

# Credit Information System – the use of micro-data in credit statistics

Renato Baldini Jr<sup>1</sup>

## Introduction

The Credit Information System (“*Sistema de Informações de Crédito*” in Portuguese; SCR) is a data bank maintained and administered by the *Banco Central do Brasil* (BCB), with registers of all loans (plus leasing and other credit-like operations) from national financial institutions to enterprises and individuals. Each single credit operation from borrowers whose responsibilities against the financial system are equal or superior to R\$ 1,000 (c. USD 500) is individually registered on SCR by financial institutions on a monthly basis. The remaining operations are also included on SCR but in aggregated form.

The SCR was implemented in 1997 with information on credit responsibilities above R\$ 50,000, a threshold that was gradually reduced to R\$ 5,000. In April 2012, the limit was further lowered to R\$ 1,000 in a milestone that was regarded as the move to SCR Phase 2.

## The recent growth of the Brazilian credit market

The Brazilian credit market has fully developed only after the consolidation of macroeconomic stability, even though progress has been stronger on the loans market than on the securities market. Having started from a very low base, loans have boomed over the last ten years – total loans to GDP increased from 26% in December 2002 to 53.8% in December 2012 – basically following economic growth and some important institutional advances which allowed for the reduction of interest rates and the expansion of credit supply.

Against this background the SCR has evolved with the main objective of providing the BCB’s banking supervision with detailed information about credit operations of the institutions of the national financial system. SCR data allows the banking supervision and the banking system to assess the size and the profile of the financial debt of each borrower (enterprises or individuals), as well as credit-related losses of each financial institution and of the whole banking system.

The access of financial institutions to information on SCR about potential borrowers’ credit history and the size of their aggregated financial responsibilities is crucial for the sustainable development of the credit market as it helps market participants to avoid information asymmetries and adverse selection, contributing for the adequate pricing of credit operations. By helping financial institutions to avoid lending further resources to over indebted borrowers and to lower interest

<sup>1</sup> Department of Economics, Banco Central do Brasil, renato.baldini@bcb.gov.br.

rates for historically good payers, SCR also fosters competition on the credit market and facilitates the decline of average interest rates and banking spreads.

## Compilation of statistics from SCR data

SCR covers a wide range of information about credit operations, financial institutions and borrowers. Such information can be used for the compilation of a number of macroeconomic and financial stability statistics. The move to SCR Phase 2 resulted in a significant improvement on the coverage of several statistical datasets extracted from SCR especially because of the expansion of the number of borrowers with detailed information registered on the system.

In December, 2011, there were 150.6 million credit operations individually registered in SCR. After the move to SCR 2 the number of registered operations has been increased to 475 million (June 2012). Such data covered information on credits borrowed by 61 million individuals and 3.5 million enterprises.

Information available on SCR has been used for the compilation of regional credit statistics which provide a very precise geographical distribution of credit in Brazil. The compilation of this set of statistics is based on the borrower's postal code which is informed by lenders on SCR. Previous regional statistics were based on information about the location of the lending institution, which tended to result in significantly distorted information, as the location of financial institutions are highly concentrated at major Brazilian financial centers like São Paulo and Rio de Janeiro. Publishing of regional credit statistics based on SCR began in 2007, with available data breakdowns for the five regions and the 27 Brazilian states. The postal code data of credit operations allows for even further breakdowns, at municipalities, neighborhoods and streets level, although the compilation has not advanced to such detail.

A very important indicator based on SCR is the Real Estate Collateral Value Index ("Índice de Valorização de Garantia de Imóveis Residenciais Financiados" in Portuguese; IVG-R). This index measures the long term trend of housing prices based on the appraisal values of residential units financed in the biggest eleven metropolitan regions. The IVG-R was published for the first time at the BCB's Financial Stability Report in March 2013.

Housing prices indexes have been regarded as fundamental to assess the sustainability of housing markets. Their relevance has been particularly highlighted after the U.S. subprime crisis. Accordingly, the compilation of housing prices indicators has been proposed as one of the twenty recommendations of the G-20 Data Gaps Initiative, conducted by the International Monetary Fund and the Financial Stability Board, with support by the BIS, the World Bank, OECD and Eurostat on the aftermath of the 2008 crisis.

As a major instrument of the banking supervision, the SCR has been used for the compilation of a large number of financial stability indicators. Some of them have proved to be crucial to assess the prevailing conditions on the credit market as well as to inform policy decisions. Examples of the application of such indicators are related to the macroprudential measures implemented in the end of 2010 and afterwards. The rapid growth of consumer credit in Brazil has boosted domestic demand and significantly contributed to the acceleration of the economic activity over the last ten years. Along with those positive effects came the buildup of some

specific risks, particularly in the auto loans' market. BCB then introduced measures aiming to curb the expansion of auto loans with long terms and very high Loan to Value ratios (LTV). LTV statistics based on SCR proved to be very important before and after the implementation of those measures, as well as vintage data for non performing loans (NPL), which were intensively used to gauge the evolution of NPLs since 2010.

Information available on SCR is also used for the compilation of statistics on the distribution of loans according to the size of the operations and by their remaining maturity. SCR data also contribute for the compilation of public finance statistics by providing data on the banking debt of government enterprises.

A number of other interesting and important statistical datasets are still being developed based on SCR data. Information on the turnover of enterprises and the income of individuals are going to allow for the compilation of credit statistics with breakdowns by the companies' size and the individuals' income classes. The outcome is expected to shed light for example on the patterns of indebtedness of different income classes and their behavior with regards to the payment of financial responsibilities. Such behavior can also be crossed with information about the number of years of the borrower's relationship with the financial institution, which allows for the assessment of implications of the increased access of lower income classes and smaller enterprises to the credit market.

Another important development front is the compilation of statistics about the distribution of credit across economic sectors. Currently published statistics only provide breakdowns by public or private sector and by households, housing, industry, agriculture, commerce and other services. New statistics being developed from SCR data will be able to open information according to the economic activity code of each enterprise, which will allow for the opening of distributional data in very deep detail.

## Concluding remarks

The SCR is a very powerful instrument not only for the sake of banking supervision but also for the compilation of macroeconomic statistics and financial stability indicators. Important information is being extracted from this system contributing for a large number of analyses of the fast growing credit market. SCR's sheer size has posed some operational difficulties for data compilers but gradually new indicators have been produced opening many different ways to expand SCR's utilization as a major source of credit statistics.