5	74.6
1988	81.0	85.7	65.8
1989	84.7	87.8	73.8
1990	80.2	82.0	68.1
1991	77.4	79.5	63.7
1992	71.9	74.3	62.9
1993	73.7	78.6	56.6
1994	72.4	75.4	54.2
1995	66.7	69.0	50.5
1996	65.0	71.2	52.8

Source: calculated from data from Bank Annual Reports and the Bank of Ghana.

Note: Concentration ratio = Big Four banks' total in variable concerned/banking sector Total for variable.

This general decline is a reflection of the increased competition from the other banks and the new entrants since 1990. Nevertheless, the Big Four banks still dominate the banking sector and by holding in 1996, over 65% of banking sector assets, 71% of the deposit base and 53% of loans and overdrafts, they still exercise a powerful influence over pricing decisions in the sector.

## Measures of intermediation

The key bank-specific indicators of intermediation for which comparable data exist over the 1980–86 and 1990–96 periods were: the ratio of advances to deposits; cash and short-term funds to deposits ratio; the deposits/total assets and advances/total assets ratios.

The advances/deposits ratio was expected to increase between 1980–86 and 1990–96 because the Ghanaian financial sector suffered considerable financial repression prior to the liberalisation of interest rates and credit

controls. This ratio measures the extent to which a bank is able to mobilise deposits from the public to support its lending operations and also the extent to which it is able to lend these deposits. There are two opposing considerations in determining any bank's advances/deposit ratio. First, there is a risk element arising from: economic performance; quality of bank management; the deposit base; and lending opportunities or the reluctance on the parts of banks to accept the available lending opportunities.<sup>35</sup> The effect of this factor is to lower the advances/deposit ratio.

Secondly, there is an earnings factor banks' have to consider, which results in a higher ratio.<sup>36</sup> Financial reforms create a more competitive environment and tend to focus banks on increasing their earnings potential, thereby resulting in a higher advances/deposits ratio.

Table 5.5 shows that the change in advances (net of loan loss provisions)/deposits ratio between the 1980–86 and 1990–96 periods was statistically significant at the 1% level, but with the wrong sign.

**Table 5.5. Measures of Intermediation**

Variable %	1980–1986	1990–1996	Expected sign	t
Advances to deposits	40.56 (12.90)	25.20 (6.22)	positive	-2.84 <sup>a</sup>
Cash & short-term funds /deposits	33.53 (3.75)	56.12 (8.09)	negative	+6.70 <sup>a</sup>

*Source:* Annual Reports of banks, Bank of Ghana Annual Reports. Values in brackets are standard deviations.

*Notes:* (a)= significantly different from zero, under a one tailed test, at the 1% level.  $t_{12,0.01} = 2.681$ .

The data show that for 1990–96 the advances deposits ratio was lower than for 1980–86. We recall that non-performing loans were included as assets in bank portfolios during 1980–86, which must have pushed this ratio up during that period. Another reason is that better investment avenues became available after 1988, in particular attractive returns on government securities

35. This latter situation was observed for shana by Aryeetey etal (1994:62–3).

36. McNaughton and Barltrop (1992:13) put this forward, though the 'appropriate level varies by country. 70–80 percent could represent a reasonable balance between liquidity and earnings' concerns.

and Bank of Ghana bills. The data also reflect more conservative credit practices as a result of the 1989 Banking Law and more rigorous prudential requirements. The average annual growth rates of both loans and deposits for 1980–86 were higher than corresponding growth rates for 1990–96, which was an unexpected result for a recently liberalised system.<sup>37</sup> The situation improved in the better macroeconomic environment of 1997–8 when the advances/deposits ratio was 46.42%.

The ratio of cash and short-term fund holdings to deposits by the banks increased significantly (Table 5.5). The average ratio rose by 22.6% from 1980–86 to 1990–96, when it was expected to fall. This can be partly explained by examining the components of reserve requirements during the two periods (Table 5.6). The actual total reserve requirement kept by banks was 63.4 % for 1980–86, and 67.5 % in 1990–96 (using end of December reserve requirements). Lower reserve requirements in 1997–8 influenced the attainment of a lower value of 36.36% for this indicator in that year.

**Table 5.6. Reserves of Banks**

<u>% of Deposits</u>	<u>1980–86</u>	<u>1990–96</u>
Required Cash Reserves	19.9	11.9
Actual Cash Reserves	30.6	16.3
Required Secondary Reserves	26.1	38.7
Actual Secondary Reserves	32.8	51.2
Total Required Reserves	46.0	50.6
Total Actual Reserves	63.4	67.5

*Source:* Bank of Ghana, Annual Reports.

The banks were holding for more secondary reserves in the period 1980–86 and 1990–96 (Table 5.6). The difference between the actual secondary reserves/deposits and actual cash reserves/deposits widened from 2.2% in 1980–6 to 34.9% in 1990–96. As the secondary reserves were government or public sector institutions' securities, this also meant that more credit was being channelled to the public sector, crowding out credit to the

37. The annual average growth rate for loans in 1980–86 was 65.4%, while that for 1990–96 was 52.1%. Corresponding rates for deposits were 46.5% and 35.4% respectively.

private sector. In addition, banks could earn more income without necessarily pursuing policies to expand advances to the private sector significantly (Nissanke, 1993). Under the reforms, cash reserves with the Bank of Ghana were remunerated at 3 % p.a. in 1990 and at 5 % p.a. in 1991. These returns were removed in 1994. The data show that the banking sector's balances with the Bank of Ghana's total assets ratio gradually fell from 9.7% in 1988 to 3.7% in 1995. However, it was 5.1% in 1996, but this was largely due to the change in the cash reserve requirement from 5% to 10% in October 1996 as part of an effort to check monetary expansion.

**Table 5.7 Composition of Banking Sector Balance Sheet**

% of Total Assets	1980-86	1988-9	1990-96	Expected Sign	t'
<i>Assets</i>					
Advances	31.58 (4.2)		16.44 (24.27)	+	-6.69 <sup>a</sup>
Investments	21.44 (7.91)		33.72 (4.03)	+	+3.66 <sup>a</sup>
<i>Government</i>					
<i>Securities</i>	n.a.	4.49(1.07)	11.69(4.87)	-	+1.98 <sup>c</sup>
<i>Treasury Bills</i>	n.a.	0.05(0.08)	0.84(0.48)	+	+2.21 <sup>c</sup>
<i>BOG Bills</i>	n.a.	0.96(0.78)	3.61(1.97)	+	+1.79 <sup>d</sup>
Cash & Short- Term Funds	33.53 (3.75)		36.49 (4.76)	-	+1.29
<i>Liabilities</i>					
Deposits	81.06 (12.7)		65.20 (2.86)	+	-3.22 <sup>a</sup>
Shareholders' Funds	4.87 (0.71)		13.06 (1.41)	+	+13.73 <sup>a</sup>

*Source:* Consolidated data from Bank Annual Reports and Bank of Ghana

*Notes:* (a) = significantly different from zero, under a one tailed test, at the 1% level:  $t_{12,0.01} = 2.681$ ; (b) = significantly different from zero, under a one tailed test, at the 5% level;  $t_{7,0.05} = 1.782$ ; (c) = significantly different from zero, under a one tailed test, at the 5% level:  $t_{7,0.05} = 1.895$ ; (d) = significantly different from zero, under a one tailed test, at the 10% level:  $t_{7,0.10} = 1.415$ .

Turning to the balance sheet of the banking sector for more information reveals that, whereas the average advances to total assets ratio fell significantly from 31.6% to 10.6%, that is by about 21%, between 1980-86 and 1990-96, the average deposits to total assets ratio fell by about 16 %

(Table 5.7) .

The results show that they were rather channelling a greater share of deposits into financial investments.

The expansion in the share of investments has been underlined by the expansion in holdings of government securities and Bank of Ghana bills whose rates are market driven via a weekly auction of such bills.

For the Big Four banks, their advances to deposits ratio fell significantly, from 35.48 % to 19.28% between the 1980–86 and 1990–96 periods while the cash and short-term funds/deposits ratio rose significantly (Table 5.8). This is only about 0.9% less than the corresponding difference for the banking sector as a whole (Table 5.5), because of lower ratios by GCB and SSB between these same periods.

**Table 5.8. Intermediation by the Big Four Banks**

Variable %	1980-86	1990-96	Expected Sign	t
Advances/ Deposits	35.48 (12.01)	19.28 (4.43)	positive	-3.35 <sup>a</sup>
Cash & Short-term Funds/Deposits	34.62 (4.35)	56.35 (10.00)	negative	+5.27 <sup>a</sup>

Source: Worksheets.

Note: Values in brackets are standard deviations. (a) = significantly different from zero, under a one tailed test, at the 0.5% level:  $t_{12,0.005} = 3.055$ .

Summarising the significant changes in balance sheet composition (in terms of shares of total assets): advances declined; investments in government and central bank securities increased; deposits declined; shareholder's funds increased.

### *Sectoral Allocation of Credit*

The sectoral allocation of credit by the banks was examined to ascertain if there had been any shifts in its structure between the two periods (1980–86 and 1990–96) and to throw more light on bank lending. In February 1988, sectoral credit controls were removed, except for agriculture where the lending targets were abolished in November 1990. The implication of this was that banks were going to lend more to sectors in which returns to them were maximised, a situation which was expected to result in a smaller share



of credit to high-risk sectors such as agriculture, transport and exports (other than cocoa). At the 5% level of significance, only the relative share of credit for the electricity, gas and water and the export trade sectors did not change significantly between the two periods (Table 5.9).

**Table 5.9. End-Use Allocation of Bank Advances to Public and Private Sectors**

% of total advances <sup>a</sup>	1980-86	1990-96	t
Agric.,Forestry, Fishing	25.01(6.01)	11.05(2.73)	-5.59
Mining, Quarrying	4.7(1.47)	1.89(0.95)	-4.24
Manufacturing	23.21(4.6)	28.27(2.79)	+2.49
Construction	11.56(1.55)	14.44(2.77)	+2.40
Electricity, Gas, Water	1.18(1.76)	1.84(0.79)	+0.91 <sup>b</sup>
Commerce:			
Import Trade	2.9(2.39)	6.37(1.26)	+3.39
Export Trade	5.86(4.85)	6.75(2.03)	+0.45 <sup>b</sup>
Other (Commerce)	10.76(1.89)	14.06(1.55)	+3.57
Transport and Communications	7.05(1.9)	3.63(1.63)	-3.61
Other Services	5.05(0.96)	7.72(0.97)	+5.09
Misc.	2.74(0.83)	4.16(0.78)	+3.33

Source: Bank of Ghana, Quarterly and Annual Reports 1989-1996.

Quarterly Digest of Statistics various issues.

Notes:  $t_{12,0.05} = 1.782$ ,  $t_{12,0.10} = 1.356$ . Values in brackets are standard deviations. (a) = Total Advances excludes that for cocoa marketing; (b) = t ratio not significant at 10% level.

For priority sectors in particular, the value (in 1990 cedis) of agricultural loans fell from an average of ₵16,177.86 million in 1980-86 to ₵12206.06 million in 1990-96, while for manufacturing there was a rise from ₵16647.36 million to ₵32907.71 million. Thus the profile of the sectoral allocation of bank credit did change significantly between 1980-86 and 1990-96.

This is a reflection of the importance of risk, and the demand for particular credit-types which banks were faced with. For the pre-reform period, the sectoral allocation of credit made by the authorities had an important influence on the actual credit granted by banks. It was also possible that banks manipulated their returns on credit to indicate that they had given out more agricultural credit in the pre-reform period.

**Table 5.10. Rankings in Sectoral Shares of Bank Credit**

Rank	1980-86	1990-96
1	Agriculture	Manufacturing
2	Manufacturing	Commerce
3	Commerce	Construction
4	Construction	Agriculture

Source: Table 5.9.

### *Deposit Composition*

Data on the various deposit types are available post-1987 data for all banks; a composition analysis for deposits is given in Table 5.11.

The deposit structure (see also Table A5.2) remained essentially the same in the two periods 1988-9 and 1990-96, in the sense that the relative shares in total liabilities of demand deposits or current accounts, savings deposits, and time deposits are in the same order of ranking in magnitude. There was some decline in the share of time deposits between 1988-89 and 1990-96.

**Table 5.11. The Ratio of Deposit Types to Total Liabilities \***

% of Total Liabilities	1988-9	1990-96	t	Expected sign
Demand Deposits	45.79 (7.84)	35.03 (5.61)	-2.24 <sup>b</sup>	positive
Foreign Deposits	0	1.01	n.a.	positive
Savings Deposits	13.47 (0.13)	20.08 (6.54)	+1.36	positive
Time Deposits	10.28 (0.36)	9.07 (1.12)	-1.44 <sup>c</sup>	positive

Source: compiled from *Annual Reports* of banks and Bank of Ghana.

Notes: \* The deposits here unlike those of Table 5.12 include deposits of government, public institutions and the private sector; (a) Total liabilities include Shareholders' Funds; The standard deviations are shown in brackets; (b) Significantly different from zero, under a one tailed test, at the 5% level:  $t_{7,0.05} = 1.895$ ; (c) Significantly different from zero, under a one tailed test, at the 10% level,  $t_{7,0.10} = 1.415$ .

Using a different grouping of deposit types, given only in the *Annual Reports* of the Bank of Ghana, shows that private sector deposits fell significantly between 1980–86 and 1990–96 whereas public sector and government deposits increased significantly (Table 5.12).

**Table 5.12. Shares of Deposits in Total Liabilities by Sector**

% of Total Liabilities	1980–86	1990–96	t-value	Significant at 5%	Sign of expected change
Total Private Sector Deposits	53.8 (5.58)	32.09 (2.7)	-9.26	Yes	positive
<i>Demand deposits</i>	30.91 (3.83)	14.94 (3.22)	-8.45	Yes	positive
<i>Saving deposits</i>	19.36 (6.12)	14.3 (1.27)	-2.14	Yes	positive
<i>Time deposits</i>	3.53 (1.19)	2.83 (1.4)	-1.01	No	positive
Public Sector Institutions deposits	4.97 (1.39)	11.44 (1.36)	+8.80	Yes	?
Government deposits	1.93 (0.74)	4.29 (1.05)	+4.86	Yes	?

*Source:* Computed with data from Bank of Ghana Annual Reports.

*Note:* End of December values only; Standard deviations are in brackets.

The following section is concerned with how the financial reforms have affected costs and income inflows in the banking sector. This enables us to make an informed judgment on the balance of focus in the restructuring exercise. The reforms removed troubled assets from banks, thereby improving their profitability indicators. Nevertheless, in the long term if the banks are not to be given future removal of non-performing assets, then more competent staff are needed to design and implement measures to improve income generation and assess risk. The shares of various types of operational expenses in total assets have to be reduced, while net interest income and other income from intermediation activities should be increasing reasonably to maintain profitability. Nonetheless, bank performance will still

be dependant on how well the underlying real economy is faring.

## Indicators of operational efficiency

The nature of bank profit and loss statements made it difficult to compare data on operational measures across the entire 1980–96 period. The new accounting system has been used by most banks since 1988. This has standardised entries and allows greater comparative analysis. The following discussion concerns the period 1988–9, namely before the removal of bad debts from banks but after substantial implementation of major monetary control and exchange-rate reforms, and then for 1990–96, after the implementation of the Banking Law (December 1989).

The following indicators were analysed:

Ratios of various types of operational expenses to total assets, shareholders' funds/total assets, provisions for bad debt/total assets, other operating income/total assets, net spread  $((\text{interest income}/\text{net advances}) - (\text{interest expenses}/\text{deposits}))$ , net interest income/total assets, net loan loss provisions/total assets or total loans.

After the introduction of the financial reforms, we expect a decline in the ratios of the various types of operational expenses to total assets, provisions for bad debt/total Assets, net loan loss provisions/total loans. We also expect an improvement in other operating income/total assets, Net Spread =  $((\text{Interest Income}/\text{Net Advances}) - (\text{Interest Expenses}/\text{Deposits}))$  and Net Interest Margin =  $\text{Net Interest Income}/\text{Total Assets}$ .

Net spread does not refer to interest rate spread, but is a ratio showing by how much interest income derived from lending exceeds the interest costs of deposits. Given that interest rates were liberalised as part of the financial sector reforms, both interest income and interest costs should rise, but provided banks ensure that they have a good quality loan portfolio, the net spread should also rise. It could also rise because interest rate spreads are widening (instead of narrowing, as was theoretically expected under financial liberalisation). In Ghana interest rate spreads have widened since financial liberalisation (see Chapter 4).

Net spread increased in magnitude significantly in 1990–96 as compared with over 1988–89 (Table 5.13), showing that the share of bank profitability

from core intermediation activity had increased due to expected operational efficiency and greater interest income. The interest income from investments (mainly Government securities, Bank of Ghana Bills and Treasury Bills) made up the largest share of interest income at 45.2 % in 1990–96, with interest income from advances at 32.3% (Table 5.14).

**Table 5.13. Measures of Operational Efficiency <sup>a</sup>**

Variable (%)	1988–89	1990–96	Expected Sign	t
OPREX/T.A.	7.19(2.41)	4.66(0.67)	negative	-2.86 <sup>c</sup>
STEX/T.A.	4.37(1.01)	2.92(0.58)	negative	-2.75 <sup>c</sup>
OTPEX/T.A.	2.32(1.3)	1.42(0.24)	negative	-2.08 <sup>b</sup>
OCCEX/T.A.	0.5(0.1)	0.32(0.06)	negative	-3.34 <sup>e</sup>
LLPROV/T.A.	6.97(1.24)	1.5(0.57)	negative	-9.67 <sup>d</sup>
PROV/T.A.	15.78(1.87)	4.80(1.72)	negative	-7.86 <sup>d</sup>
Net Spread	48.26(10.64)	66.8(12.36)	positive	+1.90 <sup>b</sup>
Net Interest Margin	3.87(1.38)	7.09(1.32)	positive	+3.02 <sup>e</sup>
OPI/T.A.	6.07(3.43)	4.32(1.78)	positive	-1.04

*Source:* Annual Reports of Banks and Bank of Ghana.

*Note:* Values in brackets are standard deviations. (a) T.A.= total assets, OPREX=operating expenses, STEX= staff costs, OTPEX=other operating expenses, OCCEX=occupancy expenses, LLPROV = net loan loss provisions (provisions for debt less recoveries), PROV= provisions for bad debts, and OPI= other operating income, Net Spread= ((interest income/advances) - (interest expenses/interest bearing deposits)) \* 100. Net Interest Margin = net interest income/total assets; (b) significantly different from zero, under a one tailed test, at the 5% level:  $t_{7,0.05} = 1.895$ ; (c) significantly different from zero, under a one tailed test, at the 2.5% level,  $t_{7,0.025} = 2.365$ ; (d) significantly different from zero, under a one tailed test, at the 0.5% level,  $t_{7,0.005} = 3.499$ ; (e) significantly different from zero, under a one tailed test, at the 1% level,  $t_{7,0.01} = 2.998$ .

Net interest income/Total assets rose from 3.87% in 1988–9 to 7.1% in 1990–96, while interest expenses total assets fell by about 0.2 % between the two periods.<sup>38</sup> The most substantial rise in interest expenses came from the payment of interest on current accounts (demand deposits). This rose by 18.47% of total interest expenses; while that on savings fell by 1% (see table A5.3 in Appendix IV). There were declines in the level of shares of interest expenses from time deposits and borrowing by banks from local and foreign

38. Interest expenses/total assets averaged 5.18% in 1988–9 and 4.95% for 1990–96.

sources of 19.37% and 3.4% respectively between the two periods.

**Table 5.14. Shares of Interest Income**

%	1988-89	1990-96	t statistic
Interest Income from Advances	59.18 (6.31)	32.34 (3.04)	-9.07 <sup>a</sup>
Interest Income from Investments	21.12 (2.45)	45.2 (7.98)	+4.03 <sup>a</sup>
Interest Income from short-term funds	19.70 (3.86)	22.47 (8.77)	+0.419 <sup>b</sup>

*Source:* Worksheets.

*Note:* Values in brackets are standard deviations. (a)= significantly different from zero, under a one tailed test, at the 0.5% level,  $t_{7,0.005} = 3.499$ ; (b)= not significantly different from zero.

Banks began to offer interest on current accounts of more than  $\text{€}3$  million in 1988 at about 3-5% p.a.; this limit on current accounts was  $\text{€}10$  million, at a rate of 5-16.5% p.a. in 1996. Prior to interest-rate liberalisation, there was no interest paid on current accounts. These returns on demand deposits are low, but demand deposits accounted for 53.71% of total deposits in 1990-96 as compared with 65.63% for 1980-86. The existing profile of bank deposits shows that current account deposits still provide banks with the largest and cheapest source of funds (Table A5.2). The net interest income/total assets ratio (net interest margin) also rose significantly. Net interest income grew on average by 57.47% p.a, while total assets grew by 36.65% in the 1988-9 period.

The ratio of other operational income to total assets (OPI/TA) gives a quantifiable measure of the impact of non-traditional bank income, which is income not based on loans or any financial investments but mainly income from commissions and fees, income from foreign-exchange transactions and dividends. After interest rate liberalisation, implementation of objective criteria for entry into the sector (under the Banking Law 1989) and bank restructuring, this ratio is expected to rise, because of competition and the diversification of income sources due to the expected narrowing of interest rate spreads. OPI did not behave as predicted, i.e it did not change significantly between the two periods (Table 5.13).

All component shares of operational expenses in total assets are expected to decline after the major financial sector reforms. The ratios of expenses in total assets all declined significantly as expected.

These were the effects of the bank restructuring measures, and in particular the three-year bank turnaround plans implemented for the distressed state-owned banks (GCB, SSB, NIB, BHC, ADB, NSCB and later by COOP), which involved changes in bank management teams, staff reductions, closure of unprofitable branches and efforts to cut expenditures. These measures were implemented between 1989/90 and completed by 1992.

The averages for net loan loss provisions/total assets and loan provisions/total assets (Table 5.13) show that, relative to total assets, these provisions have declined substantially between the two periods.<sup>39</sup> At face-value this means that there has been a significant improvement in the quality of the lending process in many banks and ultimately bank solvency. A certain scepticism is valid at least for regard to these observations, however. First, two previously restructured banks, BHC and COOP, were expelled from the cheque clearing system in 1996 because they had liquidity problems arising from poor lending policies. Secondly the NIB, with its high advances to deposits ratio of over 100% in 1996, faced liquidity problems in 1997–8. Finally comments made by some bank officials during the survey about loan recovery pointed to problems with loan repayments in 1990–96 (Chapter 6).

### *Measures of operational efficiency for the Big Four banks*

Data to assess the indicators of operational efficiency were not available in the desired form for 1980–86, the only proxy which assists this assessment being the shareholders funds/total assets ratio. This ratio depends on retained profits, equity capital, and bank reserve funds as required by the Banking Law.

The shareholders funds/total assets ratio of the Big Four banks was 4.14% in 1980–86 and rose to 12.84% in 1990–96. This change was significantly different from zero (at the 0.5% level). It points to rising income retention by the four banks from their operations, including increasing injection of capital. The latter has been possible because all four banks are listed on the Ghana Stock Exchange. Ultimately these activities depended on good operational performance by these banks.

The other indicators are net spread, operating costs/total assets, and the

---

39. Net loan loss provisions are obtained by removing loan recoveries from provisions for bad debt.



net interest income/total assets ratios for 1990–96 (Table 5.15).

**Table 5.15. Indicators of Operational Efficiency for Big Four Banks**

Year	Operating expenses/T.A.	Net interest margin	Net spread
1990	4.04	5.33	87.82
1991	4.27	6.38	96.49
1992	4.77	5.35	52.01
1993	4.23	5.80	72.04
1994	4.59	6.69	78.39
1995	6.88	9.23	99.30
1996	6.47	9.77	78.84
Average	5.03	6.94	80.70

*Source:* Calculated from bank financial statements.

The share of operating costs in total assets was higher than that for the sector as a whole. This is mainly due to BBG and SCB which had higher operational expenses. Over the period these two banks invested substantially in automatic teller machines, computerisation and information technology. By 1996 most branches of BBG in the capital Accra were connected, and BBG went a step further (in 1997/98) by connecting all other branches in Ghana, and through a satellite link connecting them to their UK and Gambian network so that clients' can access their accounts from most branches of BBG.<sup>40</sup>

The net interest margin for the Big Four banks was only slightly lower (by 0.12%) than that for the banking sector in 1990–96. Net spread was about 20 percentage points than the sector average for 1990–96 (see table 5.13). This resulted from their holding a larger volume of loans and deposits in a period of widening interest rate spreads.

40. High Street Journal newspaper (Banking Survey), 23 November and 7 December, 1997, and interviews with bank staff. See also Standard Chartered Bank Annual Reports for 1993 and 1996.



## **Correlation between profitability, market structure, and demand for banking services**

The literature review in Chapter 2, provides some testable hypotheses on the relationship between ROA and variables relating to market structure, capital, intermediation, management or operational efficiency, and GDP per capita (demand or economic factor). Owing to the small sample size, these were tested for 1988–96 data by using the non-parametric Spearman's rank correlation coefficients of proxies of these factors with the return on assets (Table 5.16).

The significant but declining statistical relationship of deposit concentration with ROA does not agree with the results given by Agu (1992) for Nigeria, on Abdulla (1994) for Bahrain, but agrees with that for Malawi (Chirwa, 1996) which also undertook financial reforms from 1987. This result is due to the increasing profitability of the smaller banks at the same time as the dominance of the Big Four banks was gradually declining.

The number of branches shows a negative correlation with ROA, despite the fact that the number of branches has decreased and operational improvements, shown by the positive and significant relationships between net spread and net interest Margin with profitability, together with the declining share of operating costs in total assets, have more than offset the benefits of a larger branch network.

Economic theory suggests a positive relationship between market structure variables and the profitability of a firm (structure-conduct-performance hypothesis). This is shown only for the total assets of banks which showed a significant positive relationship with ROA. GDP per capita also shows a positive relationship with ROA. The relationship of the share of stated capital in total assets with ROA across the 1988–96 period is also positive and significant reflecting that the banks have been able to ensure that growth in capital went hand in hand with increased profitability. These tentative results could be confirmed or refuted with a larger sample period and the application of regression analysis, which is not feasible with the available data.

Table 5.16. Correlation between ROA and other bank performance indicators

Variable	Spearman's Rank Correlation Coefficient
<i>Market Structure</i>	
Deposit Concentration	-0.72 <sup>c</sup>
Total Assets	+0.80 <sup>b</sup>
No. Of Branches	-0.84 <sup>a</sup>
<i>Intermediation and Deposit-Mix</i>	
Deposits/Total Assets	+0.20
Advances/Deposits	+0.08
Advances/Total Assets	-0.30
Time & Savings Deposits/Total Deposits	-0.05
Balances with Bank of Ghana	-0.72 <sup>c</sup>
Cash & Short-Term Funds/Total Assets	-0.63 <sup>d</sup>
<i>Operational Performance</i>	
Net Spread	+0.58 <sup>d</sup>
Operating Costs/Total Assets	-0.23
Net Margin	+0.79 <sup>b</sup>
Provisions for Bad Debt/Total Assets	-0.73 <sup>c</sup>
Net Loan Loss Provisions/Total Assets	-0.57 <sup>e</sup>
<i>Demand Factor</i>	
GDP per capita	+0.80 <sup>b</sup>
<i>Capitalization</i>	
Shareholders Funds/Total Assets	+0.45
Stated Capital/Total Assets	+0.47 <sup>e</sup>

Source: Worksheets.<sup>41</sup>

Notes: (a) = significant at the 0.5% level; (b) = significant at 1% level; (c) = significant at 2.5%; (d) = significant at the 5% level; (e) = significant at the 10% level.

41. Critical values of the Spearman rank correlation test for a sample size of 9 at various levels of significance are given below:

$\alpha$	0.001	0.005	0.010	0.025	0.05	0.100
N = 9	0.9000	0.8167	0.7667	0.6833	0.5833	0.4667
Source: Kaniji, 1990: Table 26						
Note: $\alpha$ = level of significance.						

**State-owned banks and private banks 1990–96<sup>42</sup>**

The private sector banks are those with less than a 51% government shareholding and whose boards of directors are not appointed by the government. The various indicators studied show clearly the better performance of the private banks (Tables 5.17).

**Table 5.17. Average Performance of State-Owned and Private Banks (percentages)**

Average Index for:	State-Owned Banks	Private Banks
<i>Profitability</i>		
ROA	1.41	1.83
<i>Intermediation</i>		
ADV/Deposits	120	139
<i>Operational efficiency</i>		
Net Interest Margin	113	134
Net Spread	114	89
OPREX/Total Assets	122	165
<i>Balance Sheet Shares</i>		
INV/Total Assets	98	65
SHF/Total Assets	92	69
CSHTF/Total Assets	87	109
ADV/Total Assets	110	154
Deposits/Total Assets	93	111

*Source:* Tables A5.5 and A5.6.

*Notes:* ADV= advances. OPREX= Operating Expenses; INV = Investments; SHF= Shareholders' Funds; CSHTF= Cash and Short term funds.

The following points were noted:

- The privately run banks were more profitable in terms of ROA.

42. State-owned banks are: GCB, SSB, NSCB, BHC, ADB, NIB for 1990–3; GCB, SSB, BHC, ADB, NIB for 1994; and GCB, BHC, ADB, NIB for 1995–6. The private banks are: SCB, BBG, MBG, CAL, EBG for 1990–2; SCB, BBG, MBG, CAL, EBG, MBBG for 1993–1994; SCB, BBG, MBG, CAL, EBG, TTB, FAMBL, METRO, SSB for 1995; SCB, BBG, MBG, CAL, EBG, TTB, FAMBL, METRO, SSB, PBL for 1996. COOP, BCC and ICB were excluded for lack of data.

- In terms of intermediation, the advances to deposits ratio reveals that privately run banks were better performers. This is supported by their higher shares of advances and deposits in total assets, despite holding a larger share of cash and short-term funds in total assets.
- The state-run banks held a greater share of investments (government securities, Bank of Ghana Bills and short-term securities) in total assets than the private banks. This implied that they were not prepared to take the greater risk involved in higher levels of lending.
- In terms of operations, the private banks had a higher share of operating expenses relative to total assets. These banks have spent a lot on computerisation, automatic teller machines, and branch refurbishment.

## Summary and conclusions

The data show that, despite the aim of enhancing financial intermediation, the banks have not increased the shares of deposits and net advances in their balance sheets following the financial reforms. Instead these shares have declined. Rather, banks have derived considerable profit by holding as secondary reserves government securities, Bank of Ghana Bills and Treasury Bills. The positive impact of these investments on bank income has been higher than that of advances. Furthermore, the deposit mix, in particular, the share of private sector deposits which is a reflection of the effects of financial liberalisation on savings mobilisation, showed a significant decline between the two periods 1980–86 and 1990–96. Overall, deposits (public and private) were mainly held in the form of current accounts (demand deposits), followed by savings deposits and time deposits. In addition, banks have not been able significantly to attract longer-term deposits to engage in longer-term lending.

These results provide evidence that the use of a number of bank-specific indicators is useful in revealing the different effects of the financial sector reforms on the different facets of bank performance, namely the effects on market structure, intermediation and general operations. The removal of non-performing assets had an immediate impact on bank performance. The impact of macroeconomic instability from 1992 showed itself in the volatility of real interest rates, the widening of interest-rate spreads and the shift by banks into holding safe zero risk government and Bank of Ghana securities which are also reserve eligible. This instability is not conducive to lending,

especially long-term lending, as greater uncertainty is introduced into business planning. The Return on Assets and the Return of Earning Assets both changed positively between 1980–86 and 1990–96. Thus the profitability of the banking sector increased considerably between the two periods. For the Big Four commercial banks, all these indicators changed significantly. There has also been a continual reduction in the overall dominance of the Big Four during the period 1990–96, implying some growth in the importance of the smaller banks.

In the sectoral allocation of advances, the profile changed between the two periods, but with still more emphasis on commerce. Actual intermediation, measured by deposit mobilisation (deposits/total assets), and advances from deposits declined in relative terms, even though these were expected to have improved significantly as a result of the reforms. There was also a rise in interest income from short-term funds. The lowering of net loan loss provisions/ total assets was also evident.

Across the 1988–96 period the ROA had a positive statistical relationship with the share in total assets of capital, net spread, net interest margin, bank size and income per capita, while it showed a negative statistical relationship with the share in total assets of balances with the Bank of Ghana, cash and short-term funds; deposit concentration; number of bank branches, provisions for bad debt and the net provisions for bad debt after recoveries. Furthermore, the impact of the financial reforms on the banks in terms of total assets was greater on dealing with issues of capitalisation and the holding of short-term liquid assets. Though it enabled banks to have access to more avenues to invest funds in secondary reserves, reserve requirements were also high but with the added bonus of higher returns than in the pre-reform period. The record for intermediation was poor contrary to expectations, but there were improvements in income generation.

The performance of the state-owned banks was found to be below that of the private banks in terms of profitability, intermediation and operations. It was only in operational expenses that the state-owned banks were better, but this was due to investments in equipment and information technology by the private banks.

## Perceptions on Financial Sector Reforms

### Perceptions of bank performance by bank clients<sup>1</sup>

A survey was carried out to gauge the perceptions of bank customers on the significant changes in their bank services which they considered to have taken place since the onset of the financial sector reforms in 1987. The survey questionnaire was handed out to 75 businesses or enterprises in the industrial area and the central business sector in Accra.

In 20 cases it was answered in the presence of the survey officers and 27 others completed it by the set deadline. Of these 47 respondents, 11 were sole proprietorships, 31 limited liability companies, 2 partnerships, and 3 sole proprietors/salary-earning employees of other institutions.

In terms of sectoral distribution, 13 were in the manufacturing or industrial sector while 34 were in services. Agriculture and mining were not represented. Seven were state-owned, 26 Ghanaian private sector-owned, five were foreign-owned and nine had either joint Ghanaian/foreign ownership. The businesses had been in existence from less than five years to dating back to the 1930s.

The questionnaire covered three broad areas, namely:

- changes to bank customer services;
- new bank products and policies; and
- bank staff competence.

There were 13 fixed-alternative questions for which respondents were normally required to choose one of four, five, or six options (see Appendix III). Throughout this section the views of these different groups will be highlighted only when they are markedly different from the rest.

### *Credit service to customers*

Respondents were asked their opinions on the ease in obtaining credit, bank monitoring of borrowers, requirements for loans and the trend in bank fees and commissions. They had 6 alternatives to choose from, i.e. 'strongly

---

1. The survey was conducted between October 1997 and January 1998.

agree', 'agree', 'neither agree nor disagree', 'disagree', 'strongly disagreed', and 'no idea'. For the purpose of the analysis the first two possible responses are considered favourable, the third is neutral and the fourth and fifth are unfavourable responses. In terms of:

**Ease in obtaining bank credit.** 9% of customers strongly agreed that it was now easier to obtain credit from banks than in the period prior to 1987. Overall, 32.6% of all respondents considered that credit was easier to obtain, while 15.2% were neutral and 43.5% disagreed about the easy accessibility to credit. 64% of sole proprietors did not agree with this statement and only 31% of service sector respondents agreed with it.

**Speedier approval of loan applications.** 31% of respondents agreed that the loan approvals process was quicker, 11% were neutral, while 49% thought loan approvals now took longer than before 1987. 25% of respondents in the services sector were in favour of the statement and 62% of those in manufacturing.

**Increased number of loan requirements after the reforms.** 20% of respondents agreed with this statement, while, 17% were neutral. 50% of bank clients did not think that loan requirements had increased in number. 13% had no opinions on the matter.

**Closer monitoring of borrowers by banks after the reforms.** This was favourably considered by 59% of respondents; only 11% did not agree.

**Increased commissions and fees are being charged by banks compared with the pre-1987 period.** The agreement with this statement was overwhelming. As much as 94% agreed, and there was no disagreement.

**Factors that influenced loan repayments before the financial sector reforms.** Only 7 respondents answered this question. It was acknowledged that the low interest rates which were then fixed administratively and the exchange rate stability should have assisted businesses. Poor economic conditions however did not encourage loan repayment. Four respondents complained about unscheduled cancellations of government contracts and the very poor payment schedules for government projects. These had a negative influence on loan repayment.

Factors that have influenced loan repayments since the introduction of the financial sector reforms. On the positive side, there was only one comment



that the supply of inputs (in particular fuel) was better and that business conditions were better for active loan repayments. On the negative side, out of 31 comments, the majority mentioned high lending rates; 16% were concerned that the continuous depreciation of the cedi was affecting their loan repayments and business performance. One trading house mentioned exchange-rate movements as wiping about 70 million cedis from its profits in 1996. The other important factors mentioned were the continuing high rate of inflation, falling demand for goods and the short-term nature of bank loans (10% each). It was mentioned that those in the construction sector faced delays in payment, especially for government projects, and untimely cancellation of contracts because of fiscal considerations.

### **Bank customer services**

The respondents were asked to make comments on any noticeable changes to bank customer services since 1987. Secondly, they were asked to name banks which in their opinion had performed well in all respects.

The first case had multiple answers, giving 91 responses in all. 3% thought that there was not much change in customer services, while 8% thought there was none or did not answer the question. Of the 89% who stated that bank customer services had improved, 21% noted that services were faster and had improved, 24% mentioned computerisation, 7% thought that cash counting machines had reduced waiting times. Others commented on staff friendliness and co-operation (11%) and the introduction of new products (11%).

The overwhelming choices for the best banks in the opinion of the respondents, in terms of customer services and performance, were the private sector banks. In order of ranking the first state-owned bank was placed fifth. This supports the finding in Chapter 5 that, the private sector banks have outperformed the state owned banks since 1990.

**Bank response to customer requests after the introduction of financial sector reforms.** This was to ascertain whether banks do respond to customer requests in general, and to support the answers given to the question on noticeable changes in customer services since 1987 already discussed. 62% of respondents concurred that bank responses were now much quicker.

**Bank products and policies since the introduction of the reforms.** On new bank products encountered since the reforms, the following were mentioned:



automatic teller machines (ATMs) introduced initially by Meridian BIAO Bank (MBBG) in 1992 and now also in operation with BBG, SCB and TTB at their branches; Sika Card - a cash card introduced by SSB in 1996; foreign currency deposit accounts since 1989; money link card - a credit guarantee card from SCB since 1993; call accounts; cheque discounting facility offered by CAL; and mobile cash deposit schemes offered by most banks to such customers as traders and revenue-collecting public institutions. The respondents also said that computerisation and counting machines had speeded up counter services. Of these products, the overwhelming majority of respondents mentioned that the ATMs were very useful and others mentioned call accounts and foreign currency deposit accounts.

Concerning their choices of financial securities to invest in, most mentioned Treasury Bills first, then fixed or time deposits and company shares. They cited security and attractive interest rates for Treasury Bills and fixed deposits (whose rates were negotiable for large amounts). Treasury Bills could also be used as collateral. Most respondents stated that they held most of their funds in current accounts or demand deposits, which were seen as more convenient for transactions or making withdrawals confirming the evidence given in Tables 5.11 and A5.2. Savings Deposits and Fixed Deposits came next. A few said they kept their savings in foreign currencies.

Banks policies such as minimum deposit requirements (mentioned by sole proprietors), high lending rates and high bank charges caught the attention of respondents as damaging. Financial sector policies such as interest-rate liberalisation had resulted in high lending rates but slower growth in deposit rates. Other adverse factors mentioned were the steady depreciation of the cedi and tight credit conditions because of higher loan rates.

### *Perceptions by clients' on bank staff competence and customer relations*

The ability of banks to perform creditably and attract more customers depends in a large measure on the relationship between staff and clients. The study enquired about clients opinions on staff competence, responsiveness, and accessibility since the introduction of the financial sector reforms. Respondents had 5 or 6 alternatives to choose from: 'Excellent', 'Good', 'So-so', 'Poor', 'Very Poor', or 'No idea'. For this analysis, the first two options were considered favourable, the third neutral, and the fourth and fifth are ranked as unfavourable responses (Table 6.1).

Bank staff received highly favourable ratings on their technical competence

(83 % of responses versus 4% who disagreed), accessibility (79% of the responses while 7% disagreed). On the issue of timeliness of responses to customer requests 72% agreed, 21% were neutral and 7% disagreed.

**Table 6.1. Perceptions of Bank Staff**

%	Favourable	Neutral	Unfavourable	No idea
Technical competence	83	11	4	2
Timeliness	72	21	6	
Accessibility	79	15	7	

*Source:* Survey

*Note:* Numbers may not add up to 100 because of rounding.

In terms of an overall summary, 72.3% of respondents stated that they were satisfied with their bankers since the reforms, 21.3 % were indifferent while 6.4% were dissatisfied. At the same time, 23% felt that their bankers worked with them as true partners and made frequent contact with them, 46% saw them as consistent providers of funds and advice who met their deadlines, and 18% regarded their relationship with their bankers as a reactive one, with the bankers providing them with standard products and services. 13% were definitely not happy, and felt that their bankers did not seek to build any relationship with them.

### *Summary and conclusions*

The objective of liberalising interest rates under the reforms has been undermined by high inflation, leading to the Bank of Ghana imposing high discount rates and therefore high loan rates. This was the most important factor impeding loan repayment by borrowers. The depreciation of the cedi also affected repayment.

Overall, respondents had noticed an increasing range and diversity of bank products and services in the post-reform era. From a small majority of bank customers, credit was not easier to obtain and loan processing took a longer time. Clients also acknowledged that the banks were doing a better job in monitoring borrowers. They had also noticed a general rise in commissions and fees.

Important factors militating against loan repayment prior to the economic

reforms were inflation, lack of foreign exchange, and supply constraints. Since the introduction of the financial reforms, bank clients have complained that, high lending rates, rapid depreciation of the cedi, inflation and demand for their products or services were their major problems as far as loan repayment was concerned. On the positive side, the improved availability of inputs for their businesses has enhanced their performance and ability to meet loan repayments.

They also confirmed the view that most deposits were still demand deposits, and that what hurt their banking habits most were the wide interest-rate spreads (with high lending rates and much lower deposit rates) and the minimum deposit requirements for small-scale entrepreneurs. In general, bank customers were happy that bank services (making increasing use of modern information technology) were faster and had improved. In addition, bank staff were more helpful and friendly.

The responses given support the findings of Chapter 5, namely, the profile of deposit types and the general decline in lending. They also emphasise that problems with loan repayment are related to inflation and the resulting high lending rates.

Bankers need to address the issues of widening interest-rate spreads and higher minimum deposit requirements if they are serious about deposit mobilisation from the general public. Otherwise, there is the danger that they may concentrate on their captive or niche segments of the financial market and lose ground to the NBFIs sector.

## **Perceptions of financial sector reforms by banks**

In the attempt to obtain the views of bankers on the impact of the financial sector reforms, questionnaires were sent to 11 banks which were in existence by 1990. Of these 7 responded, giving their views about how the reforms had influenced their operations. The questionnaire was in 3 parts, the first providing general information on their activities, the second dealing with the impact of specific measures implemented as part of the reforms, with some comparisons with the pre-reform situation, and the last part dealing with the impact of competition (see Appendix II).

Of the respondents, 2 classified themselves as commercial banks, 2 were development banks and 3 were merchant banks. In terms of ownership, 3 were state-owned and 4 private sector-owned. Where any views were distinctly different these are highlighted in the discussion.

**General information about banks.** Banks in Ghana can be said to be similar

as their services and products are similar. The main banking group which performs specific functions is the merchant banks, which deal mainly with corporate clients. Even so, the other banks also provide merchant banking services such as leasing and project financing. A distinctive feature about the new merchant banks that have been established is that they do not offer savings accounts but maintain their focus in dealing with corporate clients. Otherwise, they offer similar products to the others.

Since the introduction of the financial reforms some of the new banking products introduced on the market include, call accounts, daily/weekly/monthly interest-bearing savings accounts, cash cards (sika card), Cheque guarantee cards, Credit cards, Overnight deposit accounts, Cedi traveller's cheque. Automatic Teller Machines were also introduced from 1992 onwards.

One aim of the reforms was to encourage banks to become more cost-conscious and efficient. As a result, many banks have rationalised their branch network. A few opened new branches but many more branches have been closed. The main reason given for opening new branches has been to take advantage of increasing business developments in fast-growing areas in Accra, Tema and Takoradi, and also to reduce congestion at branches in the Accra central area. Those sited at the port towns of Tema and Takoradi were meant to allow closer contact with export-oriented and industrial clients. Specifically for Takoradi, the banks intended to strengthen their presence near the rapidly growing mining and wood processing centres of the Western Region of Ghana. One bank stressed that the establishment of its new branches was in line with its objective of promoting trade in the ECOWAS region. Reasons cited for branch closures were : declining economic activities in the given areas; and persistent loss-making over 3 to 5 year periods.

In summary, banks in Ghana generally offer similar products and services. Only the merchant banks have shown some focus on the corporate sector. The sector reforms, in implementing stringent prudential requirements and market-based policies, have forced banks to take greater account of branch profitability and the general economic prospects in various areas.

### *Impact of financial sector reforms*

**Equity.** 6 of the 7 banks stated that the capital requirements under the Banking Law and the established capital market had helped them raise equity funds.

**Prudential returns.** They confirmed that the number and frequency of returns to the Bank of Ghana had increased in comparison with the pre-reform era. Furthermore, they also stated in all cases that the prudential requirements had helped them improve internal controls.

**Bank supervision.** They stated, that banking supervision had improved to a great extent, but 2 banks said that off-site surveillance had improved only marginally and that in some cases returns were not scrutinised quickly and carefully.

**Banking sector development.** There was general agreement that the financial reforms had created an enabling environment for the development of the sector.

**Liquidity requirements.** These were seen as being designed to favour the holding of government or public sector securities, but it was noted that returns on these securities had become more attractive during 1990–96.

Following this, questions were asked on the policies or measures implemented as part of the financial sector reforms that had adverse and positive effects on bank performance.

**Policies with positive effects.** All banks mentioned interest-rate liberalisation and the removal of sectoral credit allocation as having a positive impact on their operations. Both the merchant and commercial banks mentioned also the exchange -rate reforms which were not part of the financial reforms but of the general economic reforms pursued since 1983, because of the exchange gains they had made on foreign currency denominated loans plus fees on overseas transfers. The commercial and development banks both included the establishment of NPART and bank restructuring. Finally the merchant and development banks stated that they were assisted by the establishment of discount houses and the introduction of zero risk-rated Bank of Ghana Bills.

**Policies with adverse effects.** The (strictly) commercial banks ‘not applicable’ in answer to this question. The development banks were not happy with the unified cash reserve requirement on demand, savings and time deposits. Together with the merchant banks they complained about the establishment of many non-bank financial institutions, apart from the discount houses. The merchant banks specifically mentioned the operations of forex bureaux. They also acknowledged the existence of more competition, because of the

licensing of more banks as part of the liberalisation of the sector. Lastly, the high reserve requirements which were meant to dampen inflationary pressures were bothersome.

**Effects of the imposition of the 6% minimum capital adequacy ratio (CAR).** Apart from the commercial banks, the other banks said that it constrained their ability to lend, thereby making them cautious and conservative about lending. All the respondents stated that they were able to maintain capital adequacy ratios at higher levels than 6%. The commercial banks said that this requirement had assisted the prudent management of their banks. It had forced them to improve the management of assets and liabilities, in particular in paying attention to risky asset holdings.

**The Banking Law of 1989.** One commercial bank said that it had helped ensure prudent lending. Other effects of the law on bank operations were the following:

- it affected reporting by ensuring the prompt submission of returns to the Bank of Ghana;
- it helped improve internal controls and supervision; and
- it forced the injection of new equity capital.

**Lending, loan procedures and loan recovery.** Lending constitutes an important part of banking. Successful and sustainable bank performance is largely dependent on the quality of lending procedures, monitoring of borrowers, early detection of doubtful loans, and timely loan recovery where necessary. The banks reported no significant change in average loan maturity since the onset of the reforms.

Five banks stated emphatically that their loan recovery efforts were now more effective than in the pre-reform period. Loan recovery rates reported ranged from 10% to 99%. These five banks gave average rates for 1990–96 of 95%, 99%, 10%, 55%, and 78%. However, one development bank stated that its loan recovery rate was about the same and was still low. Anecdotal evidence gave the impression that these figures were the best values ever obtained by the banks in question, and that they were having problems with borrowers. In any case, the situation was much better than before bank restructuring. The 1980–86 values were given by only three banks, at 50%, about 0% and 85%.

Five of the seven banks noted that the level of loan requests had increased in the post-1990 years when compared with the period prior to the reforms.



At the same time loan screening costs had gone up because more effort was being put into loan appraisal.

**Pressure on banks to lend to SOEs and particular firms/individuals.** Only one bank (state-owned) agreed that there was pressure being put on it by government officials or politicians to lend to state-owned enterprises (SOEs). One commercial bank neither agreed nor disagreed with this statement. The other 5 banks disagreed with this view.

However, on the question of pressure to lend to particular firms or individuals, two banks (state-owned banks) agreed with this view. Of the rest, one did not commit itself, one had no idea and the other three banks disagreed.

**Major reasons given by banks for firms' default on loans before the reforms** All the six banks which answered this question mentioned weak loan appraisal processes on their part and poor monitoring and supervision of borrowers. Three out of the six banks, stated that the high level of devaluations when the general economic reforms began in 1983 and the continuing depreciation of the cedi caused the cedi value of foreign currency loans to rise rapidly, causing repayment difficulties for borrowers. Two banks mentioned weak or incompetent management on the part of both banks and enterprises. Other reasons given were inflation, poor loan recovery efforts, the weak capital base of enterprises and the 'lack of commitment to repay'.

**Interest rate liberalisation.** All banks felt that the decontrol of interest rates had improved deposit mobilisation, and expanded the level of loan requests. These views can only be considered right in nominal terms. They also mentioned that in setting their rates they made comparisons with rates from other banks and the Bank of Ghana. In our opinion the Big Four banks were the main points of reference, because of their domination of the sector.

**Current factors and relevance of previous causes of loan default.** Previous factors still relevant were the weak capital base of firms, the unstable macroeconomic environment (high inflation and the resulting high nominal interest rates and rapid depreciation of the exchange rate), and the weak monitoring and supervision of loans.

**Major constraints on bank performance prior to the reforms.** These were given as : interest-rate controls; credit ceilings, even though deposits had been

mobilised; state intervention on behalf of SOEs; large stock of non-performing assets; lack of skilled top management and weak bank supervision.

**Most profitable line of business.** The banks stated that the most profitable line of business before the financial sector reforms, was financing the importation of goods. The development banks mentioned lending in regard to their main focus of activity for which they were established. The 2 commercial banks mentioned lending for commerce and for manufacturing as being most profitable during the 1990-96 period. The others mentioned short-term financial investments (Treasury operations).

**Effects of persistent inflation on clients.** The banks all agreed that inflation was hindering deposit mobilisation. Sophisticated customers were in the main turning to other financial instruments, especially financial securities such as Treasury Bills.

**Competition.** All the banks agreed that competition in the banking sector had increased. It was noted that:

- the number of banks had increased. While some had opened new branches, others had closed branches especially those outside the major urban centres in order to improve performance;
- many old branches were being relocated or renovated;
- each bank had introduced a new product or a variant of old products or services in order to entice customers who in turn had become more sophisticated.

The merchant banks specifically mentioned the competition from the increasing number of NBFIs. The establishment of the Stock Exchange was mentioned as providing another source of long-term corporate financing.

Specific policies mentioned as contributing to increased competition included: interest-rate liberalisation; enactment of the NBFi law encouraging and regularising the establishment of NBFIs; objective criteria for entry into the banking sector; and the removal of credit ceilings.

In giving a ranking in descending order of major competitors, all banks ranked other banks first. But for one bank the ranking afterwards was in the order of NBFIs, the Stock Exchange and informal sector operators. One development bank with a reasonably large presence in rural areas put informal sector operators second on the list.



Two banks were concerned with the apparent lack of sanctioning of NBFIs by the Bank of Ghana when they act contrary to the regulations. They cited the examples of the pyramid schemes in 1993–5 (via the institutions Pyramid Ltd, Resource 5 Ltd and the Christian Benefit Centre).<sup>2</sup>

### *Summary*

In general, the financial sector reforms have had a positive impact on bank operations. Specific positive measures which enhanced performance were the decontrol of interest rates, the decontrol of credit allocation, the establishment of discount houses, bank restructuring and the removal from bank balance sheets of much of the heavy load of non-performing assets to NPART. Decontrol of credit ceilings meant that the deposit mobilisation effort corresponded with greater earning assets for the banks. In their view, reform measures which need to be ameliorated are the unified cash reserve requirement on all deposits which ought to be decoupled, and the high level of overall reserve requirements.

There was some hint that state-owned banks had some pressure put on them by politicians or government officials to lend to particular firms or individuals but as this was reported by only one bank it cannot be concluded that there was any 'hidden' official policy. Nevertheless, in the pre-reform period there was state intervention on behalf of state-owned enterprises.

Loan recovery appeared to be still a problem in 1994–96 even though loan applications were better appraised than in the pre-reform period. It was clear that a lot of work had to be done in this area through more pro-active monitoring and supervision of borrowers. Bankers were of the view that the problems encountered with loan repayment, apart from having to do with weakness in the capital base and management in private sector firms, also had to do with attitudes to loan repayment. However, they recognised that better private sector behaviour was ultimately dependent on macroeconomic conditions which had deteriorated since 1992. On the whole, bankers felt that the sector reforms had created a better environment for the development of the banking sector.

---

2. These were illegal savings schemes which offered very high rates of interest on short deposits compared with those in the formal banking system. By attracting a large pool of funds initially, the scheme works until the high interest payments become a burden on the less rapidly growing deposit base.

## Conclusions

### Summary and conclusions

The evidence of serious problems facing the financial sector, and banking in particular, prompted the Ghanaian government to initiate financial sector reforms with the assistance of the World Bank. The problems faced by Ghanaian banks had to do with the state ownership of most banks and also managerial and policy environment factors. The pre-1988 banking sector was plagued by high costs, poor services, low profitability, poor loan recovery and the weak capital position of all the state-owned banks. The weak macroeconomic environment of high inflation and negative economic growth compounded the problems of the financial sector. We have noted that macroeconomic variables such as growth, budget balance, credit to the private sector, and the M2/GDP ratio have each showed low points between 1982 and 1984. Another low point but considerably higher than the first was observed for 1990. The highest rate of inflation was recorded in 1983. The consequent structural adjustment programme from 1983, especially the reform of the exchange rate, precipitated the growth of large non-performing assets within the banking system. The financial sector reforms were implemented in response to a clear need for enhancing financial intermediation in order to promote savings and investment in the economy for sustainable growth.

The results of bank performance, listed in Chapter 5, showed that the Return on Assets and the Return in Earning Assets both changed in a significantly positive manner between 1980–86 and 1990–96. The profitability of the Ghanaian banking system thus increased considerably between the two periods. For the Big Four commercial banks, these indicators also changed significantly in the same direction. There has been some reduction in the overall dominance of the big four commercial banks since 1990, implying some growth in the importance of the smaller banks. Nevertheless, these four banks control over 60% of the sector's assets and therefore still have significant market power.

Large interest-rate spreads between deposit and lending rates, and the still high four-bank concentration ratio, indicate that competition in the banking sector is still not strong enough. A more competitive banking sector would limit the ability of banks to increase interest-rate spreads. The increase in such spreads following financial liberalisation therefore suggests that the sector is still in need of policies to encourage more competition. High interest-rate spreads are problematic because they penalise depositors and

discourage investment. A review of banking sector costs is necessary, in order to identify them and lead to policies to reduce them. This low level of competition is also reflected in the wider economy where very large enterprises like the Ashanti Goldfields and the Volta River Authority dominate their respective sectors and have near-monopoly power in pricing and output decisions in these sectors.

Banks changed their balance sheet profile by reducing the share of advances in terms of total assets and expanding the shares of investments and the holding of cash and short-term funds between the two periods 1980-6 and 1990-6. Meanwhile, the share of deposits fell, while that of shareholders' funds in total assets rose significantly.

The overall behaviour of the indicators studied for the pre-reform period 1980-86, or for the period during the major reforms of 1988-9 and 1990-6, indicates that the banking sector failed to increase significantly the shares of advances and deposits in its consolidated balance sheet. The advance/deposits ratio fell, contrary to the expectations of policy-makers. It was also a sign of the magnitude of the non-performing asset problem in the pre-reform period, when bad debts were treated as assets by most banks.

In the sectoral allocation of advances, the profile changed between the two periods but with still more emphasis on commerce. Deposits were held mainly in the form of demand deposits, which are a cheaper source of funds for the banks, followed by savings deposits and time deposits. Banks have not been able to attract longer-term deposits to engage in longer-term lending.

Banks did increase the share of income obtained from investments in financial securities (mainly government securities and Bank of Ghana bills). There was also a rise in interest income from short-term funds. The lowering of net loan loss provisions for bad debt/total assets was also observed.

It was evident that the Return on Assets across the 1988-96 period showed a positive statistical relationship with the share in total assets of: capital; net spread, net interest margin, bank size and income per Capita. While it showed a negative statistical relationship with the share in total assets of: balances with the Bank of Ghana; cash and short-term funds; deposit concentration; number of bank branches; provisions for bad debt and also the net loan loss provisions for bad debt.

Furthermore, the impact of the financial reforms on the banks in terms of total assets was positive in dealing with issues of capitalisation, but encouraged the holding of very short-term liquid assets. The financial reforms provided the conditions for banks to have access to more avenues to invest funds. The impact of macroeconomic instability from 1992 showed

itself in the volatility of real interest rates and the shift by bankers into the holding of safe zero-risk government and Bank of Ghana securities which are also reserve-eligible. This is not conducive to lending, especially the long-term lending necessary for industrial investment. Reserve requirements, though high, had the added bonus of higher returns than in the pre-reform period. Poor as the record for intermediation was, contrary to expectations, there were improvements in income generation. Banks have derived considerable profit by holding secondary reserves. The positive impact of these investments on bank income has been higher than that from advances.

The results provide evidence that the use of a number of indicators, both bank-specific and macroeconomic, is useful in showing the different effects of the sector reforms. The impact of the removal of non-performing assets had an immediate impact on bank profitability. The impact of macroeconomic instability also revealed itself, in responses by bank customers and bankers in the survey as confirming that people and firms are investing in short-term securities, especially government securities, Bank of Ghana Bills and Treasury Bills because of better returns.

The views of banks and bank clients were sought on the shortcomings of the reform measures implemented. In summary, these were the following:

- the failure to achieve control over inflation and the rapid depreciation of the cedi, before fully decontrolling interest rates;
- the maintenance of high reserve requirements on deposits;
- the switch from differentiated cash reserve requirements according to deposit type, to a unified cash reserve requirement;
- the slow enforcement of legal guidelines both for banks and for NBFIs by the Bank of Ghana.

Other adverse observations concerning post-liberalisation bank operations made by bank clients and the banks were:

- managerial weaknesses in the private sector;
- the weak capital base of most private sector enterprises;
- inadequate monitoring and supervision of borrowers;
- the widening of interest-rate spreads;
- the general decline in lending to the private sector;
- the growing resort to increasing minimum deposit requirements; and
- the danger of the concentration by banks on serving the needs of particular segments of the customer base.

The financial reforms have proceeded without serious regard to the nature of macroeconomic conditions in 1988–96 or even any serious national debate. The inflationary conditions in Ghana during this period had a dampening effect on the intended results of the reforms. Research on the impact of interest-rate liberalisation on gross domestic or financial savings concludes that there has been no significant effect. More evidence on this issue would need a longer sample period. The Bank of Ghana widened its monetary data coverage from 11 to 17 banks from December 1997, implying that improved data quality would help provide better results on this issue and for other analyses. Thus, the M2/GDP indicator used has its limitations, as it does not cover data from rural banks and deposit-taking NBFIs.

The rapid improvement in bank performance after 1989 despite high inflation suggests that the institutional aspects of the financial reforms should precede interest rate liberalisation. Interest rate liberalisation could have been implemented when macroeconomic conditions were better and with less haste, in order to allow banks and their clients to adjust to the new environment. Apart from the removal of bad loans and bank restructuring these institutional aspects need to include staff training and recruitment especially in the areas of credit/risk management, development and marketing of financial products, banking supervision and monetary management.

Some support has been given by the World Bank to the Institute of Chartered Accountants and the Institute of Bankers. A National Banking College was also established in 1994 as part of the financial reforms. These undoubtedly will enhance human capacity-building in the financial sector. The slide back into liquidity problems by three state-owned banks, because of white collar fraud, staff inefficiencies and the tardy response of the central bank, still supports the necessity of a strong emphasis on staff training at the beginning of the implementation of the financial reforms.

Issues concerning the improvement in the net worth of the private enterprise sector were not directly addressed. After the economic collapse of the 1970s and early 1980s, Sheng and Tannor (1992) note that the net worth of the private sector declined substantially. The financial reforms were not complemented by a fiscal package of tax credits for both banks and enterprises. This could have served to improve incentives for banks to lend, while borrowers were able to build up their net worth or creditworthiness. Gertler and Rose (1996) argue that the success of financial reforms crucially depends on the existence of a viable critical mass of entrepreneurs who can persuade banks to extend credit to them at lower rates, which should lead to more domestic private investment.



The outlook for the private sector in this regard appears bleak. The present cohort of entrepreneurs, for instance, have failed to utilise various funds provided by donors to promote various industries. The Private Enterprise Export Development Fund (PEED) and the Fund for Small and Medium Enterprises (FUSMED) failed to be used to any significant degree (CEPA, 1998). The Business Assistance Fund (with 10 billion cedis) had considerable publicity in facing massive loan defaulting by beneficiaries. These funds are administered via the banks, CEPA (1998) attributes this situation mainly to lack of awareness of these facilities, high loan rates and short-term maturity. We add to this the poor culture of loan repayment reported by the banks in our survey, and low borrower net worth even to be eligible for the facilities.

Bank supervision by the Bank of Ghana checks compliance with its guidelines. There was no suggestion that the central bank regularly assesses internal control and reporting systems in the banks or assists them to upgrade such systems. Co-operation in this area should help reduce the incidence of fraud and would permit its early detection. The pace of technological improvements in the banking sector in Ghana and of financial transactions requires such a partnership. A stitch in time would save the monetary authorities and ultimately tax-payers the cost of another carve-out of non-performing assets from banks in the future. The overall evolution of the financial sector has blurred the traditional boundaries between banks and other financial institutions. This is creeping into the Ghanaian financial sector. Finance companies are providing lines of credit for commerce, Leasing companies are also providing facilities for entrepreneurs to have access to capital goods. Traditionally, banks were the only institutions in Ghana offering such facilities. The various supervisory institutions have to co-ordinate their activities for an earlier detection of problem areas. This also suggests the need for the banking law and other legislation to change with the times, especially in the area of prudential guidelines, while at the same time encouraging competition.

The financial sector reforms have largely succeeded in terms of the establishment of appropriate financial institutions. The aspects which impinge on the operations of banks have been quite successful. There are still question marks about the supervision of the sector, given the instances of pyramid schemes and the liquidity problems of some banks. Nevertheless, the sector reforms have allowed the financial sector to expand in size and diversity. If their results are to be sustainable, then the problems which have come up need to be addressed. What has not taken place, has been the expected significant increase in financial deepening, and enhanced financial intermediation.

## Recommendations

### *Bank Regulation*

1. As NBFIs increasingly compete with banks in traditional financial intermediation activities, there should be a gradual convergence of the NBFIs Law and the Banking Law over a period of time, especially in the areas of capital adequacy, reserve requirements and prudential lending. The aim should be to maintain a balance between the growth of NBFIs and fairness to banks, especially in terms of prudential requirements. The ultimate goal, *ceteris paribus*, should be a Financial Services Law based on functional activity rather than in terms of institutions.

2. To ensure that minimum capital requirements are not eroded by inflation, they could be indexed to the exchange rate or reviewed annually.

3. To improve the oversight of the Banking Supervision Department, it should develop the staff capability to assess the internal controls and reporting systems of banks and where necessary provide technical assistance.

4. The pace of change in the financial sector in technology, innovations and products requires a forum for effective co-ordination and co-operation between the Bank of Ghana, the Stock Exchange, the National Insurance Commission, and other regulators in the wider financial sector. This would ensure an early knowledge of possible problem areas for prompt corrective actions.

### *Lending*

1. The apparently gradual shift by banks to concentrate on servicing the needs of particular segments of the financial market may not be beneficial to them in the long term. Whenever stable macroeconomic conditions persist for a considerable period, nominal interest rates will decline. This should encourage the operations of the capital market. Prime bank clients will shift their investible funds to more attractive areas or institutions such as the Stock Exchange. They could also meet a large part of their credit needs from the capital market or by direct issues of bonds or bills.

Banks will need to diversify further into new products and services, find new sources of fee-based income, and invest in subsidiaries within the NBFIs

sector if the regulatory regime based on institutions remains as it is.

Within the country's policy vision (Vision 2020), the aim of increasing agricultural and manufacturing growth may not be achieved if there is a continuation of the decline in bank lending to these sectors. An effort has been made in this direction. The reduction of the tax rate on banks for income obtained from the priority sector of agriculture is a step in the right direction. (Government of Ghana budget statement for 1998). A similar scheme could be extended to manufacturing. This then becomes the market-based counterpart of sectoral lending guidelines.

2. Banks need to take the monitoring and supervision of borrowers more seriously. It would be better for banks, as part of their loan packages, to assist borrowers with some expertise (in consultancy, managerial or technical advice), in order to ensure that the enterprises concerned will perform as expected.

### *Competition and Efficiency in The Banking Sector*

The evidence of large interest-rate spreads and a high four-bank concentration ratio suggests the need for the monetary authorities to review banking sector costs and interest-rate determination in order to identify ways of reducing costs and promoting more efficiency.

#### **Deposit mobilisation**

The issue of increasing minimum deposit requirements was damagingly identified as bank habits. Banks would naturally wish to reduce their interest costs and the time spent working on the balances of small savers who make frequent withdrawals. As real deposit rates improve, depositors would be encouraged to maintain reasonable deposit balances.

With regard to the monetary authorities, the use of a unified cash reserve requirement on all deposits should be reconsidered. It takes a greater effort to mobilise time or fixed deposits. These longer-term deposits, however, provide banks with a longer planning horizon and greater stability of earning assets. They also widen the pool of loanable funds available to bank customers. Banks which mobilise more of these deposits should have some incentive to do so, even though this creates another line for prudential returns.

Alternatively, the Bank of Ghana could reduce the 8% cash reserve requirement and the 35% secondary reserve requirement, but this is subject



to the monetary policy stance and the cost of some complication in monetary policy. Policy-makers need to weigh the advantages and disadvantages of this recommendation.

### **Macroeconomic stability**

The rate of inflation remained high and volatile during much of the period 1990–98. The rate of depreciation of the local currency, the cedi, increased in the 1990–96 period and the budget deficit situation has persisted. These unstable conditions impacted negatively on the mobilisation of deposits and the financial depth of the economy. The financial sector reforms did not yield the intended effects, primarily because of the lack of sustained improvements in the macroeconomic environment.

The need to improve macroeconomic stabilisation measures, especially fiscal stabilisation, is quite clear. However, weaknesses in the fundamental structure of the economy have also affected the outcome of financial sector reform. High budget deficits led to increasing interest rates on government debt reorienting credit away from the private sector to the government. The underlying real economy also showed structural weaknesses which made it vulnerable to instability, and poor agricultural sector and trade performance. In addition to stabilisation, macroeconomic policy must go further to address some of the structural imbalances. This would improve real sector performance enhancing the prospects for firms and increasing the number of bank-financed projects.

## References

- Abdulla, J.Y.A. (1994) 'An Empirical Analysis of Commercial Banks Performance in Bahrain', *Savings and Development*, XVIII (3).
- Adjetei, S.M.A. (1978) 'The Structure of the Financial System in Ghana' (unpublished), Research Department. Accra: Bank of Ghana.
- Agu, C.C. (1992) 'Analysis of the Determinants of the Nigerian Banking System's Profits and Profitability Performance', *Savings and Development* XVI (4).
- Amuzu, G. (1997) 'Fiscal Policy in Ghana 1984-1997'. Paper presented at the conference on External Debt Management held at the Ghana Institute of Management and Public Administration, organised by the West African Monetary Association.
- Arshadi, W. and E.C. Lawrence (1987) 'An Empirical Investigation of New Bank Performance', *Journal of Banking and Finance* II:33-48, Vol.II.
- Aryeetey, E., A. Baah-Nuakoh, T. Duggleby, H. Hettige, W. Steel (1994) Supply and Demand for Finance of Small Enterprises in Ghana. *World Bank Discussion Paper No.251*. Washington, DC: World Bank.
- Aryeetey, E. and F. Gockel (1991) 'Mobilising Domestic Resources for Capital Formation in Ghana', *AERC Research Paper* No. 3. Nairobi: AERC.
- Asiama, J. (1996) 'An Assessment of the McKinnon-Shaw Financial Liberalisation Hypothesis in Ghana.' Unpublished M.Phil.(Economics) thesis, University of Ghana.
- Ayiku, M. (1996) 'Savings Behaviour Under Financial Repression and Liberalization in Ghana.' Unpublished M.Phil. (Economics) Thesis, Department of Economics University of Ghana.
- Bank of Ghana, *Annual Reports* and *Quarterly Economic Bulletins*.
- Brownbridge, M. and A.F. Gockel (1996) 'The Impact of Financial Sector Policies on Banking in Ghana', *IDS Working Paper*, No. 38, Institute of Development Studies, Sussex University.
- Caprio G. and D. Klingebiel (1996) 'Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking?'. Paper prepared for the World Bank's Annual Conference on Development Economics, Washington DC, April 25-25th, 1996.
- CEPA (1996) Ghana Macroeconomic Review and Outlook, Accra Center for Policy Analysis.
- CEPA (1998) Ghana Macroeconomic Review and Outlook, Accra Center for Policy Analysis.
- Civelek, M.A. and M.W. Al-Alami (1991) 'An Empirical Investigation of the Concentration Profitability Relationship in the Jordanian Banking System', *Savings and Development*, 15 (3).

- Chirwa, E.W.T. (1996) 'Market Structure, Liberalisation and Performance in the Malawian Banking Industry', *AERC Work-in-Progress Report*. Nairobi: AERC.
- Cho, Y. and D. Khatkhate(1989) 'Lessons of Financial Liberalisation in Asia', *World Bank Discussion Paper*, No. 50. Washington, DC: World Bank.
- Demircuc-Kunt, A. and E. Detragiache (1997) 'Determinants of Banking Crisis: Evidence from Developing and Developed Countries', *IMF Working Paper*, No. 97/106. Washington, DC: IMF.
- Dziobek C. and C. Pazarbasioglu (1997) 'Lessons from Systemic Bank Restructuring: A Survey of 24 Countries', *IMF Working Paper*, No. 97/161. Washington, DC: IMF.
- Fischer, B. (1993) 'Success and Pitfalls with Financial Reforms in Developing Countries', *Savings and Development* No. 2, XVII (2).
- Fraser, D.R., Phillips, W. and P.S. Rose (1974) 'A Canonical Analysis of Bank Performance', *Journal of Financial and Quantitative Analysis*, No. 9.
- Fry M.J. (1988) *Money, Interest, and Banking in Economic Development*. Baltimore, MD: John Hopkins University Press.
- Garcia-Herrero, A., (1997) 'Monetary impact of a banking Crisis and the Conduct of Monetary Policy'. *IMF Working Paper*, No. 97/124. Washington, DC: IMF.
- Gertler M. and A. Rose(1996) 'Finance, Public Policy, and Growth', in G. Caprio Jr., I. Atiyas and J.A. Hanson (eds) *Financial Reforms: Theory and Experience*. Cambridge: Cambridge University Press.
- Ghana Statistical Service, *Quarterly Digest of Statistics*, various issues.
- Harris, L. (1996), 'The International Experience of Liberalization: Assessing Financial Liberalization Policies'. Paper presented at Bank of Zambia Conference, 21-23 August.
- Hunter, W.C. and A. Srinivasan (1990) 'Determinants of De Novo Bank Performance', *Federal Reserve Bank of Atlanta Economic Review*, March/April.
- Jibili, A., K. Enders, and Volker Treichel (1997) 'Financial Sector Reforms in Algeria, Morocco, and Tunisia: A preliminary Assessment'. *IMF Working Paper*, No 97/81. Washington, DC: IMF.
- Johnston, R.B., and C. Pazarbasioglu (1995) 'Linkages Between Financial Variables, Financial Sector Reform and Economic Growth and Efficiency', *IMF Working Paper*, No. 95/103. Washington, DC: IMF
- Kaminsky, Graciela, and Carmen Reinhart (1996) 'The Twin Crisis: The Causes of Banking and Balance-of-Payments', *International Finance*

- Discussion Paper*, No. 544, Board of Governors of the Federal Reserve, Washington, DC.
- Kaniji, G.K. (1990) *100 Statistical Tables*, Sage Publications, London.
- Kapur, I., T.M. Hadjimichael, P. Hilbers, J. Schiff and P. Szymczak (1991) 'Ghana, Adjustment and Growth, 1983-91', *IMF Occasional Paper* No. 86. Washington, DC: IMF.
- Killick, T.(1995) *IMF Programmes in Developing Countries*. London: Overseas Development Institute.
- Killick, T.and M. Martin (1990) 'Policies for Financial Liberalisation', *ODI Working Paper*, No.35. London: Overseas Development Institute.
- Kmenta, J. (1986) *Elements of Econometrics*. New York: MacMillan Publishing Company.
- McKinnon R. I. (1973) *Money and Capital in Economic Development*. Washington, DC: Brookings Institution.
- McNaughton, D. and C. J. Barltrop (1992) *Banking Institutions in Developing Markets, Vol.2: Interpreting Financial Statements*. Washington, DC: World Bank.
- Molyneux, P. and J. Thornton (1992) 'Determinants of European Bank Profitability: A Note', *Journal of Banking and Finance*, No. 1173-1178.
- Nissanke, M. (1991) 'Theoretical Issues in Finance and Development: A Critical Literature Survey', *Centro Studi Luca d'Agliano-Queen Elizabeth House Development Studies Working Papers*, No. 36, University of Oxford, UK.
- Nissanke, M. (1993) 'Excess Liquidity Syndrome in the Banking System in Low-Income Developing Countries', *Department of Economics Working Paper*, No.34, School of Oriental and African Studies. London: SOAS.
- Obben, J. (1992) 'Performance of Ghanaian Rural Banks: A Canonical Correlation Analysis', *Savings and Development*, XVI (2).
- Oyewole, O.B. (1993) 'Empirical Analysis of the Effect of Financial Policy Reforms on Innovations in Nigeria's Banking Sector', *Saving and Development*, XVII (2).
- Pantallone, C. C. and M. B Platt (1987) 'Predicting Commercial Bank Failure Since Deregulation', *Federal Reserve Bank of Boston New England Economic Review*, July/August.
- Pettway, R. H. and J. F. Sinkey (1980) 'Establishing On-Site Bank Examination Priorities: An Early Warning System Using Accounting and Market Information', *Journal of Finance*, 35(1).
- Rose, P. S. (1981) 'Performance Analysis: How Does Your Bank Measure Up?' *Canadian Banker and ICB Review*, 68(1).

- Shaw, E.S. (1973) *Financial Deepening in Economic Development*. New York: Oxford University Press.
- Schianterelli F., Izak Atiyas, G. Caprio Jr., J. Harris, and A. Weiss (1996) 'Credit Where It Is Due? A Review of the Macro and Micro Evidence on The Real Effects of Financial Reform', in *Financial Reforms: Theory and Experience*, G. Caprio Jr., I. Atiyas and J.A. Hanson (eds.). Cambridge: Cambridge University Press.
- Sheng, A. (ed.) (1996) *Bank Restructuring: Lessons from the 1980s*. Washington, DC: World Bank..
- Sheng, A. and A. Tannor (1996) 'Ghana's Financial Restructuring, 1983-91', in Sheng, A. (ed.)
- Siems, T.F. (1992) 'Quantifying Management's Role in Bank Survival', *Federal Reserve Bank of Dallas Economics Review*, First Quarter.
- Simons, K. and S. Cross (1990) 'Do Capital Markets Predict Problems in Large Commercial Banks?', *Federal Reserve Bank of Boston New England Economic Review*, May/June.
- Sowa, N.K. (1989) 'Financial Intermediation and Economic Development', Chapter 6 in *The State, Development and Politics in Ghana*. Dakar: CODESRIA.
- Sowa, N.K. (1991) 'Monetary Control in Ghana: 1957-1988, ODI Working Paper, No. 45. London: Overseas Development Institute.
- Sowa, N.K. (1993) 'Ghana: 1957-1988', in S. Page (ed.) *Monetary Policy in Developing Countries*. London: Routledge.
- Sowa, N. K. and J. K. Kwakye (1991) 'Inflationary Trends and Control in Ghana', *AERC Research Report*. Nairobi: AERC.
- Soyibo, A. and F. Adekanye (1992) 'Financial System Regulation, Deregulation and Savings Mobilization in Nigeria', *AERC Research Paper*, No.11. Nairobi: AERC.
- Vittas, D. (1991), 'Measuring Commercial Banking Efficiency: Use and Misuse of Bank Operating Ratios', *Staff Working Paper*, No. 806, World Bank, November 1991.
- World Bank (1994) *Ghana Financial Sector Review: Bringing Savers and Investors Together*, Country Operations Division, West-Central Africa Department Report No.13423-GH. Washington, DC: World Bank.
- World Bank (1989) *World Development Report 1989*. New York: Oxford University Press for the World Bank.

# Appendix I

## Chronology of Financial Sector Reforms and other Monetary Measures<sup>1</sup>

**1987**

September Decontrolled maximum lending and minimum deposit rates.

October Introduced weekly auction of Treasury Bills.

November Established Consolidated Discount House.

**1988**

February Decontrolled minimum bank savings rate.

April Established foreign-exchange Bureaux.

September Introduced 90-day Bank of Ghana (BOG) bills for banks.

**1989**

July Adopted comprehensive restructuring plan for banks.

August

September Enacted Insurance Law.

December

Introduced non-rediscountable, medium-term BOG instruments for banks with 180-day, 1-year, and 2-year maturities. Promulgated revised Banking Law.

**1990**

January Appointed new bank managers for public sector banks; licensed two new merchant banks, CAL Merchant Bank and Ecobank.

March

Unified bank cash-reserve requirements on demand, savings, and time deposits.

April

Unified foreign-exchange market by abolishing foreign exchange auctions.

May

Began restructuring three state-owned banks; SOE non-performing

---

1. As implemented by the Bank of Ghana, the Ministry of Finance, the FINSAP Secretariat and the World Bank.

loans swapped with BOG FINSAP bonds.

- |             |  |
|-------------|--|
| September   | Enacted Non-performing Assets (Loans, Investments) Recovery Law to expedite recovery of non-performing loans of banks; created 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 non-bank sector; abolished lending targets for agricultural sector; rescheduled bank charge fees; reduced cash reserve ratio to 22%; increased secondary reserves ratio to 20%; extended bank restructuring to three additional banks. |
| December    | Remunerated cash reserves at 3%; swapped private sector non-performing loans of state-owned banks with BOG-issued FINSAP bonds; enforced capital adequacy standards.   |
| <b>1991</b> |  |
| March       | Swapped private sector non-performing loans in sound banks for BOG-issued FINSAP bonds.  |
| June        | Licensed second Discount House; licensed Meridian BIAO, a private commercial bank  |
| July        | Reduced cash reserve ratio to 18%; increased secondary reserves to 24%; and increased remuneration on cash reserves to 5%.   |
| <b>1992</b> |  |
| January     | Licensed a leasing company.  |
| October     | Enacted new BOG Law providing for stronger supervisory and regulatory powers.  |
| <b>1993</b> |  |
| March       | Reduced cash reserve ratio to 10%; increased secondary reserve ratio to 32%.   |
| May         | Enacted Financial Institutions (Non-banking) Law to provide supervisory and regulatory framework for NBFIs 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 development of leasing industry.
September	Reduced cash reserve ratio to 5%; imposed temporary additional 15% secondary reserve ratio bringing it up to 52%.
1994	Liquidation of Meridian Bank BIAO and formation of Trust (TTB) which took over all its assets.
1995	
February	Announced appointment of Divestiture Advisers for divestiture of Social Security Bank.
March	Announced appointment of advisers for proposed partial privatisation of Ghana Commercial Bank.
April	Announced appointment of advisers to proposed partial privatisation of National Investment Bank.
1996	
1st Quarter	GCB sale through stock exchange of 36% of capital to domestic investors.
October	Primary reserve requirement changed to 10% and secondary reserve requirement to 47%.
1997	
April	Primary reserve requirement changed to 8% and secondary reserve requirement to 35%.
December	Bank of Ghana widens monetary data coverage from 11 to 17 banks.

## Appendix II

### Questionnaire for banks

1. Name of Bank
2. Year of Establishment
3. Type of Bank: (a) Commercial bank  
(b) Development bank  
(c) Merchant bank  
(d) Other
4. Number of branches and/or agencies (1980-1996)
- 5a. Has this bank opened any new branch and/or agency since 1987? (Yes/No)  
(if Yes, how many) (if No, please skip 5a)
- 5b. What factors caused you to open them?
- 6a. Has your bank closed any branches and/or agencies? (Yes/No)  
(if Yes, how many) (if No, please skip 6a)
- 6b. What factors caused you to close them?
7. Which of these operations does the bank undertake?
  - (a) Deposit - taking
  - (b) Advances
  - (c) Company Registrars
  - (d) Warehousing
  - (e) Factoring
  - (f) Insurance
  - (g) Hire Purchase
  - (h) Leasing
  - (i) Stockbroking
  - (j) Other(s) please specify
8. Which of these operations were introduced from 1987 onwards?
  - (a) Deposit taking Year:
  - (b) Advances Year:
  - (c) Company Registration Year:
  - (d) Warehousing Year:
  - (e) Factoring Year:
  - (f) Insurance/Insurance Broking Year:
  - (g) Hire Purchase Year:
  - (h) Leasing Year:
  - (i) Stockbroking Year:
  - (j) Other(s)
9. Which types of deposit mobilisation products do you have?
  - (a) Demand deposit account
  - (b) Savings deposit account
  - (c) Time or Fixed deposit account
  - (d) Certificates of Deposit
  - (e) Same Day/Week/Month interest-bearing accounts
  - (f) Overnight deposit account
  - (g) Checkable Savings deposit account
  - (h) Bearer bonds
  - (i) Other(s) (NOW accounts etc.)

10. Which deposit products were introduced from 1987 onwards?
- Demand deposit account
  - Savings deposit account
  - Time or Fixed deposit account
  - Certificates of Deposit
  - Overnight deposit account
  - Same Day/Week/Month interest-bearing accounts
  - Checkable Savings deposit account
  - Bearer bonds
  - Other(s) (NOW accounts etc.)
11. What types of advances has the bank given?
- Venture capital
  - Overdrafts
  - Project loans
  - Personal loans
  - Corporate Financing
  - Consortium loans
  - Consumer credit/Hire purchase
  - Leasing
  - Credit card facility
  - Other(s)
12. Which lending instruments were introduced after 1987?
- Venture capital
  - Overdrafts
  - Project Loans
  - Personal Loans
  - Corporate Financing
  - Consortium Loans
  - Consumer Credit
  - Leasing
  - Credit card facility
  - Other(s)

To what extent have the measures under the Financial Sector Reforms been helpful to your bank in each of the following: (Circle one answer for each line across).

To a very great extent	To a great extent	To some extent	To a little extent	Not at all	No idea		
1	2	3	4	5	6		
13. Raising equity capital		1	2	3	4	5	6

- |  |            |           |   |   |   |   |
|--|------------|-----------|---|---|---|---|
| 14. In changing the number of returns required by Bank of Ghana  | 1          | 2         | 3 | 4 | 5 | 6 |
| 15. Improving bank supervision by the Bank of Ghana  | 1          | 2         | 3 | 4 | 5 | 6 |
| 16. Increased on-site surveillance by Bank Supervisors   | 1          | 2         | 3 | 4 | 5 | 6 |
| 17. Increased off-site surveillance by Bank Supervisors  | 1          | 2         | 3 | 4 | 5 | 6 |
| 18. Improving internal controls  | 1          | 2         | 3 | 4 | 5 | 6 |
| 19. Creating an enabling environment for banking sector development  | 1          | 2         | 3 | 4 | 5 | 6 |
| 20. Liquidity requirements under PNDC L225 (Banking Law 1989) favours the holding of Government securities | 1          | 2         | 3 | 4 | 5 | 6 |
| 21. These liquidity requirements favour the holding of reserves given the returns on them                  | 1          | 2         | 3 | 4 | 5 | 6 |
| 22. What was the level of Government ownership in the bank? (>50% or <50%).                                |            |           |   |   |   |   |
| 1983-1987.....   | 1991 ..... | 1995..... |   |   |   |   |
| 1988 .....   | 1992 ..... | 1996..... |   |   |   |   |
| 1989 .....   | 1993 ..... |           |   |   |   |   |
| 1990 .....   | 1994 ..... |           |   |   |   |   |

- 23a. Which policies or measures under FINSAP have helped your bank performance most?
- 23b. Which policies have hurt your bank most?
24. To what extent has the imposition of the 6 percent minimum capital adequacy ratio affected your operations? Explain
25. Has the new banking law (PNDC L225) changed the nature of your operations? In what way?
- 26a. How much of your non-performing assets were taken over by NPART?
- 26b. Which sector (SOE or private sector) defaulted most?
27. How would you compare your current loan recovery efforts to the pre-FINSAP period. Circle one answer.
1. It is much more effective
  2. It is more effective
  3. It is about the same
  4. It is less effective
  5. It is much more less effective
28. What was your average loan recovery rate?  
1989-1996 (annual figures)  
1980-1987 (annual values)
29. On average is the level of loan requests higher now than in the pre-FINSAP period? (Yes/No/About the same)
30. Have real screening costs for loan applications risen in comparison to the pre-FINSAP period? (Yes/No/About the same)

Would you agree or disagree with the following statements?

- | Strongly agree   | Agree | Neither agree nor disagree | Disagree | Strongly disagree | No idea |   |   |
|--|-------|----------------------------|----------|-------------------|---------|---|---|
| 1  | 2     | 3                          | 4        | 5                 | 6       |   |   |
| 31. There is pressure on you from government officials/politicians to lend to SOEs |       |                            |          |                   |         |   |   |
|  |       | 1                          | 2        | 3                 | 4       | 5 | 6 |

32. There is some pressure from government/ politicians to lend to particular firms or individuals            1            2            3            4            5            6
33. In your opinion what are the three major factors causing enterprises or firms to default on loans before FINSAP?
34. Are those factors in (33) still relevant since the onset of FINSAP? What other factors are now relevant?
35. Has competition in the provision of banking services increased since the FINSAP? (Yes/No) Please give your reasons.
36. Which of the following organisations would you consider a competitor for your services (Rank from 1st to 4th)?
- (a) Other Banks
  - (b) Non-bank financial institutions
  - (c) The Stock Exchange
  - (d) Informal sector operators
37. In your opinion what has been the impact of interest rate deregulation on:
- (a) Deposit Mobilisation (Same/Increased/Decreased)
  - (b) Loans (Same/Increased/Decreased)
  - (c) Interest rate spreads (Same/Increased/Decreased)
38. In setting your interest rates do you consult: (Circle responses)
- (a) Other Banks
  - (b) Bank of Ghana
  - (c) Institute of Bankers
  - (d) No other institution
  - (e) Association of Bankers
39. What were the major constraints on your bank's performance prior to FINSAP?
40. Which general line of business generated most of your income in the:
- (a) pre-FINSAP period
  - (b) post-1987 period

41. How many staff were on the managerial and higher grades in
 

1996 .....	1989 .....
1995 .....	1988 .....
1994 .....	1987 .....
1993 .....	1986.....
1992 .....	1984.....
1990 .....	1983.....
1982 .....	1981.....
1980 .....	
  
42. How many staff benefited on average from refresher courses for the period 1983-1986 and for the period after 1987? On what criteria is promotion based?
  
43. What is the ratio of the number of loan payments received to the number of loan payments due annually, since 1987?
  
44. List your products and services before the onset of FINSAP (pre-1987).
45. What were the average loan sizes in the following years?
 

1996 .....	1990 .....
1995 .....	1989 .....
1994 .....	1988 .....
1993 .....	1987 .....
1992 .....	1980-1986 (average).....
1991 .....	
  
46. Has the normal maturity period for loans changed significantly since the onset of FINSAP?
  
47. Since the onset of FINSAP has the level of bank fraud risen significantly? (Yes/No/the same).
  
48. What has been the level of annual losses due to fraud since 1983?
  
49. What has been the level of loss or gains (annually) due to the continuous depreciation of the cedi since 1986?
  
- 50a. Ghana has experienced persistent inflation since 1992 is this situation turning away depositors?
  
- 50b. Which financial securities are your clients turning to?
  
51. What has been the effect of FINSAP on your operating costs?



52. In your opinion is the Bank of Ghana's supervisory role adequate?
53. There is some concern about lax supervision of NBFIs and the fact that they have some advantages over banks because of different legal requirements. Do you share this view? Why?
54. What has been the total number of staff annually between 1980 and 1996?
55. What has been the impact of the new information technology had on your operations, in terms of:
  - (a) internal controls?
  - (b) monitoring branches?
  - (c) staff costs?
  - (d) staff productivity?
  - (e) responsiveness to customer demands?
  - (f) reducing work time?
  - (g) processing and assessing credit applications?
  - (h) recognizing problem loans?
  - (i) introduction of new products?
  - (j) asset-liability management?
  - (k) meeting deadlines for submitting prudential returns?
  - (l) decision-making?
56. Do you have any other comments?

# Appendix III

## Questionnaire for Bank Clients

1. How do you describe your institution?

- (a) Sole proprietorship
- (b) Limited liability Company
- (c) Partnership
- (d) Other (state: NGO, Public Servant, Teacher, Health Worker, etc.)

2. When did you start operating?

3. What is the principal nature of your business?

- (a) Manufacturing/Industrial
- (b) Service
- (c) Agriculture
- (d) Mining
- (e) Other (please specify)

4. Is the institution

- (a) State-owned
- (b) Ghanaian private sector-owned
- (c) Foreign-owned
- (d) Other

5. What changes have you noticed in the customer services of your major banker since 1987? Please list them.

6. In your opinion which bank(s) are performing very well? Why?

To what extent do you agree or disagree with each of the following statements (use the given scale)?

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No idea
----------------	-------	----------------------------	----------	-------------------	---------

1	2	3	4	5	6
---	---	---	---	---	---

7. It is now easier to obtain credit from banks than before 1987

1	2	3	4	5	6
---	---	---	---	---	---

8. It is now quicker to have loan applications approved than before 1987
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
9. The banks are now closely monitoring borrowers
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
10. The banks have not increased the number of requirements for loans
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
11. Banks fees and commissions have risen significantly compared to the pre-1987 period
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
12. Are bank responses to your requests now much quicker? (Yes/No)
13. What new bank products have you encountered since 1987 ?
14. Which of these in your opinion have been very useful?
15. What financial securities do you like investing in? Why?
16. Which type of bank deposits hold most of your funds? Why?
17. In your opinion which bank policies have hurt your banking habits?
18. Which financial sector policies have hurt your banking habits?
19. If you have ever taken credit from a bank, which factors have had positive or negative effects on loan repayment a) before 1987; b) after 1987?

All in all, how would you rate your banker (since 1987) in each of the following?

Excellent	Good	So-So	Poor	Very poor	No idea
1	2	3	4	5	6

20. Technical competence of staff
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
21. Staff accessibility to you
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
22. Respond to your questions or requests in a timely way
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
23. Has your banker introduced computers at the front-line desks (for cashiers, balance enquiry/statement requests etc.)?
24. What other gadgets have you noticed?
25. In your opinion, how have the use of these newly introduced gadgets influenced your relationship with your banker:
- in terms of making deposits?
  - in terms of making withdrawals?
  - in terms of the speed with which an application for a credit facility gets approved?
  - in terms of time-wasting at banks?
  - in terms of getting in touch with bank staff about your requests and their responsiveness?
  - helping you receive more information from your bankers about their services?
  - Do you have other comments about the impact of the new information technology on your banking habits and on the bank staff?
26. How have the high nominal interest rates since 1993 affected your banking behaviour ?
27. In summary how satisfied are you with your bankers since 1987?
- Very satisfied
  - Satisfied
  - So-So
  - Dissatisfied
  - Very dissatisfied
28. How would you describe the (post 1987) relationship between you and your major banker as compared to the pre-1987 period?
- Partnership relationship

- (b) Responsive relationship
- (c) Reactive relationship
- (d) Minimal relationship

29. In your opinion, are the banks now giving more assistance to women than they did before the financial sector reforms? Give your reasons.
30. Do you have any other comments?

## Appendix IV

**Table A3.1. Size of Selected NBFIs (€m)**

	1993	1994	1995	1996	1997
Total assets of discount houses	n.a.	47,791.3	65,503.3	53,148.1	61,315.7
GSE capitalisation (€bn)	96.51	1,968.43	2,399.02	2,862.72	2,552.78

Source: Bank of Ghana

**Table A4.1. Interest-Rate Spreads and Real Interest Rates**

Year	Real Lending Rate	Real Deposit Rate	Interest Rate Spread
1980	-31.7	-38.2	6.5
1981	-91	-98.5	7.5
1982	-8.3	-14.3	6.0
1983	-103.9	-121.9	8.0
1984	-17.2	-25.3	8.0
1985	+11.9	+5.4	6.5
1986	-1.3	-6.8	5.5
1987	-9.8	-21.8	12.0
1988	-1.15	-18.9	17.75
1989	+5.05	-15.2	20.25
1990	-6.95	-24.2	17.25
1991	+13.5	-7.4	20.9
1992	+18.9	+0.9	18
1993	+14.0	-10	24
1994	+12.6	-11.15	23.75
1995	-12	-38.0	26
1996	+1.4	-21.6	23
1997	23.1	+0.5	28.5

Source: Bank of Ghana *Quarterly* and *Annual Reports*, various issues.

Notes: 1. The maximum nominal lending rate was used in calculating the real lending rate; and the minimum nominal deposit rate was used for finding the real deposit rate. In both cases the rate of inflation was subtracted from the nominal rate; 2. Interest rate spread = real lending rate-real deposit rate .

Table A4.2. Selected Macroeconomic Indicators

Year	Real GDP Growth (1990 cedis)	CPS/GDP	CBC/GDP	Inflation	Government Balance/GDP	RM/TD	RM/QM	M2/GDP
1980	0.5	2.2	0.20	50.2	-4.2	110.4	229.2	20.3
1981	-3.5	1.8	0.13	116.5	-6.5	138.6	287.2	18.8
1982	-6.9	1.8	0.14	22.3	-5.6	108.6	209.3	19.8
1983	-4.5	1.5	0.13	122.9	-2.7	96.5	248.3	13.2
1984	8.6	2.2	0.35	39.7	-1.8	94.1	260.3	12.5
1985	5.1	3.1	0.77	11.1	-2.2	89.5	256.3	16.0
1986	5.2	5.2	0.69	24.3	0.1	88.9	237.4	16.5
1987	4.7	4.3	0.63	39.8	0.5	82.6	189.5	17.1
1988	6.3	5.5	0.58	31.4	0.4	83.2	205.8	18.0
1989	5.1	4.3	0.63	25.2	0.7	80.1	229.1	16.9
1990	3.3	3.1	0.51	37.2	0.2	64.1	196.4	13.9
1991	5.0	3.4	0.34	18.0	1.6	50.6	125.6	16.3
1992	3.9	4.9	0.15	10.1	-5.2	73.2	154.9	18.6
1993	5.0	5.1	0.19	25.0	-2.6	58.7	128.8	18.0
1994	3.8	5.5	0.13	24.9	2.5	76.4	157.2	19.5
1995	4.5	5.3	0.11	59.5	0.9	78.6	154.1	17.9
1996	5.2	6.4	0.09	46.6	-3.2	84.2	156.8	16.8
1997	5.1	8.2	0.23	27.9	-2.1	73.7	140.5	18.3
1998	5.2	9.9	0.07	15.7*	-2.07	n.a.	n.a.	19.5

Source: Computed from: Bank of Ghana, Annual Reports; Quarterly Digest of Statistics Ghana Statistical Service; IMF, International Financial  
Statistic 1997 Yearbook.

Note: (a) = December 1998 value from the new inflation series, with September 1997 = 100.



Table A4.3. Growth in Nominal Income and Credit to Private Sector

Year	Growth in GDP	Growth in CPS
1988	40.91	80.58
1989	34.82	5.13
1990	43.36	3.57
1991	19.48	31.31
1992	15.47	66.72
1993	31.11	35.25
1994	34.71	45.87
1995	49.85	43.92
1996	43.34	73.13

Source: Calculated from Consolidated Balance Sheet of Banking Sector, Bank of Ghana *Annual Reports*. GDP growth calculated from *IFS Yearbooks*.

Table A4.4. Behaviour of Real Credit to Private Sector (CPS)-to GDP RATIO

Year	Real CPS/Real GDP
1980	15.90
1981	5.70
1982	4.82
1983	1.23
1984	1.20
1985	1.96
1986	2.71
1987	1.67
1988	1.71
1989	1.00
1990	0.43
1991	0.47
1992	0.71
1993	0.57
1994	0.53
1995	0.27
1996	0.23

Source: Credit data, BOG *Annual reports*; GDP data; from *IFS Yearbooks*. CPI (1990=100) data for calculations from *IFS Yearbooks*

**Table A5.1. Bank Profitability (% of Total Assets)**

Year	Gross Earnings	Operating Expenses	Net Loan Loss Provisions	Net Earnings	Return on Assets
1988	13.3	8.9	7.85	4.4	-4.2
1989	6.5	5.5	6.09	4.1	-2.83
1990	8.1	4.1	2.29	4	7.15
1991	10.2	4.3	2.31	5.9	3.58
1992	9.4	4.6	1.37	4.8	3.39
1993	10	4.2	0.96	5.8	4.59
1994	11.2	4.3	1.03	6.9	5.77
1995	15.9	5.8	1.14	10.1	8.67
1996	15.1	5.4	1.41	9.8	7.99
1997	15.8	6.5	2.31	9.3	6.96
1998	15.3	6	1.47	9.3	7.55

*Source:* calculated from data compiled from bank annual reports.

**Table A5.2. Composition of Deposits**

% of Total Deposits	1988-9	1990-96
Savings accounts	19.47 (1.94)	30.84 (9.77)
Current accounts	65.63 (4.08)	53.71 (7.76)
Time deposits	14.91 (2.14)	13.9 (1.53)
Foreign currency deposits	0	1.55 (2.55)

*Source:* Worksheets.

*Note:* Values in brackets are standard deviations.

**Table A5.3. Composition of Interest Expenses (%)**

Interest Expenses (sources)	1988-9	1990-96
Interest Expenses from:		
Savings Deposits	41.36	45.65
Current Accounts	1.67	20.14
Time of Fixed Deposits	45.43	26.06
Borrowings (local & foreign)	11.54	8.16

*Source:* Worksheets

Table A5.4. Annual Changes in Interest Income, Income Expenses and Net Interest Margin

Changes in	1989	1990	1991	1992	1993	1994	1995	1996
Interest Income	-7.11	87.08	60.86	1.42	80.42	52.13	45.18	68.67
Interest from:	-20.15	23.57	24.09	12.27	92.89	44.23	43.62	97.65
Advances	9.51	196.24	80.62	11.87	67.09	66.19	84.57	66.09
Investments								
cash & short-term funds	22.76	136.98	2.95	-20.82	88.36	40.32	-24.83	8.91
Interest Expenses	4.58	21.5	48.6	5.86	79.61	51.87	66.54	88.57
Net Interest Margin	-21.06	190.7	68.95	-1.15	80.92	52.29	32.04	57.09

Table A5.5. Performance of Private Banks

Year	1990	1991	1992	1993	1994	1995	1996
ROA	153	154	153	189	201	200	232
Loans/Deposits	128	120	155	146	153	129	145
Net Margin	109	135	112	142	131	146	167
INV/TA	54	56	61	68	62	80	75
OPREX/TA	142	165	160	162	167	195	160
Net Spread	70	109	66	93	82	102	105
SHF/TA	68	64	63	66	65	77	80
CSHTE/TA	107	119	105	91	124	109	107
Loans/TA.	146	131	168	157	162	149	168
Deposits/TA.	114	109	108	108	106	116	116

Source: Worksheets.

Table A5.6. Performance of State-Owned Banks (1993=100)<sup>2</sup>

Year	1990	1991	1992	1993	1994	1995	1996
ROA	20	73	65	100	261	273	194
ADV./Deposits	75	77	125	100	117	136	210
Net Margin	87	115	89	100	131	135	131
INV./TA	78	88	83	100	127	115	95
OPREX/TA	113	104	116	100	118	163	144
Net Spread	137	147	79	100	130	122	80
SHE/TA	84	85	95	100	85	100	92
CSHTF/TA	127	112	95	100	55	53	67
ADV./TA	71	78	113	100	99	123	189
Deposits/TA	94	101	90	100	85	90	90

Source: Worksheets.

2. 1993 values are the medians for each of the series and for convenience the values of the indicators for state-owned banks are used as the base values in Table A5.5 and Table A5.6.

State owned banks are: GCB, SSB, NSCB, BHC, ADB, NIB for 1990-1993; GCB, SSB, BHC, ADB, NIB for 1994; and GCB, BHC, ADB, NIB for 1995-96. The private banks are: SCB, BBG, MBG, CAL, EBG for 1990-1992; SCB, BBG, MBG, CAL, EBG, MBBG for 1993-1994; SCB, BBG, MBG, CAL, EBG, ITB, FAMBL, METRO, SSB for 1995; SCB, BBG, MBG, CAL, EBG, ITB, FAMBL, METRO, SSB, PBL for 1996. COOP, BCC and ICB were excluded for lack of data.

ADV.- advances; net margin -net interest income/total assets; INV-investments; OPREX-operating expenses; SHF=shareholders funds; CSHTF-cash and short-term funds; T.A.- total assets.

# Appendix V

## Non-performing assets

One of the aims of the financial sector reforms was to enhance bank solvency through the bank restructuring which began in 1988. The state-owned banks, in particular, were in a distressed state; even the struggling but viable banks (BBG, SCB, MBG) had some state equity. Non-performing loans to government and state-owned enterprises were offset against government loans, and the remaining balances were converted into bonds and transferred to the Non-Performing Asset Recovery Trust (NPART). Non-performing private sector loans were converted into bonds and also transferred to NPART, which was authorised to recover the bad loans and administer the proceeds.

**Table A5.7. Non-Performing Assets Recoveries by NPART**

Year	NPART (€bn)
1991	3.31
1992	3.36
1993	3.23
1994	4.09
1995	2.35
1996	2.34

*Source: NPART Sixth Annual Report and Accounts 1995.*

NPART - Non-Performing Asset Recoveries.

# Appendix VI

## Accounting Issues

Banks since 1989 are required to prepare their financial statements in conformity with a standard set of accounts developed by the Bank of Ghana. This manual provides the format and prescribes appropriate accounting and valuation policies. Unlike in the pre reform period, this allows very incisive analysis since all accounts are presented in the same format.

### *Consolidation*

The standard accounting practice maintains that the banking account should be prepared in the form of a single set of consolidated financial statements covering the bank and subsidiaries. Dissimilarity of business justifies the exclusion of a subsidiary. In addition, uniform accounting policies should be followed by the group and common accounting dates should be used.

### *Foreign Currency*

Monetary liabilities and assets maintained in foreign currencies are translated into cedis at exchange rates ruling at the end of the bank's financial year. Any exchange rate gains or losses are taken to the Profit and Loss account.

### *Interest Income*

Interest income from loans automatically ceases to be recognised when the payment of principal or interest is 90 or more days late. This is also adhered to if payment is in doubt. Thereafter loans are returned to the accrual basis only when doubt about collectibility is removed and when outstanding arrears of principal and interest are received.

### *Loan Loss Provisions*

The appropriate level of loan loss provision is a management decision having regard to both specific and general factors. A specific provision is raised against a loan which has been reviewed and specifically identified as bad or doubtful. In addition, in deciding on the level of loss provisions required, there is consideration of other factors including domestic economic conditions, composition of the loan portfolio and past bad debt experience.

### *Taxation*

The rate of explicit tax on the banks is set in the annual government budget statement if it is being changed from the previous level. The explicit tax cost of financial intermediation was lowered through the lowering of corporate tax rates for banks. The tax rate was lowered from 50 to 45% in the 1992 budget statement. The reduction continued to 40% in 1993 and to 35% in 1994, putting it in line with the general corporate tax rate.

(Source: Bank Annual Reports of various banks)



---

ODI Research Study

# Financial Sector Reforms and Bank Performance in Ghana

*T.O. Antwi-Asare and E.K.Y. Addison*

Throughout the developing world governments have introduced banking reforms. This case study is intended to throw light on how commercial banks respond to such measures and is thus of an interest well beyond Ghana. Ghana's banks have performed poorly in the past, but reform measures were introduced from the late 1980s. Based on original research, the study concludes that measures such as the liberalisation of interest rates and credit allocations have enhanced financial development. A wider range of financial services is now available and there is greater competition between banks. There remain weaknesses, however. State-owned banks remain inefficient, the sector is still oligopolistic and loan recovery remains a problem.

ISBN 0-85003-456-6



9780850034561

2000 ISBN 0 85003 456 6

---

There is a companion volume to the present study:

## Determinants of Foreign Direct Investment in Ghana

*G. Kwaku Tsikata, Yaw Asante, and E.M. Gyasi*

2000 ISBN 0 85003 455 8 paper



**odi**

Department of Economics  
University of Ghana  
Overseas Development Institute

---