

Overseas Development Institute

FINANCIAL INTEGRATION AND DEVELOPMENT IN SUB-SAHARAN AFRICA:

A STUDY OF INFORMAL FINANCE IN GHANA

Ernest Aryeetey

di Library

Overseas Development Institute

FOR REFERENCE ONLY

Working Paper 78

Results of ODI research presented in preliminary form for discussion and critical comment

ODI Working Papers

- 37: Judging Success: Evaluating NGO Income-Generating Projects, Roger Riddell, 1990, £3.50, ISBN 0 85003 133 8
- 38: ACP Export Diversification: Non-Traditional Exports from Zimbabwe, Roger Riddell. 1990. £3.50. ISBN 0 85003 134 6
- **39:** Monetary Policy in Kenya, 1967–88, Tony Killick and F M Mwega, 1990, £3.50, ISBN 0 85003 135 4
- **40:** ACP Export Diversification: Jamaica, Kenya and Ethiopia, Christopher Stevens, 1990, £3.50, ISBN 0 85003 136 2*
- 41: ACP Export Diversification: The Case of Mauritius, Matthew McQueen, 1990, £3.50, ISBN 0 85003 137 0
- 42: An Econometric Study of Selected Monetary Policy Issues in Kenya, F M Mwega, 1990, £3.50, ISBN 0 85003 142 7
- 43: Differences in Econometric Performance between Franc Zone and other Sub-Saharan African Countries, Christopher E Lane and Sheila Page, 1991, £3.50, ISBN 085003 148 6
- 44: Monetary Policy Effectiveness in Indonesia, 1974–1900, Christopher E Lane, David C Cole and Betty F Slade, 1991, £3.50, ISBN 0 85003 150 8
- **45: Monetary Control in Ghana: 1957–1988**, *Nii Kwaku Sowa*, 1991, £3.50 ISBN 0 85003 152 4*
- **46:** The IMF in the **1990s:** Forward to the Past or Back to the Future, *Graham Bird*, 1991, £3.50, ISBN 0 85003 153 2*
- 47: What Can We Know About the Effects of IMF rrogrammes?, Tony Killick, Moazzam Malik and Marcus Manuel, 1991, £3.50, ISBN 0 85003 154 0*
- **48:** Country Experiences with IMF Programmes in the 1980s, Tony Killick with Moazzam Malik, 1991, £3.50, ISBN 0 85003 155 9*
- 49: Evaluating the Impact of NGOs in Rural Poverty Alleviation: India Country Study, Mark Robinson, 1991, £5.00, ISBN 0 85003 157 5
- 50: Evaluating the Impact of NGOs in Rural Poverty Alleviation: Bangladesh Country Study, Sarah White, 1991, £8.70, ISBN 0 85003 158 3
- 51: Evaluating the Impact of NGOs in Rural Poverty Alleviation: Uganda Country Study, John De Coninck, 1991, £8.70, ISBN 0-85003-159-1
- 52: Evaluating the Impact of NGOs in Rural Poverty Alleviation: Zimbabwe Country Study, Ann Muir, 1991, £5.00, ISBN 0 85003 160 5
- 53: Environmental Change and Dryland Management in Machakos District, Kenya: Environmental Profile, edited by Michael Mortimore, 1991, £4.00, ISBN 0 85003 163 X
- 54: Environmental Change and Dryland Management in Machakos District, Kenya: Population Profile, Mary Tiffen, 1991, £4.00, ISBN 0 85003 164 8
- 55: Environmental Change and Dryland Management in Machakos District, Kenya: Production Profile, edited by Mary Tiffen, 1991, £4.00, ISBN 0 85003 166 4
- 56: Environmental Change and Dryland Management in Machakos District, Kenya: Conservation Profile, F N Gichuki, 1991, £4.00, ISBN 0 85003 167 2
- 57: Environmental Change and Dryland Management in Machakos District, Kenya: Technological Change, edited by Michael Mortimore, 1992, £4.00, ISBN 0 85003 174 5 58: Environmental Change and Dryland Management in Machakos District, Kenya:
- Land Use Profile, R S Rostom and Michael Mortimore, 1992, £4.00. ISBN 0 85003 175 3
- 59: Environmental Change and Dryland Management in Machakos District, Kenya: Farming and Income Systems, edited by Mary Tiffen, 1992, £4.00, ISBN 0 85003 176 1*

WORKING PAPER 78

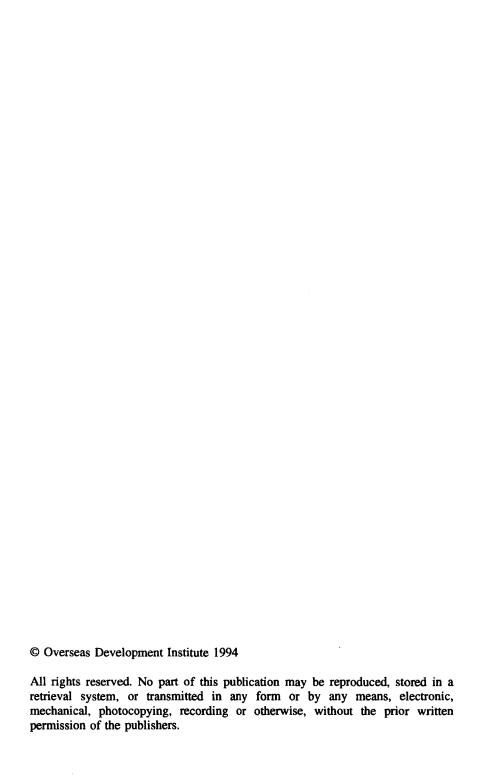
FINANCIAL INTEGRATION AND DEVELOPMENT IN SUB-SAHARAN AFRICA: A STUDY OF INFORMAL FINANCE IN GHANA

Ernest Aryeetey

October 1994

ISBN 0 85003 214 8

Overseas Development Institute Regent's College Inner Circle, Regent's Park London NW1 4NS



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 to (i) adopt financial liberalisation measures, and (ii) enhance regulatory and supervisory functions to ensure prudence of the financial institutions. Special Financial Sector Adjustment loans have been adopted to uphold reform measures and to restructure and strengthen distressed financial systems in several African countries. An improved regulatory environment with enhanced supervision is emphasised in these operations, while the recent literature on the subject highlights 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 effects in the region so far. It has been increasingly recognised that the 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, a research project on 'Financial Integration and Development in Sub-Saharan Africa' has been undertaken at ODI, with support from the World Bank Research Committee, to examine the performance of financial systems for resource mobilisation and intermediation for economic development in sub-Saharan Africa. Field work was conducted in Ghana, Malawi, Nigeria and Tanzania based on questionnaires addressed to formal, semi-formal and informal institutions and borrowers. The main objectives of the research were to:

- investigate the nature and degree of fragmentation and segmentation of financial markets in sub-Saharan Africa;
- ii) 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;
- examine operational constraints facing formal financial institutions and informal associations/lenders;
- iv) 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;

 v) help the design of long-term policies towards financial sector development and 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 paper by Dr Ernest Aryeetey, Senior Research Fellow at the Institute of Statistics and Socio-economic Research, University of Ghana, 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 field work on the behavioural characteristics of *informal* financial organisations and agents, and the operational constraints in urban and rural areas.

Machiko Nissanke Project Coordinator October 1994

Contents

Preface	3
1. Introduction	7
1.1 Specific objective	8
1.2 Hypotheses	8
2. Methodology	10
2.1 Sampling and questionnaire administration	11
2.2 Data analysis	12
3. Review of the literature on informal finance in Ghana	14
3.1 Forms of informal finance	14
3.2 Credit arrangements	15
3.3 Modes of financing	17
3.4 Emerging systems	18
4. The structure of informal financial institutions	21
4.1 Some personal attributes of informal lenders	21
4.2 Deposit characteristics	22
4.3 Structure of lending operations	25
4.4 The characteristics of usual borrowers	25
4.5 Lending to small and microenterprises	27
4.6 Conclusions	28
5. The characteristics of informal loans	29
5.1 Loan sizes and loan maturity	29
5.1.1 Moneylenders	30
5.1.2 Susu collectors	30
5.1.3 Rotating susu groups (ROSCAs)	30
5.1.4 Non-rotating susu groups and cooperatives	31
5.1.5 Credit unions	31
5.2 Interest rates	31
5.2.1 Moneylenders	31
5.2.2 Susu collectors	33
5.2.3 Non-rotating susu groups and cooperatives	33
5.2.4 Credit unions	33
5.3 Collateral	33
5.4 Capacity to lend	34
5.5 Conclusions	34

6. Transactions costs	37
6.1 The screening process and its costs	37
6.1.1 Screening practices and relevant information	37
6.1.2 Creditworthiness criteria	39
6.1.3 Screening costs	39
6.2 Loan monitoring and its costs	42
6.3 Loan repayments and contract enforcement costs	43
6.4 Administrative costs	45
7. Relationship with banks and other formal financial institutions	46
8. Summary and conclusions	47
References	49
Tables	
1 Mean number of depositors per susu collector by region, 1990-92	22
2 Mean number of depositors per credit union by region, 1990-92	24
3 Mean number of loan applications received by sample	
informal lenders annually by region, 1990–92	26
, , ,	
4 Average size of loans by region in 1992 (cedis)	29
5 Mean monthly interest rates by regions in 1992 (%)	32
6 Screening cost per loan application in 1992 (cedis)	40
7 Mean loan administration cost by region in 1992	, -
(percentage of loan amount)	45

1. Introduction

Development of a well-integrated financial market structure is required for growth and development in Africa, particularly in view of the many avoidable costs that a segmented financial market imposes on investors and producers. However, there is much scepticism about whether such integration can be achieved solely as a response to liberalising financial systems. A precondition for integration is the removal of various structural and institutional bottlenecks that preclude greater interaction among the various segments of the market. But before they can be removed, a comprehensive understanding of market structures and behaviour in the various segments must be reached. Hence, this study attempts to determine, among other things, why the market does not clear.

This study of informal finance in Ghana is part of a wider study of the financial sector of Ghana, which is itself a component of a broader study of the financial sectors of three other sub-Saharan African countries — Malawi, Nigeria and Tanzania. The objective of the broader comparative study is to investigate why financial market integration and improved intermediation has not been achieved fully in sub-Saharan Africa. The entire study focuses on the structural and institutional constraints that prevent closer interaction between the formal and informal segments of the financial market. The overall goal is to evaluate the government policy and institutional interventions that would best expand and accelerate the intermediation process by effecting greater integration among segments.

The conceptual origins of this study lie in various explanations of financial dualism – including the financial repression hypothesis of how restrictive policies and controls shift the allocation of investible funds away from the market to the government, thereby creating parallel markets (McKinnon, 1973; Shaw, 1973; Fry, 1988), as well as the more recent literature that discusses the existence of imperfect information as a determinant of fragmentation and thus of structural market failures (Hoff and Stiglitz, 1990). Thus, this study is concerned with the consequences of a dualistic market – extreme fragmentation in which various segments can be categorised according to identifiable characteristics (such as formal and informal), the existence of weak intermediation within the informal segment, and the limited impact of financial liberalisation on the expansion of the formal sector. Other determinants of fragmentation, such as the role of transaction costs and the risks and incentives facing both lenders and borrowers, must also be measured and assessed. Do costs and incentives differ widely across segments? What goes into these costs, and how are they affected by the macroeconomic environment?

1.1 Specific objectives

This study on informal finance in Ghana seeks to create a better understanding of how the informal segment of the market operates and how it differs from the formal segment. It attempts to put together a comprehensive set of data on the characteristics of the segment, analysed by types of institutions, and by interregional and rural-urban variations. It addresses six broad questions:

- What type of informal institutions are available?
- To what extent are these institutions involved in mobilising savings and effecting financial intermediation? In other words, who utilises the services they offer?
- How do they go about mobilising savings and making loans, and how do these
 operational features differ from those in the formal sector?
- What does it cost to use particular practices to mobilise savings and make loans?
- How do the costs of the institutions translate into the prices of their financial services?
- What is the impact of the practices and their associated costs on the quantity and quality of products, and how do these products differ from those in the formal sector?

1.2 Hypotheses

Five main hypotheses about the lack of integration and the prospects for it have guided this study design. They concern: (i) the origins of segmentation; (ii) why interest rates do not clear markets; (iii) the persistence of fragmentation between segments; (iv) the persistence of fragmentation within the informal sectors; and (v) how integration might increase. Where appropriate, we have re-cast these hypotheses into their policy-based, structural and institutional aspects.

Thus, the hypothesis about the *origins of segmentation* is that financially repressive policies stimulated the formation of informal/semi-formal financial units, so that savings could be mobilised by, and credit extended to, those who lack access to the formal financial system. The policy-based aspect of this hypothesis is that, under financial repression, interest rates will diverge from those of the formal system and converge when the regime is liberalised. The hypothesis about the *structural origins* of different informal units is that different practices in screening loan applications and in monitoring and enforcing contracts lead to different transaction costs.

The hypothesis about the persistence of fragmentation between segments is that the lack of information prevents the flow of funds from formal to informal units, and that the perception of high-risk clients and high transaction costs prevent banks from expanding lending activities to small borrowers and informal units. Thus, it is important that the type of information used by informal lenders be established, their perception of risk be ascertained, and their transaction costs be measured for purposes of comparison.

The hypothesis about the *persistence of fragmentation within the informal sector* is that informal units are limited by the scope of their direct contacts, the short-term nature of their transactions, and the dearth of information on markets.

In line with our forward-looking approach to the entire study, we hypothesise that integration will increase only when informal and semi-formal units have greater access to formal credit, thereby enabling them to expand their lending operations. They cannot lend more than they can mobilise for a short period only or as a surplus from another activity. Semi-formal units may apply low transaction-cost methods to short-term funds to expand their lending.

2. Methodology

A one-time survey was administered in early 1993, with a questionnaire that sought a wide range of data, some of it retrospective:

- The deposit characteristics of various informal lenders. These data cover such items as the number of depositors for the years 1990-92. This data set seeks to match the assets of lenders with their liabilities and to assess how they are generated.
- The characteristics of the lending business. These data provide insight into the origins of the lending business and how it has developed over several years.
- The *characteristics of usual borrowers*. These data identify the background and number of loan applicants and applications.
- The magnitude of lending to small and microenterprises. These data help differentiate this sector from the entire portfolio of informal lenders.
- Loan characteristics, maturity and other conditions. These data need comprehensive information on loan sizes, maturities, collateral, interest rates and the capacity of the lender to lend. Together with data on applications, they provide a rough clue to the supply and demand conditions that prevail in the informal segments of the financial market. All these data cover a three-year period, yielding some insight into how the process has changed in response to liberalisation.

Data from the questionnaire also address the hypothesis that the major constraints to developing effective linkages among financial sectors are the widely varying information base and transaction and other costs. Separate data are available on the entire process of loan transactions in the informal financial sector – screening, monitoring and contract enforcement. For each aspect of the process, the data describe the type of information that is used and its adequacy, while establishing how the information is obtained. Based on these data, the study estimates the administrative costs of the process, broken down by personnel costs, transport and stationery. These breakdowns support the estimation of the average administrative cost for each cedi loaned out. The study also analyses data on the cost of funds, yielding some insight into the transaction costs of lending in the informal sector.

2.1 Sampling and questionnaire administration

In the absence of census data on informal financial activity, an appropriate sample frame could not be developed. Thus, for the purposes of developing a suitably representative sample, the sample was chosen so as to capture as many known types of informal/semi-formal financial agents as possible. As such, the sampling plan attempted to capture the factors that either have been noted to influence behaviour in informal segments or were likely to have a bearing on such behaviour – ethnicity, religion, the economic status of agents/users, the degree of urbanisation in the area of lending operations, and other such factors.

We subsequently concentrated on seven administrative regions that cut across the length and breadth of Ghana, thereby making the sample as diverse as possible. The sample areas and the reasons for their selection are as follows:

• Upper West region

This region was chosen for the prevalence of Islamic practices in economic and social activity. The region also falls within the 'peripheral region' of Ghana, where poverty is most acute. Production goes primarily toward domestic consumption.

• Brong Ahafo region

This region contains Akan communities lying within the export periphery of Ghana. Very little processing activity takes place, but the export of cash crops dominates the economy. It may be described as an economy in 'upward transition', which was expected to be reflected in the types of institutions to be found

Ashanti region

This region represents the dominant ethnic group of Akans (Ashanti) and displays one of the most vibrant regional economies in the country. The wealth of Ashanti is reflected in the diversity of social institutions and attitudes toward wealth and its acquisition, which differ from those in all other parts of Ghana.

· Eastern region

This region contains another Akan group whose attitudes toward wealth and its acquisition differ markedly from those of the Ashanti.

· Volta region

This region is a major non-Akan area whose social and institutional structures and practices differ from those of Akan areas.

Greater Accra

This is the capital region, exhibiting the most diversified and modern economy. Institutions and practices were expected to reflect the dynamism of the informal sector.

• Central region

Of major interest in this region were its fishing communities, as well as the fact that, after its early contact with the colonial economy, it is a region in a 'downward transition', with several dying towns.

In each of these regions, we interviewed 10 to 12 informal lenders, comprising 5 to 6 urban and rural lenders each. 'Urban' centres are defined as the regional administrative centres, with populations between 30,000 and 50,000, with the exception of Accra, Kumasi, and Takoradi which have larger populations. Rural settlements in these regions usually consist of populations of less than 15,000. In each region we interviewed moneylenders, susu companies, leaders of savings and credit associations (SCAs) (and 'susu' thrift groups, which may or may not rotate), leaders of savings and credit cooperatives (SCCs), mobile bankers (who are also generally known as susu collectors), and the treasurers of credit unions. The selection of these agents is justified by the literature review (see section 3), which establishes their presence in Ghana. While we sought to capture all agencies mentioned, the number actually interviewed reflects the 'relative ease' of finding willing and acceptable respondents.

The distribution of administered questionnaires by type of lender is as follows:

Moneylenders	12
Susu collectors	28
Credit unions	18
Susu groups (SCAs)	18
Cooperatives (SCCs)	12
Susu companies	2
Total	90

In view of the relatively low representation of susu companies in the sample and the fact that their operations are obviously similar to those of susu collectors (granting that the companies generate more investible assets), they are analysed in this report as the latter, with differences in structure highlighted when necessary.

2.2 Data analysis

The basic analytic approach was to determine frequencies and other simple descriptive statistics (such as arithmetic means) for selected variables. We then

conducted t-tests to ascertain significant differences in the means of comparable variables derived from different sample groups, and then established correlations among each type of informal financial unit observed, the location of institutions (both urban/rural and region), and all other variables of interest. Cross-tabulations permitted this last analysis. Then, after establishing the variation in interest rates between moneylenders and *susu* collectors, we constructed analysis of variance (ANOVA) tables to study two-way and three-way interactions between the categorical variables – type of lender, region, and urban/rural area – and the dependent variable – interest rates. In general, for ANOVA, we used the F-statistic. defined as:

 $F^* = MSTR/MSE$, where MSTR is the mean square treatment and MSE is the mean square error

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

where, Y_{ijk} is the k^{th} observation of the i^{th} level of the first factor (the type of lender) and the j^{th} level of the second factor (the location of the lender – that is, urban/rural area or region); $Y_{ijk} = \Sigma Y_{ijk}/n$ is the mean for the treatment corresponding to the i^{th} level of the first factor (the type of lender) and the j^{th} level of the second factor; and $Y = \Sigma\Sigma\Sigma Y_{ijk}/N$ is the grand mean.

 $^{^{\}rm 1}$ Statistically significant differences in this study are always reported at the 5% level.

² In general, when the F-statistic was less than one, we accepted the null hypothesis that no significant difference exists between the variables being compared.

3. Review of the literature on informal finance in Ghana

Although the existence of informal finance units in Ghana has long been known, the sector has not been featured prominently in research on economic policy issues. Thus, there is a significant dearth of published material on informal financial entities and processes. Moreover, as in the rest of Africa, this segment of Ghana's financial market has only rarely been considered in analyses and projections of macroeconomic performance. Similarly, its impact on the income-earning capabilities of individuals, households, and enterprises has not been investigated in any depth.

Increasingly, however, research interest has been expressed in the scope and performance of informal finance – particularly its size, characteristics and economic impact. With the significant investments that most African countries have made in establishing formal banking institutions, interest has also been expressed in the nature and extent of the relationship between the formal and informal sectors, if any such relationship is identifiable, and its impact on financial sector development.

3.1 Forms of informal finance

By suggesting that there has been more interest in informal finance recently, we have not overlooked the earlier mass of literature on forms of financing in African countries. What is interesting about that literature is the domination of anthropological studies placing more emphasis on social interactions between persons than on the economic significance of those interactions.

Of course, the early literature on Ghana (for example, Ardener, 1964) does not use the expression 'informal finance units', although it focuses primarily on the types of institutions involved. From the assorted institutions and arrangements described, we were able to conclude that the expression may be used to encompass all identified institutions and persons engaged in financial transactions beyond the functional scope of banking and other governmental financial regulations. Institutions operating under such regulations are placed in the 'formal financial sector', bound by those regulations that govern the control, supervision and operations of the financial sector. Based on this distinction, the formal sector category includes the commercial banking system, near-banks, insurance companies, housing development banks, investment banks, agricultural development banks, rural banks and so forth.

This distinction leaves several entities and financing arrangements that can be classified as informal. In addition to those listed earlier as part of the data

collection process (in section 2.1) informal financial entities include mutual assistance groups, landlords, neighbours, friends and family members. It should be noted that while SCAs (some of which rotate and are thus considered to be ROSCAs – rotating savings and credit associations) and mobile bankers are both known as susu arrangements in Ghana, the major difference between them is that arrangements for collection and payment in SCAs are organised collectively, and that individual 'operators' or 'collectors' have sole responsibility for managing and controlling mobile banking arrangements. This distinction is made clearer in the review of the works by Adjetey (1978) and Aryeetey and Gockel (1991). As a matter of fact, until recently the term 'ROSCA' was not used widely in the Ghanaian literature (Aryeetey et al., 1990). The list of informal entities gathered from our data collection and literature review indicates that credit arrangements may be grounded in either commercial or mutual assistance origins. Interest herein tends to focus on those of commercial origin.

3.2 Credit arrangements

An interesting piece by Adjetey (1978) suggests that the informal segment consists of a wide range of financial agencies, including moneylenders, thrift groups and other non-institutionalised savings arrangements (or trusts) scattered throughout the country. Private moneylenders are the best known informal commercial credit agencies. Adjetey (1978) places moneylenders in two categories: those who are licensed to operate under the Moneylenders Ordinances of 1940 and 1957, and those who do business without official authority. The latter group tends to dominate the business and operates primarily among farming communities. He also identified thrift groups, otherwise known as susu groups or clubs. Adjetey (1978) indicates that they are widespread throughout Ghana, especially in towns, and that they are popular among market women and small traders. They operate as follows. Any number of people may agree among themselves to contribute individual sums of money regularly into a pool, which are then handed to a participant at an appointed time. The frequency with which the contributions are made depends on the income flow of the participants. Market women and other traders normally operate the scheme on a weekly basis, while workers usually operate the scheme on a monthly basis. This simple scheme provides participants with an interest-free credit facility, either for further investment in their trade or for the purchase of consumer items. The participants are expected to repay the loan by continuing to make their regular contributions.

According to Adjetey (1978), a variant of the *susu* scheme is popularly known as the *olu* savings scheme, sometimes described in the literature as 'mobile banking' (Miracle et al., 1980). In the scheme, the *olus* or *susu* collectors go to markets and hawkers to collect daily savings. The saver chooses the amount he or she can deposit each working day, and the collector records this amount on a card, indicating some personal information about the depositor. No formal agreement

exists between the saver and the collector. The scheme is based entirely on personal trust and relationship. Some collectors do make credit facilities available to some of their savers. Such facilities sometimes attract interest payments that are made on a daily basis.

Offei (1965) provides three reasons that rural persons have poor access to formal credit facilities – the lack of collateral security, the fragmented nature of farms, and the risk that they will divert their loans to consumption items. Subsequently, the three primary sources of credit for rural persons are private informal institutions and individuals, co-operatives, and some public institutions. She suggests that credit from private sources forms the bulk of informal credit. These sources include moneylenders, traders, friends, relatives and neighbours. She also indicates that moneylenders form the primary source of credit for many persons in Ghana, and that non-professional moneylenders dominate commercial credit, usually lending money to people from their own incomes, and sometimes operating on a commission basis as agents for other professional moneylenders. She suggests further that non-professional lenders levy higher interest rates than professional lenders, given that they operate with fewer funds.

Another informal arrangement identified by Offei (1965) is credit from traders, often in the form of either a supplier's credit or an advance payment from a 'middleman' against future purchases. In Ghana, thousands of 'middlemen' operate between producers in rural areas and consumers in the urban centres. Indeed, credit extended to farmers by these operators is one of the most important functions of this trade arrangement. Middlemen do not usually ask for collateral for the credit they advance. Rather, they enter into agreements with the producers to have all their farm produce sold to them over an agreed period. Interest on this arrangement may be as high as 50% of the principal for the farming season. Offei (1965) suggests that, beyond these two facilities, friends, neighbours and relatives are the other major sources of credit.

Ahulu (1988) lists several distinct systems of informal credit and describes their mode of operation. These are *nnoboa* or mutual assistance groups, relatives and friends, private moneylenders, urban-based traders in food crops and agricultural products, *susu* collectors and *susu* savings groups (SCAs). He indicates that *nnoboa* arrangements were originally traditional mutual labour-exchange arrangements that sometimes offered some financial assistance. He notes that because they are community-based institutions, they rely on a personal knowledge of clients or their guarantors. While some negative debtor-creditor relationships are sometimes observed in the informal circuit, various other positive aspects sustain the systems, including the dominance of oral modes of transaction that reduce the length of transaction time, the absence of collateral if the borrower is backed by guarantors, and negotiable charges (including commitment fees, interest and debt-servicing charges). Indeed, while the informal credit sector suffers from the absence of

standardised terms of transactions, among other problems, it remains strong and resilient given its accessibility, flexibility and informality.

The World Bank (1989) also identifies several informal financial arrangements in Ghana. They include rotating savings and credit associations (ROSCAs) and moneylenders. As observed earlier, the list also includes family, private groups, providers of trade credit and instalment contract operators. The report describes the sector as remaining 'essentially private, (and) remote from outside enquiry and quantification'. It attempts to find explanations for the existence of the informal sector and suggests that in rural areas the banking system offers low quality services: the processing of deposit and withdrawal takes several hours, and in some instances customers find there is no cash and must revisit the bank in order to make a withdrawal.

The report also indicates that positive real interest rates are not crucial in mobilising additional deposits and creating avenues for granting credit, as evidenced by the fact that the susu system functions with negative nominal rates. It indicates that rural communities place a higher premium on convenience, accessibility and trust. The report notes that the importance of informal finance is widely recognised in Ghana, and that the government would like to improve the efficiency of informal intermediation, especially in rural areas - this in recognition that the formal financial system does not have the capacity to serve small borrowers, thus forcing them to turn to informal operators. The report argues that, as much as a clear understanding of these institutions may be useful, their informal nature and fear of government intervention may render them hostile to formal inquiry. In addition, it is unclear how direct government intervention could improve upon informal financing operations, which appear to be vibrant and robust when compared with government-owned banks. Finally, the report suggests that a feasible option may be to increase the efficiency of rural banks and credit unions, thereby increasing the integration of the formal and informal financial sectors.

3.3 Modes of financing

Ashiley (1986) compares formal and informal finance sources in rural areas. She notes that, in contrast to formal-sector practices, informal sources in rural areas do not demand conventional collateral. The main guarantee for repayment is a verbal promise by the borrower. In a few cases, however, an agreement is made that a farmer's (borrower) crop will be sold to the lender. The interest rate charged in this sector ranges from 20% to more than 100%, and nearly all loans are short term (one year or less). Ashiley also focuses heavily on credit from processors of agricultural produce and input distributors as another source of finance. This group of informal lenders operate at varying levels in different parts of the country, yet their activities extend only to their well-attested customers. They normally prefinance the operations of their customers and provide them with consumption

credit during the slack production season. As with traders, the processors of agricultural produce are interested only in particular crops, and subsequently advance credit on the condition that either part or all of a farmer's produce will be sold to them at harvest time. These arrangements generate prices that are invariably lower than market prices. Ashiley suggests that a return on the loans is less important to these agricultural processors than is the assurance of a regular supply of an important farm product they require.

Lawson (1974) undertook quite a detailed study of the various modes of financing the fishing industry in Ghana, noting that debt is an integral component of canoe fishing. Due in part to the low level of earnings, but more particularly to the highly seasonal nature of these earnings, fishermen must invariably borrow money off-season. She notes that debt is not generally incurred for subsistence, but for the purchase of nets and other equipment. The major source of financing for fishermen is usually a local fish trader, who expects the entire catch of the fisherman on a regular basis as repayment. This arrangement, which is similar to that which characterises farming communities (described earlier), usually benefits the fish trader, who not only secures a regular supply of fish, but is also able to charge a high rate of interest that is not always specified when the loans are contracted. Fishermen find it difficult to raise capital outside the industry, which makes fish traders crucial to their survival. Beyond fish traders, fishermen also use family members, friends, and even such professionals as lawyers and other senior public servants as informal sources of credit.

3.4 Emerging systems

Bortei-Doku and Aryeetey (1992) discuss the operation of rotating savings clubs in Ghana, shedding light on such issues as the significance of clubs within the national economy, their structural and functional characteristics, their gender composition, the attitudes and perceptions of club members about the system, and more recent changes and variations induced by changes in the national macroeconomic setting. They note that while the mainstream principle of grouping together people whose common goal is to accumulate a lump sum over a specific period of time is still a respected method for mobilising savings and allocating and thus a robust socioeconomic development instrument, operationalisation of that principle had changed over time. They note that 'new' institutions had emerged, but using the same principle, that is susu collectors and emerging savings and loan companies. Bortei-Doku and Aryeetey argue that despite changes in how the principle of group economic activity is operationalised, the interests of men and women as differentiable savers in this informal sector activity appear to have been affected, even if only moderately. Thus, while women appear to be more active in accumulating the required lump-sums within the framework of the newer susu collection system, more men, particularly at workplaces, continue to stick to rotating savings schemes. They maintain that the susu system remains a resilient institution, in view of the preparedness of participants to introduce operational innovations in response to changing socioeconomic conditions.

Also in a report on new institutions, Aryeetey (1992) observes *susu* companies that have emerged in Ghana only since 1985, and whose operational principles are similar to those of individual *susu* collectors. The difference between the two is that the saver is 'guaranteed' credit. Rather than deposits being returned to the saver monthly, as is the case with the *susu* collector, the company holds them for at least six months, after which the depositor may withdraw the savings, in addition to an equivalent amount of loan. The companies are found primarily in the largest centres of Ghana. As part of the innovation occurring among informal units, newer savings and loan companies have also emerged. These larger entities sometimes use commissioned agents (*susu* collectors) to mobilise deposits primarily from market women, and make short-term loans available to them from time to time.

In 1988, the Food and Agriculture Organisation (FAO) held a workshop in Accra to address how the informal segment of the financial market could contribute to agricultural development. Summaries of papers by Wilmot, Atta-Konadu, Oduro-Kwarten, Issifu and Masuku, all underscoring the various observations made herein, are found in FAO (1988).

A study of rural finance in Ghana by Integriete Projekt Consult (1988) notes several positive elements about informal sector operations. While the study does not make specific policy recommendations about the sector itself, it urges both the Bank of Ghana and the government to adopt innovations in that sector leading to reorganisation of rural banking, especially in northern Ghana. It recommends that rural banking be free and competitive, and that it be made more flexible in order to reduce administrative costs.

In a study of the informal financial sector in Ghana, Aryeetey and Gockel (1991) sought to improve the information base on the size, nature and characteristics of non-bank savers, borrowers and lenders. The study suggests that a growing lack of confidence in the banking system since the late 1970s may have led to a significant expansion of informal savings and credit facilities in the period. The study also notes that while the informal units (the commercial component of this financial market segment) may be very important for mobilising savings, they are much less significant as independent financial intermediaries. Their main intermediary role is serving as a channel through banks, as do susu collectors. The authors estimate that the informal sector was responsible for initially mobilising at least 55% of the total financial savings in Ghana. They also observe significant relationships between the formal and informal sectors. This study and another by Aryeetey (1992) suggest that the relationships between the two segments of the financial market (the demand for credit from the two sectors) may be both complementary and competitive, but more complementary in urban areas. The studies suggest that in rural areas, where formal sources are usually absent, informal sources often tend

to be substitutes for formal credit. Very seldom are both formal and informal credit used together or applied in a complementary manner in rural areas.

Despite the nearly exclusive nature of the credit market in rural areas, strong links between the formal and informal financial sectors have been observed, I.P.C. (1988) suggests that it is highly likely that credit granted by formal banks depends heavily on informally mobilised rural savings. Indeed, although only an estimated 7.5% of total financial and non-financial savings are held in banks by rural households in Ghana, versus 11.8% of total informal savings, the fact that most 'informal savings mobilisers' (including the susu collectors) use bank facilities for deposits implies that a substantial part of rural financial savings ends up in banks. At Savelugu and Yendi in rural northern Ghana, susu collectors were able to collect \$\psi 1.8 \text{ million and \$\psi 1.6 \text{ million per month, respectively, which they saved in commercial banks at Tamale, the regional capital (I.P.C, 1988). But while informally mobilised savings are being utilised to enhance the lending operations of formal banks, both the I.P.C. study and the study by Aryeetey et al. (1990) indicate that such lending is skewed toward urban areas. Beyond susu collectors, various other informal savings mobilisation groups, such as cooperative groups, use banking facilities extensively to safeguard their funds.

Another area of interest in the link between formal and informal financial institutions is the extent to which the formal system may use the informal system as a conduit for granting credit to rural residents. In a study of the operations of 12 moneylenders in Accra, Hohoe, and Agona Swedru, Aryeetey and Gockel (1991) found that only 2 had used bank credit to advance their moneylending operations. They suggest that the credit-granting link between formal and informal entities required further investigation, since developing this system properly might open up additional credit possibilities to rural residents.

It must be emphasised that while most studies into informal rural credit schemes do not suggest how an appropriate relationship between the formal and informal sectors can be developed, most of the literature indicates that both sectors must learn from the positive aspects of the operations of each other. The following discussion of the structure of informal financial institutions attempts to characterise many of the institutions discussed in this review of the literature.

4. The structure of informal financial institutions

Beyond the descriptions of identifiable informal financial agents in the literature review, Aryeetey and Gockel (1991) provide a detailed description of the operational characteristics of various institutions in the informal sector of the financial market. Later in this section, our data provide some further insight into differences in how those institutions and agents operate.

4.1 Some personal attributes of informal lenders

Moneylenders tend to be older than other informal lenders, although the differences are not significant. Thus, while the average moneylender in our survey was 49 years of age, the average susu collector was aged 41, and the leaders of susu groups, credit unions, and SCCs were all in their mid-40s.

Our sample is dominated by men, since it was difficult to find female savings mobilisers and lenders in all types of units. However, women appear to figure more prominently in operating savings and credit cooperatives (SCCs) and susu groups (SCAs). Thus, whereas only 16% of moneylenders identified in the survey are women, it was relatively easier to find the 46% of the sample women who were susu group leaders. However, the susu collection business is dominated almost completely by men.

Contrary to the notion that the informal segments usually attract poorly educated operators who thus cannot easily find places in the modern economy, they appear to attract fairly literate and educated persons. Thus, while our sample of informal lenders may not be trained financiers, the average moneylender and credit union treasurer spent 15 years in school, which is comparable to the number of years that many bank clerks spend in education. However, their educational level was higher than the average educational level of leaders of susu groups and susu collectors (12 years in both cases). This disparity may be due to the fact that, as well-organised institutions credit unions require proper management, and many urban moneylenders may have worked previously in public services where they would expect to be relatively well educated.

It is interesting to note that moneylenders generally do not devote any more of their time to the lending business than do other commercial informal lenders. They generally spend only about 30% of their working time on lending activities, comparable to the one-third time spent by susu collectors, who devote their remaining, time to mobilising savings. Given that 66% of our sample of moneylenders indicated that they were only part-time lenders, moneylenders

generally have other businesses that capture the rest of their time. These moneylenders indicated that very few people could afford to be full-time lenders given the high risks and level of uncertainty associated with the business. In *susu* groups, leaders devote only 17% of their working time to lending activity, since they also invariably have other activities, such as a regular job in public services.

4.2 Deposit characteristics

Trends in the mobilisation of deposits and the application and allocation loans suggest that contrary to the notion that informal units thrive best under repressive policies, informal units in Ghana have been quite vibrant and growing under financial liberalisation. While we cannot attribute their current growth to liberalisation policies, it is obvious that the policies are not enough to discourage the growth of informal units.

Moneylenders generally do not mobilise deposits. Thus the most significant informal deposit mobilisers are still the *susu* collectors and credit unions. Between 1990 and 1992, *susu* collectors increased the size of their clientele steadily, even though their clientele grew more rapidly in urban areas than in rural areas. In Greater Accra, the mean number of monthly depositors per *susu* collector rose from 220 in 1990 to 275 in 1991, and to 305 in 1992, a 39% increase over the period (Table 1). Assuming that the size of a collector's clientele from year to year is an independent factor, we tested for differences in means and found that the growth in clientele was significant between consecutive years at the 5% level. Conversely, in the Eastern region, where most of our collectors lived in small towns and rural areas, the mean number of depositors rose from 119 in 1990 to 129 in 1991, but

Table 1 Mean number of depositors per susu collector by region, 1990–92									
Region	1990	1991	1992						
Greater Accra	220	275	305						
Eastern	119	129	125						
Volta	157	183	191						
Central	90	60	176						
Ashanti	62	69	84						
Brong Ahafo	145	154	167						
Upper West	95	110	150						

then fell to 125 in 1992, a total increase of 5% over the period. It is interesting to note that the fewest number of depositors per collector was observed in the Ashanti region, where the mean number of depositors averaged 70 over the 3-year period. This finding might suggest that in areas with relatively strong traditional socioeconomic 'institutions' (such as wealthy cocoa farmers and traders) those institutions dominate financing arrangements. Very often, these arrangements manifest themselves in non-lending activities, where reliance on family members for mutual assistance dominates.

Membership in our sample of susu groups (SCAs) that do not rotate averages 37 participants, which is similar to the average for SCCs. For susu groups that rotate a membership of 12, corresponding to the number of months, was common. While credit unions tend to have a large membership (an average of 390), they are not as widespread as individual susu collectors. In the Accra (primarily urban) area, credit unions contained an average of 1,166 members in 1992, a marginal growth of 6% over the 1990 figure. The only other regions with very large union membership are the Upper West region (UWR), which, interestingly, is primarily rural, and the Central region. Unions in UWR had an average of 592 members in 1990 and 821 in 1992, a growth of 39%. The strong presence of credit unions in UWR is attributable to the work of the Catholic Church in this region, given that credit unions in Ghana were actually started by the church. In other regions, credit unions recorded only modest growth, but with relatively low membership³ numbers.

Despite an increase in national income during the period in which Ghana pursued liberal economic policies (seven years prior to our study), growth in the deposits made to informal institutions varied in that time period. Among susu groups, during the 1990–92 period, a mean deposit amount of ¢190,000 was collected monthly in 1990, which fell to ¢177,000 in 1991 but again rose to ¢190,000 in 1992. In effect, monthly contributions by members averaged about ¢5,000, which is comparable to the figure measured by Bortei-Doku and Arveetey (1992).

In general, average monthly collections among susu collectors rose from ¢540,000 in 1990 to ¢542,000 in 1991, but then shot up to ¢886,118 in 1992. Having checked for internal consistency in the data, we attribute the increase in monthly collections to an increase in both the size of clientele of each collector and the average nominal size of deposits in the past three years. In the urban area of Accra, collectors averaged ¢85,000 daily and ¢2,500,000 monthly in 1991. The average monthly amount mobilised in Accra by a collector rose to ¢4,117,500 in 1992, suggesting that the average daily deposit of clients grew from ¢300 in 1991 to ¢450 in 1992. With an inflation rate of about 15%, there was significant real growth in

³ We caution here that the figures for union membership vary considerably in light of the fact that some unions included dormant members in their group-size figures, since they could not always isolate them.

Table 2 Mean number of depositors per credit union by region, 1990–92								
Region	1990	1991	1992					
Greater Accra	1,100	900	1,166					
Eastern	28	20	17					
Volta	44	61	56					
Central	296	328	407					
Ashanti	48	55	63					
Brong Ahafo	67	42	50					
Upper West	592	720	821					

deposits made by the clients of *susu* collectors in those two years. In rural areas, deposits also grew significantly, as mean daily deposits increased from ¢50 to ¢80 between 1991 and 1992.

Credit unions in Accra mobilised an average of \$5,830,000 in deposits monthly in 1992. Indeed, the deposits mobilised by unions in Accra have been erratic for some time, reflecting the general problems facing credit unions in Ghana. Deposits had actually declined by more than 50% from the 1991 figure, after a 40% increase between 1990 and 1991. Thus, the average size of monthly deposits made to susu collectors in Accra in 1992 (¢13,500) was significantly larger than the size of deposits made to credit unions (¢5,000). The smaller deposit sizes of union members can be attributed to the fact that members of unions are primarily lowincome public servants whose more or less fixed income flows prompt them to save towards consumption for 'rainy days'. Conversely, many market women who save with susu collectors are not merely saving towards consumption. They are putting together their working capital for the next month. It should be noted that the size of the average monthly deposit in credit unions is comparable to that in susu groups (SCA), where deposits are also slated primarily for consumption. Allowing for regional variations, the average monthly deposits of individuals in credit unions and the susu system would be comparable - about 10% of the monthly earnings of depositors.

Our data indicate that, in urban areas, the annual flow of deposits to depositmobilising institutions does not appear to vary significantly, with the exception of susu collectors. However, depositors with susu collectors usually increase the size of their deposits in November, often doubling them. They do so obviously to ensure that they are able to save adequately towards anticipated expenditures for Christmas. In rural areas (among SCCs), deposits tend to be more seasonal, since they are linked to the harvest season around August.

4.3 Structure of lending operations

We are interested here in how lending capital is raised and allocated. According to our survey data, moneylenders raise their lending capital primarily from their earnings from other economic activities in which they are currently involved. In rural areas, this other activity is usually farming; in urban areas, it is often trading. Another major source for moneylenders is pension income, particularly for those aged 50 and older. Credit unions in Ghana depend primarily on the deposits of their clients, but have sought assistance from international donors operating through the Credit Union Association, and have been able to raise additional capital that far exceeds their deposits. For *susu* collectors, mobilised deposits are their only lending base. The capital base of most informal lenders appears to have grown considerably in nominal terms since their activities began. Various institutions are able to determine whether the base has grown in 'real terms' by how much, their clientele has grown. They suggest that they have seen 'real growth' over the years.

Most informal lenders believe that the flow of loan applications fluctuates considerably in a year. In rural areas, the flow of applications coincides primarily with the land-clearing and planting seasons in March and April. In urban areas, the largest number of loan applications come in December and January, when many consumers must borrow either for Christmas spending or to restore their consumption to pre-Christmas levels. Traders also borrow considerably in October and November to make purchases for Christmas sales. Given this type of cycle, susu collectors in urban areas do considerable business in November, December and January, when the size of both deposits and loan requests increases by more than 100%.

4.4 The characteristics of usual borrowers

The dominance of traders as usual borrowers from informal lenders cannot be overemphasised. For susu collectors, the fact that 90% of the sample indicated that traders dominate their list of borrowers is not surprising, since they also dominate deposits collected. Among moneylenders, 33% have traders as their main borrowers, and 50% have public servants as their main borrowers. No moneylenders suggested that SMEs are their main clients. Public servants borrow typically to purchase consumer items and services, whereas traders borrow either to restock trading inventories or to settle consumption bills. Susu groups (SCAs) and cooperatives (SCCs) also indicated that their membership/borrowers are primarily public servants and traders. While borrowing from credit unions in urban

areas is dominated by public servants, borrowing from unions in rural areas is dominated by farmers.

One factor that could influence the transaction costs of borrowers is the cost of transportation to and from lenders. These costs do not tend to be high in urban areas. In those areas, and particularly among those institutions that lend primarily to their members, borrowers tend to live in the same town as their lenders. Where, as in most of the rural areas studied, borrowers must travel in order to borrow money, distances tend to vary considerably, with a minimum of 5 km and a maximum of 180 km excluding outliers, and averaging about 50 km. Credit unions in rural Ghana are centred around small towns, which might require that member borrowers travel an average of 20 km to union offices, as observed in the Upper West region.

Growth in informal financial activity is also evident from the number of persons who applied for loans from certain categories of informal lenders between 1990 and 1992. For moneylenders, loan applications rose from 85 per lender in 1990 to 89 in 1991, and then to 103 in 1992. But the amount of applications varied considerably among the regions (see Table 3), so that in the relatively prosperous regions of Accra and Ashanti (which contained a larger proportion of urban respondents) moneylenders tended to receive fewer applications than in the other regions, except Brong Ahafo. Indeed, a strong correlation exists between the number of applications received by each moneylender and the residence of the lender, suggesting that rural moneylenders receive more applications in a year than do urban lenders. More competition certainly exists in urban areas. Moreover, the number of applications from men and women varied extensively: twice as many men as women attempted to borrow from moneylenders.

sample informal lenders annually by region, 1990-92												
Region	Mo	oneyle	nder	Sus	u colle	ector*		SCC		Cre	dit uni	on*
•	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992
Greater Accra	50	66	82	1,584	1,692	1,860	30	45	40	410	466	416
Eastern	110	120	125	480	600	408	65	78	88	124	130	120
Volta	140	155	188	205	271	397	71	90	60	100	120	120
Central	127	123	141	276	396	864	85	88	90	174	190	196
Ashanti	53	37	38	432	564	792	27	20	23	84	96	112
Brong Ahafo	30	30	41	156	384	468	75	75	100	195	189	106

Mean number of loan applications received by

Source: Calculated from survey data.

Table 3

Upper West

120 128

30

94

180 124

180

^{*} The number of loan applicants may exceed the number of depositors, since many depositors make several applications during the year.

Credit unions received an average of 133 of loan applications in 1990, 137 in 1991, and 123 in 1992. These average figures varied considerably between urban and rural areas, but (contrary to the case for moneylenders) urban unions received more than 100% more loan applications than did rural credit unions. This disparity can be attributed to the fact that loan applications are derived directly from membership, which tends to be larger in urban areas.

The number of persons who received loans from informal lenders varies in the same manner as the loan applications the lenders received. In 1990, moneylenders gave loans to an average of 70 persons - or to 82% of their loan applicants. The proportion of applicants who received loans in 1991 and 1992 were 71% and 82%, respectively. The number of loan recipients from susu collectors averaged less than 50% of all loan applicants in the 3-year period. It is ironic that, although a loan applicant has less chance of receiving a loan from susu collectors (compared with other informal sources), a larger number of persons apply to them. The popularity of these loans may be attributed to their characteristics, as we discuss later. In the rotating susu groups, the number of loan applicants must equal the number of available applicants, as each person takes a turn at the regular collection. In the associations that do not 'rotate', as well as in the cooperatives, more than 90% of loan requests are granted – a rate that can be explained by the fact that borrowers are members of the organisation. Among credit unions, the rate at which loans have been approved has varied extensively: only 55% of applicants in 1990 were granted loans, compared with 83% in 1991 and about 95% in 1992. This increase in the loan approval rate can be explained by the fact that credit unions have received external support to boost their lending activities. It is indeed interesting that while some indigenous units have managed to boost lending by making their schemes more innovative, non-indigenous units such as credit unions have been able to do so only with donor support. We did not observe much variation in loan approval rates among the regions and between rural and urban areas.

4.5 Lending to small and microenterprises

Informal lending to small and microenterprises is relatively insignificant. With the exception of susu collectors and cooperatives, all other categories of lenders indicated that the number of those who borrow for consumption far exceeds the number that borrow either for fixed investment or for working capital. Subsequently, only about 5% of loan applicants to moneylenders between 1990 and 1992 were small and microenterprises, and they also formed about the same proportion of loan recipients. The proportions are similar to those of credit unions. Susu collectors seem to have more microenterprise borrowers than do other informal lenders; microenterprise borrowers constitute 14% of their loan recipients.

About a third of moneylenders indicated that lending to microenterprises is not profitable – due largely to the perennial cash-flow problems of entrepreneurs. Most

of the remainder had no specific views about the issue, but it is interesting that the views of *susu* collectors were equally divided about whether or not lending to microenterprises is profitable. Obviously, many informal lenders are averse to lending to microenterprises; but many microenterprises may prefer not to borrow from informal units, since those loans may not be the most attractive to them, as discussed later of the characteristics of loans. However, emerging new *susu* companies showed greater interest in lending to microenterprises than did more 'traditional' institutions. One such company indicated that it intends to target that market niche specifically, underscoring the desire of many new lenders to grant loans beyond those that are used primarily for short-term consumption purposes. The desire to break new ground has arisen under the more liberal dispensation experienced in the economy in general in the past decade.

4.6 Conclusions

In general, the characteristics of our sample lenders and their businesses do not suggest that they operate only as a response to repressive financial sector policies. It is obvious that their activities and clientele continue to grow in the presence of financial liberalisation. They appear to have advantages in their selected market niches, the nature of which is explored in the next section. In this regard, Adams and Fitchett (1992: 3) have written, 'Informal finance is ubiquitous in low income countries, and it is concentrated wherever there are substantial amounts of commercial transactions – especially in urban areas – regardless of the state of development of formal financial markets.' We may add that when incomes are relatively low, informal finance also provides an opportunity for people to smooth their consumption, as discussed by Deaton (1989).

5. The characteristics of informal loans

Informal loans vary by size, maturity rate, interest rates and the capacity of the lenders to lend. These characteristics should be indicative of the degree of market segmentation in so far as they illustrate product differentiation and variations in product packaging. The main question in this section is, what makes particular informal financial products attractive to particular clientele?

5.1 Loan sizes and loan maturity

The operations of informal lenders tend to vary considerably according to the size of their loans, in the same way that the total amount they lend out varies extensively according to the location and source of lending capital. ANOVA suggests that the major sources of variation in loan sizes are the type of lender and location (urban/rural) (Table 4). Urban loans tend to be significantly larger than rural loans, and loan sizes tend to be largest among moneylenders, followed by credit unions, SCAs, SCCs, and susu collectors in that order. In the discussion that follows, savings and credit associations that rotate (ROSCAs) are distinguished from those that do not.

Table 4	Average	size of I	oans by	region	in 1992	(cedis))	
	Mon	eylender	Susu collector		SCC		Credit union	
Region	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Greater Accra	200,000	125,000	15,500	8,000	120,000	80,000	42,000	30,000
Eastern	250,000	50,000	12,000	6,000	55,000	25,000	20,000	10,000
Volta	60,000	45,000	12,000	6,000	74,250	30,000	30,000	30,000
Central	40,000	30,000	11,000	5,000	60,000	33,000	90,000	54,000
Ashanti	126,000	85,000	21,500	9,000	77,000	75,000	45,000	11,000
Brong Ahafo	100,000	54,000	10,000	6,000	80,000	42,000	33,000	70,000
Upper West	_	-	6,000	3,000	80,000	60,000	300,000*	60,000

^{*} This figure includes funds from a special assistance programme offered by an external donor institution.

Source: Calculated from survey data.

Note: At the time of survey, January-February 1993, US\$1 = ϕ 580.

5.1.1 Moneylenders

In 1992, the average loan amount from moneylenders was ¢100,000. In Accra, however, the average loan amount was about ¢200,000. In most rural areas, loan sizes from moneylenders averaged ¢50,000. (The difference in the size of urban and rural loans is statistically significant.) These loans had an average maturity period of 3 months. Few loans went beyond 6 months, even though the maximum period allowed by lenders was 1 year. It is remarkable that the loan amounts granted to clients were about the same as were requested. The largest loan amount in 1992 was ¢1.2 million, and the smallest was ¢2,000. In general, loans from moneylenders tend to be significantly larger than those from susu collectors.

5.1.2 Susu collectors

Urban susu collectors granted an average loan of \$\psi 12,500\$ in 1992, with a repayment schedule of 1 month. The longest maturity period offered by susu collectors was 3 months. Here, also, the loan amounts were often about the same size as were requested by clients. Thus it would seem that informal lenders do not normally scale down the amounts requested by clients; in fact, they indicate that their clients know what is reasonable to expect. In 1992, the largest loan amount granted by a susu collector was \$\psi 250,000\$ and the smallest \$\psi 400\$, indicating the flexibility of the system. Susu collectors cannot grant longer-term loans, given the short-term nature of their deposit liabilities. Here, also, the difference in the average size of urban and rural loans was statistically significant.

5.1.3 Rotating susu groups (ROSCAs)

The loan amount of a rotating susu group is equivalent to the total amount contributed by its members at an agreed-upon time. The size of these cash contributions vary widely from one group to another. Members usually choose an amount that will yield a sizeable enough fund for them to make 'large' purchases or to provide working capital for business. The appropriate size may thus be derived from the cost of some of the goods that members want to buy, including household appliances and building materials. Some of the amounts being applied in the public departments of some urban areas are about 10% of the salaries of junior civil servants each month, yielding an intake (or loan amount) of \$\phi60,000\$.

5.1.4 Non-rotating susu groups and cooperatives

The average loan amount granted by these groups to applicants was about ¢75,000 in 1992. This figure lies between what one can borrow from *susu* collectors and

from moneylenders. These amounts are usually to be repaid within 6 months. Loans may be extended beyond 6 months only under unusual circumstances, such as bereavement. In 1992, the largest loan amount from a cooperative was ¢600,000, and the smallest was ¢2,000.

5.1.5 Credit unions

In 1992, the largest loan amount from our sample of credit unions was $\&pperpsize{1000}$ 3 million; the smallest was $\&pperpsize{1000}$ 40,000. On average, however, loan amounts were about $\&pperpsize{1000}$ 40,000 in rural areas and about $\&pperpsize{1000}$ 45,000 in urban areas. In contrast with moneylenders and susu collectors, credit unions granted significantly smaller loans than the amounts requested by applicants. Usually, loans from credit unions had maturities of 6 to 12 months, with 12-month loans dominating. The size of loans from credit unions does not differ significantly between urban and rural areas.

5.2 Interest rates

Moneylenders are often chided for 'outrageously high' interest rates, in contrast to both other informal lenders and all formal lenders. Indeed, the interest rates charged by different informal lenders vary considerably (Table 5). Noting that informal lenders seldom grant loans beyond a maturity of 3 months, we consider here monthly interest rates only for purposes of comparison. An analysis of the variance in interest rates (based on F-statistics) indicated significant variation, the main source of which was the type of lender. In addition, a t-test on the mean monthly interest rates by type of lender indicated that all other mean interest rates differ significantly from those of moneylenders. However, differences in the rates measured in urban and rural areas for each type of lender are not significant. Yet, we should point out that when other informal lenders make loans to persons other than their traditional clientele their lending rates are no different from those of moneylenders as, for example, when a non-rotating SCA lends to a non-member.

5.2.1 Moneylenders

If informal lenders attach different risks to different categories of borrowers, they can do so by applying differential interest rates. Remarkably, however, after having indicated that lending to small and microenterprises may sometimes not be profitable, all but one moneylender in the sample indicated that interest rates are not used to differentiate among borrowers. Similarly, they reported not offering different interest rates on loans to new and old customers.

Table 5 Mean monthly interest rates by regions in 1992 (%)

	Mone	ylenders	Susu co	ollectors	SCCs	/SCAs	Credit unions		
Region	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	
Greater Accra	8	7	3.3	3.3	5	5	6	5	
Eastern	10	10	3.3	3.3	5	5	10	10	
Volta	10	8	3.3	3.3	5	3	5	5	
Central	10	7	3.3	3.3	5	3	3	3	
Ashanti	9	9	3.3	3.3	3	3	3	5	
Brong Ahafo	10	7	3.3	3.3	5	10	10	5	
Upper West	1000	-	3.3	3.3	5	10	3	3	

Source: Calculated from survey data.

The interest rates charged by moneylenders do not vary much. For a 3-month loan, moneylenders charged an interest rate of 25 to 30% for the period in the urban areas of most regions – that is other than in Accra and Kumasi where the rates were lower on average. In most cases, rural interest rates were either slightly lower than or equal to urban rates. It is certainly not realistic to annualise the interest rates of many moneylenders since they do not usually consider annual loans and their rate determination process differs when they grant annual loans. In the few cases in which repayment was extended to 6 months to a year, moneylenders did charge higher interest rates, ranging between 50% and 100% of the principal for the period. The borrower was usually expected to repay the entire amount in one lump sum before the end of the year. A few moneylenders charged interest rates of more than 100% for 1-year loans.

It is unclear how moneylenders determine interest rates. Many contend that they use a combination of tradition and market forces to determine the rate. By tradition, they would suggest that the 'rates have always been 100% for one year'. By market forces, they are saying that 'we are aware our clients today cannot afford to pay 100% in 1 year, so we "help" them out with a lower rate.' That would probably explain why rates lie between 50% and 100% on their 'long-term' loans. Yet most moneylenders insisted that their rates are not negotiable. The fact that their rates have come down with inflation since 1983, when 100% on loans maturing in less than 6 months was more common (as they indicated), is evidence of the growing strength of market forces in interest-rate setting. Between 1989 and 1992, however, their rates stabilised. Given these trends it is ironic, that 83% of moneylenders maintained that the level of inflation had nothing to do with the rates they charged. Without exception, all moneylenders in our sample insisted that, beyond interest, they impose no other charges on loans.

5.2.2 Susu collectors

Most susu collectors do not charge interest on their loans because all they do is advance amounts equivalent to what clients are obliged to save, less their own commission at about 3.3% each month. For the 30% of the sample who do charge interest on loans, particularly to non-deposit clients in large urban areas, interest rates do not differ significantly from those of moneylenders. They vary between 20% and 40% for 3 months, with higher rates reserved for non-deposit clients. The rate-setting determinants of susu collectors are also similar to those of moneylenders. Thus, it is obvious that when susu collectors decide to lend to non-clients they behave like typical moneylenders, with the exception that susu collectors' intermediate funds that are mobilised through susu collection. However, in view of the high-risk and short-term nature of this activity, its scope is limited.

5.2.3 Non-rotating susu groups and cooperatives

These groups do not discriminate among categories of borrowers in their interest charges. In 1992, interest on loans averaged about 5% monthly for 6-month loans.

5.2.4 Credit unions

Credit unions also do not use interest rates to discriminate among different borrowers. This would appear to be a general trend among all informal lenders. Credit unions in the sample generally charge a uniform rate of 36% annually on all loans. For shorter maturity loans, the rate is usually 3% monthly (wide deviations from this general rate were observed in the Eastern and Brong Ahafo regions). However, their interest rates are always influenced by those of formal institutions since they try to match them. Their policy is to price loans slightly above what banks charge. In doing so they are operating somewhere between banks and other informal lenders, assured of a clientele that will receive some credit when required.

5.3 Collateral

Almost all moneylenders and credit unions require security for loans, but the type of security they prefer differs. About 83% of moneylenders require security against loans, as do 76% of credit unions. However, the community and group-based institutions, such as the cooperatives and both types of susu systems, take security for granted in view of the nature of association. Thus, many susu collectors require security only when they lend to non-deposit clients (40% of the sample of collectors) and almost 70% of the cooperatives do not require security.

The preferred form of security among moneylenders varies considerably. Twothirds of the sample require such physical assets as buildings, farmland and undeveloped land; the remainder prefer non-physical securities, such as guarantees from friends, relations or employers. When lending to a public servant, moneylenders usually reach an understanding with the borrower's paymaster. It must be pointed out that moneylenders are generally prepared to lend in the absence of collateral if other guarantees, including verbal pledges from extended family heads, are provided.

Credit unions require that loan applicants be in good standing with their deposit obligations. They consider it ideal if another member of the union guarantees the loan.

5.4 Capacity to lend

The capability of moneylenders to satisfy the loan requirements of their clients also varies considerably. Of those interviewed, 42% were unable to satisfy all the loan requirements of their good clients and another 42% were able to do so sometimes. That leaves only 16% of moneylenders who were always able to provide loans to what they perceived were good requests from applicants. Those unable to satisfy the loan requirements of good clients normally deny the application, as opposed to scaling down the amount to conform with available funds.

Susu collectors show a similar lending capacity: 40% were unable to grant loans to all of their good clients; only 20% were always able to grant deserved loans. We should point out that all the other informal institutions we studied showed similar trends, implying that informal lenders reject a relatively large number of applications, primarily due to an inadequate lending base.

5.5 Conclusions

Our main conclusion here is that each segment of the informal finance sector packages its loans to satisfy the needs of specific groups. In other words, informal units serve distinct market niches. Thus, while loans from moneylenders may be more expensive than other informal loans, they remain the only source open to the general public, and one that does not require that borrowers satisfy any distinct criteria, such as membership in a group. In this regard, their significantly higher interest rates partially represent a risk premium for the lender, who is ceding the sanctioning authority that is inherent in other informal arrangements that entail group membership. In addition, moneylending is unique in the sense that, other than ROSCAs, it is the only source from which borrowers can almost be certain that their loan requests will be met. As such, borrowing from moneylenders is more acceptable to borrowers without many other options, such as those who require

loans to meet social and economic emergencies. They are not attractive to those who seek working capital and fixed investment loans.

Conversely, loans from susu collectors are attractive to low-income earners who need short-term working capital. The relatively low interest rate makes lending even more attractive, as does the possibility that repayment can be made daily in small amounts. Although the loan amounts are relatively small, their regularity enables many traders to smooth their expenditure patterns by making immediate payments to their suppliers and thus ensuring a regular flow of supplies. The small size of the loans and their very short maturity periods do not make them very useful for small and microenterprises.

While savings and credit cooperatives and non-rotating savings and credit associations offer larger loan amounts than do susu collectors but at comparable rates, only a limited number of borrowers may have access to them at any time given the condition of membership. But membership is an essential tool for screening loan applications and for ensuring that contracts can be enforced, as we discuss later. The size of the groups must be kept at a level that can be self-managed effectively and act as a constraint on the number of group members who have access to loans. Thus, the funds available are restricted primarily to those borrowers whose loan demands are not for every-day needs, for example, those who require loans to purchase relatively expensive consumption items. In some associations, however, market women and traders who have a demand for larger loan sizes use daily deposits with the susu collector to accumulate periodic deposits into the SCA pool, thus gaining leverage to achieve the desired loan size.

The operational principles of credit unions are similar to those of cooperatives and associations, but their articles of association are defined more precisely and their channels of administration and management are more formalised. They often target low-income public servants in urban areas for membership, which necessarily discourages small enterprises, microenterprises and traders from using the facility. There does not currently appear to be any major informal unit that serves small-and microenterprises.

Our evidence that informal units serve distinct market niches is supported by the arguments of Hoff and Stiglitz (1993) who suggest that credit markets in developing countries operate a matching system whereby different prospective borrowers are implicitly sorted across different lenders according to the ability of the lender to screen particular borrowers and enforce particular contracts. Thus, 'only an individual who markets his or her surplus through a trader can be matched with that trader-lender' (Hoff and Stiglitz, 1990: 6). However, Adams (1992) goes further by analysing the products of informal lenders. Using an analogy from the clothing industry, he argues that 'informal finance is able to tailor contracts to fit the individual dimensions, requirements, and tastes of a wide spectrum of lenders and borrowers'. Thus, only a few contracts, and hence products, in informal finance

are similar. In other words, most of the financial products that borrowers receive differ considerably from each other. An illustration of this point may be made with two short-term informal loans offered by the same lender and with similar interest rates and maturity periods, which, nonetheless, may entail different collateral arrangements for securing the loan depending on several factors, including the wealth of the borrower. While our data suggest that informal loans vary considerably we have no reason to believe that one lender grants different types of loans to different borrowers. The differences in types of loans merely reflect the different types of lenders and how they categorise different borrowers to whom they are willing to lend.

6. Transactions costs

6.1 The screening process and its costs

This analysis of the loan-screening process describes the information used by informal lenders to screen applications, how important that information is to their process, how they obtained it and its cost. It is important to note that more than 98% of the entire sample of informal lenders keep some form of record on all loan transactions, a figure that runs contrary to popular belief. Although we relied on these records for the study, their quality and reliability varied considerably. Whereas these records might represent a general ledger book for some moneylenders, they were simply lists of debtors and their debts for others. Ledger cards for susu collectors were available for each client, as they were for credit unions, which generally maintain detailed records on individual transactions but at a lower level of aggregation than would be expected for annual or other periodic reports.

6.1.1 Screening practices and relevant information

With the exception of credit union borrowers, most persons seeking loans from informal lenders do so verbally - 66% among moneylenders and 85% among susu collectors. Loan applications from credit unions usually require that an application letter be submitted and a standardised application form completed. In the community or group-based arrangements, standard screening practices entail group observations of the habits of individuals and group obligations towards applicants. Thus, in a susu group (SCA) or cooperative (SCC) the associations are aware that members have joined primarily because they cam borrow, which makes them obliged to meet that need. Thus, in 'screening' applicants these associations use criteria based not necessarily on whether members can pay back loans but on whether members are committed to the group's goals. Another question the group must answer is what effective disciplinary measure it can exercise in the event of trouble. Subsequently, most of the screening process must be undertaken before members join. In other words, they do not screen loans but membership, which is restricted entirely to whether persons can be trusted to meet their obligations to the group routinely. Since the incomes and credit requirements of members are invariably similar, the major criterion in answering the question is the individual's character and how reliable he or she is.

The screening process of susu collectors entails a perfunctory examination of a loan applicant's ledger card. Several empty spaces or blanks against days of the month

suggest irregular payments, indicating that an applicant cannot be trusted or may have cash-flow problems. It generally does not matter whether applicants are 'first-time' or 'repeat' borrowers. Given that a collector feels financially able to advance credit to deposit clients, regular payments are the sole criterion for extending loans. For non-deposit clients, they must be personally known to the lender. About 98% of susu collector respondents indicated they do not lend to people whom they do not know.

Most of those who borrow from moneylenders are usually recommended by old clients (which was true of 60% of our sample of moneylenders). For those lending to public servants, common practice is to establish working relationships with the accounts offices of various departments so that individual applicants can be recommended by colleagues in those offices. Beyond this criterion personal knowledge of the client might be preferable but not essential (83% of our sample of moneylenders indicated that they only sometimes know their applicants). Susu collectors obviously differ. Moreover, a 'first-time' applicant to a moneylender is not necessarily at a disadvantage; the proportion of successful 'first-time' moneylender applicants in 1992 (68%) does not differ significantly from the proportion of successful 'repeat' applicants (74%).

In screening loan applicants most of our sample moneylenders reported not requiring that they and the applicant have a business relationship. The sample was also equally divided between those who make third-party inquiries about applicants before granting loans and those who do not. When they ask others for information about loan applicants, the most important issue for half of them is the character of the applicant; the other half want to know the economic standing of the applicant. In most cases, moneylenders seemed to find the information they sought before granting the loans. It is important to note that many of the referees are persons who work with the applicants – for instance, a public servant's accounts officer. Also in many cases the word of the person who recommends or introduces the applicant is enough. It is noteworthy too that moneylenders seldom visit the project sites of applicants who are non-public servants (or microentrepreneurs).

These practices contrast sharply with those of banks. For example, Aryeetey and Seini (1992) found that in seeking information about potential borrowers, 80% of bank managers invariably want to know about the existence and extent of indebtedness. This criterion was followed by the personal integrity of the borrower. Banks suggest that their standard screening practice is to visit the project sites of loan clients before granting the requested loan.

It is remarkable that 67% of the moneylenders indicated that they are not interested in the returns that borrowers made on their investments. Another 25% are reportedly only sometimes interested. They often remarked that the type of activities in which their borrowers are involved could be evaluated mentally. A moneylender who trades can easily determine whether a loan to buy more stock of

a particular consumer item is sensible. Moreover, in screening loans 92% of the moneylenders do not consider ethnicity or religion as a screening criterion.

The records of credit unions provide adequate information about loan applicants, who must be members of the unions. Thus, in most cases (61%) they reported not consulting third parties about loan applicants. When they do their most important criterion is the character of the applicant. These third-party referees are invariably other members of the union who know the applicant. In workplace unions, information from colleagues and superiors can be obtained easily. Credit union representatives also do not normally visit project sites, which is not surprising, since most credit union loans go to consumption items.

6.1.2 Creditworthiness criteria

The creditworthiness criteria of most informal lenders appear to be relatively simple. Credit unions, because they are not particularly interested in 'investment' lending, have simply not developed creditworthiness criteria. Their approach to lending appears to be one of rationing a fixed amount among members each year. It is usually on a 'first come, first served' basis, with emphasis on character and membership standing.

Only a third of moneylenders indicated that they apply any clear credit-worthiness criteria; of this proportion, half believe the direct returns on a project are the most important criterion for project loans and half consider credit 'need' to be most important. In attempting to establish the credit 'need' of the applicant, many moneylenders often arrange interviews with applicants in which they try to find out more about their backgrounds and how they will use the loans. The issue here is quite distinct from the usual concept of 'credit demand'; what is at stake is primarily the urgency attached to the application for credit as opposed to feasibility. But, as already indicated, as long as some form of security is available, moneylenders tend to lend if they can. A report by Aryeetey and Seini (1992) on the assessment of creditworthiness by banks indicates a sharply contrasting process. About 99% of bank managers indicated that the return on projects or their feasibility was the most important criterion for assessment. Interestingly, they also reported that, while no bankers ranked collateral as the most important factor in assessing creditworthiness, their sample invariably ranked it among the top four.

6.1.3 Screening costs

In computing the costs of screening, monitoring and contract enforcement, we are interested in both the average variable cost and marginal cost of each (additional) loan. We subsequently considered variable personnel costs, measured as the time devoted to screening activities, on-site visits to projects, correspondence and

studying, and the amount that staff were paid for those activities. We also collected data on transport expenses and on stationery used and made deductions for tax payments. In calculating personnel costs, we used the opportunity cost of the lenders' time for salary (where appropriate), since they often do not allocate themselves any specific salaries. This cost was based on income from the other activities of lenders, or on income they would have earned in the jobs they left to begin lending.

Screening is the most important component of the lending process for the informal sector. Thus, for many of the lending units, costs incurred in this regard become the major component of transaction costs. Analysis of variance for total screening costs in 1992 suggested that the most significant source of variation in costs is, again, the type of lender; region and type of settlement are not major sources of variation.

We estimate that the totals or aggregate screening cost of urban moneylenders averaged ¢189,000 in 1992. This left the average variable cost for screening each loan at about ¢1,800, which would be about 1.4% of each loan amount (see Table 6).

In rural areas, the mean total variable screening cost for all loans by moneylenders was &0.23,0.00, and the average variable screening cost was &0.25% of the loan amount. While the difference in mean per-loan screening costs of rural and urban lenders tends not to be significant at the 5% level, the difference in the cost per loan amount differs significantly following the wide differences in the size of urban and rural loans.

Region	Moneylenders		Susu collectors		SCCs		Credit unions	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Greater Accra	2,200	1,600	50	105	280	120	600	1,500
Eastern	1,800	1,230	120	150	100	95	1,530	1,790
Volta	1,550	1,485	100	100	65	80	1,400	1,680
Central	1,700	1,165	95	100	70	75	1,200	1,650
Ashanti	2,050	1,500	125	105	75	70	1,100	1,550
Brong Ahafo	1,750	1,400	100	120	60	60	1,275	1,660
Upper West	-	_	110	100	65	75	1,800	1,910

To determine costs for susu collectors, we apportioned the cost of daily visits to clients to deposit mobilisation and loan processing. The estimates for loan processing (salaries and other expenses for the collectors) were taken to be onethird of the actual daily expenses, since susu collectors spend only a third of their time on lending activities and the rest on deposit mobilisation. We then divided the cost of loan processing into three parts, corresponding to loan screening, loan monitoring and contract enforcement. We gave equal weight to those three activities in view of the fact that they are performed simultaneously. This methodology yielded a mean total screening cost of ¢62,000 in urban areas and ¢59,000 in rural areas in 1992. In Accra, susu collectors had an average variable screening cost of \$\psi 50\$ per loan application (or 0.3\% of the average loan amount). In other urban areas, this cost was \$\psi 110\$ per loan, equal to 0.9% of the loan amount. However, screening costs per loan and per loan amount do not differ significantly for urban and rural susu collectors. Yet, the per-loan screening costs of susu collectors are significantly less (at the 5% level) than those of moneylenders.

For urban cooperatives (SCC), the screening cost per loan is about 0.1% of the loan amount, coming primarily from the cost of stationery and transport by their secretaries and/or treasurers. This cost rose to 0.2% of the average loan size for rural cooperatives. Here, also, the differences in urban and rural costs are insignificant. The cost for non-rotating susu groups is quite similar to the cost to cooperatives. Rotating susu groups have almost zero screening costs since they claim to 'pay for nothing' except for the notebooks in which they enter payments.

Credit unions in Accra spent an average of \$600 in screening each loan application. about twice the cost incurred by cooperatives and 1.4% of the average loan amount. The screening costs of credit unions in other urban areas was more than double (averaging \$1,400 per application, or 3.2% of the loan amount), coming primarily from the salaries of full-time treasurers and watchmen, as well as from other office management expenses. Although the difference in aggregate costs between urban and rural unions is not statistically significant, rural credit unions tend to have significantly larger screening costs per loan amount (4.4%) than do the urban unions. In addition, among all types of lenders, credit unions show the greatest variation in aggregate or total screening costs across regions. It should be noted that the screening costs per loan amount among credit unions seem to be comparable to those of some formal lending institutions (see Aryeetey and Seini, 1992). Thus, while their screening costs per loan application do not differ significantly from those of moneylenders, the costs per loan amount are substantially above those of the latter, given the smaller size of their loans. Similarly, susu collectors are able to maintain lower screening costs (both per loan and per loan amount) since they do not use the same amount of detail in administration. No elaborate paperwork is called for in susu operations.

6.2 Loan monitoring and its costs

Contrary to the popular notion that informal lenders monitor loans extensively (which in turn is an explanation for relatively low default rates), we observed that very few informal lenders actually monitored how loans were used. This observation is not surprising given that most of the loans are for consumption items. Of our sample of credit unions, 50% never monitor loans and another 22% do so only sometimes. Thus, only 28% of credit unions always monitor loans. Monitoring by credit unions is more common in rural areas, where most loans are made to farmers and which thus require visiting the farms. For these, we estimated a loan monitoring cost of about another 1% of the loan amount, primarily to cover transport and personnel costs.

Moneylenders have virtually no monitoring costs. Nearly 75% of our sample do not monitor loans, and the remainder do so only sometimes. For loans that are monitored, they comprise less than 5% of loans annually. Thus, moneylenders have virtually zero monitoring costs. They described the lending process as one in which the lender gives money to borrowers in his or her home, and waits for them to come back and repay.

Susu collectors monitor loans implicitly as part of their operations, since they visit clients daily to collect deposits. The monitoring costs of susu collectors are also 0.2% of the loan amount. Susu groups have no monitoring costs, and only 20% of cooperatives actually monitored loans.

Our conclusion about the loan monitoring activities of informal lenders is that they are so limited that low default rates cannot be attributed to tight loan monitoring.

6.3 Loan repayments and contract enforcement costs

Informal lenders have a variety of repayment schedules. They include daily payments (as with *susu* collectors), monthly payments of interest and principal over an agreed-upon period, and lump sum payment of principal and interest at the end of an agreed-upon period. With the exception of *susu* collectors, who invariably use daily payments, and credit unions, which have regular monthly repayments, other lenders tend to offer flexible repayment schedules. For example, while many moneylenders accept a bulk payment of interest and principal at the end of period, several would rather have monthly payments of only the agreed-upon interest to the end of maturity, at which time the principal would be paid back in one lump sum. With this schedule, lenders may not worry about when the principal will be repaid, as long as the borrower pays interest regularly. Moreover, moneylenders seldom experience defaults, sometimes rolling short-term loans into long-term loans, keeping the monthly interest rate the same.

Compared with banks, repayment delinquency is relatively rare with informal lenders. For example, 77% of the entire sample had no delinquent borrowers in 1990 and 70% had none in 1991. For those who had delinquent borrowers, they usually comprised less than 5% of the total number of borrowers. In general, lenders believe that delinquent borrowers will usually pay within 3 to 6 months after the agreed-upon period. The largest ratio of defaulting to non-defaulting borrowers was observed in just a few rural credit unions and cooperatives, where defaulters averaged 30% of borrowers. These tenders were usually large bodies with hundreds of members.

In general, the reasons for repayment default or delinquency vary among lenders. It should be noted here that lenders' perceptions of the reasons for delinquency and default may partially be at variance with their loan screening practices. While screening practices indicate a concern about the possibility of a 'strategic' default in which the borrower simply decides not to repay rather than with default because a loan project fails, lenders in rural areas often attribute non-payment to cash-flow problems, while urban lenders attributed it to a mixture of cash-flow problems and the lack of commitment by borrowers to settle debts. However, based on crosstabulations of perceptions about the reasons for default to the end use of loans, we conclude that lenders who provide loans primarily for consumption purposes and trading tend to be more concerned about strategic default, whereas those who lend to farmers, in particular, show more concern about failed projects.

In view of the relatively low rates of delinquency and default, contract enforcement costs tend to be generally low, averaging 0.2% for all categories of lenders. These costs were significantly higher in the presence of a large number of delinquent cases. When defaults and delinquencies occurred, lenders often had to go to the homes and businesses of their clients to deliver verbal warnings. It is interesting to note that when asked to indicate what they do to forestall default by delinquent borrowers, 20% of the sample indicated that they do nothing but hope that the lender pays, and 30% indicate that they threaten to harm the borrower or his or her property. The remainder indicated an assortment of possible reactions, ranging from confiscating collateral to dismissing the borrower from group. It would appear that group or community-based institutions do not have an effective way to deal with defaulters, except to make them 'live with the stigma' of being defaulters. However, when a rural cooperative arrangement contains a large number of defaulters, sanction of stigmatising an individual fails to be effective. Only 7 lenders (8% of the sample) seek legal assistance to redeem loans, due primarily to the small number of defaulters, but also in part to their reluctance to seek legal assistance because of the cost. Some lenders indicated that they have sought the assistance of security agents to compel borrowers to repay loans, albeit illegally, sometimes costing them about 10% of the loan amount.

6.4 Administrative costs

Based on our hypotheses about the persistence of fragmentation among informal financial units, we expected significant variation in the costs incurred by such units as they interact with their clients. These would include the costs of administration and of funds, and we consider their variation in this section.

Analysis of the variation in the total administrative costs incurred after screening, monitoring and contract enforcement actually suggests that the most significant source of variation was the type of lender. The administrative costs of credit unions in urban areas were significantly higher than those of other informal units, while the lowest costs were incurred by the indigenous group-based units – that is, the SCCs and SCAs (see Table 7). Similarly, the administrative costs of SCCs and SCAs were significantly lower than all others. Some correlation exists between the degree of organisation involved in the activity and the administrative costs incurred in lending. Very often, 'organisation' involves the amount of paperwork required, as opposed to transport expenses, which were minimal among all units. This finding supports the popular notion that the less formal the activity, the lower the administrative costs

The cost of funds is negligible for most informal financial units, primarily because those who mobilise deposits do not generally incur any costs in this regard. To estimate the cost of funds, we gathered data on interest payments on deposits and their handling costs, returns on investments in other markets and interest payments on loans taken for lending purposes.

Table 7	Mean loan administration cost by region in 1992 (percentage of loan amount)									
Region	Moneylender		Susu collector		SCC		Credit union			
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural		
Greater Accra	0.9	1.1	1.0	0.6	0.1	0.1	1.7	4.6		
Eastern	1.2	2.5	2.5	2.3	0.1	0.2	7.1	10.0		
Volta	1.5	3.1	2.7	2.5	0.1	0.2	4.6	4.6		
Central	1.7	4.6	2.7	2.4	0.1	0:1	1.5	2.6		
Ashanti	1.3	1.6	2.2	2.0	0.1	0.1	4.2	8.0		
Brong Ahafo	1.4	2.5	2.4	2.4	0.2	0.3	4.2	2.2		
Upper West	_	_	2.5	2.6	0.1	0.2	0.5	2.3		

All such costs for susu collectors are negative, since they receive payment for taking deposits and avoid having to deposit them at the bank when they loan them out. They earn interest on their deposits (primarily demand deposits) with the bank only when their balance exceeds $\not\in 1$ million continuously for half of the year, which usually means that there is no interest foregone. We thus measured the cost of funds as the implicit daily interest rate on daily fixed deposits accumulated over 30 days, or -0.2%, representing the collectors' fee. This is equivalent to -6.3% of an average loan amount monthly or -54.4% annually. Thus, for a typical 1-month loan from a susu collector in Accra, the total transaction cost is equivalent to -5.3% of the loan amount. With a monthly interest rate of 3.3%, there is a substantially large spread of more than 8 percentage points. The cost of funds for the other informal lenders was usually between 0 and 0.1%, thus also yielding substantial spreads.

⁴ Aryeetey and Steel (1992) provide a detailed calculation of implicit interest rates and cost of funds for susu collectors.

7. Relationship with banks and other formal financial institutions

Among almost all lenders, their major relationship with banks entails using banking facilities for holding deposits. Only 11% of the sample had no bank accounts, and these were primarily rotating susu groups that did not need bank accounts since they loaned out whatever they collected immediately after they collected it. For all those operating bank accounts, the major reason was to ensure the safety of their deposits. While susu collectors invariably operated demand deposits, the others had primarily savings deposits. With the exception of a handful of credit unions, lenders do deal with their clients through banks.

Only 9% of the entire sample had ever applied to banks for loans. A half of those cases wanted the loans to boost their lending business, while the other half (primarily moneylenders) wanted the loans for investment in their other businesses. It is interesting that informal lenders were often uninformed about current bank lending rates; only about 25% of the sample always knew what these rates were, and more than 90% of sample did not use these rates as a guide for their own rate-setting. Often, only credit unions needed to be guided by bank lending rates to set their own rates. About 70% of the entire sample would be interested in obtaining bank loans for on-lending to clients, believing that these loans would boost their lending capital extensively. Most of those who do not want bank loans were rotating susu groups and other community-based institutions. Most moneylenders and susu collectors were generally quite enthusiastic about on-lending bank-provided capital.

8. Summary and conclusions

Our analyses show clearly that informal financial agents operate in relatively confined segments, and are thus unable to make much impact on production agents that require a large dose of capital. Because both their assets and liabilities are short term, the scope for their involvement in term lending is extensively limited without a change in their current structures.

The literature review revealed that informal financial activity has been occurring in Ghana for many decades, when governments have variously pursued either liberal or repressive financial policies. Thus, any suggestion that the policy origin of segmentation lies only in repressive policies is unrealistic. They thrive on increased economic activity that generates a demand for short-term credit, particularly among traders and consumers. The fact that informal financial activity has grown considerably since 1987, when the government began pursuing liberal financial policies and actively supporting the growth of formal financial institutions, is further evidence.

Moreover, while the structural origins of segmentation tend to have different transaction costs, there is no indication that these come primarily from different screening, monitoring and contract enforcement practices. The differences in transaction costs originate from the type of 'infrastructure' used by the units, varying particularly by personnel costs and extent of record-keeping and stationery use. All units attach relatively greater importance to screening, which invariably involves addressing one central issue: 'Can the lender trust the borrower to repay?' In marginal cases, the issue becomes, 'What sanctioning authority does the lender possess?' The information required for answering the first question was often obtained from the borrower's membership in a group or association, or from his or her daily relationship to a susu collector in an association controlled by the collector. For moneylenders, it is based on the confidence they place in whoever introduces the applicant, or in their own knowledge of the borrower given their geographic proximity. Lenders' perception of the persuasive power or sanctioning authority they possess is also derived from membership in the association. In a workplace credit union or SCA, arrangements can sometimes be made with employers to deduct payments from salaries. Moneylenders also make similar arrangements quite often, although informally, with borrowers' employers. They also rely on available collateral. This process of loan decision-making limits the importance of information asymmetry and minimises moral hazard. In essence, information costs for all informal lenders are low.

The segmentation that is observed is due to the fact that in attempting to reduce the moral hazard involved in lending, informal units must create distinct groups or

associations that they can control, one way or another. This attempt at creating controllable associations precludes the participation of various potential borrowers, whose only recourse is to turn to moneylenders. In a sense, those who resort to moneylenders may be regarded as the 'least creditworthy' and thus as the highestrisk borrowers. Subsequently, although moneylenders may have a lower transaction cost than do credit unions, they make their interest rates higher in an effort to cover the higher risks.

These interest rate trends among moneylenders and credit unions suggest that market conditions and structure certainly have a role to play in the determination of interest rates. This finding certainly bodes well for enhancing the scope of financial integration after the various structural and policy bottlenecks to a larger capital base are removed.

References

- Adams, Dale W. (1992) 'Using Contracts to Analyse Informal Finance', Economic and Sociology Occasional Paper No. 1972. Columbus, OH: Ohio State University, Rural Finance Program.
- Adams, D.W. and D.A. Fitchett (eds) (1992) Informal Finance in Low-Income Countries. San Francisco, CA: Westview Press.
- Adjetey, S.M.A. (1978) *The Financial System in Ghana*, Research Memorandum, Research Department, Bank of Ghana, Accra.
- Ardener, S. (1964) 'The Comparative Study of Rotating Credit Associations', *The Journal of the Royal Anthropological Institute* 94(2): 229.
- Aryeetey, E. (1992) The Relationship Between Formal and Informal Segments of the Financial Sector in Ghana, Research Paper 10. Nairobi: African Economic Research Consortium.
- Aryeetey, E. and F. Gockel (1991) Mobilizing Domestic Resources for Capital Formation in Ghana: The Role of Informal Financial Markets, Research Paper 3. Nairobi: African Economic Research Consortium.
- Arycetey, E., A. Kyei and E. Asante (1990) 'Mobilizing Domestic Savings for African Development and Diversification: A Ghanaian Case Study', Research Report presented at a Workshop of the International Development Centre, Queen Elizabeth House, Oxford University, July.
- Aryeetey, E. and A.W. Seini (1992) 'An Analysis of the Transaction Costs of Lending in Ghana', paper presented at a Workshop of the African Economic Research Consortium, Nairobi, December.
- Aryeetey, E. and W.F. Steel (1992) Incomplete Linkage between Informal and Formal Finance in Ghana, Industry and Energy Department Working Paper, Industry Series No. 62. Washington, DC: World Bank.
- Ahulu, N.H. (1988) 'The Nature and Characteristics of Informal Savings and Loan Associations', Report of the FAO/Ghana Workshop on Informal Financial Systems, Accra.
- Ashiley, C.K. (1986) 'The Credit Delivery Structure', Master's thesis, Institute of Social Studies, The Hague.
- Bortei-Doku, E. and E. Aryeetey (1992) 'Operation, Utilization and Change in Rotating Savings Clubs in Ghana', paper presented at the International Workshop on Rotating Savings, Centre for Cross-Cultural Research on Women, Oxford, 7–9 January.
- Deaton, A. (1989) 'Saving in Developing Countries: Theory and Review', Proceedings of the World Bank Annual Conference on Development Economics. Washington, DC: World Bank.
- FAO (1988) Report of the Workshop on Informal Financial Systems, Regional Office for Africa, Accra.

- Fry, M.J. (1988) Money, Interest and Banking in Economic Development. Baltimore, MD: Johns Hopkins University Press.
- Hoff, K. and J.E. Stiglitz (1990) 'Imperfect Information and Rural Credit Markets: Puzzles and Policy Perspectives', World Bank Economic Review vol. 4: 25–250.
- Integriete Projekt Consult (1988) 'Rural Finance in Ghana', a research study on behalf of the Bank of Ghana, Frankfurt.
- Lawson, R.M. (1974) African Entrepreneurship and Economic Growth, a case study of the fishing industry of Ghana. Accra: Ghana Universities Press.
- McKinnon, R.I. (1973) Money and Capital in Economic Development, Washington, DC: The Brookings Institution.
- Miracle, M.P., D.S. Miracle and L. Cohen (1980) 'Informal Savings Mobilization in Africa', Economic Development and Cultural Change 28, July.
- Offei, C. (1965) 'Rural Credit in Ghana', Master's thesis, University of Ghana.
- Shaw, E.M. (1973) Financial Deepening in Economic Development. Oxford: Oxford University Press.
- World Bank (1989) 'Republic of Ghana, Rural Finance Project', staff appraisal report, African Country Department IV, Agricultural Operations Division, Washington, DC, April.

- **60:** Explaining Africa's Post-Independence Development Experiences, *Tony Killick*, 1992, £4.00, ISBN 0 85003 177 X*
- 61: The Informal Financial Sector: How Does It Operate and Who Are the Customers?, J J Thomas, 1992, £4.00, ISBN 0 85003 178 8
- 62: Environmental Change and Dryland Management in Machakos District, Kenya: Institutional Profile, edited by Mary Tiffen, 1992, £4.00, ISBN 0 85003 179 6
- 63: Environmental Change and Dryland Management in Machakos District, Kenya: Tree Management, Michael Mortimore, 1992, £4.00, ISBN 0 85003 180 X
- **64: IMF Lending: The Analytical Issues**, *Graham Bird*, 1992, £4.00, ISBN 0 85003 182 6
- 65: The Seed Sector in Developing Countries: A Framework for Performance Analysis, Elizabeth Cromwell, Esbern Friis-Hansen and Michael Turner, 1992, £6.00, ISBN 0 85003 183 4
- 66: The Performance of the Seed Sector in Zimbabwe: An Analysis of the Influence of Organisational Structure, Esbern Friis-Hansen, 1992, £4.00, ISBN 0 85003 184 2
- 67: Political Regimes and Economic Policy Patterns in Developing Countries,
- 1978-88, John Healey, Richard Ketley, Mark Robinson, 1992, £4.00, ISBN 0 85003 185 0
- 68: The Impact of NGO Poverty Alleviation Projects: Results of the Case Study Evaluations. Roger Riddell and Mark Robinson, 1992, £4,00, ISBN 0-85003-1923
- 69: Continuity and Change in IMF Programme Design, 1982-92, Tony Killick, 1992, £4.00, ISBN 0 85003 194 X
- 70: IMF Lending: The Empirical Evidence, Graham Bird, 1993, £4.00, ISBN 0-85003-197-4
- 71: Issues in the Design of IMF Programmes, $Tony\ Killick$, 1993, £4.00, ISBN 0-85003-199-0
- 72: Food Aid Programmes of the European Community and its Member States: A Comparative Statistical Analysis, Edward Clay and Charlotte Benson, 1993, £4.00, ISBN 0-85003-200-8
- 73: Economic Inflexibility in Africa: Evidence and Causes, *Tony Killick*, 1993, £4.00, ISBN 0-85003-205-9
- 74: The Changing Role of NGOs in the Provision of Relief and Rehabilitation Assistance: Case Study 1 Afghanistan/Pakistan, Nigel Nicholds with John Borton, 1994, £6.00, ISBN 0 85003 206 7
- 75: The Changing Role of NGOs in the Provision of Relief and Rehabilitation Assistance: Case Study 2 Cambodia/Thailand, Charlotte Benson, 1993, £6.00, ISBN 0 85003 207 5
- 76: The Changing Role of NGOs in the Provision of Relief and Rehabilitation Assistance: Case Study 3 Northern Ethiopia/Eritrea, John Borton, 1994, £6.00, ISBN 0 85003 210 5
- 77: The Impact of Drought on Sub-Saharan African Economies: A Preliminary Examination, Charlotte Benson and Edward Clay, 1994, £6.00, ISBN 0 85003 212 1
- 78: Financial Integration and Development in Sub-Saharan Africa: A Study of Informal Finance in Ghana, *Ernest Aryeetey*, 1994, £6.00, ISBN 0 85003 214 8
- 79: Financial Integration and Development in Sub-Saharan Africa: A Study of Informal Finance in Tanzania, *Mboya S.D. Bagachwa*, 1994, £6.00, ISBN 0-85003-215-6

* currently out of print

Overseas Development Institute Regent's College Inner Circle Regent's Park London NW1 4NS UK

Telephone +44 (0)171 487 7413 Fax +44 (0)171 487 7590 Telex 94082191 ODIUK G Email odi @ gn.apc.org (Internet)