WESTERN HEMISPHERE CREDIT AND LOAN REPORTING INITIATIVE

Centre for Latin American Monetary Studies The World Bank FIRST Initiative

CREDIT AND LOAN REPORTING SYSTEMS IN BRAZIL



March 2005

(PRELIMINARY VERSION FOR COMMENTS)

Note to Readers

This report on Credit and Loan Reporting Systems in Brazil has been prepared by an international team in cooperation with local representatives of the Central Bank of Brazil (BCB). The report is prepared under the umbrella of the Western Hemisphere Credit and Loan Reporting Initiative (WHCRI), led by the World Bank and in partnership with the *Centro de Estudios Monetarios Latinamericanos* (CEMLA) with the financial support of the FIRST Initiative. The objective of the Initiative is to describe and assess the credit and loan reporting systems of the Western Hemisphere with a view to identifying possible improvement measures in their efficiency and integrity.

The report is posted on the WHCRI web page for public consultation after being approved by local authorities. The **consultation period will last until** (<u>4 weeks after posting</u>), and interested parties are invited to comment on any aspect of the report. The statistical tables and glossary will be completed in the final version.

During this time, the report will also be reviewed by an International Consultative Committee (ICC), established in the context of the WHCRI. In addition to CEMLA and the World Bank, the institutions that have been accepted to participate in the ICC include multilateral institutions, such as the Inter-American Development Bank (IADB), the International Finance Corporation (IFC), and the International Monetary Fund (IMF); central banks such as the Bank of Canada, the Bank of Spain, the Federal Reserve Bank of New York; and regional banking supervision institutions such as the Association of Supervisors of Banks of the Americas (ASBA).

At the end of the consultation process, the report will be formally published by CEMLA.

Comments may be sent to:

CEMLA José Antonio Garcia Senior Economist Durango 54 Colonia Roma México D.F., 06700 Tel: (52-55) 5207-3325 Fax: (52-55) 5207-8006 Ext. 289 jagarcia@cemla.org

Foreword

In August 2004, following a request from the central banks of Latin America and the Caribbean, the World Bank and the *Centro de Estudios Monetarios Latinoamericanos* (CEMLA), with the financial support of the FIRST Initiative, launched the Western Hemisphere Credit and Loan Reporting Initiative (WHCRI). The objective of the Initiative is to describe and assess the credit and loan reporting systems of the Western Hemisphere with a view to identifying possible improvement measures in their efficiency and integrity.

As part of the project structure, an International Consultative Committee (ICC), comprised of experts in the field from several institutions was established in August 2004. In addition to CEMLA and the World Bank, the institutions that have been accepted to participate in the ICC include multilateral institutions, such as the Inter-American Development Bank (IADB), the International Finance Corporation (IFC), and the International Monetary Fund (IMF); central banks such as the Bank of Canada, the Bank of Spain, the Federal Reserve Bank of New York; and regional banking supervision institutions such as the Association of Supervisors of Banks of the Americas (ASBA).

To assure quality and effectiveness, the Initiative includes two important components. First, all studies are conducted with the active participation of country officials and the project builds on the existing work being undertaken in the respective countries. Second, the Initiative draws on international and national expertise on the subject, through the ICC, to provide guidance, advice and alternatives to current practices.

The Initiative has undertaken a number of activities in order to respond to the LAC Central Banks' request. These include: the preparation of public reports containing a systematic in-depth description of each country's credit and loan reporting systems; the delivery of recommendations reports to country authorities on a confidential basis; the organization of ICC meetings to review country studies and provide input for future work; the organization of workshops focusing on issues of particular interest; the creation of a web-page (www.whcri.org) to present the outputs of the Initiative and other information of interest in the credit reporting area; and the promotion of working groups to ensure a continuation of the project activity.

CEMLA has been acting as Technical Secretariat of the Initiative and is playing a major role in making the process sustainable and capable of extension to all the countries in the Hemisphere. To this end, the Initiative has helped strengthen CEMLA's in-house expertise and also in broadening of knowledge and the transfer of know-how within the Region. The endeavors of the working groups in coordination with CEMLA will maintain the infrastructure created under the Initiative and provide a permanent forum for the countries in the Region to

discuss, coordinate, and add a collective impetus to the work in the area of credit reporting systems.

This report "*Credit and Loan Reporting Systems in Brazil*" is one of the public reports in the series and was prepared by an international team in cooperation with local representatives of the Central Bank of Brazil (*Banco Central do Brasil*).

Kenneth Coates Director General CEMLA David de Ferranti Vice president, LAC World Bank Cesare Calari Vice president, Financial Sector World Bank

Acknowledgements

This Report is based on the findings of a mission that visited Brasilia, Rio de Janeiro and Sao Paulo, Brazil, in January 2005. The Report was prepared under the coordination of Lucinda Brickler (FIRST Consultant) and José Antonio Garcia (CEMLA). Other members of the international team were Massimo Cirasino (World Bank), Mario Guadamillas (World Bank), Matías Gutiérrez (FIRST Consultant), José Mantilla (FIRST Consultant), and Margaret Miller (World Bank). The international team worked in close cooperation with the local team formed by officials of the Central Bank of Brazil (*Banco Central do Brasil*).

TABLE OF CONTENTS

1 ECONOMIC AND FINANCIAL MARKET OVERVIEW

- 1.1 Major Reforms in Recent Years
- 1.2 Banking Sector
 - 1.2.1 Recent Reforms
 - 1.2.2 Current Structure
- 1.3 Other Major Credit-Granting Institutions of the Financial and Non-financial Sectors
 - 1.3.1 Leasing Companies
 - 1.3.2 Commercial Financing Companies
 - 1.3.3 Factoring Companies
 - 1.3.4 Other Non-financial Creditors
- 1.4 Current Credit Market
 - 1.4.1. Major issues in business finance
 - 1.4.2 Major issues in consumer finance
- 1.5 Major Trends in Credit Reporting

2 INSTITUTIONAL ASPECTS

- 2.1 Legal Framework
 - 2.1.1 Privacy
 - 2.1.2 Bank Secrecy
 - 2.1.3 Consumer Protection/Quality Assurance
- 2.2 Role of Financial Institutions
 - 2.2.1 Credit Reporting Agencies
 - 2.2.2 Banking Sector
 - 2.2.3 Others
 - Role of Authorities

2.3

- 2.3.1 Central Bank
 - 2.3.2 Ministry of Finance
 - 2.3.3 Banking Supervisory Agency
 - 2.3.4 Consumer Protection Agency
 - 2.3.5 Others
- 2.4 Role of Other Private and Public Sector Institutions
 - 2.4.1 Non-financial Creditors
 - 2.4.2 Industry Associations

3 PRIVATE CREDIT REGISTRIES

- 3.1 Overview
- 3.2 SERASA
 - 3.2.1 Ownership/Governance
 - 3.2.2 Sources of Information

- 3.2.3 Users
- 3.2.4 Services Provided
- 3.2.5 Pricing Policies
- 3.2.6 Procedures and Policies to Ensure Quality of Information
- 3.2.7 Procedures and Policies to Manage Risk
- 3.2.8 Rights of Individuals/Firms to Access and Dispute Information
- 3.2.9 Information Sharing Policies
- 3.3 SCPC (Servico Central de Protecao ao Credito)
 - 3.3.1 Ownership/Governance
 - 3.3.2 Sources of Information
 - 3.3.3 Users
 - 3.3.4 Services Provided
 - 3.3.5 Pricing Policies
 - 3.3.6 Procedures and Policies to Ensure Quality of Information
 - 3.3.7 Procedures and Policies to Manage Risk
 - 3.3.8 Rights of Individuals/Firms to Access and Dispute Information
 - 3.3.9 Information Sharing Policies

3.4 SCI Equifax

- 3.4.1 Ownership/Governance
- 3.4.2 Sources of Information
- 3.4.3 Users
- 3.4.4 Services Provided
- 3.4.5 Pricing Policies
- 3.4.6 Procedures and Policies to Ensure Quality of Information
- 3.4.7 Procedures and Policies to Manage Risk
- 3.4.8 Rights of Individuals/Firms to Access and Dispute Information
- 3.4.9 Information Sharing Policies

4 PUBLIC CREDIT REGISTRIES

Overview

Central de Risco de Crédito/Sistema de Informacaos de Crédito do Banco Central

- 4.2.1 Main Objectives of Registry
- 4.2.2 Sources of Information
- 4.2.3 Users
- 4.2.4 Services Provided
- 4.2.5 Pricing Policies
- 4.2.6 Procedures and Policies to Ensure Quality of Information
- 4.2.7 Procedures and Policies to Manage Risk
- 4.2.8 Rights of Individuals/Firms to Access and Dispute Information
- 4.2.9 Information Sharing Policies
- 4.3 CADIN
 - 4.3.1 Main Objectives of Registry
 - 4.3.2 Sources of Information

March 2005

- 4.3.3 Users
- 4.3.4 Services Provided
- 4.3.5 Pricing Policies
- 4.3.6 Procedures and Policies to Ensure Quality of Information
 4.3.7 Procedures and Policies to Manage Risk
- 4.3.8 Rights of Individuals/Firms to Access and Dispute Information
- 4.3.9 Information Sharing Policies

INTERACTION WITH OTHER COMPONENTS OF THE FINANCIAL 5 INFRASTRUCTURE

5.1 Payment Systems and Instruments Corporate Registries 5.3 Collateral Registries Property

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

APPENDIX: STATISTICAL TABLES

Specialized Business Reports Specialized Credit Scoring

LIST OF ABBREVIATIONS

GLOSSARY

Vehicles 5.4 Others

Civil Status Judicial Records **Ratings Firms**

March 2005

Boxes in the Text:

Box 1: Mercosul

Tables in the Text:

Table 1: Macroeconomic Indicators Table 2: Top Ten Brazilian Domestic Banks Table 3: Top Ten Brazilian Leasing Companies Table 4: Top Ten Brazilian Finance Companies

Table 5: Financial System Assets by Institution Type

Charts in the Text:

Chart 1: Loans to Companies and Individuals by Instrument

Figures in the Text:

- Figure 1: *Relato* Example Figure 2: *Pefin* Query
- Figure 3: Web Service Access to SCR
- Figure 4: Internet Access to SCR
- Figure 5: Batch File Access to SCR

1 ECONOMIC AND FINANCIAL MARKET OVERVIEW

1.1 Major Reforms in Recent Years

High inflation rates were one of the predominant features of the Brazilian economy during the decades leading up to the introduction of the Real Plan in 1994. The second half of the eighties and the first half of the nineties were particularly problematic in terms of inflation. Five different price stabilization plans were launched from February 1986 through January 1991, none of which lasted more than 7 months.

The extreme instability in prices reflected both the difficulty of establishing macroeconomic conditions consistent with long run stability as well as the institutional capacity developed in the Brazilian economy to coexist with high levels of inflation. This coexistence was made possible through the indexation of virtually all the prices in the economy, including wages, contracts, exchange, interests, etc. This arrangement allowed for the government and a minority with access to the mechanisms of protection against the inflation not only to remain insulated from its negative effects, but also to benefit from it.

With the launching of the Real Plan in 1994, the Brazilian economy successfully moved to a lower and sustainable level of inflation. The consumer price index (IPCA) dropped from 2,477 percent in 1993 to 1.65 percent in 1998. Price stability induced greater transparency to public finances, which forced the government into furthering reforms with respect to payrolls, the pension system, eliminating monopolies and opening up public sector businesses to private investment, greater transparency in public sector debt and fiscal reform. Work still needs to be done in the area of removing tax distortions that hamper production, investments and exports.

The Central Bank of Brazil (*Banco Central do Brasil*) allowed the Real to float freely beginning on January 15, 1999, after abandoning the "crawling peg" system. Under the previous regime, the Real steadily lost value against the currencies of its man trading partners since its introduction in 1994.

The national consumer price index (INPC) grew by 7.7 and 8.1 percent in 2003 and 2004, respectively. The Monetary Policy Committee (COPOM) of the BCB has reduced interest rates since June 2003.

The policy mix also involves a tight fiscal stance. Responsibility in fiscal affairs at all government levels was secured and is institutionalized by a Fiscal Responsibility Law approved in May 2000 law basically states that there must be equivalent new revenues or cuts if a new permanent expenditure is to be created. It also defines ceilings for the public debt, personnel expenditures, and perhaps most importantly, it outlaws public authorities that break or neglect the rules. In April 2004, the non-financial public sector registered a primary surplus of USD 35 billion.

Notwithstanding the improvement in the fiscal position, the devaluation of the exchange rate and persistent high interest rates have had a detrimental impact on public sector debt. In May 2004, 67.2 percent of outstanding government securities were indexed either to the USD or to the SELIC rate. The net public debt to GDP ration increased from 55.5 percent in December 2002 to 58.7 percent in December 2003.

Since taking office in 2003, Luis Inácio da Silva of the left-wing *Partido dos Trabalhadores* (PT) has continued to pursue macroeconomic reforms, but his political base has been frustrated that living standards have not improved.

Table 1: Macroeconomic Indicators^{*}

	2000	2001	2002	2003
Real GDP annual growth rate (in %)	4.4	1.3	1.9	-0.2
Imports (in USD million)	55,783	55,572	47,241	48,283
Exports (in USD million)	55,086	58,223	60,362	73,084
Current account balance (as percentage of GDP)	-4.0	-4.6	-1.7	0.8
National Consumer Price Index (inter-annual growth rate)	5.3	9.4	14.7	10.4
Unemployment	5.6	10.6	10.5	10.5
Public Sector Deficit (as a percentage of the GDP)	3.6	3.6	4.6	5.2
Basic Interest Rate (SELIC)	16.2	19.1	23	16.9
Inflation (annual growth rate of the Consumer Price Index)	9.0	4.4	5.7	3.9
Reals per USD (annual average)	1.9	2.3	3.5	2.9

Sources: Banco Central do Brasil, Secretaría do Tesouro Nacional and Instituto Brasileiro de Geografia e Estatística.

Real GDP rose 5.2% in 2004, yielding the highest growth rate since 1994. In anticipation of inflationary pressures, the Monetary Policy Committee (COPOM) has been raising the target value of the SELIC rate. It currently stands at 17.5%. As a result, the 2004 consumer price index rose a moderate 6.27% in 2004.

Total public debt at the end of December 2004 was worth R\$956,996 million or 55% of GDP. Total indebtedness increased slightly due to interest payments totaling 7.3% of GDP in 2004. The growth of the GDP, however, resulted in a net decline in indebtedness as a percentage of GDP.

Total credit granted by the financial system totaled R\$483,973 in December 2004. Of this amount, 96% was granted to the private sector—industry 26.8%, housing 5.5%, agriculture 12%, commerce 12% and individuals 27%.

Despite high growth and relatively low inflation, access to credit remains relatively depressed due to the persistence of high interest rates.

Box 1: Mercosul

The Common Market of the South (*Mercosur* in Spanish, *Mercosul* in Portuguese) was created in March 1991 in Asunción del Paraguay, Paraguay, by the signature of the *Tratado de Asunción*, which was later supported by the signature of the *Protocolo de Ouro Preto* December 1994. It is composed by four member countries: Argentina, Brazil, Paraguay and Uruguay, where its

^{*} The following conventions for notation are used throughout the Report: "n.a." indicates data that are not available; "…" stands for data that are not applicable; "neg" (this is, negligible) indicates where data are very small relative to other relevant data in the table concerned.

headquarters is located. In addition, there are three associated countries: Bolivia, Chile and Perú.

The *Common Market of the South* was created with the following objectives: being a common market that would allow the free mobility of goods, services and production factors; member countries would share a common foreign economic policy (including a Common External Tariff – *Arancel Externo Común*) and would have coordinated positions in international forums; their macroeconomic and sector-wide economic policies, and domestic legislation. The abovementioned would support the greater integration of the member countries, but would also provide the citizens of those countries with access to larger markets, thus creating new business opportunities and fostering growth.

This market has a population of 226.2 million, a GDP of US\$638.8 billion, exports worth US\$119.9 billion and imports worth US\$88.1 billion.

1.2 Banking Sector

1.2.1 Recent Reforms

Prior to 1994, when inflation was brought down from the extreme levels that had prevailed since the mid-70s, the financial system in Brazil was almost entirely geared to maximizing non-lending operations income. Emphasis was on increasing operational efficiency. Credit-granting activities received much less attention, since little credit was flowing to the private sector anyway. Private banks lent little and focused on short-term financing mechanisms such as overdraft facilities and working capital finance.

During this period, little or no investment was made to develop and enhance sound credit analysis. Most medium and long term credit to firms was provided by state banks—influenced by other objectives than pure risk analysis.

The only segment which showed an expansion was consumer and personal loans, which tripled as a proportion of GDP from 1993-1997. However, the industries' lack of expertise with respect to credit analysis led to massive defaults. In addition, the information available on potential borrowers was inadequate as many were accessing credit markets for the first time. Furthermore, the predominance of negative data meant that credit reports served primarily as an incentive to pay, not as a source of information for potential lenders. Debtor's names were erased as soon as loans were paid.

Since this time, banks have improved their credit analysis capabilities and the credit reporting industry has improved.

Banks experienced a crisis when they experienced a sudden decline in inflation-derived revenues after the introduction of the Real Plan. The Program of Incentives for the Restructuring and Strengthening of the National Financial System (PROER) and the Program for the Restructuring of the State-Owned Financial System (PROES) and the Deposit Guaranty Fund (FGC) were introduced. These contributed to a fast and orderly consolidation including almost a complete phasing out of state-owned banks. Some

small banks were liquidated, while medium and large banks' distress was resolved mostly through purchase-and-assumption transactions with the government assuming a large share of their bad loans. In the case of Banco do Brasil, the country's largest bank, the government made a capital infusion of close to USD \$8 billion to avoid bankruptcy. Other state banks were recapitalized and then privatized. Several of these failing banks were acquired by foreign institutions.

Under these programs, the BCB was given a mandate to deal with issues related to controlling stockholders, the adoption of preventative measures aimed at restructuring failing institutions, including possible market solutions, and a more flexible approach to privatizations. More than 40 percent of the operating bank licenses that existed at the end of 1993 have since changed owners or exited the system via mergers or closures. Four large banks were absorbed between 1994 and 1998. In addition, foreign participation in the Brazilian financial sector increased.

Deposit insurance, established after the post-Real Plan bank crisis is managed by the Deposit Guarantee Fund (*Fundo Garantidor de Créditos,* FGC), a private nonprofit organization that guarantees deposits and certain financial investments up to R\$20,000 per depositor in case of bankruptcy or closure by the central bank. This insurance covers demand and term deposits, savings accounts, letters of exchange issued or granted by the financial institutions. All financial institutions, except for credit cooperatives, participate in the FGC, paying a monthly flat premium of 0.025 percent on the value of its outstanding balances on the accounts insured.

The financial system has undergone an intense period of modernization beginning in 1988. Key areas of modernization included the creation of multi-purpose banks (*bancos multiplos*) and increasing foreign participation in the sector. A multi-purpose institution may operate as many as four financing departments under a single corporate name including commercial banking, investment banks, real-estate finance and consumer finance. Government banks are not allowed to participate in investment banking, but may serve as development banks.

In addition, insolvent public sector banks have been opened to participation of private capital; either domestic or foreign (Article 52 of the title IX of the 1988 constitution). This activity has recently stalled, however due to legal issues, politics and the economic downturn beginning in 2002. The auction of *Banco do Estado de Santa Catarina* (BESC) was blocked in its final stages over a disagreement on how to handle state workers' bank accounts. The auction of a 17.8 percent stake in Banco do Brasil was also cancelled in December 2002 due to the changing economic climate.

1.2.2 Current Structure

As if December 2003, there were a total of 116 universal banks with commercial bank capabilities, 23 commercial banks and the *Caixa Economica Federal*. The banking sector is considered to be strong and diversified, holding up well during the Mexican debt crisis of 1994, the Reals' devaluation in 1999, the Argentine crisis of 2001-2002 and lack of political confidence within Brazil during the 2002 elections.

The Brazilian banking system is large in terms of assets, but shallow in terms of financing to the private sector. Financing to the private sector, as measured by total

claims on the private sector, has diminished over the last six years and accounted only for 47.4 percent of total assets in 2003.

Even though the government has been working to privatize state-owned banks, public institutions still held 37.2 percent of banking sector assets as of year end 2003.

Commercial banks play a leading role in Brazil's financial structure. Domestic commercial banks are the principal source of short-term working capital for the private sector through loans and discounted trade bills. Banks, however, have traditionally viewed commercial, especially retail, services as unattractive and are now only trying to build their customer bases. Their primary profit center has been supplying the federal government with funds.

The high-interest rate environment over the last few years combined with the devaluation of the Real has resulted in record profits in the banking sector, as most banks had bet heavily against the national currency in 2002. Provisions for market turbulence resulting from the 2002 elections and losses in the mutual funds segments, however, have recently dampened profits.

The state-owned *Banco do Brasil*, the country's largest financial institution, plays a key role in financing agricultural production nationwide. It also focuses on export financing, credit to small enterprises and improving access to credit by the low-income population.

Caixa Economica Federal (CEF) is the largest participant in the local mortgage market.

Banco Bradesco, the largest privately held domestic bank, has been on a buying spree in recent years most recently acquiring the state-owned *Banco do Estado do Maranhao* (BEM). In addition, Bradesco launched a "Postal Bank" project in 2002 and is expected to have 54,000 Postal Banks up and running by year-end 2004. This effort is targeted at the large un-banked population in Brazil.

As of September 2003, the top ten domestic banks held 60.4% of the banking system's total assets. The two largest banks are both owned by the federal government: *Banco do Brasil* with 16.85 percent of the market and the savings and Ioan *Caixa Economica Federal* with 11.05 percent. The largest private bank, Bradesco follows closely with 10.89 percent.

Table 2: Top Ten Brazilian Domestic Banks

Ranked by assets as of September 2003 in billions of Reals

Bank	Assets	Market Share
Banco do Brasil*	215.1	16.85
Caixa Economica Federal*	141.1	11.05
Banco Bradesco	139.0	10.89
Banco Itaú	113.2	8.87
Unibanco	62.7	4.91
Banco Safra	30.6	2.40
Nossa Caixa*	24.1	1.89
Banco Votoratim	21.3	1.67

Brazil Report	Brazil
---------------	--------

Banrisul Banco do Nordeste do Brasil'	12.3 * 11.9	0.96 0.93
Total Top 10 Domestic	771.3	60.4%
Total Market	1,276.8	100.00%

*Owned by the federal government.

Source: Central Bank of Brazil

In September 2003, foreign banks held 20 percent of total system assets, down from 28.3 percent a year earlier. Foreign banks receive their funding from corporate deposits and overseas sources and typically emphasize trade finance, foreign-exchange operations and supporting the needs of multi-national companies. The largest foreign bank operating in Brazil in late 2003 was *Banco Santander Central Hispano* (BSCH) with assets of 57.4 billion Reals.

1.3 Other Major Credit-Granting Institutions of the Financial and Nonfinancial Sectors

1.3.1 Leasing Companies

Financial leasing is an important source of medium- to long-term financing for large companies operating in Brazil. It is also used by wealthier individuals to acquire vehicles. The minimum term is generally 2 years with a life span of five years or less and three years for all other assets. Leases can be extended for longer periods through renewal contracts. Leasing as a source of financing grew tremendously after the introduction of the Real Plan in 1994 which made it possible to enter into longer term financial contracts.

In 2003 there were around 65 leasing companies or institutions with leasing portfolios in Brazil. The sector includes both commercial-bank affiliates and equipment and vehicle manufacturers that provide finance for their own sales. According to the Brazilian Association of Leasing Companies (*Associacao Brasileira das Empresas de Leasing* ABEL), the market is highly concentrated with the top 10 firms controlling over 80 percent of the business as of November 2003.

Leading bank operating leasing operations include Safra Leasing, Bradesco BCN Leasing, Itaú Leasing, Sudameris and Bank Boston. Manufacturers with major leasing operations in Brazil include IBM, Hewlett Packard and Volkswagon.

Table 3: Top 10 Brazilian Leasing Companies (Ranked by total assets as of November 2003—in millions of Reals)

Bank	Assets	Share		
Safra Leasing Bradesco BCN Leasing	1,511.9 1.408.9	17.73 16.52		
Itaú Leasing	1,030.7	12.09		

March 2005

IBM Brasil Leasing	922.2	10.81
Hewlett Packard	458.3	5.37
Sudameris	355.9	4.17
BankBoston	346.9	4.07
Unibanco	297.2	3.49
BB Leasing	256.2	3.00
Volkswagon	242.1	2.84
Total Top 10	6,832.1	79.66
Total Market	8.527.5	100.00
	0,027.0	100.00

Source: Brazilian Association of Leasing Companies

1.3.2 Commercial Financing Companies

Finance companies (*companhias financeiras*) provide direct consumer financing to individuals for the purchase of consumer durable goods and vehicles. Some major retailers and car manufacturers maintain their own finance companies to help boost sales.

Finance companies represent a relatively small segment of the financial system and their operations have not grown significantly despite the recent boom of consumer spending. The number of finance companies in Brazil is small, hovering around 40 in recent years.

Table 4: Top 10 Brazilian Finance Companies (Ranked by total assets as of June 2003—in millions of Reals)

Bank	Assets
Itaucard	1,592.8
BV Financeira	805.4
Finaustria	359.8
Alfa	350.1
Financeira Renault	227.0
HSBC Financeira	180.2
BRB	104.1
Luizacred	89.6
Caterpillar	83.8
Perfisa	49.7

Source: Austin Asis Consultants.

1.3.3 Factoring Companies

Weak bankruptcy and secured transactions laws generate difficulties I the user of collateral in Brazil that create special incentives for factoring as a form of financing. Small- and medium-sized enterprises (SMES) with low credit ratings often find it easier (although more expensive) to obtain financing from factoring firms than from banks. At the end of 2001, the fixed interest rate applied was 50.1 percent for invoices discounted at banks while the implicit average "purchase factor" was 58.2 percent.¹

There is little official information on the factoring sector because due to the historic absence of regulation. The National Association of Factoring (*Associacao Nacional das Socidades de Fomento Mercantil Factoring*—Anfac) estimates that there were 720 known factoring companies in Brazil at the end of 2001. In addition, they said that the industry had a transaction volume of R50bn in 2003, up from R30bn in 2002. They attribute this growth to rebound from depressed activity levels in the latter part of 2002. According to Anfac, the delinquency is 4 percent for factoring firms, compared with 8.4 percent for banks.

Factoring companies serve a broad spectrum of sectors. The industrial sector accounts for 65 percent of overall activity, the commercial sector another 20 percent, and the services sector for 15 percent.²

Factoring companies manage their credit risk through traditional credit information services, complementing traditional credit analysis with personal contact with the sellers to gain knowledge of their business practices. Factoring is an important player in both the provision and use of credit information systems, as both users and providers of information.

Law No. 10,406 which came into effect in January 2003, advocated by Anfac, recognizes financing firms as financial agents.

1.3.4 Non-financial Credit Providers

Supplier credit is difficult to come by in Brazil. Many firms sell strictly on a cash basis.

Appliance stores such as Casas Bahia, Ponto Frio and Electro are major sources of consumer credit. In some cases, these stores consider lending to be their primary business.

1.4 The Current Credit Market

Real interest rates for all types of loans in Brazil are among the highest in the world, despite the significant reduction of inflation in the last ten years.

A major factor restricting credit in Brazil are the excessive banking spreads. In 2000, the annual banking spread was 38.2% in Brazil, compared with 11.96% in Mexico, 2.75% in Argentina, 5.64% in Chile, 2.77% in the U.S., and 3.15% in the Euro area. Banks find it more profitable and less risky and costly to invest in government securities to finance Brazil's debt than to loan money. Lack of competition in the banking sector exacerbates

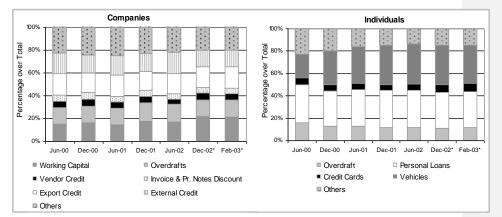
¹ Mario's paper.

² Mario's paper

the problem.

Banks are the major players both in the consumer and commercial lending markets in Brazil. The Brazilian banking sector is characterized by still a relatively large presence of government-owned banks and some directed-lending practices.

Chart 1: Loans to Companies and Individuals by Instrument (%)



Source: Central Bank of Brazil, appendix Tables A4.1 and A4.2

1.4.1. Major issues in business finance

Corporate fund-raising is difficult in Brazil. Most foreign companies continue to rely on foreign funding. While short-term credit from commercial banks, primarily overdrafts (*conta garantida*) is common, longer term loans are typically only available to segments of the economy targeted for development, such as the promotion of exports. Trade bill discounting (*duplicates*), factoring and leasing are widely employed financing methods. Many corporations, however, shy away from using trade-bill discounting due to the expense of maintaining compensating balances with banks. Banks generally require compensating balances of 20 percent to 35 percent on commercial financing depending on the volume of other business the company does with the banks. Few local-currency loans extend beyond 60 days and the average length is 30 days. Overdrafts accounted for 15 percent of all outstanding loans to businesses and 30 percent of all new loans in 2002.

Vendor credit exists, but is not very common. In 2002, it represented about 5 to 6 percent of finance to enterprises.

Lending decisions by banks for businesses are often made by committees, on a case by case basis. They consider the client's file (*cadastro*), its economic and financial situation, its relationship with the bank, its business tradition, and its industry's prospects. The middle market is the most profitable segment for banks, but also the most risky due to poor accounting practices and rampant tax evasion.

The major source of medium- and long-term federal credit for companies operating in Brazil is the Rio de Janeiro-based National Bank for Economic and Social Development (*Banco Nacional de Desenvolvimento Economico Social*, BNDES). Disbursements by the BNDES system reached R33bn in 2003. Disbursements to small and medium companies grew 22% to R10bn.

Brazil has long been considered one of the world's great-untapped microfinance markets. Because of the country's large population, it's relatively high poverty rates, and open economy, it has the largest concentration of micro enterprises in Latin America. Of more than 9 million micro enterprises estimated to exist in the country, at least 2 million of them are located in the Northeast Region. Banco do Nordeste do Brazil's *CrediAmigo* is already among the top microfinance institutions in Latin America in terms of geographical penetration, number of clients and depth of outreach. As of July 2004, the program had over 150,000 active clients in 358 municipalities through the northeastern region of Brazil. The average outstanding loan balance was R591, less than 8 percent of Brazil's GDP per capita. Only 2.5 percent of its loans are past due, using a strict 3-day non-performing accounting method.

1.4.2 Major issues in consumer finance

Consumer Credit

Low-income consumers have access to credit in Brazil through specialized financial institutions, some of which operate largely via store credit operations with retailers of consumer durables. Appliance stores such as *Casas Bahia*, *Ponto Frio* and *Electro* are major sources of credit. In some cases, these stores consider lending to be their primary business.

One of the most common forms of credit for low-income consumers are installment payments for goods, typically distributed over 4-12 months. In many stores in Brazil, prices are displayed in terms of the monthly installment prices, for example, 4 X R10, to indicate four installments of ten Reals. Low-income consumers often are unaware of the very high rates of interest implicit in these installment plans, which can exceed 100 percent and even 200 percent per annum. Once a consumer falls behind in their payments, fees which are charged may make it even more difficult for the person to get out of debt.

Some of the main financial intermediaries serving the low-income consumer segment in Brazil are *Cacique, Panamericano, Losange and Fininvest* (now owned by Unibanco). *Cacique* offers a service where they will bring loan funds to the door of the consumer, in amounts of 2-3 times their monthly salary. *Losango* operates primarily as the financing arm of *Casas Bahia* and *Fininvest* is working to expand its microcredit program. These financial institutions report some information to both SCPC and SERASA, but it appears they do not report to SCI Equifax.

Loans to consumers tend to be highly decentralized. Loan requests are treated automatically by statistical methods (credit scoring, for instance) based on information

supplied by the client and or available from public records.³ This process is applied to overdraft facilities *(cheque especial)*, consumer installment credit, leasing, credit card loans, and secured or unsecured personal loans.

As of December 2003, there were over 44 million credit cards active in the country. Credit cards were first introduced in Brazil in 1956. It was not until the mid-nineties, however, that this instrument grew in importance—after the launch of the Real Plan. The industry is now consolidated and in 2000 it represented 42 percent of all the business in the Latin American market and 2.6 percent of the credit card. The number of credit cards issued has increased from 23.4 million in December 1999 to 44 million in December 2003. The number of transactions increased by 96 percent during the period from 1999-2003.

Mortgage

Long term lending in Brazil has traditionally been very scarce due to the very high inflation rates prevailing until not so long ago. Hence mortgage lending has been restricted to the housing finance loans granted by the Housing Finance System (SFH).

These loans have been made possible by monetary correction or adjustment, which was introduced in 1964 to prevent the capital base of such loans and of government issued securities to be eroded by inflation.

The economic stabilization process implemented with the Real Plan, in July 1994, is enabling the development of new sources of financing for the real estate sector, as well as the implementation of a secondary mortgage market in Brazil.

1.5 Major Trends in Credit Reporting

Negative credit information has been available and shared through the credit reporting system in Brazil for some years. Recently, some positive credit information is also becoming available for regulated financial institutions through the BCB-operated *Sistema de Informações de Crédito* (SCR). This database was originally called *Central de Risco de Crédito* (CRC) and functioned mainly as a centralized system of credit information for banking supervisory purposes. Initially only loans of amounts $\ge R$ \$50,000 were reported. In 2001, the former system was reformed to include additional positive and negative information on all loans with amounts $\ge R$ \$5,000, and the information collected was made available through more efficient means to financial institutions. Nevertheless, the SCR's basic purpose is still to support banking supervision activities and the credit bureau function it provides is considered by the BCB only as a secondary role of the system. Regulated financial institutions feed the SCR monthly and only these institutions may access the database for consultation purposes. At present, approximately 2.5 million consultations to the SCR are made by authorized financial institutions every month.

The BCB also operates other databases. These include the Registro Comun de Operações Rurais (RECOR), Microcrédito, Sistema de Registro de Operações de Crédito com o Setor Público (CADIP), and the Cadastro Informativo de Créditos nao Quitãdos do Setor Público Federal (CADIN). The BCB is also closely involved with the Cadastro de Emitentes de

³ Castelar Pinheiro, Armando and Moura, Alkimar, "Segmentation and the Use of Information in Brazilian Credit Markets:".

Cheques sem Fundos (CCF), whose daily operation is carried out by the state-owned Banco do Brasil. While the first three are used by the BCB basically to monitor the compliance of regulated financial institutions with laws and regulations as well as for statistical purposes, the CADIN and the CCF are relevant for credit decisions and the information they contain may be accessed by credit providers either directly or through private credit reporting firms.

SERASA is the largest privately-owned credit bureau in Brazil and is owned by a group of private commercial banks, although it also provides services to many other financial and non-financial credit providers. SERASA was created almost 37 years ago, but it began to function as a credit reporting firm only in 1995. Traditionally, SERASA's focus has been on consumer credit data. Approximately 25,000 institutions feed data to SERASA (20,000 negative information and 5,000 negative and positive) and its database contains information on approximately 70 million individuals (only 42 million with credit information) and more than 7 million firms. On average there are 2.5 million consultations per day. Besides negative and some (little) positive credit information reported by credit providers, SERASA also has and provides information on delinquent taxes (CADIN), dishonored cheques (CCF), and judicial actions and proceedings, among others. Finally, SERASA also provides a variety of value added products and services for credit grantors, including analytical and decision tools such as bureau credit scoring models.

Other relevant credit reporting firms include Serviço Central de Proteção ao Credito (SCPC) and Equifax. SCPC is a not-for-profit venture of the Sao Paulo Chamber of Commerce, which has developed a nationwide network by linking similar registries in other cities. Its information sources were traditionally retail merchants, although at present banks supply a substantial share of information to SCPC. After SERASA, SCPC is the most commonly used database of consumer credit information and is used by both non-financial and financial creditors. Its database contains approximately 40 million individuals. On the other hand, Equifax focuses on commercial credit. Until 1998 when Equifax acquired it, the firm used to be a local credit bureau focusing on the manufacturing industry. Currently, its database contains records on 5 million enterprises. It also reported having data on 7.5 million individuals. Besides its basic credit bureau services, Equifax is working on the development of credit scoring models.

Regarding other useful data for credit decisions such as public commerce acts or property information on real estate and other major goods (i.e. vehicles) and their related liens, in most cases there is no public centralized registry system from which this information can be obtained. In general, information of these types is handled by public notaries and private registries (*cartórios*), each of them with a monopoly over a particular geographical area where such information is recorded. Through authorized distributors, some information is then sold to credit providers and private credit registries. One exception is the *Sistema Nacional de Gravámenes* (SNG), which was developed to register liens on motor vehicles.

Laws like the *Lei 8.078* (Consumer Protection Law) and *Lei Complementaria 105/01* contain some of the concepts and dispositions that are relevant to credit reporting, including the conditions under which positive and negative credit information may be shared without violating banking secrecy provisions and the time limit for negative data to remain in any given database. Also, there are some Resolutions issued by the *Conselho Monetário Nacional* that deal with specific issues related to credit reporting. However, information sharing and credit reporting activities remain unregulated for the most part. To this end, there is currently a draft law to be presented shortly to Congress whose basic purpose will be to provide a sound legal basis for exchanges of positive credit information.

SERASA, the dominant player in the industry, is coming under increased competition. SCPC appears to be the most serious competition at this time. SCPC's coverage of low-income consumers, mainly through store credit data, is of increasing interest to banks. Also, the fact that the data from the Chambers of Commerce throughout Brazil have been linked into a national network is increasing demand for the service.

Growing demand since the mid-1990s has attracted new players to the Brazilian credit industry; Equifax bought SCI, a smaller competitor of SERASA. In addition, credit ratings agencies such as Standard & Poors established local offices. Increased demand has also encouraged existing players to expand their services toward the supply of more positive information, e.g., SERASA's *Fica, Relato* and Credit Bureau.⁴

SCI Equifax is also developing its presence, in both the business and consumer markets. Given their association with Fair Isaac, they may be successful in increasing their share of the commercial market for credit reporting and related services. It will be much more difficult, however, to enter the consumer market. The firm emphasizes its role as a provider of high quality analytical solutions including credit scoring. This makes SCI Equifax a major competitor to SERASA in the market for value added services.

2 INSTITUTIONAL ASPECTS

2.1 Legal Framework

Brazil does not have a specific law focused on credit reporting. The legal foundations for credit reporting come from several laws including the Constitution (Art. 5, incisos XII, XIV, XXXIII), the Consumer Protection Law (No. 8.078, Article 43), Financial Sector Law (No. 4.595, Article 38 regarding bank secrecy), the Law for Habeas Data (No. 9.507) and the Civil Code (No. 397 – mora).

Additional laws govern specific aspects of information sharing, such as the laws for Cartórios (Nos. 8.935/94, 9.492 and 9.841 – Art. 40) and Central Bank laws and regulations related to the public credit registry (including notably Complementary Law 105). In some cases, state laws and regulations also affect this activity, as well as judicial decisions.

There is also an important new draft law being developed to provide a strong legal foundation for the operation of positive information credit bureaus. An interministerial team led by the Secretary of Economic Policy in the Ministry of Finance (Fazenda) and including both the Ministry of Justice and the Central Bank is developing the new law. The work on this law was prompted by a desire to promote greater access to credit in Brazil and lower transaction costs through more transparency and better risk analysis.

The Ministry of Justice, which oversees the state-level PROCONs (Consumer Protection Advocates) brought consumer protection concerns to the debate and the Central Bank brought insights regarding the importance of this data for the financial sector. In addition, the team sought input from the major credit reporting firms in Brazil.

⁴ Castelar Pinheiro and Moura.

The current draft law provide guidance on the legal basis for sharing credit information in Brazil helping to address some of the legal vacuum which currently exists. Among the most important aspects of the draft law are the following:

- establishment of a clear legal framework specifically for credit reporting activities;
- ii. establishment of the legal foundation for sharing positive payment histories, including detailed guidance as to the required mechanisms for notifying customers of the creation of a positive data file;
- creation of the legal basis for negative information to be provided directly to credit reporting firms with no prior requirement of passing through the *cartorio* system;
- creation of the legal basis for maintaining information on debts which have been regularized in credit reports (so that negative data is not simply erased once the debt is repaid);
- v. clarification that credit reporting firms may not restrict data providers from sharing information with other competing credit reporting firms;
- vi. clarification of some consumer rights and grievance procedures related to the operation of credit registries; and
- vii. establishment of the legal foundation for the development of decision tools such as credit scoring and other analytical risk tools.

2.1.1 Privacy

The Brazilian Constitution of 1988 includes the fundamental right of access to information, from both the public and private sectors, but also recognizes certain conditions or limits on this access. Article 5, item XIV states that citizens, in general, have a right to access information but also states that the source of the information may be protected if necessary for exercising a profession. For example, Article 5, item XII of the Constitution recognizes the private or secret nature of correspondence and communications including telegraph and telephone. This "telephone secrecy" may discourage telecommunications providers from reporting on delinquent customers as their dealings with the phone company are seen to be protected in the Constitution. Item XXXIII of the same Article guarantees citizens their right to access data held by the government, with exceptions for information which requires confidential treatment to protect the security of society at large or the state.

2.1.2 Bank Secrecy

The Financial Sector Law, No. 4.595, from 1964, governs the financial system in Brazil including the operation of the Central Bank, National Monetary Council, public banks and privately owned financial institutions. Article 38 of this Law describes bank secrecy and states that it relates to both assets and liabilities. Item 7 of the Article specifies criminal penalties of up to four years in prison for violation of bank secrecy. It does not mention credit information sharing by financial institutions nor does it provide any guidance as to how credit reporting would be viewed under bank secrecy.

Bank secrecy is often cited as a primary reason for the lack of sharing of positive payment history data by banks in Brazil. The law applies to bank assets (loans) as well as deposits and, as stated previously, provides no exception for credit reporting. Subsequent laws, such as Complementary Law No. 105, and even the draft law

"cadastro positivo" (both described in greater detail below) do not specifically state that bank secrecy does not apply to private credit reporting initiatives and the exchange of positive payment history data. The lack of clarity with respect to the status of credit reporting has been an impediment to the development of this activity, even if it does not represent an outright prohibition on information sharing.

2.1.3 Consumer Protection/Quality Assurance

Articles 43 and 44 of the Consumer Protection Law, No. 8.078 (passed into law on September 11, 1990) provides general guidance on the operation of databases in Brazil. Although databases for credit reporting are not mentioned specifically, this law is considered to cover their operation, as they are not excluded. Article 44 relates to a registry of consumer complaints about Brazilian businesses to be maintained by the consumer protection authorities and made available to the public. The relevant guidance on credit reporting thus comes in Article 43, items 1 through 5 which include the following principles:

- a. Data should be objective, clear and accurate;
- Negative information should be maintained for no more than five years;
- c. Consumers must be notified in writing about the creation of a file on them if they did not request its creation;
- d. Consumers can request changes of incorrect data to the database operator. These changes are to be effected in 5 working days and communicated to institutions which received the erroneous data;
- e. Databases on consumers, credit protection services and other related databases have a public character; and
- f. Once a debt is repaid negative information related to it should be erased.

Although specific regulatory guidance on the implementation of the Consumer Protection Law with respect to databases was never passed, the law is observed by the credit reporting industry and is the basis for judicial decisions.

The Law, however, is written in fairly general terms as more detailed guidance was expected to be provided by the Ministry of Justice. The uncertainty resulting from this situation gives judges significant latitude in interpreting the law, with consequences far from what may have been originally intended by lawmakers.

One of the most important of these judicial rulings for the credit reporting industry concerns the interpretation of what is required when informing customers of the creation of positive databases. On May 8, 2003, a Federal Judge in Sao Paulo upheld an earlier ruling and found that in order to duly inform consumers of their inclusion in a positive information database SERASA would have to use registered letters with proof of receipt. This type of mail is much more costly than the standard letter used for other consumer communication, such as when negative information is added to a file. The difference in price (about R\$ 7 compared with less than R\$ 1 for a standard letter) makes positive credit reporting in Brazil (i.e., development of a database containing information on a person's complete payment history, including on-time payments). Although this decision is being appealed, due to the case backlog it could still be years in normal circumstances before it is resolved.

The Law governing Habeas Data (No. 9.507, passed on November 12, 1997) further specifies the rights of data subjects with respect to access to their information contained in registries and databases and their legal recourse to correct and amend this information. The Law begins by stating that registries and databases which have information that is distributed to third parties have a public character. Data subjects can request access to their information and can request changes to information they consider erroneous. Once information has been shown to be inaccurate, the database operator has 10 days to change the data. If the database operator believes the data to be accurate even after the challenge, the data subject still has the right to add a comment to his/her file with regard to the data. If data subjects are denied access to their information from the database operator for more than ten days after seeking access or if the database operator refuses to amend inaccurate data or does not communicate with the data subject within 15 days of being notified of the data error, these are grounds for seeking judicial remedy under habeas data.

2.2 Role of Financial Institutions

2.2.1 Credit Reporting Agencies

There are three private credit reporting firms operating in Colombia—SERASA (bankowned), SCPC (not-for-profit venture of the Sao Paulo Chamber or Commerce) and Equifax. There is also a public credit registry operated by the BCB, the SCR. The BCB also operates CADIN, a registry of unpaid debts with the federal government. Details about the operations and services of these credit registries appear in sections 3 and 4 of this report

There are also several firms which offer more detailed business credit reports including...

2.2.2 Banking Sector

As owners of SERASA, banks play a prominent role as data sources and users of credit information. Brazilian banks have resisted sharing of positive information due to competitive issues. All banks use negative information as a first filter and to monitor a client's situation after a relationship has been established.

Moreover, the larger commercial banks have specialized departments to gather information from legal, commercial, property and real estate registries.

Banks in Brazil routinely offer mortgages, consumer loans and issue credit cards

2.2.3 Others

Other institutions that routinely provide information to credit reporting firms in Brazil include factoring firms, leasing companies and finance companies.

2.3 Role of Authorities

The lack of a general legal framework for credit reporting in Brazil implies that no authority is currently empowered to oversee the credit reporting industry. Thus, at present, there is no official control over private sector firms providing credit reporting services, access criteria to such services, quality of information t be stored in their databases, permissible uses of this information, security issues, etc.

Four agencies—under the aegis of the National Monetary Council (Conselho Monetário Nacional—CMN)—are responsible for the regulation and supervision of financial entities. The CMN is the highest regulatory entity within Brazil's financial system and it holds the ultimate responsibility for issuing the sector's regulatory policies.

The regulatory framework for credit reporting is limited in Brazil. There is no regulatory body charged with supervision of the credit reporting industry in Brazil. No government body has the legal right to access the information in the database of credit reporting firms to verify that it complies with the rules or the right to request audits for the same purpose.

In addition there is not consistency within the Government. In the Executive branch, the Ministry of Justice take the viewpoint of protecting the privacy of the individual is paramount, while the Central Bank believes that credit reporting should be viewed as a vital part of the financial system which seeks to support access to credit. In the legislative branch, many laws with conflicting objectives have been introduced.

No registration or authorization is necessary to establish a credit reporting firm in Brazil.

No requirement that data be collected through lawful means, that data should be authorized or have a legal purpose expressed in writing or implied in transactions or be restricted to recipients with an authorized purpose or lawful interest in the data.

Nor are there regulations on security, openness and transparency or the ability to impose sanctions.

There are limits in the time that data may be held/reported. A five-year period has been established for personal data records, including credit reports..

2.3.1 Central Bank

Central Bank of Brazil (*Banco Central do Brasil*, BCB)—oversees financial institutions and regulates the money markets. The Central Bank has a much broader role than corresponding institutions in most other countries. For example, every exchange transaction is reported and monitored and must be directly or indirectly authorized by the Central Bank.

The CMN imposed stricter requirements on Central Bank lines of credit in February 2000. The Central Bank may only lend funds to resolve relatively short-term liquidity problems and troubled banks must hand over assets in exchange for loans.

The Central Bank of Brazil owns and operates a Returned Check Register (*Cadastro de Cheque sem Fundos*) which lists all persons who have issued unfunded checks, information compulsorily supplied by banks. Updated copies of this register are made available to participants and clients of all credit information registries operating in Brazil.

The BCB supervises banks as well as several other types of financial intermediaries, including credit cooperatives. Bank-based conglomerates are supervised on a consolidated basis by the BCB.

2.3.2 Ministry of Finance and Public Credit

The Ministry of Finance (*Ministerio de Fazenda* or MinFaz) is responsible for all monetary and financial matters in Brazil.

2.3.3 Banking Supervisory Agency

Central Bank of Brazil (*Banco Central do Brasil*, BCB), Departameto de Fiscalizacao (DEFIS) is responsible for supervising financial entities operating in Brazil. It is in this context that the BCB operates the *Central de Risco de Crédito*.

2.3.4 Consumer Protection Agency

Consumer Protection & Defense Department (PROCON) of the Ministry of Justice, Economic Law Secretariat is the authority charged with settling complaints. They are empowered to apply sanctions and remedies as part of their enforcement of laws and regulations pertaining to data protection and credit reporting.

They require consumers to be notified in writing every time negative information on them is sent to a credit reporting firm. Either the lender or the credit reporting firm can provide the notification. They would like to make the requirement even stronger—requiring confirmation of receipt of the notification.

In addition, PROCON holds conferences on key consumers issues and offers consumer education in the form of public service announcements and brochures—including the functioning of the credit registries. The Sao Paulo PROCON also tracks consumer complaints—including those resulting from information included in a credit bureau. The complaints, however, are attributed to the firms that supplied the credit. PROCON does not feel it has any direct oversight responsibility over credit reporting firms, as the consumer has no direct relationship with these firms.

Low-income consumers may also have more difficulty navigating in the system and taking the steps required to clear their record. For these reasons, many low-income consumers are included in the files of credit reporting firms and these individuals' problems are the main concern of PROCON and influence their way of viewing the credit reporting industry.

2.3.5 Others

There are several non-governmental organizations (NGOs) operating in Brazil with the aim of protecting the rights of consumers, including their rights with respect to the use of credit and credit information systems. These NGOs include Independent em Defesa do Consumeridor Cidadao (IDEC) and the Associacao Brasileira de Defesa do Consumidor (PRO TESTES). These organizations function independently, but in the same manner as the PROCONs.

2.4 **Role of Other Private and Public Sector Institutions**

Non-financial Creditors 2.4.1

Table 5 shows that financial assets have been dominated by banks. Finance companies and leasing companies together accounted for only 3-4 percent of total assets in recent years.

Percentage of Total Assets	Dec-95	Dec-96	Dec-97	Dec-98	Dec-99	Dec-00	Dec 01
Banks (1)	91.40	90.25	91.42	90.67	91.58	93.08	93.64
Multiple Banks	53.31	52.76	52.10	47.10	50.76	52.61	69.10
Cooperatives	0.20	0.25	0.31	0.41	0.54	0.62	0.75
Finance Companies	0.29	0.59	0.52	0.41	0.53	0.71	0.49
Leasing Companies	3.33	3.36	4.17	5.24	5.42	3.87	3.29
Other Financial Intermediaries (2)	4.78	5.55	3.58	3.27	1.93	1.72	1.83

Table 5: F	inancial Sy	ystem Assets B	y Institutional	Туре
------------	-------------	----------------	-----------------	------

Notes: 1/ Includes multiple banks, commercial banks, caixa economica, development banks and investment banks.

2/ Includes housing finance entities, securities markets brokers& dealers and foreign exchange dealers. Source: Central Bank of Brazil

2.4.2 Industry Associations

Sao Paolo Chamber of Commerce is the owner and operator of the SCPC-a credit registry that initially was developed to meet the needs of its commercial members. The service has now expanded and enjoys participation from major banking institutions. It is a good source of data on low income consumers in Brazil.

Brazilian Federation of Banking Association FEBRABAN—Bankers' Association Uniting public, private and foreign-owned financial institutions, it lobbies the government, works with regulators on current issues, sets industry standards and provides information regarding the sector.

FEBRABAN publishes documentation for consumers on how to improve relations with banking institutions. This documentation includes information on how to dispute information contained in credit registries.

PRIVATE CREDIT REGISTRIES 3

3.1 Overview

There are three major private sector providers of credit information in Brazil. SERASA, established by Brazil's domestic banks in 1968, is the largest. It is the most commonly used source of consumer credit information. SCPC is a service owned and operated by the Chamber of Commerce of the city of Sao Paulo. It is linked by a computer network to chambers of commerce in hundreds of cities across Brazil and also focuses on consumer credit information.

SCI Equifax focuses on business credit information, although it has expressed an interest in expanding into consumer information.

3.2 SERASA

SERASA is the largest private credit reporting firm in the developing world, with annual sales exceeding USD \$147 million (update). Its market share within Brazil is estimated by some to be 80 percent.

3.2.1 Ownership/Governance

SERASA was established in 1968 by three of Brazil's largest domestic banks to enable them to exchange negative information on borrowers' payment activity. SERASA remains domestically owned and all medium and large banks are currently shareholders in the company.

3.2.2 Sources of Information

A 2001 report states that 6000 institutions feed data to SERASA, including 200 banks. The database contains information on 65 million individuals over the past five years, covering 59 percent of the adult population. SERASA also reported having information on 10.7 million firms.

Institutions report on a daily basis. In theory, they provide both positive and negative data, but reporting of positive data is problematic in Brazil for reasons outlined in Section 2 of this report.

SERASA also includes informant on delinquent taxes provided by the Tax Administration (Secretaria da Receita Federal) in its reports. (Miller Ch11)

3.2.3 Users

SERASA claims over 300,000 direct and indirect customers. SERASA users reportedly generate over 2.5 million queries per day. Reciprocity (i.e., feeding data to SERASA) is not required in order to consult the database.

3.2.4 Services Provided

As stated above SERASA traditionally handled only negative information. With the introduction of the Real Plan, it started to collect and offer positive information, although several of its main products still focus on negative data.

In the past years, the firm has focused on creating value added products. These are comprehensive information solutions, tailored for each customer group such as banking, retail, small, medium and large businesses. These information solutions provide a possibility of integration of information from several sources such as banks, firms, court and other public records, and may include analytical tools such as credit scoring.

Additional value-added products offered by SERASA include:

Credit Bureau—A group of five lenders: *Panamericano, Losango, Cacique, Fininvest* and ABN Amro (automobile loans only) provide data for this service. These five have provided full payment histories to SERASA on their client base. There are approximately 25 million consumer records in this Credit Bureau—a large majority of which are low income. The five intermediaries have given this data to SERASA, however, they are concerned about their liability due to the bank secrecy law. And thus data is only retrieved from the database on consumers who authorize access to the data in writing. Currently, not more than 5-10 percent of the data in this bureau is being used. Also, since the data is so detailed, the five lenders which have provided this data to SERASA, did so under the stipulation that it only be available within the group. In the future, however, they would be interested in expanding membership, so as to have a more complete picture of the credit histories of their borrowers already listed, as well as to extend coverage.

Credit Bureau includes positive information on individuals obtained from and used by credit card, financial, leasing, factoring, and insurance companies. To receive the information, firms have to agree to provide feedback into the system (reciprocity). Credit bureau includes the 1) name, date, and place of birth, spouse's and parent's names, address, telephone, time at current address, if residence is owned or rented, main occupation, employer, and time at current job; 2) negative information such as delays in paying credit obligations, judicial actions, unfunded or irregular checks, and so forth; 3) number and dates of recent credit consultations; 4) occupation, professional address, schooling, other addresses and professional activities, existing financial obligations, and payment behavior; 5) outstanding credit obligations; and 6) credit scoring, calculated using risk predictive models.

Data goes back five years.

Achei and Recheque—provide information on unfunded, canceled, stopped, stolen, and lost checks.

Concentre—provides information on *protestos*, checks with insufficient funds, bankruptcies, *concordatas*, judicial actions (executive actions, search and seizure actions, federal justice fiscal execution actions, tax debts, and participation in bankruptcy processes).

Confirmei, Identifica—verifies CPF (individual tax identification) and CNPJ (business tax identification)

Relato—payment history of a firm obtained from suppliers and banks. It includes the name and legal identification of the firm's five main suppliers, the total number of suppliers along with the length of their relationship with the firm and the following information for the 13 previous months; 1) the number of consultations about that firm, with the information on the data and name of the firms responsible for the four last consultations; 2) information on due payment values classified as on time and by intervals of delay, together with the value of cash payments and the total value of payments for the month; 3) the evolution of the firm's debt to suppliers; 4) the date and value of the last purchase, of the largest invoice, and of the largest cumulate value of

Ň

purchases; and 5) due and not paid financial obligations. It also give the consolidated position of bank and supplier credit. *Relato* offers a full perspective of a businesses' behavior in their trade relationships, guaranteed by the up-to-date, comprehensive information made available.

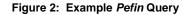
Monitore—constant tracking of business partners.

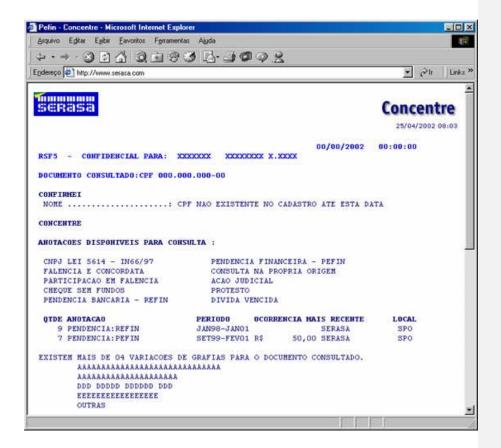
Figure 1: Relato Example

Serasa - INFORMA	CIA MODELO DAT TION SOLUTIONS S BEHAVIOR REPORT	E: 99/99	/9999	TIME:	11:09:18
SÃO JOSÉ DOS CAMPOS-SE FUND: 99/99/9999 F RAMO: COMÉRCIO VAREJIS PRINCIPAIS PRODUTOS: A		S 201/204 - 012 TEL REÍ,CAÇAPAV A, PLÁSTICO QUEDOS	CENTRO 21-2345 E A EMPREGA	DOS: 50	1
ENTRADA 22222222/0001-15 99/9999 33333333327 99/9999		NACIONALI BRASIL BRASIL BRASIL		AP TOTAL 40,0 30,0 30,0	
CARGO 33333333/27 BRU GERENTE) ON 99/99/9999) INISTRADOR NACIONALIDADE NO RAFAEL DINIZ BRASIL LO RODRIGO SANTOS BRASIL	CASADO	ENTRADA 99/9999 99/9999	INDET	
STOCK HELD CPF/CNPJ PARTICIPANT 12456222/25 COMERCIAL EX BASE INDL E	EMPRESA LIGADA DISTRIBUIDORA SPA S/A MEMPLO	VINCULC AC AC	CIDADE-UI SJCAMPOS-SI SUZANO-SP	%CAP P 51%	ITAL
MAIN SOURCES RAZÃO SOCIAL CERÂMICA NACIONAL S/A CIA DE EMBALAGENS PAUL CIA DE PRODUTOS DE PLÁ COMÉRCIO DE UTILIDADES IND E COM DE ARTEFATOS RELATIONSHIP WITI ATÉ 6MESES:8 6MÊS-IAM	STICOS LTDA LTDA DE BORRACHA S/A	44.444 55.555 FON1	11.111. 22.222. .333/0001-33 .444/0001-44 .555/0001-55 TES CONSU	4 5 LTADAS: 22	
QUERIES CONTROL MÊS EMPR BCOS	MÊS EMPR BCOS	CINCO ÚL	TIMAS		QTDE

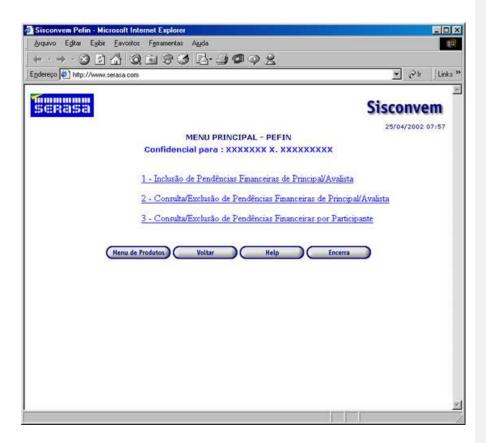
ATUAL: 6 7 MAR: 4 OUT: 5 6 ABR: 5 SET: 6 5 FEV: 5 AGO: 5 5 JAN: 4 JUL: 6 5 DEZ: 3 JUN: 5 8 NOV: 5 MAI: 4 6 OUT: 2	
PAYMENTSPROFILE(AMOUNTS IN R\$ THMÊSPONTUAL6-1516-3031	-60 +60 PMA À TOTAL
Mail VAL WAL VAL VAL <td>% VAL % * VISTA MÊS 22 0 0 22,3 120 1.450</td>	% VAL % * VISTA MÊS 22 0 0 22,3 120 1.450
SET 250 25 225 23 200 20 175 AGO 230 26 205 23 180 20 155	18 150 15 18,5 50 1.050 17 130 14 18,0 15 915
AGO 230 26 205 23 180 20 155 JUL 430 27 405 26 380 24 355	17 130 14 18,0 15 915 23 0 0 23,0 20 1.590
JUN 190 31 165 27 140 23 115	19 0 0 21,5 0 610
MAI 120 42 95 55 70 25 0	0 0 0 12,0 30 313
MAR 270 33 210 25 190 23 90	11 70 8 24,0 100 930
FEV 310 26 300 26 240 21 200 JAN 420 56 170 23 100 13 60	
DEZ 350 33 340 32 150 14 120	11 110 10 23,0 85 1.155
NOV 110 40 92 34 72 26 0 OUT 280 32 320 36 152 17 36	0 0 0 12,3 10 284 5 90 10 20,0 180 1.058
MÉDIA 263 32 226n 27 169 22 123	
* PMA = PRAZO MÉDIO DE ATRASO EM DIAS	
SUPPLIER COMMITMENTS EVOLUTION	(AMOUNTS IN R\$)
99 VENCIDOSA VENCER TOTAL 99/98	VENCIDOS A VENCER TOTAL
OUT 3000 2200 5200 MAR SET 1000 1900 2900 FEV	2000 2000 4000 1000 2000 3000
AGO 5000 2200 7200 JAN	1000 2000 3000
JUL 5000 2500 7500 DEZ JUN 0 2300 2300 NOV	2000 2200 5200 2000 2300 4300
OUT 3000 2200 S200 MAR SET 1000 1900 2900 FEV AGO 5000 2200 7200 JAN JUL 5000 2500 7500 DEZ JUN 0 2300 2300 NOV MAI 0 2300 2300 OUT	2000 2300 4300 1000 2300 3300
ABR 1000 2000 3000 BUSINESS POTENTIAL (AMOUNTS	
DATA VALOR	
ÚLTIMA COMPRA 99/99/9999 1.500 MAIOR FATURA 99/99/999912.250	
	9.080
MAIOR ACÚMULO 99/99/99933.200	14.870
FINANCIAL PENDING MATTERS (AMC	
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR	unts in r\$) N° Origem Filial
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/9990DUPLICATA 1.500,00	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: (ALCR VENCTO TÍTULO AVAL VALOR 99/99/9999DUPLICATA 1.500,00 320,00	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: (ALOR VENCTO TÍTULO AVAL VALOR 99/99/9999DUPLICATA 1.500,00 320,00 CONCENTRE INFORMATION (AMOUNTS IN	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$)
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: (MIC VENCTO TÍTULO AVAL VALOR 99/99/9999DUPLICATA 1.500,00 320,00 CONCENTRE INFORMATION (AMOUNTS II) EXISTE APENAS UMA GRAFIA PARA O DOCUMEN CONCENTRE (AMOUNTS II)	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$)
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: VALOR VENCTO TÍTULO AVAL VALOR 99/99/9999DUPLICATA 1.500,00 320,00 CONCENTRE INFORMATION (AMOUNTS IN EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO CONCENTRE RESUMO	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999)
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: (ALOR) VENCTO TÍTULO AVAL VALOR 99/99/99990HELICATA 1.500,00 320,00 CONCENTRE INFORMATION (AMOUNTS II) EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/9999DUPLICATA 1.500,00 99/99/9999CHEQUE 320,00 CONCENTRE INFORMATION (AMOUNTS IN EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO 2 PROTESTO	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VALOR VENCTO TÍTULO AVAL VALOR 99/99/99900HEJCATA 1.500,00 320,00 OCONCENTRE INFORMATION (AMOUNTS IN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5)	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VALOR VENCTO TÍTULO AVAL VALOR 99/99/99990HEICATA 1.500,00 320,00 OCONCENTRE INFORMATION (AMOUNTS II) EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CABTÓRIO	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) FO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 99 R\$2.520 SÃOPAULO SPO
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: VALOR VENCTO TÍTULO AVAL VALOR 99/99/99990HLICATA 1.500,00 320,00 OGNENTRE INFORMATION (AMCUNTS II) EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 799 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO FAULO SP
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VALOR VENCTO TÍTULO AVAL VALOR 99/99/99990HEICATA 1.500,00 320,00 OCONCENTRE INFORMATION (AMOUNTS I) EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/9999 R\$ 2.520 2	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) FO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 99 R\$2.520 SÃOPAULO SPO
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VALOR VENCTO TÍTULO AVAL VALOR 99/99/99990HELICATA 1.500,00 320,00 CONCENTRE INFORMATION (AMOUNTS I) EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 99/99/9999 R\$ 2.0000 1 TOTAL DE OCORRÊNCIAS = 2 2	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 799 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO FAULO SP SÃO FAULO SP
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/99990UPLICATA 1.500,00 99/99/99990UPLICATA 1.500,00 99/99/99990CHEQUE 320,00 CONCENTRE INFORMATION (AMOUNTS IN EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AG099-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.0.000 1 TOTAL DE OCORRÊNCIAS = 2 RECHEQUE INFORMATION (MISSING / Total de 32 Ocorrências de Sustação de	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 799 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO FAULO SP SUSPENDED CHECKS) Cheques nos últimos seis meses. 6 últimas:
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/99990CHEQUE 320,00 OPORCENTRE INFORMATION (AMOUNTS I EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 99/99/9999 R\$ 2.520 2 99/91/00 1 TOTAL DE OCORRÊNCIAS = 2 RECHEQUE INFORMATION DATA BANCO AG	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 799 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO FAULO SP SÃO FAULO SP SUSPENDED CHECKS) Cheques nos últimos seis meses. 6 últimas: CONTA CH INICIALCH FINAL MOTIVO
FINANCIAL PENDING MATTERS (AMC Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/99990HPLICATA 1.500,00 99/99/99990HPLICATA 1.500,00 CONCENTRE INFORMATION (AMOUNTS TI EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO9-OUTO COCORÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 99/99/9999 R\$ 2.520 2 99/99/9999 R\$ 2.0.000 1 TOTAL DE OCORRÊNCIAS = 2 RECHEQUE INFORMATION (MISSING / Total de 32 Ocorrências de Sustação de DATA BANCO AG 99/99/99 BRADESCO 1402	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 799 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO FAULO SP SUSPENDED CHECKS) Cheques nos últimos seis meses. 6 últimas:
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/99990HELCATA 1.500,00 99/99/99990HEQUE 320,00 COMCENTRE INFORMATION (AMOUNTS II EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 99/99/999 R\$ 2.520 2 99/99/9999 R\$ 2.520 2 99/99/999 R\$ 2.520 2 99/99/999 R\$ 2.520 1 Total de 32 Ocorrências de Sustação de DATA BANCO 99/99/99 BAME	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA 799 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO PAULO SP SÃO PAULO SP SUSPENDED CHECKS) Cheques nos últimos seis meses. 6 últimas: CONTA CH INICIALCH FINAL MOTIVO 100.563-0 001.000 001.020 SUSTAÇÃO
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/99990HELCATA 1.500,00 99/99/99990HEQUE 320,00 COMCENTRE INFORMATION (AMOUNTS II EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 99/99/999 R\$ 2.520 2 99/99/9999 R\$ 2.520 2 99/99/999 R\$ 2.520 2 99/99/999 R\$ 2.520 1 Total de 32 Ocorrências de Sustação de DATA BANCO 99/99/99 BAME	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) FO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA '99 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO PAULO SP SUSPENDED CHECKS) Cheques nos últimos seis meses. 6 últimas: CONTA CH INICIALCH FINAL MOTIVO 100.563-0 001.000 001.020 SUSTAÇÃO 000.123-4 088.544 EXTRAVIO
FINANCIAL PENDING MATTERS (AMO Total de 2 Ocorrências. 2 últimas: VENCTO TÍTULO AVAL VALOR 99/99/99990HELCATA 1.500,00 99/99/99990HEQUE 320,00 CONCENTRE INFORMATION (AMOUNTS IL EXISTE APENAS UMA GRAFIA PARA O DOCUMEN COMERCIAL EXEMPLO LIDA RESUMO QTD DISCRIMINAÇÃO PERÍODO 2 PROTESTO AGO99-OUT OCORRÊNCIAS MAIS RECENTES (ATÉ 5) PROTESTO DATA VALOR CARTÓRIO 99/99/9999 R\$ 2.520 2 99/99/9999 R\$ 20.000 1 TOTAL DE OCORRÊNCIAS = 2 RECLEQUE INFORMATION (MISSING / Total de 32 Ocorrências de Sustação de DATA BANCO AG 99/99/99 BAADESCO 1402 99/99/99 BARDESCO 1402 99/99/99 BADESCO 1402 99/99/99 BADESCO 1402	UNTS IN R\$) N° ORIGEM FILIAL 156.789 CIA DE PRODUTOS DE PLÁSTICOS SPO 032.232 INDUSTRIAL QUÍMICA S/A SPO N R\$) TO CONSULTADO (99.999.999) OCORRÊNCIA MAIS RECENTE VALOR ORIGEM AG/PRAÇA '99 R\$2.520 SÃOPAULO SPO CIDADE UF SÃO PAULO SP SÃO PAULO SP SÃO PAULO SP SUSPENDED CHECKS) Cheques nos últimos seis meses. 6 últimas: CONTA CH INICIALCH FINAL MOTIVO 100.563-0 001.000 001.020 SUSTAÇÃO 000.123-4 038.544 033.588 EXTRAVIO

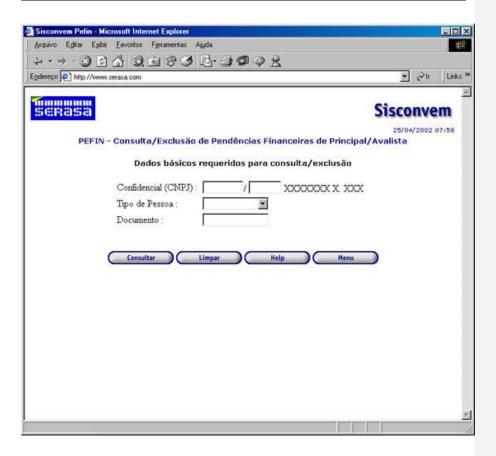
Pefin-Shows pending financial matters for individuals or firms.



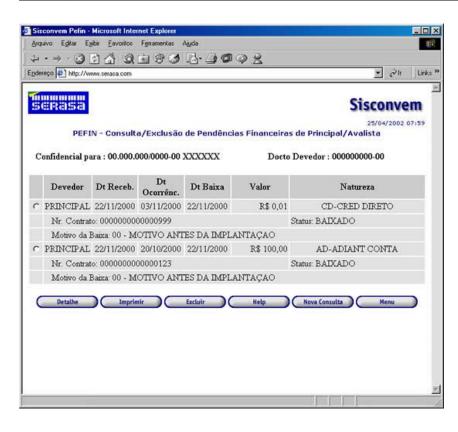


daragent to 1 bits							
asieve le 1 mp	://www.setasa.com					• 21	Links
INCO OCOR	RENCIAS MAIS REC	ENTES:					
ENDENCIA :	REFIN						
DATA	MODALIDADE AVAL		VALOR	CONTRATO	ORIGEN	LOCAL	
0/01/2001	LEASING				SERASA	SPO	
0/01/2000	EMPRES CONTA	R\$9999	999999,99		SERASA	SPO	
	FINANCIAMENT		2020222220		SERASA	SPO	
0/09/1999	FINANCIAHENT				SERASA	SPO	
6/01/1999	CRED CARTAO S	R\$ 5	00.000,00		SERASA	RJO	
ENDENCIA:	PEFIN						
DATA	MODALIDADE AVAL		VALOR	CONTRATO	LOCAL		
1/02/2001		R\$	50,00	5555555	SPO		
	ORIGEN: SERASA				00000		
0/01/2001	ADIANT CONTA ORIGEM: SERASA		111111,11	1234567899876543	SPO		
0/12/2000	OUTRAS OPER		0,01	000000000000000000000000000000000000000	SPO		
	ORIGEN: SERASA		121211-221	17972100042420			
0/12/2000	ADIANT CONTA ORIGEM: SERASA	RŞ	20,00	123456789	SPO		
0/12/1999	ADIANT CONTA ORIGEN: 222222			000000000000987	SPO		
INAL - DT	SPONIVEL P/OUTRA	CONSU	LTA				
	A SHITLE FOULA	consu	S. 9.16				
		1000		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -		23	
	Imprimir		Monitore	Nova Consulta	Menu de Produto:		





March 2005



March 2005

Arquivo Egitar	Egibir <u>F</u> avoritos F <u>e</u> rra	ientas Aiuda			
$\Rightarrow \cdot \Rightarrow \cdot \otimes$		9 3 B.	30092		
ipdereço 🛃 http://	/www.serasa.com			2	∂lr ∐Lini
SERasa				Siscor	ivem
	1	clusão de P	endências Financeira	All states of the second s	2002 07:59
	Confide	ncial para :	00.000.000/0000-00	*****	
Docto : 00	000000-00	Devedor : Pl	RINCIPAL	Status : BAIXADO	
Dt recebim. ;	22/11/2000		Hora :	12:35	
Dt disponib. :			Postagem carta :		
Dt ocorren :	03/11/2000		Praça :	ACLD-ACRELANDIA	
Dt da baixa :	22/11/2000		User_id efetuou baixa :	GEPRO48	
Motivo baixa :	00 - MOTTVO A	TES DA IM	PLANTAÇÃO		
Valor :	R\$ 0,01		Cod. natureza :	CD - CRED DIRETO	
Dt comprom.:			Valor tot compromisso :	R\$ 0,00	
Nr. contrato :	000000000000000	99	Nosso Nr. :	00000000000123	
Credor (CNPJ)					
Nome credor :					
Nome dev. :	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	x xxxxxxx	XXXXXXXX		
Endereço :	R DAS FLORES	1223			
Compl.end. :			DDD/Fone :	0000/000000000	
UF/Município :	SP/SAOPAULO				

March 2005

Dt disponib : Postagem carta : Dt docorren : 03/11/2000 Praça : ACLD-ACRELANDIA Dt da baixa : 22/11/2000 User_id efetuou baixa : GEPRO48 Motivo baixa : 00 - MOTTVO ANTES DA IMPLANTAÇÃO GEPRO48 Valor : R\$ 0,01 Cod. natureza : CD - CRED DIRETO Dt comprom : Valor tot compromisso : R\$ 0,00 Nr. contrato : 00000000000999 Nosso Nr. : 00000000000123 Credor (CNPJ): Nome credor : NOCOCOCOX XOCOCOCOX XOCOCOCOX COCOCOCOX XOCOCOCOX XOCOCOCOX Nome dev. : XOCOCOCOX XOCOCOCOX XOCOCOCOX 0000/00000000 UF/Município : SP/SAOPAULO Bairro : HORTO FLORESTAL CEP : 02611-001 R.G. dev/UF : Dt nascimento : Nome do pai : SP/SAOPAULO Dt nascimento : XOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC	Arquivo Egitar	Egibir Eavontos Ferramentas Agada		
Dt recebim : 22/11/2000 Hora : 12:35 Dt disponib : Postagem carta : Dt ocorren : 03/11/2000 Praça : ACLD-ACRELANDIA Dt da baixa : 22/11/2000 User_id efetuou baixa : GEPRO48 Motivo baixa : 00 - MOTIVO ANTES DA IMPLANTAÇAO Valor : R\$ 0,01 Cod. natureza : CD - CRED DIRETO Dt comprom : Cod. natureza : CD - CRED DIRETO Dt comprom : R\$ 0,01 Cod. natureza : CD - CRED DIRETO Dt comprom : R\$ 0,00 Nr. contrato : 00000000000999 Nosso Nr. : 00000000000123 Credor (CNPJ): Nome credor : Nome credor : Nome dev : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	$\Rightarrow - \Rightarrow - \otimes$	0 4 9 9 9 3	·4092	
Dt disponib : Postagem carta : Dt docorren : 03/11/2000 Praça : ACLD-ACRELANDIA Dt da baixa : 22/11/2000 User_id efetuou baixa : GEPRO48 Motivo baixa : 00 - MOTTVO ANTES DA IMPLANTAÇÃO GEPRO48 Valor : R\$ 0,01 Cod. natureza : CD - CRED DIRETO Dt comprom : Valor tot compromisso : R\$ 0,00 Nr. contrato : 00000000000999 Nosso Nr. : 00000000000123 Credor (CNPJ): Nome credor : NOCOCOCOX XOCOCOCOX XOCOCOCOX COO00000000000000000000000000000000000	indereço 🛃 http://	/www.serasa.com		👻 🖓 İr 🛛 Lini
Dt ocorren: 03/11/2000 Praça: ACLD-ACRELANDIA Dt da baixa: 22/11/2000 User_id efetuou baixa: GEPRO48 Motivo baixa: 00 - MOTTVO ANTES DA IMPLANTAÇÃO Valor: R\$ 0,01 Cod. natureza: CD - CRED DIRETO Valor: R\$ 0,01 Cod. natureza: CD - CRED DIRETO Dt comprom: Valor tot compromisso: R\$ 0,00 Nr. contrato: 00000000000999 Nosso Nr. : 00000000000123 Credor (CNPJ): Nome credor: NOMOCOCOCX XOCOCOCX XOCOCOCX Endereço: Nome dev.: XOCOCOCOX XOCOCOCX XOCOCOCX 0000/00000000 UF/Município: SP/SAOPAULO DDD/Fone: 0000/00000000 Bairro: HORTO FLORESTAL CEP : 02611-001 R.G. dev/UF: Dt nascimento : Nome do pai:	Dt recebim. :	22/11/2000	Hora :	12:35
Dt da baixa : 22/11/2000 User_id efetuou baixa : GEPRO48 Motivo baixa : 00 - MOTTVO ANTES DA IMPLANTAÇÃO CD - CRED DIRETO Valor : R\$ 0,01 Cod. natureza : CD - CRED DIRETO Dt comprom : Valor tot compromisso : R\$ 0,00 Nr. contrato : 000000000000999 Nosso Nr. : 00000000000123 Credor (CNPJ):	Dt disponib. :		Postagem carta :	
Df da basa : 22/11/2000 baixa : GEPRO48 Motivo baixa : 00 - MOTTVO ANTES DA IMPLANTAÇÃO Valor in terme a servicia de la compressiona de la compressima de la compressima de la compressiona de la compressiona	Dt ocorren. :	03/11/2000	Praça :	ACLD-ACRELANDIA
Valor: R\$ 0,01 Cod. natureza: CD - CRED DIRETO Dt comprom: Valor tot compromisso: R\$ 0,00 Nr. contrato: 00000000000999 Nosso Nr.: 00000000000123 Credor (CNPJ): Nome credor: Nome credor: Nome credor: Nome dev: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Dt da baixa :	22/11/2000		GEPRO48
Dt comprom:: Valor tot compromisso : R\$ 0,00 Nr. contrato : 00000000000999 Nosso Nr. : 0000000000123 Credor (CNPJ): Nome dev : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Motivo baixa :	00 - MOTIVO ANTES DA I	MPLANTAÇAO	
Dt comprom: compromisso : R\$ 0,00 Nr. contrato : 00000000000999 Nosso Nr. : 00000000000123 Credor (CNPJ): Nome credor : Nome credor : Nome dev. : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Valor :	R\$ 0,01	Cod. natureza :	CD - CRED DIRETO
Credor (CNPJ): Nome credor : Nome dev. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Dt comprom :			R\$ 0.00
Nome credor : Nome dev. : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Nr. contrato :	000000000000999	Nosso Nr. :	00000000000123
Nome dev : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Credor (CNPJ)			
Endereço : R DAS FLORES 1223 Compl end : DDD/Fone : 0000/00000000 UF/Município : SP/SAOPAULO Bairro : HORTO FLORESTAL CEP : 02611-001 R.G. dev./UF : Dt nascimento : Nome do pai :	Nome credor :			
Complend.: DDD/Fone: 0000/00000000 UF/Município: SP/SAOPAULO Bairro: HORTO FLORESTAL CEP: 02611-001 R.G. dev./UF: Dt nascimento: Nome do pai:	Nome dev. :	200000000 200000000	20000000	
UF/Município : SP/SAOPAULO Bairro : HORTO FLORESTAL CEP : 02611-001 R.G. dev./UF : Dt nascimento : Nome do pai :	Endereço :	R DAS FLORES 1223		
Bairro : HORTO FLORESTAL CEP : 02611-001 R.G. dev./UF : Dt nascimento : Nome do pai :	Compl.end. :		DDD/Fone :	0000/00000000
R.G. dev./UF : Dt nascimento : Nome do pai :	UF/Município :	SP/SAOPAULO		
Nome do pai :	Bairro :	HORTO FLORESTAL	CEP :	02611-001
	R.G. dev./UF :		Dt nascimento :	
Nome da mãe :	Nome do pai :			
	Nome da mãe :			
	<u> </u>	Lucion Imprimitr	Metp Ve	Menu
Excluir Imprimir Help Voltar Menu				

Autorizador de Crédito-Credit scoring for retail transactions.

Gestor de Crédito-Business-to-business credit scoring.

3.2.5 Pricing Policies

Basic report costs \$3.00-indicates whether there are outstanding problems faced by the firm. A more complete report costs about \$70.00.

3.2.6 Procedures and Policies to Ensure Quality of Information

3.2.7 Procedures and Policies to Manage Risk

Serasa's services are certified according to ISO 9000 quality standards.

Serasa has 2000 employees in 140 locations across Brazil.

3.2.8 Rights of Individuals/Firms to Access and Dispute Information

Serasa maintains a call center and 140 physical locations across Brazil. Individuals wishing to view data must present required documentation—ID or work permit, tax document in person or through a third party in possession of a notarized Power of Attorney plus required documentation. Serasa provides free Citizen Guidance for resolving pending financial matters in their offices.

In order to correct an error, the individual must contact the creditor who submitted the false or outdated information. Serasa will correct the information in its database at the request of the creditor. After a creditor has notified Serasa of the need to update its database, Serasa will complete the request within five business days.

Individuals must be notified by mail before information on an overdue debt maybe entered into Serasa's database.

There is a legal requirement to respond to consumer complaints. Consumers may request that their entire record be removed.

Data is removed once debt has been repaid. Unpaid debts remain on file for 5 years.

Creditors must notify consumers when relationship is established, new information is provided, and when the customer defaults. The credit bureau must notify customer when negative information is received, but not when positive data is received nor when credit report is emitted.

3.2.9 Information Sharing Policies

SERASA offers the *Relatorios Internacionais Serasa* service as a result of agreements between SERASA and other foreign private credit bureaus. This service makes it possible for Brazilian lenders to obtain a credit report on a foreign firm and for foreign vendors to obtain reports on Brazilian firms. This service does not apply to credit reports for individuals.

3.3 SCPC (Servico Central de Protecao ao Credito)

After Serasa, SCPC is the most commonly used database of consumer credit information. While the database itself contains only information on individuals, the retailers exchange information on borrowers who have defaulted on their commercial or trading responsibilities.

3.3.1 Ownership/Governance

SCPC is a service provided by the Sao Paulo Chamber of Commerce. It is linked to similar registries in Rio de Janiero, Brasilia and Paraná by a network. Together these networks cover 95% of Brazil. SCPC is a not-for-profit venture.

3.3.2 Sources of Information

Sources were traditionally retail merchants. Banks now comprise a significant share of information provided to the SCPC.

3.3.3 Users

SCPC users are still mainly stores, but financial credit institutions and credit cards companies also use the service. Casas Bahia, a large electronic appliance retailer, is the largest user..

3.3.4 Services Provided

SCPC reports 38 million consultations in 2003 and 41 million consultations in 2004. The database contains approximately 40 million records on about 10 million individuals and provides information to about 100,000 users. SCPC maintains a database of consumer loans based mostly on reports of retailers. Users may query by name and date of birth or CPF. The result is the name of a firm or retailer where individual has an unpaid debt, number of a contract, date of missed payment and the amount unpaid.

In addition to credit reports, SCPC offers the following services:

Telecheque—A database for check users.

UseCheque—Information on checks with insufficient funds for consumers and firms. Clients query by entering the telephone number of an individual or firm, CPF or CNPJ, name of the bank that has issued the check, bank account number and/or check number.

3.3.5 Pricing Policies

Prices for a standard credit report range from \$R0.76 to \$R1.40, depending on the client's volume.

3.3.6 Procedures and Policies to Ensure Quality of Information

3.3.7 Procedures and Policies to Manage Risk

3.3.8 Rights of Individuals/Firms to Access and Dispute Information

Consumers may view their data and register disputes in SCPC offices. They also offer consumers brochures with advice on how to "clean" their credit report.

3.3.9 Information Sharing Policies

3.4 Equifax

Second largest for-profit credit reporting firm in Brazil. SCI traditionally focused on trade credit—they claim to have the largest database of mercantile credit in Brazil (not corroborated). Since they were acquired by Equifax, they have expressed an interest in challenging SERASA's dominance in consumer credit.

3.4.1 Ownership/Governance

U.S. credit bureau giant purchased 80 percent of the Brazilian credit reporting firm, SCI, in 1998 and has invested heavily in developing the firm, including a new office building (2000) in the financial district of Sao Paulo.

3.4.2 Sources of Information

Contains records on 11.5 million enterprises, of which 4 million are active. They also reported having data on 7.5 million consumers.

3.4.3 Users

Provide information to about 25,000 users.

3.4.4 Services Provided

SCI is working intensively on the development of decision analysis tools, such as credit scoring, and has an exclusive relationship with Fair Isaac. (Fair Isaac had been working with SERASA until the summer of 2001.)

Fees are charged on a bulk-order basis and are competitive with those charged by SERASA.

Equifax *Empresarial*—is a comprehensive report on businesses operating in Brazil including identification information, judicial records and payment behavior records.

Score *Empresarial*—is a statistical model evaluating the level of credit risk of a given enterprise.

Equifax Pessoal—is comprehensive credit report on individuals.

Cheque Pessoal (Empresarial)-is a bad check report on individuals or firms?

3.4.5 Pricing Policies

A basic report costs about R1.00, with volume discounts bring the price down to R0.46 to R0.70.

- 3.4.6 Procedures and Policies to Ensure Quality of Information
- 3.4.7 Procedures and Policies to Manage Risk
- 3.4.8 Rights of Individuals/Firms to Access and Dispute Information
- 3.4.9 Information Sharing Policies

4 PUBLIC CREDIT REGISTRIES

4.1 Overview

There are two credit information registries operated by the Brazilian government. The *Central de Risco* whose primary purpose is to support Bank Supervision activities, can also be used by institutions that submit data as a supplementary source of information on large creditors.

The federal government also maintains CADIN which registers unpaid debts with any public authority—including tax debts, social labor fees owed by employers, late or delinquent payments to state owned utilities.

SCR was created by the Conselho Monetário Nacional and is operated by the BCB.

In addition, the Central Bank also operates a bad check database.

4.2 Central de Risco de Credito and Sistema de Informacoes de Credito do Banco Central

4.3.1 Main Objectives of Registry

The Central de Risco de Crédito (CRC) was created by the BCB in June 1997 primarily to support its supervision of regulated financial institutions. It has a secondary objective of operating as a public credit bureau. Information has been increasingly used by financial institutions to gather information on existing and potential clients to enhance their risk management process.

To enhance the usefulness of its database, the BCB launched a successor to the CRC called *Sistema de Informacoes de Crédito do Banco Central* (SCR) in June 2004⁵. The SCR collects a broader set of information to enhance its use as a supervisory tool as well as its use as a public credit bureau. The additional information in the SCR (both positive and negative) fills an existing vacuum in the private credit bureau market where generally only negative information is shared.

The quality of information in the SCR also surpasses that of the CRC, it has technical features that facilitate querying on information and is better suited for Brazil's forthcoming implementation of the Basel II guidelines.

4.2.2 Sources of Information

Providing credit data to the BCB is mandatory for regulated institutions including: Bancos Múltiplos; Bancos Comerciais; Caixa Econômica Federal; Bancos de Investimento; Bancos de Desenvolvimento; Sociedades de Crédito Imobiliário; Sociedades de Crédito, Financiamiento e Investimento; Companhias Hipotecárias;

⁵ The migration to the SCR began in the year 2000. SCR was developed and implemented with the aid of an external consultant and took into account the results of discussions with financial institutions. It began collecting data in May 2002. Both systems are currently running in parallel, although the CRC will be discontinued in the near future.

Agências de Fomento ou de Desenvolvimento; Associações de Poupança e Empréstimo; Sociedades de Arrendamento Mercantil and some Cooperativas de Crédito.

The BCB receives information from reporting institutions on borrower liabilities exceeding R\$5000. This information includes data on performing and non-performing credits, off-balance sheet or contingent financing such as guarantees and credit limits. Each month the SCR receives approximately 14 million borrower records.

In some cases borrower information is not disclosed due to judicial injunctions or errors in the origination of the financing.

The CRC began by collecting information on large loans, in excess of about USD \$50,000. Now this has been reduced to only about USD \$5000.

Institutions must provide information on borrowers with total outstanding liabilities above R\$5,000 at the end of a given by the 20th of the following month. They must also at this time provide aggregate data regarding their entire credit portfolio.

4.2.3 Users

The primary users of the system are the BCB's bank supervisors to monitor the health of individual financial institutions as well as the financial system as a whole. The system will also be used to implement the Basel II guidelines for calculating capital requirements for financial institutions. It is also used for some economic analysis and research.

Access to SCR data outside of the BCB is limited to borrowers (only their own data) and the regulated institutions which report data. By law, the BCB may not disclose data to others with the exception of a borrower's legal representative or judges.

To consult a current or potential client's record, the financial institution must obtain written authorization. This practice is supervised by DESUP and non-compliance carries legal sanctions.

4.2.4 Services Provided

Financial institutions may access a detailed report of a borrower's credit history with that institution and another report that shows the situation of the borrower with the financial system as a while. The CRC has processed nearly 2.5 million queries per month in recent years. The SCR is expected to handle 40 million queries per month.

A borrower's credit history includes a summary of the information in each of the last thirteen monthly datasets, which includes a distribution of the credits by payment status (outstanding, past-due or written off), the borrower's total liabilities (credits and contingent financing) and approved limits, number of credits with the institution, debts in foreign currency, the number and amount of credits disputed in the courts, the largest exposure in the last 13 months and the date when the borrower's relationship with the financial institution began.

1

Additional information available includes:

- Flow of Aggregate Maturities—a breakdown of the borrower's total obligations by maturity, indicating the amounts and fractions of the borrower's total obligations that fall due in different time horizons broken down by currency denomination. It also shows amounts written off in the previous year as well as the previous five years.
- Flow of Aggregate Maturities by Risk Classification—a breakdown of the borrower's total credits by maturity further broken down by risk classification including contingent financing.
- History of Previous 13 Months—detail of the information contained in each of the last13 monthly datasets submitted, including a breakdown of total liabilities by type of financing.
- Additional breakdowns by type of credit, type of credit and risk classification, by type of credit and payment behavior.

Financial institutions have three channels to access information:

- i. Web Service—a real time, host-to host https connection, where the bank's system contacts the BCB's system. It operates over many possible platforms, such as .net or java.
- ii. Internet—the financial institution can perform individual queries on clients.
- iii. Batch File—financial institution's may request information regarding many clients, but this is limited to their aggregate positions with the financial system. Credit information of up to 50,000 selected borrowers may be requested seven times per month or the a financial institution may request its entire portfolio three times per month.

The methods by which financial institutions have to access the information are depicted in **Diagrams I-IV**.



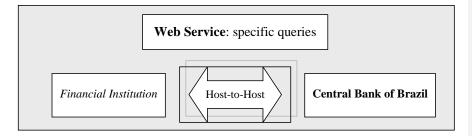


Figure 4.

March 2005

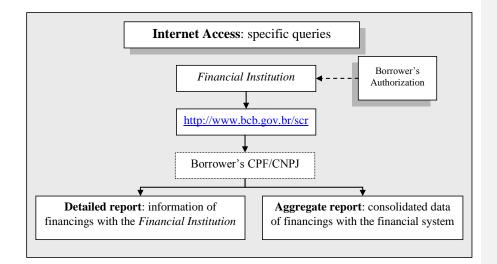


Figure 5.

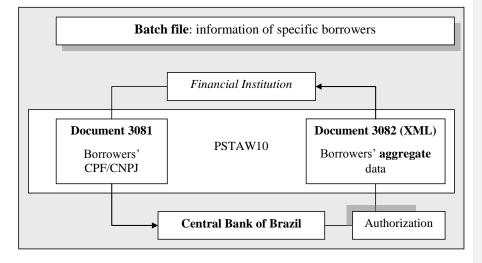
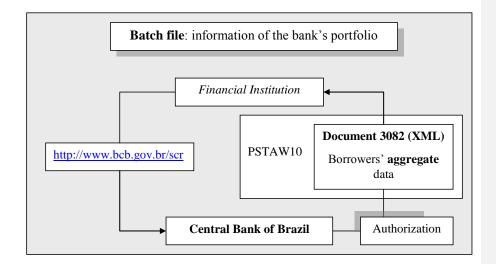


Diagram IV.



4.2.5 Pricing Policies

The Batch File service is the least expensive option, followed by the Web Service then the Internet.

4.2.6 Procedures and Policies to Ensure Quality of Information

The BCB's DEFIN verifies that all required information is received, that it meets quality requirements. DEFIN has developed a procedure to verify the quality of information received and detect inaccuracies. The procedure is automated and consists of the following three steps:

• Stage 0—Prevalidation

In this stage, initial edits are performed, for example, to determine that the file date is correct.

• Stage 1—Validation of Syntax

In this stage the structure and format of the document are analyzed. More than 600 syntax edits are performed.

• Stage 2—Semantic Validation

The consistency of information is analyzed. This involves more than 50 additional checks, for example, to compare the individual information against balance sheet information, comparisons to the previous month's information and seeking duplicate records.

Information is either rejected or corrected, depending on the type of error discovered. The BCB may apply sanction for late reporting or poor data quality, although this practice has been temporarily suspended until the transition from the CRC to the SCR is complete.

While the data is generally perceived to be of high quality, certain variables such as interest rates, indexing clause, *prejuizios* and guarantees are problematic. It is also difficult to verify balance sheet information.

4.2.7 Procedures and Policies to Manage Risk

Access to borrower's information is limited within financial institutions. Access by BCB officials is limited by the needs and responsibilities of each person. Use is generally limited to supervision departments, CAPs staff and information technology professionals responsible for maintaining the system. All access to data is logged.

While CRC information was sent in a fixed .txt format, SCR uses the flexible XML (eXtended Markup Language), which allows the handling of much larger volumes of information. Each month they receive data from 1,800 institutions on 10 million borrowers and 18 million lines of credit. This amounts to 15 to 17 gigabytes of data every month. So far, 2 terabytes have been collected in two years of operation.

SCR's information is stored in a data warehouse for five years, along with additional information created from the data received. In addition, there is an operational database containing up to 1.5 years worth of raw data aimed at satisfying normal requests and needs. Data more than 5 years old is stored in physical devices.

A Business Recovery Plan consisting of a second site operating at 4/5 kilometers distance can replace the main system in less than one hour. The information is backed up in real time.

4.2.8 Rights of Individuals/Firms to Access and Dispute Information

Borrowers (both individuals and firms) may request to see their own detailed information, which includes identification of creditors, from any of the BCB's 10 *Centrais de Atendimento a Público* (CAP) or through a toll free telephone number. The CAPs are located in Brasilia and nine regional divisions including Belém, Belo Horizonte, Curitiba, Fortaleza, Porto Alegre, Recife, Rid de Janeiro, Salvador and Sao Paulo. Individuals must show their identification and CPF. Firms must present their *Junta Comercial* certificate. Borrowers may also register at a CAP to receive their information through the Internet.

Borrowers may also request a copy of their information by mail by sending by sending in the required, signed documentation. After verifying the authenticity of the documents presented, the CAP will send a copy of the report to be delivered to the person by hand.

If the debtor disagrees with the informant in the SCR, he or she may complain directly to the financial institution which introduced the error, at any CAP office or to the Ministry of Justice. CAP staff will provide the individual with information on how they may proceed

and will forward the complaint to bank supervisory staff who will contact the financial institution. If it is determined that the financial institution made an error it must provide a written response to he individual. If a financial institution does not adequately address a complaint it may be referred to DEFIN for possible application of sanctions.

4.2.9 Information Sharing Policies

Within the public sector there are no agreements between the BCB and other supervisors to share information in their public credit bureaus to reinforce supervision of entities whose activities span borders.

4.3 CADIN

CADIN is the public sector's credit registry. It was created in 1993 and is operated by the BCB. Debts with any federal public authority are reported to CADIN, including unpaid taxes, social/labor fees owed by employers, fines, late or delinquent payments to state-owned utilities, etc. CADIN is located in Brasilia.

4.3.1 Main Objectives of Registry

CADIN was originally created to block access to credit from pubic institutions to firms and individuals who were in default either with a public financial institution or in their tax obligations. They have since expanded to all federal public institutions in order to provide a strong incentive to honor obligations with public agencies.

Individuals or firms on the list are no longer blocked from access to credit from public institutions.

4.3.2 Sources of Information

Data may be submitted by any public institution of the Brazilian federal government. Past-due debts which exceed R\$10,000 must be registered, otherwise registration is discretionary.

4.3.3 Users

Use is limited to the public sector. At first limited to only public financial institutions, now all public institutions.

4.3.4 Services Provided

Records include name and CPF/CNPJ of the individuals and firms which are at least 90 days past due. The creditor and date of registration in CADIN are identified, however the amount of the debt is not included.

Past-due debts remain in the registry until they are paid, at which time the creditor has up to five days to remove the record. Unpaid debts remain in the registry indefinitely.

4.3.5 Pricing Policies

4.3.6 Procedures and Policies to Ensure Quality of Information

The information in CADIN is subject to some consistency checks, which include controlling the code of the reporting creditor, the date when the information was furnished, the debtor's CPF or CNPK and the date when the debt was originated.

4.3.7 Procedures and Policies to Manage Risk

4.3.8 Rights of Individuals/Firms to Access and Dispute Information

Individuals may query their own information at any of the BCB's CAP offices.

4.3.9 Information Sharing Policies

5 INTERACTION WITH OTHER COMPONENTS OF THE FINANCIAL INFRASTRUCTURE

5.1 Payment Systems and Instruments

The Returned Check Register (*Cadastro de Cheque sem Fundos*, CCF) was created in 1989 with the objective of the use of the check as a payment instrument by registering and disclosing information regarding issuers of checks without funds. It is regulated by the BCB, but operated by the public-owned commercial bank, *Banco do Brasil*.

Currently the CCF has 100 million records with a monthly turnover of 100,000. The information is maintained for 5 years and includes the name of the issuer, CPF/CNPJ, number of rejected checks, current account number, amount of rejected checks, reason for rejection (closed account, insufficient funds, etc.), date of rejection an date of inclusion in the CCF.

The information is compulsorily supplied by banks in electronic files on a daily basis. Smaller institutions may send with less frequency. Upon receipt, the information is subject to some edits, but the institutions providing the information are ultimately responsible for its accuracy. The information received from all banks is consolidated into one file and sent back. There is no charge to institutions that provide data. Other institutions who do not provide data may receive

5.2 Corporate Registries

???

5.3 Collateral Registries

5.3.1 Property

Brazilian real estate is registered with local, privately operated concessions known as *cartorios*. There is no centralized real estate or property registry run by the Public Administration.

The information in the *Registro de Imóveis* registered in the *cartorios* is not interconnected nationally or even within states. In order to view a property record, the interested party must make inquiries in each of the individual *cartorios*, in person or through a postal service offered by ANOREG (*Associacao dos Notarios e Registradores do Brasil*), *Cartorio 24 Horas* (www.cargorio 24horas.com.br).

In addition to the lack of interconnectedness, the reliability of the information is sometimes compromised due to the fact that not all liens on real estate are registered in the corresponding *cartorio*. As a result, the certificates issued b may not give a complete description of the status of a given property.

ANOREG and IRIBI (*Instituto do Registro Imobiliario do Brasil*) have projects to interconnect the *cartorios*. Specifically, IRIBI's project aims at interconnecting the *cartorios* that register real estate.

5.3.2 Vehicles

The Registro Nacional de Veículos Automotores or RENVAM contains information on Brazilian automobiles, including vehicle ownership. This information can be queried through the DETRAN (*Departamento Estadual de Transito*) of each state.

5.4 Others

5.4.1 Civil Status

As was described in the case of real estate registration, registration of civil status has also been delegated to privately operated, local concessions known as *cartorios*.

5.4.2 Judicial Records

???

5.4.3 Ratings Firm

S&P, Fitch, Moody's???

5.4.4 Business Reports

???

Notary publics—have concessions to run "*cartorios*" where delinquent payments may be registered. Lenders can obtain "protest letters" (*protestos*) from the *cartorios* if they register a delinquent loan. The "protest" letter has certain legal status, even though it does not mean that any assessment has been made as to the situation regarding the complaints, i.e., that it is justified or not. The notaries want to make it a requirement that delinquent payments or loans be registered with them before they can be sent to a credit reporting firm.

APPENDIX: STATISTICAL TABLES

The first series of tables (A) provide information on credit reporting in Brazil. These tables have been prepared following the Standard Methodology for Country Tables developed by the WHCRI core team. This methodology is available at the WHCRI web site <u>www.whcri.org</u>.

The second series (B) provide general statistics of the financial system and the credit market.

Series A

Credit Reporting Statistics

Table A1: Basic Statistical Data	53
Table A2: Credit and Loan Reporting Institutions and other Relevant Datab	bases for
Credit Activities	53
Table A3: Private Credit Bureaus – Ownership Structure	53
Table A4: Number of Institutions Reporting to Private Credit Bureaus	54
Table A5: Number of Institutions Reporting to Public Credit Registries	54
Table A6: Number of Individuals, Firms and Transactions Registered in Priva Bureaus	
Table A7: Number of Individuals, Firms and Transactions Registered in Publ Registries	
Table A8: Credit Reports Requested to Private Credit Bureaus	56
Table A9: Credit Reports Requested to Private Credit Bureaus	56
Table A10: Credit Reports Requested to / Delivered by Public Credit Registries.	57

Series B

General Financial System and Credit Market Statistics

Table B1: Financial Institutions	.58
Table B2: Credit Granted by Financial Sector Entities	.58
Table B3: Credit Granted by Financial Sector Entities	.59
Table B4: Credit Granted by Financial Sector Entities	.59
Table B5: Credit Quality Indicators for Credit Granted by Financial Sector Entities	.59
Table B6: Credit Granted by Non-Financial Entities	.60

Table A1: Basic Statistical Data

	2000	2001	2002	2003	2004
Population (millions)					
GDP (USD billion)					
GDP per Capita (in USD)					
Exchange Rate vs. USD					
End of Year					
Average					
Source:					

Table A2: Credit and Loan Reporting Institutions and other Relevant Databases for Credit Activities

	Name	General Description
Private Credit Bureaus		
Public Credit Registries / Centrals	Risk	
Other Databases Judicial System Databases Corporate Registries Collateral Registries Property Registries Commerce Registries Others		
Source:		

Table A3: Private Credit Bureaus – Ownership Structure

	Name Shareholder	of	Stake
Credit Bureau 1	Shareholder 1 Shareholder 2		
Credit Bureau 2	Shareholder 1 Shareholder 2		

.....

Source:

Table A4: Number of Institutions Reporting to Private Credit Bureaus

	2000	2001	2002	2003	2004
Credit Bureau 1					
Financial Sector					
Banks					
Other (provide breakdown)					
Non-Financial Sector					
Total					
Credit Bureau 2					
Financial Sector					
Banks					
Other (provide breakdown)					
Non-Financial Sector					
Total					
Source:					

Table A5: Number of Institutions Reporting to Public Credit Registries

2000	2001	2002	2003	2004
	2000	2000 2001	2000 2001 2002	2000 2001 2002 2003

Source:

_

Table A6: Number of Individuals, Firms and Transactions Registered in Private Credit Bureaus

	2000	2001	2002	2003	2004
Credit Bureau 1					
Number of Individuals					
Number of Firms					
Total					
Number of Records (accounts) belonging to Individuals					
Number of Records (accounts) belonging to Firms					
Total					
Credit Bureau 2 Number of Individuals Number of Firms Total Number of Records (accounts) belonging to Individuals Number of Records (accounts) belonging to Firms Total					
Source:					

Table A7: Number of Individuals, Firms and Transactions Registered in Public Credit Registries

	2000	2001	2002	2003	2004	
Public Credit Registry 1						
Number of Individuals						
Number of Firms						
Total						
Number of Records (accounts) belonging to						
Individuals						
Number of Records (accounts) belonging to Firms						
Total						
Public Credit Registry 1						
Number of Individuals						
Number of Firms						
Total						
Number of Records (accounts) belonging to						
Individuals						
Number of Records (accounts) belonging to Firms						
Total						

March 2005

Memo: Lower Limit for Reporting Firms, Individuals and Accounts to the Public Credit Registry (in USD)

Source:

Table A8: Credit Reports Requested to Private Credit Bureaus

(by type of soliciting institution)

20002001200220032004Credit Bureau 1 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report						
Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total		2000	2001	2002	2003	2004
Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Credit Bureau 1					
Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Financial Sector					
Non-Financial Sector (provide breakdown) Individuals or Firms that requested Individuals or Credit Report Total Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector preakdown) Individuals or Firms that requested their own Credit Report Total	Banks					
breakdown) Individuals or Firms that requested their own Credit Report Total Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Others (provide breakdown)					
their own Credit Report Total Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total						
Credit Bureau 2 Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total						
Financial Sector Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Total					
Banks Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Credit Bureau 2					
Others (provide breakdown) Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Financial Sector					
Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Banks					
Non-Financial Sector (provide breakdown) Individuals or Firms that requested their own Credit Report Total	Others (provide breakdown)					
Individuals or Firms that requested their own Credit Report Total	ů ,					
their own Credit Report Total	breakdown)					
Source:	Total					
	Source:					

Table A9: Credit Reports Requested to Private Credit Bureaus (by delivery channel)

	2000	2001	2002	2003	2004
Credit Bureau 1					
Direct Connection					
Internet					
Mail					
Fax					
Physical delivery at branch					
Others					
Total					
Credit Bureau 1					
Direct Connection					
Internet					

March 2005

Mail Fax Physical delivery at branch Others Total

Source:

 Table A10: Credit Reports Requested to / Delivered by Public Credit Registries

 (by type of soliciting institution)

	2000	2001	2002	2003	2004
Public Credit Registry 1					
Financial Sector					
Banks					
Others (provide breakdown)					
Non-Financial Sector (if applicable)					
Individuals or Firms that requested their own Credit Report (if applicable)					
Total					
Public Credit Registry 2					
Financial Sector					
Banks					
Others (provide breakdown)					
Non-Financial Sector (if applicable)					
Individuals or Firms that					
requested their own Credit Report					
(if applicable)					
Total					

* Indicate if credit reports furnished by Public Credit Registries are delivered upon request or are distributed periodically by the operator of the Registry.

Source:

March 2005

Table B1: Financial Institutions

	2000	2001	2002	2003	2004
Banks					
Private commercial banks					
State-owned commercial banks					
Branches of foreign banks					
Development banks					
Non-banking financial intermediaries					
Financial companies					
Savings and loans associations					
Leasing firms					
Factoring firms					
Deposit warehouses					
Insurance companies					
Bonding companies					
Securities firms					
Mutual funds operators					
Pension funds operators					
Foreign exchange houses					
Credit unions					
Others					
Total					
Source:					

Table B2: Credit Granted by Financial Sector Entities (by main creditor type, in USD)

		2000	2001	2002	2003	2004
Private commen	cial bank	S				
State-owned	comm	ercial				
banks						
Development ba	anks					
Financial compa	anies					
Leasing firms						
Factoring firms						
	nd	loans				
associations						
Credit unions						
Others						
otal						
Source						

Source:

Table B3: Credit Granted by Financial Sector Entities

(by main debtor type, in USD)

	2000	2001	2002	2003	2004
Non-financial private sector					
Individuals					
Firms					
Financial sector					
Non-financial public sector					
Total					
Source:					

Table B4: Credit Granted by Financial Sector Entities (by main credit type, in USD)

	2000	2001	2002	2003	2004
Commercial loans					
Short-term (≤ 1 year)					
Long-term (> 1 year)					
Residential mortgage loans					
Personal loans					
Credit card loans					
Others					
Total					
Source:					

Table B5: Credit Quality Indicators for Credit Granted by Financial Sector Entities (in USD)

	2000	2001	2002	2003	2004
Total loans					
Current loans					
Non-performing loans					
Allowance for loan losses					
Total loans classified by credit					
quality					
AAA					
AA					
A					
В					
С					
D					
E					

March 2005

Others

Source:

Table B6: Credit Granted by Non-Financial Entities(by main creditor type, in USD)

20002001200220032004Non-banking general credit card issuerspurposeDepartment supermarketsstores and supermarketsand supermarketsOfficial institutions*housing financing institutions*financing inancing official consumptionOfficial institutions*consumption financing institutions*financing institutions							
credit card issuers Department stores and supermarkets Official housing financing institutions* Official consumption financing institutions*			2000	2001	2002	2003	2004
supermarkets Official housing financing institutions* Official consumption financing institutions*	5 5	purpose					
institutions* Official consumption financing institutions*	•	and					
institutions*		financing					
	institutions*	financing					

* Not belonging to the financial sector

Source:

LIST OF ABBREVIATIONS

ABEL	Associacao das Empresas de Leasing (Brazilian Association of Leasing Companies)
ANFAC	Associacao Nacional das Socidades de Fomento Mercantil Factoring (National Factoring Association)
ANOREG	Associacao do Notarios e Registradores do Brasil
BCB	Banco Central do Brasil (Central Bank of Brazil)
BNDES	Banco Nacional de Desenvolvimento Economico Social (National Bank for Economic and Social Development)
BSCH	Banco Santander Central Hispano
BEM	Banco do Estado do Marahao
CADIP	Sistema de Registro de Operacoes de Crédito com o Setor Público
CADIN	Cadastro Informativo de Créditos nao Quitados do Setor Público Federal
CAP	Centrais de Atendimento a Público
CCF	Cadastro de Emitentes de Cheques sem Fondos
CEF	Caixa Economica Federal
CPF	
CNPJ	
СОРОМ	Comite de Política Monetaría (Monetary Policy Committee)
CMN	Conselho Monetário Nacional (National Monetary Council)
CRC	Central de Risco de Crédito
DECEC	Deparamento de Capitais Estranjeiros de Cambio (Department of Foreign Capital and Foreign Exchange)

March 2005

DEFIN	
DEINF	Departamento de Informatica
DEINV	
DESIF	Departamento de Combate a Ilícitos Cambiais e Financeiros (Department to Combat Illicit Financial and Foreign Exchange Transactions)
DESIN	Departmento de Supervisao Indireta (Department of Indirect or Offsite Supervision)
DESUP	Departamento de Supervisao Directa (Department of Direct or On- site Supervision)
Febraban	Federacao Brasileira de Bancos (Brazilian Federation of Banks)
GDP	Gross Domestic Product
FGC	Fondo Garantidor de Créditors (Deposit Guarantee Fund)
IDEC	Independente em Defesa do Consumidor
INPC	National Consumer Price Index
IPCA	Consumer Price Index
IRIBI	Instituto do Registro Imobilario do Brasil
PROCON	Consumer Protection and Defense Department
PROER	Program of Incentives for the Restructuring and Strengthening of the National Financial System
PROES	Program for the Restructuring of the State-owned Financial System
PRO TESTE	Associacao Brasileira de Defesa do Consumidor
PT	Partido dos Trabalhadores (Labor Party)
RECOR	Registro Comun de Operacoes Rurais
SELIC	Sistema Especial de Liquidacao de de Costodia

March 2005

SCR Sistema de Informacoes de Crédito

- SCPC Servico Central de Proteao ao Crédito (Central Service for Credit Protection)
- SNG Sistema Nacional de Gravámenes

GLOSSARY

Cadastros—The credit report of a person or a firm.

Cartorios—Privately owned and operated concessions that register real property and civil status among other things.

Cheque especial-Overdrafts to individuals.

Conta garantida-Overdrafts to business enterprises.

Protesto—A "letter of protest" that can be filed with a cartorio regarding an unpaid debt.

SELIC Rate—Basic interest rate reflecting transactions in the secondary market for government securities. It is the target rate in the current monetary policy framework. It is the weighted average of over night inter-bank operations with reserves. The calculation comprises go-arounds, repurchase and reverse repurchase agreements. It reflects the cost of reserves in the interbank market.

This document is an output from a project funded by the FIRST Initiative (<u>www.firstinitiative.org</u>). he views expressed are not necessarily those of FIRST. This document is protected by copyright and other applicable intellectual property rights owned by and/or licensed to FIRST Initiative.