

Evolution of Default, Indebtedness and Commitment of the Household Income

Figure 1 – Credit operations with individuals – Interest rates and average terms

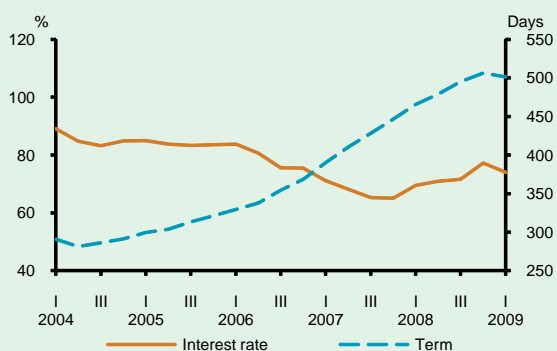


Figure 2 – Credit operations with individuals – Default and grantings

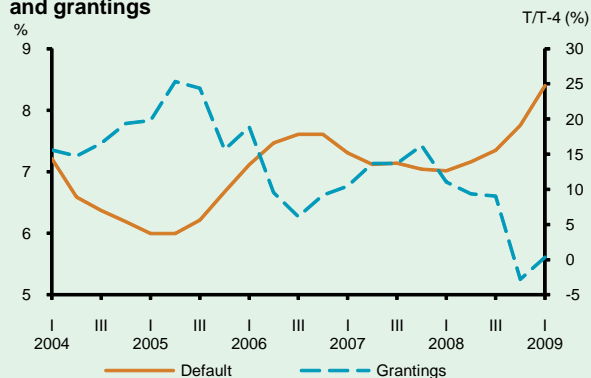


Table 1 – Default

Modality	%	April 2009		
		Change		
		t-1	t-3	t-12
Individuals	8.4	0.0	0.2	1.3
Special overdraft checks	10.0	0.3	-0.2	1.7
Personal credit	5.7	-0.1	0.0	0.6
Automotive vehicles	5.2	0.2	0.6	1.7
Purchase of goods	14.6	0.4	0.8	1.7

In recent years, the expansion observed in the segment of credit to individuals was led by the dynamism of lower risk modalities, with emphasis on payroll deducted loans and operations targeted to the purchase of vehicles. This trajectory which, as shown in Figure 1, occurred in an environment of reduced interest rates and increase of medium terms, was interrupted as of the intensification of the crisis in financial markets, when in a scenario of deteriorating credit conditions, the external funding became more scarce and expensive and, domestically, liquidity constraints have hindered temporarily the financing of small and medium sized companies in the interbank market.

Additionally, highlighting the aggravation of the balance of risks, financial institutions have promoted an immediate reduction of new hires, with shorter deadlines and rising interest rates, as recorded in Figure 2. In this context, from mid-2008, a rise in default under the credit reference for individuals, which reached 8.4% in April 2009, compared to 7% in December 2007, a move due to general increase in arrears in all credit modalities, especially in personal credit, auto loans and credit card (Table 1).

This set of recent changes in the macroeconomic scenario makes it relevant to revisit the box published in the Inflation Report September 2008 issue, which addressed the trajectory of household indebtedness and the commitment of their income in the period prior to the restriction in the channels of credit.

The compilation of credit statistics was unchanged when compared to the previous survey, also using the quarterly averages of end-of-month balances in the modalities interest rate reference credit, to

leasing operations and those carried out by credit cooperatives. As regards the interest rates and the terms of the modalities not belonging to reference credit, proxies were estimated adjusted to tax specificities: to leasing, parameters of the mode of acquisition of vehicles were adopted; for cooperatives, were adopted those ones related to the type of personal credit. Channeled housing credit was not included because of the lack of regular statistics on interest rates and maturities for these operations.

Household income, which is called Extended Overall Wage (MSA), was estimated from the aggregation of the overall wages, calculated in the Monthly Employment Survey (PME),¹ with transfers from the official social security. Similar to the previous study for the final calculation of the MSA, the average of the last four quarters was used to mitigate seasonal effects on income. A methodological change in the compilation of income resulted in achieving higher levels estimated for the indebtedness and commitment of income, since the MSA corresponds to an amount about 20% lower than the one of the indicators used in the previous study.

The household indebtedness was estimated as the ratio of debt stock in a given period and the average income of the previous four quarters. For the construction of an indicator of income commitment, the value of disbursements to the principal, corresponding to the ratio of the balance and the average maturity of the portfolio during that period, was calculated for each modality. In terms of revolving credit, overdraft check and credit card, it was considered only the income commitment for the payment of interest. In addition to the main payments with the estimated debt service, it also includes interest payments, given by multiplying, for each modality, the average monthly interest rate by the respective balance. Finally, the income commitment was obtained by dividing the debt service for the MSA of the respective period. It is important to note that the statistics available to the average maturity of the portfolio does not match the period running until the expiration of the last installment, but the average time of benefits weighted

1/ Since the PME encompasses the metropolitan areas of Belo Horizonte, Porto Alegre, Recife, Rio de Janeiro, Salvador and São Paulo, the indicator referring to the overall national wages was obtained by multiplying the ratio of Brazil GDP to the GDP of each of the six metropolitan areas by the PME's overall wages.

by their respective values. In this concept, the average term of a loan with 24 equal monthly installments will be 12.5 months. In terms of income commitment, the use of the term to come would reflect more faithfully the period in which the borrower is overtaxed by the credit operation. Therefore, it was used in this study the period to come, obtained by the approximation from the medium term.

Figure 3 – Indebtedness and income commitment

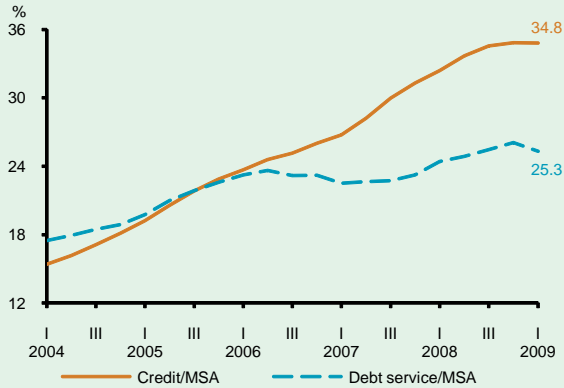


Figure 4 – Income commitment with interests and principal

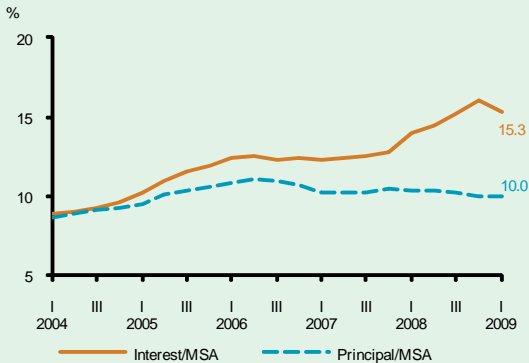


Figure 3 shows the significant increase of the level of indebtedness over the past few years, a movement associated with the very development of the credit market, which was incipient before the consolidation of macroeconomic stability. In March, the level of household indebtedness reached 34.8% of the annual earned income in the last twelve months, recording increases of 2.4 p.p. over the same period of the previous year and of 8.1 p.p. over the past two years. From the third quarter of 2008, the indebtedness starts to present a deceleration trend, a behavior consistent with the slowing of hires.

The income commitment level with the debt service, reached 25.3% in March, dropping 0.8 p.p. in the quarter, recording increases of 0.9 p.p. in twelve months and of 2.8 p.p. in two years, as expressed in Figure 4. This indicator evolves in a less remarkable manner, reflecting the combined effects of changes in balances, terms and interest rates. In this sense, the income commitment decreased from the second quarter of 2006 and the first quarter of 2007, when the increase in time and the reduction in interest rates offset the expansion of credit. From mid 2007, the indicator began to record growth, mainly explained by the rapid expansion of sales. Throughout 2008, this growth rate became more pronounced, driven particularly by high interest rates. In 2009, there was further decline, primarily explained by lower rates.

The analysis of the income commitment from its components shows that the amount paid regarding the principal remains relatively stable over the past two years, which indicates that balances respond more slowly to overcooling in grants and lengthening of terms. Different behavior is shown by the commitment resulting from interest payments, which showed expansion, interrupted only in early 2009, when it was observed a decline of 0.8 p.p.,

reflecting the impact of monetary policy on bank interest in this period.

As in the study published in September 2008, it is important to note that the estimated construction of the indicators requires the adoption of various hypotheses and assumptions, besides the subjection to significant limitations. Therefore, the focus of the analysis should be on the behavior of these indicators over time, in its variations and trends rather than on their absolute levels. Even with these reservations, it should be noted that, as shown by Figures 2 and 3, the latest indicators of income commitment show stability and fall, indicating a cooling off of the growth trend of the household leverage.