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Working Paper 86

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Overseas Development Institute

**THE FORMAL FINANCIAL SECTOR
IN GHANA
AFTER THE REFORMS**

Ernest Aryeetey
ISSER/Legon

Report of a Study Sponsored by the World Bank Research Committee
and Administered by the Overseas Development Institute

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Preface

As part of Structural Adjustment Programmes, many governments in Sub-Saharan Africa initiated a large scale restructuring of the financial system in the 1980s. Emphasis in these programmes was placed on the need (i) to adopt financial liberalisation measures, and (ii) to enhance regulatory and supervisory functions to ensure prudence of the financial institutions. Special Financial Sector Adjustment loans have been taken up to uphold reform measures and to restructure and strengthen distressed financial systems in several African countries. An improved regulatory environment with enhanced supervision is underscored in these operations, while the recent literature on the subject points to the need for careful design of the sequence, pace and timing of financial liberalisation and the importance of its coordination with changing macroeconomic conditions.

However, financial reform has at best had limited *developmental* effect in the region so far. It has been increasingly recognised that adoption of financial liberalisation policy alone has not been sufficient to generate a strong response in terms of increased savings mobilisation and intermediation through the financial system, wider access to financial services, and increased investment by the private sector. Fragmentation of financial markets persists, impeding efficient resource mobilisation and financial intermediation.

Given this background, a research project, 'Financial Integration and Development in Sub-Saharan Africa' has been undertaken at ODI, with financial support from the World Bank and SIDA, to examine the performance of financial systems for resource mobilisation and intermediation for economic development in Sub-Saharan Africa. The field work has been conducted in Ghana, Malawi, Nigeria and Tanzania, based on common questionnaires addressed to formal, semi-formal, and informal institutions and borrowers. The main objectives of research were:

- to investigate the nature and degree of fragmentation and segmentation of financial markets in Sub-Saharan Africa;
- to examine the sources of segmentation against several theoretical paradigms and evaluate the conditions under which linkages between segments utilise the comparative advantages of each, and obstacles to such linkages;
- to examine operational constraints facing formal financial institutions and informal associations/lenders;
- to evaluate the effects of financial liberalisation on the whole financial system; in particular, to provide understanding of the impediments to financial deepening in Africa and the extent to which they can be relieved through financial liberalisation and through active policies of positive interventions, technical assistance and infrastructure that support market

development by facilitating information flows and lowering transaction costs and risks;

- to help the design of long-term policies towards financial sector development; and to evaluate which policy and institutional measures can most effectively accelerate the financial system's ability to mobilise resources and intermediate between saving and investment for broad-based development in Africa.

This present paper is one of a series that will provide initial presentation of results of the country case studies. It presents the *Ghanaian* case study, reporting the results of the field work on the behavioural characteristics of *formal* financial organisations/agents and the operational constraints in urban and rural areas.

Machiko Nissanke
(Project Coordinator)

May 1995

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1. Introduction

The history of the financial system in Ghana before 1985 suggests that change and growth invariably implied the creation of specialised banks, following government intervention to serve the officially perceived demands of distinct economic groups. For example, the Ghana Commercial Bank was established in 1953, following what was regarded by the government as the inadequate lending policies of the two earlier established foreign banks which favoured well-established foreign firms in the granting of loans and advances. The government at the time considered banks to be ignoring indigenous farmers and small entrepreneurs; hence, the decision to set up a national bank was deemed both politically and economically desirable.

Throughout the 1960s and 1970s, various development banks, i.e. the National Investment Bank, the Agricultural Development Bank, and the Bank for Housing and Construction, were set up to meet the financing needs of specific sectors of the economy. Also, as government interest in small borrowers grew in the 1970s, banks such as the Co-operative Bank, the National Savings and Credit Bank, the Social Security Bank, and finally the unit rural banks, were created. As a result, by 1990 the formal financial system was made up of the central bank, four commercial banks, three development banks (DFIs), two merchant banks and the two smaller banks which grew out of the Post Office Savings Bank and the co-operative movement, as well as 124 unit rural banks. Not much attention was paid to the development of non-bank financial institutions in this early phase of financial development.

When policy makers felt the need for further intervention in the financial sector, following increasing dissatisfaction with the pace of the sector's development (in terms of service coverage), this was reflected in growth in the branch networks of a number of financial institutions throughout the 1970s, as state-owned banks were encouraged to expand their coverage. As a result, the number of primary commercial bank branches grew by 25% between 1976 and 1984, and that of all other banks more than tripled over the same period. More than 90% of the rural banks were established between 1976 and 1984, and bank density increased from 1.9 branches per 100,000 inhabitants in 1976 to 3.2 in 1984.

In addition to these measures, credit allocation policies were put in place at the beginning of the 1970s to direct credit to selected priority economic sectors. In spite of this interventionist approach to achieve the wider socio-economic goal of allocating financial resources to priority areas, including small indigenous businesses, there has clearly been a growing disparity in both the volume and the market share of lending to small and large businesses in Ghana. Between 1971 and 1985, the creation of many tools by the government and the central bank to direct formal credit to priority areas of the economy (including the small business and

agricultural sectors) did not stop the proportion of total credit allocated to these priority areas declining (Aryeetey, 1992). This trend did not necessarily change after the reforms. In 1990, for example, only 1% of all private sector loans were allocated to indigenous manufacturing sole proprietorships. The reluctance to lend to small businesses and the agricultural sector is often explained by bankers as the 'high transaction costs of lending to these sectors' which make small loans relatively expensive.

Following the financial sector reforms, and therefore liberalisation, which began in 1985, growth and change have increasingly originated from efforts to make the financial system more competitive, particularly among banks and other non-bank financial institutions. The reform package initially focused on issues of credit allocation, the efficiency of banking operations, the Bank of Ghana's supervision of the commercial banks and the development of capital markets. Sectoral credit ceilings, which had proved ineffective in channelling credit to priority sectors, were gradually phased out by the beginning of 1988, with the agricultural credit target removed in April 1991. All global ceilings for individual banks were also removed by 1992. Interest rates were permitted to rise in line with inflation in order to make the real rates positive. Nominal lending rates of the commercial banks rose to 30% in 1991, and the real lending rate of -104% in 1983 first became positive in 1985 (11%). It returned to being marginally negative until 1989, when positive rates were again achieved. Current bank lending rates average 24% while inflation is officially 27%, making the real rate once again negative. The anticipated greater competition among financial institutions, following the reforms, was expected to come from both new banking and non-bank financial institutions that would be attracted to the market by the liberal climate and the general improvements in the economy.

In the light of these trends in the development of formal financial institutions, this paper attempts to evaluate the extent to which the reform programme has fostered increased and sustainable competition in the financial market. It considers competition within the formal segment of the market and also between that segment and units of the informal segment. In doing this, it seeks to address the issue of why the market does not clear, even after extensive financial sector liberalisation. The hypothesis is that there are a number of structural and institutional bottlenecks that ensure the non-clearance of the market, and these need to be understood before realistic reforms directed at improved service-delivery and efficiency among all segments of the financial system can have any chance of success.

1.1 Structure of the paper

Chapter 2 begins by analysing the structure of the assets of the banking system in Ghana, mainly looking out for structural differences in the portfolios of the different types of institutions and the impact of these on their operations. It

considers savings mobilisation, from both macro and micro perspectives, using the survey data. Chapter 3 analyses the assets of the banking system, focusing on term structures and other conditions for credit allocation to different groups of borrowers, as well as banks' experiences with lending to different groups by considering loan repayment trends from the survey data. The essence of this is to portray the way the banks attempt to match the structures of their assets and liabilities. The identification of any structural differences is followed by an explanation of the policy origins of these differences.

Chapter 4 is used to discuss briefly elements of the demand for credit among micro, small and medium-sized enterprises. While we do not measure the demand for credit, the analysis is intended to corroborate our findings from the survey that firms are discriminated against in the allocation of credit, mainly on account of size, but such discrimination is not entirely based on any comprehensive analysis of creditworthiness.

Chapter 5 examines the process of portfolio choice, focusing on selection procedures and how institutions deal with such thorny issues as information asymmetry and moral hazard. Following the crucial assumption that the market remains segmented in view of structures prevailing in the different units and the structural bottlenecks to integration they impose on the market, we then consider how this is reflected in the costs of different institutions in Chapter 6.

Chapter 7 analyses any relationships that may exist between the formal units of the financial market and those that can be described as informal, and looks at the potential for a closer relationship between them. The final chapter provides a summary of our findings and makes some suggestions on how market integration can be fostered in the light of these findings.

1.2 Research methodology

The analyses in this paper are based on a combination of secondary data (from interviews with bank head office personnel and balance sheets) and primary data from a survey of 49 bank branches. The approach ensured that primary data were used to confirm structures and processes suggested by head office interviews and aggregated secondary data.

We also interviewed the owners/managers of 55 micro, small and medium-sized enterprises in both urban and rural centres. From this we gathered bank branch data, with a view to using the data either to corroborate or to debunk opinions formed from the bank interviews. Microenterprises are firms with less than 4 employees, small enterprises have between 4 and 9 employees, while medium-sized firms employ up to 30 persons.

The questionnaire used in gathering data from bank branches adopted the approach of first obtaining information on the deposit characteristics of various branches; the rationale being to match the assets and liabilities of those branches even if reserve management was not possible at that level. We then obtained data on loan characteristics, covering such items as loan amounts going to different sectors and the numbers of borrowers, the conditions under which the loans were made, including such factors as creditworthiness criteria, interest rates, maturities, etc. We also sought information with respect to institutional structure regarding decision-making and responsibility for various activities. The processes of gathering information, and the type of information bankers used in their analysis of loans, were also studied. Data on delinquency and default were gathered in order to evaluate their importance in the banks' overall assessment of default risk as indicated by the provisions made against bad loans.

In administering the questionnaire, we classified borrowers according to their sectors of operation and also by size, on the hypothesis that banks lent mainly to particular economic sectors and firms of certain sizes. We therefore had 4 classifications for borrowers, Small-Scale Manufacturing/Service (SSE), Large-Scale Manufacturing/Service (LSE), Small-Scale Agriculture (SSA), and 'others' which included such diverse sectors as commerce, construction and other individuals. In the course of a pilot study, it came to light that these classifications were not wholly practical since banks hardly kept records on firm size. Their records were based on ownership. Considering that size was highly correlated to ownership structure, we subsequently modified our classification to make sole proprietorships engaged in manufacturing/service represent SSEs. Similarly, LSE loans were represented by loans to corporate bodies or limited liability companies.

The selection of the sample of bank branches was done within a stratified framework, based on the type of bank (commercial, development and unit rural) and its location (urban and rural) (see Table 1). The selection of 70 branches/rural banks out of a population of 466 branches/unit rural banks provided us with a potential study sample of about 15% of all branches/unit rural banks. The sample was distributed in such a way that in each of the 10 administrative regions of Ghana, at least 6 branches/unit rural banks were studied. In view of the fact that the northern half of the country has less than 10% of the total bank branches/rural banks, the distribution was skewed in favour of the southern regions of Ashanti, Eastern, Central, Western and Greater Accra Regions. In the Accra-Tema area, 11 branches/rural banks were served with the questionnaire. The distribution was also arranged to ensure that at least 40% of the samples were located in rural areas. Thus, in addition to the 18 unit rural banks, 12 other rural branches of commercial and 5 branches of development banks were selected.

In view of the fact that the questionnaire was long and likely to meet with a passive response from bank branch personnel, we sought assistance from the top management of all banks selected for the sample. After going through the

Table 1
Distribution of total sample for the administration of questionnaire by type of bank and location

<i>Type/Location</i>	<i>Number</i>
1. Urban Commercial Bank	26
2. Rural Commercial Bank	12
3. Urban Development Bank	9
4. Rural Development Bank	5
5. Unit Rural Bank	18
Total	70

questionnaire at the head office, selected branches (following our direction) were instructed by their head offices to complete the questionnaires which we administered. In doing so, a first visit was made by the researcher and a research assistant to the branch/bank, during which an average of 1½ hours were spent going over all questions with the manager and any other staff members appointed to assist the manager in completing the questionnaire. Following this initial discussion, the questionnaire was left at the branch/bank for an agreed period, usually 40 days. In all cases, the research assistant went back to the branch after 20 days to monitor the progress made and to resolve any problems encountered in completing the questionnaire, for example, a misunderstanding of the data requirements for any question. A third visit usually resulted in the completed questionnaire being retrieved by the research assistant.

For the analysis in this paper data are used from 49 questionnaires from various branches that were considered as satisfactorily completed – made up of 28 commercial bank branches, 12 development bank branches and 9 unit rural banks. The basic tool for analysis is standard t-tests for the comparison of means for different variables grouped according to the types of banks being studied. Where we delved into various factors driving variation in variables, we constructed ANOVA tables, employing tests for the significance of the differences in variables for all economic sectors in the sample, with the following test statistic:

$$F^* = \text{MSTR}/\text{MSE}$$

$$= \frac{\{\sum\sum n_{ij}(Y_{ij} - Y_{...})^2\}/k-1}{\{\sum\sum\sum(Y_{ijk} - Y_{ij})^2\}/N-k}$$

where MSTR = Mean Square Treatment
and MSE = Mean Square Error

where Y_{ijk} is the k^{th} observation of the i^{th} level of the first factor (bank type) and the j^{th} level of the second factor (type of enterprise); $Y_{ijk} = \sum Y_{ijk}/n$ is the mean for the treatment corresponding to the i^{th} level of the first factor (bank type) and the j^{th} level of the second factor (type of enterprise); and $Y_{...} = \sum\sum\sum Y_{ijk}/N$ is the Grand Mean.

1.3 Measuring the transactions costs of lending

When we come to measure the transaction costs of lending, not having had the benefit to date of extensive study of different methodologies, we rely partially on the guidelines of Meyer and Cuevas (1990) who suggest a cost-allocation method using bank accounting data. This allows for studying costs without necessarily relating them to output. On this they write (p.7):

The major data inputs required by the cost-allocation method are the financial statements of a sample of bank branches in a given time period (e.g. the most recent year), salary and wages of branch personnel, loan and deposit statistics for each branch for the corresponding time period, and the time allocation of bank employees. The data are obtained from field interviews with branch personnel.

An assumption of the cost-allocation method is that non-personnel inputs used in providing loans are allocated to different stages of the preparation, disbursement and monitoring processes in the same proportion as personnel costs. We, on the other hand, elicit actual expenditure figures from branches, which enables us to determine the relative importance of loan evaluation or screening, loan monitoring and contract enforcement or loan recovery activities. We apply this cost-allocation method to different banks and branches, and use the data to test various hypotheses concerning loans to different borrower categories and bank structures.

An earlier study by Cuevas and Graham (1984) in Honduras applied a translog model to study the cost-output relationships and production technology for a single development bank with 26 branches. The model is used to study what it cost the bank to induce deposits and transform these into loans that would be repaid. Meyer and Cuevas (1990) use the same technique to carry out estimations of bank cost functions with pooled time series/cross-section data for Bangladesh, Honduras and the Dominican Republic. The complete model specification, as with others on cost-output relationships for banks, would be inappropriate for us since the scope of the present study is considerably less than the model caters for.

In the Philippines also, Untalan and Cuevas (1988) pursued a time-allocation method for measuring transaction costs. They designed a table of time-allocation to be completed by each member of the bank staff, alongside a table of staff salaries from which a horizontal summation of costs for each function was derived. The resultant weighted time-allocation for each bank activity provided percentage shares of all functions from the total, which were used to allocate personnel and non-personnel costs. Other expenses, such as guarantee fees and deposit insurance, were allocated to the corresponding activities directly.

Our approach differs considerably from that of Untalan and Cuevas, with its emphasis on the completion of major activities at the branch level. Our questionnaire was used to estimate costs related to personnel time expended on loans, and to transport and stationery. We multiplied our estimate of the proportion of a branch's total personnel time available for specific activities by loan staff salary payments in order to derive the cost of personnel time for each of these activities. In view of the fact that banks in Ghana did not engage in time-management we were obliged to estimate average time periods expended on the preparation/review of feasibility reports, credit analysis, loan structuring and decision-making as far as screening is concerned, based on managers' experience and other records where possible. We then calculated costs related to transport based on actual trips undertaken and payments made, and to stationery based on the volume of branch business related to loans. Other costs were estimated from balance sheet data. This process was repeated for loan monitoring and contract enforcement. At the end of the questionnaire, together with bank managers, we were able to estimate what it cost the branch to administer each Cedi lent out to different types of borrowers. This was then followed by an estimation of the cost of default risk per branch. Together, they provided us with the transaction cost of lending.

2. Trends in the liability structure of banks 1980–93

Our main objective in Chapters 2 and 3 of this paper is to show that banks have had difficulty in matching their assets with their liabilities, and that this trend has changed only marginally since the reforms began. As a consequence, even though the liability structure of the banking system has been somewhat altered in the last few years, it is still dominated by demand and saving deposits. Up to 1983, about 70% of the banking system's deposit base originated solely from demand deposits. By 1991, following the reforms, demand deposits still accounted for 57% of the aggregate deposit base. With savings deposits accounting for most of the rest, roughly two-thirds of bank liabilities are usually taken up by demand and savings deposits.

The domination of mainly short-term liabilities¹ is not peculiar in itself, though some bankers would argue that medium and long-term lending on a larger scale is improper if they are to maintain their liquidity status in order to retain and attract depositors' confidence. The real issue is 'what possibilities exist for achieving maturity transformation' or alternatively 'what is the scope for matching the maturity structure of their assets with the existing maturities of their liabilities'? This question becomes important in view of the fact that demand deposits and savings account balances in Ghana are highly volatile. Banks currently concentrate on maintaining a sizeable proportion of their assets in highly liquid form and in other self-liquidating assets with acceptable collateral. It is not surprising therefore that commercial banks in Ghana labour under excess liquidity since they are not eager to undertake high-risk lending, following earlier difficulty with a high portfolio of non-performing loans. Until 1990 relatively restrictive credit management policies could also be blamed for the low volume of lending. Earlier interest-rate policy that kept deposit and lending rates low, also deterred financial deepening.

The category of claims labelled 'other liabilities' in the consolidated balance sheet of the banking system follow savings and demand deposits in order of importance to all banks. They generally represent low-cost and short-term credit, margin requirements, provisions for taxation and pay-roll deductions. Hence they are quite volatile and uncertain. They grew steadily in the years of financial repression, constituting about 18% of total liabilities in 1977, and rose steadily to about 40% of total liabilities in 1983. After the reforms, they declined rapidly, so that by the end of 1991, they formed only about 12% of total liabilities.

¹ Savings deposits in Ghana are operated almost like demand deposits minus cheque books. They are highly liquid.

2.1 Trends in aggregate financial savings mobilisation 1980–1993

The most important savings instruments defined by the banks are savings deposits, time deposits, Treasury bills and stocks. Table 2 indicates trends for various deposits of the banking system. The household sector dominates the holding of private sector savings, as seen in Table 3. The M_2 /GDP ratio (the usual indicator for financial deepening) declined steadily between 1975 and 1983, except for a brief break in 1982. Indeed, a comparison of M_2 /GDP ratios showed Ghana to have one of the lowest savings rates in Africa (GCA, 1993). Over the ten-year period (1977–86), Ghana experienced the worst decline (43%) in the M_2 /GDP ratio. It moved from being one of the more deeply financialised countries of Africa to one

Table 2
Deposits of the commercial banking system
(¢m. at end of period)

	<i>Total deposits</i>			<i>Private sector deposits</i>		
	<i>Demand</i>	<i>Savings</i>	<i>Time</i>	<i>Demand</i>	<i>Savings</i>	<i>Time</i>
1980	3427.6	1763.5	87.1	2698.1	2128.9	328.8
1981	6090.4	2124.5	97.1	2860.8	2705.3	379.9
1982	6727.3	3566.7	62.6	4440.7	4364.4	451.2
1983	10033.9	3988.6	95.7	8666.0	4988.4	540.9
1984	12422.3	6054.1	1196.6	12860.7	6049.0	1177.8
1985	17241.2	8832.2	2842.4	23367.1	8826.3	2822.0
1986	31240.2	14140.8	5980.6	36271.2	14125.2	5935.3
1987	48925.5	22238.9	14982.2	52081.5	22179.0	14671.2
1988	73994.1	33862.5	16293.3	61698.3	31643.9	12627.7
1989	102236.4	44195.9	10722.2	56970.4	42228.9	3812.9
1990	116961.2	54722.4	10249.7	80443.7	54824.7	4850.1
1991	128913.3	77189.3	18747.9	83725.8	78299.6	9712.0
1992	174820.9	116391.6	42266.6	107202.4	114870.0	19027.1
1993	246936.6	136595.7	63631.7	158325.7	135647.8	24194.8

Source: Bank of Ghana, Annual Reports.

Note: Secondary banks are excluded from the total (but not from the private sector figures) for 1980–83.

of the least financialised. Starting from 1984, however, a gradual rise has been observed in real financial savings. The M_2 /GDP ratio rose from 12% in 1984 to 17% in 1987; after a decline in 1988 it rose to 16% in 1989, only to fall again to 14% in 1990, since when it has averaged 17%. The increases in financial savings up to 1987 and after 1990 can be attributed to rising real incomes following the economic reforms.

Table 3
Distribution of private sector financial savings %

<i>Year</i>	<i>Households</i>	<i>Private Enterprise</i>	<i>Parastatals</i>
1984	91	1	8
1985	93	2	5
1986	91	1	7
1987	80	2	18
1988	88	3	9
1989	79	9	12
1990	85	6	9
1991	60	5	35
1992	73	10	17
1993*	76	6	18

* Based on September figures

Source: Calculated from Bank of Ghana data.

The increases in the savings rate since 1990 are considered to be marginal, however, in comparison with set targets and the performance of other African countries. Interestingly, while neither M_2 /GDP nor domestic credit to the private sector is growing appreciably, the monetary base has remained relatively high, not much less than M_2 /GDP in 1993 and earlier years. In view of the way accounts are operated at the banks, it appears that the M_2 reflects a transactions balance more than a demand for savings.

Even though the structure of private financial savings has for a long time shown the domination of more liquid assets (e.g. savings deposits) over less liquid ones (e.g. stocks and Treasury bills) in the portfolios of households, there is some

indication of change in this trend (See Table 4²) since 1989. Treasury bills and

Table 4
Allocation of total private savings with formal financial institutions (%)

<i>Year</i>	<i>Treasury Bills</i>	<i>Stocks</i>	<i>Savings Deposits</i>	<i>Time Deposits</i>	<i>Total</i>
1989	18.2	28.6	42.7	10.4	100
1990	22.8	21.5	46.7	8.9	100
1991	13.1	20.0	5.6	11.1	100
1992	16.2	19.6	48.5	15.5	100
1993	17.7	27.2	41.5	13.5	100

Source: Calculated from Bank of Ghana figures.

stocks were initially insignificant as a proportion of total private savings (for both the household and corporate sectors), together averaging less than 3% of total private savings between 1981 and 1988. Savings deposits, on the other hand, averaged 80% of the total throughout the period with little variation. The most growth was observed for time deposits between 1985 and 1987, as Treasury bills and stocks declined alongside savings deposits, growing steadily from 3.2% in 1981 to a peak of 27.2% in 1987.

Treasury bills became an important instrument for saving by the private sector as the government and the monetary authorities attempted to mop up high levels of liquidity from the system using high rates on Treasury bills and other stocks. After the previously low share in the decade prior to 1989, their share shot up to an average of 18% of financial savings. Other government and Bank of Ghana stocks also became important. By September 1993, ₵501 bn of Treasury bills and stocks had been issued, of which the non-bank public held ₵144.3 bn.³ In contrast, time and savings deposits held by the private sector came to only ₵179 bn. In sum, 44.9% of total private financial savings were in Treasury bills and stocks, with only 55.1% in savings and time deposits. This is an interesting development as it shows a positive response to quite high interest rates for T-bills. While the previous general preference for more liquid assets was explained by the lack of confidence

² Table 4 shows the preference for liquid assets from micro-level data.

³ It is interesting, however, that the banking system dominated the holding of Treasury bills.

in the economic situation and the accompanying uncertainty, it is highly likely that a large enough real interest rate can encourage depositors to switch instruments. It would seem that the key to this is keeping inflation rates low.

2.2 Micro-level analysis of savings mobilisation since liberalisation

Since the reforms began, there has been slow progress towards active savings mobilisation, and this is often attributed to the excess liquidity syndrome with which the commercial banks are supposed to be grappling. Table 5 shows the domination of more liquid liabilities even at the branch level.

Table 5
Breakdown of deposit liabilities by bank branch
(End-of-1991 balance, ₵ m.)

<i>Type of Bank</i>	<i>Current Accounts</i>		<i>Savings Accounts</i>		<i>Time Deposits</i>	
	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>
Commercial	429	62	362	179	27	5
Development	1851 ^a	39	144	73	145	2
Unit Rural	–	25	–	48	–	2

- a) This figure is biased by the inclusion of figures from the largest branch of one development bank holding mainly the accounts of public concerns in Accra. Must be treated as an outlier.

Source: Survey data.

The slow trend in savings mobilisation since the reform is also quite evident from data on deposit mobilisation at the branch level. Our survey gathered data for the period 1989–91, which showed that yearly changes in the numbers of depositors and the amounts mobilised were not significant in that period (see Tables 6 and 7).⁴ What is interesting is the fact that the average number of urban commercial bank depositors dropped in 1990 and rose again in 1991. For urban development banks there was only a marginal increase in the numbers of depositors, even though the figures for rural bank branches showed significant rises. We associate the fall in

⁴ This is based on paired T-tests carried out for the means of depositors per branch. An ANOVA for depositors per bank type, using location as a co-variate showed, that the greatest source of variation was the type of bank, even though its influence was not significant at the 5% level.

Table 6
Average number of depositors per bank branch

<i>Type of Bank</i>	<i>1989</i>		<i>1990</i>		<i>1991</i>	
	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>
Commercial	8,482	4,834	7,818	6,222	8,030	6,362
Development	4,517	5,189	4,692	8,077	6,647	7,122
Unit Rural	–	4,799	–	5,730	–	6,550

Source: Survey data.

commercial bank deposits in 1989–90 with the worst performance of the economy since the structural adjustment programme began, as well as the switch to Treasury bills and stocks. As urban real incomes fell dramatically, rural incomes were sustained by appropriate rises in the producer price of cocoa in an attempt to boost exports. The fall/marginal increase in numbers of depositors was evenly matched by deposits mobilised, suggesting no significant changes in the average deposits made over the period. This is explained by the fact that most of those deposits were in highly liquid forms as shown in Table 5.

Table 7
Average deposits mobilised by bank branch
(End-of-Year Balance, ¢ m.)

<i>Type of Bank</i>	<i>1989</i>		<i>1990</i>		<i>1991</i>	
	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>
Commercial	783	132	770	183	938	237
Development	103	57	153	70	438 ^a	105
Unit Rural	–	34	–	47	–	66

- a) The sharp rise in development bank deposits came from the inclusion of figures from the largest branch of one development bank in Accra which could not make available figures for 1989 and 1990, hence biasing the 1991 figure.

Source: Survey data.

While no significant increases in savings mobilisation at branches are being observed, it must, nevertheless, be pointed out that the advent of new banks and the competition they are expected to foster is leading to some, even if limited, innovations in deposit mobilisation. An illustration of the gradually increasing competition in banking is provided by the re-appearance of radio and television advertisements for a few banks after a long absence. Currently, the most frequently advertised bank is the latest, Meridien Bank *biao*. Other banks advertise periodically. The absence of advertisements from the state-owned banks is quite noticeable.

2.2.1 Available deposit instruments since the reforms

Banks generally remain uninterested in adapting financial products to meet the needs of the saving public. The tendency is to try to mould customers to the existing set of financial products: interest-free current accounts, savings accounts, time deposits, a selected number of bonds and Treasury bills. Cheques can be issued only on current accounts in all banks. Other financial products from some of the larger commercial banks include safe custody services, transmission of funds through mail orders, telegraphic transfers and bankers' drafts. A number of banks also have negotiable certificates of deposit.

Recently, however, Meridien Bank *biao*'s arrival on the commercial scene has led to the observation of some variety in the products and services of banks for deposit customers. The bank has introduced what it calls the 'Gold Account' for both corporate and individual personal account holders, the essential feature of which is the variability of the interest to be paid on the account, which was unknown in Ghana. Account holders are expected to keep a minimum balance of ₵500,000, which currently attracts a minimum interest of 18%, with interest subsequently calculated on daily cleared balances and varied in line with prevailing rates. Other interest-bearing accounts normally attract interest only on the minimum balance within a quarter. Withdrawals from the Gold Account, are restricted to a maximum of 6 cheques per month. It is the only major interest-bearing current account in the country. Standard Chartered Bank allows limited interest on current accounts provided the balance is in excess of ₵20 m. in a quarter, and this will attract an interest payment of 5–8%.

The dearth of more innovative financial products from the banks is exemplified by the currently high degree of popularity of Treasury bills. All banks contend that, as the return on Treasury bills climbed to as high as 34% in 1993, an increasing number of their deposit customers used them for saving. By September 1993, the non-bank public held ₵185.2 bn worth of Treasury bills.

Other savings developments introduced since the reforms began include the issue of Ghana Commercial Bank (GCB) 'Traveller's Cheque' and the Standard

Chartered 'Service Card'. Unlike most cheques, the GCB cheque introduced in 1992 is not generally accepted for making payments anywhere. It only allows holders to exchange the cheques for equivalent amounts in cash from any GCB branches. Its major advantage lies in its saving holders from travelling around the country with large amounts of cash, thereby reducing the possibility of theft. While this is appreciated, the fact that one has to look for a GCB branch to make the exchange for cash reduces its attraction for many bank customers. It is most useful for people who have to travel with unusually large amounts of cash, particularly traders in large urban markets. The GCB suggests that the demand for this product has been encouraging.

The Standard Chartered service card introduced in 1993 is used like cheque cards in Europe and America. The bank guarantees in any single transaction the payment of a cheque from one of its own cheque books for an amount up to ₵50,000. The cheques accompanying the card can be drawn only in Ghana and only in establishments appointed by the bank. Thus, there are currently only limited places for the use of the card. For many customers, the fact that it permits them to draw cash from any of the branches of the bank is a significant improvement. The bank indicates a high demand for the card among its customers and the facility has helped to attract many more new deposit customers. It was planning to introduce Automated Teller Machines (ATM) into the country by the end of 1994.

It is obvious that, while improvements are being made in the mechanism for savings mobilisation, their full impact still has to show in the M_2 /GDP ratio. There is now a high likelihood of the 'dollarisation' of savings in Ghana. While there is no data on the extent of this phenomenon, obvious indications of it since 1992 have been the unusually rapid depreciation of the cedi and its apparent relationship with inflation. While the monetary authorities may sometimes attribute the rapid depreciation of the cedi to an 'invasion' of dollar purchasers from neighbouring countries, there appears to be a general consensus that Ghanaians are increasingly saving in dollars.⁵ An increasing number of people indicated in personal interviews that they bought foreign currency regularly from the forex bureaux, which they kept at home.

2.3 Seasonality in deposit mobilisation

Also important for the micro-analysis of savings mobilisation is the extent to which the flow suffers from seasonal conditions. This is important in view of the scope it permits for reserve and total asset management at the branch level. We observed from our sample of 49 bank branches that they were almost equally divided

⁵ The *Ghanaian Chronicle* of 31 January 1994 reported interviews with a number of Ghanaian economists who attributed the rapid depreciation of the cedi to panic buying of dollars following increasing inflation.

between the perceptions that deposit flows varied considerably in a year and that they did not. Over half (55% of the managers we interviewed) indicated that there was hardly any variation in deposit flows.

The perceptions of variations in flows varied little across the location of banks, as indicated in Table 8.

Table 8
Perceptions of flow of deposits to branches
(percentages of total responses)

<i>Type of Bank</i>	<i>Urban</i>		<i>Rural</i>	
	<i>Varies extensively</i>	<i>Does not vary extensively</i>	<i>Varies extensively</i>	<i>Does not vary extensively</i>
Commercial	37.5	62.5	33.3	66.7
Development	50.0	50.0	33.3	66.7
Unit Rural	—	—	44.4	55.6

Source: Survey data.

While we generally expected a greater variation in the flow of deposits in rural areas, our data suggested that many bankers saw no extensive variation even in those areas. Even among unit rural banks, the managers were almost equally divided on the variability of flows. This trend can only be explained by the fact that most deposits placed with bank branches are not derived from seasonal activities. The accounts held by bank branches are usually held for households, as noted earlier. But most household deposits are derived from the salaries of public sector and other employees paid through the banks regularly. Agricultural incomes are barely channelled through banks, apart from cocoa and other cash crops. Thus, the variation that is observed by some development banks and unit rural banks occurs mainly in the cocoa-growing areas, resulting from the periodic payment for cocoa by the marketing board. Hence, most rural bank managers who indicated significant variability in deposits suggested that deposits were largest between October and December, when the major cocoa season occurs. Deposits are lowest in the first three months of the year.

When the flow of deposits varied in the course of the year, the variation was observed to be largest among development banks located in rural areas. Thus, while the ratio of deposits in the peak deposit months against those in the lean months for the commercial bank branches and the unit rural banks, showed that the former

were 22% larger than the latter, the corresponding figure for the development banks was 44%. We attribute this difference to the fact that the sample contained a large agricultural bank that was mainly used by the marketing board for cocoa purchases.

3. Trends in the asset structures of banks

The central government's domination of total domestic credit, which declined considerably in the period 1988/91, would appear to have been restored since the end of 1991⁶ (see Table 9). *International Financial Statistics* monetary survey data suggest that total domestic credit as at September 1993 was ₵726 bn. Of this amount, ₵443 bn (61%) were claims the banking system had on the central government. Claims on non-financial public enterprises amounted to ₵96 bn (13%), while the private sector received ₵186 bn or 26% of total domestic credit and the remainder went to financial institutions. Thus, even though there has been a considerable expansion of domestic credit, and this has benefited the private sector in absolute terms, the government continues to increase its borrowing from the banking system.

Table 9
Distribution of total domestic credit (%)

<i>Year</i>	<i>Central Government</i>	<i>Public Enterprises</i>	<i>Private Sector</i>	<i>Financial Sector</i>
1986	64.2	16.9	15.5	3.2
1987	76.4	9.8	11.4	2.4
1988	75.8	4.13	16.9	3.2
1989	45.2	16.9	34.1	3.7
1990	47.1	11.8	37.4	3.5
1991	68.7	12.0	19.3	–
1992	68.3	10.8	20.7	–
1993	61.1	13.3	25.6	–

Source: Calculated from IFS data.

Net credit from the Bank of Ghana to the central government was reduced from ₵51 bn at the end of 1992 to ₵32 bn by end-September 1993. At the same time, however, the Bank expanded its lending to other public institutions from ₵3.8 bn

⁶ The trend was briefly altered between 1988 and 1991. In 1988, only 43% of the claims of the banking system were on government and public institutions. Commercial and secondary banks' claims on the government and public institutions constituted only 3.3% of their total claims in 1990 and less than 1% as at June, 1991.

to €26 bn. It would appear that the Bank of Ghana provided the finance that public institutions were unable to raise from the commercial and development banks as the latter underwent structural reforms. There was no lending for cocoa financing in this period.

Why does the central government have to depend on the banking system so much? Until 1988, the central government had hardly any cash balances while private sector savings were very low, compared with budgetary requirements. At the same time, until the introduction of the reforms, very few foreign resources flowed into the country. Thus the main sources for public sector financing were the central bank and the commercial banks. This was not surprising, since lending to the private sector was treated as a residual, after allowance had been made for the government's financing needs.

By end-September 1993, claims of the commercial banks on the private sector amounted to 22.6% of their total assets. This was an increase over the end-1992 figure of 20% of total portfolio allocation. This may be contrasted with the figure for 1981 of 13%. It is interesting that the commercial banks' assets continued to be dominated by the item classified as 'other assets'. While it is evident that the banking sector has made significant strides towards lending to the private sector following the financial sector reforms, there is no indication of whether their demand for finance is being met.

3.1 Sectoral allocation of credit

As indicated earlier, the Bank of Ghana prescribed sectoral credit ceilings to be applied by all banks in lending to the various sectors until 1988. These took the form of permissible percentage increases over each bank's outstanding credit to any sector at the end of the previous year. The aggregation of these sectoral ceilings resulted in a 'global credit ceiling' for each bank. Sectoral ceilings were altered periodically to coincide with the government's macroeconomic aspirations and needs.

Since 1991, all sectoral credit ceilings have been removed.⁷ This move was not surprising in view of the fact that, throughout the period in which ceilings were applied, actual bank lending to the priority sectors was often below the ceilings set for them, and above those set for the non-priority sectors. In 1983, for example, while credit to commerce and finance (non-priority) exceeded by 94%, in none of the priority sectors was the ceiling reached. Indeed, between 1981 and 1988, total credit to commerce and finance either exceeded or just about reached the ceiling, while credit to manufacturing exceeded it only once, in 1984. Also, throughout the

⁷ The last direct control measure for allocating credit sectorally, i.e. the 20% mandatory agricultural lending requirement for all banks, was removed in April 1991.

Table 10
Loans and advances by purpose
 (¢ m. at end of period)

<i>Year</i>	<i>Agriculture</i>	<i>Mining</i>	<i>Manufacturing</i>	<i>Construction</i>	<i>Other</i>	<i>Total</i>
1980	412.4	61.3	482.6	281.7	1055.0	2293.0
1981	669.7	151.1	628.7	400.0	1461.7	3311.2
1982	1101.9	243.0	635.2	511.2	1211.1	3702.4
1983	2012.9	422.6	1368.6	794.7	1713.6	6312.4
1984	3779.1	497.5	3288.4	1273.9	3156.8	11995.7
1985	5207.9	960.2	6046.4	2017.8	7168.6	21400.9
1986	7476.3	1437.3	10880.4	3899.4	14962.7	38656.1
1987	10650.6	2631.2	15472.2	6267.4	18464.8	53486.2
1988	10350.6	1254.1	20963.9	7229.5	25949.7	65747.8
1989	11476.6	1927.6	26847.2	8868.4	30186.0	79305.8
1990	12645.2	1074.2	27099.4	11012.2	27570.3	79401.3
1991	12431.8	1163.4	23024.4	14393.3	42857.4	93870.3
1992	14715.6	2460.1	37943.9	27039.4	69112.1	151271.1
1993	17257.0	3168.5	51187.1	32776.7	102670.0	207059.3

Source: Bank of Ghana, Annual Reports.

period, total credit by the banking system exceeded the total permitted under the credit ceilings, thus suggesting that the application of the ceilings may have constituted a constraint to the development of the banking system.

Even though the small business sector has always been described by government as a priority sector, between 1985 and 1990 the share of indigenous manufacturing sole proprietorships in total domestic credit dropped consistently, with the exception of 1986, when the three development banks were recapitalised with external assistance. The share of the manufacturing sector in all loans allocated to indigenous sole proprietorships also dropped, as did the share of indigenous sole proprietorships in total manufacturing sector loans. What is interesting is the fact that, even though lending to small enterprises was categorised as 'priority' under lending to the manufacturing sector, its share in manufacturing credit dropped at a time when lending to the manufacturing sector as a whole had become relatively stable (see Table 10).

The most significant change in the composition of bank assets has occurred within the development banking sector. As the development banks had the greatest difficulty in matching assets with liabilities, it is not surprising that they have carried more extensive revisions of their asset structures. There has been a gradual diversification of the sector's portfolio, as it has reduced its portfolio of term loans by over 20% since 1988 in favour of short-term loans. This is in line with the attempt to create 'universal banks'.

At this stage we use data from our survey to show how different banks have viewed lending to different sectors. It becomes evident from the analysis that small enterprises do not have easy access to formal bank loans.

3.2 Micro-analysis of the sectoral distribution of credit

3.2.1 Flow of loan applications

Of the 49 branches/banks studied, only 29 (15 commercial banks, 8 development banks and 6 unit rural banks) kept data on loan applications received. It is important, therefore, that figures provided here on mean numbers of applications per branch/bank are not taken as representative of the entire sample. They are provided only to show the distribution across sectors for each type of bank. The 'indicative' data on applications received per branch are as presented in Table 11.

It is evident that loan applications from both small and large enterprises are far outnumbered by the 'other' category. It must be pointed out that the composition of this 'other' category varies according to the type of bank. Thus, for commercial banks and unit rural banks, it is usually made up mainly of traders requiring

Table 11
Mean distribution of loan applications per branch/bank, 1991
(numbers of applications)

<i>Bank Type</i>	<i>Type of Enterprise/Applicant</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	39	15	193	190
Development Bank	101	11	118	336
Rural Bank	38	4	273	251
Overall	59	10	194	259

Source: Survey data.

working capital assistance and public servants seeking what banks describe as 'personal' loans for various purposes, such as for home construction and the purchase of assorted household items. For development banks, the 'other' category comprises larger productive units, such as those in construction and large-scale agriculture.

What is significant for our purposes is the fact that, for the average branch/bank, SSE loan applications considerably outnumber LSE applications, by about as much as six times on average. SSA applications dominate the lists of unit rural banks, but closely followed by 'other' loan applications. The absence of LSEs from rural areas and their lack of encouragement to borrow from unit rural banks is reflected in the relatively low number of such applications to unit rural banks.

Of the 14 bank branches that actually received LSE loan applications, only 2 (14%) were located in rural areas and accounted for only 5 (2.7%) of LSE loan applications. While SSE and LSE loan applications in urban areas exceeded those in rural areas, the converse was found to be true for SSA and 'other' loan applications. It must be pointed out that most of the SSA applications described as rural here came from rural branches of commercial and development banks. What is interesting is the fact that unit rural banks are increasingly turning their attention to the 'non-traditional activities' incorporated in the 'other' category, particularly personal loans to public servants. Thus, that category put in over 78% of the loan applications made in rural areas, while the small-scale agricultural (SSA) sector offered only about 16% of rural loan applications. It is also significant that as many as 81% of all SSE applications were made in urban areas. We found no significant difference, however, in the mean number of SSE loan applications by location.

For banks located in urban areas (the 3 major cities and other regional capitals), SSEs made up 34% of total loan applications, while 'others' took up 54% of urban applications. Only 4.6% of urban loan applications came from LSEs, while SSAs had 7.4% of such applications. The lower number of loan applications from LSEs than from SSEs was not surprising, since there are proportionately more SSEs operating in the system. Indeed, the picture does not change if viewed across different bank types. Even though we expected development banks to have many more LSE applications than the others, the figure was not significantly different from that of the commercial banks. This may be explained by the gradual shift from standard development banking to what they refer to as 'universal banking'.

3.2.2 Seasonality in loan applications

The flow of loan applications to branches appears to vary with the time of year, i.e. with agricultural and other cycles. As many as 70% of managers suggested that their receipt of applications varied in this way, particularly in rural areas. Usually, shortly before the beginning of the fishing or farming seasons, there is a large

number of SSA loan applications, which will taper off slowly towards the end of the season. Between the 'peak' season of March/April and the 'lean' season of October/November there is a ratio of 9:1 for loan applications. This ratio is not as acute in urban areas, where it is only about 4:1. In other words, the demand for loans is highest when deposits are likely to be low in rural areas.

3.3 Some characteristics of bank loans

In our consideration of loan volumes made available at branches/banks, we dwell characteristically on loans of at least a year's maturity. While our questionnaire was designed to cater for such loans as well as financing through shorter-term overdraft facilities, it turned out that in practice many banks made little distinction between the two, as continuous roll-overs of some overdrafts often converted them into term loans. Invariably, the volumes of overdrafts transformed in this manner exceeded ordinary loans by about three times. In our subsequent measurement of transaction costs, therefore, such overdrafts are catered for. It is interesting that, though project returns are important for term lending by the banks, we observed that banks would sometimes grant medium to long-term loans to persons not intending to invest them in business. The major form of non-business lending was for personal loans and overdrafts (particularly for housing), once banks were satisfied about the payment arrangements. In small towns and rural areas this dominated the lending, as 55% of branches had this type of facility. In larger towns or urban areas, lending for business assumed a greater role in bank portfolios than it did in small towns.

3.3.1 Sectoral distribution of loans approved at bank branches

The number of SSE loans approved per branch/bank was highest among development bank branches, as shown in Table 12. On the other hand, the number of approved LSE loans per branch was observed to be highest among commercial bank branches. In all cases the differences in approval rates for the different bank types were insignificant at the 5% level. Also, as was to be expected, unit rural banks granted the most SSA loans, while also dominating lending to 'others'.

In the rural areas, over 42% of the number of loans approved by all banks went to the SSA sector, while that sector took only 27% of urban loans. The relatively high number of agricultural loans in rural areas was not surprising as, until later in 1991, the banks were obliged to allocate a significant portion of their portfolio to that sector (see Table 13). As will become clearer from our consideration of loan volumes, the relatively small volume and the large number of borrowers ensured small SSA loan sizes, as shown in Table 16. SSEs had 19% of the number of urban loans and just over 5% of the rural loans. As expected, the number of loans approved for the LSE sector was rather small as only 0.02% and 2.4% of total rural and urban loans were allocated to that sector (see Table 13).

Table 12
Mean distribution of number of loans approved by branch/bank in 1991^a

<i>Bank Type</i>	<i>Type of Enterprise/Applicant</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	30	9	82	151
Development Bank	55	7	63	40
Unit Rural Bank	22	0	181	234
Overall	35	5	100	156

- a) Loan approvals may include those of banks that had no records of loan applications. Also, the data includes approvals carried over into 1991 from previous year(s). This makes direct comparisons between loan applications and their approvals not quite appropriate. Again, such a comparison should be seen as indicative. Our analysis of costs, however, is based on these approved and disbursed loans for 1991.

Source: Survey data.

Table 13
Distribution of total number of loans approved by bank location

<i>Location</i>	<i>Type of Enterprise</i>				<i>Total</i>
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>	
Urban	84% (19.2%)	99% (2.4%)	48.3% (27.3%)	58.6% (51.0%)	(100%) ^a
Rural	16% (33.4%)	1% (0.02%)	51.7% (42.1%)	41.4% (52.4%)	(100%) ^a
Total	100%	100%	100%	100%	(100%) ^a

- a) Figures in parenthesis indicate proportion of urban or rural loan numbers.

Source: Survey data.

It is interesting that among commercial banks, even though the number of SSE loans approved was more than three times that of LSEs, the total volume of loans to SSEs was only 19% of those to LSEs, and 14% of the total portfolio of the commercial bank branches (see Table 14). LSEs took as much as 74% of their total loans portfolio for the private sector, while SSA came in with less than 5%, thus confirming the generally held view that banks tend to favour LSEs. For the development banks it is also interesting that, while LSEs took more than 50% of loans, they were followed by the 'other' category with over 26%. Ironically, the lending portfolio of the unit rural banks studied was dominated by lending to traders and public servants, with 61% of all loans.

Table 14
Mean distribution of total loan^a volumes (Cedis ₵^b) approved by branch/bank, 1991

<i>Bank Type</i>	<i>Type of Enterprise</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial	₵53,657,754 (14.0%)	₵286,736,567 (74.4%)	₵18,061,382 (4.6%)	₵26,365,006 (6.8%)
Development	₵41,448,584 (14.6%)	₵143,524,000 (50.7%)	₵22,653,093 (8.0%)	₵75,291,250 (26.6%)
Unit Rural	₵3,084,248 (8.6%)	0	₵10,729,034 (30.2%)	₵21,685,773 (61.1%)

a) The term 'loan' is used here broadly to take account of overdrafts rolled over and for all practical purposes serving long-term purposes. By our estimates, this constitutes about 40% of all such advances.

b) At end-December 1991, US \$1 was equivalent to ₵395.

Source: Survey data.

Characteristically, in urban areas the large importance of lending to LSEs by banks is suggested by our data, as over 58% of their loans are directed at this market. SSEs take only 18.5% of loans in urban areas, while SSA acquires only 9.2%. In the rural areas, the volume of SSA loans is second to traders and others, as shown in Table 15.

Table 15
Distribution of total loan volumes by bank location

<i>Location</i>	<i>Type of Enterprise</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Urban	18.5%	58.8%	9.2%	13.4%
Rural	13.2%	6.3%	33.8%	46.6%

Source: Survey data.

3.3.2 *Loan sizes*

Our distribution of average loan sizes as shown in Table 16 was generally as expected. We had also expected, however, that LSEs borrowing from development banks would have larger loan sizes over long terms. The lower sizes of LSE loans in this respect may be attributed to the liquidity problems the development banks have faced since the mid-1980s as well as to the general transformation of their asset structures as they tried to become universal banks following the reforms. In general, loans from unit rural banks are smaller than those from development and commercial banks. The relatively large size of 'other' loans from development banks results from the fact that they go mainly to finance working capital for small construction firms, large-scale farmers and traders, while 'other' loans from commercial banks and unit rural banks are dominated by what were earlier referred to as 'personal loans' to public servants.

Table 16
Mean loan^a sizes by type of bank 1991 (cedis)

<i>Bank Type</i>	<i>Type of Enterprise</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	935,640	21,726,284	210,227	93,719
Development Bank	533,318	11,336,648	353,223	1,882,281
Unit Rural Bank	119,159	–	57,680	90,551
Overall Bank	529,372	16,531,466	207,043	688,850

a) This figure refers only to term loans.

Source: Survey data.

3.3.3 Loan maturities

Loans from commercial banks generally tend to have longer maturities than those of other banks (see Table 17). What is interesting is that, for all banks, there were hardly any distinctions in loan maturities by location. Thus, the maturity of rural loans did not differ from those of urban loans. This may be explained by the fact that the maturities are generally not very negotiable. The longest loan maturity we observed for a commercial bank lending to the SSE sector in 1991 was 17 months. For the LSE sector, the longest maturity for a commercial bank loan was 18 months. It would appear that banks did not generally use differential maturities to discriminate between different categories of borrowers. There were hardly any agricultural loans with a maturity beyond 12 months for all banks. It is interesting that development banks should display shorter maturity periods for loans than the commercial banks. Once again we attribute this development to the restructuring exercise that all development banks were undergoing at the time of the survey.

Table 17
Most frequent loan maturities (months) by type of bank, 1991

<i>Bank Type</i>	<i>Type of Enterprise</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	11	13	12	12
Development Bank	7	10	8	9
Unit Rural Bank	7	8	8	9
Overall Mean	9	11	9	10

Source: Survey data.

3.3.4 Loan repayment trends among banks

To ease the comprehension of contract enforcement costs later, we provide here an indicative picture of loan repayment trends as they affect different banks in different locations. Our data indicate that default in repayment is most acute with SSA loans. For the years 1988–90, about 50% of delinquent loans were in the name of SSA borrowers, while 35% could be assigned to SSEs. Delinquency on the part of LSEs took some 5% of outstanding payments, while ‘others’ accounted for the remaining 10%. Delinquency in repayment of SSA loans is more pronounced by far in development bank branches and the unit rural banks. Together they accounted for over 70% of the total number of borrowers who failed to repay

loans on time between 1988 and 1990. In view of the larger loan sizes that LSEs attract, it was not surprising that, even though they had lower default rates, they held as much as 55% of loan amounts in default by the end of 1991. Amounts in default by SSAs constituted 25% of the total. In contrast to the relatively large incidence of default, none of the banks foreclosed on any collateral in 1991.

3.4 Developments in interest rates and their determination by banks after reforms

Following the adoption of the financial sector adjustment programme in Ghana in 1985, it was generally expected that, by means of a liberalisation of the formal financial system, banks would set lending and deposit rates that accurately reflected credit supply and demand conditions. Thus, after the initial phase of a growing spread between lending and deposit rates (as banks needed time to reshape their cost structures within the expected changing environment), this spread was expected to narrow as more efficient business practices were adopted in the face of increasing competition on the financial market and credit demand stabilised. Also, banks were expected to increase the volume of lending to competitive sectors of the real economy, where such lending was determined by the risks associated with projects and the expected rate of return on loans made. This has in fact not happened (see Table 18).

For most of 1992, money market interest rates remained relatively stable (averaging 17–20%) until August, as did deposit and lending rates which were positive in real terms over the period. In the course of 1992, strong growth in credit may have indicated renewed inflationary expectations as the cedi depreciated rapidly in value. This depreciation, by more than 4.3% in real effective terms in the first half of the year, may have been precipitated both by pressures on the foreign-exchange market and by the expansionary financial policies. In the second half of 1992 the rediscount rate of the Bank of Ghana was raised to 23% from 20%, which led to an increase in money market rates. By the end of the year the bank rate was 30%, with a maximum interest rate on a 12-month fixed deposit placed at 22.5%, and the maximum lending rates at 29%.

The first two months of 1993 saw an unchanged bank rate, but lending rates climbed to 31.5%. In March the bank rate went up to 35%, as the monetary authorities intensified open market operations in a bid to control money supply. This action led to lending rates reaching 36.5% by the end of the year. It is interesting that, as maximum lending rates climbed 7.2 percentage points in the course of the year, the 12-month fixed deposit rate only managed an increase of 6.2 percentage points in the same period. The significance of this is that, contrary to the expectation that following the financial sector reforms and the liberalisation of markets the spread between lending and deposit rates would narrow, this is obviously not happening in Ghana. Lending rates continue to climb faster than

Table 18
Selected interest rates, 1980-90 (% p.a. end of period)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Bank rate	13.50	19.50	10.50	14.50	18.00	18.50	20.50	23.50	26.00	26.00	33.00
TB rate	12.00	18.50	9.50	13.00	16.80	17.80	19.80	22.80	19.60	19.90	27.30
<u>Deposit rates</u>											
Savings	12.00	18.00	8.00	11.00	14.50	16.50	-	19.00- 22.00	18.00- 21.50	15.00- 19.00	14.00- 18.00
Time (12 months)	13.00	19.00	9.00	12.50	16.00	18.00	20.00	22.00- 22.50	19.00- 22.50	12.00- 20.00	16.00- 21.50
CDs								17.25- 22.00	14.00- 20.00	11.50- 20.00	13.00- 25.50
<u>Lending rates</u>											
Secured by immovable property	17.50- 18.50	17.50- 18.50	17.50- 18.50	14.50	22.50	23.00	23.00	26.00- 30.00	23.00- 30.25	22.50- 30.25	22.50- 30.25
Unsecured	17.50- 18.50	17.50- 18.50	17.50- 18.50	19.00	22.50	23.00					
Other	17.50- 18.50	17.50- 18.50	17.50- 18.50	19.00	22.50	23.00	23.00	26.00	30.30	30.30	30.30
Agriculture					16.00	18.50	22.50	22.75- 30.00	23.00- 30.00	22.50- 30.00	22.50- 29.50
Manufacture					20.00	20.50	23.00	26.00- 30.00	23.50- 30.25	22.50- 30.25	22.50- 30.25

Source: Bank of Ghana and *Quarterly Digest of Statistics*, June 1991.

Table 19
Selected interest rates 1993 (%)

<i>Month</i>	<i>Govt. Stocks</i>	<i>T-Bills</i>	<i>Bank Rate</i>	<i>12-Month Fixed Deposit</i>	<i>Savings Deposit</i>	<i>CDs</i>	<i>Agric. Lending Rate</i>	<i>Export Lending Rate</i>	<i>Manf. Lending Rate</i>
Jan	16.50	28.00	30.00	23.90	18.00	22.13	28.80	28.80	28.80
Feb	16.50	28.00	30.00	26.50	18.00	21.50	31.50	31.50	31.50
March	16.50	29.50	35.00	26.50	19.00	24.50	31.50	31.50	31.50
April	16.50	32.00	35.00	28.25	22.00	26.00	35.00	35.00	35.00
May	16.50	32.00	35.00	28.63	22.00	26.00	35.50	35.50	35.50
June	16.50	32.00	35.00	32.00	22.00	32.50	35.50	35.50	36.00
July	16.50	32.00	35.00	32.00	22.00	27.75	36.50	36.50	36.50
Aug	16.50	32.00	35.00	29.00	22.00	27.75	36.50	36.50	36.50
Sept	16.50	32.00	35.00	30.00	22.00	27.75	36.50	36.50	36.50

Source: Bank of Ghana.

deposit rates almost 8 years after reforms began.

It is not obvious what factors are driving interest rates currently, since the cost of bank funds do not justify the current spreads. We shall show later that growing transaction costs, derived mainly from loan administration costs, may be crucial in explaining the growing spread. It is to be hoped that increasing competition among the banks will help to narrow this spread as the banks find more efficient ways to intermediate funds. It is important to note that, between January 1992 and September 1993, the interest rate on Treasury bills climbed from 18% to 32%. By the end of 1993, it had dropped to 29%.

While it is generally expected that, if transaction costs rise, depending on the structure of the market, lenders will push up their lending rates in order to maintain existing profit levels, Hoff and Stiglitz (1990) argue that there is a limit to how far lenders can push up their rates as 'at some higher interest rate the greater risk and thus higher incidence of default will offset the increased interest income from the loan portfolio'. What may be expected in this situation is that lenders will try to keep a 'favourable risk composition of projects'. In Ghana, as in many developing economies, banks see a favourable risk composition as one that is heavily weighted against small-scale enterprises and the agricultural sector.

As Table 19 indicates, variations in the price of loans by sector since liberalisation have more or less disappeared. This is in spite of the fact that loans to the construction and commercial sectors attract marginally higher rates. Even though most banks suggest that there are hardly any differences in the rates charged to SMEs and LSEs, we observed that 85% of the commercial bank branches in our sample and 82% of the development bank branches did discriminate in interest rates levied on different sectors. From interviews with head office staff, it was indicated to us by both commercial and development banks that they set lending rates primarily according to market competition and the average cost of funds, with administrative costs mentioned as a third consideration. While head office staff suggest that it is difficult to attach differential risks to different projects, over 70% of the managers of all types of banks interviewed indicated that differential interest rates were the result of different perceived risks.

At the time of our survey in mid-1992, banks were making out loans at base rates that ranged from 26% to as high as 32%. On top of this came loan commitment and servicing fees, which usually added about 2%. Indeed, 60% of commercial bank managers interviewed indicated that they imposed such additional fees for all categories of borrowers, while all development banks and 75% of the unit rural banks studied did so. Interestingly, small agricultural loans are still unlikely to attract other charges. It is important to note that some fees were not always obvious to the borrower. In an unusual case, one development bank's base charge for SMEs was 30%, but borrowers were also charged 1% for legal documentation, a 1% fee for appraisal and valuation of collateral, a 2% servicing fee, and a 1% commitment

fee, to yield an effective rate of 35%. The servicing fee and the commitment charges were levied on the outstanding loan each year. In 1992, one bank suggested that it charged 2% less on SME loans, since SMEs could not afford higher rates.

To indicate how far liberalisation has affected the process of interest-rate determination, we tried to identify any process of clients and bankers negotiating lending rates. We observed that there was a higher likelihood of banks negotiating with LSEs than with SSEs and small agricultural projects. For more than 80% of loan applicants in all categories, however, no 'bargaining' over interest rates was permitted by banks in 1992.

3.5 Policy factors determining the asset structures of banks

The basic question we seek to address here is why banks are less inclined to lend to small borrowers, hence leading to a segmentation of the market. We believe these have both policy origins and structural origins. The persistence of fragmentation between segments is likely to be the result of policies founded on high risk perceptions and high transaction costs in relation to small borrower lending. These do not make it possible for banks to expand lending activities to include this category of borrowers. In this section the policy factors underlying this behaviour are considered and at the structural origins of segmentation are then examined. Of interest here are broad macroeconomic policies as well as the policies of the banking sector itself.

3.5.1 Macroeconomic policies and credit allocation

The government has used a combination of direct and less direct tools to influence credit allocation. In the days of financial repression, the more direct tools of selective credit controls were applied more intensively than the less direct one of interest-rate fixing. Currently variations in interest rates as well as greater competition are expected to do the trick. We look first at the policies before liberalisation and then consider the policies of the reform era.

The government's macroeconomic objectives of real economic growth within 'priority sectors' and the abatement of inflation basically underpinned the sectoral choices for credit allocation in the era of financial repression. But this did not necessarily coincide with the economic considerations of the banking sector. The banks were more interested in resolving the conflict between profitability and liquidity against the background of risks, credit-worthiness and investment opportunities. Moreover, directives from the Bank of Ghana to the banks to allocate more credit to 'priority sectors' were not accompanied by any incentives to the banks, bearing in mind the fact that these sectors were considered by most bankers to be the high-risk sectors.

The fact that the prevailing macroeconomic environment was more influential in dictating how the banks structured their portfolios than were the sectoral credit ceilings, is illustrated by the way their 'favoured' sectors coincided with the 'high-performing' economic sectors. This may be understood by looking at the sectoral contribution to GDP and relating this to credit share. The sectoral ceilings 'binding' on the banks were designed in such a way that, once a bank had exceeded the ceiling for a sector, it could only utilise its loanable funds on sectors where the ceilings had not been reached. If we consider the 'most favoured sectors' to be those to which the banks preferred to lend once ceilings had been reached, the relationship between the general macroeconomic environment and the banks' portfolio structures becomes apparent. Between 1984 and 1988, the commercial sector's credit allocation (the largest) was consistent with its position as a large contributor to GDP. It received about 27% of domestic credit, which was a little more than its contribution to GDP. It is a fast-moving sector with high returns and is quite attractive to banks.

When the government used interest rates to direct credit under the repressive regime, the practice was to apply rates differently to different sectors, beginning in the 1970s and intensified in the early part of the 1980s. In applying preferential interest rates to different economic sectors it was assumed that the market rate would ration out some of the priority sectors. Interest rates were perceived by the monetary authorities as the cost of loanable funds, and were subsequently adjusted periodically to promote increases in the level of investment among the different sectors, and to ensure an inflation-free process of economic growth.

Between 1985 and 1988, efforts were made to narrow the differential between priority and non-priority rates until these were phased out completely in 1988. With this interest-rate structure it was certainly possible for small enterprises to obtain loans and advances from banks at concessionary rates, when the banks were prepared to lend. Since the reforms began, interest rates have been the main macroeconomic policy tool for credit allocation. But this falls within the broader policy goals of maintaining low levels of inflation and ensuring increasing private sector investment. Our discussion here demonstrates that the preoccupation with containing inflation often leads to difficulties with credit targets.

Thus, in 1993, for example, while the government's specific objective in monetary and financial sector development was 'to achieve the targeted reduction in the rate of inflation', i.e. to bring inflation down to 8.5% by the end of the year, it also sought to increase private sector credit. Hence, monetary and credit policies were directed mainly at containing inflation within that limit. The maintenance of positive real deposit rates became a major pre-occupation of the central bank as a step in encouraging growth in private financial savings, while the government re-started repayments to the banking system in order to facilitate expansion in bank credit to the private sector. This was intended to boost private domestic investment, but making it consistent with the anti-inflation programme. This was essential in

view of developments in 1992, when trends in money supply indicated a rapid expansion. Underlying factors were the strong expansion of credit to the private sector, at the same time as bank financing of the operations of the Cocoa Board and the rest of the public sector was higher than programmed.

Since all ceilings on credit allocation had been completely removed in 1991, leaving the government with only indirect controls over credit management, a more effective regulatory framework for the central bank became crucial. To achieve this, the objective of ensuring that banks' excess reserves were kept to a minimum was emphasised. As part of a programme to ensure that the Bank of Ghana was able to conduct monetary policies without being unduly worried about its own profitability, the government agreed to continue covering its revaluation losses through the issuance of long-term bonds with appropriate yields.

The difficulty of achieving these dual objectives, in an ill-functioning financial market, is clearly illustrated by developments in the monetary sector. In spite of the programme outlined above, 1993 saw the economy experiencing significant problems with monetary balances. Broad money supply increased by a little over 27% that year. Similarly, even though domestic credit to the private sector of the economy was programmed at ₵159.0 bn by year-end, the actual credit was ₵209.8 bn, an excess of 12.7% over the target. What was significant about the rapid expansion in money supply was the relative strengths of the currency held by the non-bank public and the rest of narrow money. The Bank of Ghana (1994) attributed the expansion of M_1 to the increases in credit to the private sector (14.7%) and credit to public institutions (45.7%), while net credit to the government accounted for the rest (39.6%).

When it became apparent by the middle of 1993 that a substantial further increase in the liquidity positions of the banking system would develop, the monetary authorities countered this with variations in the total minimum reserve ratio required and the pursuit of open market operations. The minimum reserve rose from 42% to 57% by the middle of the year. The effect of the rise was significant increases in interest rates and the re-emergence of excess reserves on bank balance sheets. This development adversely affected further monetary reforms (aimed at enhancing financial intermediation and increasing lending to the private sector) as the actual ratio of reserves returned rose from 66% at the beginning of the year to 70% at year-end. As a consequence, the banks still find lending to the private sector not very attractive.

4. Credit demand by enterprises

A survey of small and medium-sized enterprises in Accra, Kumasi and Takoradi (Aryeetey et al., 1993) indicated that about 63% of the sample firms had applied for bank loans for their present business over a period. Only 16.5% of the sample had never applied for a bank loan. On average, firms had applied at least twice for loans. Only 50% of firms that had put in applications had them approved. For microenterprises only 30% of applications were successful. Microenterprises had to put in an average of three applications before one was successful, whereas medium-sized firms often received loans on their first application. Also, firms received loans for much less than they requested, with the ratio rising sharply with firm size (see Table 20). This trend suggests that liberalisation of the financial system has not necessarily improved the risk-taking capabilities of the formal banks.

The above trend is quite similar to our observations from a survey of 55 sample firms in the areas where we carried out our bank surveys. We introduce here some aspects of how these enterprises were financed and how they would like to be financed in future. The essence of this analysis is only to corroborate the evidence taken earlier from the supply side.

4.1 Characteristics of micro and small enterprise finance

The results of our borrowers' survey suggest the importance of relatively small amounts of own finance at various stages of the development of micro and small enterprises, from start-up through to the expansion of fixed assets. A sizeable number of medium-sized firms also apply their own finance.

4.1.1 *The finance of start-up*

We identified the following important sources of start-up capital in the survey: (i) owners' savings; (ii) gifts from relations; (iii) loans from relations; (iv) bank loans; and (v) suppliers' credit. A minimum of 10% of the sample used these sources in varying proportions together with other sources. The use of own savings dominated start-up finance. Up to 90% of microenterprises and 82% of small enterprises began this way. Slightly fewer medium-sized firms used own savings, which provided about 75% of the capital they used. Often, the rest was borrowed from friends or relations. Indeed, as much as 20% of all sample firms borrowed some capital from friends and relations. This result is similar to what has been observed in many other studies of enterprise finance in Ghana (World Bank/RPED, 1993).

Table 20
Characteristics of loans obtained, by size and age
 (mean or percentages of responses)

	<i>Total</i>	<i>Size Categories</i>			<i>Age (years)</i>	
		<i>1-9 Micro</i>	<i>10-29 Small</i>	<i>30+ Med.</i>	<i><6 New</i>	<i>6+ Old</i>
Amount applied for (¢ m.)	18.5	8.7	12.1	58.1	21.3	25.6
Amount applied as % of desired capital	60.9	49.3	64.1	90.1	62.1	59.3
Amount received (¢ m.)	6.7	0.3	4.6	31.7	11.9	7.3
Amount received as % of application	36.0	3.1	37.9	54.5	55.9	28.5
Amount received as % of investment	56.1	43.0	55.4	100.0	57.1	59.0
Interest (monthly %)	2.05	2.02	2.03	2.13	2.15	2.25
Maturity (months)	22.2	12.8	22.9	48.0	23.4	27.7
Asked to provide collateral (%)	72.5	58.5	80.8	100.0	71.4	80.0

Source: Aryeetey et al., 1993.

In general, the likelihood of using own finance for start-up, is greater the smaller the enterprise. Using a larger sample that also included larger (medium-sized firms), Aryeetey et al. (1993) observed that only 50% of medium-sized firms used owners' savings as the primary source as against 67% for small-scale enterprises and 71% for microenterprises. On the other hand, the use of formal finance rose sharply with size. The conclusion drawn from this trend was that the new entrepreneur's access to external capital might determine initial size, rather than the desired size determining the amount borrowed.

We were surprised, in view of the fact that fewer entrepreneurs used bank loans to start their businesses, prior to beginning their businesses, as many as 65% of the sample used banks to accumulate savings. Relatively little use (only 5% of microentrepreneurs) was made of *susu* and other informal units to accumulate savings. Only 8% of the micro and small-sized firms in the sample had access to bank loans to finance the start of their businesses. There was an obvious correlation between the use of bank loans for start-up and firm size. This was again similar to observations made elsewhere when access to bank loans for start-up varied considerably among firms of different sizes (Aryeetey et al., 1993), with as many as 29% of medium-sized firms using a bank loan in start-up as against only 8% of both small-scale firms and microenterprises. For 21% of medium-sized firms, bank loans were the primary source of funds in starting businesses, as against 1% of microenterprises and 5% small firms. These differences were statistically significant.

Even though considerable attention is being paid in recent times to the role of suppliers' or trade credit in the finance of African businesses (World Bank/RPED, 1993), we found little evidence of its being a major source for small businesses in Ghana. Only 5% of our microenterprises used such facilities and another 9% of small enterprises used them to start their businesses. Aryeetey et al. (1993) observed the use of suppliers' credit to start up businesses at about 21% of medium-sized enterprises and about 15% of small-sized enterprises. Again, only 5% of their microenterprises had access to suppliers' credit. Suppliers' credit was almost always used to complement another source of finance. Larger firms are more likely to have access to this facility.

4.1.2 Financing working capital

The finance of working capital among our sample firms was dominated by the use of internal sources. While 80% of microenterprises surveyed used retained profits (often together with other sources) for this purpose, as many as 35% of them also indicated using their personal savings (partially, at least) to finance working capital. Retained profits were the principal source for 55%. External finance used consisted mainly of advances from customers (30% of the sample), overdrafts (15%), and suppliers' credit (15%). It is interesting that, for financing working capital, funds

from relations and friends became unimportant, while retained profits, customers' advances and bank overdrafts assumed a greater role. Advances from customers were more likely to be available to larger firms. Similarly, older firms tended to find it easier to obtain overdrafts for working capital than newer firms.

Here also, the use of bank loans was found to be directly related to firm size. Thus, while only 4% of microenterprises used bank loans for working capital, we observed that 18% of small-sized firms did. There was a significantly higher likelihood, however, of microenterprises having used overdraft facilities for working capital as against bank loans. The trend suggests that banks may be more willing to provide short-term working capital than long-term investment finance to smaller enterprises. This might be explained by the short repayment period which reduces the risk and the absence of project appraisal which lowers the transaction cost.

4.1.3 Financing fixed investments

Financing additional fixed investments over the previous 3–5 years often required similar financing practices to those employed for the finance of working capital. The only difference was the relative absence of overdrafts in this case. Internal sources remained pronounced for both micro and small enterprises. The probability of using loans increased as firm size expanded. While only 4% of microenterprises used bank loans to expand, 20% of small enterprises did. In the earlier study by Aryeetey et al. (1993), as many as 33% of medium-sized enterprises and only 2% of microenterprises used bank loans for expansion. It is important to emphasise that co-investors have not come out as significant financiers of fixed investments; less than 3% of our sample had tried this.

4.2 The demand for finance among SMEs

There are, in principle, a number of ways of defining the demand for finance. In general, when entrepreneurs cite finance as a constraint when in need of cash, this may often be seen only as perceived demand. When this perceived demand or desire is actually expressed (for example in a survey), but no action is taken on it in the face of market imperfections and institutional barriers, some portion of this might represent 'potential' demand. This includes discouraged, would-be applicants who might come forward if they thought their chances of securing loans were better. Bankers are, however, only interested in revealed demand, i.e. entrepreneurs applying for credit at prevailing interest rates. They are interested in revealed demand that is backed by bankable projects. For the purposes of our analysis, however, we need to go beyond what is revealed and to include potential demand. It is, however, difficult to derive a reliable estimate of such demand for credit.

Many directed credit schemes for small enterprises, such as those used by the government in Ghana, rely on supply-leading finance approaches, which assume that the demand for credit far exceeds the supply. This approach has been criticised extensively (Adams and Graham, 1981; Adams et al., 1984). Underlying these critiques is the contention that non-existent demand would not necessarily emerge to follow supply and would, therefore, lead to a misallocation of resources.

A suggestion has indeed been made in a study in Ghana, that what is perceived as a high unsatisfied demand for credit from small borrowers, may actually be a demand for liquidity, against which a supply-leading programme will have little impact in bringing about more investments (IPC, 1988). When we analysed credit demand for the present study, we laid emphasis on the extent to which the perceived demand of entrepreneurs is translated into active demand that is potentially bankable. One measure of the strength of demand is tenacity in making further efforts after a loan application is turned down.

4.2.1 Loan requests by firms

It is interesting that the proportion applying for bank loans (67% of our sample) considerably exceeded those who indicated that finance was the most important constraint to expansion (45%). These were entrepreneurs who had, at different times, applied for bank loans for their present business. It may be noted that 70% of the sample firms indicated that their firms were making profits at the time of the survey. The average number of applications each respondent had made was 3 for the present business. About 2% of them had applied for loans for a different business, while 14% had enquired from banks but had been discouraged from putting in applications. Another 17% of the sample had never applied for a bank loan. We observed that larger firms in the sample were more likely to apply for bank loans than smaller ones. Fewer of the larger enterprises (than microenterprises) had never applied for a bank loan. These figures would suggest that some of the applications representing revealed demand, are likely not to be bankable.⁸ There is the likelihood that some of the applications, albeit a smaller proportion, might have been intended to solve temporary liquidity constraints.

4.2.2 Bank response to loan applications

Our observation of the responses of various banks to loan applications of sample firms were quite similar to those observed in the study by Aryeetey et al. (1993). On average, each respondent who had applied for a bank loan had had at least two failed applications and one successful one. Thus, for any application submitted by

⁸ This is a situation where revealed demand exceeds potential demand.

microenterprises, the chance of its being positively evaluated was no more than 33%. This was very similar to the findings of Aryeetey et al. (1993) that 'microenterprises had to put in an average of three applications before one was successful, whereas medium-sized firms often received loans with their first applications'. The data showed that actual loan amounts were usually less than 50% of what firms requested. It is interesting, however, that more than half of our sample had used bank loans before.

Firms indicated that the major reason for failing to obtain the loans applied for was usually the lack of adequate collateral. This was the main reason given by the banks. Twice as many microenterprises as small-sized firms suggested that this was the main reason for the failure of the loan application.

We tried assessing sample firms on the basis of standard criteria of creditworthiness. Our assessment of projects proposed by firms indicated that about 55% of them might be considered creditworthy. This leads to the view that there are considerably more viable projects being considered by micro and small enterprises than the banks estimate. We are inclined to believe that overall credit rating rises sharply with firm size, which is also correlated strongly with the acceptability of collateral and financial management capability. A bias of lending in favour of larger firms appears to be consistent with 'good' prudential lending practices. The only way small borrowers can become attractive is if different measures for assessment are introduced.

4.3 Characteristics of external finance demanded by firms

4.3.1 Working capital finance

To finance the purchase of additional raw materials needed to meet a large order, 60% of our sample would rely on advances from customers. For half of these, this would be the main source. The remainder indicated that they would rely partially on retained profits. In spite of the relatively high probability of loan applications being turned down and the relatively small use of overdraft facilities by microenterprises, more than half of them suggested that they would also apply for bank assistance. These were, however, mainly larger or medium-sized firms. A few small firms suggested that they might turn to relations and friends for assistance.

4.3.2 Preferred loan conditions

Interest rates: We asked firms how useful a loan at a relatively high interest rate at the time of the survey (30% p.a.) would be for new investment and for working capital. Altogether, only 47% of the firms said that they would find a loan at 30%

'very useful', while another 25% would find it only 'moderately useful' for new investment. We observed hardly any significant differences among size classes. For working capital also, 55% of the total sample of firms said that they would find this type of loan 'very useful'. More small and medium-sized firms found this rate acceptable than did microenterprises.

It is interesting that, irrespective of size, firms responded that they would find an interest rate of 18% acceptable. This was after considering their expected returns and other market conditions. This was 8 percentage points below the minimum market rate at the time (26%).

Maturity: It would appear that larger firms prefer loans with longer maturities, averaging 48 months, while smaller firms do not mind loans that are to be paid back within 18 months. For the entire sample, the preferred average maturity of loans was 24 months. This is generally twice as long as the current average maturity of loans actually received by small and medium-sized firms.

Frequency of repayment: A little over a half of our respondents said that they would prefer to make loan repayments on a monthly basis, while most of the remainder would like quarterly payments.

Availability of collateral: A surprisingly large proportion of sample firms had the ability to offer property as collateral. Only less than 20% of the sample were unable to offer any collateral at the time of the survey. As expected, we found microenterprises the most unlikely to be able to offer property as collateral (30%). Most owners of such firms (70%) without landed property suggested that the banks could take a lien on their equipment as an alternative to houses and farmlands. A relatively small number of microenterprises suggested that the best alternative would be the savings account of a guarantor.

In sum, the evidence gathered from our survey of borrowers corroborates the evidence of discrimination against small borrowers, which is a major cause of market segmentation. But the revealed demand of small firms for finance is mainly for normal working capital and growth requirements; it is not intended to solve only temporary liquidity problems. Using the criteria that banks generally apply, smaller firms are bound to be less creditworthy than larger enterprises. Some of those currently not creditworthy may become creditworthy only if the criteria for determination are varied to make them more flexible, and if institutional constraints to proper appraisal are removed.

5. The processes of loan administration

An unintended effect of liberalisation and financial restructuring has been to increase the time required for loan processing and hence the cost of lending. This occurs mainly because restructuring requirements have caused some of the more active state-owned banks to increase the centralisation of their loan processing and supervision in order to achieve a greater degree of control over growth in credit volume and recovery management. The project analysis requirements of their credit programmes have also added to processing time.

Before discussing the costs, it is interesting to consider some of the approaches employed by bankers studied at the branch level to screen loan applications, in order to understand how these affect the costs of institutions differently. During the survey we learned that, whereas previous acquaintance with the borrower is taken for granted by most banks when lending for large operations, such a relationship barely exists with regard to small borrowers. Hence, while 64% and 75% of those receiving SSA loans from commercial and development banks respectively in 1991 were first-time borrowers, more than 99% of LSE borrowers had borrowed from their bankers before. This would require more screening for SSAs. For the unit rural banks, almost all SSA borrowers were first-time borrowers in 1991.

In screening loan applications it is almost standard practice, where feasible, for banks to seek information about the potential borrowers from other sources. Invariably, for commercial and development banks, this amounts to asking other bankers for their references. Many bank managers indicated that, while this may occasionally yield vital information, it is often not very useful as a screening tool since other banks seldom have information about their customers. In view of the fact that group lending schemes have become very popular for agricultural lending, bankers consider references from other banks as irrelevant for SSA lending.

When banks seek information about potential borrowers, they invariably want to know about indebtedness, if any. This was the case for 80% of the bank managers interviewed.⁹ This information is followed in order of importance by the personal integrity of the borrower. Banks suggest that it is standard practice for them to visit the project sites of SSA and LSE loan clients as part of the screening process before they grant the required loan. In the case of most SSE customers, they only occasionally visit projects, depending on the size of loan in question. In small towns and rural areas, bankers suggest that they might already be acquainted with the projects of most of their customers, thus making visits unnecessary during screening. In the assessment of creditworthiness, 99% of bank managers indicated that the return on projects or feasibility was the most important criterion for

⁹ It may be noted that this is similar to information sought by moneylenders (Aryeetey, 1994).

assessment. Interestingly, while no bankers in our branch survey ranked collateral as the most important factor in assessing creditworthiness, it was invariably quoted among the top four factors for the entire sample. ◦

The information obtained from various bank head offices revealed some interesting perceptions and new attempts banks are making towards improving their lending approaches.

Creditworthiness criteria: High costs or difficulty in obtaining and processing information about the borrower and the project can deter banks from offering credit to small borrowers because they regard this information as critical for assessing creditworthiness. The time spent in verifying information for project analysis, and the related salary and support costs, are the largest single cost factor in lending to small borrowers. Establishment of the borrower's character and reputation in the business is particularly difficult for small and new borrowers. The absence of a credit reference bureau and poor inter-bank co-operation contribute to the difficulty. Also, the lack of good market information on supply, demand and costs makes it difficult to establish project viability.

The main criteria used by banks in appraising large and small enterprise loans are the same. Similarly, the criteria for new and older firms did not differ greatly. Banks rank experience in a business higher when it is applied to a new firm, in view of the lack of information on the firm. They also rank character/reputation lower for new businesses since they often have no basis for establishing it. It is interesting that collateral is not ranked highly but almost always features in the requirements of all banks. Some banks do not require collateral for large established firms. The use of collateral in all lending criteria suggests that it may be used as a substitute for effective appraisal of the entrepreneur and the project. While banks may insist that they consider the viability of projects as the most important criterion in assessing applications, many small borrowers believe that their loan applications are usually rejected for lack of collateral, as seen earlier.

Unfortunately, the reforms have not ushered in any significant new approaches in the appraisal of creditworthiness. What the banks have done is to try to improve project analysis with improved information based on projects. Some bankers indicated that they are increasingly paying more attention to the appraisal of the small borrower's character than they did before. This was because they had become aware of the fact that the project analysis requirements imposed by small borrower loans were in general too technical, and that the average small borrower was not technically or financially equipped to provide the necessary documentation. The banks indicated that most small entrepreneurs applied for loans without any feasibility studies, audited accounts, or documentation on collateral. The attempt to find the information required was often too costly for them, hence the new interest in character assessment. It is important to note, however, that this approach is not yet seen by the banks as a suitable alternative to the usual methods of project

analysis. It is only used if there are compelling reasons for it, on a case-by-case approach.

The use of collateral: Some banks maintain that they have increased their emphasis on sounder project appraisal in order to lessen the chances of foreclosure, in view of the fact that the decision to seize property in Ghana is taken only with great difficulty. In addition to landed property, such as houses, they have also begun to apply a variety of other forms of security, including blocked accounts, letters of undertaking, and pledges of other financial instruments. The continued dominance of houses as acceptable collateral cannot be denied, however. The taking of sufficient collateral remains a major tool of risk reduction.

Risk reduction measures: Market liberalisation has not significantly decreased risk aversion towards small borrowers. This explains why there has been no substantial reduction in dependence on collateral. Ironically, the restructuring of the banks has tended to increase their general risk aversion. A major contributory factor has been the requirement that banks restructure their portfolios and write-off bad assets, tighten credit analysis standards and increase project equity requirements. For most banks collateral requirements could be relaxed, if a sound loan insurance or guarantee fund were available to provide risk coverage.

In the absence of such insurance, the risk of borrower default and project non-viability is expected to be pursued through more thorough project analysis and more frequent on-site monitoring, as well as more consistent loan account monitoring by branch office staff, with monthly reporting to head office. While this suggestion is made by the banks, we found little evidence of extensive loan monitoring in our branch survey. Several banks have indicated that they have gradually been diversifying lending into other sectors, thereby spreading their risks. This diversification is needed to improve portfolio performance and income, and also to reduce over-concentration in sectors that are subject to significant foreign exchange risks. The diversification has become possible since the removal of sectoral ceilings by the central bank.

6. The transaction costs of lending

By the transaction costs of lending, we mean the cost of administering credit and the cost of the risk of default. They are the costs involved in establishing and conducting financial relationships. The first component, administrative costs, includes the cost of information-gathering, recording systems for transaction processing, ensuring that loans are used as planned through monitoring, enforcing contracts to ensure repayment, etc. These are derived from wage and salary expenses and other administrative costs such as printing, stationery, rent, travel, etc. The second component, the costs of default risk, are defined as 'those expenses for the risk of loan default incurred by the lending institutions, for example, provision for loan losses, the loan guarantee fees paid, and the actual bad debts incurred' (Saito and Villanueva, 1981). Transaction costs are usually expressed as a percentage of the total loan amount.

We presume that the spread between lending and deposit rates has remained high since liberalisation because there has been relatively little pressure on formal lenders to reduce their transaction costs, as competition on the financial market is being achieved only relatively slowly. Transaction costs form a major component of the effective cost of credit to any borrower, as the effective rate on bank lending is derived from a summation of the net pure profit of banks (returns on stockholders' equity), the cost of their funds or interest cost, and their transaction costs. The spread generally grows as lending rates rise faster than deposit rates. If the net pure profit and the cost of funds were held stable, any widening of the spread could be attributed to transaction costs. There is, therefore, a direct relationship between transaction costs and the spread.

Many bank managers interviewed indicated that banks usually calculated their transaction costs based on their standard overhead costs. They did not estimate the actual costs of administering a loan through the processes of screening, monitoring and contract enforcement. They were subsequently unable to give details on why they thought an SME loan cost more to transact than credit to a larger enterprise. The view that small loans are more expensive is therefore founded on the following notion. Aside from the possibility that absolute costs for small and large loans may not differ, which would therefore make the transaction costs on small loans higher, small loans may also presumably be more expensive because it may be more difficult to obtain accurate information on small borrowers. Small borrowers are spread over wide geographical areas, thus making contact with them more difficult. Frequent illiteracy among small borrowers requires that more time be spent in dealing with them. Their incomes are erratic, thus making repayment sources unclear. Special programmes for small borrowers (e.g. group-lending schemes) impose additional constraints on bank resources. Saito and Villanueva (1981), who developed the first known measurement of transaction costs for a developing country, suggest (p.631):

In percentage terms, costs of administration are expected to rise as the size of the loan falls, the duration of the loans shortens, and accounting services are expanded in order to cope with a large number of small-scale borrowers. Costs of risks and defaults incorporate an element to cover losses through default. The more careful the loan appraisal, supervision of loans, and pursuit of delinquents, the higher the administrative costs are likely to be.

They observed in the Philippines that lenders' annual administrative costs lie between 3% and 4% of the loan amount for lending to small-scale agriculture and industry. For lending to large-scale industry, an administrative cost component of 0.36% of the loan amount was realised. This ensured that the total transaction costs for small-scale agriculture averaged 6.3% of the loan amount, as against 6.2% for small-scale industry. In other words, the transaction costs for small-scale industry and agriculture were comparable. They explain why the administrative costs as a percentage of the size of the loan decline as the size of the loan recipient increases. They note (p.634):

A great number of small firms have incomplete financial statements and therefore require more time to piece together bits of information for a satisfactory evaluation of their financial position.

A factor that could possibly contribute to the apparently high transaction costs is the actual measurement approach and what goes into it. Bearing in mind that default risk costs include the provisions made for bad and doubtful debts, the fact that two development banks maintained 75% of their total loans and advances in 1988/90 for this provision when the actual default was under 40%, illustrates how improper measurements of transaction costs can arise. While there may be legitimate reasons for banks to be risk-averse in their estimates of default risk, we tend to hold the view that banks may overestimate these, and that such an overestimation of default risk costs is also likely to lead to an overestimation of administrative costs. As banks expect more and more borrowers to default, they intensify their efforts to screen and monitor loans and this leads to larger provisions for loan administration. In other words, administrative costs for small loans become unduly inflated by improper estimation of the costs of default risk.

On the other hand, while there may generally be good reasons for large loans to be less expensive than small loans, there may be equally good reasons why small loans need not be expensive after all. In this regard, it may be pointed out that since transaction costs, along with the cost of funds, play a key role in bank estimations of the appropriate lending rates to charge, they are measured *ex ante*. But *ex ante* measurements may tend to include provisions that do not necessarily bear much relation to reality. For example, do actual expenditures on travel for small loan monitoring correspond to the budgetary provisions? In other words, do bank loan officers actually spend time and other resources travelling to screen and monitor small loans? One statement generally made by loan officers (during

Table 21
Mean total loan administration cost per branch/bank
 (cedis)

<i>Bank Type</i>	<i>Type of Enterprise/Applicant</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	632,127	796,552	850,168	679,773
Development Bank	399,865	288,115	661,441	283,034
Unit Rural Bank	95,227	–	307,890	296,642
Overall Mean	460,108	627,073	660,703	545,781

Source: Survey data.

interviews) in almost all banks has been that inadequate project vehicles make it impossible for them to visit project sites as often as they are expected to. The projects that get monitored are, therefore, the large projects not too far away from the loan officer at the head office. In this situation, a bank is more likely to intensify the screening of loan applications from the documents submitted or available to it.

6.1 Loan administration cost and its components

Initial information from head offices would suggest that considerable personnel time is devoted to loan administration. They suggest that processing a small enterprise loan application takes, on average, a month for lenders that have delegated at least some responsibility for feasibility review and loan supervision to branch offices (Duggleby et al., 1992). Other banks which centralise the authority for feasibility review and project appraisal can take up to 3 months to complete project analysis on a loan application. Where a centralised team approach is employed in project appraisal, dividing the tasks of analysis among several credit officers and setting a timeframe for a team recommendation, can cut loan processing to between 10 and 15 days per project. Some development banks have successfully employed the 'team lending' approach to reduce time. In general, however, the entire loan processing activity, which includes appraisal, loan structuring and loan decision-making, still takes no less than 6 months in most cases. The requirements of lending through such guaranteed schemes as the Fund for Small and Medium Sized Enterprise Development (FUSMED) facility have begun to exert pressure for the decentralisation of credit appraisal and supervision in order to reduce the costs of lending. State owned banks are considering steps to involve branch managers more in project review and loan supervision. But evidence

from our survey suggests that the actual time spent on loan applications is considerably less than the time it takes for applicants to be informed about the outcome of their applications.

From the survey data, we ascertained that, on average, a full man-day is required to screen an SSE loan application properly. This involves a feasibility study, credit analysis and loan structuring. A similar exercise for SSA loans takes a quarter of a man-day, while an average of 2 man-days is required for LSE loans. This measurement takes into consideration all the applications a loans officer works on throughout a month. In the rural areas, about 50% of the working time of loans staff at branches is devoted to screening and monitoring SSA loans. Only about 10% of their time is devoted to a similar exercise for SSE loans and another 3% for LSEs. In larger urban centres, the time spent on SSA loans remains under 10%, while 60% is spent on SSE and trading loans. Loans to LSEs take about 30% of their working time.

Table 21 suggests that commercial bank branches have the largest administrative costs for all categories of loans, with the largest being incurred when they lend to the SSA sector. This trend may be attributed to many factors, including the intensity with which loan screening is done and the location of projects. We investigate this later, with an analysis of the variation in costs. The lower administration costs of development bank branches may derive partly from the fact that, by 1991, they were under considerable pressure from the central bank to cut back on administrative costs as part of the restructuring exercise. In view of this, their branches have become relatively smaller than those of the largest commercial bank we studied.

Of greater interest to us, however, is the administration cost as a percentage of the total loan amount from the branch or bank directed at a particular sector. This is presented in Table 22, which suggests that, for every Cedi lent to a customer in 1991, the largest administrative costs were incurred when commercial banks dealt with the SSA sector, while the lowest administrative costs were observed when LSEs borrowed from development bank branches. It is interesting that lending by rural banks to the 'other' category was less expensive than that of commercial banks. This may derive from the fact that most lending by unit rural banks to that sector is made up of loans to public servants guaranteed by their employers and paid back directly through regular deductions from salary payments passed through the banks. Thus, very little screening, monitoring and contract enforcement is required. For development banks, their highest costs of 2.9% of each Cedi lent came from lending to the SSA sector. On average, development bank branches spent ₦661,441 administering loans to SSA, while they spent only ₦283,034 on 'others'. Lending to LSEs cost them ₦288,115, and that to SSEs ₦399,865 per annum. It is important to note, however, that there were relatively large and significant differences between the mean total administrative costs of commercial and development bank branches, as the former incurred a cost of ₦632,127 in

lending to SSEs, and ₦796,552 in lending to LSEs, while they spent an average ₦850,168 in administering SSA loans.

Table 22
Loan administration costs as a percentage of loan amount by type of bank

<i>Bank Type</i>	<i>Type of Enterprise/Applicant</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Other</i>
Commercial Bank	1.2	0.3	4.7	2.5
Development Bank	0.9	0.2	2.9	0.4
Unit Rural Bank	3.0	–	2.8	1.3
Overall Mean	1.7	0.2	3.5	1.4

Source: Survey Data.

These costs may tend to support the notion that, while commercial banks are not geared towards satisfying the small needs of farming communities, development banks may be better structured and tuned to dealing with larger enterprises. It is interesting that, for unit rural banks, lending to SSEs may be relatively more expensive than lending to SSA, even though the average unit rural bank spent ₦307,890 administering SSA loans and ₦95,227 lending to SSEs in 1991.

Our ANOVA for administration costs yielded an F^* of 0.39. Since this is within the acceptance region, we take the position that there is no significant difference in the mean total administration costs for banks of lending to different sectors. Probably more interesting is how significant various factors were in determining the levels and composition of these costs. We look now at the total costs for screening, monitoring and contract enforcement.

6.1.1 Total screening costs

These are made up of the costs of assembling information in relation to loan applications, analysing this information in order to arrive at decisions, and then processing such loans as may ensue. As for the other administrative costs, we look at personnel, stationery and transport costs.

We noted some relationship between the type of bank (bank effect) and total screening costs, and also between the location of the bank (location effect) and these costs, with no major interaction effects.

In general, (i.e. with the exception of SSA), banks devoted more than half of all total administrative costs for each sector to screening activities (see Table 23). Also, the proportion of their administrative costs assigned to screening for SSEs was generally larger than the respective proportions for screening in the other sectors. Screening costs were, however, lowest for development banks for all

Table 23
Screening costs as a component of total administrative cost for branch/bank per sector by type of bank (%)

<i>Bank Type</i>	<i>Type of Enterprise</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	79.5	76.9	43.1	58.3
Development Bank	57.9	39.9	37.3	40.8
Unit Rural Bank	65.4	–	46.2	81.9
Overall	67.6	58.4	42.2	60.3

Source: Survey data.

sectors. Our data suggests that the total administrative cost per development bank branch is kept low, mainly because of low screening expenses. On average, commercial bank branches spend twice as much time on screening as development bank branches. Even though it is tempting to believe the explanation of the seemingly specialised nature of development bank operations from their project offices which help them to save time and cut down on costs, it is more likely that recent cuts in their staffing make it less feasible for them to do any extensive screening. This argument is supported by the fact that their monitoring costs are also among the lowest (which is unusual for development banks), as we show later. The relatively low level of resources devoted to SSA screening by the commercial banks may be attributed to the fact that, with the group lending schemes supported by many of them, project appraisal is minimal as the guarantees of group participation are often considered an acceptable substitute for collateral, thereby reducing the need for more thorough screening processes. Our analysis of the variance in these proportions, however, suggested no significant differences, with an F^* of 0.4.

6.1.2 Total monitoring costs

With the exception of SSA, bank branches generally devote less than 20% of their administrative expenditures to monitoring loans (see Table 24). In the case of SSA,

all banks allocated an average of 40% of the resources directed at servicing the sector to loan monitoring. Another peculiar feature of the activity levels with respect to loan servicing was the unexpectedly low allocation of resources by development banks to the monitoring of loans to 'others'. Only 6% of actual expenditures for the sector went into monitoring activity. Again, this may be

Table 24
Monitoring costs as a component of total administrative cost for branch/bank per sector by type of bank (%)

<i>Bank Type</i>	<i>Type of Enterprise</i>			
	<i>SSEs</i>	<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	16.3	18.2	45.3	17.2
Development Bank	19.0	26.0	35.1	6.0
Unit Rural Bank	23.5	–	41.0	11.4
Overall	19.6	22.1	40.4	11.5

Source: Survey data.

attributed to the relative absence of adequately qualified persons and other resources to handle these activities. Their largest allocation of monitoring resources went to SSA. They explain this by the nature of the risks to which the sector is exposed. In general, we may note that commercial bank branches devoted proportionately more resources to the screening and monitoring of loans in 1991 than did development bank branches.

Plotting the monitoring costs of different types of banks showed that type of bank and location separately had effects on actual monitoring costs, without any significant interaction effects. On average, the monitoring costs of commercial bank branches were more than 50% larger than those of development bank branches for all categories of loans. Similarly, the monitoring costs of urban located branches were on average more than twice those of their rural counterparts. However, the interaction effects were not important.

An F-Test for significance in the variation in these cost allocations according to bank type, yielded an $F^* = 312.73/600.29 = 0.52$. Again, the effects and variations observed could not be deemed significant.

6.1.3 Total contract enforcement costs

By contract enforcement costs, we refer to all those expenses incurred by a bank in ensuring that contracts are adhered to (see Table 25). It includes 'chasing' after overdue loans through correspondence and/or visits, legal measures if necessary, and foreclosure on collateral when required. For many banks, some aspects of these are undertaken at head office level through their legal departments. For our analysis, we have used the actual expenses incurred by the branches and weighted them by a unit to represent head office costs for the branch, based on secondary data on legal department expenses for 1991, and number of actual default cases observed at the branch.

In view of the loan repayment trends discussed earlier, a peculiar feature of resulting contract enforcement costs, is that development banks appeared to devote greater resources to ensuring loan repayment following default than other banks. This is not surprising in view of the fact that the last few years in Ghana have witnessed an increase in loan default rates, especially among state owned banks, which tend more often to be development banks. Many commercial banks would argue that a more thorough screening process leaves default rates relatively low and would rather go for that approach. But, as we saw earlier, the thorough screening process of commercial banks implies relatively fewer loan approvals by those banks.

It is interesting that, for development banks, as much as 53.1% of the resources allocated to administering 'other' loans and 34% of those for LSEs went into

Table 25
Contract enforcement costs as a component of total administrative costs per sector by type of bank (%)

<i>Bank Type</i>	<i>SSEs</i>	<i>Type of Enterprise</i>		
		<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	4.0	4.8	11.5	24.4
Development Bank	23.0	34.0	27.5	53.1
Unit Rural Bank	10.9	0	12.7	6.6
Overall	12.0	19.4	17.3	20.9

Source: Survey Data.

contract enforcement, while only 23% of similar resources for SSEs went into that process. In contrast, commercial banks apportioned 24.4%, 4.8% and 4.0%

respectively to those processes. Some bank managers attribute the higher proportions of the development banks to the on-going restructuring exercise. This requires evidence of their efforts to retrieve defaulting loans before assistance can be sought from the Non-Performing Assets Recovery Trust (NPART), established by the government as part of the efforts to strengthen the banking system. The development banks have an unusually difficult task in this regard since many of their LSE borrowers are either large state-owned or joint state/private owned entities that have been affected by the removal of various kinds of subsidies, and have subsequently suffered considerable losses because of lack of competitiveness. At the same time, large-scale agriculture, which has a significant impact on the portfolio of one development bank, has provided no reprieve. In the case of some large state owned enterprises, development banks did not screen their projects adequately, as it was often taken for granted that such loans would be covered by the government.

An analysis of the variation in contract enforcement costs, however, provided an F-Statistic of 0.9, thus suggesting no significance.

6.2 Measurement of the cost of default risk

For this measurement we utilise data mainly from the published profit and loss accounts of the banks, supplemented by information on loan repayment trends obtained from our interviews (see Table 26). For the development and commercial bank branches, we took the 'Provision for Bad and Doubtful Debts' of each of the banks studied and allocated these proportionately to their branches, depending on the following criteria and weights:

First, each bank's provision for bad debts was allocated to the SSE, LSE, SSA and 'other' sectors depending on the proportion of total bank loans and advances going to the sector and weighted accordingly; these were distributed equally among all branches of each bank for an initial provision for bad and doubtful debt at the branch level or branch level default-risk cost. Secondly, these initial provisions for the branches we were studying were weighted based on the proportion of total bank loans and advances made by the branch and on the volume of advances made to each sector; the default-risk costs were finally weighted according to the probability of default in each sector for each type of bank, as estimated from our field data.

For the unit rural banks, we averaged the total amount of provisions for bad and doubtful debts and allocated these among the various sectors, weighted according to loan volumes and the sectoral probability of default, as estimated from our field data. Using this approach, we estimated the subsequent default risk costs as percentages of the total loans made to the sectors by branches.

Table 26
Default risk costs as a proportion of
total loan amount per sector by type of bank (%)

<i>Bank Type</i>	<i>SSEs</i>	<i>Type of Enterprise</i>		
		<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	2.0	1.5	1.7	1.6
Development Bank	7.8	7.8	7.7	7.8
Unit Rural Bank	2.8	–	1.1	1.7
Overall	4.2	4.6	3.5	3.7

Source: Calculated from Bank balance sheets.

6.3 Total transaction costs

A summation of the default risk costs, and the loan administration costs yields the following lending transaction costs for the banks studied. Table 27 indicates that transaction costs were highest for development banks for all sectors. This we attribute to their large centralised operations. But what is more significant about

Table 27
Transaction costs of lending in Ghana as a proportion of
total loan amount for sector by type of bank (%)

<i>Bank Type</i>	<i>SSEs</i>	<i>Type of Enterprise</i>		
		<i>LSEs</i>	<i>SSA</i>	<i>Others</i>
Commercial Bank	3.2	1.8	6.4	4.1
Development Bank	8.7	8.0	10.6	8.2
Unit Rural Bank	5.8	–	3.9	3.0
Overall	5.9	4.9	6.9	5.1

Source: Calculated from Survey data and bank balance sheets.

these costs is that default risk costs add to them extensively. Thus, even though development banks had the lowest loan administration costs per branch, their unusually high provisions for bad debts push up their lending transaction costs significantly.

The average total lending transaction costs for SSEs (5.9% of the loan amount) are comparable to what Saito and Villanueva (1981) observed for similar borrowers in the Philippines. They averaged 6.1% for three classes of development banks. Similarly, our estimated average transaction costs of 6.9% for SSA is only 0.6 percentage points higher than their average of 6.3%. The major difference between the two sets of results lies in the average for LSEs. Our measured transaction costs of 4.9% of the loan amount, appears to be more than twice the size of their average of 2.1%. On their own, however, these differences are not the most important aspect of the comparison. What is interesting is the fact that, whereas administrative costs generally dominated the total transaction costs for development banks in the Philippines, the Ghanaian situation depicted a reversed situation for commercial and development banks, as seen earlier. In general, it is expected that administration costs will exceed default risk costs.

7. Interactions and developments among formal and informal financial sectors

Our survey results tend to suggest that there is not much of an operational relationship between formal and informal lenders. On the other hand, there tends to be considerable linkage in deposit mobilisation, particularly through *susu collectors* and some credit unions (Aryeetey, 1992).

We have already reported (Aryeetey, 1994) that, even though moneylenders had considerable contact or at least some business with banks, these have not as yet been exploited for the purposes of enhanced lending involving the two segments of the financial market. Thus, despite the fact that most of the moneylenders studied saved with banks and had actually borrowed money from them before, none of them admitted lending onwards the amounts borrowed. In an earlier study (Aryeetey and Gockel, 1991), we observed that only 2 out of 8 moneylenders actually lent onwards the amounts they borrowed from banks. The rest insisted that such credit was usually to promote their other businesses and not for lending. They all maintained, however, that it was not easy to obtain credit from the banks. The potential in directing bank credit to customers via moneylenders is one that has not yet been investigated in Ghana. The major advantage it holds is the reduced cost of funds to moneylenders, which could help reduce their own lending rates, depending on the structure of the local market. This is a link between the formal and informal financial sectors that requires further investigation because of its macroeconomic significance. Our survey results indicate, however, that bankers are quite divided on the role informal lenders could play in promoting an expansion of bank portfolios.

Until recently, there had been no serious effort at monitoring the activities of informal savings mobilisers and lenders. Though the regulations governing the activities of moneylenders have been spelt out in the Moneylenders Ordinance, their enforcement did not rest with the banking authorities and they were barely enforced. The result was that informal lenders' operations were uncontrolled. It is recognised, however, that the only way to operate monetary policy effectively in relation to informal finance is to forge a strong link between it and formal finance. Thus, in spite of weak operational links, there have been some attempts recently by the central bank to introduce some elements of 'institutionalisation' into the operations of informal financial units in Ghana, ostensibly to ensure a proper supervision of their activities. The result is the Financial Institutions (Non-Banking) Law (PNDCL 328) passed in January 1993 to prop up the money and capital markets.

The law authorised the operations of discount companies, finance houses, acceptance houses, building societies, credit unions, mortgage finance companies,

venture capital funding companies, leasing and hire purchase companies and savings and loan companies. It is obvious that the law sought to be abreast with innovations in this sector of the financial system, which had been characterised by the introduction of new forms of business hitherto not present in Ghana. Emerging new institutions sought to fill market niches created through significant growth in the economy up to 1991.

The Bank of Ghana has now set up a new department to register and supervise non-bank financial institutions. Among the companies registered by January 1994 were two savings and loan companies. In addition to the institutions registered under the law, a number of 'informal' institutions operate as NBFIs. These include all the 289 operating credit unions affiliated to the Credit Union Association (CUA).

We describe briefly here how the new law affects informal finance and illustrate the development it seeks to encourage, with the experience in one savings and loan company. The issue of interest here is whether this company represents a development in the integration of formal and informal finance.

7.1 The emergence of savings and loan companies

The Bank of Ghana has established guidelines under which various savings and loan companies can operate. No attempt is made under the law to distinguish between relatively large and well established non-bank deposit-takers and the *susu* system, for example. It is thus not clear what constitutes a savings and loan company in Ghana at the moment. Indeed, the law as currently formulated would suggest that all informal deposit-takers need to be registered as savings and loan companies, but they operate openly as they have always done, outside any financial institutions law. The one factor that distinguishes savings and loan companies from *susu* collectors and moneylenders, is their ability to satisfy the requirement of a minimum paid-up capital of ₵100 million.

We look here at the operations of Citi Savings and Loan Company as an illustration of the growing interaction between formal and informal finance. The company was incorporated in July 1992 and authorised to operate by the Bank of Ghana in September 1992. It received its first customers at its first branch in August 1993. The main functions of the company are the acceptance of deposits from the public, the granting of loans to account holders, and the undertaking of hire-purchase financing for account holders. It started with a share capital of ₵100 million provided by the directors. At the end of 1993, after 4 months of operation, the directors made available another ₵100 million as a loan to the company.

The proprietors see the company essentially as filling a market niche by meeting the financing needs of market women mainly and other small businesses. They

believe that large sections of market women control substantial financial wealth which is held outside the banking system;¹⁰ but due to poor intermediation, deficit groups in the marketplace are denied access to credit to facilitate their trading activities. The demand for credit is perceived to be large, but this demand cannot be met by banks in view of the difficulties they have in dealing with small borrowers, as described, earlier, and the costs involved. Hence, the financing instruments of the company, which are in many ways innovative, have been designed to satisfy a segment of borrowers that is of no interest or appeal to banks.

7.1.1 Innovation in financial products

The financial products of the company are not as innovative in themselves as their packaging. Deposit customers are currently offered a mixture of savings accounts, current accounts, and time deposits. These are fairly standard bank accounts, but are operated with some modification. Thus, for example, most market women saving with the company at Agbogbloshie Market are encouraged to open both a savings and a current account. They are then encouraged to deposit their daily turnover in the current account at the close of the market day, only for a part of it at least, to be withdrawn the following morning to meet the day's running expenses. Thus, for many of the market women the current account is used more or less to run an overnight safety deposit box at no cost. An interest of 20% is currently paid on savings accounts and 28% on 12-month fixed deposits. An account may be opened with a minimum balance of ₵5000.

The first 3 months of the company's operations brought 965 deposit customers, made up of 628 savings account holders and 337 current account holders. In the period, ₵85.4 m. of deposits were mobilised, with ₵30.3 m. in savings accounts and ₵54.3 m. in current accounts. Only ₵0.8 m. was held in fixed deposits. By the end of January 1994, the total mobilised deposits stood at ₵125 m. with 1,205 depositors.

An interesting aspect of the financial products offered may be seen on the lending side of the company's operations. It allows its customers to use their interest-earning savings accounts as collateral security.¹¹ It then offers working capital loans on hire-purchase terms. There is also the possibility of the market women being provided with physical working capital items, rather than cash. The company intends in future to arrange for bulk purchase of working capital items for a number of market women together, which should work out cheaper for them. Currently, credit is extended to customers to cover single purchases of food items

¹⁰ It is reported that in the fire that occurred at Makola Market in Accra, an estimated ₵1.2 bn in currency held by market women was lost.

¹¹ Even though many banks allow this, they often require some other form of security in addition.

at the farm gate, and they are expected to repay this within 2–3 days. The rationale is that 'if a market woman cannot sell 3–4 crates of tomatoes in two days, she can never sell them', and therefore cannot repay the loan. Such advances are currently treated as overdrafts and attract a maximum interest payment of 0.75% on the amount outstanding for each day the account remains in debit. For many market women, this is a highly satisfactory arrangement as it evens out the flow of wares into their stalls and helps to regularise their income flows. Loans at the moment are of an average maturity of 3 months. By the end of January 1994, 82 customers had benefitted from such advances and loans, and the amount outstanding was €86.5 m.

Since the institution is not classified as a bank, it cannot directly issue cheques to its customers. Hence, to facilitate access to deposits made by customers, it has both a counter payment order and a cheque drawn on the accounts which the company maintains at Meridien Bank BIAO and also at a branch of Standard Chartered Bank. In this way 'large' customers may use their cheques to settle their debts to large suppliers.

The company currently operates from two of the largest markets in Accra, Agboghloshie and Kaneshie. It has plans to expand and to open branches at all the major markets within a 50 km radius of Accra. It sees the future of its business mainly with large local food markets and is prepared to invest wherever they may be found. It also appears to be aware of some of the peculiar characteristics of providing financial services for market women and other small borrowers, and is adapting its services to meet these requirements. Thus, for example, in view of the fact that market women are the most impatient when queuing at the banks, it uses on-line computer facilities to accelerate reference when withdrawals are being made, and also electric money counters.

An interesting innovation, obviously borrowed from the *susu* collector, is the situation where employees of the company move around the market taking daily deposits from market women as they sit behind their wares. The company staff are all easily identifiable to the market women. Customers also have the option of walking to the branch themselves to make their deposits. In future, it is proposed to open agencies in markets manned by 2 cashiers only, and with the necessary machines to facilitate deposit-taking. The company also plans to provide collection security vans as it moves into markets outside Accra.

A further innovation is the keeping of 'unusual' banking hours. The branches open as early as 7.00 am and stay open until 6.00 pm. This makes it convenient for market women to deposit all their takings for the day and withdraw whatever they require early the following morning. The company plans to create night safes with money pouches for their customers. These will have keys that will be kept only by the customer. This facility is intended for foodstuff dealers who arrive at the market at dawn after trips to food-growing regions.

A major aspect of the company's business strategy is to work closely with market queens, who are respected and powerful enforcers of informal operating regulations at markets. Their confidence in this innovative scheme is important for its success, as they are very useful in canvassing for deposits and assisting in debt collection when necessary. They are capable of sanctioning other market women who break the trust a loan contract supposes.

As a further step towards reducing the risks involved in lending to small borrowers, the company plans to insure against defaulting loans that occur through major ailments and death. There are other plans to educate customers on the need to take out insurance policies for their businesses. Projections of an end-of-year balance of $\text{ø}900$ m. in constant 1993 prices has been made for 1996, as the company's operating profits rise to $\text{ø}550$ m. from the projected $\text{ø}250$ m. for 1994. The portfolio planned is as follows: money on call at short notice (cash on hand) – 15%; balances with banks – 30%; and retail lending – 55%.

The company's financial projections, based on money supply figures, expected price levels and new branch openings, suggest a positive future. Its major competitors at the markets will be the hundreds of individual *susu* collectors. The company is seen by market women as a cross between the banks and informal savings collectors. The advantage it has over *susu* collectors is its greater ability to lend from a larger base of loanable funds. With the *susu* collectors contemplating the transformation of their co-operative into a savings and loan company, or even possibly a bank, keen competition can be expected in efforts to penetrate this market niche in the near future.

8. Summary and conclusions

We set out to evaluate the extent to which the programme of reform in the financial sector has fostered increased and sustainable competition in the financial market. Our main hypothesis has been that there are a number of institutional and structural bottlenecks to market clearance which make it necessary for the formal sector of the financial market to ration-out certain categories of borrowers. Formal sector institutions accept, for lending purposes only, those borrowers about whom they have adequate information, and with whom they believe they can minimise their transaction costs. Banks simply do not like lending to small borrowers, arguing that they do not present bankable projects. The capabilities of banks to administer small loans efficiently appear to be currently over-stretched. It is evident that, in spite of liberalisation and the attempt to introduce some competitiveness into the financial market, the formal sector has not made significant inroads into becoming accessible to that broader section of the real sector of the economy. That the market does not clear, even after the reforms, has been demonstrated by the fact that the distribution of formal sector loans continues to show significant non-price rationing out of small borrowers. We have argued that this rationing out is the result of a combination of factors, including those institutional policies based on the incorrect perception of a higher transaction cost.

While we might agree that under 'normal circumstances' the transaction cost of dealing with small borrowers might be higher than for large borrowers. Current administrative practices and the unusually large provisions for default, make it difficult to distinguish significant differences in the costs of lending to large and small borrowers. We attribute the bank's failure to acknowledge this absence of significant differences in transaction costs to the fact that they do not properly measure these costs. Indeed, there is no immediate pressure on them to break new ground by seeking what they might perceive to be marginal clients, in view of the oligopolistic market structure which guarantees them adequate profits from the limited market shares. In view of this lack of interest in marginal or small borrowers (a problem that the financial sector reform programme was not designed to solve), much of the hoped for competition among banks has not taken place.

The absence of a relatively high level of competition has been illustrated here by the unchanged structures of the assets and liabilities of formal financial institutions. As before the reforms, the liabilities of banks continue to be dominated by short-term instruments, after only marginal alterations. It is apparent that deposits reflect a transactions balance rather than a demand for savings. There are currently hardly any new instruments for savings mobilisation, but some attempt is being made by a handful of banks to repackage their wares more attractively. In view of the currently low scope for maturity transformation, the assets of banks tend to be dominated by equally short-term instruments which have seen no new credit instruments either. Most bank assets are held in either highly liquid forms or in

rather high-yielding government paper. The anticipated financial deepening has not occurred.

Further evidence of little competition following the reforms, is provided by the current interest rate structure and trends within the banking system. While we looked for shrinking spreads between deposit and lending rates after an initial phase of adjustment following the reforms, we did not observe any such shrinkage more than 6 years after the reforms began. Lending rates have continued to rise much faster than deposit rates, a feature which reflects the seller's domination of the market. At the micro level, we observe that such essential characteristics of bank lending as loan sizes and maturities, also appear to be unaffected by the reforms. Also, institutional development in commercial banking has been rather limited, with fewer new institutions than expected.

Despite the reforms, we observed a number of severe policy constraints to effective competition within the banking system. These constraints have arisen from the government's desire to achieve such broad macroeconomic goals as low inflation, as well as the need to finance its own rising expenditures. The goal of achieving low inflation has not been adequately reconciled with the need to have an efficient banking system that is capable of achieving significant financial depth. Hence, in the last few years, central government borrowing from the banking system has once again dominated total bank lending, effectively crowding-out the private sector. The frequent increases in the re-discount rate, the high rates on Treasury bills, and the frequent issue of relatively large amounts of other bills by the central bank have contributed to making the banking system less competitive and largely dependent on government action.

The institutional constraints to banks expanding the scope of their operations are posed by major problems with personnel and other resources. Even in the major banks, there is little preparation of staff to deal with 'non-traditional' borrowers. The reforms did not necessarily imply new approaches in the determination of creditworthiness, and the bank's information base about local borrowers does not appear to have improved significantly. Indeed, data management in many banks is not very advanced. Even though there is considerable variation in the way banks administer loans, they all tend to attach considerable importance to screening as against loan monitoring and the enforcement of contracts, but screening practices continue to be standard and relatively costly. Loan administration costs will come down only when screening costs come down. This will require some structural changes within banks including effective decentralisation.

There has, however, been some positive change in the financial system since the beginning of the liberalisation of financial sector policies by the government in 1985. The most remarkable change is in the development of new non-bank financial institutions, particularly on the money market. Savings and loan companies represent an attempt by their proprietors to fill a market niche for small

depositors and borrowers where banks do not fit in. They employ a combination of formal and informal structures and practices, and have so far been successful in mobilising deposits. With rather limited lending to date, it is difficult to see clearly what the future holds for them. It will obviously depend on their ability to enforce contracts properly and cheaply, which will in turn depend on the extent to which they adopt informal principles in their operations.

The more conspicuous new institutions that have emerged on the money market obviously have an important role to play in making the banking sector efficient. Their ability to play this role is directly linked, more probably than for other institutions, with the performance of the economy. In times of bad economic performance, the banks can always turn to trading in government paper, as they do, and still make substantial profits. But discount houses, for example, cannot afford this since they will be marginalised by the banks. Their growth depends on a solid performance of the private sector and the development of new short-term instruments for that sector. So long as government stocks are the only major stocks to be traded, little real development can be expected from the formal financial system.

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