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Enforcement, Contract Design, and Default: Exploring the Financial Markets of Costa Rica

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Introduction

This paper examines the institutional determinants of incentives to repay in Costa Rica and their effects on defaults and the design of financial contracts. Enforcement mechanisms help to determine how much is paid back to creditors and how much shareholders receive as dividends. Theoretically, however, the most important effects will be on the observable characteristics of contracts, as rational agents foresee the incentives of other parties. As courts enforce contracts and punish defaulters, they determine the form contracts take and the magnitude and direction of investments.

Recent work by La Porta *et al.* (1996) reports significant differences in the financial market of countries that have different types of legal systems. The most notable difference is between countries with a French civil law system and those with British common law traditions. Costa Rica is much closer to the civil law tradition.¹ While this international comparison is by itself highly suggestive, a closer look at actual enforcement, contracting design, and creditors' outcomes in Costa Rica can provide a better understanding of the effectiveness of the legal framework, alternative enforcement mechanisms, and lenders' responses in allocating credit.

The paper contains findings on the practices of financial intermediaries that are discussed in the context of contract theory, with a focus on the formal financial intermediaries that are scattered throughout the country.² Much of the information comes from primary sources, including a sample of almost 1,700 civil trials and a detailed survey on the credit policies of 31 intermediaries.³ The data cover a large variety of intermediaries, permitting an investigation of the ways outcomes vary with creditor practices.

This paper reviews the creditor-borrower relationship at all stages—*ex ante*, *interim*, and *ex post*. The evidence supports the importance of collateral and other *ex post* repayment incentives. Collateral is a critical variable in granting a loan, as well as in determining how closely the bank follows it, how much is recovered in case of default, and how efficiently the courts function as an enforcement mechanism. The evidence also suggests that, contrary to the common view, banks are not passive lenders. They remain alert to how well projects perform

¹ Costa Rica is not included in their study. The corresponding values are derived from the authors' own readings of the Civil and Commercial Codes. The values are reported in Monge, Cascante and Hall (2000).

² Thus important sectors such as housing credit, trade and retail credit, and informal credit are omitted.

³ Box 1 identifies the banks interviewed.

and rely on previous experience and a rather sophisticated informational network in granting credit.

Financial Intermediation in Costa Rica

Despite Costa Rica's small economy, a diverse group of financial intermediaries operates in the country.⁴ While demographic heterogeneity could explain the variety of intermediaries, government intervention has also had a remarkable effect. After the civil war in 1948, the new government nationalized the three largest commercial banks. Together with the already public National Bank, these banks have since allocated most of the credit in Costa Rica. The new government regarded nationalization as one of its major achievements, and later attempts to liberalize these banks faced fierce opposition from specific interest groups as well as widespread skepticism and general unpopularity. Important political sectors still oppose efforts to complete the privatization of the remaining public financial intermediaries. Nationalization prevented private entities from accepting deposits, but government intervention was not confined to the creation of this "deposit monopsony." The Central Bank was given direct control over interest rates (both lending and borrowing) and over the allocation of credit through quantitative restrictions on lending for different activities.

The events of the second half of the twentieth century in Costa Rica can be succinctly summarized as a very slow but persistent reversal of earlier nationalization policies. In 1972 non-banking institutions were allowed to obtain funds from the public in the form of investment certificates. While restrictions were placed on the maturity of these certificates, the simple fact of their existence resulted in a remarkable growth in private intermediaries, both in number and in shares of total bank credit (Figures 1 and 2). In 1984 private banks began intermediating resources from foreign loans, national institutions, and multilateral cooperation agencies. In the second half of the 1980s, the authorities lifted credit quotas and ended direct regulation of interest rates. Moreover after the liquidity crisis of 1987, the General Auditor of Banks extended its authority to include nonbonding institutions, becoming the General Auditor of Financial Institutions (AGEF). But the reform maintained important asymmetries among intermediaries. First, private banks could not receive deposits with a maturity of less than 180 days. Second,

⁴ As of September 1998, the Superintendency of Financial Institutions (SUGEF) was regulating 3 commercial public banks, 23 private banks, 35 savings and loan cooperatives, 17 private nonbanking financial companies, 9 mutual funds for housing, and 3 other intermediaries created under special laws.

they did not have access to the Central Bank discount window. Third, the AGEF did not regulate cooperatives and other intermediaries created by special laws. Fourth, the Central Bank implicitly backed only those deposits issued by public institutions.

Liberalization generated a trend of decreasing concentration in the banking industry, as illustrated by the most common concentration indices, here applied to the assets of regulated intermediaries (Figures 3 and 4).⁵ The figures show that the decrease in concentration is the result of the greater presence of private banks and also to the lower concentration *within* the group of private intermediaries.

The 1990s ushered in a new wave of liberalization. Restrictions on operations in foreign currency that had long been in place were, for all practical purposes, relaxed for all types of banks. Asymmetries in the regulation of financial intermediaries were eliminated. Private banks were given access to the discount window of the Central Bank and allowed to accept deposits with any maturity, including demand deposits.⁶ In 1998 the government instituted a further reform, creating three superintendencies to regulate financial markets under the control of the National Council of Financial Supervision (CONASIF). The AGEF became the General Superintendency of Financial Entities; two other agencies, the General Superintendency of Stock Markets (SUGEVAL) and the General Superintendency of Pension Funds (SUPEN) regulate the securities markets and pension funds, respectively. The new Superintendency of Financial Entities extended its supervisory powers to the savings and loans cooperatives and other special banks like the Banco Popular, which is financed with compulsory savings from workers and employers. The superintendency follows the guidelines set out in the Basle Accords. While regulation in terms of capital, liquidity, and management varies across types of intermediary,

⁵ The following explanation applies: N is the number of firms in an industry and $j=1,2,3,\dots,N$ indexes each of them. In addition p_j is the share of firm j in the industry. The Hirschman-Herfindhal index is defined as $HH \equiv \sum_j^N p_j^2$. HH is always between 0 and 1, and the higher it is, the more concentrated is the industry. Entropy is defined as $E = -\sum_{j=1}^N p_j \log_2(p_j)$. It ranges between 0 and $\log_2(N)$, and the lower E is, the higher the concentration. Relative Entropy is defined as $E/\log_2(N)$, so its values range between 0 and 1, independently of N . Overall assets rather than just credit are used here, because government debt and other bonds are an important component of banks' portfolios. The calculations exclude institutions like Banco Popular, the Fund of the National Teachers Association (ANDE), and the cooperatives, which until recently were not regulated.

⁶ Banking intermediaries can create checking accounts, provided they open agencies in rural areas or deposit part of these accounts in the public banks.

credit is regulated and graded uniformly. Despite these changes, the Central Bank still insures only the deposits of public banks.⁷

Intermediaries finance a wide variety of activities (Figure 5).⁸ The largest share is personal credit, which encompasses any financing used for household consumption, including credit cards (housing, however, is included under “other”). Services include tourism, the country’s fastest-growing industry since the late 1990s. Agriculture and other primary sectors represent a very small fraction of bank credit. While bank credit is not necessarily representative of total credit, this breakdown of activities financed by banks shows the variety of uses for credit.⁹

Since 1995 public and private banks have shared the credit market almost equally (Figure 2).¹⁰ Yet the activities they finance differ (Figure 6). Public banks are markedly more dominant in agriculture, reflecting their extensive network of agencies and branches in rural areas and their institutional expertise. But credit to the fastest growing productive sectors—manufacturing, commerce, and services—is largely in the hands of private banks, reflecting the greater flexibility these banks show in responding to new activities. In some sectors special banks have acquired a notable market share, including the Fund of the National Association of Teachers (ANDE) and Banco Popular (personal credit) and the National Bank of Mortgages and Housing, or BANVHI (housing credit).

Overall default rates are not very high, especially for public and private banks, and reflect mostly arrears. Moreover, banks experience the highest default rates in those sectors where their participation is lowest (Figure 7). On average private banks have lower default rates than public banks. Except for the small number of loans in legal collection, however, the difference in the default rates of private and public banks is not great. For special banks, however, the default rates can be significant. The largest number of defaulted loans are in the manufacturing sector

⁷ This fact is not explicitly stated. But the Central Bank backed the deposits of the liquidated Banco Anglo, although it has not covered the deposits of liquidated private banks such as the Banco Germano.

⁸ Cooperatives are not included because, as of 1998, they had not been added to the database.

⁹ Several biases exist, however. First, a large fraction of credit for agricultural uses is generated in nonbanking institutions, as in the coffee sector. Second, as confirmed by interviews with bankers conducted as part of this study, many loans to other productive sectors are classified as personal credit because borrowers want to speed up the approval process. Third, a large share of personal credit is allocated by cooperatives, retail stores, and other traders. Fourth, housing is largely financed by the Mutuales, financial companies that specialize in housing credit. Some casual evidence also suggests that the credit extended by street vendors, informally called *polacos*, is important for urban low-income households.

¹⁰ The balance has been changing, however. In February 1998 private banks had a larger share in total credit.

(55 percent of loans are late or in legal collection). This pattern suggests that the intermediary's expertise in the sector reduces the default rate.

Contract Design and Bank-Borrower Relationships

Since the legal framework is common to all intermediaries, any differences in the number of defaults across banks must result from differences among the banks themselves—and their clients. Matching borrowers and intermediaries, a process probably complicated by adverse selection, can account for some of the differences. But ultimately these differences are determined by the intermediaries' credit policies, which affect repayment incentives. These policies set screening procedures, collateral requirements, methods of monitoring active loans, and actions taken on non-performing loans.

The information presented here on credit policies is based on responses from a sample of 31 intermediaries to a 1998 questionnaire.¹¹ The sample consists of 15 branches of the 3 public banks, 8 private banks, 5 savings and credit cooperatives and 3 other banks (Banco Popular and 2 private banks) owned and managed by groups such as cooperatives and labor unions (Box 1).¹² The sample provides geographic and demographic variety. It contains 13 intermediaries in the San Jose metropolitan area (all with headquarters in San Jose) and 18 intermediaries scattered in various rural areas, including the southern and northern regions and the Pacific and Atlantic watersheds.

The intermediaries are classified according to demographic type (metropolitan or rural) and institutional type (public, private, cooperative, and other). The questionnaire used three types of multiple-choice questions designed to measure how often intermediaries take certain actions and whether certain items are relevant to credit procedures. The first involves the frequency of a given action by the intermediary; the alternatives are never, rarely, occasionally, frequently, very frequently, always. The second type asks the relevance of a given item; the alternatives are irrelevant, little importance, some importance, important, very important, crucial. The third type

¹¹ No public record or comprehensive study on the credit policies of intermediaries is available. The questionnaire was answered by the intermediaries' credit manager with the help of credit and collection personnel.

¹² The two cooperative banks were liquidated in 1999.

is a yes-or-no question. For tractability the answers are grouped as frequently to always and important to crucial.¹³

Screening Projects and Borrowers

In general entrepreneurs know more about themselves and their projects than creditors do. Most theoretical models take one of two extreme views: that the characteristics of the project are common knowledge or that only the entrepreneur knows them. The latter view leads to models of adverse selection in which intermediaries' contracts must consider the incentives to entrepreneurs of revealing such information. In practice, however, banks can try to acquire information on projects and entrepreneurs. This type of information gathering is costly, but it can help banks decide whether to grant loans and what terms to apply.

The questionnaire asked banks about the process used to investigate credit applications. The questions covered every practice that could conceivably yield useful information about the prospects of a project and the characteristics of the borrower and the collateral. The results show that banks (especially private institutions located in the San Jose metropolitan area) actively screen potential borrowers (Table 8). For example, 85 percent of metropolitan banks and 75 percent of private banks visit firms that apply for credit, especially new clients. In general intermediaries check the applicant's reputation, although metropolitan and rural banks use different mechanisms.

The most common screening activity is careful scrutiny of both the collateral and the borrower's overall assets, including a review of relevant financial statements. Regulation indeed provides an incentive to demand collateral, because banks are required to maintain reserves on loans (depending on performance); for large loans, reserve requirements depend on collateral. While banks take project risk into account, they assign only moderate importance to sectoral and international risk. Finally, intermediaries sometimes suggest modifications to the intended use of funds, but this practice is not particularly pervasive.

The questionnaire allowed respondents to prioritize various criteria for granting a loan. Because different combinations of these items could produce the same result for an application, respondents were asked to note how much a positive assessment of each item would increase the

¹³ The choices for frequency were never, rarely, occasionally, frequently, very frequently, and always. The options for relevance are irrelevant, little importance, some importance, important, very important, and crucial. The results are grouped as "frequently to always" and "important to crucial," and these categories are used in the analysis.

chances of approval.¹⁴ All the items included in the questionnaire were rated as very important (Table 9). But borrower's characteristics—including solvency, credit references, previous experience, and collateral—were considered more relevant than project characteristics.

Determining the Interest Rate and Other Terms

According to economic theory, banks and entrepreneurs consider each other's incentives when designing contractual agreements. These incentives appear at different times—before and during the period covered by the contract and after the contract is concluded. Contractual arrangements may stipulate action plans and payment schedules, but one key variable is the interest rate. Respondents were asked to rate the importance of various loan characteristics in setting the interest rate (Table 10).

Surprisingly, the most important consideration in setting interest rates is the sector (economic activity of the project). This finding seems to be the inertial heritage of the interventionist epoch. However, items such as collateral, credit references, and previous experience—which are very important in the approval process—still retained some importance in setting interest rates, especially for private banks.

Interest rates are only one element in the contracts, which usually include a section on terms of reference that sets out certain procedures for both parties. The contents of this section are unlimited, and in principle it can be used to introduce responses to contingencies as well as communication and monitoring procedures. Banks make active use of this section. For instance, covenants can make provisions for contingencies—useful for dividing risks between entrepreneurs and intermediaries (Table 11). Table 12 shows the number of banks using covenants to cover shocks (called “unforeseen problems” in the questionnaire). Contrary to the predictions of models of risk sharing using private information, intermediaries set forth covenants more frequently for idiosyncratic shocks than aggregate shocks, even though the latter are more easily observable. Of the groups examined, public banks in rural areas set forth the greatest number of covenants for aggregate shocks. No private bank uses covenants for regional shocks, and only one metropolitan branch of a public bank does so. Covenants for shocks from projects and entrepreneurs are much more common among private banks. For the most part, cooperatives do not use covenants.

¹⁴ As opposed to a negative assessment—that is, how much a negative report on an item would affect the chance of

The responses suggest that, if anything, covenants are used to monitor the projects that are financed. Intermediaries were asked how frequently they use covenants to specify alternative monitoring mechanisms (Table 13). The responses to this question differ radically from the responses to the previous one. Banks use covenants primarily to oblige entrepreneurs to report on the results of the investment, to call back a loan or enact other suspension measures, and to mandate visits from bank officials. All but one of the private banks and cooperatives reported using the clauses for these purposes. It is safe to say, then, that covenants are used for monitoring purposes and not to offer insurance to entrepreneurs.

Monitoring

The questionnaire asked intermediaries about monitoring practices on outstanding loans. Again, most theoretical models make one of two extreme assumptions: that entrepreneurial effort (or physical investment) is unverifiable or that it can be verified at no cost. Both parties are better off if effort is verifiable, since the absence of moral hazard enhances possibilities for risk sharing and allows for relatively large projects (among other things). Contrasting these stylized models suggests that any mechanism banks can use to verify borrowers' actions can benefit both parties, the only counterweight being the cost of the mechanism. For instance, intermediaries would like to commit to monitoring borrowers, even in a random fashion, unless monitoring costs are prohibitive.

Table 13 reports the frequency of different actions across banks in the sample. As before, each entry indicates the number of banks within each category. Banks were asked how frequently they took each action before problems such as delays in payment developed. The findings show that banks actively follow projects' development and that they actively monitor, especially whether the loan is effectively used for the investment plan agreed upon. They require copies of invoices or other documents showing how resource were used, send bank officials to visit firms, and keep abreast of firms' overall solvency by reviewing financial statements.

Previous Experience

In the presence of constraints on incentives, the repeated interaction of parties can radically change the nature of the optimal contract and effectively increase expected welfare. The intuition

approval.

is simple: future payments and actions can be set as functions of current outcomes and actions, and since repeated replication of static contracts is always feasible, repeated interactions must necessarily increase the set of attainable allocations that is compatible with incentives.

Intermediaries were asked how they use the information acquired during previous experience with the borrower (Table 14). Nearly all the intermediaries keep a record of their experiences with the borrower and maintain an automated grading system. Borrowers are not always aware of this practice, however. Given the potential role of incentives in loan repayment, it is surprising that intermediaries are not more inclined to tell their clients about it. In fact, only three out of eight private banks tell their clients about this record.

How does such experience affect contracts between banks and borrowers? As already noted, previous experience is very important in deciding whether to grant loans. But it is also important in setting the terms of contracts (Table 15). It has a significant effect on most of the activities under consideration. Some 24 of 31 respondents regard it as important to the speed with which they process loan applications, the collateral requirements, the overall credit evaluation, the amount lent, and other renegotiation clauses. Previous performance can be described as relationship collateral, since it plays a role similar to physical collateral. Only its effect on the repayment terms of the loan is surprisingly small. Fewer than two-thirds of lenders (19 respondents) regard previous experience as important in setting the maturity, interest rate, repayment schedule, and grace period. Thus long-term relationships with banks are important in facilitating Costa Rican companies' access to credit, even though the relationships have few effects on interest rates and other terms of loan contracts.

Implicit Contingencies, Default, and Renegotiation

Projects financed by banks and other intermediaries usually entail risks that are beyond the control of both the entrepreneur and the creditor. A financial contract defines how the returns of the project will be divided. The repayment schedule, a function of how well the project is realized, defines how risk is allocated. In the absence of agency problems, both parties' attitude toward risk and the agents' hedging ability determine the optimal repayment schedule. One assumption that is commonly made—and that has intuitive appeal—is that financial intermediaries have greater risk tolerance, because they finance many projects with (partly)

uncorrelated returns. The optimal contract under these circumstances allocates most of the risk to the creditor.

This result contrasts sharply with actual financial contracts, most of which are debt contracts that in principle assign all risk to the borrower. Theoretical models can reconcile this fact with theory of agency problems. For example if the efforts of entrepreneurs are not observable or simply not contractible, entrepreneurs must face risks that stimulate effort. Alternatively if only the entrepreneurs observe the outcome but intermediaries can audit at a cost, the optimal contract takes the form of debt with the possibility of default. But incentive problems only limit the scope for risk sharing. Generally, theory predicts that repayment depends on how well projects are realized.

As has been noted explicit contingency clauses are a common feature of loan contracts. But what about implicit contingency clauses? Table 16 shows the response of banks to four different types of shocks. A significant number of intermediaries are willing to consider renegotiating their contracts when shocks occur. Metropolitan banks are more inclined to do so than rural banks, and intermediaries are more likely to renegotiate because of idiosyncratic shocks than they are because of aggregate shocks.

The questionnaire also asked about the terms banks are most willing to renegotiate when a borrower has difficulty making payments (Table 17). Banks appear to be most flexible in extending the term of the loan; many are even willing to grant grace periods. Metropolitan banks are more inclined to renegotiate than rural banks on all points. Private and public banks tend to be willing to renegotiate different items but in general renegotiate more frequently than cooperatives and other types of banks. Contrary to widespread belief, cooperatives do not offer more flexibility than other banks.

Finally, the questionnaire asked how the characteristics of both borrower and project affect the bank's willingness to renegotiate rather than take the case to court. In general, banks in the sample reply that they are willing to renegotiate as long as they are confident that the client is willing to repay. Accordingly previous experience with the borrower and reputation in the community are key variables in the decision (Table 18). Repayment capacity and information about the effort and care put into the project are also considered important.

Collateral and Default

The survey breaks loans down into six categories:

- Unsecured loans;
- Loans secured by real estate;
- Loans backed by other real assets, such as cars or other durable goods;
- Loans backed by fiduciary collateral, allowing the borrower's income to be seized in case of default;
- Loans secured by stocks or other securities; and
- Loans in which a third party guarantees repayment.

As Table 19 shows, loans backed by real estate and fiduciary collateral are the most common type of credit. Only two private banks grant unsecured credit, and then only to well-known entrepreneurs with whom the bank or their owners have had a long relationship. The fraction of loans backed by real estate is significantly higher for firms, as is the number of loans backed by other real assets (except for other banks). The proportion of loans backed by real estate is also higher for public banks than for other types of intermediaries for loans to firms and households. Cooperatives and other banks account for the largest proportion of household loans backed by fiduciary collateral.

A more direct measure of each institution's lending policy is the ratio between the total amount of the loan and the value of the collateral. If liquidity and the value of collateral have any effect on loan contracts, intermediaries should be adjusting the terms and amounts of loans to the characteristics of the collateral. In Table 20, the figures show, except for fiduciary guarantees, the ratio of the principal to the estimated value of the asset backing the loan. For fiduciary guarantees, the figures show the fraction of the borrower's monthly income that is necessary to make the loan payments. The salient feature is the considerable variation among types of guarantees and intermediaries. Loans backed by fiduciary guarantees are far less collateralized than all the others. Other banks seem to be the most liberal, since they lend the largest amounts against almost all types of collateral. Private banks appear to be the most conservative, except when it comes to fiduciary guarantees. Moreover while public and other banks do not differentiate their policies across firms or individuals, private banks are more liberal in granting credit to firms than to households, except when a guarantor is available.

What is the default rate with each type of credit? One problem with answering this question is the lack of a standard definition of default. When asked intermediaries gave several definitions of non-performing loans. These definitions fall into three categories: payments that are more than 1 day late, payments that are more than 10 days late, and payments that are more than 15 days late. The boundary between performing and non-performing loans varies with the type of bank. In general, cooperatives and other banks are the most lenient, private banks are the most rigorous, and public banks are somewhere in the middle. What is surprising is how sharp these differences are. Six of eight private banks use the first criterion, while all the cooperatives and two of the three other banks use the third criterion. All but one of the public banks define default according to the second criterion. But despite these differences there is a pattern to the default rates for the various intermediaries and kinds of collateral.

First, even though private banks use the first and strictest criterion, their default rates are lower than those of public banks, except for loans to individuals backed by real assets other than real estate (Table 21). Private banks also have lower default rates than cooperatives, but the two types of intermediaries are not really comparable because they use different criteria. Similarly, the two other banks have the highest default rates in loans backed by real estate, other assets, and fiduciary collateral, although they use the third and weakest criterion.

Second, bankers report that default rates differ according to the type of collateral. These differences are independent of the characteristics of the institution and borrower and of the criteria used to measure the default rate. The default rate on loans backed by securities and other assets or guarantors is usually negligible, and the default rate on loans backed by real estate tends to be lower than the rate for loans guaranteed by other real assets or fiduciary collateral. This evidence supports the hypothesis that the type of collateral has a significant effect on the allocation and performance of loans—a phenomenon consistent with the variations in loan-to-collateral ratio as a function of the collateral type. Given this fact it is appropriate to ask whether collateral affects the mode of resolution for defaulted loans. Does it affect the amount recovered by the lender?

Most defaulted loans never reach the courts (Table 22). Civil trials carry serious costs that represent a net loss for both borrower and lender. For this reason both parties are willing to bargain rather than turn to the courts. As Table 22 shows, private banks resolve a larger number of defaulting loans through renegotiation than public banks. In addition both public and private

banks are more likely to settle loans to firms through direct bargaining than loans to households. Finally defaulted loans that are guaranteed with stocks or guarantors are enforced in court less frequently than loans backed by other types of collateral.

Table 16 reports only loans extended to firms and thus excludes cooperatives. As the table shows, recovery rates are uniformly much lower with court procedures than with direct renegotiation. The proportion of loans recovered through renegotiation is remarkably high.

Civil Law and Its Enforcement

Courts are commonly considered the ultimate enforcement mechanism, since the law explicitly defines contractual forms and procedures for resolving conflicts among agents. But procedures are only one part of the story. The key issue is how effectively is the law enforced. Costa Rica has two different types of procedures for collecting debts, one for individual debts and the other for the total liabilities of an individual or a firm. The procedures are similar to those used in other civil law countries (see Monge, Cascante and Hall 2000).

Procedures for Collecting Individual Debts

Depending on how well defined the debt is, the creditor needs to start either an ordinary or executive trial. Ordinary trials require the creditor to establish the existence and amount of the debt, while executive trials simply enforce the debt. The type of executive procedure used depends on the form of collateral and can be simple (no specified collateral), mortgage (real estate) or pledge (other assets). A different procedure applies when one of the parties belongs to the public sector (Table 17).

Simple trials set in motion procedures that allow the creditor to seize enough assets from the debtor to repay the debt plus 50 percent of the interest and costs of the proceeding. The procedure is faster with specified collateral, requiring little in the way of valuation procedures and research to determine ownership of the asset(s).¹⁵ With collateral other than real estate, it is automatically presumed that the debtor accedes to executive privilege, that is, that the document defines the existence and amount of the debt. With real estate the contract must explicitly specify whether the debtor accedes to executive privileges. If not, the only legal procedure required is a simple trial.

¹⁵ Specifying collateral requires listing the loan in the Public Registry.

Procedures Governing Total Debt of Individuals and Firms

A number of procedures govern total debts of firms and individuals: bankruptcies (firms), insolvencies (individuals), and administration with reorganization by judicial intervention (a procedure very similar to Chapter 11 in United States), and special proceedings for liquidating financial intermediaries and securities market traders (Table 18). All procedures begin by freezing payments on any debt to give the bankruptcy receiver time to examine the documents backing all claims. Debtors as well as creditors can initiate these proceedings, usually for one of the following reasons:

- A debtor defaults on one or several debts (proof is required);
- A business closes or a debtor disappears unexpectedly; or
- A debtor transfers all or a large share of assets to third parties.

The process defines two types of creditors: common and separate. Separate creditors are those with specified collateral (mortgages and pledges), those with claims arising from renting farms or real estate to the debtor, and the public sector. Debts to the government have priority over all others.¹⁶

In 1989 a new procedure was introduced for firms in financial distress: administration with reorganization and judicial intervention (Table 18).¹⁷ A debtor could initiate the procedure on very minor grounds. The debtor was required to show up-to-date accounts for the last year and to present a financial statement and details of liabilities; the debtor must not have declared bankruptcy, had bankruptcy procedures initiated against the firm, or been convicted of criminal damage to private or public property. When the court declared the procedure open, it named a receiver in charge of managing the firm and its assets. This legal protection could last up to three years. The debtor was required to turn over management of the firm to a receiver (by law a lawyer) and to stop distributing dividends.

The new procedure had profound effects on creditors. First, it eliminated all executive and ordinary trials against a debtor, as well as any other procedure that involved the debtor (even

¹⁶ Even with specified collateral, separate creditors are adversely affected by a bankruptcy. First, the value of the collateral must be set by a specialist named by the court. Second, unless a date is set for the legal auction, the bankruptcy proceeding must include a court hearing—often a source of considerable delays. Creditors may also benefit: if the auction does not generate enough money to cover the debts, separate creditors can become a common creditor. This option can be valuable if ex post the creditor learns that the value of the collateral is lower than expected.

as a guarantor). Second, it impeded the initiation of new collection procedures against the debtor. Finally, interest on affected debts ceased to accrue. In a country like Costa Rica, where inflation has caused nominal interest rates to rise to more than 30 percent, stopping the accrual of interest can in itself significantly erode the real value of a debt. As expected, before the 1996 reform the law prompted many firms, even large ones, to request such legal protection.

Legal Enforcement

Three measures are important in appraising how well courts function: their accuracy in determining and enforcing commitments, their accessibility to the contracting parties, and their effectiveness in resolving conflicts promptly. The first is largely abstract, since no ideal benchmark exists for verdicts and no analysis has been undertaken. For this reason this analysis is confined to the two other measures.

Monetary costs of procedures. The cost of legal trials is an important dimension of the laws that protect the rights of creditors. Either party must take the costs of initiating a legal procedure into consideration when deciding to pursue a lawsuit. These net costs arise because of legal fees, procedural costs, and most importantly, because of lawyers' honoraria, which are aimed at increasing the potential net payoff at the expense of the other side. Thus, regardless of the verdict, both parties could be better off resolving a conflict on their own, replicating the transfers a judge would dictate and saving all the resources that would be sunk into the legal process. The more resources the procedures require, the more likely it is that parties will find alternative methods of resolving disputes. More importantly, rational forward-looking agents will avoid the possibility of conflict or change the conditions they will confront if a conflict arises. They can even avoid contracting in the first place.

From the perspective of a creditor deciding whether to start a trial, lawyers' honoraria are the single most important monetary cost to consider. Other judicial costs that are not covered by general tax revenue (such as required certifications) are very minor. Lawyers' effective fees therefore give a good indication of the cost to the creditor of accessing the civil courts.

In Costa Rica the Colegio de Abogados y Notarios, the lawyers' association, is very powerful. Any practicing lawyer or notary (also a lawyer) must be a member of the Colegio. Lawyers' honoraria for each type of procedures are fixed by the *Tabla de Horarios*. This

¹⁷ The law was amended in 1996.

document is a government decree and is jealously watched over by the College.¹⁸ Interviews with several lawyers specializing in civil law and with banking officials revealed that all lawyers charge the rates stipulated in the *Tabla*. Indeed, the only alternative is not to charge at all.¹⁹ Table 19 shows the marginal rates stipulated for the relevant collection procedures, as determined by the 1996 decree. The amounts have been converted using the October 1998 exchange rate of 250 colones to the U.S. dollar.

The *Tabla* defines marginal rates. For example, the lawyer for a plaintiff claiming a debt of US\$5,000 backed by a document with executory force would be paid according to the formula $0.125 \times 4000 + 0.09 \times 1000$, or \$590 dollars for the entire process. This example shows that the *Tabla* is regressive, as honoraria increase less than proportionately with the amount of debt. Arguably, the scheme should be even more regressive, as the lawyer has to perform practically the same amount of work regardless of the amount involved in the trial. The reason for the positive link between the honoraria and the amounts in dispute is to provide lawyers with an incentive to serve clients well.

These rates apply to the lawyers for each party. In the case of a debt worth less than \$4,000, then, conflicting parties would spend 50 percent just in lawyers' fees. In bankruptcies, judicial intervention, and concourse of creditors, the lawyer acting as receiver and overseeing the liquidation of assets receives the honoraria. Creditors wanting a lawyer's assistance to collect debts in any of these procedures must pay according to the rates displayed above for ordinary or executive trials.

The rates differ in two important ways. First, an ordinary trial costs twice as much as an executive trial, encouraging creditors to back their loans with documents that have executive force. Second, the same rate applies to executive trials regardless of the type or amount of collateral, even though the duration of a trial, the stages it goes through, and the outcome all depend on the collateral. If the collateral is substantial, for instance, the trial is settled in the first stage. Thus even if the cost of complete executive trials is in principle independent of the collateral, collateral determines the effective cost because it determines the length of the trial. In fact, the collateral may determine whether the case goes to court at all, depending on how the

¹⁸ However, in 1998, after the first draft of this paper was written, professional fees were liberalized.

¹⁹ The competition among lawyers seems to be based on the quantity and characteristics of cases, and some anecdotal evidence (but no formal evidence) suggests that there is an excess supply of lawyers.

creditor perceives the debtor's intention to repay. For this reason lawyers are not paid the full honorarium up front; instead, they are paid at each stage of the trial.

As a measure of the effectiveness of legal enforcement, this analysis uses the time involved in executive procedures, which involve enforcing repayments without having to establish the existence and amount of a debt. Different variables—type and amount of collateral, amount of the loan, and type of plaintiff—clearly affect the duration of trials (Table 20). In addition, disputes are resolved differently (a critical distinction). Some trials are abandoned, for instance, when the plaintiff agrees to settle.

The analysis is based on two samples from courts in San Jose, the *Juzgado Sexto Civil* (Sixth Civil Court) of trials ending in the period 1995-97 (945), and the *Alcaldía Tercera Civil* (Third Civil Court of Small Claims) of trials ending in the period 1996-97 (734). The courts were chosen on the basis of their willingness to provide information. The following information was recorded for each trial:

- The duration of each trial in calendar days;
- The type of guarantee (simple, pledge, and mortgage);
- The amount of debt, deflated using the consumer price index (CPI) for that month;
- The type of plaintiff (financial and non financial); and
- The reason for terminating the case.

Clerks recorded some of this information themselves, but each file was examined thoroughly in order to verify information. The summary statistics in Table 20 reveal a pattern of right skewness: for most cases the duration falls in the left-tail of the distribution. In some cases, the trials are extremely long. For example, in the *Juzgado* one case that went to trial lasted 4,941 days and another 4,842 days.²⁰

Duration of Trials by Type of Collateral. The summary statistics show that trials involving debts backed by specified assets are much shorter than trials involving loans not backed by specific assets (simple trials). This effect can arise from different procedural rules, but it can also reflect differences in the optimal strategies of the creditor and debtor. The difference is present in both cases brought to trial and settled out of court. It is also present in simple cases

²⁰ Approximately 13.54 and 13.27 years, respectively.

and pledges in the Alcaldía. Differences also exist in the cases of pledges and of mortgages, but these variations are not as strong and unambiguous. At the contracting date, or even prior to the decision to access courts, rational creditors and debtors are likely to foresee these effects, helping to explain why loans guaranteed by specified collateral perform much better than other loans.

Duration of Trials by Type of Plaintiff. The actions of the parties affect the duration of trials. A creditor's experience can influence both the outcome and duration of the proceedings. Experienced agents are likely to be more successful in collecting debts, both in and outside the courts, for several reasons. Their experience teaches them how best to pursue repayment for each type of debt and when to take a case to court. Similarly (and independent of their ability to collect loans), financial intermediaries are likely to have better judgment about granting a loan than other types of lenders. Trials in which a financial intermediary is the plaintiff should therefore be shorter than other trials. The information in Table 20 supports this prediction. In all four cases the mean and the median for nonintermediaries are much higher than they are for intermediaries.

Separating the Effect of Collateral and Plaintiff. Is it possible to disentangle the effects of the different variables on the time required to resolve a case? As plaintiffs, for instance, banks may have negative effects on the duration of cases simply because banks require specific types of collateral. But as long as no perfect deterministic relationship (multicollinearity) exists between the characteristics of the plaintiff and those of the collateral, simple regression techniques are enough to consistently estimate the effect of each of the variable.

There is a more interesting econometric problem, however. The same variables that determine whether a trial is resolved by sentencing or settled out of court may also explain the time required to reach either type of resolution. Estimating the effect of each variable on the duration of trials using separate regressions for sentenced and settled cases would provide results that are biased because of sample selection. The two pools of cases are not random, and the estimated effects of the characteristics of plaintiff and collateral on duration would be biased because these effects are capturing in part the probability of observing the case in either pool. The authors designed an econometric model (a double Tobit) for this analysis that resolves this econometric problem by explicitly taking sample selection into account. The model estimates the effect of observables on the probability of a trial proceeding to sentencing or being settled and on the duration of the proceedings for both types of plaintiff (Monge, Cascante and Hall 2000).

The findings are summarized here. First, the coefficient of the amount disputed is insignificant in the probit regression that separates the cases terminated in settlement from those terminated in court. Second, collateral in the form of a pledge is the only variable whose coefficient is not insignificant in the probit. In simple cases pledges increase the probability of a settlement. The effect of different types of collateral are, however, significant in regressions for duration, in which the point estimates are much higher than for sentences. The type of plaintiff is significant in both but is negative only in the equation for settlements. The positive effect on sentencing could reflect the existence of very old debts in public banks, which seem to have been common before the 1980 reforms.

Recent Changes

The second part of the 1990s saw some important changes in the Civil Law. Table 21 offers a synopsis of the major changes.

Prior to the reforms the process of notification created an avenue of escape for debtors. The law required that defendants be notified in person (or by validated communication at their domicile) before a trial was initiated. Debtors could avoid being notified by changing their address or simply hiding. The new law on notifications introduced a variety of modifications intended to make notification easier. First, parties to a contract can specify their domicile in case of default. If any of the parties wishes to initiate a trial, the notification must be directed to the specified address. If the address is invalid, the court can legitimately notify the defendant by publishing an edict in the *Judicial Bulletin* and in a newspaper with national circulation.

The most important reform (in October 1998) altered the law governing administration with reorganization and judicial intervention. The reform was initiated in response to a sharp increase in the number of cases during the first half of the decade. The new law tightened the eligibility requirements for this procedure and reduced the benefits to debtors. Under the new law the judge must be convinced that the debtor's business is able to survive the financial hardship of reorganization and intervention. The law allows the judge to directly initiate bankruptcy if the business is not viable. In addition, the procedure can be used only if a firm's bankruptcy entails substantial social costs. While the judge has considerable discretion, the law suggests the number of employees and business partners necessary to qualify for the procedure. Further, a procedure can include all the individuals and firms belonging to what is termed the

“same economic interest group,” whether inside or outside the country. Finally, the debtor is required to present a plan for the restructuring and repayment of all debts.

For debtors the law now excludes certain types of debts (such as those already in legal liquidation, those with guarantees not directly linked to a firm, and payroll debts). Most importantly, the new law mandates the accrual of interest on defaulted debts. The rate, however, is set at a level that is likely to be below the rate specified in the contract.²¹

Other changes have been introduced to expedite notification prior to the auctioning of an asset and to increase the effectiveness of the auctions. In addition the provision that allowed any party to a civil dispute to require the other party to deposit the full amount of legal costs (including lawyers’ honoraria) during the proceedings has been eliminated. Under this provision the courts typically denied the right to appeal a verdict if such a deposit was on record prior to sentencing, significantly increasing the cost of the proceedings.

Finally, in September 1998 the lawyers’ fees set in the *Tabla* were abolished. In a recent interpretation of the antitrust law, the Office of the State Attorney (*Procuraduría*) made the practice of fee setting by professional associations illegal. Thus these associations can no longer mandate the fees their members charge. This change will have important effects in the services and labor markets, but the most important overall effect is a likely to be a decrease in the cost of accessing civil courts. Lawyers and their clients can freely negotiate fees for their services, payments, and any other contingency (for instance, they can stipulate different honoraria for different verdicts). Time is needed for these changes to have measurable effects. Some professional associations are even discussing a legal challenge, but the reform is likely to survive.

An Additional Device: Communication among Intermediaries

In addition to the courts, other social institutions such as peer pressure, family and social collateral, and informal networks can help sustain intertemporal trade in the economy. Theoretical, empirical, and policy research emphasize the importance of these institutions (Besley and Coate, 1991; Coate and Ravallion, 1993; Rashid and Townsend, 1994; Stiglitz,

²¹ Specifically, for debts in colones, the rate is the *Tasa Básica Pasiva*, a bank-borrowing rate reported by the Central Bank, and the Prime Rate for debts in U.S. dollars. However the creditor does not lose the difference between these and contracted rates, as they accrue to the principal but do not compound.

1990]). Anecdotal evidence also suggests that they are important in many transactions in Costa Rica; in fact, unsecured credit is the best-performing category of credit.²²

In large economies, a mechanism such as a credit union that records and makes publicly available borrowers' earlier transactions can enhance contracting possibilities, as borrowers are more predisposed to repay if their future access to credit depends on their references.²³ Credit bureaus can be private or public; they can be managed directly by a coalition of creditors, or they can operate as independent firms.

All these variations are present in Costa Rica. A sampling of banks shows that these institutions are widely used (Table 22). About 60 percent of all the banks use at least one type of bureau, and private and public bureaus are used almost equally. The response of intermediaries in the metropolitan area differs dramatically from the response in the countryside, however. Almost all of the intermediaries in the metropolitan area make use of some type of bureau, while 10 out of 17 banks in rural areas do not use any, as they are more likely to have first-hand information on the borrowers.

Two bureaus are operated by coalitions of intermediaries, and several are independent private firms. The coalitions are the Information Center of the Costa Rican Association of Banks (*Central de Información de la Asociación Bancaria Costarricense*, or CI-ABC), a private entity, and the Debtors' Information Center (*Central de Deudores de la SUGEF*, or CD-SUGEF), a publicly administrated entity. Among the second group are companies such as Protectora de Crédito, Credicomer, Teletec/Telesoft, Sincom Inversiones Rolani, Protecsta, and others.

Interviews were conducted with the managers of CI-ABC, CD-SUGEF, and two of the independent bureaus. The managers of the private bureaus were reluctant to answer some of the questions, as they have faced threats and even legal action in the course of doing business. Competition in the credit information area is also fierce. Both bureaus requested anonymity, so they have become Bureau A and Bureau B in Table 23.

All the bureaus said that they require their members to commit to providing their own information.^{24,25} CI-ABC and CD-SUGEF serve only banks, while independent bureaus service

²² In one particularly picturesque practice, owners and managers of bars and cantinas in some rural areas display the nicknames and the arrears of clients who leave without paying.

²³ For a discussion of these issues, see Melumad and Reichelstein (1986).

²⁴ For instance, Bureau B expelled one of the public commercial banks because it was not providing information

²⁵ After this paper was written, however, the authors learned that one of the bureaus had sold information to a public bank without requiring reciprocity.

creditors such as department stores and car dealers. All four bureaus differ in several important ways. For example CI-ABC and CD-SUGEF report only credit histories; bureaus A and B also provide information on assets and civil trials. CD-SUGEF's services are free; CI-ABC charges a fixed fee per month. The cost of consultations with Bureau B is much lower than with Bureau A (Bureau A argues that it provides higher-quality information than Bureau B). Bureau B's services, which are standardized, are surprisingly cheap: an individual credit report costs only 100 colones (US\$0.4). It includes personal data and information on bounced checks and involvement in civil trials as well as a credit record. It also reports which of the bureau's clients have requested data for this individual previously. For the same cost, Bureau B will examine property and assets and provide information on mortgages and obligations. A complete study that includes all of the above as well as a record of previous transactions and involvement in firms costs 400 colones (US\$1.6). Finally a corporate business record costs 600 colones (US\$2.4) and includes the name and personal data of the legal representatives and the executive board; information on capital, outstanding credits, and civil trials, and credit references.

Table 23 shows that the bureaus differ in size, number of years in operation, services provided, and information technology used. For example, Bureau A has been in business 41 years, and Bureau B for only one year. While Bureau A takes full responsibility for the accuracy of its reports, the other bureaus do not, as their data are updated directly by the clients. Bureaus A and B estimate the number of debtors for whom they have data at around 700,000 and 600,000, respectively. However Bureau B had 1,219 businesses and organizations as members at the time of the interview in 1998. Since the entire population of Costa Rica is around 3.5 million, existing bureaus have information on the majority of debtors and serve a significant and growing share of creditors.

Besides formal credit bureaus, creditors use other mechanisms to gather and share information. The CI-ABC itself evolved from an informal communication network among a group of bankers that operated under a "gentlemen's agreement." The intermediaries in the North Region (San Carlos) have a similar agreement, and advertise it by displaying posters and giving away stickers with the logo of all the intermediaries, encouraging the prompt repayment of loans.²⁶ Such communication is absent in other communities. In the Valley of El General and the

²⁶ Both posters and stickers have the logo of Banco de Costa Rica, Banco C.Q., BanCrecen, Banco del Comercio, Banco Federado, Banco Nacional, Banco Popular, Coocique R.L., and Mutual Alajuela. Freely translated into English, the sticker reads "I pay my bills on time: To be punctual in the payment of your bills is to open for yourself

region of Los Santos, intermediaries have no communication and seem to be rivals. Even the branches of the same national commercial bank behave differently, depending on the region.

Finally, many agents, informally known as hawks (*gavilanes*), specialize in obtaining information from the Public Registry and other judicial institutions. They work independently for one or several large creditors, including financial intermediaries and commercial retailers, or for lawyers who specialize in collection trials. They gather information on assets, pending trials, and other transactions effected by debtors.

Some Final Thoughts

This paper has examined the institutional features and practices of creditors that help determine repayment incentives in Costa Rica. The diversity of intermediaries' behavior and the dispersion in the default rates make clear that the efficiency of the laws protecting creditors' rights cannot be understood without reference to the strategies creditors adopt in their relationships with borrowers. Although serious weaknesses exist in the effectiveness of courts, the relatively low average default rate indicates that banks are taking corrective actions to protect themselves, both by requiring collateral and by relying on their knowledge of specific borrowers (relationship lending). The evidence seems to support the view that the ineffectiveness and high cost of judicial protection are reflected not in default rates but in the efficiency of the credit market, the volume of lending, and the types of loan contracts. Further, other institutional constraints are relevant to the behavior of different types of banks. For instance, private banks have lower default rates than other financial institutions, possibly because their incentives are dictated by profit maximization rather than by political considerations.

The analysis here has emphasized the design of credit contracts and the relationship between banks and borrowers. Intermediaries are actively coping with the incentive problems of borrowers, but some of the findings are puzzling in the light of theoretical models. A salient conclusion is that repeated interaction and borrowers' reputation play a crucial role. But while ex-ante screening and interim control are important considerations, the evidence also shows that ex-post repayment incentives also play a critical role, as emphasized by recent literature on incomplete contracts and contracting under limited commitment (Besley and Coate, 1991; Coate

the doors of the northern zone's financial system." (The original Spanish reads "Yo mantengo mis cuentas al día: Ser puntual en el pago de sus cuentas es abrirse las puertas en el sistema financiero de la zona norte.")

and Ravallion, 1993; Hart and Moore, 1988, 1989; Monge 1998). The value and type of guarantees influence the decisions of banks and the outcomes of the relationship at all its stages, including the decision to grant credit, the performance of loans, the resolution in case of default, and the amount recovered from nonperforming loans.

The analysis has also looked at judicial enforcement system. The evidence strongly supports the notion that collateral has a significant effect on the effectiveness of courts in protecting creditors. This conclusion further underlines the importance of collateral to lending relationships. Finally, the paper has argued that a rather sophisticated information network among creditors (used mainly by intermediaries in the metropolitan area) helps to protect creditors from default. These networks seem less important for intermediaries in rural areas, possibly because rural institutions have a more accurate informal knowledge of borrowers' characteristics. Overall, however, information-sharing systems play—and will continue to play—an important role in preventing defaults and enforcing willingness to pay.

References

- Besley, T., and S. Coate. 1991. "Group Lending, Repayment Incentives, and Social Collateral." Research Program in Development Studies 152. Princeton, United States; Princeton University.
- Coate, S., and M. Ravallion. 1993. "Reciprocity Without Commitment: Characterization and Performance of Informal Insurance Arrangements." *Journal of Development Economics* 40(1): 1-24.
- Cole, H., and N. Kocherlakota. 1997. "Efficient Allocations with Hidden Income and Hidden Storage." Working Paper 577. Minneapolis, United States: Federal Reserve Bank of Minneapolis.
- Freixas, X., and J.C. Rochet. 1997. *Microeconomics of Banking*. Cambridge, United States: MIT Press.
- Fudenberg, D., B. Holmstrom, and P. Milgrom. 1990. "Short-Term Contracts and Long-Term Agency Relationships." *Journal of Economic Theory* 51(1):1-31.
- Gale, D., and M. Hellwig. 1985. "Incentive-Compatible Debt Contracts: The One-Period Problem." *Review of Economics Studies* 52(4): 647-63.
- Grossman, S., and O. Hart. 1983. "An Analysis of the Principal Agent Problem." *Econometrica* 51(1): 7-45.
- Hart, O., and J. Moore. 1988. "Incomplete Contracts and Renegotiation." *Econometrica* 56(4): 755-85.
- . 1994. "A Theory of Debt Based on the Inalienability of Human Capital." *Quarterly Journal of Economics* 109(4): 841-79.
- Holmstrom, B. 1979. "Moral Hazard and Observability." *Bell Journal of Economics* 10(1): 74-91.
- . 1982. "Moral Hazard in Teams." *Bell Journal of Economics* 13(2): 324-40.

- Holmstrom, B., and P. Milgrom. 1990. "Regulating Trade among Agents." *Journal of Institutional and Theoretical Economics* 146(1): 85-105.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer *et al.* 1996. *Law and Finance*. NBER Working Paper 5661. Cambridge, Mass.: National Bureau of Economic Research.
- Melumad, N.D. and S. Reichelstein. 1986. "The Value of Communication Agencies." Research Paper 895. Stanford, United States: Stanford University, Department of Economics.
- Monge, A. 1996. "On Financial Markets, Entrepreneurship and the Distribution of Wealth." Working Paper, Department of Economics, University of Chicago.
- . 1999. "Recursive Bank-Entrepreneur Relationships and the Aggregate Dynamics of Creation and Destruction." Chicago, United States: University of Chicago, Department of Economics. Unpublished doctoral dissertation.
- Monge, A., J. Cascante and L. Hall. 2000. "Enforcement Mechanisms, Contract Design and Default: Exploring the Financial Markets of Costa Rica." Working Paper, Instituto de Investigaciones en Ciencias Economicas, Universidad de Costa Rica.
- Myerson, R. 1979. "Incentive Compatibility and the Bargaining Problem." *Econometrica* 47(1): 61-74.
- Phelan, C., and R. Townsend. 1991. "Computing Multiperiod Information-Constrained Optima." *Review of Economics Studies* 58(5): 824-53.
- Prescott, E. and R. Townsend. 1984a. "General Competitive Analysis in an Economy with Private Information." *International Economic Review* 25 (1): 1-20.
- .1984b. "Pareto Optima and Competitive Equilibria with Adverse Selection and Moral Hazard." *Econometrica* 52(1): 21-46.
- Rashid, M., and R. Townsend. 1994. "Targeting Credit and Insurance: Efficiency, Mechanism Design and Program Evaluation." ESP Discussion Paper Series 47. Washington, DC, United States: World Bank, Education and Social Policy Department.

- Rogerson, W. 1985. "Repeated Moral Hazard." *Econometrica* 53: 69-76.
- Rothschild, M., and J.E. Stiglitz. 1976. "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information" *Quarterly Journal of Economics* 90(4): 629-49.
- Spear, S., and S. Strivastava. 1987. "On Repeated Moral Hazard with Discounting." *Review of Economic Studies* 54(4): 599-618.
- Stiglitz, J.E. 1990. "Peer Monitoring and Credit Markets." *The World Bank Economic Review* 4(3): 351-66.
- Thomas, J., and T. Worrall. 1990. "Income Fluctuation and Asymmetric Information: An Example of Repeated Principal Agent Problem." *Journal of Economic Theory* 51(2): 367-90.
- Townsend, R.M. 1979. "Optimal Contracts and Competitive Markets with Costly State Verification." *Journal of Economic Theory* 21(2): 265-93.
- . 1982. "Optimal Multiperiod Contracts and the Gain to Enduring Relationship under Private Information." *Journal of Political Economy* 90(6): 1166-86.
- . 1987. "Economic Organization with Limited Communication." *American Economic Review* 77(5): 954-71.
- . 1988. "Information-Constrained Insurance. The Revelation Principle Extended." *Journal of Monetary Economics* 21(2): 411-50.
- . 1993. *The Medieval Village Economy: Study of the Pareto Mapping in General Equilibrium Models*. Princeton, United States: Princeton University Press.
- . 1994. "Risk and Insurance in Village India." *Econometrica* 62(3): 539-591
- Townsend, R., and R. Mueller. 1997. "Mechanism Design and Village Economies: From Credit to Tenancy to Cropping Groups." *Review of Economic Dynamics* 1(1): 119-72.

Figure 1. Share of Bank Credit by Type of Intermediary, 1974-1997

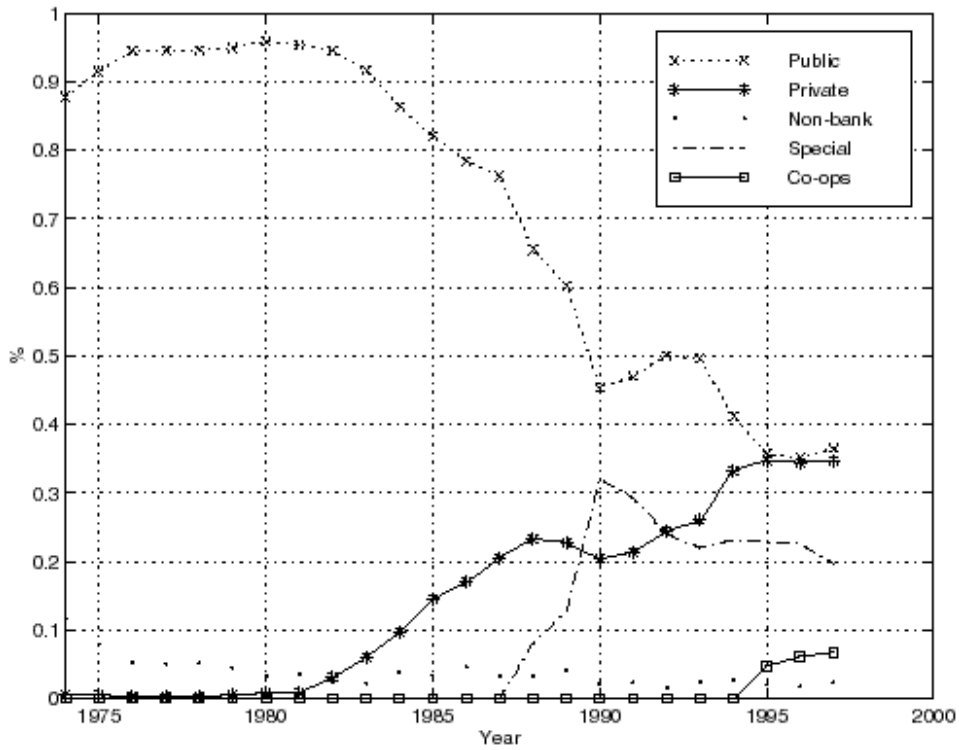


Figure 2. Number of Financial Intermediaries, 1974-1997

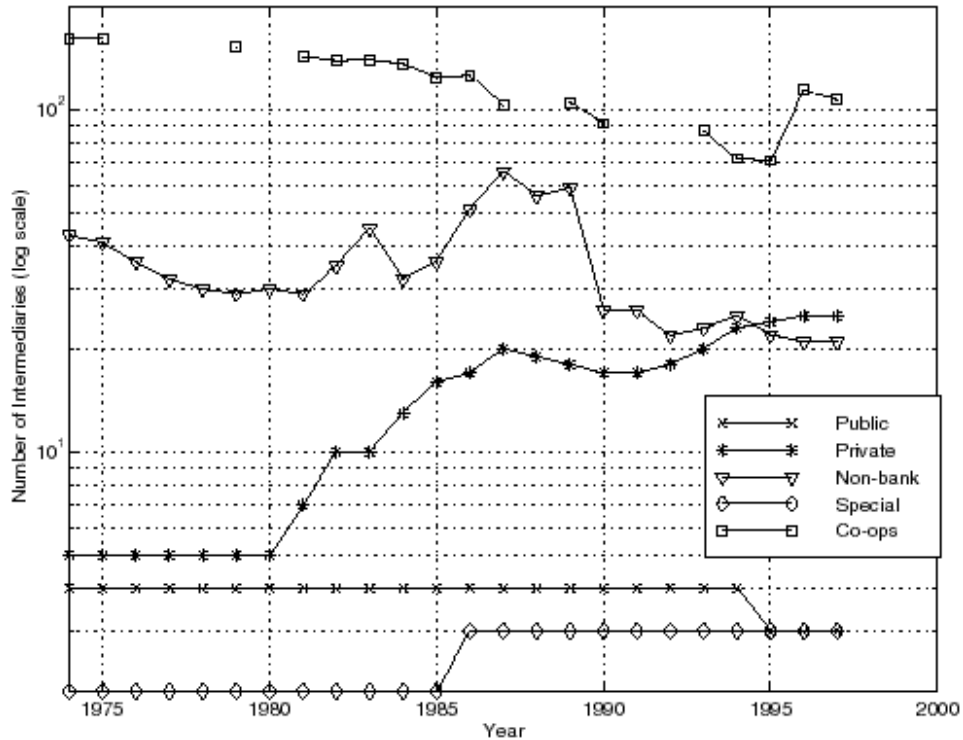


Figure 3. Banking Industry Concentration, 1970-2000

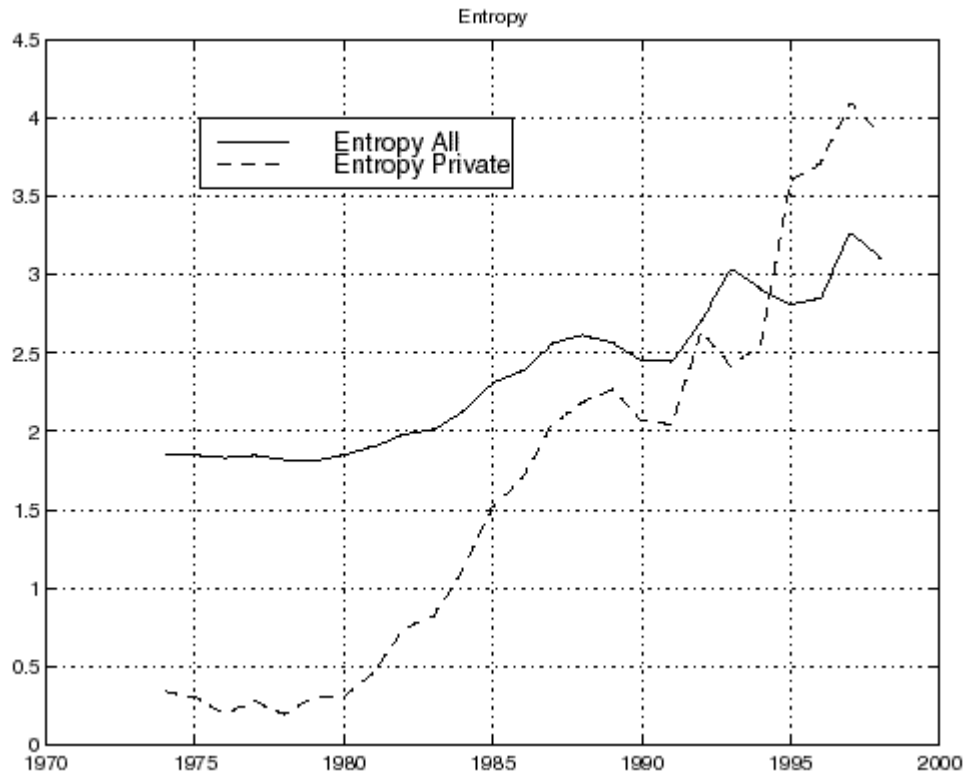


Figure 4. Banking Industry Concentration by Alternative Indices, 1970-2000

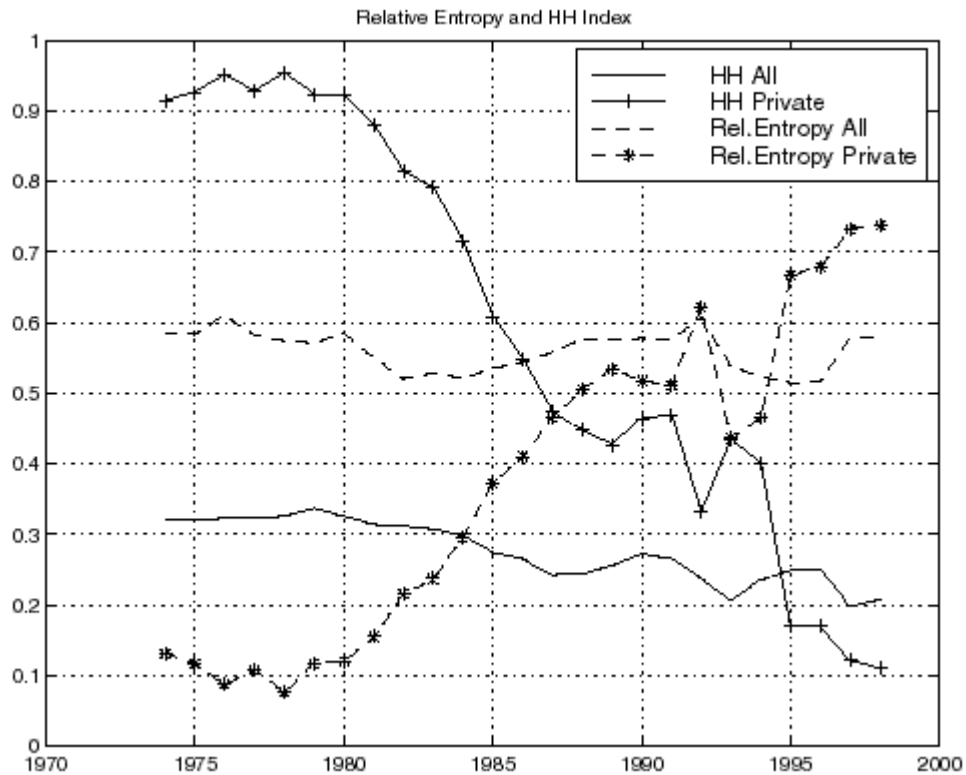


Figure 5. Percentage Shares of Activities Financed by Intermediaries in Costa Rica

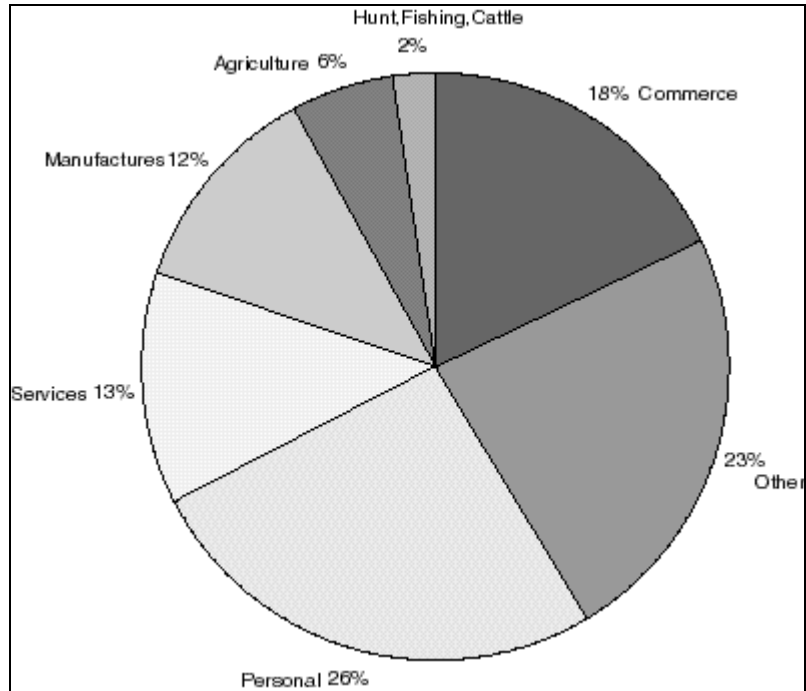


Figure 6. Credit by Type of Intermediary

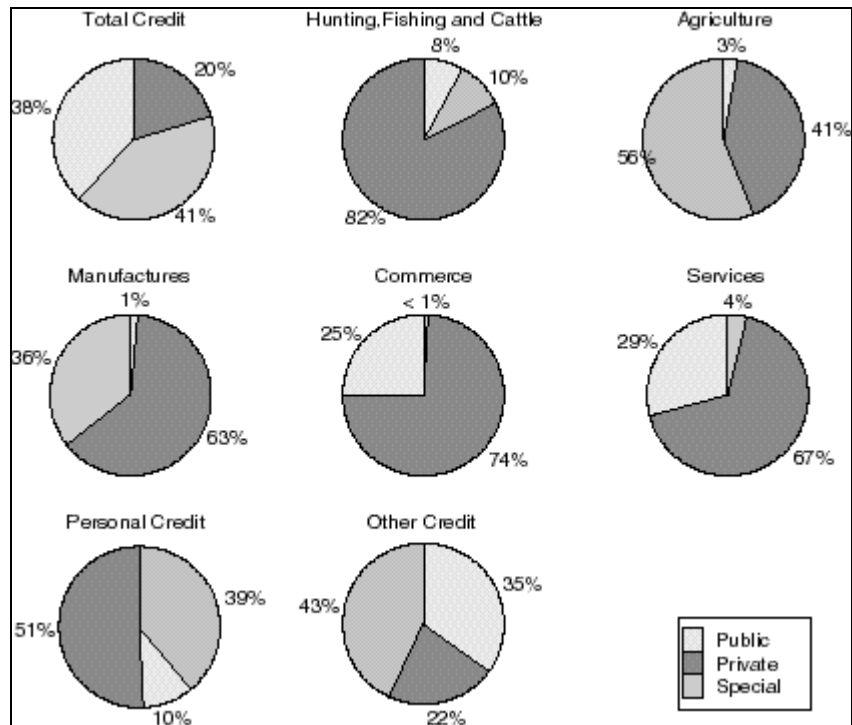
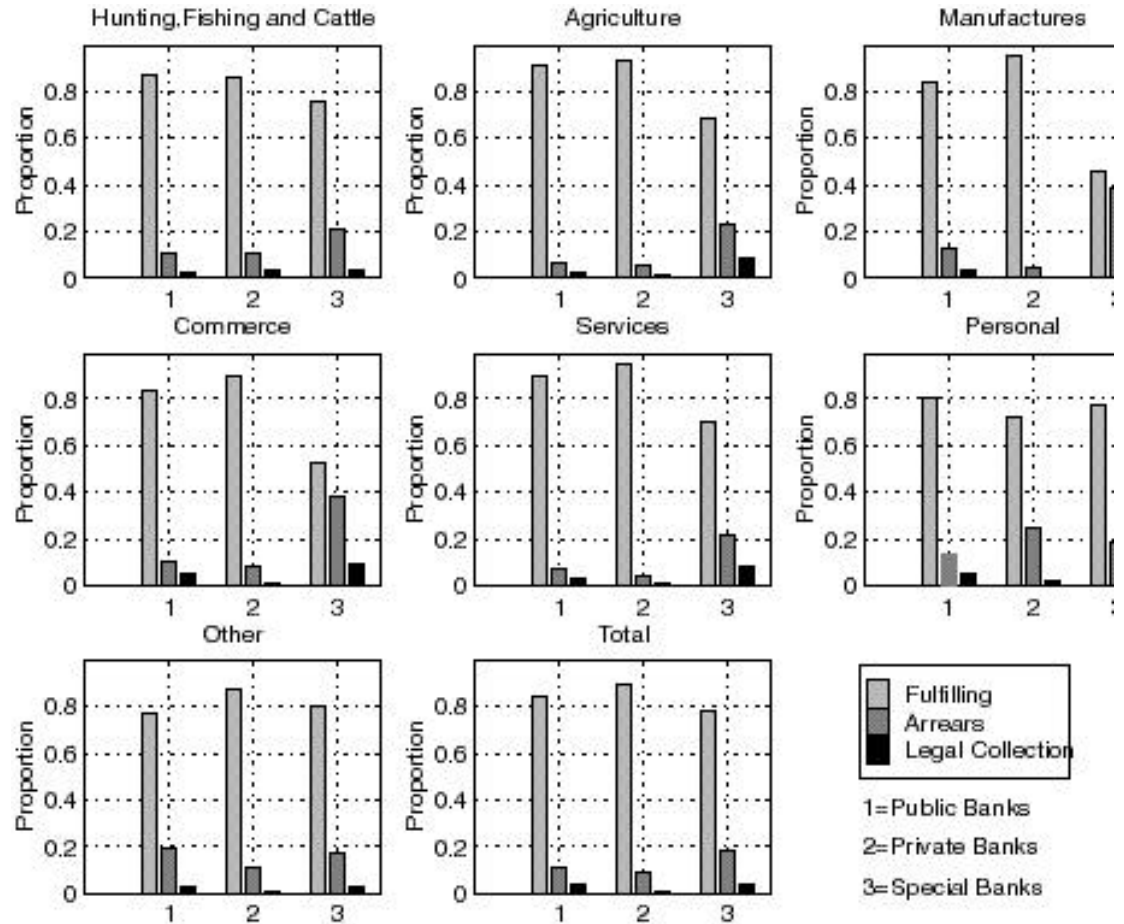


Figure 7. Status of Debts by Activity and Intermediary



Note: Performing/fulfilling loans are those repaid on time. Arrears are those that have not been repaid on but that have not gone into a judicial procedure. Legal collection indicates loans for which the bank has a judicial process.

Box 1. Intermediaries in the Sample

Intermediary	Rural/Metropolitan	Phone Calls	Visits	Questionnaire
Private Banks:				
Banco CQ	R	30	3	Complete
Banco de San José	M	33	3	Complete
Banco del Comercio	M	40	4	Complete
Banco ELCA	M	35	4	Complete
Banco Improsa	M	24	2	Complete
BANEX	M	36	4	Complete
BFA	M	35	3	Complete
Interfin	M	70	3	Complete
Bancrecen	M	21	2	Unanswered
Public Banks:				
Banco Crédito Agrícola de Cartago	M	16	3	Complete
Banco de Costa Rica:				Complete
San José	M	50	3	Complete
Guápiles	R	30	1	Complete
Liberia	R	32	1	Complete
Limón	R	12	1	Complete
Puntarenas	R	38	1	Complete
San Carlos	R	27	1	Complete
Turrialba	R	15	1	Complete
Banco Nacional de Costa Rica:				Complete
San José	M	30	6	Complete
Guápiles	R	10	1	Complete
Limón	R	20	1	Complete
Puntarenas	R	10	1	Complete
San Carlos	R	28	1	Complete
Turrialba	R	38	1	Complete
Cooperatives:				
COOCIQUE	R	25	3	Complete
COOPEALIANZA	R	15	3	Complete
COOPESANRAMON	R	10	2	Complete
COOPESPARTA	R	17	1	Complete
COOTILARAN	R	10	1	Complete
COOPESANMARCOS	R	15	1	Unanswered
Special Banks:				
Banco Federado	M	25	2	Complete
Bancoop	M	20	3	Complete
BPDC	M	29	3	Complete
Total	33	845	69	

Table 1. Screening Mechanisms Used Frequently or Always (percent)

Item	Total Sample (31)	Demog. Type			Inst. Type		
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Visit the firm	64.5	84.6	50.0	60.0	75.0	60.0	66.6
Study the project evaluation	87.0	92.3	83.3	93.3	87.5	60.0	100.0
Study financial statements	93.5	100.0	88.8	93.3	100.0	66.6	100.0
Analyze project risk	87.0	76.9	94.4	93.3	75.0	66.6	100.0
Analyze sectoral risk	61.2	61.5	61.1	60.0	62.5	60.0	66.6
Analyze international risk	19.3	30.7	11.1	13.3	37.5	20.0	0.0
Assess liquidity of collateral	93.5	92.3	94.4	93.3	100.0	66.6	100.0
Assess market value of collateral	96.7	100.0	94.4	100.0	100.0	66.6	100.0
Check reputation of applicant	90.3	100.0	83.3	93.3	100.0	60.0	100.0
Physically audit collateral	80.6	92.3	72.2	66.6	100.0	100.0	66.6
Suggest modifications to project	54.8	61.5	50.0	60.0	50.0	60.0	33.3

Table 2. Criteria for Granting Loans Considered Important to Crucial (percent of sample)

Item	Total Sample (31)	. Type of Institution					
		Metro. (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Solvency of applicant	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Existence of project evaluation	90.3	84.6	94.4	100.0	75.0	66.6	100.0
Profitability of project	96.7	92.3	100.0	100.0	87.5	100.0	100.0
Credit references	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Existence of collateral	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Type of collateral	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Value of collateral	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Liquidity of collateral	96.7	92.3	100.0	100.0	87.5	100.0	100.0
Previous experience with borrower	96.7	100.0	94.4	100.0	87.5	100.0	100.0
Information from visit	96.7	92.3	100.0	100.0	87.5	100.0	100.0
Risk of project	93.5	84.6	100.0	93.3	87.5	100.0	100.0
Economic sector of project	87.0	84.6	88.8	100.0	87.5	60.0	66.6

Table 3. Criteria for Setting Interest Rates Considered Important to Crucial (percent of sample)

Item	Total Sample (31)	Type of Institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Loan term	45.1	46.1	44.4	40.0	75.0	20.0	33.3
Type of economic activity	83.8	84.6	83.3	93.3	75.0	60.0	100.0
Amount requested	38.7	46.1	33.3	33.3	87.5	0.0	0.0
Collateral	45.1	53.8	38.8	40.0	87.55	0.0	33.3
Credit references	29.0	38.4	22.2	26.6	62.5	0.0	0.0
Previous experience	35.4	46.1	27.7	26.6	62.5	20.0	33.3

Table 4. Banks Using Covenants Frequently to Always (percent of sample)

Item	Total Sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Reports of the project results	83.8	92.3	77.7	93.3	87.5	40.0	100.0
Evolution of the investment plan	93.5	92.3	94.4	100.0	87.5	80.0	100.0
Visit of bank executives to the firm	87.0	92.3	83.3	86.6	87.5	80.0	100.0
Suspension clauses	93.5	92.3	94.4	100.0	87.5	80.0	100.0

Table 5. Banks Using Covenants to Cover Contingencies (percent of sample)

Item	Total Sample (31)	Type of Institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Regional shocks affecting project	22.5	7.6	33.3	40.0	0.0	20.0	0.0
Sectoral shocks to project	38.7	38.4	38.8	46.6	12.5	40.0	66.6
Idiosyncratic shocks to project	54.8	76.9	38.8	60.0	62.5	20.0	66.6
Other shocks to borrower	54.8	69.2	44.4	66.6	50.0	20.0	66.6

Table 6. Banks That Monitor Ongoing Loans Frequently to Always (percent of sample)

Item	Total Sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Visit of bank representatives	58.0	76.9	44.4	66.6	62.5	20.0	66.6
Phone calls	58.0	76.9	44.4	60.0	87.5	0.0	66.6
Service or technical support	22.5	30.7	16.6	20.0	37.5	20.0	0.0
Bank-firm meetings to evaluate course project	32.2	53.8	16.6	33.3	50.0	0.0	33.3
Monitor investment plan project	90.3	92.3	88.8	100.0	87.5	60.0	100.0
Check and audit financial statements	74.1	92.3	61.1	73.3	87.5	40.0	66.6
Check general solvency of the firm	77.4	84.6	72.2	86.6	87.5	40.0	66.6
Keep informed of other client debts	45.1	53.8	38.8	60.0	50.0	0.0	33.3
Check the behavior of input prices	19.3	23.0	16.6	20.0	37.5	0.0	0.0

Table 7. Using of Information on Previous Experience (percent of sample)

Item	Total Sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Keep record of previous clients	96.7	92.3	100.0	100.0	100.0	100.0	66.6
Inform clients of this record	58.0	46.1	66.6	66.6	37.5	80.0	33.3
Maintain a client grading system	97.5	100.0	94.4	93.6	100.0	100.0	100.0

Table 8. Effects of Previous Experience on Loan Contracts (percent of sample)

Item	Total Sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Time for processing applications	806.	84.6	77.7	86.6	87.5	60.0	66.6
Type of collateral required	83.8	84.6	83.3	80.0	87.5	100.0	66.6
Value or liquidity of collateral	80.6	76.9	83.3	73.3	75.0	100.0	100.0
Evaluation required of credit	77.4	69.2	83.3	93.3	75.0	60.0	33.3
Maturity of loan	58.0	46.1	66.6	73.3	50.0	40.0	33.3
Interest rate charged	54.8	46.1	44.4	84.0	87.5	40.0	66.6
Repayment schedule	61.2	53.8	66.6	60.0	62.5	60.0	66.6
Grace period	51.6	53.8	50.0	53.3	62.5	40.0	33.3
Amount lent	77.4	61.5	88.8	73.3	87.5	100.0	33.3
Other renegotiation clauses	77.4	61.5	88.8	80.0	75.0	80.0	66.6

Table 9. Shocks That Frequently to Always Justify Renegotiation (percent of sample)

Item	Total sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Regional problems	35.4	38.4	33.3	40.0	37.5	40.0	0.0
Sectoral problems	45.1	69.2	27.7	33.3	75.0	40.0	33.3
Problems linked directly to the project	54.8	2	44.4	53.3	62.5	40.0	66.6
Borrower problems not directly linked to the project	45.1	46.1	44.4	33.3	50.0	80.0	33.3

Table 10. Banks That Reset Contracts Because of Shocks (frequently or always, percent of sample)

Item	Total sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Extend period of loans	64.5	84.6	50.0	53.3	100.0	60.0	33.3
Grant grace periods	51.6	61.5	44.4	66.6	62.5	20.0	0.0
Realign interest or principal	51.6	69.2	38.8	40.0	62.5	60.0	66.6
Offer additional loans	12.9	0.0	22.2	20.0	0.0	20.0	0.0
Rearrange terms of liquidation	38.7	53.8	27.7	20.0	100.0	20.0	0.0

Table 11. What Banks Consider Important or Crucial in Renegotiations or Legal Collection (percent of sample)

Item	Total sample (31)	Type of institution					
		Metro (13)	Rural (18)	Public (15)	Private (8)	Coop (5)	Other (3)
Experience with client	87.0	92.3	83.3	80.0	100.0	100.0	66.6
Experience with client activity	74.2	84.6	66.6	86.6	100.0	0.0	66.6
Value of collateral	96.7	100.0	94.4	93.3	100.0	100.0	100.0
Net assets of borrower	83.8	92.3	77.7	80.0	100.0	80.0	66.6
Other client debts	77.4	84.6	72.2	86.6	87.5	40.0	66.6
Primary information about administration of the project	74.1	92.3	61.1	73.3	100.0	40.0	66.6
Entrepreneurial problems not related to the project	93.5	92.3	94.4	93.3	100.0	100.0	66.6
Client's reputation in the community	93.5	92.3	94.4	93.3	100.0	100.0	66.6
Political or sectoral pressures	32.2	53.8	16.6	6.6	62.5	40.0	66.6

Table 12. Estimated Composition of the Credit Portfolio (percent)

Client	Collateral	All	Public	Private	Coop	Other
		(31)	(15)	(8)	(5)	(3)
<i>Individuals</i>	Unsecured credit	1.4	...	...	...	...
	Real estate	41.4	49.2	34.9	35.9	28.7
	Other real assets	10.0	8.9	12.7	3.9	18.4
	Fiduciary	37.9	36.4	27.2	52.4	49.8
	Securities and others	5.5	1.7	5.4	3.1	3.0
	Guarantor and other	3.9	4.0	5.2	4.4	0
<i>Firms</i>	Intermediaries	(26)	(15)	(8)	(0)	(3)
	Unsecured credit	0.8	...	2.6	...	...
	Real state	55.4	62.7	44.1	...	49.6
	Other real assets	16.1	18.1	13.9	...	13.3
	Fiduciary	17.2	12.0	23.0	...	26.7
	Securities and others	4.2	3.5	4.9	...	7.3
	Guarantor and other	5.6	4.5	9.3	...	3.0

... not applicable.

Note: By law cooperatives may not lend to firms.

Table 13. Average Ratio of Loans to Guarantees

Client	Collateral	All	Public	Private	Co-op	Other
		(31)	(15)	(8)	(5)	(3)
<i>Individuals</i>	Unsecured credit	...	...	...	...	...
	Real estate	78.5	81.0	72.1	80.0	81.7
	Other real assets	69.9	71.8	66.5	66.3	77.3
	Fiduciary	34.9	30.7	39.9	38.8	39.2
	Securities and others	90.4	90.6	86.9	92.5	100.0
	Guarantor and other	93.8	100.0	93.3	90.0	100.0
<i>Firms</i>	Unsecured credit	(26)	(15)	(8)	(0)	(3)
	Real estate	...	...	...	...	...
	Other real assets	78.3	81.0	73.3	...	81.7
	Fiduciary	71.1	71.8	67.0	...	77.3
	Securities and others	34.0	30.7	39.9	...	39.2
	Guarantor and other	90.5	90.6	88.6	-...	100.0
		93.6	100.0	88.3	...	100.0

... not applicable

Note: By law cooperatives may not rent to firms.

Table 14. Nonperforming Loans (percent of total loans)

Client	Criterion	Collateral	All (31)	Public (15)	Private (8)	Co-op (5)	Other (3)
<i>Individuals</i>	>1 day	# of Intermediaries	7	1	6	0	0
		Unsecured credit	5.0	---	5.0	---	---
		Real estate	9.1	12.5	8.4	---	---
		Other real assets	14.7	14.5	14.8	---	---
		Fiduciary	11.8	17.0	10.8	---	---
		Securities and others	5.4	---	5.4	---	---
		Guarantor and other	5.4	---	5.4	---	---
	More than 10 days	# of Intermediaries	14	13	0	0	1
		Unsecured credit	---	---	---	---	---
		Real estate	14.5	15.3	---	---	5.0
		Other real assets	11.8	11.2	---	---	20.0
		Fiduciary	27.3	28.7	---	---	10.0
		Securities and others	---	---	---	---	---
		Guarantor and other	---	---	---	---	---
	More than 15 days	# of Intermediaries	10	1	2	5	2
		Unsecured credit	---	---	---	---	---
		Real estate	16.5	6.0	3.0	15.3	31.5
		Other real assets	14.9	5.0	6.5	9	34.0
Fiduciary		22.2	30.0	16.0	19.2	29.0	
Securities and others		4.6	---	---	11.5	---	
Guarantor and other		0.3	---	---	0.4	---	
	More than 1 day	# of Intermediaries	6	1	6	---	---
		Unsecured credit	---	---	---	---	---
		Real estate	8.1	12.0	7.3	---	---
		Other real assets	8.9	---	8.9	---	---
		Fiduciary	8.5	---	8.5	---	---
		Securities and others	1.3	---	1.3	---	---
		Guarantor and other	---	---	---	---	---
<i>Firms</i>	More than 10 days	# of Intermediaries	14	13	0	0	1
		Unsecured credit	---	---	---	---	---
		Real estate	12.8	13.0	---	---	8.8
		Other Real assets	11.5	12.0	---	---	8.9
		Fiduciary	14.9	15.9	---	---	17.1
		Securities and others	---	---	---	---	---
		Guarantor and other	---	---	---	---	---
	More than 15 days	# of Intermediaries	5	1	2	0	2
		Unsecured credit	---	---	---	---	---
		Real estate	14.2	---	4.0	---	31.5
		Other real assets	18.8	---	7.0	---	34.0
		Fiduciary	21.3	15.0	12.0	---	29.0
		Securities and others	0.8	---	1.5	---	---
		Guarantor and other	1.0	---	15.	---	---

---. not available

Table 15. Nonperforming Loans Resolved by Renegotiation and Court Procedures (percent of total loans)

Client	Collateral (Intermediaries)	Sample (31)		Public (15)		Private (8)		Co-op. (5)		Other (3)	
		Legal	Reneg.	Legal	Reneg.	Legal	Reneg.	Legal	Reneg.	Legal	Reneg.
Indiv.	Unsecured credit	5.0	95.0	---	---	5.00	95.0	---	---	---	---
	Real estate	13.0	87.0	15.6	84.4	7.9	91.4	13.9	86.1	13.7	86.3
	Other real assets	13.1	86.9	14.4	85.6	11.5	87.9	0.4	99.6	18.7	81.3
	Fiduciary	20.1	79.7	24.7	75.3	16.0	83.3	20.1	80.0	13.0	87.0
	Securities and others	1.1	98.9	0.6	99.4	2.3	97.7	---	100.0	---	100.0
	Guarantor and other	3.3	96.7	3.00	97.0	4.8	95.2	---	100.0	---	---
Firms	Unsecured credit	3.0	97.0	---	---	3.00	97.0	---	---	---	---
	Real estate	10.0	90.0	10.7	89.3	6.9	92.5	---	---	13.7	86.3
	Other real assets	11.3	88.7	12.3	87.7	6.1	93.1	---	---	18.7	81.3
	Fiduciary	13.0	86.8	13.0	87.0	12.9	86.4	---	---	13.0	87.0
	Securities and others	1.6	98.4	0.83	99.2	2.8	97.2	---	---	---	100.0
	Guarantor and other	5.0	95.0	3.00	97.0	6.02	93.3	---	---	---	---

Table 16. Nonperforming Loans Recovered through Renegotiation and Legal Collection

Collateral	All (26)		Public (15)		Private (8)		Other (3)	
	Legal	Reneg.	Legal	Reneg.	Legal	Reneg.	Legal	Reneg.
Unsecured credit	30.0	67.1	---	---	30.0	100.0	---	---
Real estate	100	94.8	84.5	99.3	91.9	100.0	89.2	100.0
Other real assets	87.3	75.0	72.9	97.9	80.7	97.1	80.00	50.00
Fiduciary	99.6	100.0	72.3	95.8	50.0	95.0	76.7	90.0
Securities and others	76.0	80.0	0	100.0	100.0	100.0	---	100.0
Guarantor and other	91.7	100.0	80.0	100.0	---	--	100.0	---

---, not available

Table 17. Procedures for Judicial Collection of Single Debts

Type of Trial	Purpose
Ordinary	The court needs to establish the existence and amount of the debt.
Executive Trials	The court only enforces the debt; executive documents determine the amount of the debt.
Simple	The debt is not backed by a specific good or asset
Pledge	The debt is directly linked to a specific asset.
Mortgage	Collateral is in the form of real estate.
Monitory trials	One or more of the requirements for an executive trial is not fulfilled, or the debt is based on a document without executive force.

Table 18. Procedures for Collecting Multiple Debts

Procedures	Purpose	Effect on Creditor
Bankruptcy	Applies to a firm that cannot repay its debts and seeks liquidation.	Initially freezes payments. Divides creditors into common and separate. Pools all assets for liquidation.
Insolvency	Identical to bankruptcy but applies to individuals.	Identical to bankruptcy.
Administration and reorganization with judicial intervention	Helps firms in financial distress survive.	Stops the repayment of debts and interest buildup. Stops ongoing collection trials and initiation of new ones.
Assembly of creditors	Applies to debtors in financial distress. Coordinates creditors to attain a settlement with the debtor.	Depends entirely on bargaining between debtor and creditors.
Collective execution	Occurs when multiple trials are taking place and one or more creditors believe the debtor's assets are insufficient.	Like bankruptcy but takes place only when debts are backed by executive documents.
Liquidation of financial intermediaries	Used in place of the administration and reorganization with judicial intervention.	Depends on intervener, who decides whether interest accrues during the procedure.

Table 19. Marginal Rates for Lawyers' Honoraria

Type	Amount of debt (in US\$)			
	0-4,000	4,000-8,000	8,000-0,000	20,000 +
Ordinary (%)	25	18	14	10
Executive (%)	12.5	9	7	5
Bankruptcy (% of assets)				
Judicial Intervention (% of assets)	5	5	5	5
Concourse of Creditors (% of assets)				

**Table 20. Duration of Trials in San José
(Juzgado Sexto Civil: Executive trials , 1995-97)**

Statistic	All	Trials settled out of court						Sentenced		
		All	Simple	Pledge	Mortgage	Inter- mediary	Other	All	Simple	Pledge
Mean	222.8	213.7	272.6	181.5	146.1	172.1	250.0	301.9	342.5	215.0
St. Dev.	106.0	347.2	452.7	262.7	155.2	354.2	337.3	660.8	798.1	202.5
Median	397.7	102.0	119.5	98.0	88.5	77.0	134.0	141.5	105.0	155.0
Maximum	4,941.0	4,842.0	4,842.0	181.5	146.1	4,842.0	2,460.0	4,941.0	4,941.0	864.0
Cases	945.0	835.0	342.0	373.0	120.0	389.0	446.0	110.0	73.0	29.0

Alcaldía Tercera Civil: Executive trials 1996-97

Statistic	All	Trials settled out of court						Sent		
		All	Simple	Pledge	Mortgage	Inter- mediary	Other	All	Simple	Pled
Mean	340.1	295.1	308.0	149.8	45.8	287.7	306.5	588.7	593.0	9
St. Dev.	391.4	362.4	369.2	228.0	44.4	352.3	378.1	449.6	449.2	9
Median	200.5	158.0	174.5	68.0	32.5	172.0	147.0	489.0	494.0	9
Maxim.	2396.0	2396.0	2396.0	1202.0	107.0	2396.0	2297.0	2072.0	2072.0	9
# Cases	750.0	635.0	586.0	45.0	4.0	384.0	251.0	115.0	114.0	

Table 21. Recent Changes in the Administration of Civil Law

Item	Main reform
Notifications	If prearranged contractually, initial notification can be made using newspapers announcements.
Deposit of costs	Parties can no longer require other parties to deposit the total legal costs at the inception of the trial.
Auction of collateral	The procedure is faster, and restrictions designed to reduce the use of fake bidders have been increased.
Lawyers' honoraria	Honoraria are no longer necessarily set according to the tabla but can be set by bargaining with clients.
Judicial intervention	The debtors' prerequisites for qualifying for this procedure are more stringent, and the benefits of using this procedure have been reduced (for instance interest accrues to creditors during the intervention).

Table 22. Banks Using Credit Bureaus

Use Private Bureaus	Use Public Bureaus		Total
	Yes	No	
Yes	8(4)	3(3)	11(7)
No	10(5)	10(1)	20(6)
Total	18(9)	13(4)	31(13)

Note: Numbers in parentheses are for banks operating in the San Jose metropolitan area.

Table 23. Four Credit Bureaus in Costa Rica

Item	Managed by coalitions		Independent firms	
	SUGEF	ABC	Bureau A	Bureau B
Years in operation	2	1	41	5
Number of clients	103 intermediaries	8 banks	Not revealed	1219
Individuals in database	424,342	Unknown	700,000 ^a .	600,000 ^a .
Employees	4	2	60	15
Processing of debtors' information	Banks	Banks	Employees	Clients/Employees
Clients committed to providing own information	Yes	Yes	Yes	Yes
Type of information	Positive and negative	Negative	Positive and negative	Negative
Grading of debtors	Yes	No	Yes	No
Other information	No	Not yet	Yes	Yes
Consultations per day	200 ^a	Not revealed	Not revealed	7,500
Transfer of information	Messengers	Modem	Phone-Modem	Modem-Fax
Waiting time for information	24 hours	Instant	Instant; 24 hours for updates	Instant
Memory	Infinite	10 years	Infinite	3,000 days
Other services	No	No	Yes	Yes
Charges	Free	Monthly fee	Per consult	Per consult
International services	No	No	Yes	Yes

a. Figures are approximate.