

**WARNING OF THE EUROPEAN SYSTEMIC RISK BOARD**  
**of 2 December 2021**  
**on medium-term vulnerabilities in the residential real estate sector of Croatia**  
**(ESRB/2021/13)**  
(2022/C 122/04)

THE GENERAL BOARD OF THE EUROPEAN SYSTEMIC RISK BOARD,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board <sup>(1)</sup>, and in particular Article 3(2)(c) and Articles 16 and 18 thereof,

Having regard to Decision ESRB/2011/1 of the European Systemic Risk Board of 20 January 2011 adopting the Rules of Procedure of the European Systemic Risk Board <sup>(2)</sup>, and in particular Article 18 thereof,

Whereas:

- (1) Housing is a key sector of the real economy and represents a major part of household wealth and bank lending. Residential real estate (RRE) properties make up a large component of households' asset holdings and loans for housing are often a large part of banks' balance sheets. Furthermore, housing construction is typically an important component of the real economy, as a source of employment, investment and growth.
- (2) Past financial crises and experience in many countries have demonstrated that unsustainable development in real estate markets may have severe repercussions for the stability of the financial system and the economy as a whole in any given country, which may also lead to negative cross-border spill-overs. The effects on financial stability may be both direct and indirect. Direct effects consist of credit losses from mortgage portfolios due to adverse economic and financial conditions and simultaneous negative developments in the RRE market. Indirect effects relate to adjustments in household consumption, with further consequences for the real economy and for financial stability.
- (3) Real estate markets are prone to cyclical developments. Excessive risk-taking, excessive leverage and misaligned incentives during the upturn of the real estate cycle may lead to severe negative implications for both financial stability and the real economy. Given the relevance of RRE for financial and macroeconomic stability, seeking to prevent the build-up of vulnerabilities in RRE markets by the use of macroprudential policy is especially important, in addition to its use as a means of mitigating systemic risk.
- (4) While cyclical factors play an important role in fuelling the vulnerabilities identified in RRE markets in European Economic Area (EEA) countries, structural factors have also driven these vulnerabilities. These structural factors can include a lack of housing supply, which has exerted upward pressure on house prices and debt for households that buy their own property, and other public policies that may act as an incentive for households to overborrow. Given that these factors go beyond macroprudential policy, measures originating from other policy areas can complement and support the current macroprudential measures in addressing the vulnerabilities present in RRE markets in individual countries efficiently and effectively, without generating excessive costs for the real economy and the financial system.
- (5) The outbreak of the COVID-19 pandemic in 2020 and the related crisis have not led to a cyclical decline in housing markets. Rather, following a period of gradual growth, and amidst the low interest rate environment, real house price and lending growth have accelerated further in several countries, largely outpacing the growth in household income. In order to mitigate the impact of the pandemic and the resulting economic uncertainty, various measures and policies, such as moratoria and public guarantees, have been implemented. In this broad policy context, previously

<sup>(1)</sup> OJ L 331, 15.12.2010, p. 1.

<sup>(2)</sup> OJ C 58, 24.2.2011, p. 4.

scheduled macroprudential measures have been temporarily relaxed or their activation delayed in some countries. The currently observed improvement in the economic situation allows for an adjustment of macroprudential policy in those countries in which RRE-related vulnerabilities have continued to build up.

(6) The European Systemic Risk Board (ESRB) has recently concluded a systematic and forward-looking EEA-wide assessment of vulnerabilities relating to RRE.

(7) As regards Croatia, this recent assessment has revealed that:

a. Following a prolonged period of correction and subdued growth, real house price growth accelerated to 8 % year-on-year at the beginning of 2019. Since the outbreak of the COVID-19 pandemic, house price dynamics have remained robust. According to the estimates by Hrvatska narodna banka, house prices are increasingly diverging from their long-term fundamentals.

b. A number of factors on both the demand and supply side may affect the evolution of house prices to varying degrees across Croatian regions. First, in some regions, a significant part of housing demand has been by foreign buyers (around 10 % overall according to Hrvatska narodna banka). While overall transaction activity was lower after the outbreak of the COVID-19 pandemic, the share of foreign buyers remained at pre-crisis levels according to Hrvatska narodna banka. Second, Croatia suffered two earthquakes in 2020, both of which hit the Zagreb region and damaged dwellings. These events revealed some deficiencies in the quality standards of the dwellings that were built before the 1960s, i.e. before anti-seismic standards were introduced in Croatia. As a result, the relatively lower level of liquidity of some of these dwellings may reduce the stock of housing to be transacted, potentially leading to a higher general house price level. At the same time, gradual reparation of the damaged dwellings, the cost of which was estimated at 23 % of the gross domestic product (GDP) in 2020, may inflate house prices through higher construction activity and its positive impact on the economy. Finally, in 2020, the Government of Croatia extended the housing subsidy scheme, which has been in place since late 2017 and provides higher subsidy rates in less developed regions, to first-time buyers.

c. Even though only approximately one half of housing transactions are financed through bank credit according to Hrvatska narodna banka, real mortgage credit growth accelerated in the second half of 2019 and especially in the course of 2020. It stood on average at approximately 7,5 % between January and August 2021. To some extent, this dynamic has been driven by the government housing subsidy scheme, with the share of subsidised loans increasing from 18 % in 2019 to 35 % in 2020.

d. New collection of data on mortgage lending standards, conducted by Hrvatska narodna banka, suggest that a substantial share of new loans had a loan-to-value (LTV) ratio higher than 90 % in the first half of 2021. Many of these loans, were government-subsidised loans, whose LTV ratios typically ranged between 90 % and 100 %. Approximately 10 % of new loans had an LTV over 100 %. Approximately one quarter of new loans were also granted with a loan service-to-income (LSTI) ratio over 40 %. Moreover, some of these new loans also had an LTV over 90 %. In addition, in the first half of 2021, in the case of some of the new loans, maturity exceeded 30 years.

e. Against this background, in comparison to banks operating in the rest of the Union, banks operating in Croatia have relatively high levels of own funds. The average Tier 1 capital ratio reached 25 % in December 2020. Average risk weights for mortgage loans under the Internal Ratings Based (IRB) approach for the calculation of own funds requirements, amounted to 38 % in June 2021. The share of these loans represented about 12 % of the market in Croatia. The majority of credit institutions follow the Standardised Approach, and, to assign preferential risk weights to RRE exposures as authorised by Regulation (EU) No 575/2013 of the European Parliament and of the Council<sup>(\*)</sup>, they must meet the stricter criteria set out in Article 124 of that Regulation. In June 2021, average risk weights for credit institutions following the Standardised Approach amounted to 42 %.

(\*) Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1.).

- f. At the same time, household indebtedness in Croatia is relatively low compared to other Union countries. Over the course of 2020, household loans increased in real terms, but at lower rates than loans for housing. This was the result of a decline in general consumer confidence, which has reduced the intake of general consumer credit, while government subsidy schemes for mortgage loans have kept the demand for real estate loans up. Another driving factor may be the decrease in interest rates on loans to households. According to the European Banking Authority (EBA), in the second half of 2020, a slight increase in the ratio of non-performing loans was observed for household loans and mortgage loans in particular. In the first quarter of 2021, the non-performing loan ratio remained unchanged for household loans overall (at 5,9 %) and declined slightly for mortgage loans (to 3,6 %).
- g. In comparison to other Member States, while the share of mortgage loans in banks' portfolios in Croatia is limited, household indebtedness is relatively low, the level of capitalisation of the banking sector is relatively high and a significant part of housing demand is not financed by bank loans, favourable conditions and possibly relaxed lending standards for mortgage lending could pose a risk of a spiral, which may evolve between house prices and mortgage credit in the medium term. On the one hand, due to rising house prices, the value of collateral for real estate loans has been increasing, thereby allowing borrowers to take higher leverage. On the other hand, house price growth is usually accompanied by positive macroeconomic developments, which in turn may lead to a loosening of lending standards by the credit providers owing to general optimism on the market. At the same time, the increasing supply of real estate loans may exert additional upward pressure on house prices. From the medium-term perspective, such a spiral could lead to a credit-driven house price bubble despite the fact that a significant part of housing demand is currently financed from sources other than domestic bank credit. In particular, credit dynamics could continue to be fuelled by mortgage credit subsidies promoted by the Government of Croatia.
- h. The ESRB acknowledges that several measures that mitigate current RRE vulnerabilities are in place in Croatia, in particular, the measure provided for in Article 124 of Regulation (EU) No 575/2013 as well as other capital-based measures (e.g. the systemic risk buffer) contribute to the relatively high capitalisation of the banking sector in comparison with other Member States. This provides a cushion against the potential materialisation of RRE risks. The indirect debt service-to-income (DSTI) limit, which was introduced in line with the EBA Guidelines on creditworthiness assessment and the EBA Guidelines on arrears and foreclosure, also serves as a backstop against excessive debt service burden of borrowers to a certain extent. The ESRB also acknowledges that the legal framework for borrower-based measures established in 2020 has significantly enlarged the macroprudential policy toolkit in Croatia, and that the detailed collection of data on lending standards, which was introduced at the end of 2020, allows for effective monitoring of risks stemming from the RRE market.
- i. From a forward-looking perspective and taking into account the medium-term risk outlook, the current macroprudential policy mix is considered to be partially appropriate and partially sufficient. From a forward-looking perspective, in spite of the relatively high capitalisation of the banking sector, the introduction of explicit borrower-based measures as pre-emptive action against the potential growth of a spiral between house prices and credit that could be fuelled by relaxed lending standards and government mortgage credit subsidies could complement current macroprudential measures related to mortgage loans. At the same time, macroprudential policies could be complemented by broader policy action to address factors that facilitate or promote increasing household indebtedness, namely government mortgage credit subsidies, in order to support current macroprudential measures to address remaining vulnerabilities identified in Croatia's RRE market efficiently and effectively, without producing excessive costs for the Croatian real economy and financial system.
- (8) When activating any measures to address the identified vulnerabilities, their calibration and phasing-in should take into account Croatia's position in the economic and financial cycles, and any potential implications as regards the associated costs and benefits,

HAS ADOPTED THIS WARNING:

The ESRB has identified medium-term vulnerabilities in the residential real estate sector in Croatia as a source of systemic risk to financial stability, which may have the potential for serious negative consequences for the real economy. From a macroprudential perspective, the ESRB considers the main vulnerabilities to be the rapid growth in household credit and possible signs of house price overvaluation, given the absence of explicit borrower-based measures that could mitigate the build-up of risks related to the residential real estate sector.

Done at Frankfurt am Main, 2 December 2021.

*The Head of the ESRB Secretariat,  
on behalf of the General Board of the ESRB*  
Francesco MAZZAFERRO

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