

## Early Warning Signs for Household Defaulting Rates

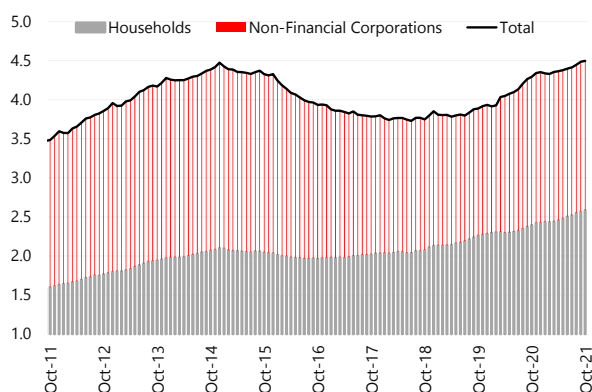
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- The Brazil Central Bank (BCB) released data for October showing strong overall growth in credit to households and companies, in tandem with the reopening process as the pandemic is slowly brought under control.
- For households, the non-earmarked segment posted a decrease of 1.3% MoM-sa. This result is mainly composed of personal credit total (-9.8% MoM-nsa) and vehicle purchase (-0.5% MoM-nsa).
- The earmarked segment registered a significant decrease of 30.5% MoM-sa after the last month rise (7.2%). This result is mainly driven by BNDES funds (-47.9% MoM-nsa) and Others (-63.9% MoM-nsa).
- Finally, debt-service and debt-to-income ratios continue to rise, reaching the highest point in the series, which we see as a risk for delinquencies as the economy recovers.

Total outstanding loans in the National Financial System (SFN) posted inflation-adjusted growth of 4.8% YoY in October to BRL4.5 trillion (0.3% MoM-sa), up 8.1% YoY for households (0.7% MoM-sa) and up 0.6% YoY for non-financial corporations (-0.3% MoM-sa).

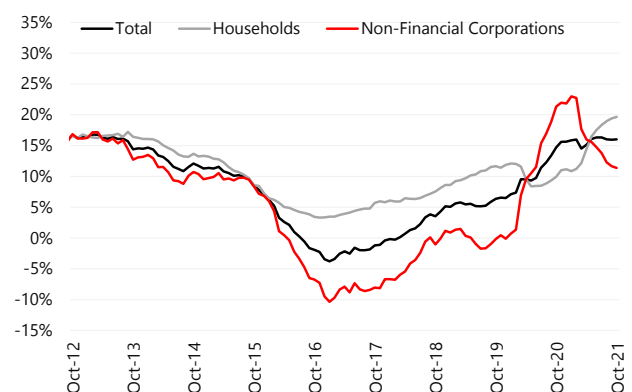
The growth rate of total outstanding loans has remained the same at 16.0%. In addition, credit to corporations fell to 11.4% from 11.6%, while the volume of credit for households continued to accelerate, rising to 19.7% from 19.4%.

**Figure 1. Total Outstanding Balance of Credit Operations (inflation adjusted, BRL billion)**



Sources: Brazilian Central Bank, Santander.

**Figure 2. Total Outstanding Balance of Credit Operations – Growth Rate (%)**



Sources: Brazilian Central Bank, Santander.

In the non-earmarked segment, household portfolios grew 9.6% YoY during October, (inflation adjusted), with **personal credit posting growth of 11.8% YoY, inflation adjusted, and credit cards showing growth of 15.6% YoY, inflation adjusted.** For corporations, growth in the balance of non-earmarked loans remained the same, at 4.8% YoY, with total **working capital presenting for the fourth time in a row a negative variation**

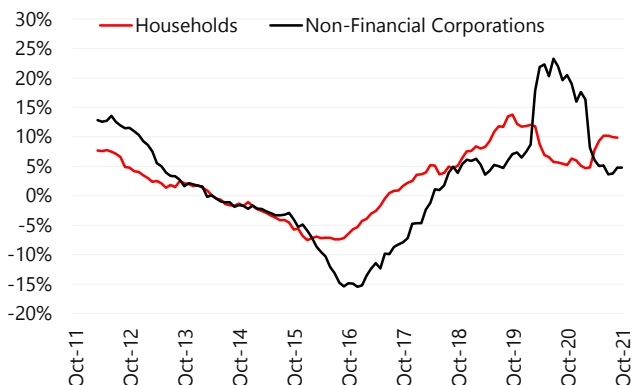
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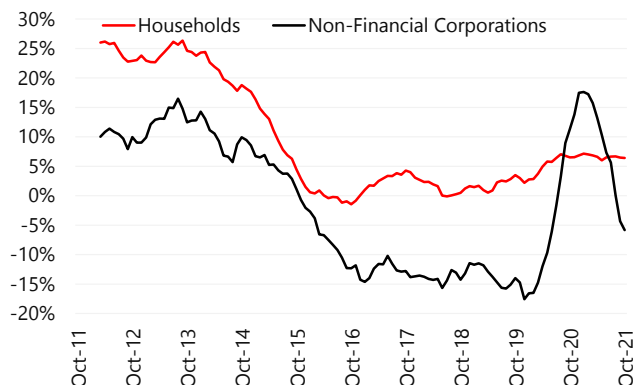
**(-4.1% YoY, inflation adjusted).** In the earmarked segment, households have decreased a bit from last month to 6.4% YoY, while **real estate financing showed growth of 1 p.p from last month, to 4.8% YoY, inflation adjusted**, but still lower than the year-ago figure (October-20: 18.1% YoY, inflation adjusted). Corporations posted a decrease of 1.5 p.p. (-5.8% YoY, inflation adjusted), with **both rural credit and real estate financing still presenting negative variations in 12 months (-8.4% and -14.6%, respectively – inflation adjusted).**

**Figure 3. Outstanding Balance – Non-Earmarked (inflation adjusted) (% YoY)**



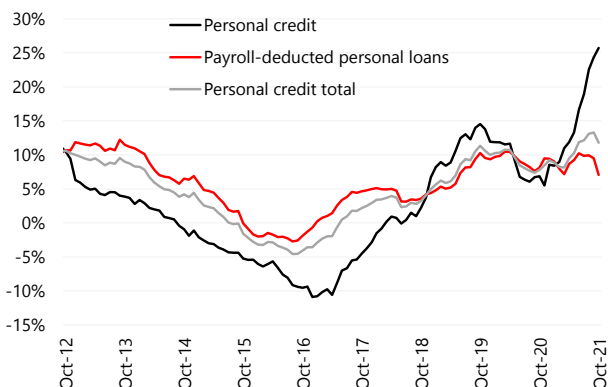
Sources: Brazilian Central Bank, Santander.

**Figure 4. Outstanding Balance - Earmarked (inflation adjusted) (% YoY)**



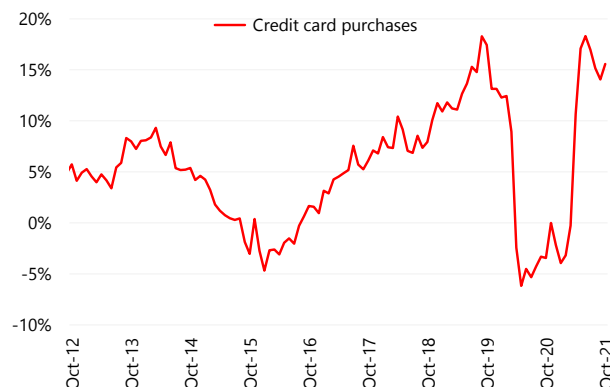
Sources: Brazilian Central Bank, Santander.

**Figure 5. Outstanding Balance – Personal Credit - Non-Earmarked (inflation adjusted) (% YoY)**



Sources: Brazilian Central Bank, Santander.

**Figure 6. Outstanding Balance – Credit Card Purchases - Non-Earmarked (inflation adjusted) (% YoY)**



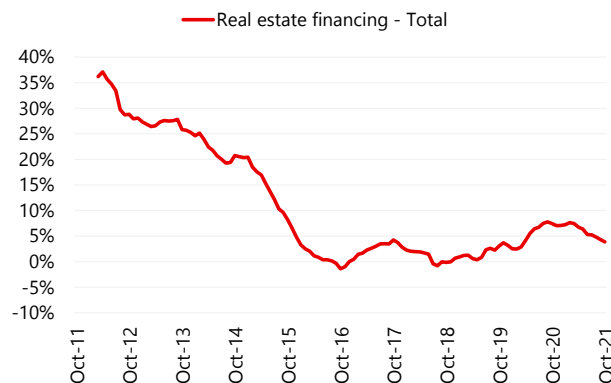
Sources: Brazilian Central Bank, Santander.

**Figure 7. Outstanding Balance – Working Capital - Non-Earmarked (inflation adj) (% YoY)**



Sources: Brazilian Central Bank, Santander.

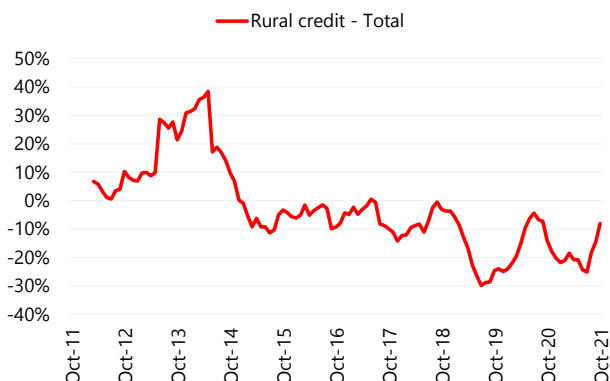
**Figure 8. Outstanding Balance – Real Estate Financing for Households – Earmarked (inflation adj) (% YoY)**



Sources: Brazilian Central Bank, Santander.

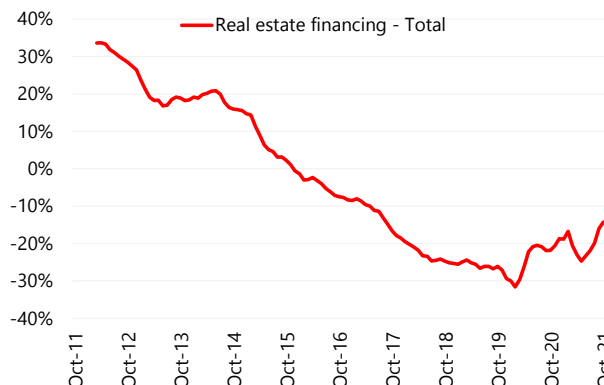


**Figure 9. Outstanding Balance – Rural Credit - Earmarked (inflation adjusted) (% YoY)**



Sources: Brazilian Central Bank, Santander.

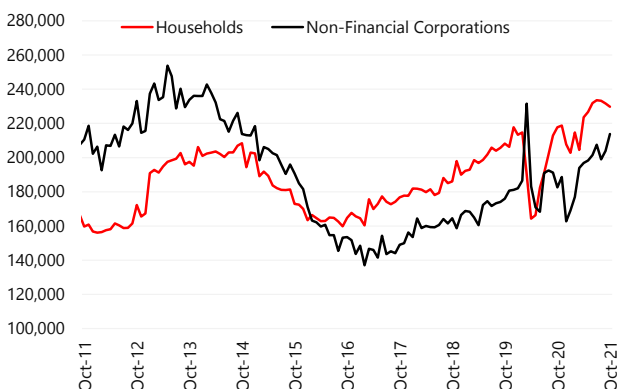
**Figure 10. Outstanding Balance – Real Estate Financing for Corporations – Earmarked (inflation adj) (% YoY)**



Sources: Brazilian Central Bank, Santander.

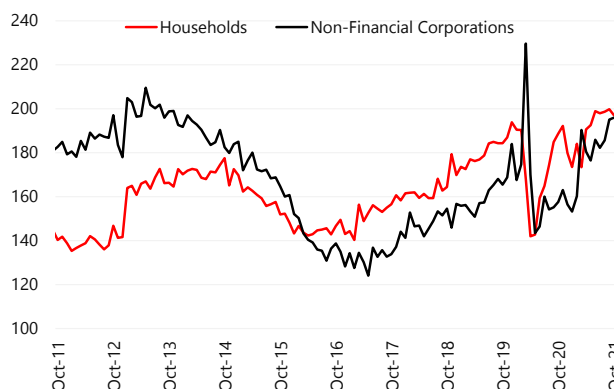
New loans adjusted for inflation and seasonality (BCB methodology) recorded an increase, 2.3% in October. For households, the **non-earmarked segment posted a decrease of 1.3% MoM-nsa. This result is mainly composed of personal credit total (-9.8% MoM-nsa) and vehicle purchase (-0.5% MoM-nsa).** In the earmarked segment, rural credit and real estate financing decreased (-11.6% MoM-nsa and -5.9% MoM-nsa, respectively). For companies, there was an increase of 0.5% MoM-nsa in September in the non-earmarked segment. **The earmarked segment registered a significant decrease of 30.5% MoM-nsa after the last month rise (7.2%). This result is mainly driven by BNDES funds (-47.9% MoM-nsa) and Others (-63.9% MoM-nsa).**

**Figure 11. New Operations – Non-Earmarked (inflation and seasonally adjusted, BRL billions)**



Sources: Brazilian Central Bank, Santander.

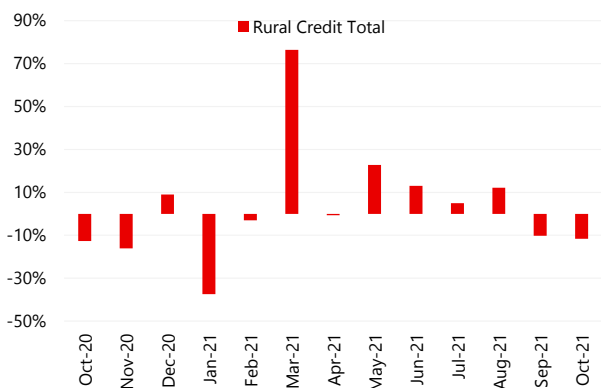
**Figure 12. New Operations – Earmarked (inflation and seasonally adjusted, BRL billions)**



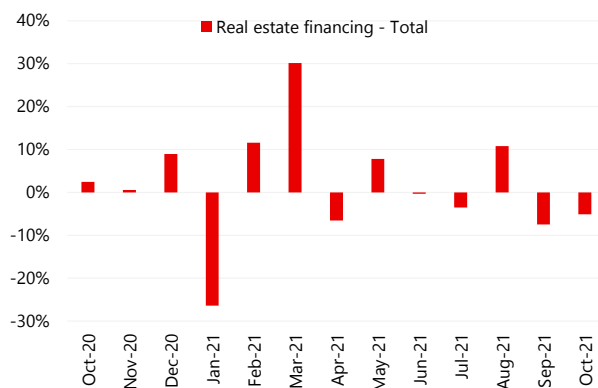
Sources: Brazilian Central Bank, Santander.

**Figure 13. New Operations – Earmarked – Rural Credit Total to households (% MoM-nsa)**

**Figure 14. New Operations – Earmarked – Real Estate Financing Total to households (% MoM-nsa)**

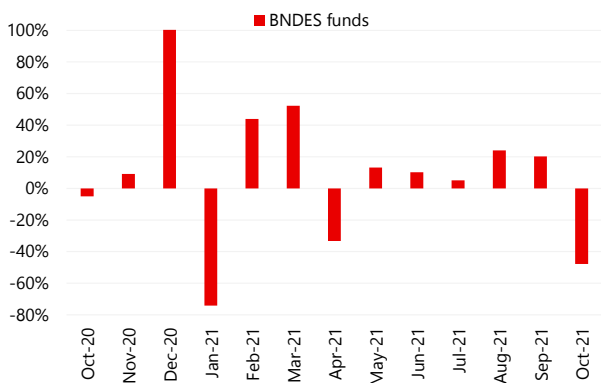


Sources: Brazilian Central Bank, Santander.



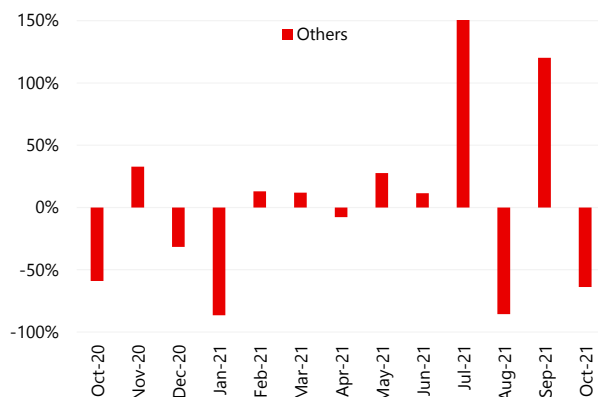
Sources: Brazilian Central Bank, Santander.

**Figure 10. Outstanding Balance – Non-Financial Corporations (inflation adjusted, % YoY)**



Sources: Brazilian Central Bank, Santander.

**Figure 11. New Operations – Earmarked (inflation and seasonally adjusted, BRL billion)**

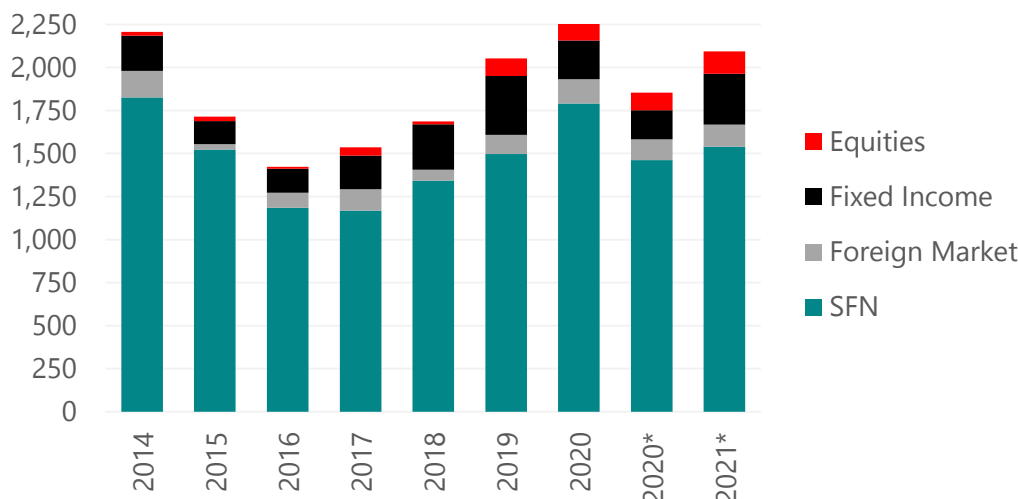


Sources: Brazilian Central Bank, Santander.

Considering total corporate financing YTD through October 2021 (new loans in the SFN, debt and equity issues in the capital markets) vs. the year-ago period, issuances in the capital markets were 56.6% higher, while SFN concessions were up 5.28%. **As a result, total corporate financing was up 12.92 % compared to the year-ago period.**



**Figure 12. Total Corporate Financing (inflation adjusted, BRL billions)**



\*January to October.

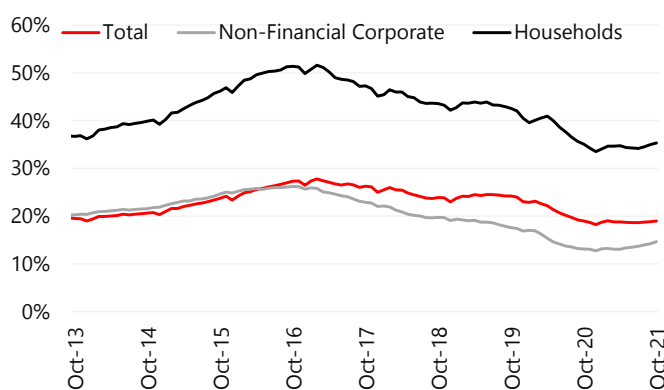
SFN - exclude *conta garantida, cheque especial* (overdraft) and credit card.  
 Foreign Market - bonus, MTNs and securities.  
 Fixed Income - Debentures, commercial papers, LFs, CRAs, CRIs e FIDCs.  
 Equity - IPO and follow-on.

Sources: Brazilian Central Bank, Anbima, Santander.

Lastly, the Credit Cost Indicator (ICC) of non-earmarked loans to households increased 0.3 p.p. in October compared to September, to 35.3% p.a., and for corporations increased 0.5 p.p. to 14.7% p.a. The average interest rate for non-earmarked new loans was 43.8% p.a. for households (+2.5 p.p. from September) and 19.1% for corporations (compared to 17.1% p.a. in September). The spread on non-earmarked new loans was 33.8% for households (1.7 p.p. from September) and 9.7% for corporations (+1.1 p.p. from September).

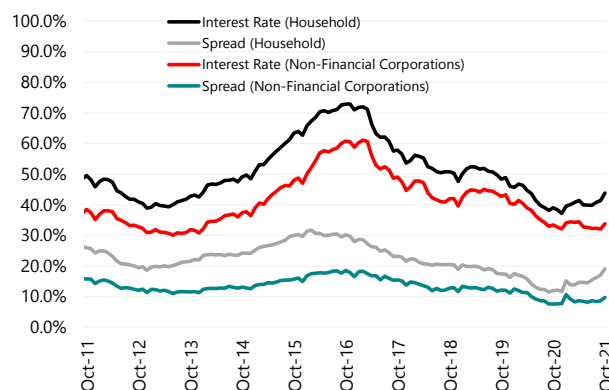
Still regarding non-earmarked loans, the seasonally adjusted default rate (% of 90-day past-due loans) was at 4.3% and 1.6%, respectively, for households and corporations. **Importantly, the household debt-service ratio continued to rise reaching the highest point in the series, 59.9% in August, without real estate financing, the household debt-service is 37%. In addition, the debt-to-income ratio rose to 30.1% in August, without real estate financing the debt-to-income ratio is 27.5%. We see these figures as a risk for delinquencies as the economy recovers.**

**Figure 13. Credit Cost Indicator (ICC) – Non-Earmarked (% p.a.)**



Sources: Brazilian Central Bank, Santander.

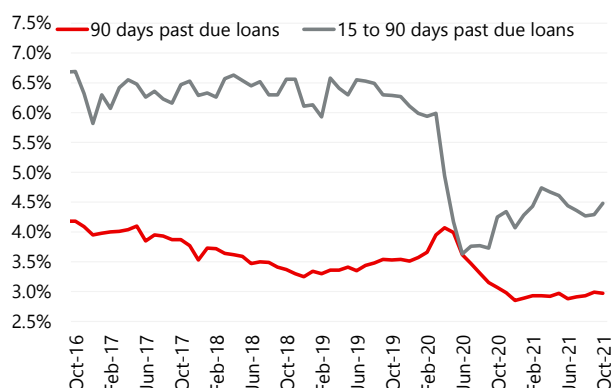
**Figure 14. Average Interest Rate and Spread – Non-Earmarked (% p.a.)**



Sources: Brazilian Central Bank, Santander.

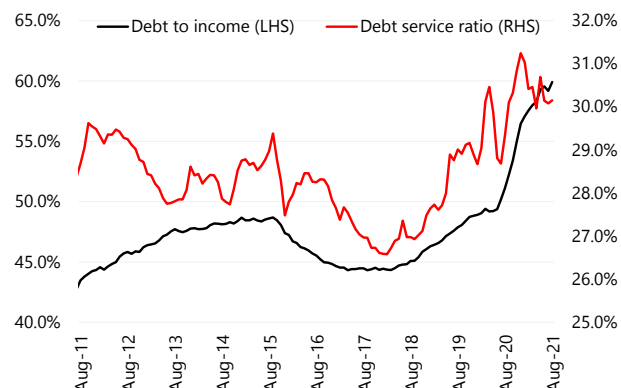


Figure 15. Loans Due – Households (% , s.a.)



Sources: Brazilian Central Bank, Santander.

Figure 16 – Household Debt-to-Income and Debt Service Ratio (%)



Sources: Brazilian Central Bank, Santander.

Figure 17. Indicators

| Outstanding inf. adj. (YoY) | Nonearmarked |             |             | Earmarked   |             |             | Total       |             |             |
|-----------------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                             | Aug-21       | Sep-21      | Oct-21      | Aug-21      | Sep-21      | Oct-21      | Aug-21      | Sep-21      | Oct-21      |
| Households                  | 10.0%        | 9.8%        | 9.6%        | 6.7%        | 6.5%        | 6.4%        | 8.5%        | 8.3%        | 8.1%        |
| Non-financial corporations  | 3.8%         | 4.8%        | 4.8%        | 0.1%        | -4.3%       | -5.8%       | 2.4%        | 1.3%        | 0.6%        |
| <b>Total</b>                | <b>7.0%</b>  | <b>7.4%</b> | <b>7.3%</b> | <b>4.1%</b> | <b>2.1%</b> | <b>1.5%</b> | <b>5.8%</b> | <b>5.2%</b> | <b>4.8%</b> |

| New operations inf. adj. (MoM-sa) | Nonearmarked |             |             | Earmarked     |              |              | Total        |             |             |
|-----------------------------------|--------------|-------------|-------------|---------------|--------------|--------------|--------------|-------------|-------------|
|                                   | Aug-21       | Sep-21      | Oct-21      | Aug-21        | Sep-21       | Oct-21       | Aug-21       | Sep-21      | Oct-21      |
| Households                        | 0.4%         | 0.5%        | -1.3%       | -5.0%         | -5.8%        | 1.3%         | -0.1%        | -0.7%       | -0.8%       |
| Non-financial corporations        | 1.9%         | 5.1%        | 0.5%        | -48.6%        | 7.2%         | -30.5%       | -4.1%        | 2.5%        | 4.8%        |
| <b>Total</b>                      | <b>-0.2%</b> | <b>2.3%</b> | <b>1.0%</b> | <b>-31.4%</b> | <b>-1.6%</b> | <b>-5.7%</b> | <b>-2.4%</b> | <b>1.9%</b> | <b>2.3%</b> |

| Interest rate              | Nonearmarked |             |             | Earmarked    |              |              | Total        |              |              |
|----------------------------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                            | Aug-21       | Sep-21      | Oct-21      | Aug-21       | Sep-21       | Oct-21       | Aug-21       | Sep-21       | Oct-21       |
| Households                 | 10.0%        | 9.5%        | 10.8%       | 0.0%         | 0.0%         | 0.0%         | 7.9%         | 8.0%         | 8.5%         |
| Non-financial corporations | 14.5%        | 14.5%       | 15.3%       | 19.1%        | 19.1%        | 20.0%        | 40.8%        | 41.3%        | 43.8%        |
| <b>Total</b>               | <b>7.1%</b>  | <b>7.3%</b> | <b>7.7%</b> | <b>16.2%</b> | <b>17.1%</b> | <b>19.1%</b> | <b>29.8%</b> | <b>30.6%</b> | <b>32.8%</b> |

| Spreads                    | Nonearmarked |             |             | Earmarked   |             |             | Total       |             |             |
|----------------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                            | Aug-21       | Sep-21      | Oct-21      | Aug-21      | Sep-21      | Oct-21      | Aug-21      | Sep-21      | Oct-21      |
| Households                 | 3.5%         | 2.9%        | 2.9%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        |
| Non-financial corporations | 4.2%         | 4.3%        | 4.3%        | 1.6%        | 1.6%        | 1.6%        | 1.6%        | 1.6%        | 1.6%        |
| <b>Total</b>               | <b>3.8%</b>  | <b>3.8%</b> | <b>3.7%</b> | <b>8.4%</b> | <b>8.6%</b> | <b>9.7%</b> | <b>8.4%</b> | <b>8.6%</b> | <b>9.7%</b> |

|  | Aug-21       | Sep-21       | Oct-21       |
|--|--------------|--------------|--------------|
| <b>Total Outstanding / GDP</b>                 | <b>52.4%</b> | <b>52.9%</b> | <b>53.2%</b> |
| <b>Total Outstanding under public control</b>  | <b>43.5%</b> | <b>43.2%</b> | <b>43.0%</b> |
| <b>Total Outstanding under private control</b> | <b>56.5%</b> | <b>56.8%</b> | <b>57.0%</b> |

Sources: Brazilian Central Bank, Santander.



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