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An Assessment of the Role of Informal Finance in the Development Process

INTRODUCTION

For more than two decades, formal financial markets have been emphasized by policy makers in their attempt to direct more credit into rural areas in pursuit of production and income goals. Informal finance, and especially the role of moneylenders, has often been considered to be exploitative and a hindrance to modernizing agriculture. Policies have often been employed, therefore, with an explicit objective of increasing formal finance and diminishing the role of informal finance.

In fact, the supply-leading approach to formal finance has largely failed (Adams, Graham and Von Pischke, 1984). Loan quotas and targets set for commercial banks have not led to sustained agricultural lending. Interest rate controls and special small farmer credit projects have not resulted in large amounts of lending to small farmers, because larger farmers have received most of the cheap loans. Agricultural development banks and cooperatives specifically established to lend to agriculture have often failed or are saddled with huge non-performing assets. Ironically, in areas where formal finance temporarily displaced informal finance, the latter is now re-emerging and is once again the main source of financial services for most rural firms and households.

Researchers and policy makers have rediscovered informal finance. But, unlike earlier times, when informal finance was considered exploitative, today the predominant view is that informal finance may play a useful role in developing countries. It may be the only viable financial source in the short term, and may have certain informational and cost advantages, so it will continue to exist even when the formal financial system has become better developed.

Analysing and understanding informal finance presents a challenge, for two reasons: first, informal finance consists of a complex set of individual and group financial arrangements and contracts; second, unlike the use of bank-firm theory for formal finance, there is no standard framework for studying informal finance. Frequently, therefore, widely divergent conclusions and policy recommendations are presented about the role of informal finance in the development process.

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The purposes of this paper are briefly to describe the wide variety of arrangements and contracts that exist in informal finance, to discuss some of the approaches used to study it, and to summarize the policy alternatives that emerge from recent studies. The paper is divided into three parts. The first describes informal finance, the second briefly discusses theories and frameworks used in informal finance studies, and the third discusses policies.

INFORMAL FINANCE IN THE FINANCIAL SYSTEM

No standard definition exists for informal finance.[1] Table 1 presents examples of several financial arrangements found in financial systems in developing countries. These arrangements could be arranged along a continuum from most formal (a bank) to least formal (family and friends) but for simplicity's sake they are classified into formal, semi-formal and informal.

The formal financial system has three components. The first is the central bank and other regulatory and prudential institutions that establish the financial rules of the game for most formal institutions, and sometimes for semi-formal and informal finance. The second is a wide variety of financial institutions that provide financial services directly to savers and borrowers. They have been the focus of most supply-leading financial policies. The third component represents capital markets, but they generally play an insignificant role in low-income countries.

Semi-formal finance includes those financial arrangements that fall between formal and informal. Usually they are not regulated and supervised by the same regulatory authorities as formal finance, but they may have some official sanctions, such as being licensed and audited by a cooperative registrar. They may also have formal written statutes and operating procedures. Some are actively encouraged, assisted and subsidized by NGOs (non-governmental organizations) and PVOs (private voluntary organizations), or governments and donor agencies. Owing to the failure of formal finance in many countries, semi-formal financial arrangements have recently become the focus of increased government and donor attention.

Informal finance includes a heterogeneous set of individual and group financial arrangements. Most fall outside the scope of government support and regulation, although some countries have usury and other laws intended to cover them. Some types of informal finance are autonomous, while others emerge as a reaction to the repression of formal finance (Chandavarkar, 1986). Some have strong links to formal finance, such as the input supplier who borrows from formal institutions and sells inputs on credit, while others operate completely outside the formal system.

Informal finance is often loosely defined to include both the financial arrangements classified here as semi-formal and informal. Several attributes can be identified for informal finance:

(1) *Heterogeneity.* Informal finance includes a wide variety of institutional forms and, within any one type, a variety of financial contracts between savers and borrowers can be found. The frequency with which these

TABLE 1 *Important components of the rural financial system*

Formal	Semi-formal	Informal
Regional and national central banks, Treasury, and other regulatory bodies	Agricultural cooperatives	Communal clubs
Financial intermediaries	Credit unions	Mutual aid associations
Commercial banks	Banques populaires	Moneylenders
Development banks	Integrated dev. projects	Moneykeepers/mobile bankers
Savings banks	Village banks	Input suppliers
Postal savings	Self-help groups	Store-owners/merchants
Cooperative banks	Savings clubs	Trader-lenders
Unit rural banks		Farmer-lenders
Finance corporations		Friends
Capital markets		Neighbours
		Relatives/family

financial arrangements are found varies widely: Africa and Asia seem to have a greater variety of informal finance arrangements than Latin America, for example.

(2) *Services*. Informal finance offers both loan and savings unlike supply-leading finance which often ignores savings. Many types of informal finance also offer marketing and services.

(3) *Specialization*. Some informal financial arrangements serve a broad clientele, but informational problems often encourage specialization. For example, moneykeepers, moneylenders and trader-lenders often provide only one type of financial service and it is limited to those clients for which the supplier has good information. This specialization may provide efficient services, but also limits access for new clients.

(4) *Access*. Informal finance is used by the rich and the poor but often it is the only source for the poor, while it is an alternative source for the rich.

(5) *Collateral*. As with formal finance, some informal financial arrangements may require collateral for loans (for example credit unions, pawnshops) but frequently informal finance has developed effective collateral substitutes through interlinked contracts, peer monitoring and group lending.

(6) *Interest rates and transaction costs*. Moneylenders have criticized for charging exploitative interest rates on loans, but other types of informal lenders, such as farmers, friends and relatives, often charge no interest at all. Some credit unions have experienced difficulty because they have not charged rates high enough to cover costs and inflation. What tends to distinguish informal finance is the relatively low transaction costs for savers and borrowers because of close proximity and a minimum of formal procedures.

(7) *Growth and decline*. It is difficult conclusively to determine the trends of informal finance. In countries as diverse as Brazil and the Philippines, it appears that informal finance has increased with the decline of formal

financial institutions. Credit unions are expanding in Togo and the Cameroon, but declining in Ecuador and other countries with high inflation. The large informal sector observed in many countries implies that informal finance will also be large.

(8) *Contribution to development.* Clearly, informal finance is already contributing to development because it is often the only source of financial services for the poor, the landless, and those living in isolated regions. The question frequently asked is how the positive benefits of informal finance can be expanded and improved so its contributions can be increased.

Researchers face a challenging task in conducting studies of, and evaluating, policy alternatives for informal finance. There are no well-defined theoretical and methodological tools to guide research in the way that bank–firm theory serves as a standard framework for studying formal finance. The following section highlights some of the issues in developing an ideal framework to examine informal finance.

THEORIES AND FRAMEWORK TO STUDY INFORMAL FINANCE

There are a number of unique features of financial market transactions compared to transactions in other factor and product markets that create special research problems. A wide variety of contractual arrangements exist in financial markets in which a loan is exchanged in the current period for a promise to repay in the future. The fulfilment of the promise, however, is influenced by exogenous and endogenous risks that affect borrowers. While exogenous risks are due to random shocks, endogenous risks arise because of borrower incentives to default and because of asymmetric information, so that lenders cannot perfectly screen borrowers and enforce contracts (Hoff and Stiglitz, 1990). Therefore rural financial markets tend to be highly segmented, owing to variations in financial technologies used by lenders for screening and enforcement (Esguerra and Meyer, 1992). Furthermore, since rural financial markets generally operate in environments where contingent markets are incomplete or absent, financial contracts must incorporate insurance features.

Although informal financial markets are faced with these inherent problems, they have a comparative advantage over formal financial institutions in their ability to internalize the externalities caused by information problems and exogenous risks. Complex interlinked loan contracts are often designed to mitigate or accommodate exogenous and endogenous risks in a given institutional environment. Peer monitoring and transactions among participants with established social and familial relations are effectively used to reduce information problems. Therefore moral hazard and adverse selection problems, which can occur under asymmetric information, are not as prominent in informal as in formal financial markets.[2] Informal financial markets effectively use collateral substitutes such as factor and product market linkages and third-party guarantees to overcome rigid collateral requirements which restrict access in formal financial markets.[3] Furthermore, the engendering of reciprocal obligations and risk-sharing contracts observed in informal finance function as insurance substitutes (Platteau and Abraham, 1987). Interest rates are often more flexible in informal than in formal finance, so financial contracts can adjust more easily to differences in costs and risks. The flexibility of informal financial contracts and the heterogeneity of the financial agents make it difficult to model informal finance quantitatively. A robust framework is required for analysis, however, in order to understand the structure of informal finance, the nature of financial contracts and the efficiency of financial transactions.

Several theories and economic frameworks used to study formal, semi-formal and informal finance are outlined in Table 2. Bank–firm, contract and insurance theories have been effectively used to examine the supply and demand sides of formal financial institutions. The frameworks of the new institutional economics and the new household economics have used club theory in addition to bank–firm and insurance theories to study semi-formal finance. The normative nature of the new household economics guides rational choice and decision making of borrowers under risk, uncertainty and costless markets (Singh, Squire and Strauss, 1986). On the other hand, the new institutional economics incorporates transaction and information costs that arise within a given institutional environment to explain the contractual relations between lenders and borrowers (Eggertsson, 1990; Floro and Yotopoulos, 1991).

The theoretical tools developed for formal and semi-formal finance are used to examine contractual relations between anonymous lenders and borrowers. They are not appropriate, however, to analyse informal finance, where the identity and reputation of the contracting parties influence the multifaceted transactions conducted among heterogeneous participants. Empirical studies of informal finance, therefore, have often relied on hypothetical conjectures

TABLE 2 *Theories and Frameworks to Study Rural Financial Markets*

Formal	Semi-formal	Informal
	Theories	
Bank–firm theory under: (a) asymmetric, incomplete and imperfect information (b) risks and uncertainty	Bank–firm theory under: (a) lender-dominated institutions (b) borrower-dominated institutions	Game theory
Insurance theory Contract theory	Insurance theory Club theory under: (a) exclusive and non-exclusive contracts (b) queuing models	Insurance theory Contract theory
	Frameworks	
Supply side: profit maximization	New institutional economics	New institutional economics
Demand side: new household economics	New household economics	New household economics
		Neo-institutional economics

based on artificial paradigms or have simply limited themselves to descriptive analysis. Recent studies have attempted to evaluate more rigorously informal contractual arrangements and market structure.[4] The new institutional economics, the new household economics and neo-institutional economics have been employed to analyse the behaviour of informal financial market participants and to explain complex informal contractual arrangements. For instance, the bulk of the literature on interlinked credit contracts follows the new institutional economics framework using the theories of games, contracts and insurance under the axioms of micro-economics.[5] These models explain the existence of heterogeneous interlinked contractual arrangements as a means to economize on transaction and information costs. While models based on game theory consider interlinked contracts between lenders and borrowers as a repetitive game that incorporates reputation and pre-commitments in terms of reciprocity, the models based on insurance theory explain interlinked contracts as insurance substitutes.[6] These models are theoretically appealing, but they have limited empirical application because of data problems. The empirical regularities of informal contractual arrangements are better explained by the positive nature of a neo-institutional economics framework that integrates both the institutional and household economics frameworks (Eggertsson, 1990).

The multiplicity of frameworks identified above might suggest the availability of well developed methodological tools to study informal finance. The segmentation of informal financial markets and the heterogeneity among the contracts, however, inhibit the development of a single model that will capture the details of most of the transactions. The basic structure of informal financial markets is often subject to controversies, so there is a lack of consensus about how to study them, especially in developing countries. This has led to a proliferation of conflicting propositions based on divergent models. The contradicting explanations provided to rationalize high interest rates charged in informal credit markets is one example.[7] Consequently, these conflicting opinions have confused policy makers regarding the role of informal finance in the development process.[8]

It can be concluded that the several theories and frameworks used to study informal finance are as heterogeneous and controversial as the informal financial markets themselves. Therefore research on informal markets is confronted with unresolved issues such as (1) What is the structure of informal financial markets? Are they competitive, monopolistic or contestable? (2) How can the terms and conditions of differentiated informal financial contracts from heterogeneous lenders in a given institutional environment be explained by a plausible framework that incorporates costs and risks? These issues need to be addressed if we are to evaluate adequately the role of informal finance in the development process and to suggest appropriate policies.

POLICY ALTERNATIVES

Several policy alternatives have been suggested for informal finance in developing countries. Some implicitly propose controlling or reducing informal transactions because they are rooted in the old exploitation school of thought.

Others follow the newer approach in which informal finance is perceived as providing valuable services. The difficulty in generalizing about informal finance is due to its heterogeneity and to the lack of a consistent framework for analysis.

The purpose of this section is to summarize five policy alternatives that are found in the developing country literature. It is important to understand the nature of these recommendations, even though there is little consensus about when, where and for which type of informal finance they apply.[9]

(1) *Benign neglect* Those who are most frustrated about the negative experience of two decades of supply-leading formal finance argue that the worst thing to do would be to meddle with informal finance. They argue that past failures demonstrate the difficulty of effectively developing a financial system through government efforts. Attempts to intervene in informal financial markets could result in the same negative consequences. Efforts to 'use' informal finance as a development strategy may damage or destroy its integrity. Part of its rationale derives precisely from its informality and immunity from official regulation (Chandavarkar, 1986).

(2) *Regulate and supervise* Although informal finance may be ubiquitous in developing countries and successfully operate in environments where formal finance fails, a number of problems exist which lead some analysts to argue that social welfare would probably increase with some degree of government regulation and supervision.[10] The problems identified include the perception that interlinked credit transactions are exploitative, that participants in group savings arrangements run the risk of losing their savings, and that the self-regulation of cooperatives and credit unions is too weak to prevent abuses. Besides the possibility of systematic abuse, there are also the normal financial problems such as excessive portfolio concentration of localized institutions operating in areas with high covariance in income.

The regulations that are proposed to avoid or reduce these problems range from the simple establishment of minimum conditions for obtaining operating licences, to more complex rules about portfolio diversification, lending to insiders, capital requirements, bookkeeping and accounting procedures, and contract terms and conditions. Reporting requirements and supervisory procedures are also recommended.

Some successful attempts to regulate informal finance exist, such as with the licensing of pawnshops in the Philippines and Sri Lanka. There is much scepticism about regulation, however, because of the regulatory failure that has frequently occurred in formal finance. The first priority, therefore, would seem to be to improve regulation and supervision of formal finance before trying to extend it to the greater complexity of informal finance. Another problem is that governments may implicitly incur additional unwanted liabilities if they attempt to license and regulate informal agents and transactions.

(3) *Imitate informal finance* Since informal finance has prospered in many environments where formal finance has failed, there is an obvious implication that informal finance must be doing something correct that should be imitated

by formal finance. This alternative implies discovering the technologies and procedures that make informal finance work, and transferring them to formal finance.

To a degree, imitation is already occurring. One of the important comparative advantages of informal finance is access to information useful for screening participants and peer monitoring (Burkett,1989). For example, members of savings clubs and ROSCAs tend to know each other; otherwise they will not undertake group activities. Likewise, trader-lenders and input suppliers accumulate information about potential borrowers through their other transactions. The highly touted Grameen Bank in Bangladesh uses group lending techniques similar to those employed by informal groups (Hossain, 1988). The borrowing groups use their informational advantages to screen and monitor their members so that bank operating costs and loan losses are reduced. Other techniques, such as mobile banks and collection agents, have been employed in some rural credit programmes to reduce costs by bringing financial institutions closer to their client. These innovations can reduce transaction costs for both borrower and lender.

Apart from these examples, it is difficult to imagine many ways in which formal finance can imitate informal techniques. The comparative advantage of formal financial institutions is that they conduct large-scale, low-margin transactions in which formal bureaucratic procedures substitute for personal relations and first-hand knowledge. This discourages them from servicing clients for which information and transaction costs are large relative to loan size.

(4) *Link formal with informal* The idea behind this alternative is that financial services can be expanded to the poor most efficiently by linking formal with informal finance. This approach is being actively promoted in Indonesia, where self-help groups are being formed to mobilize group savings that are deposited in banks as guarantees for loans to the group. Many governments and donors are now channelling funds for on-lending through credit unions and informal groups rather than through agricultural or commercial banks. The hope is that these groups will be able to lend and recover the funds more efficiently than formal institutions, many of which have failed when trying to serve a rural clientele.

One problem with using informal finance as a conduit for funds is group dynamics. The credit union experience in many Latin American countries illustrates the problem. When they were first organized and operated with their own savings in the 1950s and 1960s, many were healthy, self-sustaining institutions. In the 1970s, however, many began to lend borrowed funds and this changed their operations from being saver-dominated to borrower-dominated (Poyo, 1985). Savings mobilization was ignored, interest rates were not properly adjusted for costs and inflation, and loan recovery declined. There is not yet any clear understanding about the appropriate incentive structure to use so that external funds do not destroy these groups.

(5) *Graduate informal into formal* Many advocates of credit for the poor believe that formal institutions, even under liberalized financial conditions,

will never lend significant amounts of funds to groups currently without access. Therefore it is argued that NGOs and PVOs that attempt to serve marginal groups must eventually evolve into financial institutions (Boomgard, 1989). Rather than pursue the popular strategy of trying to graduate poor clients from specialized lending agencies to commercial banking facilities, the entire programme needs to graduate.

Some attempts to formalize or scale up informal financial arrangements are already taking place. The Grameen Bank became a formal bank after several years operating as a programme linked to existing banks. Credit union development programmes are being developed in Africa, based on the widespread incidence of moneykeepers and savings groups. Credit union central liquidity funds are being created in the Philippines and Portugal to link individual credit unions together as a way to spread risk and allocate funds among deficit and surplus units. These developments are relatively simple, however, compared with the large task implied by trying to convert many of the existing NGOs and PVOs into financial intermediaries.

CONCLUSIONS

Informal finance consists of a variety of individual and group financial arrangements and contracts. Many types of informal finance can be found in most developing countries. Often they provide the only financial services available to the poor, to small farmers, to the landless, and to other groups that lack access to formal finance. Although informal finance is ubiquitous and provides important financial services for many people, its role in the development process is subject to debate. Many researchers and policy makers still characterize it as being exploitative of people who have no choice but to rely on informal finance. Others believe that informal finance makes positive contributions to development precisely because it provides services not provided by formal finance.

One of the explanations for the divergent views about informal finance is the lack of a clear set of theories and framework for use in studying it. The study of formal finance has been able successfully to adopt the tools of bank-firm theory to examine the behaviour of formal financial institutions in developing countries. The complexity of informal finance makes it impossible to use a single framework to study its characteristics and performance. It is difficult, therefore, to arrive at a commonly accepted set of theoretical propositions to explain why informal finance exists, how financial terms and conditions are formed, and whether or not social welfare will be improved by some form of government intervention.

There is an urgent need more fully to understand informal finance. The collapse of the rural formal financial system in many developing countries is causing concern about the possible impact on production, technological change and rural incomes. The sluggish response of formal finance to recent attempts to liberalize and privatize rural financial markets has raised doubts about the ability of formal financial institutions to serve effectively the needs of agriculture, but at the same time informal finance is often not regarded as an effective substitute.

Policy alternatives ranging from benign neglect to actively promoting formal–informal financial linkages have been proposed in the research that has been completed to date. Although these recommendations may have relevance for specific cases, there is no general understanding about the appropriate set of policies to use towards informal finance. Much more work must be done to conceptualize and empirically study informal financial arrangements, their strengths and their weaknesses. Fortunately, there is generally a more positive attitude towards informal finance today than existed several years ago. This situation makes it easier to conduct the large amount of research that is needed so that more appropriate policies can be developed to ensure the most positive impact of informal finance on development.

NOTES

[1]Examples can be found in the literature where attempts have been made to establish definitions, at least for the purposes of individual studies. Recent examples include Bouman (1989), Chandavarkar (1986), Germidies, Kessler and Meghir (1991), Ghate (1988), Lamberte and Balbosa (1988).

[2]Bell (1988) claims that informal financial markets face problems of moral hazard due to asymmetric information rather than adverse selection, while Siamwalla *et al.* (1990) assume symmetric information among informal credit market participants. Nonetheless, they argue that information problems are better managed in informal than in formal finance.

[3]Transactions are said to be interlinked when the contracting parties trade in more than one market on the condition that terms and conditions of all trades are jointly determined (Bell, 1988).

[4]See, for example, Bardhan (1989), Basu (1989), Bell (1988), Bhaduri (1983), Mitra (1983).

[5]See Bardhan (1989), Bell (1988), also Quibria (1987) for a state-of-the-art review on interlinked contracts.

[6]See Roth (1985) for a game theory model that incorporates reputation, and Binswanger and Rosenzweig (1986) for a model based on insurance theory.

[7]While some perceive high interest rates as surplus extraction by exploitative lenders (Basu, 1989; Bhaduri, 1983), others justify it as a risk premium required to compensate for the high risks faced by lenders (Bottomley, 1963).

[8]The emphasis on usury laws in the Philippines in the 1960s, and the subsequent policy to relax them and use informal lenders as conduits for formal finance in the 1980s, are due in part to conflicting evaluations of informal finance.

[9]Insightful discussions about policy alternatives for informal finance are found in Adams and Ghate (1992); Chandavarkar (1986); Ghate (1988).

[10]See, for example, Floro and Yotopoulos (1991).

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DISCUSSION OPENING – CRISTINA DAVID*

I agree with the authors that further theoretical and empirical research is required to develop a full understanding of the operation of formal and informal markets in rural sectors, where interlinking of credit to other markets dominates. Such studies require understanding not only of the credit side of the transaction but the nature of the product, land and labour markets themselves. Nonetheless, I think that sufficient evidence is now available to derive some policy implications for the improvement of rural credit markets. In the Philippines case, for example, none of the five possible options appears to provide the correct approach. What is needed is policy reform in the formal financial markets as well as product and input markets, to promote the development of the formal financial markets and lower further the cost of credit in the informal credit market. Although informal credit markets may be efficient, the whole range of services provided by the formal financial markets is not as yet available to the vast majority of the rural sector.

Two sets of reforms are suggested:

(1) Financial markets:
  (a) Interest rates should be allowed to reflect true lending cost.
  (b) Regulations restricting entry to the banking sector, such as limitation on branch banking, should be removed.
  (c) Development of formal financial sectors in rural areas is restricted as a means of maintaining monopoly profits, and steps are needed to foster competition.

(2) Other markets:
  (a) Land reform measures, at least in the Philippine case, need modification. Potentially, land reform provides assets which can be used as collateral in the formal financial market, though this advantage has not materialized. Land transfers are prohibited and hence land rights and titles are not acceptable collateral. This appears less inhibiting in the case of informal financial markets, but it remains a significant problem affecting more formal financing.
  (b) Prohibition of share tenancy should be removed. Landless labourers are prevented from having access to cultivation rights, and therefore cannot take advantage of informal credit provision extended by landlords for use in production or consumption. Landless households do now have access to consumption credit, though only if they become permanent labour or attached workers receiving lower average daily wages than casual labourers.
  (c) Greater public expenditure is needed on market infrastructure, down to the level of postal and telecommunication services, to lower the costs of operation of formal financial markets and increase competition.

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(d) Increased public support for irrigation and agricultural research would reduce the inhibition on borrowing associated with risk, and increase credit demand by fostering improved repayment capacity.
(e) Macro-economic reform is needed to correct policies which artificially lower agricultural incentives. This would also improve repayment capacity and help generate demand, which could probably then be met at lower cost.