Average Interest Rate of the National Financial System's **Credit Operations**

The current structure for monitoring the evolution of interest rates and spreads of the National Financial System (SFN) credit operations originated in 1999, with the project "Interest and Banking Spread", which comprises the release of the annual report "Banking Economy and Credit". Several studies based on this project enabled a better understanding about the composition of spreads and thus contributed directly or indirectly to the adoption of measures aimed at the reduction of credit associated costs. Among these studies, it should be mentioned the regulation of payroll-deducted loans, the creation of the Banking Credit Note (CCB), the Bankruptcy Act, the dissemination of the instruments of fiduciary alienation, and the legislation on assets affected by public interest in real estate undertakings.

The "Interest and Banking Spread" project was regulated by Circular n. 2,957, dated December 30, 1999. This Circular stipulated that financial institutions should provide detailed information on the most relevant credit operations at the time, which would constitute the reference credit for interest rates. Since available information on SFN's credit operations is restricted to the modalities that compose the subset of the reference credit, the effective average interest rate of the financial system generally differ from that currently released by the Central Bank.

The goal of this box is to analyze how the inclusion of those modalities of credit operations not currently taken into account affects the SFN's average rate. For this, the calculation basis of the SFN's average interest rate will be expanded so as to incorporate a

^{1/} Available on http://www.bcb.gov.br/?SPREAD

Table 1 - Reference parameters for calculating SFN interest rates in December 2008

Modality	Interest rate	Reference
	– % p.y.	
Nonearmarked credit		
Leasing (individuals)	33.38	Credit for vehicle acquisition
Borrower by co-op	30.80	Payrol-deducted loans
Credit card	248.20	Market survey
Leasing (corporation)	17.91	Goods acquisition – Corporation
Earmarked credit		
Rural	6.92	Rural credit manual
Housing	12.22	Average weighted rate in
		SFH financing
BNDES - Direct	8.05	TJLP + 1.8% p.y.
BNDES - Onlending	12.39	BNDES direct + 4.34% p.y.

broader set of credit modalities, by utilizing reference values for the rates practiced in the modalities not previously taken into consideration. The calculation basis will now incorporate the interest rates related to operations carried out by leasing companies and credit unions, as well as those granted with earmarked resources, which encompass the National Bank of Economic and Social Development (BNDES) financing, as well as rural and housing loans².

With regard to the interest rates of the new modalities classified as nonearmarked credit operations, the effective monthly rates of similar modalities during the period under analysis were utilized as proxies³. Therefore, for corporate and individuals' leasing operations, the latter channeled particularly to the acquisition of vehicles, the rates utilized refer to the modalities of purchase of goods – corporations and purchase of goods - vehicles, which correspond, respectively, to 19% p.y. and 36.5% p.y., in December 2008⁴. For mutual loan operations, granted by credit unions, the interest rate utilized is of 30.8% p.y., which corresponds to the average interest rate of payroll-deducted loans, while the interest rate related to credit card, based on market research, was calculated at 248.2% p.y. in December.

In the segment of credit operations with earmarked resources, the interest rate of housing loans was estimated at 12.2% p.y., calculated on the basis of a mix of lending rates practiced in the framework of the Brazilian System of Savings and Loans (SBPE) and the Employment Compensation Fund (FGTS). The interest rate for the rural loans granted with monitored resources was stipulated at 6.9% p.y. This constitutes the lowest rate practiced by the SFN, taking as parameter the average rate of the operations with resources from demand deposits and rural savings accounts, foreseen in the Rural Credit Manual (MCR)⁵.

^{2/} It should be observed that the regular calculation of an interest rate that could represent the total of credit operations would require the enhancement of the normative and operational credit monitoring apparatus by means of which the financial system would supply information on the rates of earmarked operations and the share of nonearmarked credit that are not currently included in the reference credit for the calculation of interest rates.

^{3/} It should be highlighted that the estimated series took into account the effective monthly rates of the period under analysis, from March 2003 to December 2008. December 2008 rates are based on the Central Bank's Monetary Policy and Credit Operations Press Release, available at http://www.bcb.gov.br/?ECOIMPOM.

^{4/} Rates were adjusted to effective tax differences.

^{5/} Chapter 2 - Basic conditions, Section 4 - Expenditures, item 3, paragraph a. There are several exceptions to this interest rate. In 2006, interest rates varied from 1% p.y. (Pronaf – Semi-Árido – Resolution n. 3,206/2004 (MCR-10-8)), and 12.34% p.y. (Finame Agrícola Especial – Resolution n. 3,215/2004).

Figure 1 - Credit operations 60 56 52 48 40 36 32 28 2003 2004 2005 2006 2007 2008 Extended average rate Current average rate

Figure 2 - Extended average rate



The interest rate of direct BNDES loans is composed of the financial cost, related to the funding of resources, by the rate of credit risk, and by the BNDES interest earnings. Taking as reference the Long-Term Interest Rate (TJLP)6, 6.25% p.y., and adding 1.8% p.y. which refers to the interest earnings and credit risk rate, the final rate reaches 8.05% p.y. As for indirect loans, carried out through transfers to financial institutions, it should be added, to the TJLP and the BNDES interest earnings, the intermediation rate, limited to 0.8% p.y., as well as the earnings of the authorized financial institution. If the authorized financial institution utilizes the Competitive Enhancement Guaranty Fund (FGPC), which guarantees up to 80% of the operation's risk, this share of the cost is limited to the ceiling of 4% p.y. The costs associated to the last two factors analyzed totals 4.34%, thus resulting in a final rate of 12.39% p.y.

Based on these parameters, as observed on Figure 1, the SFN's average rate, comprising 86.3%⁷ of the country's total credit operations, would fall to 30.9% p.y. in December 2008, compared to 43.2% p.y. in compliance with the current methodology. Over the last two months, the expanded average rate increased by 5.3 p.p., as compared to 9.4 p.p. according to the current rate calculation. In general, it may be observed that the new series register a smoother evolution, since the response of earmarked credit operations to alterations in the monetary policy is not so intense as that of nonearmarked credit operations (Figure 2). With the inclusion of the aforementioned operations, the banking spread, in the month of December, would drop from 30.6 p.p. to 20.2 p.p. per year.

Moreover, changes in the calculation basis would increase the participation of credit operations with individuals, including the housing credit operations,

^{6/} Other indexing factors not taken into account include the National Extended Price Index (IPCA) and the Exchange variation.7/Rates were adjusted to effective tax differences.

^{7/} The calculation of the expanded interest rate does not include operations classified as "sundry" in the segment of corporations and individuals (anticipation of deposits, pledge), since their rates are excessively volatile and not homogeneous. In addition, in some operations classified as fixed-rate operations it is impossible to identify the indexing factor and thus the exact operation cost estimate. Finally, for some earmarked credit operations carried out with constitutional funds by fostering agencies and development banks, there are no available information on rates.

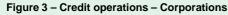




Figure 4 - Credit operations - Individuals



Table 2 - Interest rates and banking spread December 2008

	Individuals Corporations	
Scope ^{1/} (%)	89.3	84.6
Interest rate – Current methodology (%) Interest rate – Alternative methodology (%)	58.0 52.6	30.7 19.6
Spread – Current methodology (p.p.) Spread – Alternative methodology (p.p.)	45.1 39.8	18.3 8.5

^{1/} Refers to the SFN total balance of credit.

to 89.3%. The interest rate in this segment would fall from 58% p.y., according to the current sample, to 52.6% p.y, while the spread would fall from 45.1 p.p. to 39.8 p.p. With regard to corporate credit operations, participation would increase to 84.6%, and average interest rate and spread would fall, respectively, from 30.7% p.y. to 19.6% p.y., and from 18.3 p.p. to 8.5 p.p.

It is interesting to highlight that, as shown by Figures 3 and 4, the expanded average interest rate in the segment of corporations also remain lower in the period under analysis, while, in the segment of individuals, the rates are convergent. The behavior of the rates for individuals reflects, to a large extent, the inclusion of credit card operations, which rates are higher than the average, as opposed to the housing loans rates. As for operations with corporations, it should be highlighted the effect of the inclusion of longer-term loan operations, particularly with earmarked resources, with emphasis on the long-term BNDES loans. Finally, the reduction of the interest rates practiced in the framework of the productive sector evinces the significant difference still observed between the rates associated to earmarked and nonearmarked credit operations.

The forecasts shown in this box not only constitute a more comprehensive description of the credit market but also demonstrate that the SFN's effective average interest rates differ significantly from that currently released if earmarked credit operations are also taken into account. Therefore, the improvement of statistics, as well as the institutional framework that underlie its elaboration, would make it possible to achieve a more comprehensive and accurate view of the evolution of credit operations.