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IRIS
2105 Morrill Hall
College Park, MD 20742
(301) 405-3110

CENTER FOR INSTITUTIONAL REFORM AND THE INFORMAL SECTOR

University of Maryland at College Park

Center Office: IRIS Center, 2105 Morrill Hall, College Park, MD 20742

Telephone (301) 405-3110 • Fax (301) 405-3020

URBAN INFORMAL CREDIT IN INDIA: MARKETS AND INSTITUTIONS

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**Pradeep Srivastava
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Author: Pradeep Srivastava, HIID, Harvard University

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URBAN INFORMAL CREDIT IN INDIA: MARKETS AND INSTITUTIONS*

A REPORT

Prepared by

Pradeep Srivastava
HIID, Harvard University
One Eliot Street
Cambridge, MA
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For

IRIS
Institutional Reform and the Informal Sector
at the University of Maryland at College Park
7100 Baltimore Avenue, Suite 510
College Park, MD

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ABSTRACT

This study presents an analysis of urban informal credit in India. Unlike the better studied rural credit markets, focus on urban informal credit markets is relatively recent, a result of increasing documentation of the diversity and large size of such credit in most of the poor economies. In addition to presenting evidence relating to the issues of size and importance of urban informal credit in India, this study also attempts to provide an analysis of the informal markets and their institutions. The analysis utilizes results of fieldwork conducted in Delhi, over a seven-week period in December 1991 and January 1992, as well as existing secondary data.

Although it is commonly accepted that informal credit markets are fragmented, the fact that there exists considerable diversity even within these markets is not often recognized; some markets, for example, have been in existence for a long time, pre-dating the formal financial sector, and are quite well developed and sophisticated, while others are relatively new. The study also relates evidence on the structure of the informal financial sector to aggregate data on allocation of informal credit across sectors and types of activities in the economy. The distinct attributes of demand for informal loans are highlighted to explain the relation of urban informal credit to both the formal financial sector as well as the black economy. Market attributes such as cost of credit relative to formal sector rates, the term structure of interest rates, nature of price setting in these markets, price dispersion across markets and also over time are also discussed. The study uses the framework of New Institutional Economics (NIE), in particular the strand embodied in recent theoretical developments in the imperfect information paradigm, to investigate some of the institutional aspects of the informal credit markets. Since the application of this theory has been confined so far to rural credit in developing economies, the study discusses differences between rural and urban informal credit markets within this framework. Subsequently, evidence is presented with respect to a basic parameter in the NIE framework, namely, the information structure underlying the informal credit transactions. In addition, some contractual attributes are investigated to analyze the extent and mechanisms of risk sharing between lenders and borrowers in these markets. Finally, the study also discusses some implications for the framework guiding formulation of policies for urban informal credit markets.

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I Introduction

Since the well-known ILO study in Kenya in 1971, the informal sector has acquired an increasing prominence among practitioners in economic development. The sector often occupies almost a center stage in policy discussions of poverty and unemployment. This fact, however, also reflects the labor-market oriented focus of the ILO. The past decade or so has also seen a greater emphasis on dualism manifested in another market, namely, financial or credit markets in developing economies. Although the existence of informal credit markets was noted as long ago as 1948, by U Tun Wai, and even earlier - at the beginning of this century - in the context of rural moneylenders, it is only fairly recently that systematic attempts have been made to analyze these markets in an urban setting; significantly more theoretical and empirical literature has developed in the context of rural markets.

The literature on urban informal credit markets is primarily empirical, with a focus on describing these markets and attempting to document their importance. These initial attempts have been quite rewarding, revealing the large size of the urban informal financial sector and its crucial links with the non-agricultural economic activities in most of the poor economies. An important recent work in this regard is a five-country study sponsored by the Asian

Development Bank in the late eighties, that forcefully established the size and diversity of urban informal credit transactions in these economies.¹ Less comprehensive in scope, but equally important, are numerous other studies by individual researchers documenting urban informal credit transactions in African economies. However, although unequivocally successful in documenting the pervasive and important role played by urban informal credit, the existing literature marks only a beginning in studying these credit markets. Firstly, notwithstanding the truism that no amount of data is ever adequate, it would be legitimate to say that considerable more effort has to be devoted to generating systematic data pertaining to transactions in these markets. Secondly, relatively little is understood analytically about the workings of these markets and, very importantly, the institutional aspects of urban informal credit. While the former objective is beyond the scope of the present study, in terms of the scale of resources and effort entailed, the latter set of issues constitute the focus of this report. At the same time, the report also attempts to utilize secondary data from earlier, larger studies to pull together a comprehensive even if preliminary understanding of the

¹. The countries studied were Bangladesh, India, Indonesia, Philippines and Thailand. One reference in this context is NIPFP(1989); numerous others are available upon request.

urban informal credit markets in India as well as their institutional features.²

The conceptualization of 'institutions' embodied in the this study draws on the framework of the so-called New Institutional Economics, and, in particular, on the theoretical literature utilizing imperfect information and principal-agent formulations to endogenize institutions.³ A fairly large body of this literature has evolved in recent years in the context of agrarian institutions in developing economies; empirical work, however, is less developed in this area, nor has this theory been applied to informal credit markets in urban settings. Within this framework, an important focus of the primary data generated in the course of this study has been to supplement the usual discussions of informal credit markets with a preliminary understanding of their institutional modalities. In addition to enhancing the insights into the nature of urban informal credit, the objective is also to generate a set of stylized facts that can feed into future macro- and micro-analytical modeling of these markets for policy purposes as well as for future empirical studies.

². Although the fieldwork related to this study was undertaken only in Delhi, there is considerable similarity with the structure of informal credit in rest of India. Previous studies looking at the aggregate economy have not detected any significant differences; see, e.g., NIPFP(1989).

³. Bardhan(1989) provides a wide sample of this literature as well as extensive references.

Defining the 'informality' of informal credit markets is beset with theoretical and conceptual problems. For some researchers, it is the informality, in terms of ease and convenience, for the borrowers that constitutes the essence of informal credit markets (ICMs), while others view ICMs in terms of informality for lenders, translated as escape from regulations. Still others have viewed ICMs as no different from formal credit markets, with the exception that the latter have regulated prices while the ICMs are characterized by flexible, competitive and market-clearing prices. All these characterizations have various shortcomings.⁴ However, given that the study deals with these markets, it is important to clarify what is meant here by informal credit markets. The term 'informal' in this study refers to the absence of state provided institutional infrastructure to support the organization of economic activity. Such infrastructure includes property rights, contract enforcement mechanisms and allied judico-administrative apparatus of the state. The informal financial sector hence operates outside the penumbra of the state machinery. In more practical terms, the informal financial sector is identified here with what the Reserve Bank of India identifies as non-institutional credit. In

⁴. In what follows, 'ICMs' will refer to urban informal credit markets unless specifically stated otherwise. For a more detailed discussion of alternative definitions of ICMs, see Srivastava(1990).

particular, banks and registered non-bank financial intermediaries are defined as part of the formal financial sector while the rest of the financial agents are classified as constituting the informal financial sector.

The outline of the report is as follows. The next section presents a broad overview of the structure of the ICMs in Delhi. The objective is to provide the reader with a more practical and tangible overview of these markets as found in Delhi. Section III then considers existing evidence relating to the magnitude of urban informal credit in India as well as its attributes in terms of sectoral allocation and its importance for the users. The institutional aspects of the ICMs are considered in section IV. The first part of that section presents the theoretical motivations for the primary data collected in the course of this study while the subsequent sections discuss the results. Policy implications and conclusions are contained in section V. Two annexes, one describing the 'black' economy in India and the other containing the questionnaire, follow at the end.

II The structure of ICMs in Delhi

A casual reader of the literature on informal economic activities may be surprised to learn that the 'informal economy' is not the same as the 'informal sector'. For not very obvious reasons, there appears to be a consensus on the way the two terms are used: informal economy is used primarily by sociologists to refer to informal activities in industrialized countries (and, to some extent, in Latin America). Used in this context, informal economy refers basically to tax evasion and sweatshops. In contrast, the same activities in the poor countries are described under the rubric of the informal sector. Thus, while the term informal sector includes various other activities, legal and illegal, its usage is restricted entirely to the non-industrialized economies. Furthermore, unlike the informal economy, the consensus on what the informal sector means is not as well crystallized.⁵

The ambiguities in the usage of the term informal are compounded by the fact that the transactions in ICMs are characterized by an immense diversity in form, including, for example, the interest rates and loan amounts, the duration, frequency, and sources of loans. It is useful,

⁵. For example, to some the informal sector refers only to illegal activities, to others it is constituted by activities that are unregulated, while still others use it in the sense of activities undertaken by the poor for the poor, and so on.

therefore, to supplement the abstract definition of informal credit markets provided earlier with a description of the structure of the informal financial sector as a whole. It is within this broad framework that these diverse transactions are undertaken. The objective of this section is to provide the reader with a practical, albeit somewhat diectic, illustration of the markets and activities that underlie this study; an operational bird's-eye-view, as it were, of the ICMs in Delhi. Consequently, the discussion below focuses on the different types of existing markets for informal credit in Delhi. A later section then provides a more detailed analysis of the differen: transactions executed in these markets.

Perhaps, at the risk of repeating the obvious to some, it is worth reiterating that there is no one market for informal credit; instead there are a large number of informal credit markets operating without the links that characterize well integrated financial markets. The nature of these markets varies considerably: from those that are quite well developed to those for which "[i]t is indeed questionable if the existing arrangements should be referred to as 'markets'", (U Tun Wai(1980)). The usual discussions of informal credit markets generally do not highlight this heterogeneity which contributes to the observed diversity of transactions in these markets. In addition, this section also presents a discussion of some distinctive aspects of

the nature of demand for informal credit. This is useful in order to acquire a more comprehensive understanding of ICMS.

II.A Three types of informal credit markets

The most distinct type of informal credit markets are those catering to the credit needs of large traders and wholesalers. Wholesalers specializing in trading of various commodities (yarn, clothing and textiles, edible oils, foodgrains of different types, etc.), are found concentrated in specific localities of the city, especially in areas of Old Delhi, for example the 'Kapra mandi', 'Sadar', and 'Naya Bazaar'. These wholesale markets have long and rich histories and the wholesalers in these markets often have had a presence lasting across several generations. The ICMS providing credit to the wholesalers are perhaps the nearest in practice to an Weberian 'ideal' type of informal credit markets. They are among the oldest, the most developed, in terms of their sophistication, and among the largest of the informal credit markets. As the discussion in the next section shows, the volume of credit transacted in these markets is quite large. Wholesalers also provide considerable trade credit to agents lower down the trading chain which may be financed by borrowing in their credit markets.

Credit for trading facilitates the flow of goods from wholesalers to semi-wholesalers to retailers (through trade

credit) and, occasionally, even to consumers. However, the ICMS catering to wholesalers constitute the apex of this credit chain. The wholesalers in these markets have large holdings of liquid balances, a significant proportion of which are in the form of 'black' money.⁶ Given extensive informational flows and high liquidity, these ICMS often see large loans transacted in very short time.

Another distinct feature of these markets is the significant presence of brokers, who are not as common in other types of ICMS. The ICMS catering to wholesalers have numerous brokers that are quite competitive; the brokers charge brokerage fees that are virtually the same. If we rule out the (unlikely) possibility of collusion, this indicates a competitive marketplace. The brokers bring together borrowers and lenders essentially through syndicating loans for individual borrowers. The borrowers in this process are typically unaware of the identity of the lenders; the lenders, on the other hand, are usually aware of the borrower's identity. The decision to make the loan is thus upto the lenders who can choose whether or not to participate in a syndicated loan. This also conforms with the fact that the brokers do not guarantee the loans. While some respondents in the present survey claimed the broker had a 'moral' responsibility to ensure repayment, the

⁶. 'Black' refers essentially to illegal; black money and black economy in India are discussed in detail in Annex A of the report.

incentives for the brokers are based more on the importance of maintaining their business reputation of finding reliable borrowers.

Very closely related to the ICMs dominated by traders and wholesalers are the other markets found in the numerous retailing centers. Many of these retail markets have also been in existence for a substantial period of time, especially in the older parts of Delhi. In the more recently settled areas of south Delhi and the outer Delhi, these markets have not yet developed as well.⁷ Typical examples of the established retailing centers would include Kamala market, INA market, Lajpat Rai market, Chandni Chowk, Paharganj, Lodi Market, Karol Bagh, etc..⁸ In these markets too, a large number of entrepreneurs (families) and their establishments have been in existence for a number of years. Furthermore, a frequent characteristic of some of these markets is that the shopkeepers even live in the market area, often in the same building that houses their

⁷. Like many other urban centers in poor countries, Delhi has seen rapid expansion, both geographically and in terms of immigrant population, especially during the last decade. The rapid and extensive growth is reflected in the recent attempts to officially rename the city as the National Capital Region.

⁸. All except the last two were represented in the survey; other markets represented in the sample were from Trilok Puri and from three sectors in NOIDA (all Trans-Yamuna settlements) and, from South Delhi, markets in Greater Kailash - I, South Extension - II and Nehru Place.

commercial establishment. Most of the entrepreneurs surveyed who were operating inside old Delhi knew the residential address of at least 5 or more of the entrepreneurs in their market; the congruence of domestic and commercial establishments is higher in the older markets. This conforms with Timberg and Aiyar's (1984), (henceforth referred to as TA(1984)), finding that relationships between borrowers and lenders in the ICMs are often of '24 hours' variety. This has important implications for the extent and nature of information flows in these markets. The main source of informal credit for these establishments are, aside from own/family savings, borrowings among each other or chit funds in which 70% of the respondents participated, some in more than one simultaneously. Although the size of the credit transactions is smaller in these markets compared to those in the markets catering to wholesalers, two important characteristics common to both markets are noteworthy: extensive flows of information, in terms of both individual and commercial attributes, and high levels of average liquidity of individuals.

The second type of informal credit markets are those supporting transactions in industry, i.e., manufacturing and services. The latter is understood here as excluding trading, but includes a diverse set of activities, such as transportation, restaurants, and especially, construction

and real estate development, both of which have seen an exponential growth in Delhi during the past decade. A major reason underlying the distinction between ICMs catering to manufacturers and those organized by wholesalers and other traders, lies in the economic geography of the participating agents, i.e., the spatial attributes of the firms operating in the two types of markets. The wholesale and retail trading establishments display high densities: large numbers of them are packed in a small area, implying a high geographical concentration. Furthermore, unlike analogous establishments in industrialized economies, the architecture of these places provides little scope for privacy. An individual, say unoccupied by customers at the moment, has unimpeded and relatively intimate view of numerous adjacent establishments and can see the transactions going on there. Factories, in contrast, are far more insular establishments, less concentrated in density and structurally providing greater privacy. These spatial attributes have significant impact on the types and extent of information flows among participants in the markets. In particular, informational flows amongst participants in the second type of ICMs are based much more on social contacts among the individuals, rather than on commercial contacts. ICMs catering to firms in manufacturing and (non-trading) services are thus less well organized than the previous type of informal credit markets. Brokers are usually non-existent, and the major

sources of external finance in these markets are friends and relatives, and, commercial financiers that included finance companies and other non-bank financial intermediaries.⁹

Finally, a third important type of market for informal credit can also be distinguished, namely, the market for trade credit. Although credit among wholesalers, as in the first type of ICMS, is also in some sense utilized to finance trade, the market for trade credit has characteristics far different from those of the wholesalers' markets. Firstly, the transactions for trade credit occur lower down the 'trading chain' and consequently are smaller in size on the average; the further down the trading chain, the lower are the amounts involved. Secondly, while the credit transactions in the wholesalers' markets take the form of borrowing and repayment in cash, trade credit is characterized by borrowing in goods, with repayment in cash. Lastly, and relatedly, the transactions for trade credit offer the potential of interlinkage across the goods and

⁹. Needless to say, the distinctions drawn between the different types of ICMS are not necessarily applicable to the participants, in the sense that some individual may operate in both types of markets. For example, a manufacturer may also have an office or a showroom in a retailing center, thereby having access to the previous type of ICMS. However, examples of this are not very frequent; only one manufacturer in the surveyed sample had his own retail establishment which, in fact, had been in operation prior to his entering manufacturing.

credit markets while the other two types of ICMs do not.¹⁰ While the survey data does not offer any significant evidence in favor of the existence of interlinked transactions for trade credit, at least in terms of informational flows, the interaction of the borrower and lender is across the goods and credit markets; inevitably, spot transactions in the goods market form the initial contact between the two parties and are utilized over time as the basis for determining the parameters of the (trade) credit transactions if they are undertaken. Given the fact that information flows in these transactions are vertical (along the trading chain), it is not surprising that 'friends and relatives', who constitute a dominant source of finance in the other two types of markets, play virtually no role in the market for trade credit.¹¹

II.B Nature of demand for credit in ICMs

A discussion of the nature of demand for informal credit is useful for at least two reasons. Firstly, following the objective of this section, it enables a more

¹⁰. None of the wholesalers or retailers in the survey had systematic commercial relations (purchasing or selling of goods) with either the brokers or with the others they borrowed from frequently.

¹¹. One can also identify a fourth type of market for informal credit which is also significant, namely, the market for consumption credit - pawnbroking, also known as girvi-ganth. However, these transactions are excluded from the scope of the present discussion.

tangible and practical representation of the workings of informal credit markets. Secondly, it has a direct bearing on the important policy-related question: are the formal and informal credits substitutes for each other or are they complementary? If the two are complementary, then policies promoting efficient financial intermediation will have to focus on eliminating distortions in both markets and at the same time encouraging both to grow. On the other hand, if the two types of credit are strong substitutes for one another, the question becomes one of evaluating which markets are better at achieving any given economic objectives and designing policies aimed at improving their efficacy.

At the most basic level, demand for loans in ICMS emanates from two types of needs: liquidity management, and, the need for non-collateralizable loans. The former may be related to reputational constraints or cash-in-advance constraints faced by entrepreneurs. The demand for non-collateralizable loans, on the other hand, can be related to a diverse set of activities: those, such as restaurants or construction, where collaterals are not practical, to activities that entail 'black' loans, such as loans to pay bribes, to finance illegal activities like speculation in commodities or real estate, and financing the black component of goods with dual pricing. In all these cases,

collaterals are generally not feasible. Both types of loan demands are briefly discussed below.

Institutions serving the role of lenders of the last resort are generally not easily available to the firms participating in the ICMS. Consequently, active liquidity management is a major task of these entrepreneurs; this is typically an exercise in expediting payments receivable and delaying making payments, both to the extent possible, with careful attention to the timing of both.¹² Thus, consider a frequently encountered scenario: a manufacturer who either does not have access to bank credit, or has run into the maximum ceiling on bank credit. He has not received payments on orders delivered while, at the same time, has to make payments for raw materials. If the entrepreneur cannot expedite payments to himself, or delay payments to suppliers of raw materials, he will borrow in the market for a short

¹². Concern with frequent delays in payments was expressed by many of the respondents, both directly and indirectly. An individual, in attempting to manage the liquidity, often has to prioritize who will receive payments owed and who will have to wait. The collection process then involves presenting oneself as 'more of a nuisance' than other creditors - to move up the queue. This entails regular reminders for payments owed in a manner that varies from polite to different degrees of belligerence depending upon the liquidity situation of the party owed money, the extent of time elapsed and the bargaining strategy on both sides. Many of the entrepreneurs identified particular employees in their firms who were considered skilful in the art of collecting payments, which consequently constituted one of their primary tasks in the firm.

period. Note in this context that, given the large role of the public sector in the economy, many of the manufacturers are essentially selling their output to the government and its agencies. Even in the case of sales to the public sector, although payments are guaranteed, they are notoriously slow.¹³ Furthermore, the smaller a firm is relative to the buyer of its output, the greater is the likelihood of delayed payments. In a similar manner, the smaller the firm relative to the sellers of raw materials, the greater the proportion of its transactions subject to cash-in-advance constraints in the form of required spot payments.

Liquidity related demand for informal credit arises for other types of entrepreneurs in an analogous manner. As another frequent example encountered during the survey, an exporter with an export order may have letters of credit already issued and thus be guaranteed bank credit. However, the timing requirements in the delivery of the export orders often require a pace that is not matched by the bank's

¹³. Even in transactions between large companies and government agencies, the process of collecting payments can be similarly personalized. One of the firms interviewed, for example, was a partnership of two employees who had been working, until three months earlier, for a large company selling computers to various government agencies. Despite an acrimonious departure, the first 'orders' their new business had was from the ex-employer, collecting payments on commission basis for sales they had made as employees, since collection by new individuals would have been delayed even more by the bureaucracy.

processing of the papers. The exporter consequently undertakes an informal loan to bridge the resulting liquidity gap. Similarly, a trader may have an unanticipated consignment of goods that can be acted upon profitably and will then undertake a short informal loan if caught without adequate liquidity.

Demand for non-collaterizable loans is the other major constituent of borrowing in the ICMS. It has frequently been observed, especially in the context of rural credit, that the collateral requirements of banks exclude numerous borrowers from bank credit, independent of project attributes. These constraints are no different in the urban setting. Service sector activities, in particular, cannot provide satisfactory collateral and are consequently excluded from bank credit. Entrepreneurs associated with these activities frequently resort to informal borrowing to satisfy their credit needs. This has also been noted by an earlier study of urban ICMS in India, (TA(1984)). However, what has not been documented as well are the intimate links between black money and informal credit markets.¹⁴ A large proportion of the total demand for credit in ICMS is in the

¹⁴. According to TA(1984), the "intermediaries we studied appeared to be involved only peripherally, if at all, in these other (black) markets", (p.44). Although their sample was entirely different, it will become clear in the discussion presented in this report that there are grave reasons to doubt that claim. See also NIPFP(1988) which attributes a bigger role to credit transactions involving black money.

form of demand for black money. The remainder of this section provides some illustrative examples from the survey to indicate the multitudinous contexts in which demand for black money arises and to thus highlight the significant extent to which this type of demand is an important component of demand for credit in ICMS.

(i) An entrepreneur decides to purchase some property with a view to developing it. The price of the property is Rs. 30 lakhs - in white, i.e., the value to be declared officially, with an additional Rs. 20 lakhs to be paid in black.¹⁵ The entrepreneur has invested Rs. 15 lakh of his own and has a bank willing to lend the remaining half of the white price. He may still have to borrow in the ICMS if he does not have the black funds for the residual.

(ii) An individual has purchased some real estate and wants to start construction. He may find that to get adequate cement, he has to pay a premium and buy it in black. Furthermore, to get the architectural plan approved and the zoning and other regulations dealt with, he has to provide 'goodwill' money at various levels of the city administration. Again, lacking adequate resources of his own, he will resort to borrowing black money informally.

¹⁵. 1 lakh = 100,000.

(iii) A domestic producer of textiles has done quite well in the local markets and wants to enter the export market. Through relatives in the United States, he has also arranged an efficient marketing arrangement to ensure that the quality and delivery requirements are fulfilled. However, being a new exporter, he has to purchase the export quota in the market for a few years until his exports entitle him officially to a quota. The entrepreneur will have to generate black funds to purchase unutilized quota possibly from other exporting firms.

(iv) A successful businessman wants to buy a Mercedes-Benz. A third of the automobile price has to be paid in black which may be partially financed through a loan.

As these examples show, the need for black funds arises in diverse forms. A more detailed description of the black economy is provided in Annex A of the report, but suffice it to note here that the black economy is by most estimates a very large proportion, perhaps at least 40-50%, of the total economy.¹⁶

¹⁶. One may note as an aside that what is referred to as the black economy in the Indian context is what is usually meant by the term informal economy in industrialized countries.

III Quantitative dimensions of informal credit

The objective of this section is to present evidence on some quantitative aspects of the transactions undertaken in the ICMs. Consequently, the emphasis here is on providing information regarding the aggregate size of informal credit in India as well as about its allocation across different sectors. In addition, the relative importance of informal credit within the major sectors utilizing it is also examined. The focus, in sum, is on examining informal credit in terms of how large it is, how it is utilized, and, how important its role is relative to formal credit.

Data on informal credit transactions are well known to be extremely difficult to obtain, which therefore affects their quality. This applies particularly to credit quantities for two important reasons. On the demand side, individuals are often reluctant to disclose their indebtedness or its extent.¹⁷ Secondly, both suppliers and borrowers of credit can be averse to revealing relevant information due to the significant component of black money in these transactions. Consequently, the quantitative data presented here should be interpreted with some caution. Despite these caveats, the data yields useful insights that

¹⁷. The reasons behind this reluctance are outside the scope of the present discussion. The notion of indebtedness is in many ways analogous to that of "going to a 'shrink'"; both are a common occurrence, useful to the individuals and yet not usually discussed with enthusiasm.

are qualitatively robust with respect to the possible biases. The sources for the data utilized here are four prior surveys of urban informal credit in India including two conducted by the Reserve Bank of India(RBI): TA (1984), RBI (1979), RBI (1981) and NIPFP (1989).¹⁸ The first study presents data collected in 1977-79 which is also the reference period for the next two while the last study collected data over a two-year period in the latter half of the 80's. Among all these, the RBI surveys are statistically the most comprehensive. RBI (1979) surveyed small scale industrial units across India and had a sample size of 12,356. Similarly, RBI (1981) surveyed traders and transport operators in India with a sample of 3,269 wholesale traders, 8,788 retail traders and 6,129 transport operators. However, the units surveyed in all cases were those that had access to commercial bank credit. The impact of this sample-selection bias is against the relative role of informal credit. The bias is particularly strong in case of transport operators since the bulk of transport financing is for used vehicles, and is therefore for the most part undertaken outside of the channelization of commercial bank credit. Consequently, the analysis below excludes data on the transport sector.

¹⁸. To avoid repetitive citations, the data presented here, unless noted otherwise, are from the two RBI surveys and NIPFP (1989).

III.A Aggregate urban informal credit

In addition to problems associated with obtaining data on informal credit, there are also numerous conceptual issues involved in defining credit, formal or informal.¹⁹ In addition, there is the problem of units of measurement since credit is both a stock and a flow concept. These methodological problems are not addressed by TA (1984) and their estimates, consequently, cannot be utilized to derive conclusions other than that the absolute magnitudes (however defined) of informal credit are quite large. The table below presents their estimates for a limited group of informal intermediaries, namely, indigenous bankers and commercial financiers. Since a number of other types of lenders are excluded, these figures should be viewed as severely biased downward.

TABLE 1

ESTIMATES OF CREDIT EXTENDED BY SELECT INFORMAL LENDERS

| <u>Name</u> | <u>No. of firms</u> | <u>Credit extended</u> (Billions of Rs.) |
|-----------------------|---------------------|---|
| Gujerati Bankers | 2000 | 7.5 |
| Rastogi Bankers | 500 | 1.0 |
| Chettiar Bankers | 2500 | 3.8 |
| Shikarpuri Financiers | 2955 | 3.8 |

¹⁹. For a lucid and detailed discussion, see Shiller (1983).

The average credit extended by the traditional Gujerati and Rastogi bankers is significantly higher than the other groups.²⁰ The Chettiars are predominantly pawnbrokers; TA (1984) estimate there were 25,000 Chettiar pawnbroking firms in 1978/79 with credit extended amounting to Rs. 12.5 billion.

Estimates compiled by NIPFP (1989) are based on data obtained from borrowers rather than suppliers of credit. The methodology adopted is to use sample estimates of informal credit as a ratio of some variable for which aggregate data are available, e.g., bank credit or value added. The activities included are housing finance, small industry, trade, road construction, etc.. However, not all informal credit transactions are incorporated into the estimates. Furthermore, the assumptions used in deriving these estimates have deliberately attempted to introduce downward biases in an effort to get a minimum benchmark estimate of informal credit in India. The results are shown in Table 2 below.

²⁰. These intermediaries are traditional communities that have been in these activities for long periods, often centuries. Regionally, the Rastogis are associated with Uttar Pradesh, the Chettiars with Tamil Nadu, while the Shikarpuris are relatively diversified but with concentration in Western and Southern India; they originated in Sind.

TABLE 2

ESTIMATES OF AGGREGATE URBAN INFORMAL CREDIT IN INDIA

| <u>Activity</u> | <u>Amount*</u> (Rs. Billions) |
|---|----------------------------------|
| 1. Private housing | 8.65 |
| 2. Small-scale industry | 89.53 |
| 3. Road construction and transportation | 139.10 |
| 4. Trade | 516.73 |
| 5. Others(hotels and restaurants, recreation, household credit, etc.) | 61.96 |
| TOTAL | 815.97 |
| Ratio of informal credit to gross bank credit | 130.63** |

The amounts refer to years that are not the same for all sectors; the earliest year is 1981 and the latest is 1987. The ratio of informal credit to bank credit equals 73.15% if transactions estimated as involving black money are excluded.

The estimated size of total informal credit in the table is about Rs. 816 billion. This magnitude equals 1.3 times the gross bank credit extended in 1987. Given that these estimates have deliberately been biased downwards, it would seem reasonable to conclude, firstly, that the size of informal credit in India is substantial, and secondly, that

it is in all likelihood at least as large as the formal credit in the economy.²¹

III.B Sectoral allocation of informal credit

Before analyzing patterns in the allocation of informal credit across various sectors, it is worth noting that the available evidence indicates only a small fraction of the credit is used to finance consumptions debt of households. According to the All India Debt and Investment Survey of the RBI, the aggregate estimate of debt for urban households, in 1981, was Rs. 297.5 billion of which Rs. 178.2 billion was accounted for by debt from formal sources. Of the Rs. 119.3 billion informal debt, about Rs. 45 billion was from friends and relatives, while the remaining Rs. 74 billion represented informal borrowings from others. These figures are quite low relative to the size of total urban informal credit. Furthermore, 36.4% of total household debt (for urban households) in the survey was debt for financing consumption. The analogous figure for households classified as urban self employed was even lower, equaling 14.4%. Thus, only a small proportion of informal credit is directed at financing consumption.

²¹. During the field work for this report, a frequent response of individuals, when apprised of the subject of my enquiries, was an emphatic "at least 50-50". In case of businessmen, the opinion presumably reflected their own operations and their awareness of the activities of others they dealt with commercially and/or socially.

As Table 2 shows, four activities account for almost 90% of all urban informal credit: trading, small-scale industry, transportation and construction. However, trading is by far the most dominant sector, comprising about 63% of informal credit. The definition of trade used by NIPFP(1989) includes wholesale and retail trading as well as trade credit, which constitutes a substantial component. Furthermore, the sectoral estimates may suffer from downward biases to different degrees. However, the importance of trading and small industry as users of informal credit is also borne out by TA(1984). Since the estimates compiled by TA(1984) are derived from surveying lenders, rather than borrowers, their estimates of the proportions of credit allocated to different activities are more useful than estimates of absolute size of informal credit. Table 3 below shows the distribution of informal credit supplied by select financial intermediaries; these data do not include trade credit.

TABLE 3

ALLOCATION OF INFORMAL CREDIT BY INDIGENOUS INTERMEDIARIES

| <u>Intermediary</u> | <u>Trade</u> | <u>Small industry</u> | <u>Exports</u> | <u>Other</u> |
|-----------------------|--------------|-----------------------|----------------|--------------|
| Gujerati bankers | 60 | 5 | 10 | 25 |
| Chettiar bankers | 45 | 5 | 10 | 30 |
| Rastogi bankers | 55 | - | 12 | 23 |
| Shikarpuri financiers | 32 | 16 | 20 | 32 |
| Formal banks | 10 | 10 | 8 | 72 |

Since exports can be subsumed within the two categories of small industry and trade, these figures reveal a similar pattern: about 70% of credit supplied by these intermediaries is allocated to trade and small industry. The Shikarpuris are commercial financiers focusing on working-capital credit which is reflected as a relatively larger allocation to small industry. For the sake of comparison, TA(1984) identify the corresponding allocation of credit by banks which is the reverse of that of the informal intermediaries. This again provides support to the possibility that formal and informal credit are not competing in the same market and are, consequently, more likely to be complements than substitutes. Further evidence highlighting the importance of trade as a primary user of informal credit is provided by the fact that Shroffs,

indigenous financiers from Western India with a significant presence in Bombay, commit 50% of their funds to financing trade while the analogous figure was 35% for finance corporations surveyed by NIPFP(1989), and 45% for chit funds.

The dominance of trade as user of informal credit is not quite extraordinary or remarkable: trading has not had high priority in formal bank lending; it is also a major component of economic activity in an economy like India's, which is geographically large, with significant centralization, and, high costs of transportation due to relatively low levels of technology and infrastructure. What does need recognition, however, is the fact that trade is one of the oldest professions and, in the context of financing its credit needs, is organized in an extremely sophisticated and efficient manner, as was explicated in the previous section.

III.C Relative importance of informal and formal credit

Given the dominance of trade and small-scale industry in the utilization of informal credit, it is useful to take a close look at the large sample of enterprises in these sectors surveyed by RBI. The firms were chosen because they had access to bank credit, thus severely biasing the sample towards enterprises more integrated into the formal sector as a whole, including formal credit; for example, the extent

of formal education of entrepreneurs, whether the enterprises are organized as incorporated firms, and other such basic attributes of the units would also suffer from similar sample-selection bias. Nevertheless, the large size of the sample allows useful insights into the nature and type of entities that, as borrowers, constitute a large proportion of the informal financial sector in India. In addition, the available data also provides evidence on the importance of informal credit relative to institutional credit in two sectors that are major recipients of the former.

As Table 4 below indicates, at least 96% of the firms sampled were sole proprietorships or partnership; only 3% of small industrial units and almost none of the trading enterprises were incorporated entities. Furthermore, wholesale establishments are predominantly partnerships, suggesting greater frequency of (extended) family ownership while retailing and industrial units are predominantly sole proprietorships. Informal credit, as proportion of total formal and informal credit, plays a greater role for wholesale and retail traders, equaling almost 70% of total credit for the former and 78% for the latter. For 96% of the small industrial units, informal credit accounted for almost 55% of their total credit. Lastly, the relative importance of informal credit is clearly lower for

enterprises that are organized as incorporated (private limited) firms, both in trade and industrial sectors.

TABLE 4
USE OF INFORMAL CREDIT BY TYPE OF FIRM

| | <u>Type of firm</u> | | | |
|--------------------------------------|--------------------------|--------------------------|----------------------------|--------------|
| | <u>Proprie- tory</u> | <u>Partner- ship</u> | <u>Private limited</u> | <u>Other</u> |
| <u>Small Scale Industry</u> | | | | |
| Percent of firms | 68.23 | 27.74 | 3.15 | 0.85 |
| Proportion of Informal Credit (%) | 57.76 | 49.54 | 34.00 | 31.72 |
| | | 55.38* (95.97) | | |
| <u>Wholesale Trade</u> | | | | |
| Percent of firms | 22.67 | 75.11 | 1.57 | 0.66 |
| Proportion of Informal Credit (%) | 72.53 | 68.02 | 31.16 | 42.75 |
| | | 69.07* (97.78) | | |
| <u>Retail Trade</u> | | | | |
| Percent of firms | 87.20 | 12.54 | — | 0.26 |
| Proportion of Informal Credit (%) | 78.51 | 71.05 | — | 67.53 |
| | | 77.55* (99.74) | | |

* Proportion of informal credit as a weighted average for proprietary & partnership firms taken together; figure in parenthesis shows the weight of these two categories in the whole sample.

TABLE 5
USE OF INFORMAL CREDIT BY TYPE OF ACTIVITY

| | Percent of Firms | Percent of Credit Informal |
|--------------------------------|------------------|----------------------------|
| Small Scale Industry | 100 | |
| Manufacturing | 85.59 | 60.50 |
| Job Work | 10.24 | 56.96 |
| Other | 4.16 | 60.75 |
| | | 50.13 |
| Wholesale Trade | 100 | |
| Food and Beverage | 29.40 | 65.74 |
| Textiles | 23.76 | 69.00 |
| Other | 46.84 | 73.08 |
| | | 58.47 |
| Retail Trade | 100 | |
| Food and Beverages | 42.83 | 77.57 |
| Textiles & Ready Made Garments | 12.78 | 81.10 |
| Other | 44.39 | 77.62 |
| | | 76.53 |

Table 5 above shows the allocation of informal credit by type of activity. About 10% of the sampled manufacturing enterprises were undertaking job work but there is no clear evidence that these firms rely more on informal credit relative to those undertaking regular production. Trade in two basic goods, namely, food products and textiles, constitutes about half of all wholesale and retail trading. Reliance on informal credit is highest in retail trade, almost 78%, but not significantly dependent on the type of commodities being traded. In contrast, the importance of informal credit is clearly higher for food and clothing

products than others in wholesale trade. In all cases, however, despite the fact that all sampled enterprises had access to bank credit, more than half their credit needs are financed informally.

IV Institutional aspects of urban informal credit

It is now increasingly recognized that institutions exert a powerful impact on the way economic activity is organized and hence on economic outcomes. Institutions are defined as the conventional norms and social rules that constitute the framework within which socio-economic interactions are embedded. Recognition of their role has led to increased questions regarding the ubiquity of the market form of economic organization. Until recently, the key role of institutions has not attracted significant attention in neoclassical economic theorizing but the last few years have seen the development of a fairly vast body of literature analyzing institutions in rural markets.²² However, similar analyses of the urban markets have been lacking. Consequently, a major thrust of the field work connected with the present investigation has been to shed some light both on urban credit markets as well as on the institutional aspects of these markets. The specific issues underlying the discussion include, for example, the nature

²². There is no dearth of relevant literature; Bardhan(1989) contains some useful surveys and extensive references.

of information structure underlying informal credit transactions; relatedly, how do the participants mitigate problems of adverse selection and moral hazard; nature and extent of risk pooling and sharing; nature and extent of interlinkage in urban credit transactions; search and negotiation mechanisms in credit contracts; market segmentation and competitiveness; etc.. It is hoped in this manner to establish a preliminary set of stylized facts that can feed into micro- and macro-analytical models of formal and informal credit markets. Since many of the issues under consideration are conceptually intricate and, as a result, require sophisticated quantitative and qualitative data, it is important to reiterate the preliminary nature of the findings presented in this section of the report. The first sub-section below (IV.A) discusses the theoretical motivations guiding the design of the data collected during the field work while the rest of the section presents the empirical results obtained.

The information presented in the section is based primarily upon interviews with both borrowers and suppliers of informal credit in Delhi. The interviews were undertaken over a seven week period in December 1991 and January 1992. In the earlier stages of the field work, a random sample of small firms, stratified by location, was chosen for interviews but this did not prove very useful in terms of the information revealed and the time requirements. The

primary reasons for this seemed to be a general reluctance on part of many to talk about credit and indebtedness with strangers, as well as uneasiness about expanding on numerous business and credit transactions involving black money. It was decided consequently to choose firms where the quality of the information obtained would be relatively higher even if this required their being chosen in a non-random manner; for most of the firms interviewed, therefore, there was at least one third-party reference for the interviewee. As a result, although a total of 61 small firms were interviewed, they do not constitute a random sample.²³ The composition of the firms by type of activity was as follows: 28 of them were small-scale industrial units, with at most 10 employees, 12 of the firms were undertaking wholesale trade while the primary activity of another 12 was retail trade, and, the remaining 9 firms were in service sector activities (excluding trading). Geographically, firms engaging in wholesale trade were located in two wholesale markets while all the other firms are from various markets in different parts of the city. The youngest firm had been in existence for 3 months, while the longest that a firm within the sample had been operating was 43 years. On the lending side, five finance companies were interviewed, who mobilize

²³. Another important consideration in choosing this approach is discussed in IV.A below, and concerns the informational content of firm-level data given incomplete or missing markets.

some deposits but primarily engage in lending, along with four brokers. All five companies are located in New Delhi. In case of both the borrowers and the lenders, not all respondents were willing to answer all the questions in the interview; a few of them also insisted on no written notes being taken during the meeting. In addition, interviews were also conducted with some business associations and a number of officials of formal banks familiar with the lending operations of their institutions. Information on chit funds was obtained from interviews with numerous individuals, both businessmen and otherwise, who participated in them; three of the people interviewed in this connection were also organizers of chit funds.²⁴

IV.A Economic theory and institutions

Institutions have been dealt with in three broad ways in economic literature. In the mainstream neoclassical theory, attention is focused on perfect markets as the relevant economic framework; these markets are viewed as 'institutional-neutral' implying that institutions can be ignored.²⁵ This institution-neutrality informs, for example, much of the current literature on real business

²⁴. There were no women entrepreneurs in the sample of firms interviewed.

²⁵. Some of this material draws substantially on Bardhan's(1989) introduction which also provides references for much of the literature cited here.

cycles in macroeconomic theory. The problem with this approach is that even well developed markets in industrialized countries rest upon complex institutional structures, e.g., elaborately defined and effectively enforced property rights, formal contracts and guarantees, corporate hierarchies, limited liability, bankruptcy laws, etc.. The 'old institutionalist' approach, on the other hand, takes institutions as given and describes their impact on economic activity. The institutions themselves, such as Islamic restrictions on charging interest, are seen as determined by cultural and other non-economic forces. In contrast, a third approach, labeled the 'New Institutional Economics' (NIE), attempts to endogenize institutions in economic terms and is used to provide the theoretical motivation for the empirical work described here.

Within NIE itself, two strands of literature can be identified: the first analyzes institutions in terms of property rights and transaction costs in the tradition of Coase's insights and is associated with the works of Demsetz, Alchian, Williamson and North. The second strand has grown out of the theory of imperfect information, as in the works of Akerlof and Stiglitz, and relies significantly on moral hazard and principal-agent formulations to endogenize institutions. Although the distinction between the two strands is significant methodologically, conceptually the gap is much less, since informational

imperfections can be subsumed within the notion of transaction costs, defined as the costs of "arranging a contract ex ante and enforcing it ex post", (Mathews(1986)). Therefore, the distinction between the two strands is deemphasized for the purposes of this discussion.

A natural starting point for the present analysis is the existing literature on the economic theory of institutions in rural credit markets. Although the literature is too vast to be summarized here, it would be useful to identify some of the key institutions that have formed its focus and the methodology adopted to explain them. Discussion of the latter helps highlight select analytical tools of the NIE framework whose implications for urban credit arrangements have influenced the empirical design of the study. Needless to say, a prerequisite in this approach is a specific evaluation of how the economic context of rural and urban credit markets differs, i.e., an identification of the institutional distinctions that can be expected to prevail between them on theoretical grounds. It should be emphasized at the outset that the existing analysis of institutions in the framework of NIE is limited in two ways: it does not incorporate any roles for political and historical processes underlying specific institutions, as well as their social and cultural context, and secondly, the range of institutions that have been analyzed in the literature is quite small. In other words, the number of

existing institutions that have not been analyzed is quite large. Both these limitations are also reflected in the present case.

Land tenancy, specifically sharecropping, and interlinked transactions are two agrarian institutions that have probably attracted the maximum attention from theorists in NIE. Sharecropping arrangements have existed at diverse times in various parts of the world, and still characterize much of economic activity in agrarian settings. The prevalence of this institution creates a puzzle since it has been recognized at least since Marshall that sharecropping provides inefficient incentives: the worker laboring on the land receives only a fraction of the output produced at the margin, implying he will work less than he would if he received his marginal product, and thus the contract is inefficient. However, as the work of Stiglitz and his co-authors has shown, sharecropping contracts are at least pairwise efficient once the moral hazard of hired labor is introduced as a stylized fact. Given moral hazard, the worker's effort needs to be monitored since he would otherwise shirk. Now, if monitoring costs are high, the best incentives are provided by the landlord charging the worker a fixed rent irrespective of performance, but this imposes all the risks on to the worker who may be risk averse or at least less able to diversify risks compared to the landlord. Thus, sharecropping can be explained as the

efficient response to the trade off between incentive issues and optimal risk sharing.

Similarly analyses of another pervasive institution, namely interlinked transactions, are equally substantial and comprehensive, albeit relatively less conclusive. Interlinked transactions are the economic manifestation of the 'multiplex' relationships characterizing traditional societies; they differ from the anonymous transactions of perfect markets with the terms of the transactions inextricably linked to the identities of the transacting parties. Interlinked transactions are defined as transactions in two (or more) markets between the same individuals with the terms of the transaction for all markets determined simultaneously. Interlinkages have primarily been looked at in the context of credit and labor or land markets, with their rationale explained in terms of four types of reasons. Firstly, interlinkage can lower transaction costs; for example, a landlord may lend to a laborer in the slack season to ensure that the latter will be available in the peak season when the labor market tightens. Secondly, interlinkage in the context of credit markets can improve enforcement since default is more expensive if it also leads to costs in other markets. Thirdly, in case of unobserved variables, such as moral hazard with respect to work effort, interlinkage can be useful if the price in the market interlinked with affects

the incentives of the agent. Lastly, interlinkage can be the outcome of missing markets for insurance or credit, e.g., an assetless laborer without tangible collateral can use his tenancy contract as a collateral with his landlord and thus acquire credit.

Although there exist other applications, the two cases discussed above bring out some of the basic tenets of the NIE approach relevant to the present analysis. First and foremost is the fact that information matters: what the transacting parties know and do not know determines systematically the arrangements that will characterize exchange between them. Secondly, transactions costs due to informational imperfections can be so high that some markets do not exist. For example, moral hazard due to imperfect information along with bad enforcement may preclude the working of an insurance market. It is worth noting in this context that if the credit and insurance markets are missing or underdeveloped, as often characterizes the economic environment of unincorporated (owner-operated) small firms in poor countries, the traditional dichotomy between the firm and the household's allocative decisions no longer remains valid. A focus on the credit transactions of the firm alone will in such situations lead more likely than not to incorrect inferences. Thirdly, the distribution of wealth is important: economic efficiency and equity are no longer divorced. Thus, for example, given moral hazard of

hired labor, unequal distribution of land would imply lower productivity compared to the situation where land is distributed evenly and every laborer tills his own land. Similarly, Coate and Ravallion(1989) show that the existence and performance of informal risk-sharing arrangements given missing insurance markets are enhanced the higher the wealth levels of the individuals involved in reciprocity and greater the equality of wealth distribution between them. Although NIE has generated diverse and rich theoretical insights into institutions, there is relatively little empirical work in this area. A basic premise of the empirical methodology here is that the transacting environment of economic agents - in terms of informational structure, risks, enforcement, and other elements of transaction costs - can be inferred indirectly from the contractual forms. In other words, the terms of specific contracts reflect the economic environment within which they occur, and the related costs of transaction therein. This theme is developed more fully in IV.B below.

Finally, to enrich this application of economic theory of agrarian institutions to urban credit markets it is desirable to identify the differences in the economic context of these markets. At least three important differences are relevant. Firstly, the urban setting is less isolated and self enclosed than a village. This refers, inter alia, to the fact that in urban areas the

relevant population and its density are higher, and that individuals have relatively higher mobility.²⁶ Secondly, the level of wealth of individuals participating in the ICMs is generally higher than that of landless peasants or small farmers. This may not be valid if one were to focus on the markets catering to the consumption credit needs of the urban poor. Although these markets are not being considered here, wealth levels may also not be significantly higher for some participants in the third type of ICM identified earlier, namely, for trade credit, especially at the farthest ends of the trading chain. But asset holdings are indisputably higher for the majority of the borrowers in the urban ICMs compared to their rural counterparts. The significance of wealth lies in the fact that it is positively related to the individual's ability to bear risks and also to offer tangible collateral. In addition to higher levels of wealth on average, the individuals participating in ICMs also have a relatively more even distribution of wealth. In particular, the disparity in wealth between a borrower and a lender would typically be less than in a rural credit transaction. As before, this differentiation may be less significant in case of the markets for trade credit for the smallest retailers interacting directly with consumers.

²⁶. Put alternatively, the number of individuals one does not know is much less in a village than in an urban setting.

Lastly, a fundamental distinction between the rural credit markets and the ICMs is that of symmetry: a borrower and lender today may be in the reverse situation tomorrow. This symmetry is applicable to the first two types of ICMS discussed earlier. In contrast, the theoretical literature on rural credit markets specifies the identity of individuals as lenders and borrowers irrevocably; for any given pair, the same individual is the principal (or agent) in all repeated interactions. At a more general level, it may be pointed out that the two points above, relating to wealth levels and distribution and the symmetry, are fundamentally also statements about power relations among the individuals. The importance of power relations in analyzing institutions is eloquently emphasized by Bardhan's(1989b) caution against the possibility that "our theories of principal-agent games and moral hazard do not cover up the basic, often ugly, power relations involved in the phenomena". Although not pursued here, it is nevertheless important to recognize that a fundamental distinction between rural credit markets and the urban ICMS is in the nature of power relations among the respective participants.

IV.B Contractual attributes of transactions in ICMS

Given the institutional focus of the present survey and general reluctance of most respondents to discuss the

specifics of their own credit and business transactions, the stance of the questionnaire was directed towards eliciting the respondent's opinions on contractual arrangements for informal credit in general, rather than about any specific credit transaction on his part.²⁷ Therefore the relevant sample here is not a set of credit transactions but is instead the set of responses of the firms interviewed; the actual number of credit transactions underlying these responses is indeterminate. During the two years preceding the survey, 43 of the 61 firms interviewed had borrowed informally at least once; most had borrowed more often. All the respondents, however, were well informed about credit arrangements in a general way, often from their own experiences and from those of other entrepreneurs they knew, socially or on commercial basis. In presenting these results, the responses of the firms are also supplemented, where appropriate, with responses of the five lenders interviewed.

Table 6 below provides information about two aspects of the credit contracts, namely, the interest rate and loan duration.

²⁷. For example, instead of asking the duration of the last loan borrowed by him, the question would be posed in a more open-ended manner as "Usually what is the duration of the loans?".

TABLE 6

Interest rates and duration of informal loans

| | <u>Upto 3 months</u> | <u>Upto 6 mos.</u> | <u>> 6 mos.</u> | |
|---|----------------------|---------------------|--------------------|---------------|
| Loan duration | 46 | 13 | - | |
| | <u>Frequently</u> | <u>Occasionally</u> | <u>Rarely</u> | <u>Never</u> |
| Incidence of loans longer than 6 months | - | 19 | 37 | 3 |
| | <u>Don't know</u> | <u>2%</u> | <u>2-2.5%</u> | <u>2.5-3%</u> |
| Market rate | 2 | 46 | 11 | 2 |
| | <u>No</u> | <u>Higher</u> | <u>Lower</u> | |
| Rate different for 3 month versus 6 month loans | 56 | - | 3 | |

N.B.: The totals do not always add up to 61 since not all respondents provided answers to all questions.

The responses suggest that informal loans are typically of fairly short duration; 46 of the respondents cited upto three months as the typical length of the loan while 13 believed the most frequent duration of informal loans as anywhere upto 6 months. Most of the respondents agreed that loans of duration longer than six months could and did occur but no one viewed their incidence as frequent. Loans of longer than six months were felt by 19 of them to be occasional while 37 thought longer durations to be rare.

With respect to the interest rate charged on loans, the respondents were asked what the 'market rate of interest' was at the time of the survey. Given the possible diversity

of the interest rates, depending upon borrower's credit standing, loan size and duration, eliciting information on average or typical interest rates would not have been very revealing. At the same time, frequent references to a market rate by numerous individuals (both within and outside of this sample) suggested the existence of some interest rate that most businessmen are aware of and that serves as a reference mark. Thus the question posed can be viewed as reflecting upon the level of coherence in the flow of information on prices in the ICMS: if every contract is characterized by a different interest rate, the very notion of a 'market rate' may be irrelevant; given fragmented credit markets, rudimentary information flows between them would imply greater likelihood of large variations in such a market rate, even if it does exist. The responses show, however, that almost all the businessmen were aware of a reference interest rate. Secondly, there is remarkable consensus across the different respondents about the perceived value of that reference rate. The figures in the table are given in terms of monthly interest rates, without standardizing them to annualized basis, exactly the way the rates are quoted by all participants surveyed.²⁸ For

²⁸. Although the respondents were most comfortable quoting monthly rates, some of them attempted to standardize them into annualized rates for the convenience of the interviewer. The method used to convert monthly rates into annualized rates by these individuals, including lenders, suggested an
(continued...)

reference we can note that the lending rates charged by formal commercial banks at the time of the survey were 11.5-16% per annum on advances of less than Rs. 2 lakhs to priority sectors, while the lending rates on regular loans had a mandatory floor of 20% per annum. These rates had been instituted in October 1991 following substantial financial liberalization measures. In addition, interest rates on financing of consumer durables by hire-purchase companies and banks were 28-40% per annum. The table also shows that, according to 56 of the respondents, the rate on three month versus six month loans are the same implying that the term structure of rates is flat for upto six months.

The responses of the individuals lending through the finance companies were generally consistent with those of the borrowers. Loans are usually for three months though they may be renewed. However, three of the lenders insisted on proof of ability to repay before renewing loans to relatively new clients. Although all the five lenders mentioned a monthly rate of 2% as the market rate, it was pointed out that the interest rates can be lower in the

²⁸(...continued)

absence of compounding. Thus 2% per month was translated as 24% per annum, and so on. In the absence of monthly payments of interest, this may also be viewed as indirect evidence suggesting the short duration of these loans, since the difference between simple and compound rates are negligible for loans of 1-2 months.

large traders' markets which have the maximum liquidity; the prevailing rate in these markets for 'good' parties was 1-1.25% per month, but these are typically call loans.

The interest rates quoted here are all for 'cash' loans, which is the popular euphemism for loans involving black money, as distinct from 'check' transactions which utilize white money. Interestingly, the interest rates on check loans (as well as deposits) are usually higher. The premium at the time of the survey was about 5-6% per annum according to three of the lenders who volunteered this information. The premium is determined by the so called 'entry' rate which is the cost of entering into white transactions with black funds. The notion of entry rate can be illustrated by an example: suppose somebody wants to buy an item worth Rs. 2 lakhs using white money but has available only black money or 'cash' at the time. He can then give Rs. 2 lakhs cash to a financier who will issue an equal amount of check; the individual can then repay the Rs. 2 lakh check later and redeem the cash amount. Entry rate is the charge for this transaction and was 5-6% at the time of the survey. Similarly, if a financier seeks white money deposit, he may give an equivalent amount of cash to the depositor and pay an additional 5% on the white deposit.

Tables 7 and 8 below provide some evidence related to considerations of risk and information, both of which are recognized as central to the analysis of credit

transactions. As discussed earlier, contractual terms may be viewed as mechanisms used to alleviate the costs of transaction arising out of the risk attributes of the economic environment, and also the information asymmetry between borrowers and lenders. For example, one observable consequence of pre-contractual information asymmetry, or adverse selection, may be the presence of a menu of credit contracts, in terms of interest rates-loan size combinations; these would be the outcome of screening on part of lenders facing observationally identical borrowers. Another consequence of such information asymmetry would be the use of collaterals if the borrowers own some assets that can be so used; interlinked transactions may also arise as a screening mechanism.²⁹ The same institutional mechanisms may also be used to ameliorate problems of information asymmetry resulting in the presence of moral hazard. Further, both adverse selection and moral hazard can lead to repeated transactions between a borrower and a lender; the past history of transactions may be utilized by the lender to infer hidden attributes of borrower (adverse selection), or alternatively, the repeated transactions may provide better incentives for repayment if backed with the threat of exclusion from future borrowing in the event of default (moral hazard). The size of a particular loan will then be

²⁹. More comprehensive discussion of these issues can be found in Bell(1988) and Udry(1991).

affected by the constraint that the long-term penalty be large enough to outweigh the benefit of defaulting on that loan. It should be noted, however, that any given contractual form may have different interpretations, as was explicated earlier in the context of interlinked transactions. The presence of any particular institution is thus neither necessary nor sufficient to show the existence of particular information problems. Consequently, the evidence provided in these tables should not be interpreted as necessarily indicative of specific underlying information asymmetries or risk-sharing arrangements. At the same time, a virtual absence of contractual adjustments dealing with information asymmetries would be an important clue suggesting the possible absence, in the relevant markets, of the information asymmetries typically specified in the theoretical literature.

TABLE 7
INFORMATION AND RISK IN ICM TRANSACTIONS: Part I

| | <u>Friend/ Relative</u> | <u>Commer- cial Lender</u> | <u>Brokers</u> | <u>Other</u> |
|---|-----------------------------|--------------------------------|-------------------|-------------------|
| 1. Sources of loans* | 39 | 10 | 12 | 2 |
| | <u>Yes</u> | <u>No</u> | | |
| 2. Knew source personally prior to first loan transaction | 37 | 6 | | |
| | <u>None</u> | <u>Rare</u> | <u>Occasional</u> | <u>Often</u> |
| 3. Frequency of contact outside of credit transactions | 1 | 7 | 11 | 24 |
| | <u>Yes</u> | <u>No</u> | | <u>Don't know</u> |
| 4. Purpose of loans known to the lender | 29 | - | | 14 |

*: More than one response allowed per respondent.

Table 7 above summarizes some direct evidence relating to the information structure in informal credit transactions. The data are based on responses of 43 of the 61 interviewees who acknowledged having borrowed informally during the two years prior to the survey. However, as before, the frame of reference are their transactions in general rather than any specific transactions. The respondents were asked about the sources of their loans, with the possibility of giving more than one answer. All except four of them listed friends and relatives as a source

for loans while 19 of them listed this category as the sole source. It should be pointed out however that the category is quite broad since 'friends' in particular can refer to many types of interactions, including those that are primarily based on commercial transactions.³⁰ All 12 of the wholesaler traders in the sample acknowledged brokers as one of the sources of their loan transactions while 10 of the respondents listed commercial lenders (such as finance companies and other commercial financiers) as a source. 37 of the individuals claimed to have known the source of credit personally prior to the first credit transaction; a few of them identified previous transactions in goods markets as the basis for acquaintance. However, all the borrowers without any prior personal relations still had third-party references. Although the questionnaire did not attempt to narrow further what the scope of "knowing" in this context meant, these figures tend to suggest clearly an absence of anonymous transacting on part of the lenders and the debtors. This is supported by the evidence relating to the frequency of contact between the participants not explicitly related to credit transactions. While one of the respondents (who listed commercial lenders as the sole source of informal credit) claimed never to meet the lender

³⁰. It is also possible that the category of friends and relatives is reflecting to some extent transactions aimed at converting black wealth into white (legal). This is expanded upon in Annex A.

outside of undertaking credit transactions, six others identified such meetings as rare. However, the bulk of the individuals responded as meeting with their lenders outside of credit transactions on an occasional or a frequent basis. In many of these cases, the frequency of interactions also reflects the geographical proximity of the commercial establishments of lenders and borrowers. Finally, 29 borrowers responded that the lender knew the intended purpose for the loan(s) while 14 did not know one way or the other what the lender knew. In some of the latter cases the ambiguity stemmed from the fact that the loans could be arranged without their being present physically, by a third person (e.g., son or employee), on the basis of the name of the borrower; presumably these were long-term credit relationships. The intended use of funds in these cases may have been understood implicitly by both sides. However, a majority of the respondents in both categories claimed that uses of fund were not explicitly identified in the loan contracts.

Interviews with the lenders, on the other hand, also suggested that the lenders usually knew the purpose for which the funds would be used. Furthermore, all five lenders indicated that they would not interfere if the funds were diverted to other uses, unless there existed extraordinary reasons. Three of the lenders said they occasionally considered unknown parties from regions outside

Delhi, but only for making 'check' loans against collaterals. However, all claimed that, for 'cash' loans, they did not accept new borrowers per se but that they would lend to such borrowers only on the basis of a (known) third-party guarantee. After the first dealing, the relationships could evolve bilaterally.

In a similar vein, the universal practice for all informal chit funds, according to the individuals surveyed, was to not accept new members at all.³¹ The only avenue for any person to enter an existing chit fund is through persuading one of its members to buy a share for him; in effect, the potential entrant acts as a member, putting in his own money for the share bought and making bids for the pool of funds ("kitty"), with the actual member being his proxy. The important point here is that, until the repetition of this process leads to the newcomer being accepted directly, the sponsor is fully accountable for the actions of the potential entrant. Another manifestation of the close-knit aspect of informal chit funds is that members who are not interested in bidding for the kitty are often not even present during the meeting but just send the money beforehand to the organizer or foreman of the chit fund.

³¹. There are also large, registered chit funds operating in Delhi, with memberships in few hundreds. These are essentially regulated non-bank financial intermediaries and thus excluded from this study.

TABLE 8
INFORMATION AND RISK IN ICM TRANSACTIONS: Part II

| | | | | |
|--|-------------|---------------|-------------------------|--------------|
| | <u>Yes</u> | <u>No</u> | | |
| 1. Collateral used* | 4 | 39 | | |
| | <u>None</u> | <u>Rare</u> | <u>Occasional</u> | <u>Often</u> |
| 2. Incidence of loans against collateral | - | 49 | 12 | - |
| | <u>No</u> | <u>Rarely</u> | <u>Occasionally/Yes</u> | |
| 3. Timing of repayment flexible(stipulated) | 51 | 10 | | - |
| | <u>None</u> | <u>Rare</u> | <u>Occasional</u> | <u>Often</u> |
| 4. Incidence of delays in repayment | 3 | 35 | 23 | - |
| | | <u>Yes</u> | <u>No</u> | |
| 5. Amount owed dependent on project outcomes | | - | 61 | |
| | <u>None</u> | <u>Rare</u> | <u>Occasional</u> | <u>Often</u> |
| 6. Incidence of deviation of actual repayments from owed | 7 | 54 | - | - |

*: Refers to responses of 43 acknowledged borrowers.

The high degree of information exchange between borrowers and lenders, suggested by their frequent contact, is also reflected in Table 8 which shows a minimal use of collateral in informal credit transactions. Among the respondents who acknowledged having borrowed informally, only four had had to provide collaterals while the rest had

borrowed without collaterals being used. All four of the borrowers reporting collateral use had also listed commercial lenders as a source for credit. Further, in response to the incidence of use of collateral for informal loans, 49 of all respondents claimed it was rare while the rest indicated an occasional use of collaterals; none of the respondents suggested that collateral was used frequently.

It is worth noting in this context that all seven registered hire-purchase companies surveyed by NIPFP(1989) in Delhi reported collateral use as routine; the companies finance primarily automobile purchases and the automobiles are hypothecated until the loans are repaid. However, all seven companies also asked for a third-party guarantee in addition to the collateral. Furthermore, five of the seven companies asked for two third-party guarantees. Guarantees would strictly be unnecessary in such transactions given that the collateral usually equals at least the value of the debt.³² While the use of collateral in these cases may suggest high transaction costs of acquiring the asset in the event of default, it should also be pointed out that the role of collateral is analytically not always obvious. It is still worthwhile to note two points that emerged during this study, about the use of collateral in general in informal transactions.

³². Repayments in hire-purchase financing are arranged so that the amount outstanding is inevitably less than the depreciated value of the automobile.

Firstly, the valuation of collateral may often also depend upon the extent of information that the lender has about the borrower. This is distinct from the situation where a lender and borrower may have asymmetric valuation of the asset or where the collateral is subject to uncertainty in terms of price shocks. To illustrate: an individual wants to borrow funds that can be fully collateralized against gold bricks he presents. A lender may still refuse to lend if he does not know the borrower personally or through a third party. For example, the collateral, gold bricks in this case, may be stolen property and, conceivably, the unknown borrower may then inform the police about the location of the gold. Similarly, a borrower using real estate as collateral will have to convince the lender that the property is actually his own and, furthermore, not under litigation. To the extent the acceptance of collateral itself depends upon personal knowledge between the two parties, the role of collateral as ameliorating problems of asymmetric information is correspondingly diminished. This situation may be viewed as a case where the collateral itself is subject to moral hazard; this has been noted in the literature on rural credit markets to explain infrequent use of cattle as collateral.

Secondly, a clue towards the use of collateral is provided by the responses of the lenders interviewed. Three of them stated that use of collateral was rare while the

other two suggested a higher use of collateral in their loans. However, all five claimed that collateral was used only if the size of the loan exceeded the 'worth' of the borrower. An implication would be greater use of collateral in case of large transactions. The two lenders with higher incidence of collateral use also acknowledged lending frequently to real estate developers. According to them, the objective of the collateral in these cases was to provide an incentive to the borrower to repay and, equally importantly, provide legal standing to their claims. The loans are usually for financing the black component of the property's value. However, the lenders will also provide a check (white money) loan towards a small proportion of the official price and issue a note specifying that funds equaling the rest of the official price will be loaned later. In return, the property is legally identified as the collateral. Given the dominance of black component in real estate values in Delhi, the white transaction in this process may be less than 10% of the actual loan amount but enhances lender enforcement of the contract.

An implication of contracting in the information intensive environment suggested above is that the lender does not have to infer statistically the state of the nature, i.e., outcomes of the project and, possibly, individual effort. Optimal risk sharing among the individuals then implies the presence of state-contingent

contracts. However the information in Table 8 does not provide any evidence in favor of such contracts in the informal credit transactions. Indeed, the evidence suggests quite the contrary: there is significant rigidity with respect to both amounts as well as the timing of repayments. None of the respondents thought the outcome of the project, for which loans were undertaken, had an impact on the amount that was owed to the lender. Furthermore, actual repayments also did not deviate from the amounts owed; most of the respondents identified the incidence of such deviations as rare while a few insisted that, outside of defaults, repayments were always equal to the agreed amounts. However, many of the respondents also suggested that there could be incomplete repayments in some cases but that including delayed payments, the actual repayments would ultimately equal the outstanding loans.

Responses regarding the flexibility of repayment timing are also consistent with this view. The timing of repayment (or the duration of the loan) was, according to this sample, almost always explicitly specified in the contract - unlike, for example, the purpose of the loan. However, 23 of the respondents claimed that significantly delayed repayments occurred occasionally while 35 thought that such delays were rare. 'Significant' delays refers to a delay of more than a few days, which is much more frequent; almost all the respondents suggested that a delay of a few days was not

even an issue unless it represented a systematic pattern in the credit history of a particular individual. In sum, therefore, transactions in the ICMs seem to reflect that the borrowers have to absorb most of the project-related shocks. This may possibly be related to the higher levels of wealth of the borrowing households relative to the loan amounts involved, implying a greater ability to absorb the shocks. At the same time, some risk sharing with respect to idiosyncratic shocks is allowed for by flexibility in the timing of repayments. The data here do not allow estimates of the costs of these risk sharing arrangements to borrowers. Their possible significance is suggested by the fact that some of the respondents in the survey indicated that they undertook considerable effort to ensure their repayments were never delayed.

Finally, in closing this section, it is useful to note briefly some information derived from interviews with the five lenders regarding a few miscellaneous but related issues, namely, lending criteria, nature of competition, price setting and interest rate volatility, and, nature of default and enforcement. With respect to lending criteria, the lenders identified borrowers overall position and 'goodwill' as the two basic criteria; equivalently, the reasons for denying credit were lack of trust, unsatisfactory experience in previous dealings or tardy reputation for payments. 'Goodwill' was also referred to by

many of the borrowers interviewed as an important determinant of access to credit. On being pressed to identify what goodwill meant, the usual response (of both borrowers and lenders) was the reputation in the market and the nature of previous dealings with the lender.³³ The lenders specified that first-time borrowers were usually tested with relatively small loan amounts. For large amounts, the lenders usually made inquiries about the project for which the funds were going to be used. Project attributes and extent of equity participation by the borrower were utilized to determine the size of the loan the lenders were willing to extend. Usually the borrower is not rationed, i.e., gets the loan he demands if his demand is 'genuine': the project is sound, the borrower has adequate equity in it and has the requisite goodwill. Denial of loans by lenders is never outright, but takes the form of inability to make loans due to lack of funds at the time or other similar problems. The average rate of rejection of requests for loans ranged from 35-50% for these lenders, (this is presumably an average for both check and cash loans).

All the lenders claimed that they had never searched for borrowers. In addition, they generally knew at least a

³³. TA(1984) report similar criteria in their survey of lenders, in terms of borrowers overall prosperity, cash position or liquidity, and commercial integrity.

few of the other lenders, lending in their geographical area, on a personal basis. In one case, the lender was located in a distinct shopping complex and met daily with all the other five lenders (finance companies) operating in that complex. Information flows between lenders may thus be significant; however, in the urban context, the sets of borrowers associated with individual lenders may not be identical. Despite not having to search for borrowers and close interactions between lenders, collusive behavior with respect to pricing may not necessarily apply. Although acknowledging that they occasionally lent at higher rates, all five lenders insisted that they mostly lent at the prevailing market rate, which was 2% per month. As one lender put it, "If you charge borrowers a high rate, who are otherwise sound, they get upset since higher interest rates reflect lack of reliability".

An important issue in the context of ICMS is the extent of volatility of interest rates; since these are unregulated markets, it is often presumed that the interest rates adjust to clear the market. None of the lenders, however, provided evidence consistent with this view. While one lender claimed that he had been lending at 2% per month since he started his operations in 1981, all others suggested they had used the same rates at least for two years prior to the survey. Other indirect evidence also supports the notion that the interest rates in the ICMS tend to not change over

relatively substantial periods of time. TA(1984), for example, found the average lending rates for loans by brokers and indigenous bankers in Bombay to established traders as equaling 12-18% per annum. The survey by NIPFP(1989) almost a decade later reported the same rates for that group; the market rate for wholesale yarn traders in Delhi was reported as 18% per annum by that study. Similarly, rates on callable loans were reported as 12% per annum by TA(1984) which are comparable to 1-1.25% per month reported during the time of this survey. NIPFP(1989) concluded that while the interest rates in the ICMs may respond to long-term trends, they did not appear to show much movement on a short-term basis. The lack of significant movement in the interest rates over at least the past fifteen years is all the more noteworthy if one recalls that the second half of 1980s saw high rates of inflation in an economy that has traditionally kept inflation at less than 5%. Three possible institutional reasons for the sluggish interest rates can be identified. Firstly, to the extent there is price leadership in determination of the rates, the market rates are often set by associations of traders, in a setting where a particular individual may lend but may also have to borrow at the rates decided. Secondly, to the extent there exists institutional fixation in price setting, as some respondents suggested, the interest rates are set as a fixed markup over formal bank rates; the latter

have not changed frequently or substantially, at least prior to the financial liberalization measures initiated in August 1991. Note, however, that upto the time of the survey, interest rate changes in banking sector had not had any impact on the informal rates. Finally, it is also likely that there may be some notion of fairness or 'just price' involved in interest rate determination. This may be significant given the small, close-knit aspect of specific markets and lack of tremendous disparities in wealth among participating individuals. Although interest rates within specific markets and regions may not show significant intertemporal variation, across regions and markets they appear to display considerably higher dispersion.

Lastly, the lenders were also asked to expand on the nature of default, and enforcement mechanisms. While delays were relatively frequent, actual defaults were identified as very few by all the lenders. On average, anywhere from 5-15% of their outstanding loans were delinquent in terms of delayed repayments. The delays are typically renegotiated with respect to the time (but not the amount) of repayment. All the lenders said they would make new loans to borrowers even if they had delayed repayments on previous loan; they would not, however, make new loans until previous loan was fully repaid. A delay is viewed as malafide default if the borrower further reneges on the renegotiated terms once or twice. One lender stated that given the intimate network

characterizing him and his borrowers, occasionally third parties would warn him that the money lent to a borrower may be getting jeopardized. At the first sign of delay in repayments, "strict follow up is required"; the lenders had employees who would go and ask for money at difficult times, i.e., in the presence of customers or business associates of the borrower. Another practice emphasized by the lenders in this context was to always be prompt in their own payments to borrowers, thereby setting up expectations of the same in return. For example, two lenders admitted that they were also organizers of chit funds (two each) and made it a point to pay the winner of the 'kitty' the full amount immediately, even if some member(s) was (were) unable to pay into the pool at that point in time but would, say, a day or two later.³⁴

³⁴. An interesting feature of the chit funds organized by both lenders was that there were two winners in each round, unlike the usual chit funds where only one person collects the kitty. The difference here was that the person with the penultimate bid was given a personal loan by the lenders, again at the time of the meeting itself. While both lenders insisted this practice was out of concern to avoid disappointment for the person with the losing bid, the responses highlight a neglected aspect of both moneylending and chit funds in the informal financial sector, namely, the obvious externality (chit fund as a preference-revelation mechanism for the lender) that is internalized by the (vertical) integration of the two activities. It is also interesting to note in this context the fact that formal banks in India have also participated in operating chit funds.

An additional mechanism for enforcing the credit contracts available to the lenders is provided by market-driven response of the private sector: private collection agencies. These companies have been growing in numbers and importance, to the extent that even an important bank is reputed to have recently resorted to their services, in relation to its lending operations focusing on consumer financing of automobiles. Although such services are provided in industrialized countries also, their existence is noteworthy in the present context in terms of the collection mechanisms they in turn employ. None of these companies were a part of the sample surveyed here, but one clue towards their mode of operations, based on interviews with diverse individuals, is that few of them hire lawyers. None of the people interviewed in the present context had any personal experience either with these companies, or related experiences in their own relations with their sources of credit. However, one respondent volunteered an example about an acquaintance's problems with a lender. The concerned lender had strong connections with extended family living in villages, in proximity to Delhi. When faced with a potential default from this borrower, he had about twenty men trucked into the city from the village, who parked themselves in the borrower's house, drinking liquor. Without any explicit violence, often alluded to in the context of debt recollection by lenders, the debt was repaid

and the men departed. However, none of the lenders surveyed for this study were willing to delve into details of enforcement mechanisms beyond those already identified here.

V Summary and concluding remarks

Much of the previous literature on urban informal credit markets in developing economies has focused on documenting their existence and importance, and succeeded admirably in that objective. However, these attempts mark just a beginning in attempts to attain a comprehensive understanding of these markets. Using some existing data as well as primary data generated in Delhi, this study has attempted to provide a broader understanding of the workings of these markets in India, and of their institutional aspects.

Even with assumptions aimed at introducing downward biases, the estimated size of aggregate urban informal credit in India is formidable. In all likelihood, it is at least as large as total bank credit in the economy, if not larger. Surveys of small firms having access to formal bank credit indicate that informal credit accounts for more than half of their total credit; a fairly significant proportion of small firms in the economy do not have any access to formal credit. In addition, wholesale and retail trading constitutes the most dominant actor in the informal financial sector, accounting for anywhere from half to

almost two-thirds of total estimated informal credit. Small-scale industry, transportation and construction are the other major users of informal credit.

Informal credit markets catering to traders, especially wholesalers, have a long history in India, pre-dating the formal sector, and are quite well developed in terms of the amounts of funds intermediated, the speed and efficiency of the intermediation, and the sophistication of the participants as well as the market as a whole. Participants in these markets often have access to diverse institutions, such as market-wide organized associations that can create, maintain and enforce complex contractual mechanisms that lower costs of transacting for individuals. It is quite likely that these markets are used as a reference, at least with respect to interest rates, by other types of ICMs, such as those catering to small-scale industry, construction and transportation; these ICMs are relatively less developed, usually taking the form of small groups of close-knit individuals. In general, the demand for credit in the ICMs is such that formal banks cannot adequately cater to it, implying that the formal and informal credit are more often complements than substitutes, although often there may be no link between the two at all (units that have access to only one or the other); more narrowly, there seems little evidence to suggest competition between suppliers of formal and informal credit.

The evidence in this study supports the view that loans in the ICMs are of fairly short duration; they are most commonly of duration up to three months and do not often exceeding six months in duration. However, loans can and do get renewed. The results also indicated a perceived market rate that individuals, across different ICMs in the city, seemed to be aware of, although it was not possible to ascertain whether they could also necessarily borrow at that rate. The market rate appears to be the same as the rate quoted in the large traders' markets on loans that are not callable. In contrast to the usual presumption, available evidence suggests the interest rates in these markets do not show significant intertemporal variation, with the rates changing little over substantial periods of time. There is also no presumption that loans in the ICMs are necessarily more expensive than in the formal sector; the NIPFP(1989) survey identified large groups of borrowers who used ICMs because the costs to them were lower in these markets. The term structure of interest rates in informal transactions is flat up to six months horizon.

Direct evidence regarding the information structure surrounding informal credit transactions strongly negates the premise that the transactions occur in an anonymous setting. Not only do the borrowers and lenders have considerable personal interactions, including those not necessarily linked to credit transactions, but lenders also

usually know the uses the funds are being put to, and monitor the overall business position of the borrower. Interestingly, however, uses of funds are not explicitly identified in the contracts, nor do lenders seem particularly interested in intervening in the event the funds are used towards different purposes. This conforms with the fact that adverse income shocks to the borrowers are, defaults aside, expected to be, and in practice are, borne by the borrowers themselves. Feasibility of such arrangements derives from the relatively higher levels of wealth of borrowers in these markets combined with low sizes of debt relative to the borrower wealth. An implication of such contracting is that moral hazard with respect to effort on part of borrower is relatively insignificant to the lender. In addition, the frequency and intimacy of contacts between borrowers and lenders suggests minimal role for adverse selection and moral hazard, due to information asymmetries, for transactions in these markets. The infrequent use of collateral provides indirect evidence supporting absence of significant information asymmetries among transacting individuals. Moral hazard related to strategic default is quite important, however, which is consistent with use of collateral with large loans. Finally, despite the absence of risk sharing indicated by contracts that are not contingent on shocks to borrower income, there is in practice some flexibility with respect

to the timing of repayments. This allows borrowers intertemporal smoothening in the event of adverse shocks that are large relative to wealth.

Although available evidence on informal credit markets is still too rudimentary to allow substantial policy analysis, this study has at least two broad implications for policy that need highlighting. Firstly, policies towards informal financial sector cannot be divorced from fiscal policies in the economy. At the simplest level, for those inclined to view informal credit markets as merely a response to regulations in formal credit sector, financial deregulation and liberalization will not by itself see the informal sector vanish. Given the large black economy in India and its, by definition, restricted access to formal financial sector, the informal markets will still play a significant role in financial portfolio management. Demand for black funds, which is quite large and frequent in the economy, cannot be satisfied by formal banks. Similarly, the supply of black funds has only limited outlets into the formal saving instruments; higher returns on the latter may thus have only a limited supply on the supply of black funds into informal instruments of savings.

An example of the inadequate understanding, in a policy-making context, of the close linkages between informal credit and fiscal policies, is provided by the recent introduction of post-dated checks in India.

Theoretically, credit markets characterized by moral hazard in the form of strategic default can be made better off by improvement in enforcement technology. Taiwan had introduced the system of post-dated checks quite successfully. Although informal credit transactions were not legitimized, individuals dishonoring post-dated checks were vigorously prosecuted by the courts, thus enhancing contract enforcement in informal credit markets. However, the introduction of post-dated checks in India has led to results that are, on the whole, quite insignificant. They have been embraced by formal banks and non-bank financial intermediaries who use them routinely in their financing of consumer durables. However, not surprisingly, few, if any, of the transactions in informal credit markets utilize these instruments to enhance enforcement.

Secondly, policies towards informal financial sector should not be based upon decrees or other such administrative controls, but should instead focus on market-based interventions. The informal financial sector does not seem to be in competition with the formal financial sector, catering primarily to markets that the formal banks cannot or do not serve. In addition, ICMs and the participants in these markets are relatively sophisticated in their abilities to get around controls, especially when they are indifferently enforced. Lastly, there is still no firm evidence regarding the relative efficiency of formal and

informal credit markets in India. For all these reasons, the most desirable framework for policies towards informal credit markets would be to focus on improving the formal markets and institutions, letting them compete, if necessary, with the informal markets and institutions. At the same time, incentives can be provided to intermediaries in the informal markets to integrate into the formal financial sector. The desirability of doing so stems from a concern that a large, de-coupled informal financial sector weakens effectiveness of monetary policy, as well as from the fact that integration of asset markets in the economy can be beneficial based on what economic theory tells us.

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ANNEX A

ON THE BLACK ECONOMY IN INDIA

The ubiquity of black money transactions in India is well recognized. Indeed, it would be difficult to conceive of individuals in the economy that are not affected by black money transactions. For example, the purchase of even a small item of household consumption from a retailing shop will be priced higher if the customer demands a receipt for the sale; these transactions are inevitably without sales receipts. The dual pricing of commodities also exists for large consumer durable items and particularly for real estate transactions, but takes the form of under-reporting of the actual price instead of sales. Thus, the ratio of black (undeclared) component to the white component for real estate sales in Delhi was estimated as 45 to 55 in 1978-79, 60 to 40 in 1980-81, and 65 to 35 in 1982-83.¹ In a similar vein, a large manufacturing concern, registered under the Factory Act, may suppress the output declared for excise taxation and keep the sales of this output off the books, to be distributed among controlling elements of the ownership and/or management; even public-sector entities are not entirely immune from these practices. Another

¹. All figures as well as some of the discussion here are from NIPFP(1985) which the interested reader should consult for greater detail.

manifestation of the pervasiveness of black money transactions is the endless string of petty to hefty bribes involved with a high proportion of interactions with the state machinery.

Although black money has a stock as well as a flow concept, which are not usually distinguished in its popular usage, empirical estimates have been confined to the flow of black income in the economy. Black incomes are generated as unaccounted income or as the result of non-reporting or under-reporting of incomes in the economy. In addition, incomes accruing due to illegal activities, such as prostitution and gambling, are also part of aggregate black income. Measuring the size of the black income in the economy, by definition, entails indirect methodologies; common approaches in this context are the fiscal approach and the monetary approach. The use of these approaches by some researchers have yielded the size of the black income as high as 60% of the aggregate measured income. The study by NIPFP(1985), on the other hand, arrived at more conservative estimates: 15-18% of GDP in 1975-76 and 18-21% of GDP in 1980-81; these estimates do not include incomes generated from illegal activities. Although two points do not necessarily constitute a trend, the increase in the ratio of black income to GDP is not inconsistent with the increasing ratio of the black component of real estate prices reported above.

Based on a questionnaire distributed to senior revenue officials in tax departments, the NIPFP study also identified the major sectors for generation of black incomes, the most common forms in which black wealth is held and the methods utilized to whiten black incomes and wealth. The respondents were asked to classify various activities into one of four categories: most important, very significant, significant and minor. Focusing on the percentage of respondents classifying a sector/activity as most important or very significant, the following emerged as dominant in generating black incomes:- capital gains from real estate transactions(92%) (i.e., 92% of the respondents ranked them as most important or very significant), film industry(91%), large-scale manufacturing(89%), incomes from professions such as doctors, lawyers, accountants and architects(78%), incomes in construction sector(77%) and wholesale trade(70%). Although ranked relatively lower in this scale, three other dominant sectors/activities in this context were: cuts and kickbacks on contracts, bribes and other financial malpractices(57%), small-scale manufacturing(46%) and retail trade(45%). From the point of view of the informal credit markets, the dominance of wholesale trade and to a lesser extent of retail trade as generating black incomes is noteworthy.

With respect to the most common forms in which black wealth is held, the respondents had to choose between three

categories, namely, very significant, significant and minor. The results, with the figures in parentheses for percent classifying as very significant, were: undervalued residential real estate(70%), undervalued commercial real estate(65%), undervalued stocks in business(51%), gold and other precious metals(40%) and "benami" financial investments(34%).² In general, the portfolio distribution of black wealth may vary considerably across different categories of economic agents, with professionals and salary earners likely to hold a higher proportion of their black wealth as cash or jewelry, than businessmen who may have easy access to alternatives such as 'undervalued stocks in business' and 'benami financial investments' in their own enterprises or in those of interlinked business concerns. It is possible, therefore, that the importance of friends and relatives as sources of informal loans may to some extent be a disguise for the reinvestment of black money into the business.

This point is reinforced by the results concerning methods for converting black incomes and wealth into white: "hawala" loans were ranked by 87% of the respondents as very significant.³ In its simplest form, a hawala loan is

². "Benami" literally means without name and refers to holding assets using somebody else's name as a front.

³. It should be noted that the easiest and most popular method for converting black income and (continued...)

simply a loan shown on the liabilities side of the balance sheet where the lender is either a fictitious person or a friend or a relative. No funds are actually loaned with the corresponding entry on the asset side shown as cash or other assets. Three other popular methods exist for converting black funds into white. Firstly, transfer of funds on papers to friends and relatives (and even household servants) who have little or no incomes, payment of corresponding taxes, and return of the funds in the form of white loans, (66%). Secondly, individuals may show the black income as income from agricultural activities which are not subject to income taxes, (52%). Lastly, the black money may be used to purchase foreign exchange in the black market and repatriated as "gift" from abroad, (37%). Needless to say, the popularity of one method over another depends on relative costs of the methods. For example, during the three month ending in December 1991, motivated by the tenuous balance of payments, the government of India had granted complete immunity ("no-questions-asked") to gifts from abroad. The consequence was a lowering in the cost of converting black money into white using repatriation route to approximately 28%, as compared to the market rate of 50%

³(...continued)

wealth into white is simply through consumption. The possibility of detection in this process is significantly lower; some estimates suggest that almost two-thirds of black funds are used for consumption while declared consumption is suppressed, thereby increasing white savings.

for conversion using (purchasing access to) fictitious transfers to low-income tax payers followed by white loan. In the period of three months, almost 3.2 billion U.S. dollars were repatriated into the country! The breakup of the total amount into repatriation of flight capital versus conversion of domestic black money into white is indeterminate although anecdotal evidence suggests both were significant components. Given the implications of diversification by portfolio theory, the amounts suggest vast quantities of both flight capital as well as domestic black money. The magnitudes involved with respect to domestic money transactions also indicate the sophistication and scope of another informal financial market, namely, the parallel markets for foreign exchange. This is another example of a commonly held view, at least in the context of some Asian economies, that the economic agents are capable of evolving well organized and sophisticated financial markets without assistance from the state.

ANNEX B

QUESTIONNAIRE

Module A: For Borrowers: Search and Negotiation

- 1> How did you decide who to borrow from? Did you know him personally before borrowing? Who are the other sources you borrow from?
- 2> How many other people did you approach before getting access to the loan(s) from the present source? Why did the other negotiations not succeed? (e.g., lender refused the amount demanded, or the borrower found terms unacceptable, etc.).
- 3> How do you decide how much loan to ask for? (e.g., self assessed need or feasibility, conditioned upon the identity of the lender, etc.).
- 4> If you decide not to borrow from the present source, would you have access to other lenders? If so, how many? How long before you could have access to loans from the new source? Would the new loans be on similar terms?
- 5> With the successful loan, who decided the actual amount lent, the rate of interest, and, if any, the duration? (I.e., is there a fixed time for the repayment?).
- 6> Was the actual loan less than what you had demanded? Would you have desired a larger loan? If desired > demanded loan, why?
- 7> Was the amount repaid the same as the agreed amount? Was the amount owed flexible? e.g., would the lender forgive non-repayment if your business or family had an accident?
- 8> What was the duration of the last loan you borrowed? Is the duration of the loan fixed? I.e., are you allowed delays in repaying? If so, under what conditions? Is there a penalty for the delay?
- 9> What would happen if someone kept on delaying repayment?
- 10> What would happen if someone decided, for some reason, to not to repay at all?
- 11> (For repeat borrowers) How has the relationship changed over time? (Larger loans, lower interest rates, etc.).
- 12> Suppose you have to make a payment, you cannot delay, and

you are short of liquidity, what would you do?

- 13> Do you normally try to plan so that you always have enough liquidity to make any loan repayments?
- 14> Do you know if there is a market rate of any sort? What is it these days?

Module B: Observed contractual outcomes

- 1> How many sources for the total loans?
- 2> What is the amount of credit as a proportion of total sales (sales over the duration of the loan)?
- 3> Are the loans against collateral? What type of collateral? (e.g., house, car, factory, machines, etc.).
- 4> When is repayment due? Can the loan be recalled before that?
- 5> Are you selling your output to the lender or buying any inputs from him? If yes, is the product price agreed to at the time of the loan? Will you still get the loan if you do not buy/sell from/to the lender?
- 6> How long have you known the lender?
- 7> How often do you meet the lender? Do you meet more often if you have actually taken out a loan? How often do you meet him when you do not actually have a loan from him?
- 8> How many other people does he lend to? Does he lend to them at the same rate of interest?
- 9> Are there any brokers who also arrange loans? Do they charge commissions?
- 10> Do you know what the interest rates are for loans of longer duration? How would the rate change if you borrowed more or less?
- 11> Would you be able to get a larger loan if you wanted to? Even if you were willing to pay a higher interest rate?
- 12> How does the lender collect payments from you?
- 13> What types of actions does the lender undertake if repayments are delayed too much?
- 14> What types of actions does he take against people who do

not pay or cannot pay at all? (e.g., if business is bad, will lender force borrower to sell jewelry to get payments?).

- 15> Would you be able to get more credit and sell more if the market demand suddenly went up?
- 16> If the market becomes slack, do you still borrow small amounts to give business to the lender?
- 17> How does the lender determine your liquidity?
- 18> What did you use the loan for? Did the lender know what was the reason for borrowing? Was the use specified when negotiating the loan?
- 19> How should bank operations and policies be changed to make them more useful to borrowers like you?

Module C: Trade credit and chit funds

- 1> Type of credit
 - (i) Production: Buys inputs on credit.
 - (ii) Marketing: Sells output on credit.
- 2> Size: As a proportion of all non-labor inputs (total output), how much is bought (sold) on credit?
- 3> Interlinkage: Do you sell output to the person you buy inputs from?

Information

- 4> How do you know the other party and for how long?
- 5> Is the other party buying (or selling) from/to other firms in the area or that you know?
- 6> How long did the two of you do business with each other before initiating trade credit? Who initiated the idea? For how long did the originating party ask for credit before the arrangements were implemented?
- 7> How long is the trade credit available for?
- 8> Can the payments be delayed? For how long? Under what conditions?

- 9> Is more credit extended when payments are in arrears?
- 10> Is there a cash discount? How much? Does it vary with the amount of goods purchased/sold?
- 11> Production credit: What proportion of the input suppliers output do you buy?
Marketing credit: What proportion of your total output is sold to/through the other party?
- 12> Does the amount of trade credit vary much? For what reasons? Has it been significantly different in the past six months?
- 13> Do you participate in chit funds? How many?
- 14> How many of the people in the chit fund did you know before joining? Did you do business with any of them? Did you do business with any of them after joining?

Module D: For Lenders

- 1> How important is lending as a part of your business activities?
- 2> On an average, how many loans do you have outstanding at any point in time?
- 3> What is the average duration of the loans? Does the duration vary a lot among the loans?
- 4> How long have you been active as a lender?
- 5> What is the biggest risk you face when making a loan/(production risk: borrower's business will fail; or, default risk: he will not repay?).
- 6> Do you ask for collateral? If so, under what conditions?
- 7> What types of uses do you make of the funds when they are not loaned out/ e.g., banks, mutual funds, etc...
- 8> Do the loan sizes vary a lot? What is the range of loan amounts? Is there an average loan size?
- 9> Are your borrowers situated locally or are they also from outside (say a day's distance?)
- 10> How do you know them - personally or through third parties? If third parties, what is the nature of your

relationship with the third parties? Do the third parties guarantee the loans? Are they themselves lenders?

- 11> What is the shortest amount of time you have known someone (personally) before lending to them?
- 12> How often do you meet/interact with borrowers on a social or business basis that has no direct connections to credit? (i.e., when the borrower does not owe any money at the time?).
- 13> Do you ever search for new borrowers?
- 14> How often do you turn down requests for loans? Why? Do you ever reject requests from people who have borrowed from you before?
- 15> How do you decide how much to lend to a borrower?
- 16> How do you determine the interest rate to be charged to a borrower? What would happen if you charged a higher interest rate?
- 17> Do the rates vary with different people? Do the rates change much over time, e.g., on a weekly or a monthly basis?
- 18> Do you know what the borrower does with the borrowed funds? Does it matter to you what the borrower does with the loan money?
- 19> Do you know if the borrower has loans from other sources?
- 20> Do you know what other sources the borrower can borrow from (other than maybe his family)?
- 21> How do you deal with a new borrower?
- 22> What type of information do you need before lending to a new borrower? How do you acquire this information?
- 23> Do you mobilize funds from others? Do you ever borrow to make loans?
- 24> Do you know if there are other lenders like you in the area? Would you guess how many? Do you have any professional or social interaction with them?
- 25> Do you use or know others who use brokers to make loans?
- 26> Do the brokers guarantee loans arranged by them for any

borrower?

- 27> Are there any conditions under which you would allow postponement in repayment? What are they? For how long would you allow the delay?
- 28> Are there conditions under which you would forgive a loan, i.e., the interest or the principal? What are they?
- 29> Do you make additional loans to borrowers who have been unable to repay the previous loan? If so, under what conditions?
- 30> At any given time, what proportion of your loans (on an average) are overdue? What is the average delay of the overdue loans?
- 31> Do you have loans that have never been repaid (since you began lending)? How many? Do you expect they will be repaid?
- 32> How do you decide that a borrower is defaulting?
- 33> If a borrower decides not to repay, how do you attempt to change his mind?
- 34> What is your procedure for delayed repayments? I.e., what steps do you undertake to expedite repayments?
- 35> What is the average time spent in recovering overdue loans?
- 36> Do you ever recall loans before they are due? Why? With how much notice?
- 37> If lending is profitable, why do you not lend to more people?
- 38> When you do lend money, are there borrowers who get less than what they ask for? If so, why?
- 39> Finally, some information (if possible) on term structure of interest rates.