Data for financial stability: Bank of Italy' s experience

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Outline

1. **Different sources of data for financial stability**

2. **An example: Indicators for real estate sector**

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Data for financial stability

Data for financial stability

▪ For financial stability purposes, it is important to closely monitor the evolution of vulnerabilities to prevent the build-up of financial fragilities and their economic consequences.

The implementation of appropriate indicators for the early identification of potential risks is crucial to promptly implement corrective policies.

▪ Macroprudential tasks are relatively new: they require to collect relevant data and define effective indicators.

▪ A major issue in the assessment of risks is **the lack of reliable and comparable data**.

Different sources of data

<u>Data collected at the Bank of Italy</u>

Examples:
- Supervisory Reports
- Credit Register
- Surveys

<u>European initiatives and data collections</u>

Examples:
- Supervisory data (Finrep and Corep)
- AnaCredit
- Securities Holdings Statistics

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Finrep and Corep data

- European Authorities and the national supervisors have developed an approach for collecting **supervisory data**.

- These data are fundamental for the monitoring and analysis of the banking system and the detection of possible risks.

- The framework for reporting has been developed by the European Banking Authority (EBA) and it is based on some technical standards, harmonized supervisory records, stemming from related EU Regulations -> this helps in enhancing **comparability across countries.**

1) **Finrep - Financial Reporting:** statistical financial data (balance sheet information)
2) **Corep - Common Reporting:** prudential data (capital, liquidity, risks,….)

AnaCredit

- The Analytical Credit dataset project (**AnaCredit**) was launched by European Institutions in 2011.

- It includes granular and detailed data from credit institutions concerning **loans** and **collateral** or **guarantees** extended to counterparties identified as **legal entities** (firms).

- It is based on **harmonized definitions** and on a complete coverage for (at least) all euro area member states, ensuring more comparability.

- The aim is to support several central banking functions, such as decision-making in monetary policy and macroprudential supervision.

Real estate markets

ESRB Recomendation on real estate data gaps

- Real estate sector is very important for financial stability, due to its central role in the economy.

- The importance of detailed data and of a reliable set of indicators for the real estate sector is highlighted by the European Systemic Risk Board (ESRB), which published a **Recommendation on "Closing real estate data gaps"**.

- It provides a **common set of indicators** that (European) national macroprudential authorities should monitor when assessing risks originating from residential (RRE) and commercial real estate (CRE) markets.

- The main issues are:
    1) income-based indicators (confidentiality constraints)
    2) CRE indicators (lack of harmonized data consistent with ESRB definition)

Risk assessment framework at the Bank of Italy

An analytical framework has been implemented in order to assess risks stemming from real estate markets. It includes:

1. **Indicators to monitor financial stability risks** (real estate market, bank and credit, household indicators);
2. **Early warning models,** econometric models aimed at identifying vulnerabilities in the run-up to a crisis, used for forecasting future vulnerabilities.

Different sources of data: supervisory reports, credit register, surveys …

➢ Most data refer to RRE sector
➢ For CRE, there is only few information.

Vulnerability indicators for banks towards real estate sector

▪ **Italy has not experienced any real estate related systemic banking crisis** (i.e. non-crisis country) => a major challenge is the definition of an appropriate "Vulnerability indicator"

▪ In order to identify systemic banking vulnerabilities stemming from rapid credit developments in the real estate sector, we construct the following ratio:

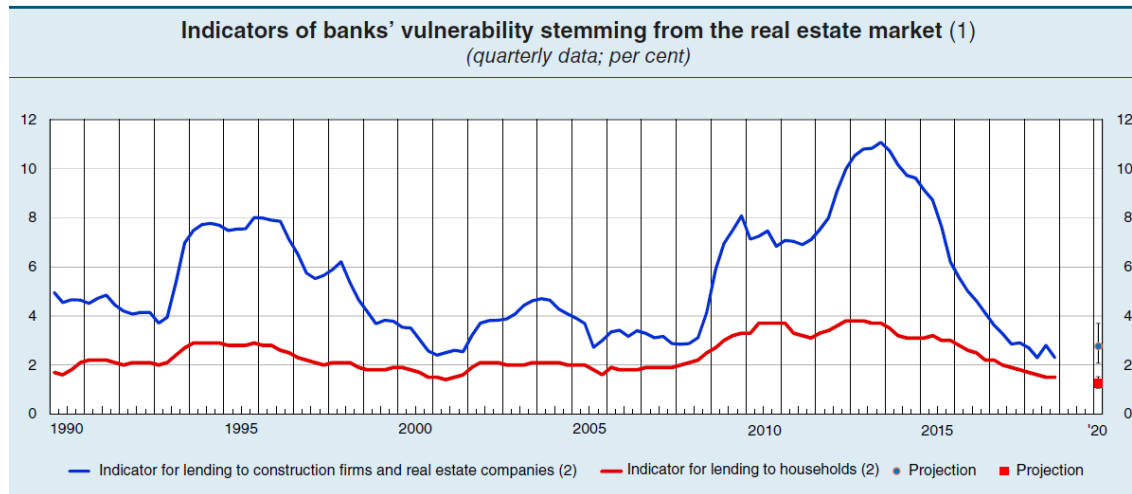$$\frac{\textit{annual flow of non-performing loans}}{\textit{capital and reserves}}$$

Data are from the Credit Register (flow of new non performing loans) and supervisory data (capital and reserves)

Vulnerability indicators

RRE and CRE vulnerability indicators

(quarterly data; per cent)

Indicators of banks' vulnerability stemming from the real estate market (1)
(quarterly data; per cent)

Legend: Indicator for lending to construction firms and real estate companies (2) — Indicator for lending to households (2) — Projection — Projection

(1) Banks' vulnerability is measured by the ratio of the flow of new non-performing loans in the last 4 quarters to the average of the banks' capital and reserves in the same period. For the projection for the 1st quarter of 2020, the graph shows the median and the 10th and 90th percentiles. For the methodology, see. F. Ciocchetta, W. Cornacchia, R. Felici and M. Loberto, 'Assessing financial stability risks arising from the real estate market in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 323, 2016, and F. Ciocchetta and W. Cornacchia, 'Assessing financial stability risks arising from the real estate market in Italy: an update', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 493, 2019. – (2) The vulnerability indicators for the period 1990-2005 are reconstructed using econometric techniques.
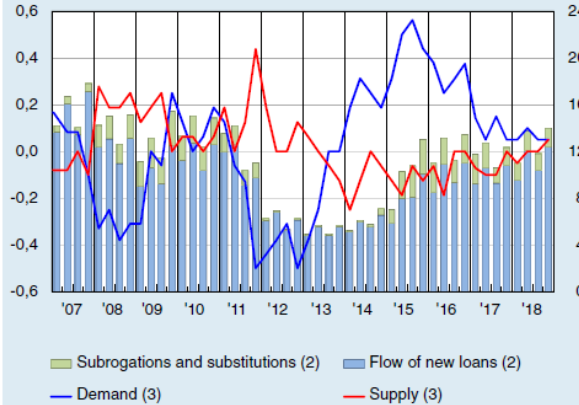
Regional bank lending survey

- The **Regional Bank Lending Survey (RBLS**) at the Bank of Italy gathers data about mortgage loans to households.

- The survey is run twice a year on a sample of about 300 banks to collect information on bank lending conditions. The survey draws upon the Bank Lending Survey conducted by the European Central banks.

- The data include **lending standards** (loan-to-value, loan-to-income, the debt-to-income ratio, …) and the **share of new mortgage loans that exceed certain thresholds** for the ratios and therefore pose a higher degree of risk.
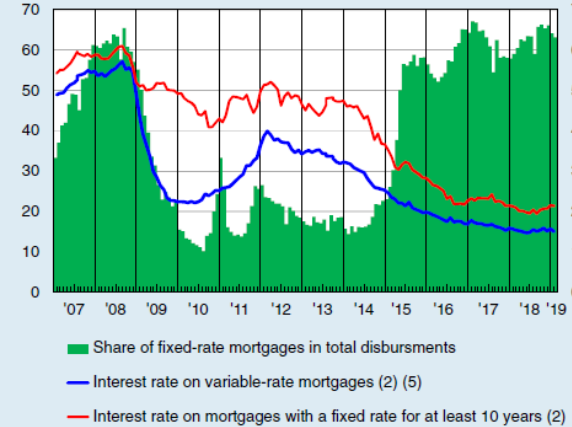
Indicators of household indebtedness

(a) Loans for house purchase: demand and supply conditions and loan disbursements (1)
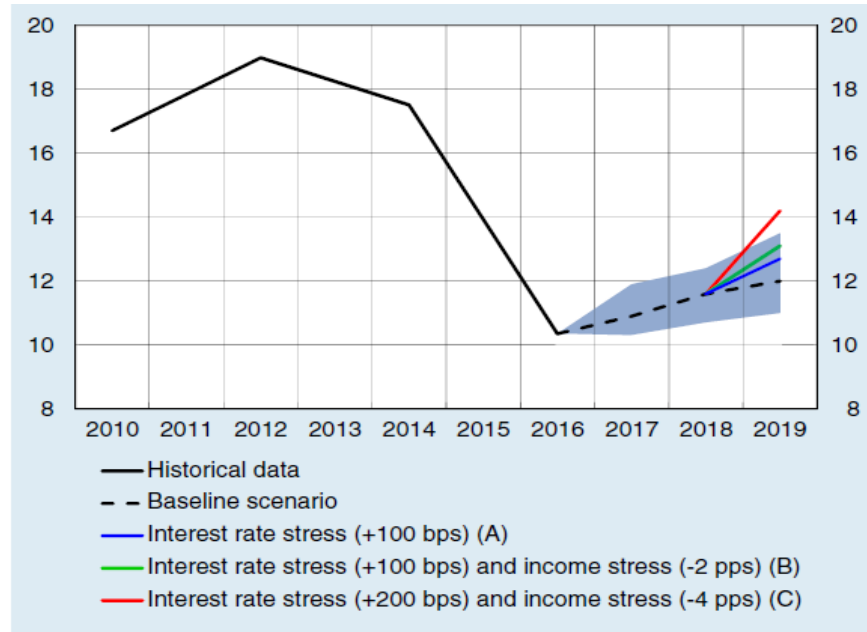*(quarterly data; diffusion indices and billions of euros)*

(b) Interest rates and disbursement of fixed-rate mortgages (4)
(monthly data on new loans; per cent)

Subrogations and substitutions (2)
Flow of new loans (2)
Demand (3)
Supply (3)

Share of fixed-rate mortgages in total disbursments
Interest rate on variable-rate mortgages (2) (5)
Interest rate on mortgages with a fixed rate for at least 10 years (2)

Sources: Euro area bank lending survey and supervisory reports.
(1) The data refer to consumer households only. – (2) Right-hand scale. – (3) For the demand index, positive (negative) values signal an expansion (restriction); for the supply index, they signal a tightening (easing). – (4) The data refer to new loans to consumer and producer households and non-profit institutions serving households. – (5) Variable rate or rate negotiable before the end of the year.

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Microsimulation model for household debts

Source: Based on data from the Survey on Household Income and Wealth (SHIW).

Conclusions

❑ **Appropriate policy decisions are based on good data:** monetary policy function, financial stability or banking supervision, depend on good quality indicators

❑ EU central banks and authorities have taken **new tasks in terms of macroprudential supervision and financial stability**, requiring new instruments and knowledge.

❑ There is an **increasing need of better and more detailed statistics**. Granular micro data (at individual or bank level) are important in order to have a better understanding of the problem

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Conclusions (2)

- ❑ **A number of data sources are available** and can be used for financial stability purposes, both at national and EU level.

- ❑ Different data can give **complementary information.**

- ❑ Based on them it is possible to build **appropriate** and **effective indicators.**

- ❑ A main issue concerns **harmonized definitions** and indicators in order to increas comparability across EU countries; numerous initiatives at EU level have been carried out to improve this aspect.

- ❑ Two possible concerns are the possibility of overburdening banks and confidentiality issues.

Thank you!

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