



Recent developments of credit statistics in Brazil

Renato Baldini Jr.

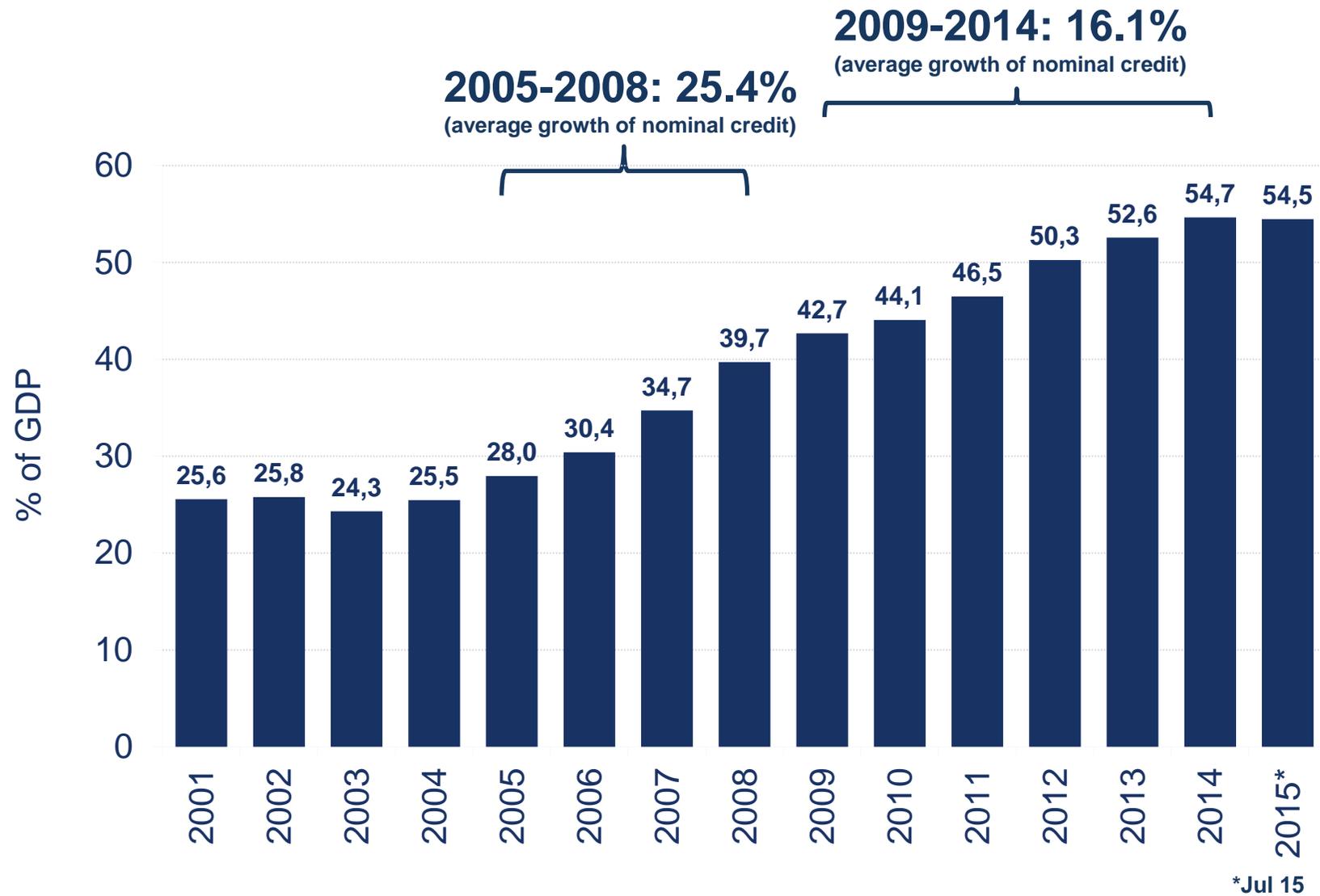
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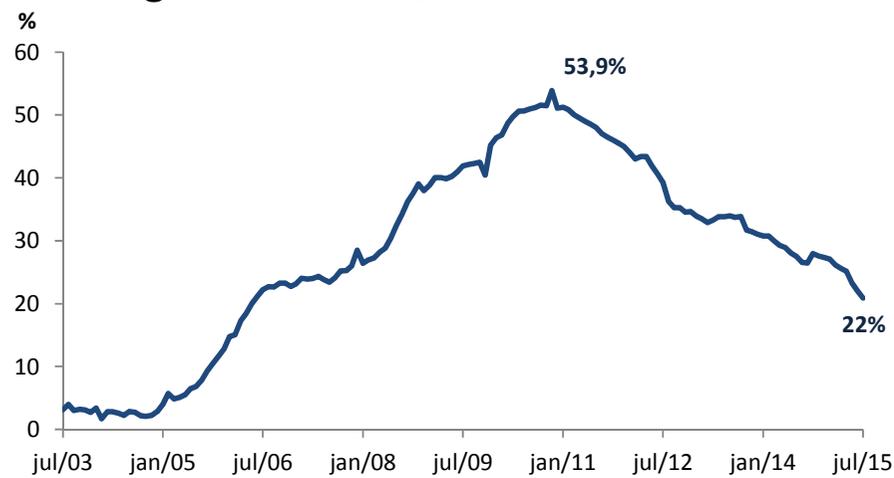
1. Background: a fast growing credit market
2. Credit statistics in Brazil
3. Macroeconomic data
4. Credit Information System
5. Use of new credit statistics
6. Conclusion

Total credit/GDP

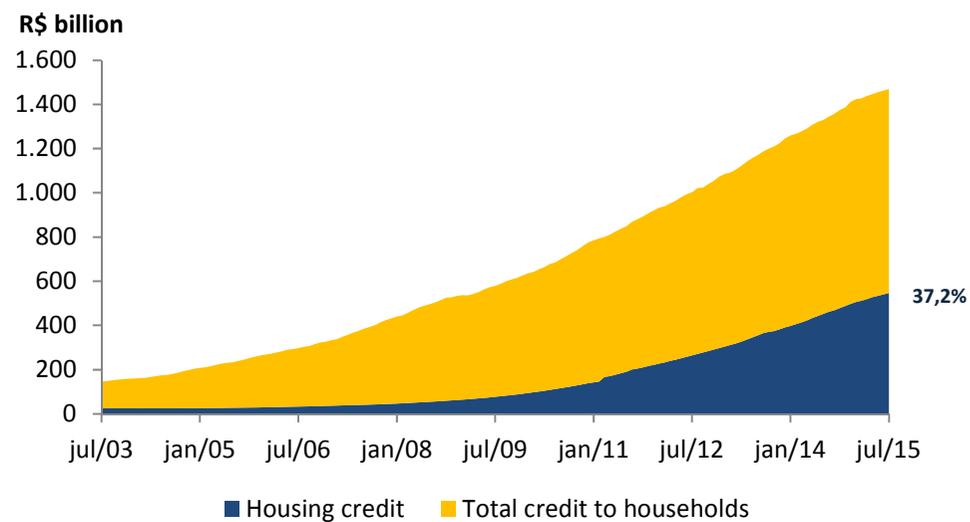


Housing credit

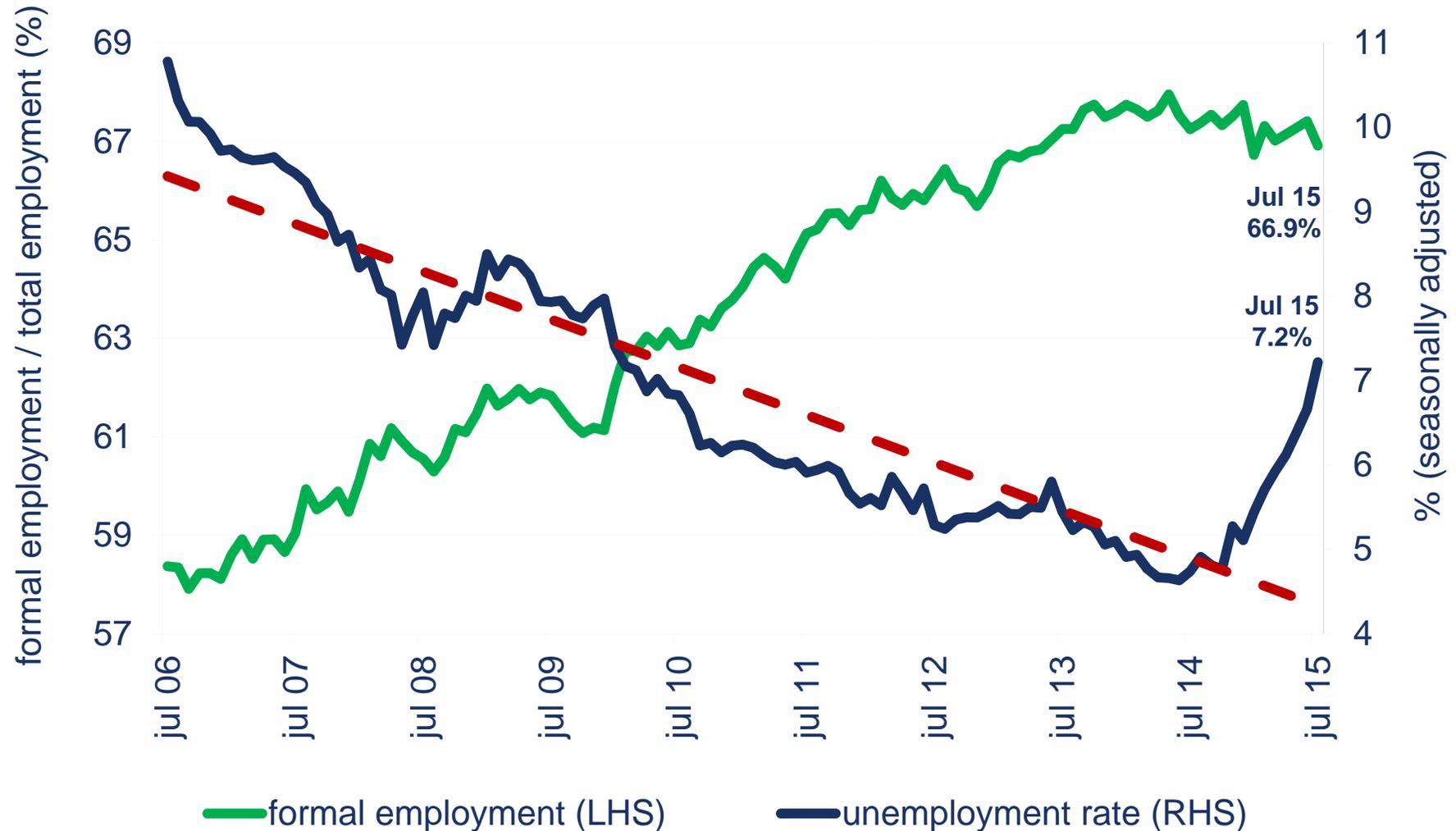
Housing credit 12-month growth



Credit to households

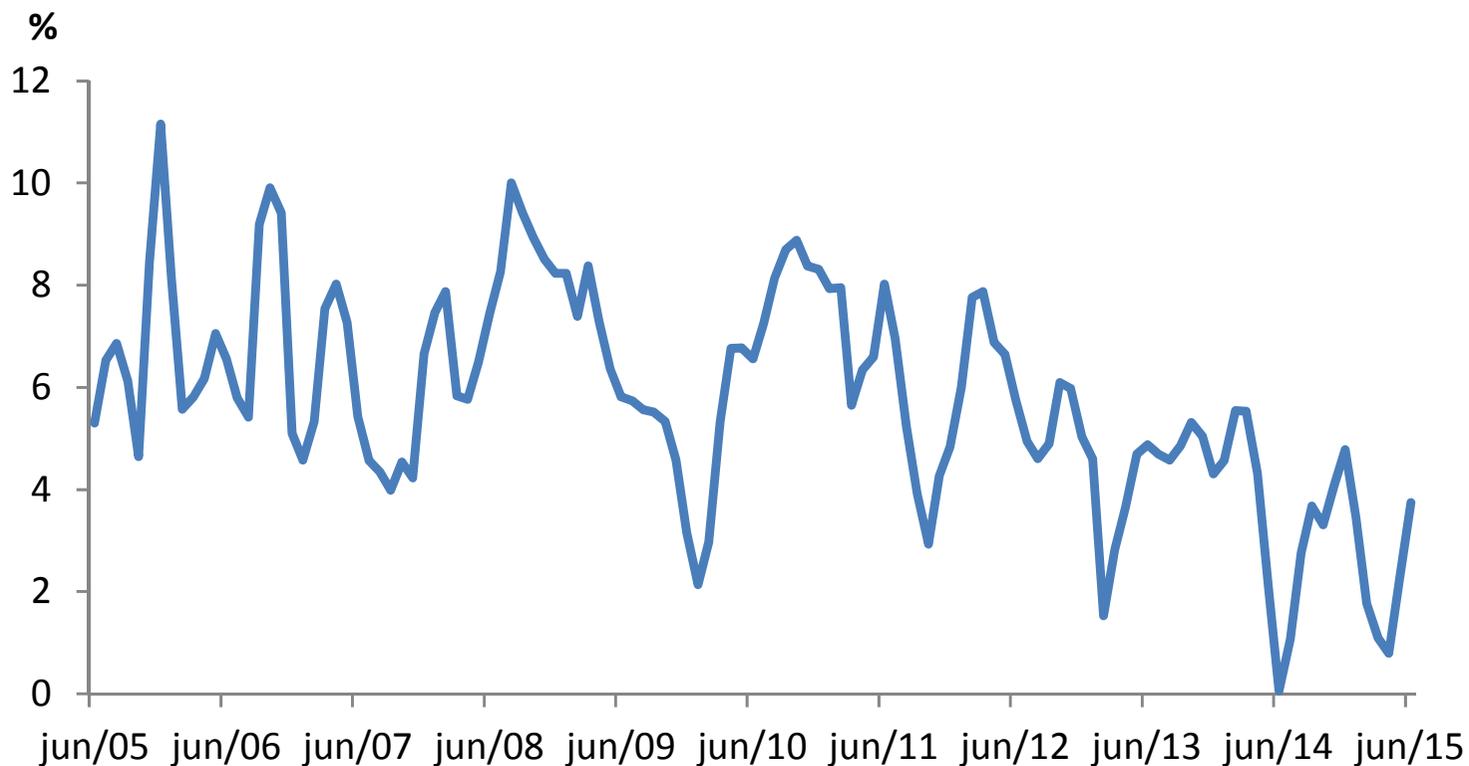


Formal employment and unemployment rate



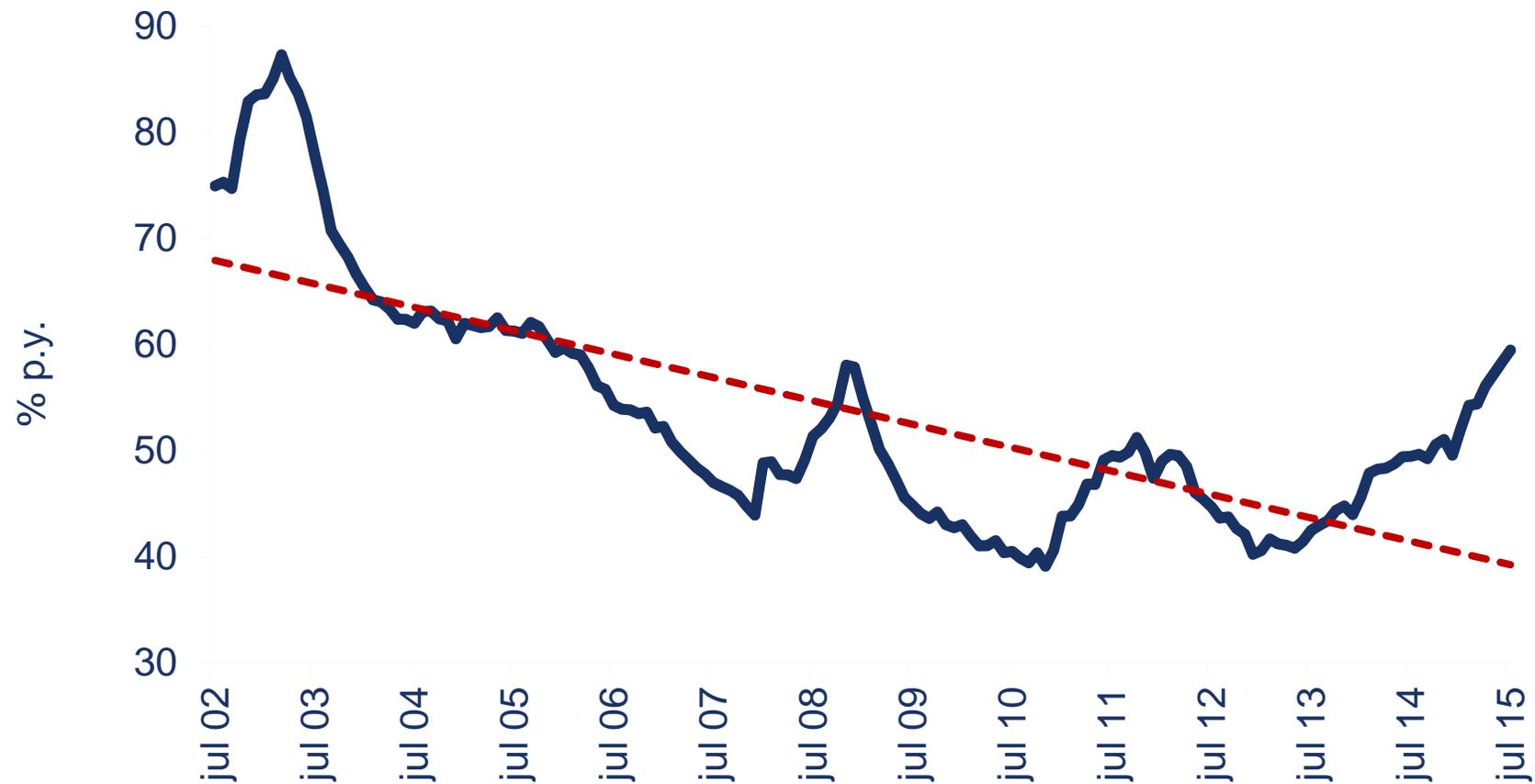
Income gains

Total payroll* 12-month real growth



* Income from wages, social security benefits, social transfers and financial instruments.

Average interest rates on household loans



* Non-earmarked credit: housing loans are not included.

Credit statistics in Brazil: 1999-2008

Before 1999: a very limited range of banking statistics were available, mostly balances.

Adoption of Inflation Targeting (1999) required more varied and timely statistics.

New statistics focused on interest rates and new operations.

Growing demand for prudential indicators.

- Risk ratings of credit outstanding.

Credit statistics in Brazil: recent developments

Global financial crisis: need for new, improved and more complete sets of statistics.

Brazil – Liquidity needs of the banking system required information on a day-to-day basis.

Increased attention to financial stability.

- Financial Stability Committee (2011).
- Financial Soundness Indicators (IMF).

SCR Phase 2 (2012).

Enhanced (more comprehensive) data on interest rates and new operations.

Credit statistics in Brazil: recent developments

Two major databases:

- Macroeconomic data (Department of Economics)
 - Focus on the economic impact of credit (**Monetary Policy**)
 - Based on aggregated data
 - Regular publication
- Credit Information System – SCR (Banking Supervision)
 - Focus on prudential indicators (**Financial Stability**)
 - Based on granular data
- Simultaneous enhancements on both databases required:
 - Conceptual convergence
 - Day-to-day quality checking

Macroeconomic data (Dept. of Economics)

The evolution of the credit market implied the need for better data on specific credit segments:

- Housing loans
- Credit cards
- BNDES loans
- Leasing operations

Macroeconomic data (Dept. of Economics)

February 2012

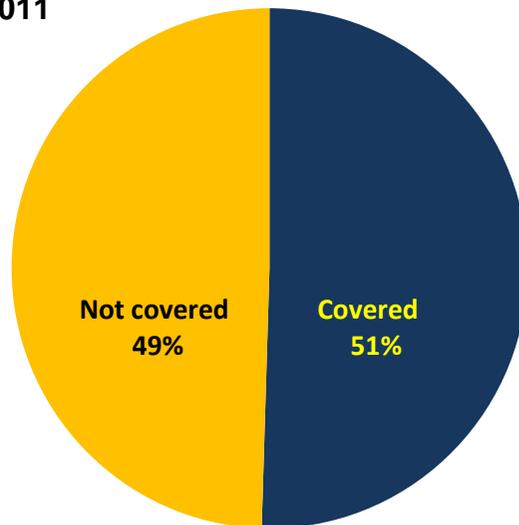
- **Daily** information on balances, new operations, interest rates, original and remaining maturities and arrears.
- Universe: 244 financial institutions (all banks, leasing and retail credit companies) + credit unions*.
- Breakdowns: corporates/households, earmarked/non-earmarked, types of credit (29 for corporates, 23 for households).
- Improved data quality system.

* Data from the 1,100 credit unions is informed on a monthly basis.

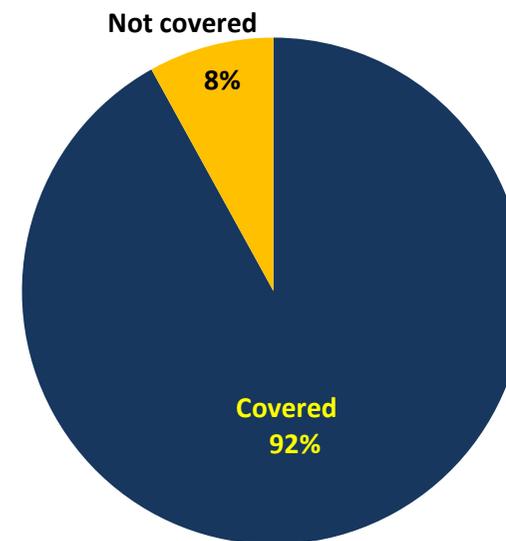
Macroeconomic data (Dept. of Economics)

Total credit outstanding, coverage of statistics on interest rates

December, 2011



July, 2015



Household indebtedness

- New statistics on households' indebtedness and debt service have been compiled since 2008.
- Indebtedness: outstanding credit to households as % of total available payroll* accumulated in 12 months.
- Debt service: monthly households' principal and interest rate payments as % of total available payroll*.

* Income from wages, social security benefits, social transfers and financial instruments, deducted of social security and income tax payments.

Credit Information System (SCR)

- The SCR is a loan-by-loan credit register.
- Comprises loan-by-loan data of borrowers with total exposure against the financial system higher than R\$ 1,000 (USD 280).
- Implemented in 1997. Phase 2 in 2012.
- Main purpose is to provide a wide range of data for the central bank's supervision, allowing for detailed assessment of the soundness of financial institutions.

Credit Information System (SCR)

As of June 2015

- Aggregated data:
 - 782 million credit operations (100%)

- Granular data (loan-by-loan):
 - 450 million credit operations (99.1% of the total outstanding balance of financial system's loans)
 - 75.4 million borrowers (71.3 million individuals, 4.1 million enterprises)

- 180 million monthly inquiries by financial institutions

Credit Information System (SCR)

- Data allows for multi-dimensional assessments:
 - of individual borrowers
 - of groups of borrowers
 - of economic sectors
 - of individual financial institutions
 - of groups of financial institutions
 - of the whole financial system

Credit Information System (SCR)

Available data:

Borrowers

- identification
- address (with postal code)
- size / income class of enterprises / individuals
- type of control (private/public enterprises)
- annual turnover (enterprises)
- participation in conglomerates (enterprises)
- history of relationship with the financial institution
- risk rating

Credit Information System (SCR)

Available data:

Operations

- origin of funding
- interest rates
- currency
- type of operation: auto loans, housing, credit card, overdrafts, working capital, etc.
- origin of operation – at the same institution or acquired
- loan loss provision
- number of days overdue

Credit Information System (SCR)

Available data:

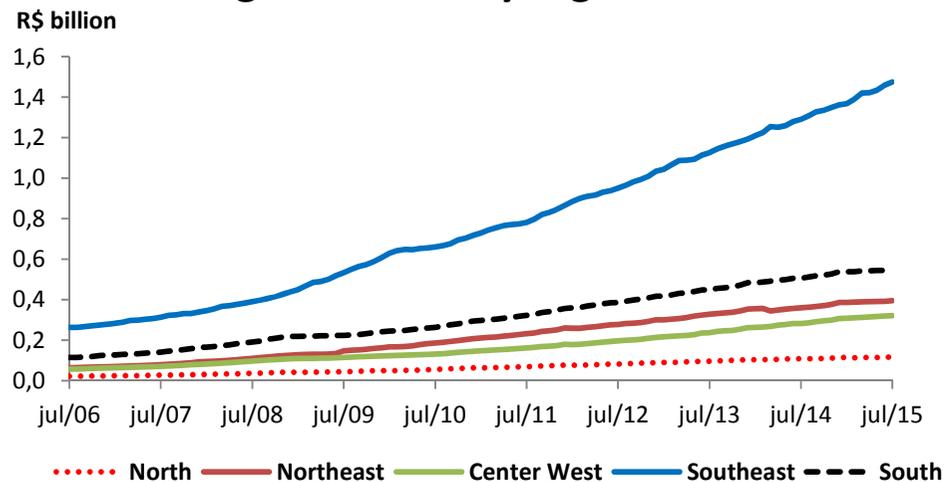
Operations

- risk rating
- instalments' timetable and expected payments
- original value
- outstanding balance
- specific features: e.g. renegotiation
- additional info: credit assignment, write-offs
- guarantees: nature, original value, revisions
- auto loans: new or used vehicles (to be implemented)

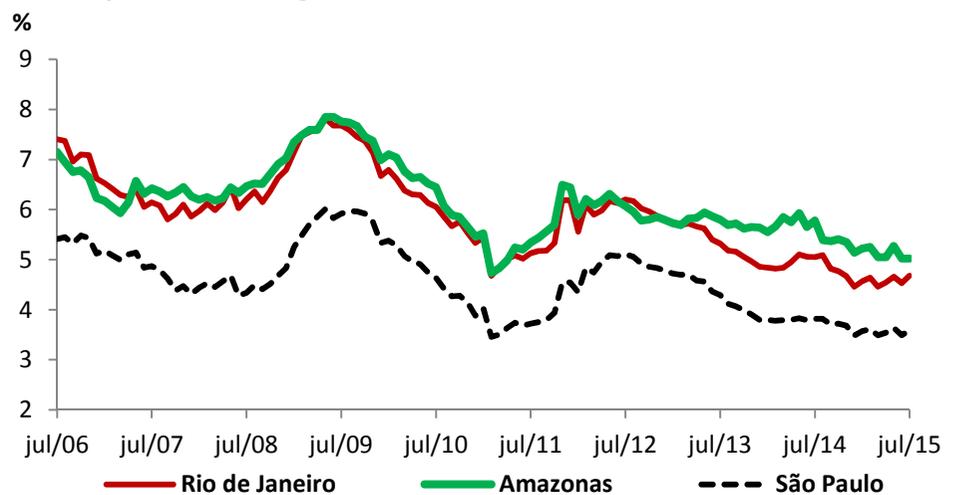
Regional credit statistics

- Based on the postal code of borrowers
- Breakdowns for all 5 geographical regions and 27 states
- Balances, NPLs

Outstanding balances - by region



Non performing loans - selected states

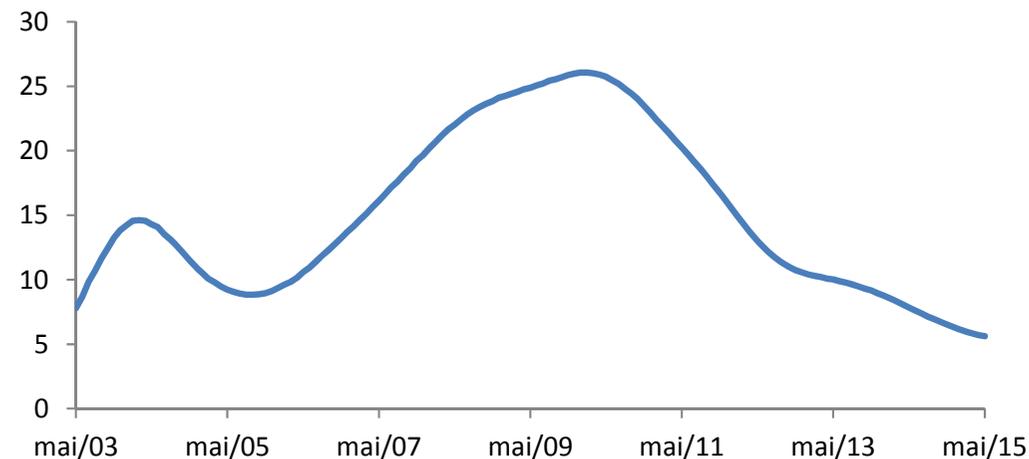


Housing loans collateral value index (IVG-R)

- Proxy for a nationwide house price index.
- Based on the appraisal values of financed residential units in 11 metropolitan regions.

IVG-R

12-month
growth (%)



Sectoral data

- Based on the national classification of economic activities.
- Available breakdowns allow for detailed information on sectoral destination of credit.
- Breakdowns currently published:
 - Industry (4 sub-sectors)
 - Agriculture
 - Services (4 sub-sectors)
 - Public Sector (2 sub-sectors)

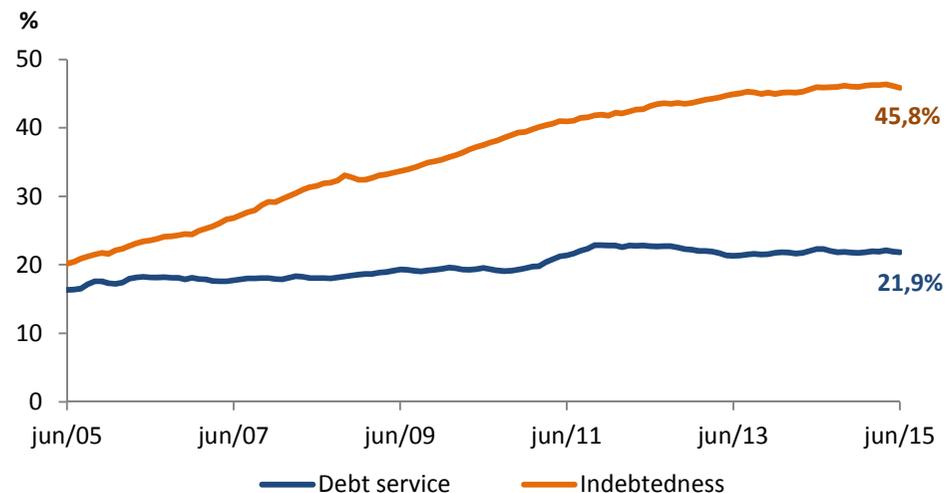
Financial Soundness Indicators (FSI)

- Indicators of the financial health and soundness of the financial institutions in a country, as well as of their corporate and household counterparts.
- Included in the scope of the G-20 Data Gaps Initiative.
- Brazil currently reports to the IMF all 12 core FSIs and 19 out of 28 encouraged FSIs.
- Themes covered include: capital adequacy, asset quality, earnings and profitability, sensitivity to market risk, market liquidity, real estate markets, other financial corporations, non-financial corporations sector, households.

Use of new credit statistics

- Indebtedness and debt service indicators have been important to assess the sustainability of credit expansion.
- Before stabilizing, indebtedness has steadily increased, reflecting the growing penetration of credit.
- Debt service has been fairly stable as declining interest rates and longer maturities have counterbalanced the effect of credit growth.

Households indebtedness

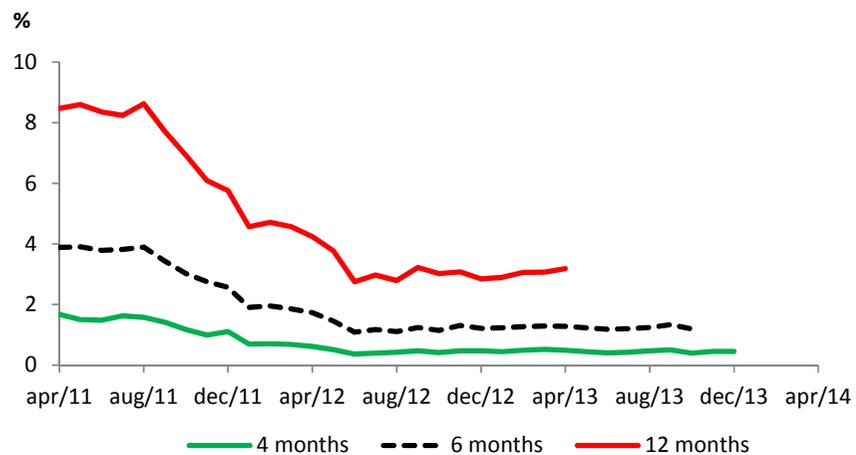


Use of new credit statistics

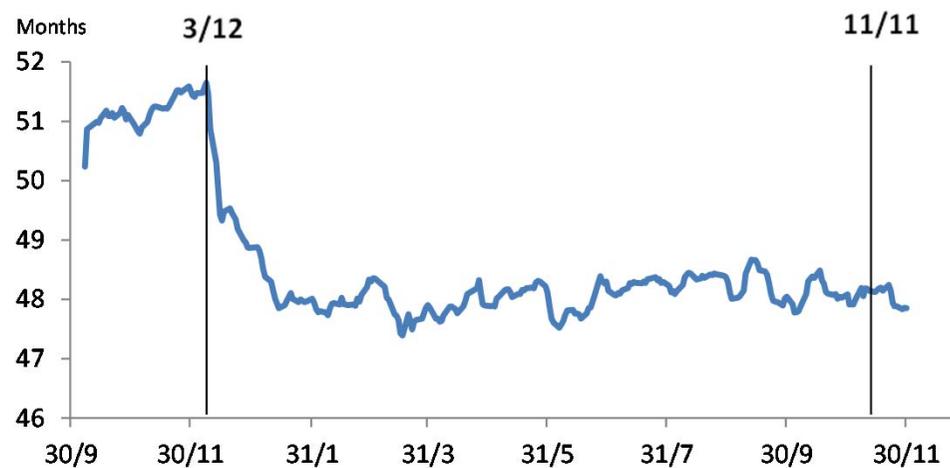
- LTV (loan to value) and credit vintage statistics have been important to inform macroprudential decisions.
- End-2010: high LTVs in auto loans contributed to a sharp increase in NPLs, calling for the introduction of macroprudential measures aimed at stimulating banks to lower LTVs and to shorten excessively long maturities.
- Credit vintages data has provided information on the evolution of NPLs before and after those measures.
- Daily data on original maturities of new operations was used to verify the outcome.

Use of new credit statistics

Auto loans NPL - by vintage



Auto loans - Average maturities of new loans 5-day moving average



Conclusion

- New statistical datasets have been required to describe and to analyse a fast growing credit market.
- Work has been conducted in two major fronts, focusing on monetary policy and financial stability.
- The new toolbox has been extensively tested in the context of a global financial crisis and have succeeded.
- One major challenge is to keep the statistical framework up-to-date with the credit market, maintaining the consistency between macro and micro data.

Thank you!

Muchas gracias!