

Press Release – Monetary Policy and Credit Operations

New credit database structure – Methodological Note – February 2013

1. Introduction

This methodological note aims to describe main improvements introduced on credit statistics monthly released by the Brazilian Central Bank through the Press Release – Monetary Policy and Credit Operations and the time series management system¹, highlighting and clarifying principal changes and key concepts.

On section 2, it is described the relationship between the credit market development over the last thirteen years and the consequent new statistical and analytical requirements. The restructuring of the previous statistical database is justified by explaining its shortcomings. On section 3, main improvements are synthetically illustrated, emphasizing the extended data coverage of lending, interest rates, terms and default rates, now including earmarked loans and financing. In annex, more specific methodological information discusses key concepts of the new database structure with emphasis on principal changes.

2. Historical trajectory and fundamentals

Database previously utilized in the elaboration of the Press Release – Monetary Policy and Credit Operations had remained essentially unchanged since June 2000, when new information on flows of credit operations (lending), interest rates, spreads, terms and default rates were introduced, adding up to statistics related to the balances of credit operations, which represented the majority of data released. On that occasion, data review aimed to improve the monitoring of monetary policy transmission channels following the adoption of the inflation targeting system in 1999.

Thirteen years after, this monitoring is still relevant, in view of the significant credit expansion, favored by better employment and income indicators, steady and significant downward trajectory of interest rates and crucial institutional progress. However, in the framework of structural changes observed in the credit market and in the macroeconomic

¹ Available at www.bcb.gov.br/?sgs.

scenario, availability of additional information has become essential, particularly with regard to more specific data on earmarked credit operations, with emphasis on housing financing, whose enhanced dynamics has contributed to reduce the housing deficit in the country. This explains the main improvement introduced in the new database structure, in which the coverage of data on lending operations, interest rates, terms and default rates was extended to the segment of earmarked credit operations.

In response to the macroeconomic stability and expanded credit market, new credit modalities arose to meet growing needs for household and corporate financing, at the same time that other credit modalities became irrelevant. Therefore, in addition to the extended data coverage, with the incorporation of the earmarked segment, information included in the new database structure has become more detailed, so as to allow the identification of the most significant credit modalities, as well as to reduce the relative share of not classifiable credit operations – incorporated as “other credits”.

The first step for the elaboration of the new database structure involved discussions among several Central Bank areas dealing with the credit market. Later, discussions were extended to include representatives of National Financial System institutions and their associations. The framework underlying methodological concepts and guidelines for remittance of new statistics by financial institutions were released between December 2008 and October 2009. Preliminary information started to be sent by March 2010, and the validation process continued up to the end of 2012.

3. Chief improvements

3.1. Extended data coverage on lending, interest rates, spreads, terms, arrears and default

One of the most significant improvements introduced in the Press Release – Monetary Policy and Credit Operations is the extension of information related to interest rates, lending, terms and default rates to earmarked and leasing² operations. Previously, these statistics were only available for a restricted group of credit modalities, the so-called “reference rate credit

² Information regarding lending, interest rates, terms and default rates do not include credit cooperatives, fostering agencies and micro entrepreneur credit societies. These institutions are responsible for 2.2% of total National Financial System Credit Operations.

operations”. Increased availability of data related to monthly credit operations and respective interest rates should contribute to generate more exact information about financial resources available to the productive sector and household consumption, in addition to enhance the understanding of the mechanism of interest rate formation.

3.2. Database uniformity

The new database of the Press Release – Monetary Policy and Credit Operations mainly relies upon information sent by financial institutions through the so-called Document 3,050, defined on the basis of the institutional framework established by Resolution no. 3,658, dated December 17/2008, and Circular no. 3,567, dated December 12/2011, and Circular-Letter no. 3,540, dated February 23/2012. Therefore, the most important information of the new database structure should be sent according to a single methodological scope, thus assuring enhanced data homogeneity. So far, since database relied upon data gathered by means of distinct documents, regulated by norms edited at different dates and with divergent purposes, primary data had to be statistically organized with the purpose of securing the consistency of data coverage, periodicity and timeliness.

3.3. More detailed information

The new database structure contains more detailed and updated information by credit modalities, so as to highlight those credit lines with increased relevance over the recent years. Among them, it should be mentioned the payroll-deducted credit modality, regulated as of the beginning of 2004. So far, available statistics on payroll-deducted loans were limited to the balance of these operations, in addition to data on new lending and interest rates, obtained on the basis of a sample composed of thirteen financial institutions. From now on, all information regarding payroll-deducted loans are associated with the totality of financial system operations, segmented by borrowers: INSS retirees and pensioners, public sector servants (actives and retired) and private sector workers.

Other credit modalities which will display more detailed information are the anticipation of credit card invoices, leasing operations (vehicles and other goods) and export and import financing. The modality of working capital loans will be subdivided in three categories: with

term lower/higher than 365 days and with revolving ceiling, a credit line in which the financial institution make available to the borrower a preset amount of funds to be utilized upon request.

3.4. New concepts

Conceptual changes involved the definition of new credit modalities and the incorporation of new information on the volume of operations. It should be mentioned that the new database will make available information regarding lending terms, indicating the time (in months) between the date of the contract agreement and the date in which the last credit installment is paid. Data refers to the originally agreed term, instead of the average portfolio term – which was the only data available so far – corresponding to the residual term of total credit balances. Lending terms make it possible to carry out more reliable analysis on the credit trajectory, thus representing a relevant indicator for the evaluation of economic policies.

Data related to the portfolio average term are still available in the Press Release – Monetary Policy and Credit Operations at the Central Bank time series management system. Other conceptual changes, especially those related to credit modalities, are further detailed in the annexed document.

3.5. Data quality

Since the beginning of the process for reformulating the database underlying the Press Release – Monetary Policy and Credit Operations, financial institutions have become aware of the importance of detailing data to be sent to the Central Bank. Improvement thus obtained in relation to previous guidelines meant a significant quality jump for the new database, thus contributing to the precise and uniform classification of information. Furthermore, the incorporation of new credit modalities in the new database helped to improve the classification of lending operations, reducing the probability of ambiguities.

ANNEX

Key concepts

1. Coverage

Coverage of data regarding the total credit balance, reflected in the Press Release – Monetary Policy and Credit Operations, includes bank operations (commercial, investment, exchange, development, multiple, BNDES and Brazilian Savings Bank – CEF), leasing companies, savings and loans associations, mortgage companies, real estate companies, credit cooperatives and fostering agencies.

2. Financial charges

Available information (balances, lending, interest rates, terms and default rates) correspond to the consolidation of credit operations agreed with major indexing factors: fixed-rate, variable rates, floating, foreign exchange, other indexing factors, TR and TJLP.

3. Information periodicity

In general, information underlying the database of the Press Release – Monetary Policy and Credit Operations is provided by financial institutions on a daily basis, except with regard to credit modalities related to earmarked credit operations, which are provided on a monthly basis. Information on arrears and default are also elaborated on a monthly basis.

4. Balances

Information regarding credit balances is consolidated by financial institutions on the basis of updated balances of each active credit operation. Balances of data released grow in function of lending operations and interest appropriation; and decrease in function of installment payments (comprising interest and principal), amortizations and writing off as loss. Balances are released in nominal terms.

5. Lending

Lending or disbursements correspond to values effectively credited to borrowers in the reference month. With regard to guaranteed account, overdraft account and revolving credit card, the value of lending correspond to resources effectively utilized, not to agreed credit limits.

Total revolving credit operations encompass overdraft account (corporations and individuals), guaranteed account, revolving credit card and credit card with no interest owed, whereas total non revolving credit operations include the remaining credit modalities. The purpose of this segmentation is to facilitate inter temporal analysis: the representativeness of revolving credit modalities is relatively low, because their balances are small, even though the amount of monthly lending is large, because they tend to repeat throughout the month.

As for the modality personal credit related to debt renegotiation, lending operations indicate renegotiated values referring to outstanding values of other credit modalities, such as overdraft account and credit card. Since these modalities refer to previously agreed credit availability, lending does not correspond to new resources made available by the financial system, and thus are not included into other lending totals (individuals, corporations and total).

6. Interest rates

Interest rates are calculated only for credit operations agreed in each month. Figures are sent by financial institutions and released by the Central Bank in terms of percentage per year, comprising interest, fiscal and operational³ charges.

The first step in the calculation of average interest rates is the daily remittance of information by financial institutions of average rates of total credit operations in each modality, which are weighted by the value of respective operations. Interest rates of each credit modality are consolidated on a daily basis, and then are once again weighted by the amount of lending granted by each financial institution. Average monthly rates are consolidated on the basis of average daily rates, which are weighted by the daily volume of lending. Average interest rates

³ The average rate of operational charges does not include charges related to the maintenance of revolving credit lines and credit card annual fees whose payment is not associated with the utilization of agreed credit limits.

for individuals, corporations, earmarked, nonearmarked and total operations are obtained by weighting each credit modality by its respective balance.

7. Lending terms

Lending terms indicate the time required for the operation to be settled, and reflects the term originally agreed, not the remaining term. It refers to lending operations agreed in the reference month, not to the entire portfolio.

8. Portfolio terms

They correspond to the remaining terms of credit operations. The term attributed to credit installments in arrears below 90 days is one day. Operations in arrears of more than 90 days are not taken into account.

9. Arrears up to 90 days and defaults

Default rate corresponds to the percentage of operations in arrears of more than 90 days in relation to the respective total balance. In the case of operations in arrears, if only one of the operation's installments is in arrears, the total outstanding balance of the operation is deemed as in arrears, even if some of the operations' installments are not overdue.

With regard to overdraft and guaranteed account, only the values exceeding the preset values agreed in the respective contracts are deemed in arrears. The number of days in arrears are calculated as of the date in which the limit was exceeded or the eventual contract termination, the first to occur. With regard to the revolving credit card modality, arrears occur when the payment is not carried out in the due date or the payment is lower than the minimum payment required.

10. Credit modalities

10.1 Nonearmarked resources – corporations

- **Discount of trade bills** – advance of funds for companies based in their cash flow associated with trade bills and other receivables (except checks and credit card invoices).
- **Working capital** – loans related to working capital requirements, regulated by a specific contract stipulating terms, rates and collaterals. In the new database structure this credit modality is subdivided in three categories:
 - working capital with terms lower than 365 days;
 - working capital with terms higher than 365 days;
 - working capital with a revolving ceiling – credit line in which the financial institution defines a preset amount of funds to be utilized by the borrower upon request. In the previous structure, this category was either included in the working capital modality or in the guaranteed account modality.
- **Guaranteed account** – a revolving credit operation available through the bank account of companies, in which a certain limited amount of funds may be utilized at the discretion of the accountholder or upon formal request to the financial institution. This operation in general requires collaterals and the amortization of debt balances is not required at any specific date as long as the contract is effective.
- **Overdraft account – corporations** – a short-term revolving credit line available through the bank account of companies in which a certain limited amount of funds may be utilized at the discretion of the accountholder without previous request to the financial institution. Debt balances are automatically amortized through account deposits. In the previous structure, these operations were included in the guaranteed account modality.
- **Vendor** – sales financing operation in which the borrowing company (supplier/seller) sells its product on credit and receive immediate payment by the financial institution. The buying company commits itself to pay the credit to the financial institution so as to settle the operation. In general, the financial institution will retain the credit rights of the selling company, which will assume the risks associated with the operation.
- **Advance on exchange contracts (ACC)** – partial or total advance of revenues on export contracts for financing the production of respective goods to be exported. They include advance on delivered exchange operations (ACE). Even though ACC operations are indexed to foreign exchange, the contract is agreed in BRL. In the new structure, interest rates of ACCs correspond only to rates effectively incurred by borrowers. The expected exchange variation during the contract period is no longer taken into account.

- **Import financing** – Financing for the purchase of goods and services abroad through foreign credit lines. In the previous structure, this modality was included in Import financing and other credits indexed to foreign exchange.
- **Foreign on lending** – on lending operations with resources obtained abroad by financial institutions and indexed to exchange variation, according to Resolution no. 3,844, dated March, 24/2010.
- **Other non earmarked credits** – non earmarked credit operations not included in the aforementioned modalities.

The following modalities were introduced:

- **Discount of checks** – credit operations for advance of resources based on cash flows associated with checks kept in custody.
- **Anticipation of credit card invoices** – advance of funds on the basis of cash flows composed of receivables represented by credit card invoices.
- **Vehicles financing – corporations** – Lending operations for the purchase of automotive vehicles to be utilized in the maintenance or expansion of output capacity of the borrower (company), classified as investment. In the previous structure, this modality was included in the item Purchase of goods. It does not include operations with the aim of constituting commercial stock by borrowing companies.
- **Other goods financing – corporations** – in the previous structure, these operations were included in the modality Purchase of goods, in which the modality Vehicles financing was also included.
- **Vehicles leasing** – in the previous structure there was no segmentation between vehicles and other goods.
- **Other goods leasing** – it does not comprise leasing of immovable goods. In the previous structure there was no segmentation between vehicles and other goods.
- **Compror** – purchase financing operations in which the financial institution pays directly the supplier/seller. In the previous structure, these operations were included in the modality Vendor.
- **Credit card – corporations** – operations subdivided in:
 - credit card – cash purchases: cash or installment purchases with no interest owed.

- credit card – revolving: operations for financing the outstanding credit card balance that remains after a partial monthly payment, and cash withdrawals.
- credit card – installments: purchases are paid in equal periodic installments with interest owed. Payment in installments may occur when the purchase is carried out or at the moment in which the invoice payment is due.
- **Export financing** – financing for the production of goods and services to be exported. It includes export notes and operations with Export Credit Bills (CCE) and Export Credits Notes (NCE).

10.2. Non earmarked resources – individuals

- **Overdraft account** – short-term revolving credit operations available through the bank account of individuals, in which a certain limited amount of funds may be automatically utilized at the discretion of the account holder without formal request to the financial institution. Debt balances are automatically amortized by means of account deposits by the borrower.
- **Personal credit non payroll-deducted** – personal credit operations not associated with the purchase of goods and services and whose payment is not deducted from payroll.
- **Payroll-deducted personal credit** – personal credit operations deducted from payroll. They are classified according to borrowers: civil servants (active and retired), INSS retirees and pensioners and private sector workers.
- **Vehicles financing** – purchase financing of automotive vehicles.
- **Other goods financing** – credit operations granted to individuals for the purchase of goods and services, except automotive vehicles. They encompass, among other, commercial credits and the financing of electronic and computer equipment.
- **Credit card – individuals** – operations subdivided in:
 - credit card – cash purchases : cash or installment purchases with no interest owed.
 - credit card – revolving: operations for financing the outstanding credit card balance that remains after a partial monthly payment, and cash withdrawals.
 - credit card – installments: purchases are paid in equal periodic installments with interest owed. Payment in installments may occur when the purchase is carried out or at the moment in which the invoice payment is due. In the previous structure,

revolving credit operations and installment purchases with interest owed were not segmented.

In the previous structure, revolving credit card operations and credit card installments with interest owed were included in the total credit balance, but their identification was not possible.

- **Other non earmarked credit operations** – credit operations not included in the other modalities of the current structure.

The following modalities were introduced:

- **Personal credit non payroll-deducted related to debt renegotiation** – credit operations granted to individuals related to the renegotiation or composition of outstanding debts.
- **Leasing – vehicles** – in the previous structure there was no segmentation between vehicles and other goods.
- **Leasing – other goods** – it does not comprise leasing of immovable goods. In the previous structure there was no segmentation between vehicles and other goods.
- **Discount of checks – individuals** – advance of funds on the basis of cash flows associated with checks kept in custody.

10.3. Earmarked resources

- **Housing financing – corporations and individuals** – housing financing operations associated with the obligatory lending of savings deposits for building or purchasing home dwellings. According to regulations, 80% of resources must be invested with regulated interest rates and the remaining at market rates. Those operations agreed with market rates are carried out with earmarked funds, even though the operations' interest rates are not regulated. Therefore, these credit operations are classified as earmarked credit operations because of the origin of resources.
- **Rural credit – corporations and individuals** – rural financing granted with earmarked resources from demand deposits and rural savings accounts according to the Rural Credit Manual (MCR). They include financing carried out in the framework of constitutional funds of the North, Northeast and Central-West regions. Rural financing with BNDES

funds are not included. Similarly to housing financing, rural financing may be granted with regulated or market interest rates. Since operations granted with market interest rates are based on earmarked resources, these operations are classified as earmarked credit operations.

- **Working capital with BNDES resources** – it consists of working capital loans and export financing with BNDES resources, including operations carried out with the BNDES Credit Card. They comprise funds directly disbursed by the BNDES or transferred by other financial institutions.
- **Fixed capital investment financing with BNDES resources** – fixed capital investment granted with BNDES resources, including operations carried out with the BNDES Credit Card. They comprise funds directly disbursed by the BNDES or transferred by other financial institutions.
- **Agroindustrial financing with BNDES resources** – agroindustrial financing of working capital or investment operations granted with BNDES resources, including operations carried out with the BNDES Credit Card. They comprise funds directly disbursed by the BNDES or transferred by other financial institutions.
- **Microcredit** – microcredit operations according to Resolution no. 3,422, dated November 30/2006.