

Box 2

Monitoring euro area residential real estate markets from a macroprudential perspective

No other macroeconomic segment has been more closely linked to financial stability than residential real estate. Historical evidence shows that financial crises involving housing market imbalances have had severe negative repercussions on the overall financial system and economic growth. Accordingly, policies to contain risks stemming from residential property markets have assumed a key role in the macroprudential toolkit. Judiciously informing their use is, however, challenging given the multitude of factors behind real estate developments. This calls for an encompassing view that goes beyond traditional standardised price and valuation metrics.

As part of its new responsibilities in the area of macroprudential policy, the ECB has stepped up efforts to monitor country-specific developments in residential real estate markets. In line with the Single Supervisory Mechanism (SSM) Regulation, which gives the ECB the power to top up national competent/designated authorities' decisions regarding the activation of certain measures,⁸ when carrying out its macroprudential policy work, the ECB has adopted an internal residential real estate risk assessment framework in order to detect early signs of vulnerabilities in individual SSM countries for financial stability and related policy purposes. The objective of the framework is preventative (rather than corrective), given the policy mandate, and consists of two main elements. First, the analysis incorporates a countercyclical perspective, with the main aim of preventing the build-up of risks. Second, it focuses on making the system more resilient to potential shocks from a forward-looking perspective.⁹ This framework also feeds into broader EU initiatives, most notably as part of the analytical support for the European Systemic Risk Board (ESRB), and is complementary to the assessment of the real estate market performed by the ECB when carrying out its banking supervision work, with different objectives, such as supporting banks in their real estate-related analysis.

The core of the ECB's risk identification within the macroprudential framework rests on a comprehensive set of indicators at the level of individual SSM countries. The underlying pool of variables covers numerous financial and economic indicators, reflecting both cyclical and structural conditions in the housing market of each country. Indicators are chosen on the basis of the evidence gained from past episodes of financial instability caused by real estate imbalances. A first set of indicators includes those regularly disseminated in the FSR which target residential real estate prices and valuations as strong price increases and underlying price misalignments tend to precede periods of financial instability and economic recessions.¹⁰ As valuation metrics are surrounded by a high degree of uncertainty, the ECB also uses various model-based approaches¹¹, while it also assesses the impact of changes in fundamental variables affecting valuations (e.g. interest rates). A second set of indicators covers lending conditions and household balance sheet soundness. Strong mortgage lending growth could lead to higher indebtedness and could be a symptom of relaxing credit standards, thereby increasing the fragility of the overall system. At the

⁸ Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions. The macroprudential tools available to the ECB are laid down in the Capital Requirements Regulation and Directive (CRR/CRD IV).

⁹ Real estate risks that have already materialised fall outside the scope of such a preventative toolkit and require a broader policy response (e.g. the legacy stock of non-performing residential real estate loans).

¹⁰ For more details, see Box 3 in *Financial Stability Review*, ECB, May 2015.

¹¹ For more details, see Box 3 in *Financial Stability Review*, ECB, November 2015.

same time, weak household balance sheets, stemming from high levels of indebtedness, low household wealth and high debt service ratios, make the unwinding of residential real estate imbalances more likely and more severe.

These indicators are assessed against historically generated early warning thresholds and transformed into risk ratings on the basis of them. The thresholds are identified by looking at the distribution of the indicators or by following experts' views or they are estimated on the basis of historical data in the spirit of the early warning model literature.

Indicators are also aggregated into composite measures that capture the overall level of residential real estate vulnerabilities in one country. This step facilitates the identification of vulnerable markets that require deeper analyses to reach a final risk assessment. To this end, consideration is given to other qualitative information on residential real estate markets and country-specific mitigating factors.

Vulnerabilities are also cross-checked against the exposure of banks to the real estate sector, as a share of total assets, GDP and capital. The assessment takes into account the exposures to overall real estate, including all types of collateralised lending and credit to industrial activities in relation to real estate. This allows an assessment of risks stemming from potential spillovers and co-movements between residential and commercial real estate. The exposures and the associated collateral are analysed in detail and monitored by ECB Banking Supervision. Other aspects that need to be closely monitored are lending conditions, including, where available, loan-to-value ratios, debt-to-income ratios and debt service-to-income ratios of new loans.

Beyond the above analytical elements, the ECB also pays attention to a broad array of structural indicators that can amplify or attenuate shocks. These include, for example, the share of floating interest rate mortgages, home ownership rates, the fraction of homeowners with mortgages, the share of households with "underwater" mortgages¹², the role of the construction sector in the overall economy, taxation regimes and country specificities. Finally, the ECB also conducts internal bank stress tests to evaluate the resilience of the banking system under an adverse scenario, defined specifically for the risk assessment of a downturn in housing markets with potential negative ramifications for the rest of the economy.

Taken together, all of the elements of the ECB's risk identification framework give a detailed picture, providing a foundation for consistently assessing vulnerabilities in residential real estate markets across euro area countries. However, country specificities which are not (or insufficiently) captured by this framework need to be taken into account and justify a role for cross-checking rule-based indications with expert judgement. With time, the depth of the analysis is expected to benefit from improving data quality and availability (including harmonised indicator definitions), strengthening the granularity and the homogeneity of the assessment of risks across countries and market segments.

¹² An "underwater" mortgage is defined as a situation where the value of the mortgage loan exceeds the market value of the home.