Monitoring process for the implementation of macroprudential tools

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Meeting on Financial Information Needs for Statistics, Macroprudential Regulation and Supervision in Central Banks of Latin America and the Caribbean

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Agenda

- **Monitoring Framework**

- **Case study: Auto loans macroprudential tools**
  - **Setting the Stage**
  - **Monitoring Tools**
  - **Calibration**
  - **Evaluating Effectiveness**
  - **Recent Improvements**

Monitoring Framework

All financial instruments issued or held by FIs must be registered in clearing houses or trade repositories.

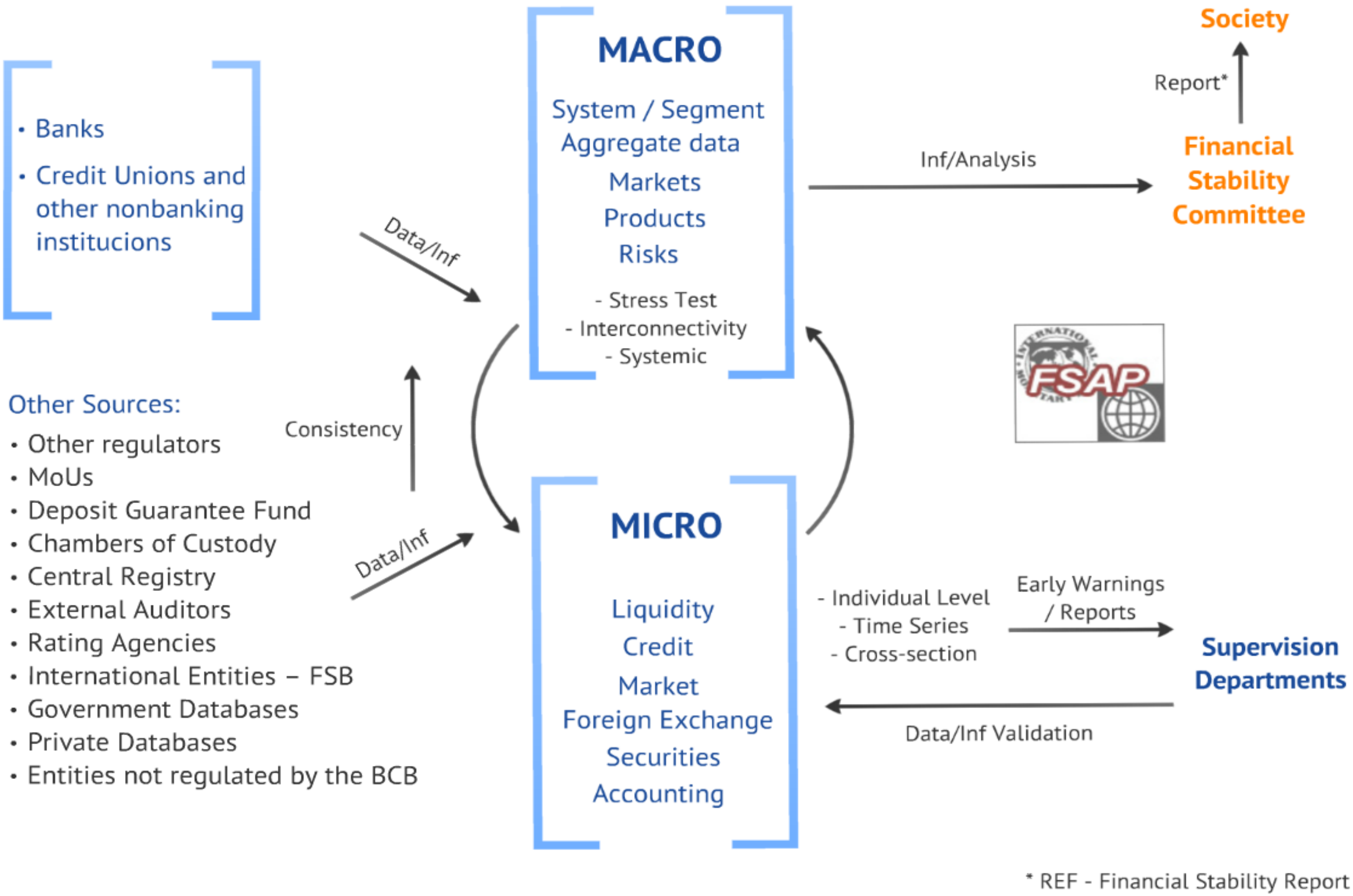
All securities and derivatives transactions are registered and traded at clearing houses. BCB gets info daily (1-day lag).

All securities transactions must be settled through the Brazilian Payments System, operated by the BCB.

All loans are informed to the credit information system (SCR).

All FX operations and credit lines are registered online at the BCB.

Monitoring Framework



Monitoring Framework

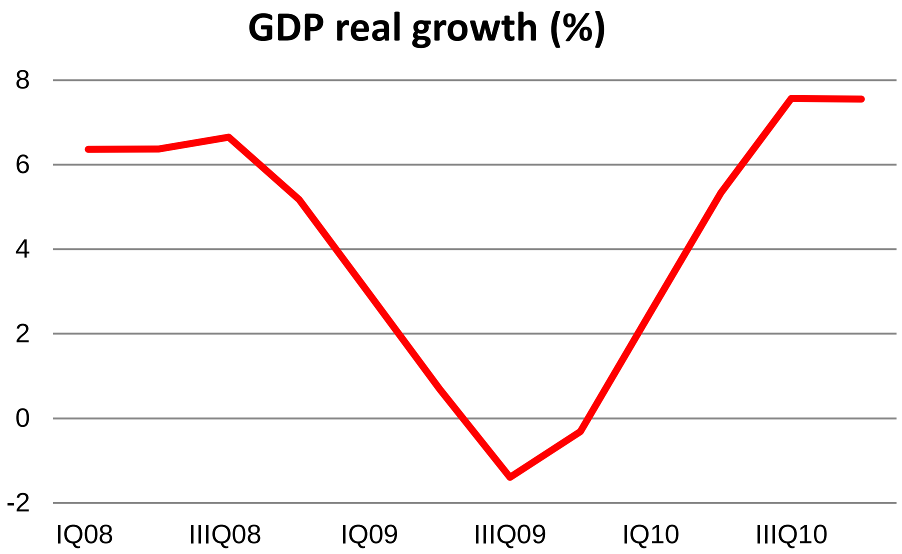
Credit Information System

- Receives monthly, from **1,600 FIs:**
  - Outstanding loans from **64 million clients**.
  - **430 million transactions (each transactions contains 36 information items)**.

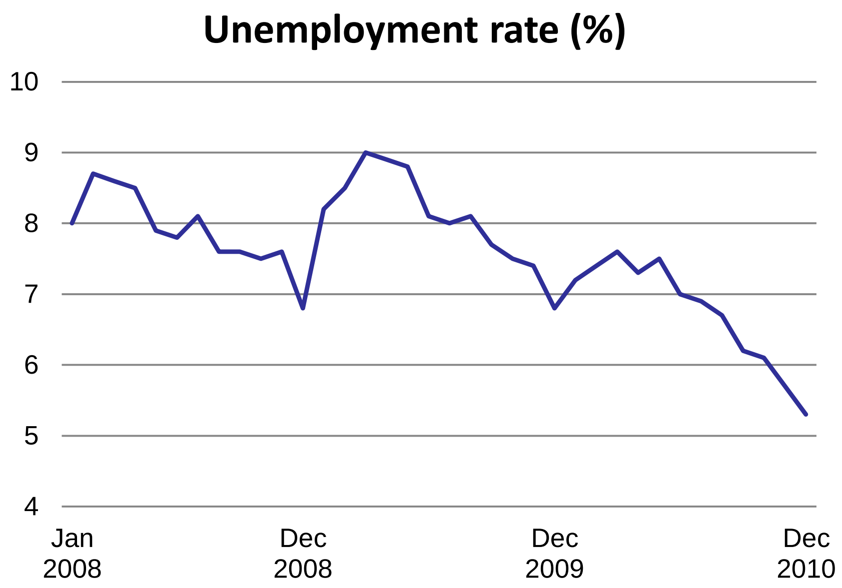
Market Monitoring System

- Receives data from: clearings, Brazilian Payment System and others
- **20 million registers a day**

Setting the Stage



Source: IBGE



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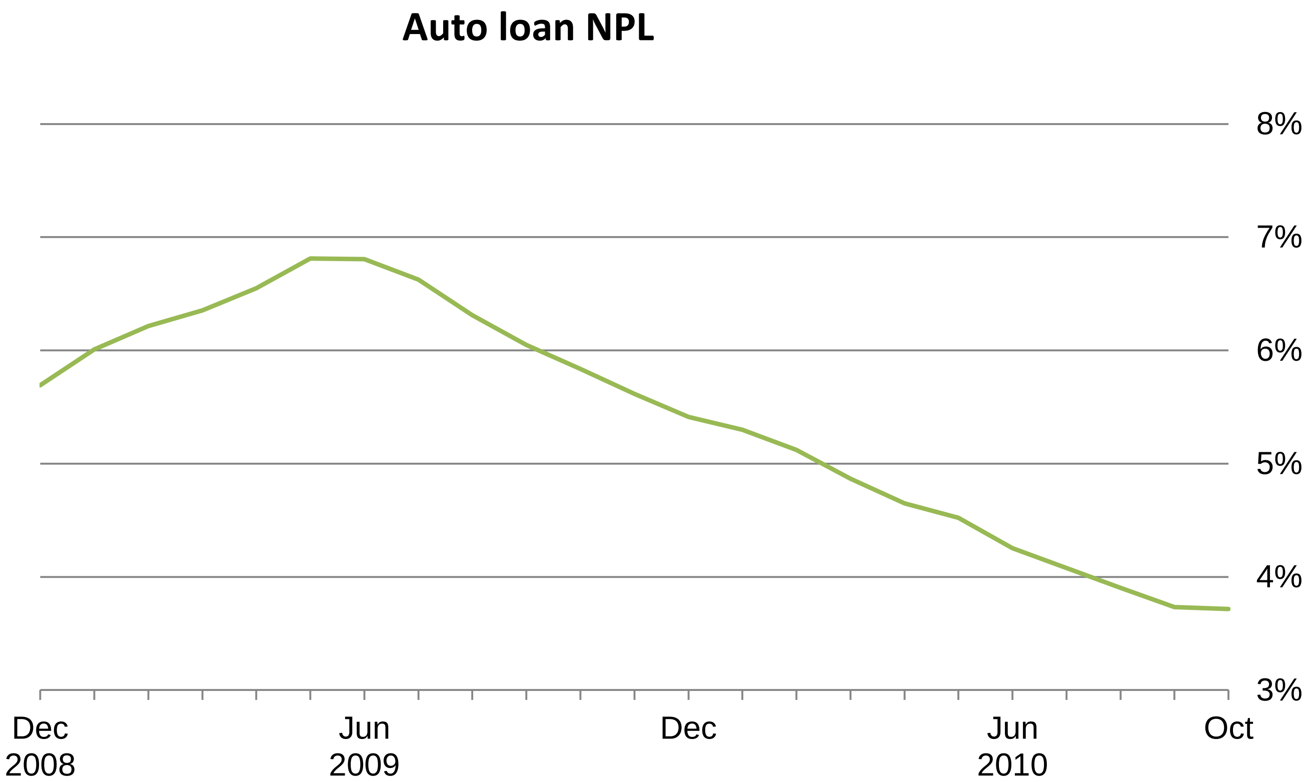
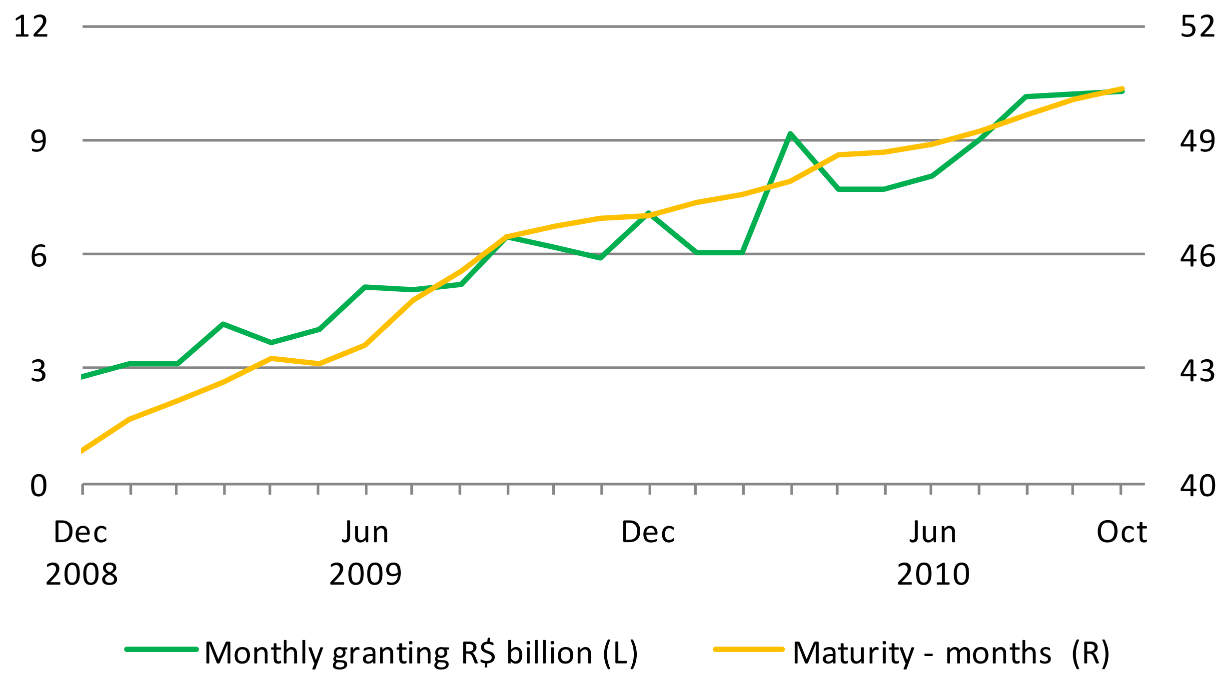
Monitoring tools

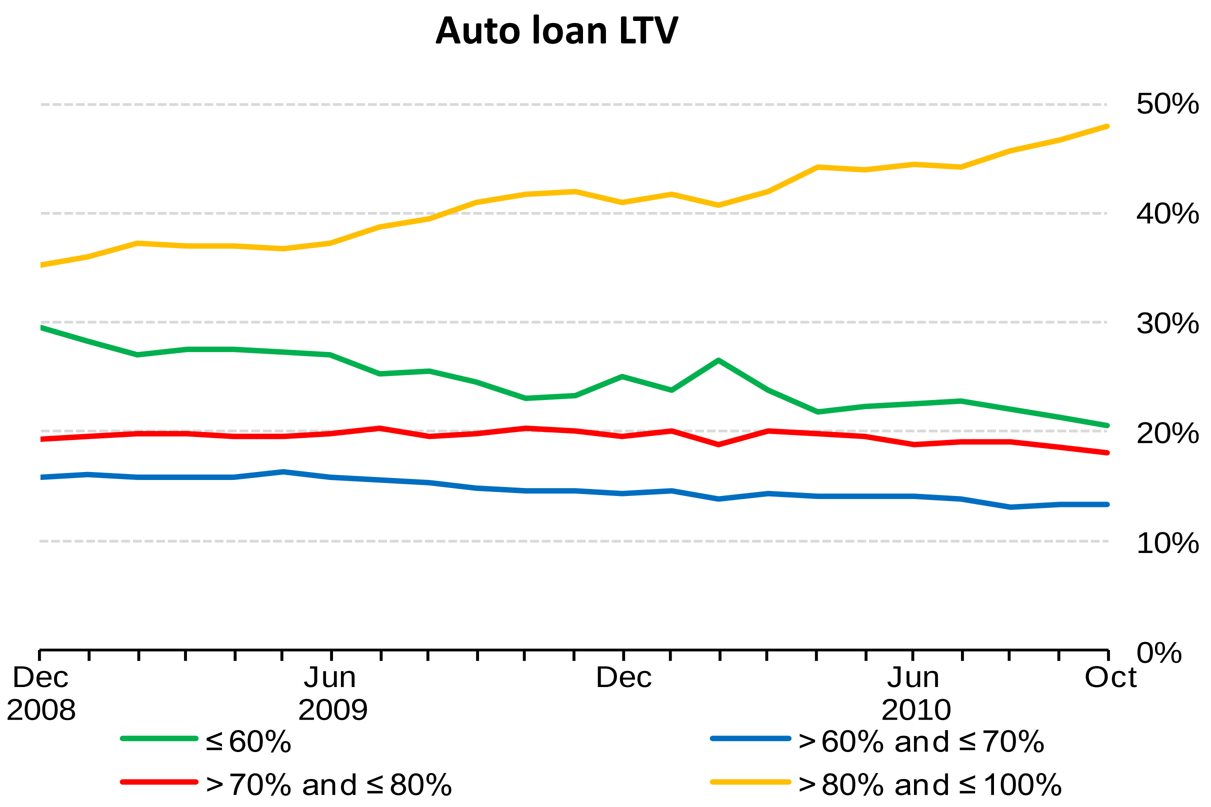


Monitoring tools

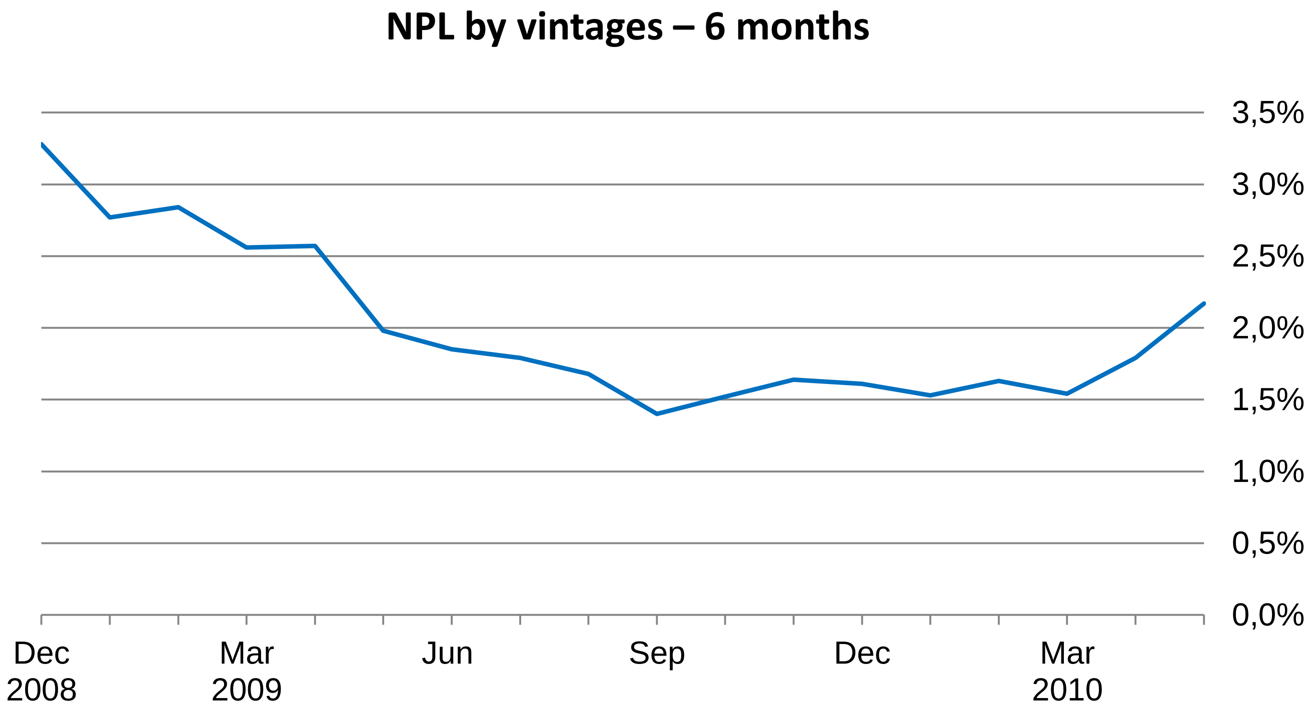
New loans and maturity



Monitoring tools



Monitoring tools



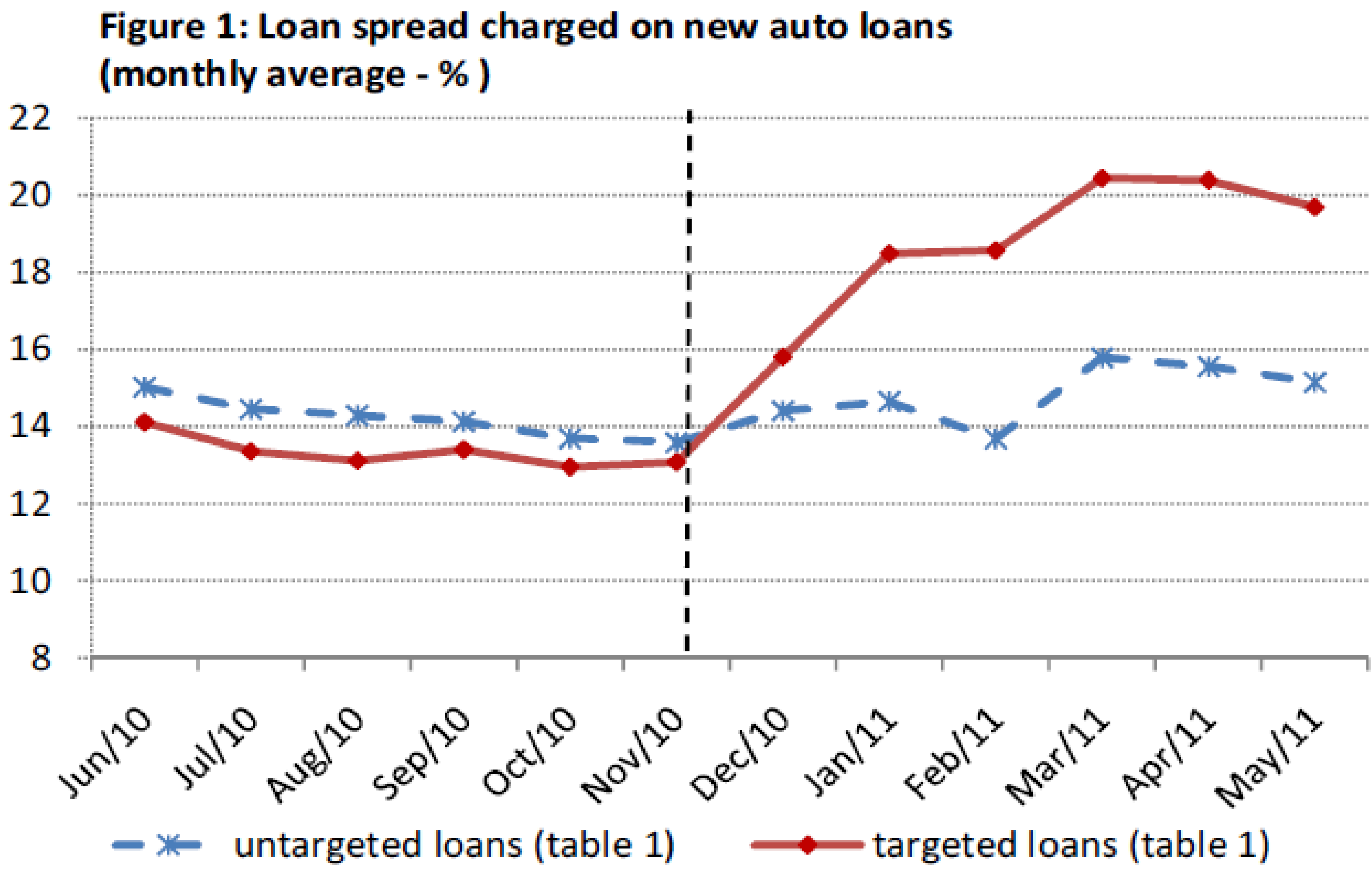
Calibration

Relation between maturities, LTV and NPL

LTV \ Maturity	> 1 and ≤ 2 yr	> 2 and ≤ 3 yr	> 3 and ≤ 4 yr	> 4 and ≤ 5 yr
≤ 60%	1,0%	1,9%	2,4%	3,1%
> 60% and ≤ 70%	2,0%	3,4%	3,9%	3,6%
> 70% and ≤ 80%	3,0%	3,5%	4,3%	4,0%
> 80% and ≤ 100	3,4%	4,0%	5,9%	4,6%

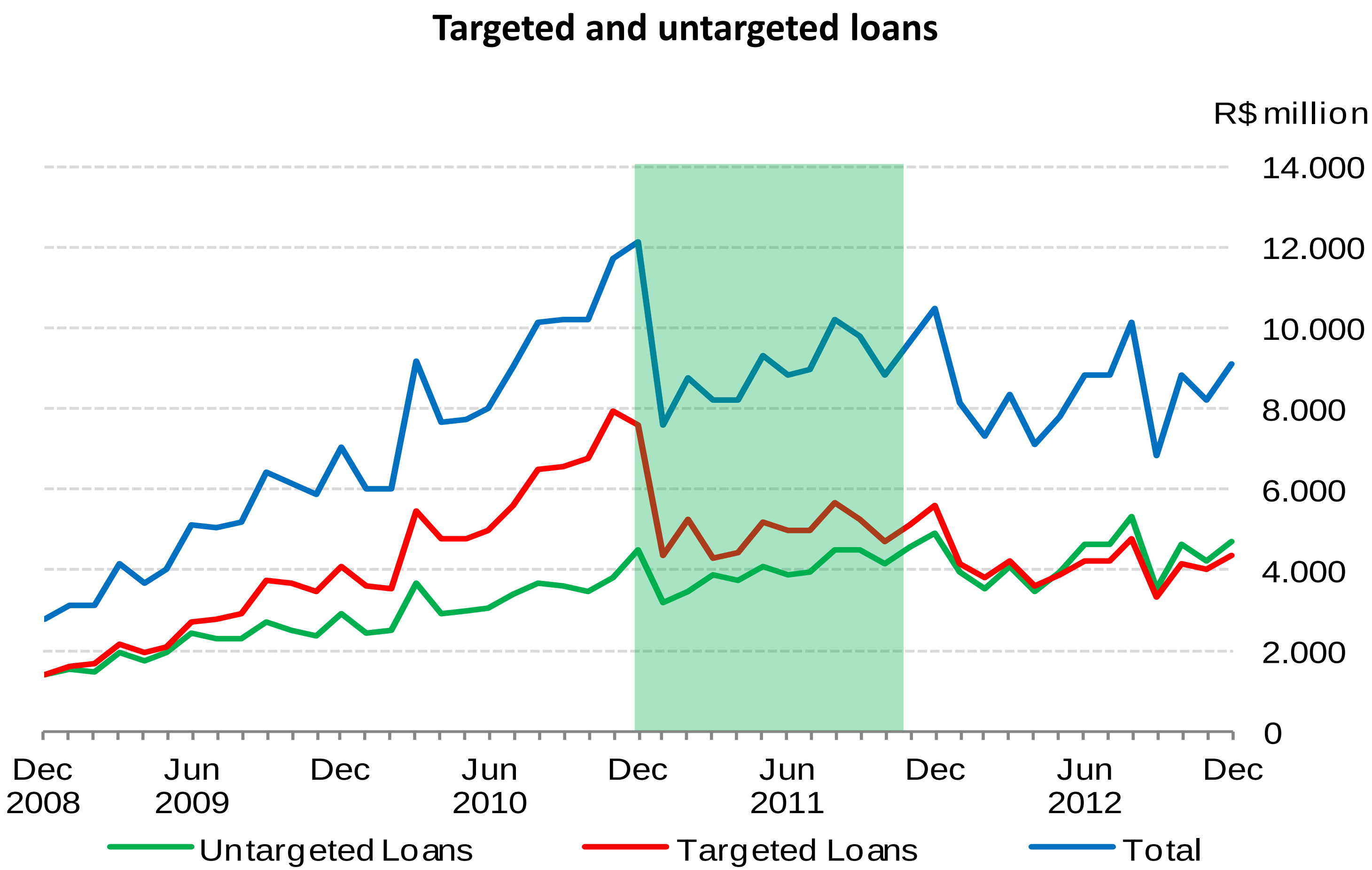
Operation	Maturity and LTV	Change of risk weight
Vehicles (financing and leasing)	2-3 yr and LTV > 80% 3-4 yr and LTV > 70% 4-5 yr and LTV > 60% more than 5 yr and any LTV	from 75% to 150%

Evaluating effectiveness

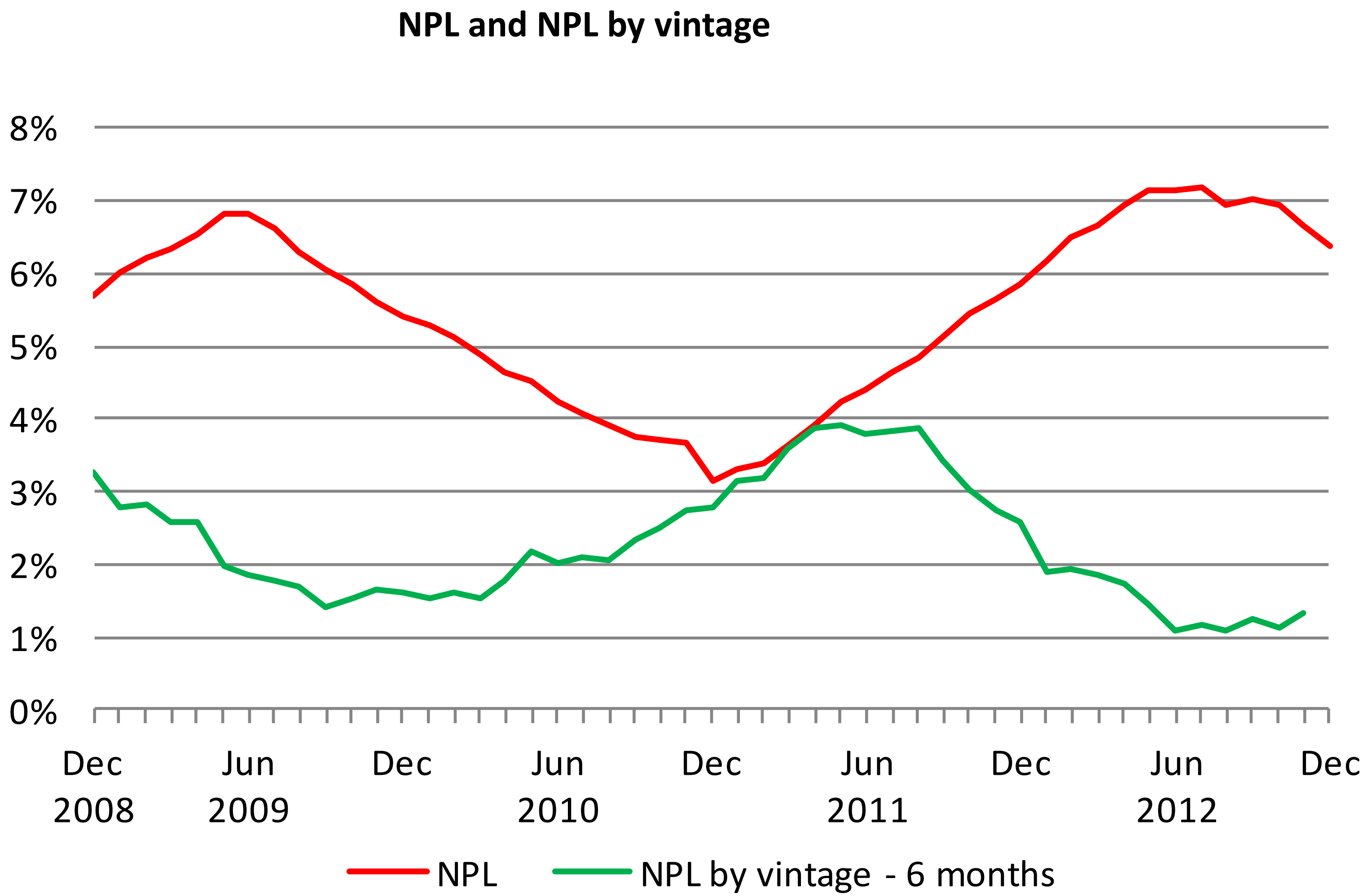


Source: Martins and Schechtman

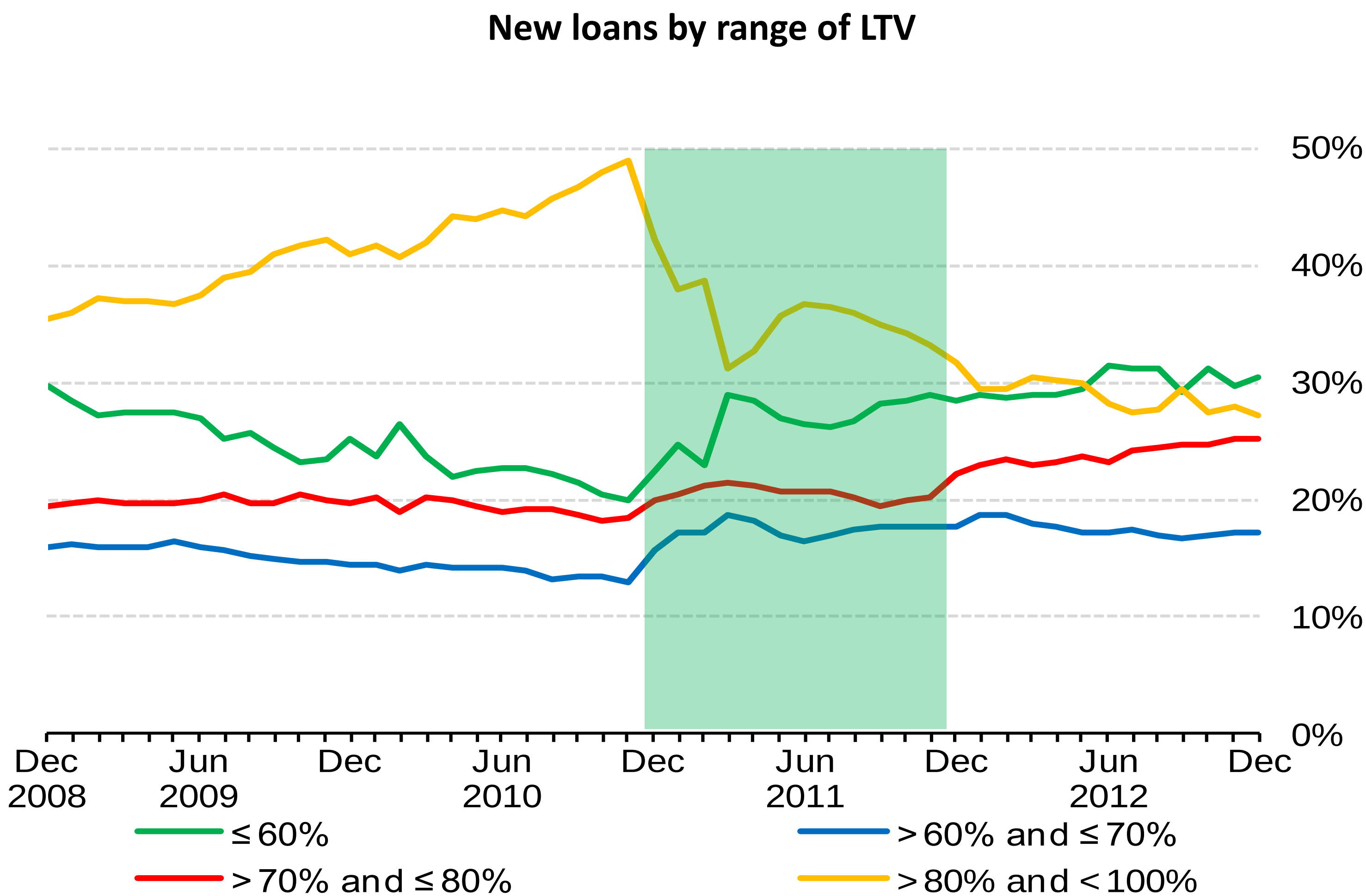
Evaluating effectiveness



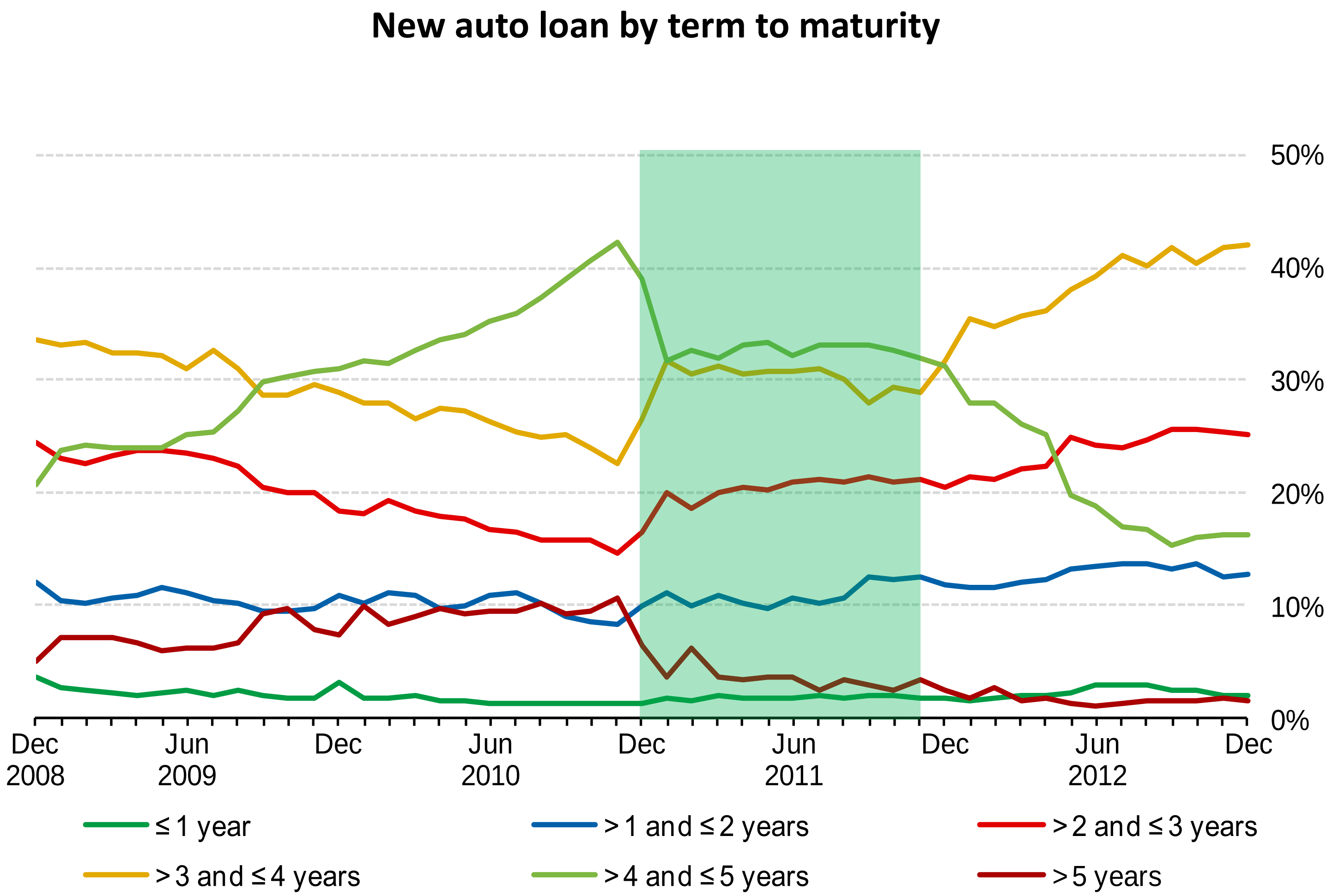
Evaluating effectiveness



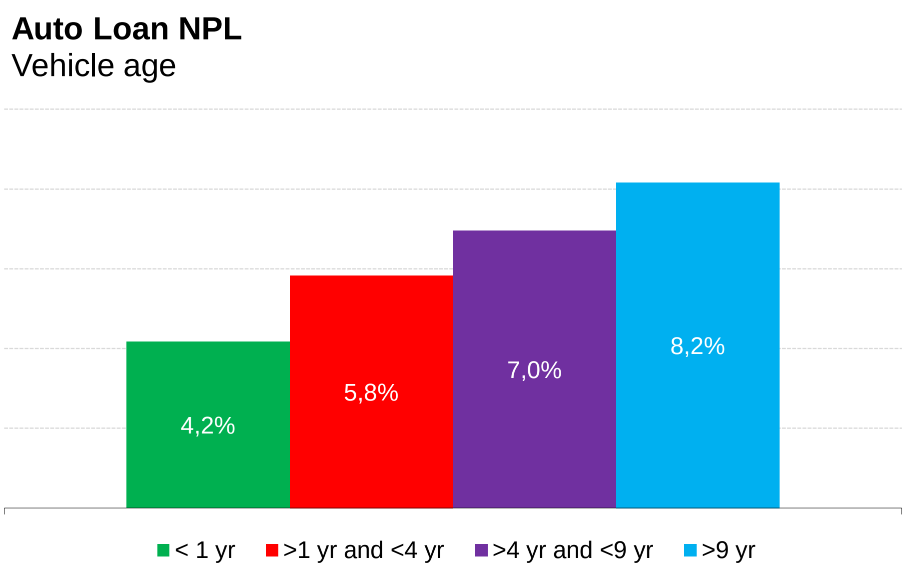
Evaluating effectiveness

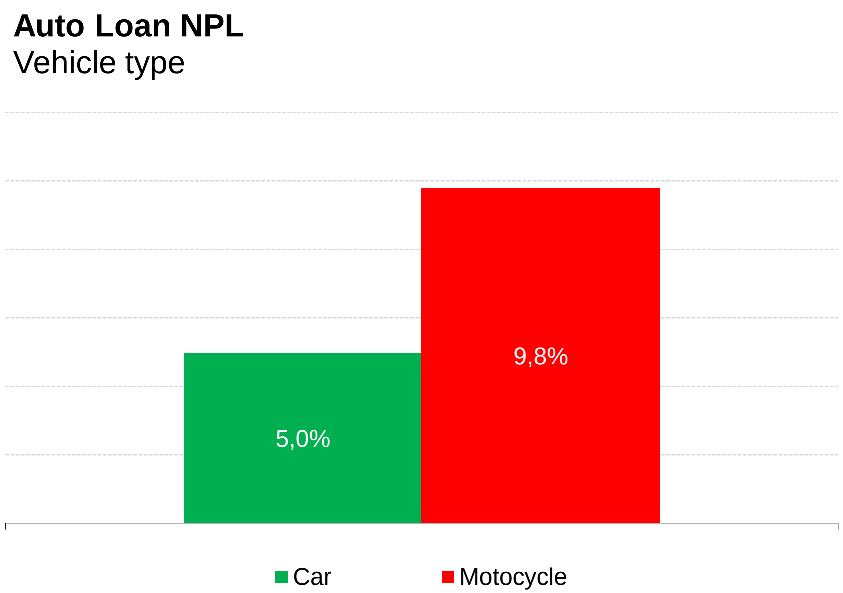


Evaluating effectiveness



Recent improvements





PD Model

- Loan: maturity, amount extended, and LTV
- Collateral: vehicle age and type
- Borrower: DSR, age, and region

To sum up

- Timely and good quality data is essential for the decision making process.

- Granular data provides valuable insights for the design of macroprudential policies.

- Identifying risks at an early stage is crucial for policies to be effective.