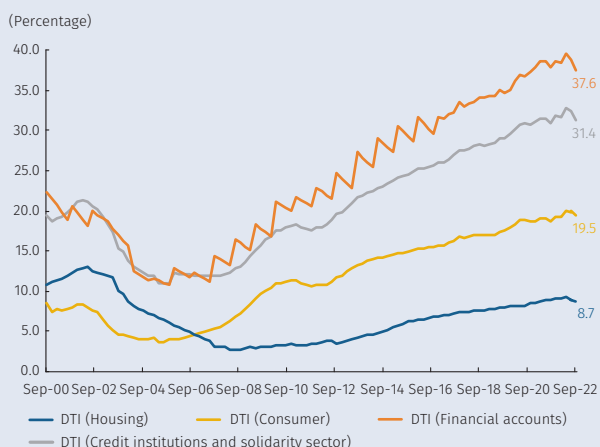


## Box 2 Indicators of Household Indebtedness

Camilo Gómez  
Juan Sebastián Mariño\*

**Graph B2.1**  
Debt-to-annualized adjusted net disposable income ratio of households



Note: The graph presents the ratio of debt to gross adjusted household disposable income (DTI: debt-to-income ratio). Income comes from national accounts by institutional sector data published by the DANE. The four measures of indebtedness presented are:

1. Gray line: household debt with credit institutions supervised by the Office of the Financial Superintendent of Colombia, savings and credit cooperatives, employee funds and the Colombian Securitization Office.

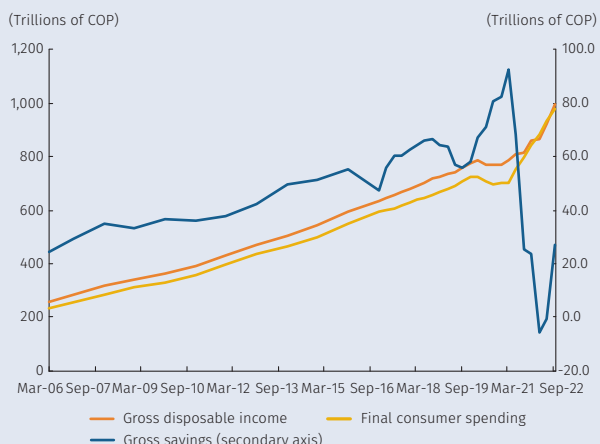
2. Orange line: household debt from financial account balances published by Banco de la República. In addition to what is included in the gray line, this line includes microcredits and commercial loans for natural persons, and obligations with other financial institutions. The series presents volatility because it switched in 2015 from an annual frequency before to quarterly.

3. Yellow line: Consumption credit with credit institutions

4. Blue line: housing loans with credit institutions

Sources: Office of the Financial Superintendent of Colombia, Superintendence of Solidarity Economy, calculations by Banco de la República.

**Graph B2.2**  
Annualized flow of gross household savings and its components



Sources: DANE

Within a backdrop of a significant rise in household indebtedness, inflation continuing above the target for a prolonged period, a resulting increase in the lending interest rates, and an expected economic slowdown in 2023, it is important to monitor the financial capability of households to face this macroeconomic scenario. This variable has been analyzed in the last three issues of *Banco de la República's Financial Stability Report*,<sup>1</sup> as well as in a complementary special report thereof.<sup>2</sup> The purpose of this Box is to update some of the analyses presented in these documents with more current information, considering indicators of household indebtedness, savings, and financial burden, as well as the most recent delinquency results of household obligations to the financial system.

Graph R2.1 illustrates the debt-to-annualized net disposable income<sup>3</sup> ratio of households. This indicator measures household leverage to the Colombian financial system. As can be seen in this graph, the four indicators have exhibited an upward trend during the last twenty years, reaching historic highs at the beginning of 2022. Although the indicators have fallen slightly since then, household debt as a percentage of income remains at relatively high levels. High indebtedness could imply an increase in the financial burden of households and, therefore, increase their likelihood of default.

Graph R2.2 shows the dynamics of the annualized flow<sup>4</sup> of gross household savings and its causes (gross disposable income and final consumption expenditure). As can be observed, since records have been kept and until 2021, households were net savers for the Colombian economy; namely, the flow of their income exceeded the flow of their expenditures. During the pandemic, partly as a precautionary measure, households increased their savings to historic highs, and then decreased these drastically as the economy reopened, reaching a negative value in early 2022. Although savings turned positive in the most recent measurement, they remain at low levels compared to their historic levels. Lower savings reduce households' capacity to respond to negative shocks to the economy.

In order to evaluate the capability of households to meet their financial obligations, *Banco de la República*, through its *Recent*

\* The authors are members of Banco de la República's Financial Stability Department.

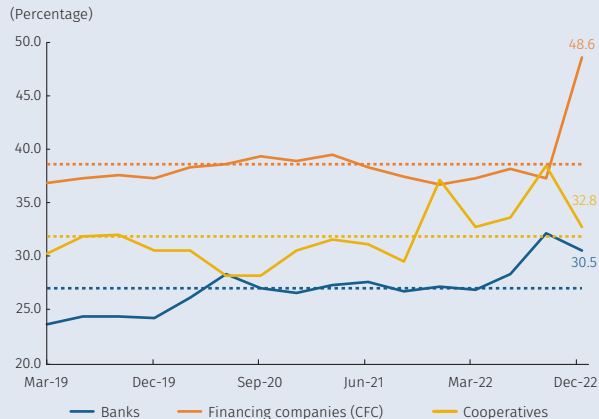
1 For more information, please see Box 2: Recent behavior of household's financial position in the *Financial Stability Report* for the second semester of 2022, available in its Spanish version at: <https://repositorio.banrep.gov.co/bitstream/handle/20.500.12134/10568/reporte-estabilidad-financiera-segundo-semester-2022.pdf>

2 For more information, please see the household's financial position information in the *Financial Stability Report* for the second semester of 2022, available in its Spanish version at: <https://repositorio.banrep.gov.co/bitstream/handle/20.500.12134/10568/reporte-estabilidad-financiera-segundo-semester-2022.pdf>

3 This income includes social transfers in kind received by households.

4 Cumulative for the last four quarters.

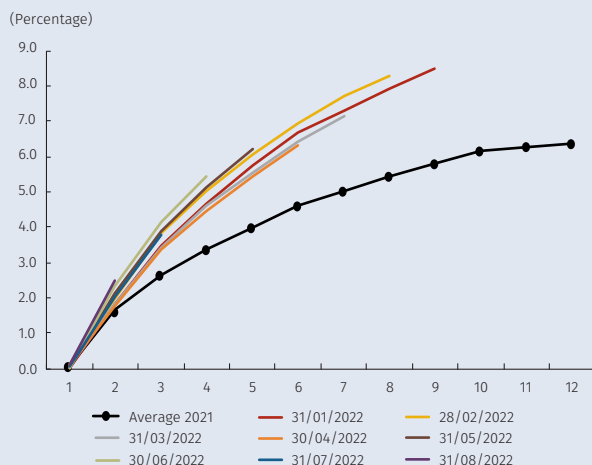
**Graph B2.3**  
Average financial burden of households accessing new credits



Note: The dotted lines show the historical average of the financial burden reported by each type of credit institution.

Sources: Survey of the Credit Situation in Colombia, December 2022 (available only in Spanish); calculations by Banco de la República.

**Graph B2.4**  
NPL of consumption credit vintages



Sources: Office of the Financial Superintendent of Colombia.

*Performance of Credit in Colombia*<sup>5</sup> (available only in Spanish), asks credit institutions information on the average financial burden<sup>6</sup> of debtors that have acquired new loans granted in the most recent quarter. As can be seen in Graph R2.3, the indicator shows relatively high values for the three types of credit institutions versus its historical average. This is consistent with the increase in loan interest rates and the high levels of indebtedness described above.

Finally, to evaluate the materialization of household credit risk in the recent past, Graph R2.4 illustrates the non-performing loans indicator (NPL) of recent consumer credit vintages.<sup>7</sup> Specifically, each line of the graph presents the NPL of loans initiated at a given point in time for a number of months after their origination (horizontal axis). The above allows us to evaluate the progression of delinquency over time for the loans analyzed. As can be observed, those loans granted more recently initiated show an increase in delinquency compared to those granted in the first months of 2022, as well as compared to the average of loans disbursed in 2021, and even compared to those of previous years that presented greater materializations of credit risk. The above behavior has been mainly driven by the unspecified use and credit card segments.

In conclusion, the economic reactivation observed after the pandemic has occurred within a backdrop of accelerated domestic demand, high indicators of household indebtedness, and a decline in household savings. Likewise, higher debt and loan interest rates have resulted in a more excessive financial burden. These dynamics have occurred together with increases in delinquencies of the loans granted throughout 2022. All of the above reduces households' capacity to respond to negative shocks in economic activity. The Office of the Financial Superintendent of Colombia has reacted to the deteriorating consumer loan portfolio by requiring additional provisions<sup>8</sup> from credit institutions for this modality. Likewise, the significant and timely increase in the monetary policy interest rate has transferred into the rates for new loans, which contributes to preventing excessive increases in household leverage within a setting of economic deceleration and a process of disinflation over the next two years.

5 <https://www.banrep.gov.co/en/blog/recent-performance-credit-colombia-only-spanish>

6 Financial burden is defined as the percentage of disposable income destined to the payment of installments of loans held by households.

7 The NPL is defined as the percentage of loans that are more than 30 days past due in the total loan portfolio.

8 In response to the recent rapid growth of the consumer loan portfolio, the SFC issued External Circular 026 of 2022, which provides instructions for the creation of risk provisions on the consumer loan portfolio to face the possible materialization of risks. For the above, the term adjustment factor to create individual provisions was modified and the possibility of making additional general provisions was added. For more information, see Chapter 4 of the Financial Stability Report for the second half of 2022, available only in its Spanish version at: <https://repositorio.banrep.gov.co/bitstream/handle/20.500.12134/10568/reporte-estabilidad-financiera-segundo-semestre-2022.pdf>.