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Explanation for increasing the countercyclical buffer rate

Following the regular¹ quarterly assessment of the evolution of cyclical systemic risks made on the basis of data for the third quarter of 2021, the Croatian National Bank adopted the decision on the increase of the countercyclical buffer rate to 0.5%, to be applied as of 31 March 2023. The reasons for the increase of the countercyclical buffer rate for the Republic of Croatia are the continued accumulation of cyclical systemic risks amid economic recovery following the crisis caused by the pandemic, the growth in the prices of residential real estate and the pickup in lending activity.

The decision on the increase of the rate has been made according to the relevant indicators of cyclical systemic risk specific for Croatia (Table 1), which reflect the dynamics of the credit-to-GDP-ratio and the overall level of cyclical risks in the domestic economy better than the standardised Basel ratio.

Table 1 Relevant indicators of cyclical systemic risk and the associated benchmark countercyclical buffer rate

Indicator	Ratio/indicator value	Credit gap (deviation from the long-term trend)	Benchmark CCyB rate
Standardised (Basel) credit-to-GDP ratio	72.1%	-15.6 p.p.	0%
Specific credit-to-GDP ratio (absolute gap)	52.9% (narrow) and 72.1% (broad)	-10.9 p.p. to -0.03 p.p.	0% to 0.15%
Specific credit-to-GDP ratio (relative gap)		-13.1% to 0.06%	0% to 0.13%
Composite indicator	0.06 (62nd percentile of distribution)	/	0.55% to 0.83%

Note: Specific ratio values differ depending on the definition of credit (52.9% for a narrow definition of credit, which includes only domestic bank credit, and 72.1% for a broad definition). Differences in gap values arise from different definitions of gap (absolute gap is calculated as the difference while the relative gap is calculated as the ratio of the following variables: the credit-to-GDP ratio and its trend) and estimated statistical trends.

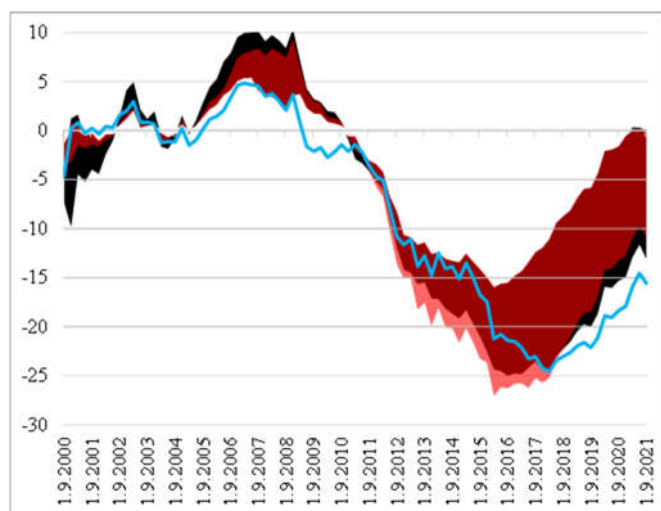
Source: CNB.

New specific credit gap indicators for the Republic of Croatia suggest that the gap is closing in the current phase of the financial cycle, with some gap indicators already moving into positive territory (Figure 1.a)). This is a result of a halt in private sector deleveraging and the stabilisation of the credit-to-GDP ratio over the past several years, coupled with a gradual decline in its long-term trend. In line with this, the range of the estimated benchmark CCyB rate points to the need to set the rate at above 0% (Figure 1.b)).

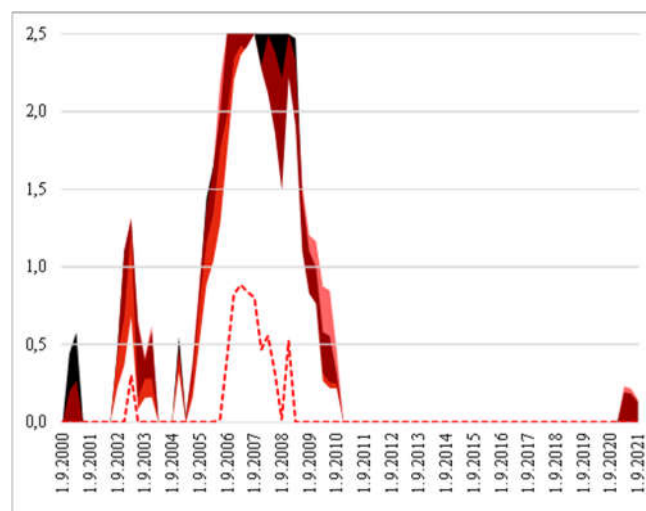
¹ The methodology is described in the CNB's regular publication Macprudential Diagnostics No. 16, February 2022. ([Box 2](#) Improvements in the methodology of countercyclical buffer identification and calibration in Croatia).

Figure 1 Range of credit gap indicators and benchmark CCyB rates

a) Credit gap (in % and p.p.)



b) Benchmark CCyB rates



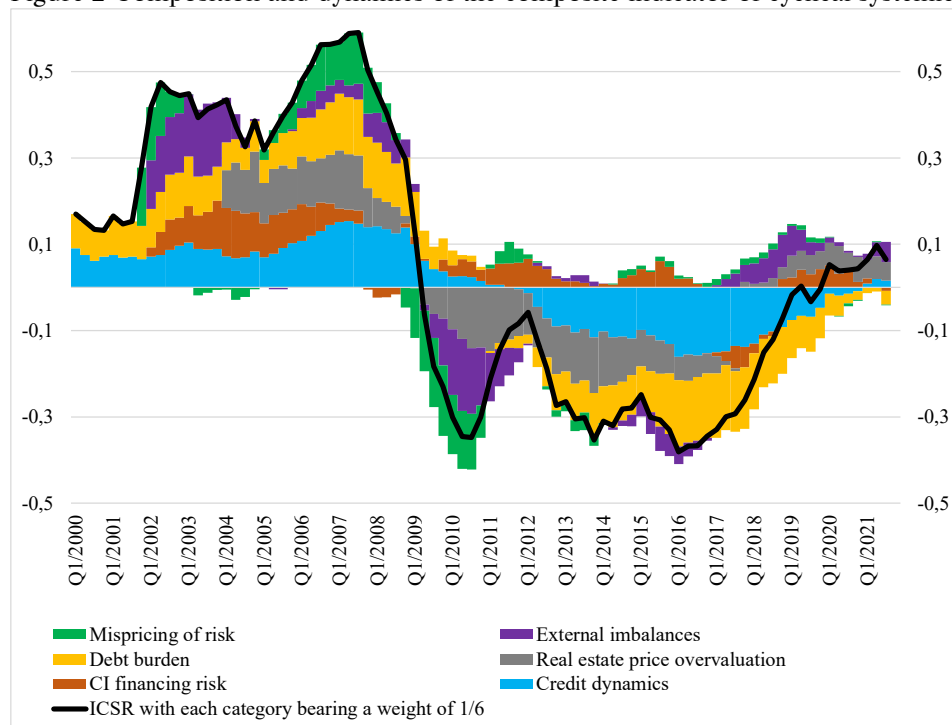
Note: The left panel shows the Basel gap (blue curve) and the range of 12 credit gap indicators which have better signalling properties for the Republic of Croatia than the Basel gap. The red shaded areas indicate the range of absolute gaps, while the black shaded areas indicate relative gaps. The right panel shows the range of CCyB rates calibrated on the basis of the gaps in the left panel. The red dashed curve indicates the calibration based on the Basel gap given in the left panel. For details on the methodology used to estimate credit gaps, see [Box 2](#) Improvements in the methodology of countercyclical buffer identification and calibration in Croatia, Macroprudential Diagnostics No. 16.

Source: CNB.

Furthermore, in accordance with the European Systemic Risk Board's recommendation on the need to monitor a broad set of systemic risk indicators when deciding on the required CCyB rate, a composite indicator of cyclical systemic risk (ICSR, Figure 2) has been constructed. The indicator combines, in a standardised manner, a broad set of data monitored by the CNB when assessing systemic cyclical risks. These data point to a steady increase in cyclical risks in the last several quarters. Since 2017, the most significant contribution to the increase in ICSR has come from growing residential real estate price overvaluation, accelerating credit activity and the rise in private sector debt burden.

Residential real estate prices, which rose annually by 9% in the third quarter of 2021, again grew faster than both income and rental costs, thus continuing to deviate from fundamental values. Total loans to the private non-financial sector continued to expand, driven mainly by loans to households. The upsurge in housing loans (9%, much above the long-term average) has been accompanied with a recovery of general purpose consumer loans, while low interest rates keep the debt repayment burden at low levels. However, the several year decrease in banks' interest margins, which hit a new record low, points to the growing possibility of risk underestimation. In addition, value adjustments in credit institutions' balance sheets have been decreasing, which may also indicate risk mispricing. Finally, the equity to assets ratio has decreased as assets of credit institutions grew faster than their equity. Reflecting the relatively early stage of risk accumulation, as indicated by the described ICSR developments, the CCyB rate has been calibrated in the model within a range between 0.55% and 0.83% (Figure 3).

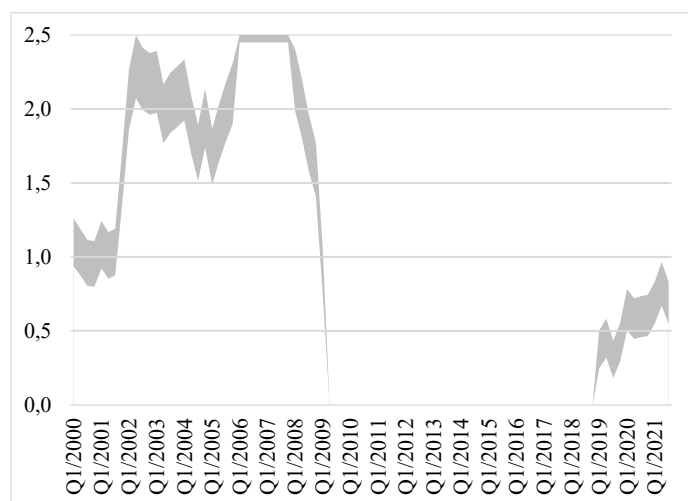
Figure 2 Composition and dynamics of the composite indicator of cyclical systemic risk (ICSR)



Note: CI indicates credit institutions.

Source: CNB.

Figure 3 Range of calibrated CCyB rates based on the ICSR



Note: The lower threshold for the calibration of the CCyB rate has been chosen to enable the rate to become positive before indicators included in ICSR calculation (Figure 2) reach median level, while the upper threshold is determined by the highest percentiles of ICSR distribution.

Source: CNB.

The ongoing economic recovery, the developments in the credit gap indicators and the composite indicator of the financial cycle, as well as other available data, suggest that the Croatian economy is currently in an upward phase of the financial cycle, which implies growing cyclical systemic risks. Bearing in mind the results of the early warning model and the developments described above, it is estimated that at this point, the CCyB rate needs to be elevated to 0.5%. As the competent macroprudential authority, the CNB will continue to monitor regularly the economic and financial developments and the further evolution of systemic risks, including risks related to the war in Ukraine, so as to be able to adjust in time the countercyclical buffer rate.