The National Committee for Macroprudential Oversight

Annual Report 2022

Annual Report
of the National Committee
for Macroprudential Oversight
for the year 2022

NOTE

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Organisation

The National Committee for Macroprudential Oversight (NCMO) comprises:

The National Bank of Romania. The NBR has an intrinsic role in maintaining financial stability, given its responsibilities arising from its multiple capacity as monetary, prudential, resolution and payment system oversight authority. Financial stability objectives are pursued both by way of its prudential, regulatory and resolution functions exerted on the institutions under its authority, and by the design and efficient transmission of monetary policy measures, as well as by overseeing the smooth functioning of systemically important payment and settlement systems.

The Financial Supervisory Authority. The FSA contributes to the consolidation of an integrated framework for the functioning and supervision of non-bank financial markets, of the participants and operations on such markets.

The Ministry of Finance. The MF is organised and run as a specialised body of central public administration, with legal status, subordinated to the Government, which implements the strategy and Government Programme in the field of public finance.

Overview

The war launched by Russia against Ukraine, the largest military conflict in Europe since the end of World War II, was the prevailing issue of 2022. After two years marked by extraordinary uncertainty as a result of the pandemic, the outbreak of such a full-scale war in Europe took the world economy by surprise. The latter was still vulnerable amid the policies adopted in order to fend off the effects of the health crisis, and the shock waves from the war – especially in the energy and agri-food markets – put an additional strain on global economic recovery and revival.

The record leap in natural gas prices was reminiscent of the 1970s energy crises. Even though Romania enjoys a privileged position within Europe's energy architecture, with most of the domestic gas demand being accommodated by the country's own production, a materialisation of such adverse scenarios – which included the temporary suspension or the rationing of energy supply to households or industrial companies – could have exerted a significant impact on European economies, Romania's main trading partners. This turmoil overlapped with a context already marked by high inflation, fuelled particularly by energy market tensions ascribable to pre-war issues.

The bleaker picture painted by the overall dashboard of systemic risks in Europe prompted national authorities to reassess and take a different stance on the available policies and tools to strengthen the resilience of economies and financial sectors.

Through the decision to increase the countercyclical buffer (CCyB) rate, approved in October 2021, Romania joined the ranks of European countries that deemed it opportune to raise the level of prudence for the forthcoming period. The outbreak of the war a few months later, as well as the worsening of the energy crisis and of the inflationary episode validated subsequently the need for adopting a prudent macroprudential policy stance in Romania. In fact, the year 2022 also saw a first from the European Systemic Risk Board (ESRB), which decided to issue a warning in September. It called on national competent authorities to prepare for the materialisation of tail-risk scenarios and take a proactive stance via the timely use of available tools to mitigate the effects of a potential shock.

In order to further tighten macroprudential policy and in response to the heightening of risks and vulnerabilities, the National Committee for Macroprudential Oversight (NCMO) decided, for the second consecutive year, on the successive increase in the CCyB rate, which will reach 1 percent as of October 2023.

The experience of the pandemic crisis has highlighted the need for the build-up of additional capital reserves and for a precautionary stance of macroprudential policy. The increasingly frequent announcements by EU countries on new measures aimed at tightening macroprudential policy are indicative of a European-wide consensus about the adequate solutions to address the proliferation of national and cross-border risks. The consensus has also been confirmed by the latest wave of rises in the CCyB rate in EU Member States.

During 2022, the NCMO issued five recommendations on the calibration of capital buffers, four following the quarterly analyses on the CCyB and one annual recommendation regarding the O-SII buffer:

- the countercyclical buffer (CCyB) rate is raised to 1 percent as of 23 October 2023, as a result of the increase in overall uncertainty, the pick-up in lending during 2022 – with Romania recording one of the highest growth rates in the EU –, but also of the persistent tensions surrounding macroeconomic equilibria, while the high liquidity and profitability levels can accommodate loan supply to eligible borrowers (NCMO Recommendation No. R/4/2022);

- looking at the buffer for other systemically important institutions (O-SII), nine systemically important institutions were identified for 2023; they are applied a differentiated buffer rate ranging between 0.5 percent and 2 percent (NCMO Recommendation No. R/5/2022).

In addition to the two buffers that were recalibrated during 2022, credit institutions in Romania also apply a conservation buffer, whose rate of 2.5 percent is uniformly set through European legislation, and a systemic risk buffer (SyRB), calibrated based on national specifics, whose rate may range between 0 percent and 2 percent, depending on the non-performing loan (NPL) ratio and the coverage ratio. The introduction and the application of the buffer have proven appropriate over the years, as Romania has neared the EU average in the case of the NPL ratio and even climbed to the top of the European ranking as regards the coverage ratio. These developments led to a gradual lowering of SyRB requirements, following the significant improvement in the indicators under review.

Moreover, the NCMO General Board approved in 2022 NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation and NCMO Recommendation No. R/7/2022 on compliance with Guidelines EBA/GL/2022/12 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators.

The sustainable increase in financial intermediation is a particularly important topic and a priority for Romania. At present, Romania has the lowest financial intermediation among EU Member States, and an improvement of the current picture could contribute significantly to the economic growth potential.

1. The National Committee for Macroprudential Oversight's activity in 2022

1.1. Macroprudential policy framework in Romania and the European Union

After the outbreak of the COVID-19 pandemic, macroprudential policy followed an easing trend across Europe, as part of a policy mix to support the real sector. The economic recovery and the swift increase in lending, visible as of 2021, along with the identification of some sectoral vulnerabilities, particularly in the real estate sector, led to a change in macroprudential policy stance, i.e. the (re)building of capital buffers or implementation of specific instruments for debtors' access to lending products. Most decisions were warranted by the recent favourable developments from a macroeconomic perspective and in terms of the profitability and solvency ratios of credit institutions, which allow for capital conservation, amid the need to adopt a prudent stance following rising vulnerabilities and prospects of adverse scenarios materialising in the coming period. At the same time, recalibration decisions were also influenced by the late developments in macroprudential policy, as follows:

- the transposition into national law of CRD V provisions. The main amendments impacting the decision to recalibrate capital buffers refer to structural buffers, namely: (i) the increased flexibility of the SyRB, which may also be applied at sectoral level through its direct setting to certain sets or subsets of exposures – as a result of this change, certain Member States decided to apply a sectoral buffer to real estate exposures, (ii) the clear delineation of the different role of the SyRB and of the O-SII buffer and (iii) the mandatory cumulation of SyRB and O-SII buffers, namely an increase in the maximum applicable rates – Member States that had previously used the SyRB to complement the O-SII buffer to tackle the risk specific to large banks recalibrated the two buffer rates;

- the expiry of the ESRB recommendations[1] on the non-distribution of dividends on 30 September 2021 – in this context, the increase in capital buffer rates is meant to replace, to some extent, this recommendation by retaining a part of profits or by including voluntary capital reserves in the combined buffer requirement;

[1] Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic and Recommendation ESRB/2020/15 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic.

- the recent experience that has proven the need to early build up buffers that may be released should a shock materialise, an approach supported by the ESRB, as well as to change capital buffer requirements by striking a better balance between countercyclical capital buffers (CCyB) and structural capital buffers – at the onset of the pandemic, a small number of Member States used a positive CCyB rate, while CCyB requirements held a low share in the combined buffer.

Ensuring that banks are able and willing to use capital buffers to support lending and absorb losses in the event of a crisis is a goal at European level. The COVID-19 experience brought to the fore the issue of the usability of buffers and triggered a discussion about their operating framework, namely whether it is optimally designed not only to ensure additional resilience, but also to act countercyclically, inter alia by preserving banks' lending capacity should an adverse macrofinancial shock occur.

At the same time, the macroprudential regulatory framework, which covers capital buffers, has become more complex with the introduction of the leverage ratio (LR) requirement since mid-2021 and of the minimum requirement for own funds and eligible liabilities (MREL), with an intermediate target in 2022 and a final target in 2024. The LR and MREL enhance the financial system's resilience and safety and, together with the risk-weighted prudential framework, have also increased the array of regulatory interactions.

In this context, discussions most often focused on the need to have buffers that may be used in times of stress and the implementation of such a framework, given banks' limited appetite to make use of the flexibility provided by the relevant EU regulation[2] and the overlap of certain legal requirements, which may *de facto* limit the usability and implicitly the efficiency/effectiveness of capital buffers.

The debates were fuelled by the review of the EU macroprudential framework for the banking sector launched by the European Commission[3]. One of the main topics the relevant stakeholders' views were sought on was the improved application of capital buffers. Following the European Commission's call for advice to the ESRB, the ECB and the EBA, EU institutions came up with proposals and opinions on how the architecture of capital requirements across the banking sector should be redesigned so that their overlap with minimum requirements is reduced and buffers are used more effectively. According to the ESRB[4], the priorities for the macroprudential toolkit for banks are: (i) ensuring that banks fund themselves with enough capital to match cyclical and structural systemic risks; (ii) enhancing the usability and effective use of capital buffers; (iii) closing gaps in

[2] As shown in the literature, banks' willingness or ability to use capital buffers in the combined buffer requirement (CBR) may be limited by a number of factors, including limitations to distributions – according to the maximum distributable amount (MDA) mechanism –, market pressure and stigma.

[3] On 30 November 2021, the European Commission (EC) launched a public consultation on the EU's macroprudential framework for the banking sector, given the legislative review laid down in Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, as subsequently amended.

[4] *Review of the EU Macroprudential Framework for the Banking Sector – A Concept Note*, ESRB, 31 March 2022.

the toolkit, notably by including borrower-based measures; (iv) ensuring consistent use of macroprudential policy instruments across the EU. In addition, the ESRB mentions that more releasable capital, which proved particularly useful at the onset of the pandemic, can be obtained by building up the countercyclical capital buffer (CCyB) earlier and in a more forward-looking manner and not necessarily related to the stage of the financial cycle.

At the same time, at end-September 2022, the ESRB issued a warning[5] whereby it underlines the need for the EU and the supervisory authorities to make prudent assessments so as to ensure the resilience of financial institutions and financial market infrastructures under their remit, in the event of tail-risk scenarios materialising.

In the warning, the ESRB highlights that although the EU's financial system has been resilient so far to rising geopolitical tensions and economic uncertainty, the probability of tail-risk scenarios materialising has increased. Thus, risks to financial stability and particularly their interaction can be particularly problematic for the European economy.

The key message of the ESRB warning refers to encouraging the use of micro- and macroprudential tools to enhance the resilience of the financial system, national authorities being urged to act in accordance with their characteristics and the structural conditions that prevailed before the current stress period. At macroprudential level, the ESRB evinces that capital buffers contribute to mitigating the increasingly large cyclical risks and to enhancing banking sector resilience. Making room for manoeuvre for macroprudential policy by building up macroprudential buffers before the materialisation of risks would allow the authorities to release these buffers when adverse developments occur.

The importance of the prudent build-up and use of buffers to smooth the impact of internal and external shocks was also stressed by the Basel Committee on Banking Supervision, given the potential for new risks to emerge and the findings in its evaluation *Report* entitled *Buffer usability and cyclicality in the Basel framework* published on 5 October 2022. In addition, in the newsletter[6] released on the same date, the BCBS mentioned its support for the approach taken by some national authorities, which set a positive cycle-neutral countercyclical capital buffer (CCyB) rate to increase the capital buffers that can be explicitly released in the event of sudden shocks, including those unrelated to the credit cycle, such as the impact of the COVID-19 pandemic.

At the same time, the relation between monetary policy and macroprudential policy has been a hotly debated topic ever since the introduction of macroprudential tools, the uncertain economic environment, the developments in lending and the inflationary pressures over the recent period highlighting their roles and interaction. Although these policies have specific objectives, they may influence each other, primarily as a result of their effects on the lending channel (Box A).

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5 Warning of the European Systemic Risk Board of 22 September 2022 on vulnerabilities in the Union financial system (ESRB/2022/7)

6 Newsletter on positive cycle-neutral countercyclical capital buffer rates, BCBS, 5 October 2022.

Box A. Macroprudential and monetary policies in the present context

Most research papers on this topic note[7] that monetary and macroprudential policy cooperation is more effective in attaining specific objectives, although not all the authors focused on the same types of instruments or the same objectives. Moreover, the institutional arrangement also plays a role in policy coordination[8].

Depending on the stage of the financial and business cycles, the two policies, while pursuing different final objectives, may act in tandem or in contradiction. As both capital buffers and the monetary policy rate influence the credit channel, albeit differently (in the former case on the supply side and in the latter on the demand side), their mix becomes even more important. The past two years saw a sharp increase in GDP Europe-wide, mostly at the same time with a sustained rise in lending, so there are indications of a high degree of synchronisation of business and financial cycles. An interesting experiment to see how countries have chosen to calibrate the two policies consists in the renormalisation of monetary policy via successive rate hikes and the decisions of most European countries to strengthen the capital base via upward adjustment of the countercyclical capital buffer. This was the main buffer Member States used in the period under review, given the build-up manner of this instrument (see Section 3.1.1).

In the EEA countries that have not made the changeover to the euro, thus retaining an independent monetary policy, although both policies have been tightened, there is generally a reverse relationship between the absolute adjustments of monetary or macroprudential policy instruments (Chart A.1). In particular, three trends are manifest, as follows: (i) countries that relied more on monetary policy rate hikes (Poland, Hungary), (ii) countries that chose to further tighten macroprudential requirements (Sweden, Norway, Denmark, Bulgaria) and (iii) countries that simultaneously tightened both policies (Iceland and Czechia). Romania has a significantly higher policy rate than the group of countries mentioned in point (ii) and a CCyB rate above those applied in Hungary and Poland, but below those used in Iceland and Czechia.

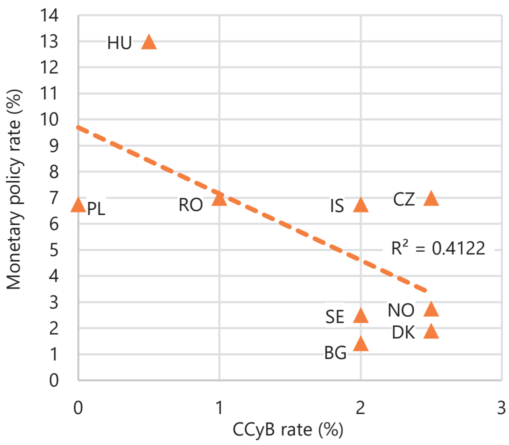
The timing of measures is also of interest, despite a significant temporal difference between the two policies: the policy rate increase has an immediate effect, whereas the rise in the countercyclical capital buffer rate takes effect approximately 12 months after the decision announcement. It should be noted that most non-euro area countries

7 Angelini, P., Neri, S., & Panetta, F. – "The interaction between capital requirements and monetary policy", *Journal of Money*, Credit and Banking, vol. 46 issue 6, 2014, pp. 1073-1112.
Altavilla, C., Laeven, L., & Peydró, J. L. – "Monetary and macroprudential policy complementarities: Evidence from European credit registers", *Working Paper Series*, No 2504, 2020, European Central Bank.
Van der Ghote, A. – "Interactions and coordination between monetary and macroprudential policies", *American Economic Journal: Macroeconomics*, 13(1), 2021, pp. 1-34.

8 In some countries, the central bank may use both policies, acting as both monetary and macroprudential authority, while in other countries another institution/committee is charged with macroprudential policy. The debate on how best to establish the national macroprudential authority remains open, with pros and cons for both types of organisation.

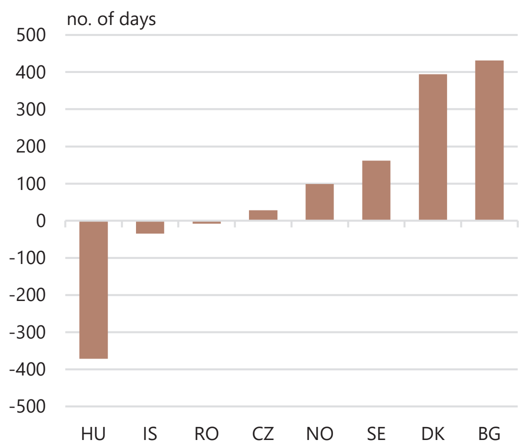
started the CCyB hike cycle earlier than the monetary policy tightening cycle, with more than one-year lags in Denmark and Bulgaria (Chart A.2). Conversely, Hungary introduced a multi-step strategy to tighten its monetary policy and raised the CCyB about one year after the first monetary policy measure. Romania stands out as the country with the highest degree of synchronisation as regards the timing of countercyclical measures.

Chart A.1. Countercyclical capital buffer and monetary policy rate decisions announced by end-January 2023



Source: ESRB, Refinitiv Datastream

Chart A.2. The difference between the start of increasing the CCyB rate and of the monetary policy tightening cycle in 2021-2022



Source: ESRB, Refinitiv Datastream

Euro area countries make for an interesting case as well. Given the centralised monetary policy, they can rely chiefly on macroprudential policy to stabilise the national financial system. The ECB raised the interest rate on the main refinancing operations to 2.5 percent in 2022, but only nine euro area countries increased the CCyB rate over the past two years, including Croatia, which had implemented the rises before officially joining the bloc. Furthermore, the maximum CCyB rate applied in these countries is 1.5 percent, as is the case in Estonia and Slovakia, while most non-euro countries announced higher CCyB rates.

Worth noting is that the countercyclical capital buffer is only one element of macroprudential policy, and countries may have firm stances on other instruments before entering the current tightening cycle. Nevertheless, the relationship between interest rate and CCyB increases also remains relevant for the overall macroprudential policy framework. By replacing the CCyB rate with the cumulative maximum level of capital buffers, the link remains virtually unchanged and even reinforces the conclusions set out above. The reasons why countries have opted for a particular policy mix are complex and require an in-depth analysis that goes beyond the purpose of this *Report*.

1.2. Topics discussed during the NCMO meetings

In the course of 2022, the Chairman of the NCMO convened, pursuant to the legislation in force, four meetings of the National Committee for Macroprudential Oversight, on 31 March, 28 June, 20 October and 15 December. Meetings were further held by written procedure in 2022 Q1 (meeting of 31 March), but following the lifting of COVID-19 pandemic restrictions, the remaining meetings were held with physical presence.

During the four meetings, the participants debated, examined and adopted measures and presented analyses concerning macroprudential policy and systemic risk to financial stability in Romania.

On the agenda of the first meeting held in 2022 were: (i) the regular analysis on the recalibration of the countercyclical capital buffer, (ii) the draft *Annual Report* of the National Committee for Macroprudential Oversight for 2021 and (iii) the implementation through voluntary reciprocity of the macroprudential policy measures adopted by the Netherlands and Lithuania. In addition, the NCMO General Board was informed of: (i) the possible implications of the Russia-Ukraine conflict for the banking sector in Romania, (ii) the systemic risks identified across the domestic financial system, (iii) the implementation of Recommendation ESRB/2020/8 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic (for further details, see Box B), (iv) the results of the macroprudential solvency stress test for the banking sector spanning the period from 2021 Q1 to 2023 Q4, and (v) the impact of the CRR "quick fix" regulatory package on the banking sector in Romania. During the meeting, Board members adopted the following macroprudential policy measures:

- NCMO Recommendation No. R/1/2022 on the countercyclical capital buffer in Romania whereby the National Bank of Romania was recommended to keep in place the measure to set the countercyclical buffer rate at 0.5 percent, as of 17 October 2022, and to further monitor developments in the economy and lending, amid the enhanced uncertainty both domestically and internationally;

- NCMO Decision No. D/2/2022 on not applying through voluntary reciprocity the macroprudential policy measures adopted by the Netherlands and Lithuania, providing for the non-recognition through voluntary reciprocity of the macroprudential measures adopted by the two countries, given that the eligible exposures of the Romanian banking sector to these countries are immaterial.

At the same time, the *Annual Report* of the National Committee for Macroprudential Oversight for 2021 was approved (NCMO Decision No. D/1/2022).

Box B. Fiscal measures taken to overcome the COVID-19 pandemic crisis – final outcome and future challenges

The fiscal measures adopted during the COVID-19 pandemic had a significant positive impact on the financial stability of countries that provided substantial support to the economy. This conclusion was reached by numerous research papers and reports of economic institutions, including the ESRB, which closely monitored the evolution of pandemic fiscal measures via Recommendation ESRB/2020/08 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic. In a recent report on this topic[9], the ESRB points out that fiscal measures significantly contributed to the resilience of the financial system and ensured the continued financial intermediation, thus preventing the emergence of a wave of corporate insolvencies and the build-up of large-scale losses.

Most fiscal measures taken in response to the COVID-19 pandemic expired in 2022. Nevertheless, the occurrence of new exogenous shocks, corroborated with the demonstrated utility of fiscal measures, urged some countries, Romania included, to adopt new fiscal measures of the same kind or extend the former programmes in a new form. Given the extraordinary nature of the measures, their future calibration is particularly important for avoiding the situation of the exception becoming the rule, while businesses adjust their behaviour to the support measures, with potential detrimental effects in the long run.

The loan moratorium[10] was one of the most widely used fiscal measures taken during the pandemic. According to the NBR data extracted from banks' reports, the deferred amounts under the moratorium peaked at lei 42.9 billion, i.e. approximately 4 percent of the pre-pandemic GDP level. The programme officially ceased at end-2021, counting over 550 thousand beneficiaries (both individuals and legal entities) in total. In the final operating quarter, the deferred amounts stood at only lei 81 thousand. Most borrowers resumed post-moratorium payments without facing additional problems, as shown by the small change in the NPL ratio across the banking sector. In 2022, the Government adopted another loan moratorium[11] in order to protect borrowers against the fast rise in prices, amid the energy shock and the military conflict in Ukraine. The NBR data indicate lower use of the latter programme, as at 30 September 2022 there were 6,605 requests with regard to exposures of about lei 895 million (approximately 2 percent of the amounts under the pandemic moratorium).

9 Fiscal support and macroprudential policy – Lessons from the COVID-19 pandemic, ESRB, 2022

10 Government Emergency Ordinance No. 37/2020 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions, as subsequently amended and supplemented.

11 Government Emergency Ordinance No. 90/2022 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions.

Public guarantee schemes targeting lending are another significant part of government aid granted to overcome the pandemic shock. Until the COVID-19 shock was manifest, Romania's experience with State guarantees related to individuals' housing loans granted under the "First Home" and "New Home" government programmes. Conversely, during the pandemic, the new public guarantee schemes targeted corporate lending, particularly the SMEs. The most important programme adopted for this purpose was IMM INVEST ROMANIA[12]. Since the start of this programme in 2020 and until 30 June 2022, 56,543 guarantees in amount of lei 31.80 billion were issued. This kind of measure was a key factor for the resumption of corporate lending in the recent period, Romania posting one of the highest growth rates among European countries in this respect over the past quarters. According to NBR estimates, approximately 81 percent of new loans to non-financial corporations were granted under the IMM INVEST state guarantee scheme in 2020, 54 percent in 2021 and 66 percent in 2022 H1.

The efficient allocation of these funds is subject to empirical debate, which will be visible in the following period, but it is important to mention that choosing prudently calibrated eligibility conditions is necessary to ensure optimal financial intermediation. Specifically, the moral hazard may occur, as borrowers can take riskier actions knowing that the State guarantees their loans, while also taking advantage of the more favourable lending conditions imposed through these schemes. Moreover, banks' propensity to grant guaranteed loans, with lower credit risk, indirectly increases the banking sector's exposure to the government, an issue Romania is already negatively known for at European level. By 30 June 2022, 208 SMEs that accessed the state guarantee schemes entered insolvency proceedings, while the Ministry of Finance made payments totalling lei 51.27 million to cover the collateral foreclosure of 179 SMEs.

Moreover, in 2022, the financing of guarantee schemes in priority areas[13] was approved, the programmes focusing on unlocking the access to funding of beneficiaries faced with COVID-19 pandemic-related difficulties, in order to make investment projects and ensure business continuity. The public guarantee schemes were subsequently extended, under the European Commission's Temporary Crisis Framework, amid Russia's invasion of Ukraine, and will be in effect until 31 December 2023. The government state aid scheme IMM INVEST PLUS[14] and its components IMM INVEST ROMANIA, AGRO IMM INVEST, IMM PROD, GARANT CONSTRUCT, INNOVATION and RURAL INVEST are the successors of programmes adopted during the COVID-19 pandemic. The amounts of guarantees under government programmes are shown in Table B.1. The shift in focus of guarantee schemes to climate sustainable companies in areas generating a higher

[12] Government Emergency Ordinance No. 110/2017 on the support programme for small- and medium-sized enterprises and for small enterprises with medium market capitalisation – IMM INVEST ROMANIA, as subsequently amended and supplemented.

[13] Government Emergency Ordinance No. 24/2022 on approving and financing guarantee programmes in priority areas of Romania's economy.

[14] Approved by Government Emergency Ordinance No. 99/2022 on approving the IMM INVEST PLUS state aid scheme and its components – IMM INVEST ROMANIA, AGRO IMM INVEST, IMM PROD, GARANT CONSTRUCT, INNOVATION and RURAL INVEST.

value added could be appropriate in the context of achieving the objective of structural change in Romania's economy, as also specified in the *Analysis of NCMO Working Group on sustainable increase in financial intermediation*[15].

Table B.1. Number and amount of guarantees under loan guarantee schemes

Programme	Period	No. of guarantees	Amount of guarantees (lei bn.)
Schemes adopted in the context of the COVID-19 pandemic			
IMM INVEST ROMANIA	2020 – June 2022	51,172	28.05
AGRO IMM INVEST	2020 – June 2022	4,831	3.75
IMM PROD	May-June 2022	539	1.13
RURAL INVEST	May-June 2022	588	0.9
GARANT CONSTRUCT for SMEs	May-June 2022	241	0.41
GARANT CONSTRUCT for TAUs	May-June 2022	1	0.005
INNOVATION	May-June 2022	0	0
Schemes adopted in the context of the war in Ukraine and the energy crisis			
IMM INVEST ROMANIA	October-December 2022	4,929	5.14
AGRO IMM INVEST	October-December 2022	160	0.20
IMM PROD	October-December 2022	603	0.74
RURAL INVEST	October-December 2022	1,008	0.9
GARANT CONSTRUCT for SMEs	October-December 2022	809	0.91
GARANT CONSTRUCT for TAUs	October-December 2022	1	0.009
INNOVATION	October-December 2022	3	0.003

Source: MF

Finally, providing direct grants to firms was another main component of the government aid targeting the real sector. In Romania, three such programmes were implemented during the pandemic: (i) microgrants below EUR 2,000, (ii) grants for working capital[16] of EUR 150,000 at most and (iii) grants for firms in accommodation and food service activities industry[17] worth of at most 20 percent of the income loss reported in 2020

[15] *Analysis of NCMO Working Group on sustainable increase in financial intermediation*, NCMO, 2022

[16] Approved by Government Emergency Ordinance No. 130/2020 as regards some measures for granting financial support from non-repayable external funds under the Competitiveness Operational Programme 2014-2020, in the context of the COVID-19 crisis, as well as other measures in the area of EU funding.

[17] Approved by Government Emergency Ordinance No. 10/2021 amending and supplementing Government Emergency Ordinance No. 224/2020 as regards some measures for granting financial support to companies in tourism and accommodation and food service activities industries and travel agencies, whose activity was affected during the COVID-19 pandemic, as well as some fiscal measures.

versus 2019. According to the latest data released by the Ministry of Economy, the amounts granted under these measures totalled lei 6.3 billion (data as at 2021 Q4). The issue of eligibility conditions is stringent for this kind of measure, but the negative potential, assuming the resource misallocation, is lower for the financial system, as it does not directly involve banks.

Additionally, other measures with a significant economic impact adopted in Romania were tax incentives, including deferrals of tax payments for certain categories of taxpayers, most notably for companies in the accommodation and food service activities sector, as well as the furlough benefits received by a large number of employees, particularly in the first pandemic year.

The second meeting of the NCMO General Board in 2022 focused on the following topics: (i) the regular analysis on the recalibration of the countercyclical capital buffer, (ii) the implementation through voluntary reciprocity of the macroprudential policy measures adopted by Belgium, as well as (iii) the analysis of the NCMO Working Group on sustainable increase in financial intermediation. The NCMO General Board was also informed of: (i) the results of the regular analysis on the systemic risk buffer, (ii) the systemic risks identified across the domestic financial system, (iii) the actions taken by the addressees in order to implement the recommendations issued by the NCMO in 2021, as well as those issued in the previous period, and (iv) the overlapping of capital buffers and other minimum requirements applied to credit institutions (Box C). The NCMO meeting of 2022 Q2 ended with the adoption of the following recommendations and decisions:

- NCMO Recommendation No. R/2/2022 on the countercyclical capital buffer in Romania whereby the National Bank of Romania was recommended to keep in place the measure to set the countercyclical buffer rate at 0.5 percent, as of 17 October 2022, and to further monitor developments in the economy and lending, given the higher number of uncertainty factors regionally and globally;

- NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation, whereby 11 recommendations are addressed to the National Bank of Romania, the Financial Supervisory Authority and the Government with the aim of increasing financial intermediation;

- NCMO Decision No. D/3/2022 whereby the archival nomenclature of the documents created and held by the NCMO was approved;

- NCMO Decision No. D/4/2022 on not applying through voluntary reciprocity the macroprudential policy measure adopted by Belgium. Given that the eligible exposures of the Romanian banking sector to this country are immaterial, the macroprudential measure adopted by the Belgian authorities, set forth by Recommendation ESRB/2022/03, shall not be reciprocated;

- NCMO Decision No. D/5/2022 on the assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates, which has not found any material third country for the banking sector in Romania.

Box C. Overlap between capital buffers and other minimum requirements applied to credit institutions

The EU legislation (CRD V/CRR II and BRRD II/SRMR II) includes three parallel frameworks that cover banks' capital requirements, namely: (i) a risk-weighted framework that refers to the resilience of banks depending on the risk taken, which also includes capital buffers, (ii) the leverage ratio framework, which constrains the build-up of leverage, complementing the former framework by taking into consideration non-risk-weighted on- and off-balance sheet exposures and (iii) the recovery and resolution framework. While the first two are prudential regulatory requirements established by CRD V and CRR II, whose primary goal is to ensure resilience across institutions and across the EU's banking sector as a whole, the latter category, namely regulatory requirements for resolution (BRRD II/SRMR II), aims to ensure sufficient loss-absorbing and recapitalisation capacity of EU institutions, and, in case of resolution, to preserve critical functions, avoid potential adverse effects on financial stability, protect public funds by minimising the possibilities to request public financial support and protect depositors, as well as customers' funds or assets.

The overlap of requirements is relevant particularly to the use/release of capital buffers, a key element of their functioning, given that in practice they might not be employed, as the same Common Equity Tier 1 (CET1) items that were put to use to meet capital buffer requirements are also utilised to cover the LR or the MREL requirements (Table C.1)[18]. Where this is the case, only that part of capital buffers that is not tied into a parallel minimum requirement is usable. In other words, the use of the same CET1 items for multiple purposes may directly affect both the ability of banks to use their capital buffers and the efficiency of macroprudential tools, where other requirements act as a constraint.

Impediments to buffer usability may adversely affect loan supply to the real economy at times when it is most needed, thus triggering a procyclical amplification of shocks. Hence, it is of the utmost importance that macroprudential authorities have an overview of capital requirements and the potential interactions between them, which could reduce the efficiency and the effectiveness of capital buffers.

[18] If credit institutions have to comply with minimum requirements on a permanent basis, also in the event of adverse scenarios materialising, capital buffers may be used, in principle, when necessary as a result of (i) credit institutions' decisions subject to the application of automatic distribution restrictions on amounts treated as own funds (e.g. dividends, variable bonuses, coupon payments) in case of breaching the combined buffer requirement (CBR) and (ii) the decision of the designated authority to release/reduce requirements, as a countercyclical policy measure in a recession or during financial crises.

Table C.1. Overview of the parallel frameworks established by EU legislation

Regulatory requirement	Purpose	Denominator of the ratio for determining regulatory requirements	Numerator of the ratio for determining regulatory requirements
Risk-weighted capital requirements (RW)	Prevent credit institutions from enhanced risk-taking to increase profitability without having an adequate level of own funds to cover the risk.	Total risk-weighted exposures	Common Equity Tier 1 (CET1) capital, Additional Tier 1 (AT1) capital and Tier 2 (T2) capital
Leverage ratio (LR) requirement	Avoid the build-up of excessive leverage in the expansionary phase of the credit cycle and mitigate the risks that may stem from underestimated regulatory requirements based on internal models.	Total exposures	Tier 1 (T1) capital: CET1 and AT1
Minimum requirement for own funds and eligible liabilities (MREL)	Allow credit institutions to absorb losses in the event of resolution and to recapitalise themselves following the implementation of the measures in the resolution plan.	Total risk-weighted exposures (MREL-RW) and total exposures (MREL-LR)	Own funds (CET1, AT1, T2) and eligible liabilities (subordinated eligible liabilities and other eligible liabilities)

Source: NBR's adaptation

To this end, in its meeting of 28 June 2022, the NBR submitted to the NCMO General Board a note that analysed whether there is an overlap between the three aforementioned types of requirements from both a theoretical and an empirical perspective in the case of credit institutions in Romania.

The agenda of the meeting of 20 October 2020 brought to the attention of the NCMO General Board the following issues: (i) the results of the regular analysis on the systemic risk buffer, (ii) the impact of credit institutions' funding plans on the flow of loans to the real economy, and (iii) the systemic risks identified across the domestic financial system. In addition, during the meeting, Board members examined analyses and adopted measures concerning the regular analyses on the recalibration of the countercyclical capital buffer and of the capital buffer for other systemically important institutions. A major item on the NCMO agenda consisted in the discussions on the warning issued by the ESRB regarding the risks and vulnerabilities in the European Union financial system in an uncertain context marked by the worsening of macroeconomic conditions. The following macroprudential policy measures were adopted:

- NCMO Recommendation No. R/4/2022 on the countercyclical capital buffer in Romania, whereby the National Bank of Romania was recommended to raise the countercyclical buffer rate by 0.5 percentage points, as of 23 October 2023, amid the additional build-up of risks to financial stability, alongside the persistence of vulnerabilities associated with the twin deficits calling for credit institutions to take a cautious approach, *inter alia* by strengthening the capital base;

- NCMO Recommendation No. R/5/2022 on the manner of implementing the capital buffer for other systemically important institutions in the course of 2023, whereby the National Bank of Romania was recommended to impose, starting 1 January 2023, a capital buffer for banks identified as systemically important, at the highest level of consolidation;

- NCMO Decision No. D/6/2022 on the implementation through voluntary reciprocity of the macroprudential policy measures adopted by Germany, whereby the NCMO General Board members decided not to voluntarily reciprocate the macroprudential measure of Germany, given that the eligible exposures of the Romanian banking sector to this country are immaterial;

- NCMO Decision No. D/7/2022 for the approval of NCMO Regulation No. 1/2022 amending NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments, whereby a series of provisions were repealed concerning the capital buffers that apply to investment firms in order to ensure harmonisation with the provisions of Directive (EU) 2019/2034.

During the last NCMO meeting of 2022, Board members examined analyses and adopted measures concerning macroprudential policy and systemic risk, namely the regular analysis on the recalibration of the countercyclical capital buffer or compliance with the provisions of the European Banking Authority Guidelines EBA/GL/2022/12. In addition, the NCMO General Board was informed of: (i) the systemic risks identified across the domestic financial system, (ii) the macroprudential measures adopted by member states of the European Economic Area (EEA) in 2022, and (iii) the evolution of lending, real estate lending included. The NCMO meeting ended with the approval of the macroprudential policy measures below:

- NCMO Recommendation No. R/6/2022 on the countercyclical capital buffer, whereby the National Bank of Romania was recommended to keep in place the measure to set the countercyclical buffer rate at 1 percent, as of 23 October 2023;

- NCMO Recommendation No. R/7/2022 on compliance with Guidelines EBA/GL/2022/12 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators, whereby the National Bank of Romania and the Financial Supervisory Authority were recommended to comply with the provisions of the European Banking Authority Guidelines EBA/GL/2022/12 from the date when there are relevant institutions (G-SIIs) within their jurisdiction;

- NCMO Decision No. D/8/2022 on the NCMO intention to comply with the provisions of the European Banking Authority Guidelines EBA/GL/2022/12 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators, providing for the transposition of the provisions of the Guidelines into the NCMO practices, from the date when there is a relevant institution (G-SII) within its jurisdiction.

In line with its mandate and complying with the principle of transparency and institutional accountability, the NCMO continued its communication to the public in 2022, by posting on its website press releases after each General Board meeting. The NCMO General Board members discussed, agreed on and approved the contents of press releases during the meetings.

1.3. The activity of working groups within the NCMO

1.3.1. Working Group on sustainable increase in financial intermediation

The Working Group on sustainable increase in financial intermediation completed its activity in 2022 by publishing a *Report*[19] that examines key structural factors with a major role in shaping the development of financial intermediation in Romania. The report covers the following topics: (i) the role of the financial system in co-financing EU-funded projects; (ii) the digitalisation of banking services and the role of FinTech in increasing financial intermediation; (iii) the supply- and demand-side factors that determine the level of the financial system's contribution to corporate lending; (iv) the level of financial education of entrepreneurs, as well as the professional training of staff in the financial system, and (v) the role of the financial system in the structural shift of the economy to a higher value added economy: support the financing of innovative sectors, green projects, etc.

The *Report* identifies possible measures and actions to foster the sustainable growth of financial intermediation, the most significant of which (Table 1.1) were included in NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation[20].

Table 1.1. Measures proposed by the NCMO Working Group on sustainable increase in financial intermediation

To support the structural shift of the economy to a higher value added economy, *inter alia* by using European funds more extensively	• Harmonise, through dialogue with the banking sector, the process of operationalisation of financial instruments under the NRRP and the Operational Programmes, so that financial instruments ensure a significant transfer of risk for intermediaries, for the purpose of full compliance with the provisions of Regulation (EU) No. 575/2013 on prudential requirements for credit institutions and investment firms, in order to facilitate the access to finance of the firms in the areas concerned, by: (i) increasing predictability and (ii) improving the implementation flow of EU-funded projects;

[19] *Analysis of the NCMO Working Group on sustainable increase in financial intermediation*

[20] http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor-2022/

– continued –

	• Extend the legal framework in order to admit non-bank financial institutions from the NBR's Special Register as direct partners in the process of financing and implementing EU-funded projects; • Set up government programmes for: (i) supporting competitive firms, identified based on a public methodology, inter alia by supporting their easier financing, (ii) implementing sectoral policies, correlated with economic and industrial policies to support the structural shift of the economy to a higher value added economy, which provides for supporting primarily firms in the sectors concerned; (iii) developing the partnership between local authorities, business environment and universities, especially where the local business environment can efficiently use the expertise developed in universities.
To improve entrepreneurs' financial education and enhance the professional training of staff in the financial system	• Start, alongside academia and the financial system, new programmes to increase firms' awareness that funding via trade credits and loans from shareholders might have, in the medium term, higher total costs than those of borrowing from financial institutions and those related to capital market-based funding; • Set up programmes for: (i) enhancing entrepreneurs' financial education, also depending on the firms' stage of development (start-ups and scale-ups), by organising workshops, conferences, financial education programmes at national level, and (ii) creating a national framework for training young people, involving experts from banks and other financial institutions, entrepreneurs, pre-university and university teaching staff, in order to correlate the gradual and applied development of certain necessary business skills in lower, upper and post-secondary education, *inter alia* with regard to protection against cyber incidents and/or attacks; • Take steps, through dialogue with representatives of credit institutions and non-bank financial institutions, regarding the minimum training requirements for bank and NBFI staff involved in granting loans to companies and managing related risks, with emphasis on staff involved with companies that operate in emerging industries (technology, innovation, digitalisation, green agenda, etc.); • Involve more extensively the human and material infrastructure of the NBR and the FSA and increase collaboration with the financial and banking sectors and academia for: (i) developing research in the banking and financial field, *inter alia* via visiting programmes, (ii) partnering for joint projects to improve the theoretical and practical training of future professionals (undergraduate and master's students, doctoral candidates) and organising master's programmes or other forms of post-graduate education and traineeships; (iii) supporting the adequate theoretical and empirical foundation of various national and European legislative initiatives or strategic decisions that might involve the financial system (e.g.: joining the Banking Union).
To diversify in a sustainable way the sources that may increase financial intermediation	• Research development opportunities for financial and banking markets, by: (i) analysing the development opportunity for a Regulatory Sandbox instrument, as well as analysing the regulatory framework and certain Regulatory Sandbox models developed by other central banks; (ii) increasing the competitiveness of the Romanian capital market by supporting the implementation of innovative technologies based on distributed ledger technology (DLT) among entities ensuring market infrastructure, by implementing a pilot project for a trading system and a settlement system based on DLT, in accordance with the EU framework in the field; • Encourage the listing of firms on the BSE's Multilateral Trading System, *inter alia* by: (i) simplifying listing procedures and (ii) implementing the use of an electronic platform that can be accessed by the issuer and the authorities tasked with approving listing requests, to ensure a fast process;

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	• Develop the necessary infrastructure for supporting the digitalisation process of financial services, *inter alia* by: (i) facilitating integrated access to databases regarding clients in order to improve the lending process, as well as to take actions to prevent and combat money laundering and terrorist financing and (ii) harmonising the national legislation to the European framework to ensure flexibility in the implementation of digital initiatives, by recognising the legal effect of simple and advanced electronic signatures; • Broaden firms' access to the activity of the Alternative Banking Dispute Resolution Centre, by amending accordingly the provisions of Government Ordinance No. 38/2015 on alternative dispute resolution between consumers and traders, regarding the power of the ABDRC, and on the dispute resolution between firms and traders whose activity is regulated, authorised and supervised/monitored by the NBR, as well as the branches of foreign traders that operate on Romania's territory, in the banking field, via ABDRC procedures.

Source: NCMO

1.4. Collaboration of NCMO member authorities with the macroprudential authority at EU level

The coordination of macroprudential policies and the cooperation between the relevant authorities at national and European level are important for ensuring financial stability in the single market and identifying best practices in the field of macroprudential policy. In this context, each NCMO member authority participates in national working groups, such as the NCMO working groups, as well as in groups established by the European Systemic Risk Board (ESRB). Specifically, in 2022, representatives of the National Bank of Romania, the Financial Supervisory Authority and the Ministry of Finance participated in the meetings of the following ESRB working groups:

- *2022 Review of Macroprudential Framework*: the working group focused on assessing the European macroprudential policy framework. The working group was attended by experts from the national authorities of Member States (Romania was represented by an NBR expert), and by experts from European institutions with macroprudential policy responsibilities. The working group developed a series of proposals for the review of the EU macroprudential regulatory framework, which are included in an ESRB *Report*[21];

- Project team set up to assess compliance with Recommendation ESRB/2020/12 on identifying legal entities: the working group was attended by experts from the national authorities of Member States, including a representative of the National Bank of Romania. The activities of the working group started in 2022, will continue throughout 2023, and will be completed by publishing a report on the website of the European Systemic Risk Board;

[21] *Review of the EU Macroprudential Framework for the Banking Sector* – A Concept Note, ESRB, March 2022

- Project team set up to assess compliance with Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures: the working group aims to examine Member States' degree of compliance with Recommendation ESRB/2015/2 in the period from 1 July 2017 to 30 June 2021. The criteria used in the assessment refer to the manner in which the countries assessed and monitored the cross-border effects of their own macroprudential measures, and to how they treated other countries' measures recommended for reciprocation by the ESRB. The results of the assessment will be released in a report to be published in 2023;

- Task Force on Stress Testing (TFST): the working group aims to develop a relevant macroeconomic narrative and harmonised (baseline and adverse) scenarios at European level of possible developments in the macroeconomic environment and financial markets. These scenarios are used every two years in the stress tests of the banking and insurance sectors and of central counterparties, which are conducted in a consistent manner across Europe. Based on the ESRB scenarios in the solvency stress test of the Romanian banking sector, the NBR will adapt the shocks used in the stress test scenarios covering the period from 2023 to 2025. The ESRB baseline scenario assumes a relatively severe evolution of macroeconomic variables, amid heightened uncertainty stemming from the geopolitical situation in the region, as well as from the current macroeconomic environment marked by inflationary pressures. The adverse scenario assumes a strongly adverse development of the macroeconomic environment, reflecting in its severity a potential persistence of macroeconomic imbalances over a long horizon;

- ATC-FSC Project Team on climate risk monitoring: the working group made up of experts started its work in 2020. In 2022, in its third phase, the working group aimed to establish a climate risk-oriented macroprudential policy framework. The main lines of action for 2022 were: (i) to address gaps in the analytical data that are necessary for supporting material policy considerations; (ii) to model climate risk, by refining and implementing the new scenarios of the Network for Greening the Financial System (NGFS) and by assessing the impact of climate risks on the financial sector; (iii) to plan policies, by mapping a growing body of analytical evidence for a possible activation of macroprudential policy. The NBR was actively involved in the substructure of the working group that conducted the analyses on the implementation of NGFS scenarios and their impact on the financial sector;

- Analysis Working Group (AWG): it is a standing working group tasked with carrying out both regular and thematic analyses, the proposals for the latter being submitted at the beginning of each year. The regular analyses concern, *inter alia*: the quarterly *Risk Dashboard*, the ESRB *Bottom Up Survey*, the ECB/ESCB crises database update, the annual assessment of the *ESRB Risk Dashboard*, the banking sector analysis and others. In 2022, other topics were also discussed, including: (i) the impact of rising inflation on financial stability; (ii) the vulnerabilities in the non-financial corporations sector; (iii) the assessment of material third countries for the European banking sector from a macroprudential perspective;

- Contact group on Stance: it serves as a forum for countries to exchange ideas and views with the ESRB Secretariat on the experience gained in implementing the macroprudential policy stance. The group works to refine the baseline data and technical specifications of methodologies, in particular the Growth-at-Risk (GAR) and the indicator-based methodologies. The main objectives of the working group are: (i) to create a platform for participants to discuss the results of methodologies related to the macroprudential stance, (ii) to implement the two methodologies across Member States in order to ensure the comparability of results at EU level, (iii) to implement new methods for identifying the macroprudential stance in order to deepen and improve the understanding of this matter, (iv) to check the robustness and consistency of approaches (by using alternative specifications), (v) to identify ways to improve methodologies, and (vi) to further refine the EU-wide database for macroprudential stance assessments (alternative definitions for the data used or alternative series from internal sources in case of gaps in the data sets currently used).

2. Overview of the main risks and vulnerabilities to financial stability

2.1. Assessment of risks and vulnerabilities at global level

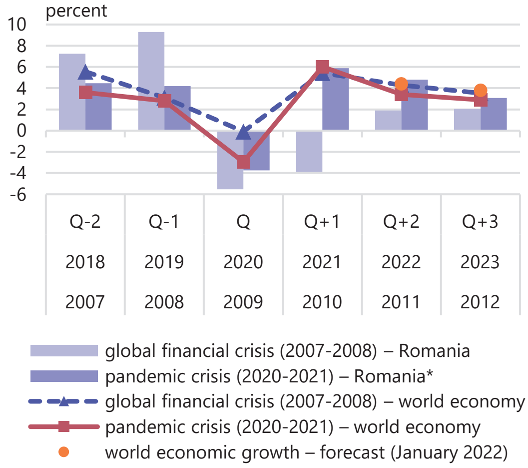
The year 2022 was marked by across-the-board recovery from the COVID-19 pandemic, on the one hand, and the effects of the war waged by Russia on Ukraine, entailing the most severe humanitarian crisis since World War II, on the other hand. Hence, the global outlook for major risks worsened and the economic recovery was reassessed to proceed at a slower-than-expected pace. Moreover, due to the geographical proximity to the warzone and the dependence on Russian gas, the EU economy is among the most exposed to the warfare risks. Against the backdrop of the uncertainty caused by the Russo-Ukrainian armed conflict, high energy prices and the erosion of households' purchasing power, the euro area countries and most Member States are expected to post tepid economic performance in the period ahead. The developments foreseen for 2023 equate with those following the 2007-2008 global financial crisis (Chart 2.1). The International Monetary Fund cut the economic growth estimates for 2022 by more than 1 percentage point (from 4.4 percent in January 2022 to 3.4 percent in January 2023), forecasting its decline to 2.9 percent in 2023, before reaching 3.1 percent in 2024[22]. The IMF foresees consumer prices in most countries to experience a slowdown over the next two years; global annual inflation is expected to fall, on average, from 8.8 percent in 2022 to 6.6 percent in 2023 and 4.3 percent in 2024.

High, broad-based inflationary pressures driven by hefty increases in commodity and electricity prices called for substantial rate hikes by major central banks. Financial conditions tightened sharply amid worsening investor expectations for economic growth prospects in the new geopolitical context. Bond yields rose for both high-risk and investment-type instruments, with developments being more pronounced for European markets. Government bonds of euro area countries followed suit, with greater changes in peripheral economies.

Financial markets saw wide fluctuations after the war in Ukraine broke out. In 2022, equity prices adjusted significantly in the USA (-19.4 percent for the S&P 500) and in Europe (-14.4 percent for Euro Stoxx). Volatility receded subsequently, but remained at a higher level than that observed in the previous year. The elevated geopolitical uncertainty and

22 IMF, *World Economic Outlook*, January 2023

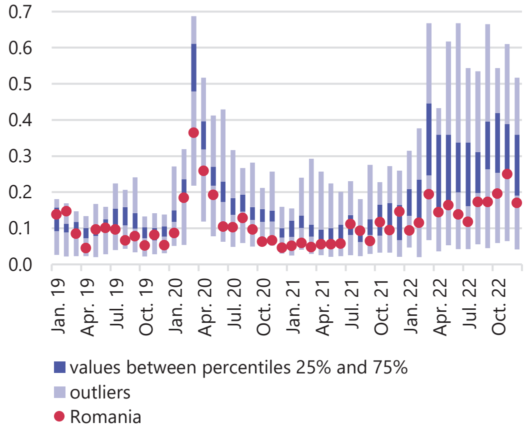
Chart 2.1. World economic growth



*) October 2022 projection

Source: International Monetary Fund, *World Economic Outlook Update*, January 2022

Chart 2.2. Country Level Index of Financial Stress (CLIFS)



Note: Bars show the CLIFS distribution by EU Member State for every period.

Source: ECB

the negative effects on financial and commodity markets, particularly those of fossil fuels and food items, contributed to maintaining a high level of financial risk[23] throughout 2022 (Chart 2.2).

The invasion of Ukraine prompted the European Union to impose sanctions on Russia, including to cut down on gas imports from Russia[24]. The European Commission's actions were compounded by measures to improve energy security at European level and to protect companies and households from the negative effects of price hikes. These measures led to significant additional fiscal costs for some of the European Union's countries[25], putting a drag on the post-pandemic fiscal consolidation (Chart 2.3).

Under the circumstances, the European Systemic Risk Board (ESRB) issued a General Warning[26] on financial system vulnerabilities. According to the ESRB, the likelihood of severe systemic risks materialising has increased. These risks are as follows: (i) the deterioration in the macroeconomic outlook combined with the tightening of financial conditions, (ii) the risk stemming from a sharp fall in asset prices, and (iii) the risk of a deterioration in asset quality and the profitability of credit institutions. In this warning, the ESRB recommends: (i) preserving or, where appropriate, further building up macroprudential buffers would support credit institutions' resilience and enable the authorities to release these buffers, if and when risks materialise, and (ii) close cooperation between relevant authorities and prudent risk management practices, key to effectively addressing risks and vulnerabilities to financial stability.

[23] The Financial Stress Index (FSI) includes six sub-indices which use data capturing three financial market segments, namely equity markets, bond markets and foreign exchange markets and is calculated according to the methodology outlined in Duprey, T., and Klaus, B., "Dating systemic financial stress episodes in the EU countries", *Working Paper Series*, No 1873, ECB, December 2015.

[24] More than 80 percent of gas imports came from Russia in 2021, yet they fell to less than 13 percent in November 2022 (https://www.consilium.europa.eu/en/infographics/eu-gas-supply/).

[25] The value of measures adopted by euro area countries in 2022 is estimated at 2 percent of GDP (https://www.ecb.europa.eu/pub/pdf/ecbu/eb202208.en.pdf).

[26] Warning of the European Systemic Risk Board on vulnerabilities in the Union financial system (CERS/2022/7)

Chart 2.3. Change in public debt (% of GDP) in EU Member States in the post-pandemic period

Source: Eurostat

2.2. Main challenges at national level

At national level, the main systemic risks to financial stability stemmed from: (i) global uncertainty amid the energy crisis and the war in Ukraine, (ii) the worsening of domestic macroeconomic equilibria, *inter alia* as a result of regional and international geopolitical events, (iii) the manner of implementing reforms and absorbing EU funds, especially via the National Recovery and Resilience Plan (NRRP), and (iv) the loan repayment capacity of the private sector.

Economic growth has lost momentum since 2022 Q2 against the backdrop of mounting uncertainty in the new geopolitical context. The three-quarter rate of increase equalled 4.3 percent in seasonally adjusted terms, driven by both household consumption and gross fixed capital formation. The latest estimates of the European Commission[27] point to Romania's significantly positive performance in 2022 (growth rate of 4.5 percent), followed by a sharp pace of decline over the next two years (2.5 percent and 3 percent in 2023 and 2024 respectively), due to tighter financial conditions and the uncertainty induced by the war in Ukraine. Both Romania and the countries in the region experience sizeable inflation rates, affected by the magnitude of recent unfavourable events. In order to counter high inflation, the NBR tightened steadily its monetary policy by raising its benchmark rates during 2022, so that in December the policy rate reached 6.75 percent (the highest level since February 2010).

The good economic performance helped narrow the public deficit to 5.7 percent of GDP (Chart 2.4), even amid the implementation of government measures to cut costs because of higher natural gas and electricity prices. Thus, with a view to supporting households,

27 European Commission, Winter 2023 (Interim) Economic Forecast

the government adopted in 2022 a number of measures, as follows: the introduction of a natural gas and electricity price capping scheme until 31 March 2025; the implementation of the "Support for Romania" government programme, whereby more than 2.5 million people from vulnerable groups received vouchers (totalling about lei 3 billion) to purchase food and hot meals, every 2 months, until end-2022; in July 2022, a one-off financial aid (lei 700) was granted to public system pensioners, state military pensioners and beneficiaries of rights provided by special laws, whose income was lower than or equal to lei 2,000; moreover, students from low-income families receiving social scholarships were awarded EUR 30 vouchers per month to purchase food, office supplies and wearing apparel.

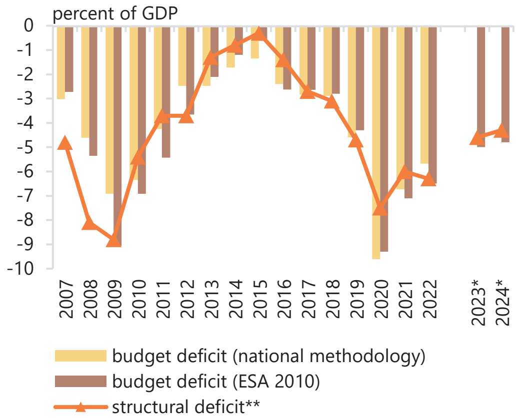
Public debt grew to lei 655 billion (November 2022) and remains close to the sustainability limit (48.3 percent of GDP). Against this backdrop, maintaining a prudent fiscal policy conduct is of the essence to ensure lower funding costs on the world's financial markets. This is all the more important as the local market's absorption capacity is limited, with the Romanian banking sector reporting one of the largest direct exposures to the government sector in the EU (the share of claims on the government sector accounted for 21.8 percent of total gross assets in September 2022).

Fiscal consolidation is necessary also in order to bring the general government deficit below the 3 percent benchmark by 2024 so as to complete the excessive deficit procedure opened before the outbreak of the COVID-19 pandemic, when Romania recorded the largest structural deficit in the EU (-4.7 percent, compared to -1.1 percent EU-wide in 2019). However, fiscal consolidation should be carried out in compliance with the strict timetable for reforms committed to under the National Recovery and Resilience Plan (NRRP). The NRRP budget totals EUR 29,182 million, of which 41 percent are intended for investment needed to support the transition to a green economy and 21 percent for digitalisation. Romania submitted the first payment request (containing the 21 milestones and targets achieved in 2021 Q4) in May 2022, and the request (in amount of EUR 2.6 billion) was approved in October 2022.

Romania continued to improve its EU funds absorption rate (the rate for the funds disbursed in the 2017-2020 multiannual programme equalling 74.5 percent in early February 2023), yet this performance lags well behind the value recorded by its regional peers (e.g. 86 percent in Poland, 85 percent in Hungary or 84 percent in Czechia). Compliance with the strict reform programme can help take some pressure off the current account deficit and ensure the smoother transition of the economy towards a sustainable, environmentally friendly growth pattern, in line with the new technological innovations.

The current account deficit widened by more than 60 percent January through November 2022 against the same year-earlier period to reach EUR 25.3 billion (Chart 2.5), with the European Commission's estimates for 2022 pointing to a 9.1 percent deficit-to-GDP ratio (the second highest in the EU after Cyprus). The current account worsening was ascribable to the wider deficit on trade in goods (41 percent in January-November 2022 versus the same year-earlier period) and the doubling of the primary income deficit. The current account deficit widening was also accompanied by a decline in the share of non-interest bearing

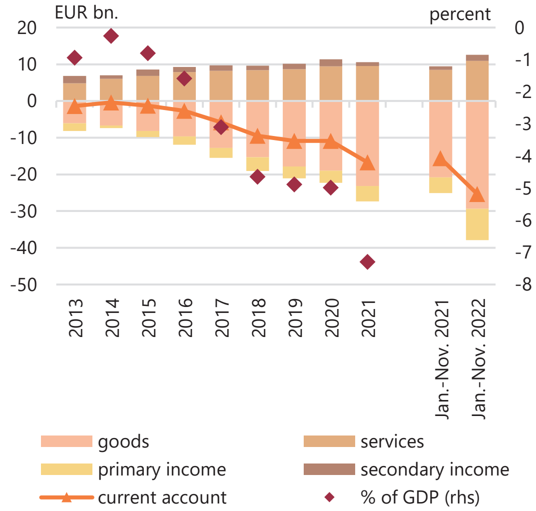
Chart 2.4. Budget deficit



*) projected values
**) Data for 2007-2009 refer to the cyclically-adjusted budget. Data for 2010-2024 refer to the structural budget balance[28].

Source: MF, AMECO

Chart 2.5. Current account deficit



Source: NBR

loans to 44 percent in the January-November 2022 period compared to 53 percent in the same year-earlier period. Reinvestment of earnings was the main contributor to the increase in direct investment (74 percent of total FDI flows), while the net portfolio investment inflows targeted long-term debt instruments. Against this backdrop, external debt added EUR 7.1 billion to EUR 143.7 billion. The breakdown shows that long-term external debt grew more moderately, with its share in total debt narrowing from 71 percent in December 2021 to 68 percent in November 2022. Nonetheless, the coverage of short-term external debt at residual maturity with foreign currency reserves remains significant, i.e. 79 percent.

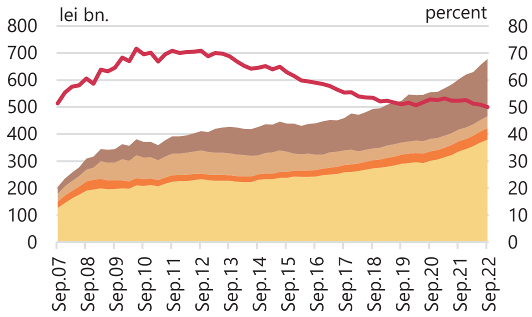
With a view to improving banking sector resilience in the new economic environment, the National Committee for Macroprudential Oversight decided to raise the countercyclical capital buffer rate to 1 percent from 0.5 percent as from October 2023. This is in line with the ESRB proposals on measures that may strengthen the financial sector's prudential buffers amid the higher risks attributable to recent geopolitical developments.

Total indebtedness of the non-financial sector stayed on an upward path in 2022, yet there are signs of the rise coming to a halt. At the end of 2022 Q3, private sector debt amounted to lei 678.6 billion, i.e. 50 percent of GDP (Chart 2.6). Bank lending slowed down in 2022 from the previous year, the annual growth rates (2022/2021 versus 2021/2020) of household loans and leu-denominated loans to non-financial corporations going down by 5.3 percentage points and 12 percentage points respectively. These developments occurred amid the tightening of the monetary policy stance and credit standards[29]. The wider gap between interest rates on loans in domestic and foreign currency prompted an adjustment of the credit flow, non-financial corporations showing their preference for foreign

[28] The structural budget balance is the result of subtracting from the actual budget balance the cyclical component of budget deficit and the one-off and temporary measures. To calculate percentages, reference is made to the nominal potential GDP, i.e. the highest economic output that does not create inflationary pressures.

[29] According to *Bank Lending Survey*, November 2022, credit institutions in Romania tightened their credit standards in 2022 Q3 for both households and non-financial corporations, and foresee this trend to continue in 2022 Q4 as well.

Chart 2.6. Private sector indebtedness

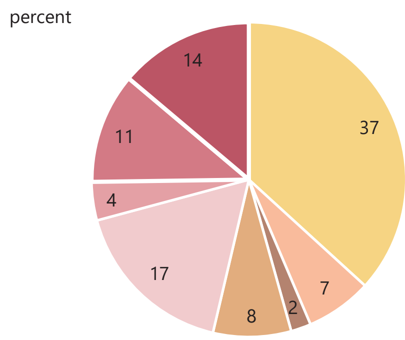


*) including write-offs and loan sales

**) including the external debt in the form of FDI

Source: NIS, NBR calculations

Chart 2.7. Non-financial corporations' financing structure in 2021



Source: MF, NBR calculations

currency-denominated loans. The share of non-financial corporations' foreign currency loans in the loan stock widened from 37 percent in December 2021 to 42 percent in December 2022. Turning to households, the strict macroprudential measures on foreign currency loans taken before the pandemic kept this indicator on a downward trend. The share of households' foreign currency loans stood at 15 percent in December 2022, down from 29 percent in December 2018 (prior to the measure adoption).

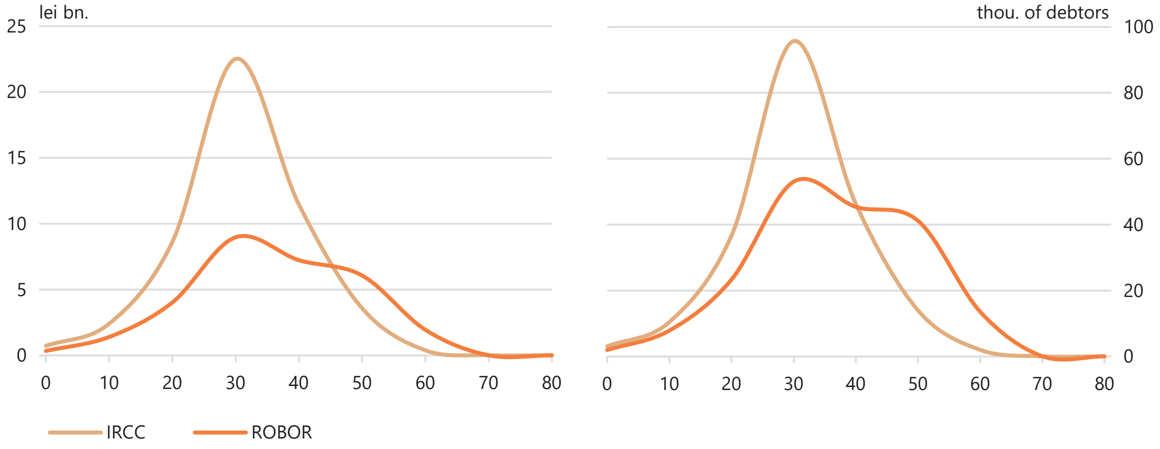
In contrast to households, loans to non-financial corporations grew at a sustained pace in 2022 (up 21 percent in December 2022 from December 2021), with Romania posting one of the highest growth rates in the EU. The fast-paced lending in this sector was backed by the government programme to support the private sector in the new geopolitical context (IMM INVEST PLUS)[30], the National Recovery and Resilience Plan and other EU-funded programmes. At end-2022, government-backed loans to non-financial corporations totalled lei 29.4 billion, accounting for 17 percent of bank loans to this sector.

The financial health indicator of non-financial corporations fared well in 2021 and remained outside the risk zone. At end-2021, the level of capitalisation and performance indicators improved, and non-financial corporations' aggregate net profit peaked at lei 142.5 billion, up 42.6 percent against 2020. It is important that firms capitalise on the substantial profits earned during this period to enhance their resilience to less favourable economic conditions by upping the capital base (Chart 2.7).

The sizeable share of companies with negative equity (about a third of total) hampers the proper functioning of the market economy and may lead to structural imbalances with major negative implications for Romania's financial system stability. In this vein, the General Board

[30] The IMM INVEST PLUS state aid scheme and its components – IMM INVEST ROMANIA, AGRO IMM INVEST, IMM PROD, GARANT CONSTRUCT, INNOVATION and RURAL INVEST –, whereby state aid in the form of loan guarantees and grants can be accessed, was approved by Government Emergency Ordinance No. 99/2022 (https://www.fngcimm.ro/imm-invest-plus).

Chart 2.8. Distribution of debt service-to-income for housing loans by floating rate benchmark index, December 2022



Note: "New Home" loans are also included.

Source: NBR

of the National Committee for Macroprudential Oversight issued two recommendations, as follows: (i) NCMO Recommendation No. R/2/2018[31] and (ii) NCMO Recommendation No. R/3/2022 (point 4)[32].

The quality of corporate and household loan portfolios improved in 2022 over the year before. Thus, the NPL ratio of non-financial corporations declined to 4.3 percent at end-2022 from 5.7 percent at end-2021 and to 3 percent from 3.2 percent for households in the period under review.

Since 2019, the NBR has taken a more prudent approach to lending, implementing tighter caps on household indebtedness. The chief goal was to improve borrowers' payment capacity by limiting their indebtedness with a view to enhancing their resilience to potential adverse shocks such as the recent ones (COVID-19 pandemic, energy crisis and the armed conflict between Russia and Ukraine). Subsequent to the implementation of this measure, household indebtedness for new loans fell from 46 percent in December 2018 to 36 percent in December 2022 (median values) and the share of borrowers with an indebtedness level higher than 45 percent decreased from 48 percent to 14 percent.

The large share of floating-rate housing loans in total housing loans to households (81 percent, December 2022) poses a significant risk, yet the measure introduced in 2019 ensures that borrowers still have a manageable level of debt, even in a higher interest rate environment. Thus, debtors who took floating-rate loans (with the IRCC benchmark index) after 2019, even though they borrowed more, are less vulnerable to rate hikes than those whose loans were taken before (with the ROBOR benchmark), the former having greater room for accommodating potential increases in the level of indebtedness (Chart 2.8). For instance, following a 2 percentage point interest rate rise, a standard borrower with a loan

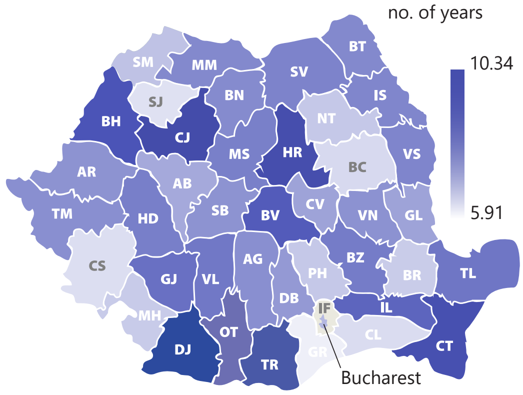
[31] NCMO Recommendation No. R/2/2018 on implementing some measures related to firms' financial soundness

[32] NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation

taken after 2019 and a median level of indebtedness of 36 percent will see its level of indebtedness go up by 2 percentage points, thus remaining below the critical value of 40 percent[33].

Residential property prices stayed on an uptrend January through September 2022, yet they remain the lowest in the region and below the EU average. In Romania, there is high heterogeneity in terms of regional development, household income, unemployment rate, but also as regards the access to finance, translating into increased regional disparities on the residential real estate market as well. Thus, in order to purchase a dwelling in Cluj county, it takes around 10 and a half years (considering wage earnings alone), while in counties such as Giurgiu, Caraș-Severin, Sălaj and Călărași, it takes less than 6 and a half years (Chart 2.9). The discrepancy is also attributed to faster growth in real estate prices in certain regions of Romania than in income levels.

Chart 2.9. Price-to-income ratio (PTI) by county (2022 Q3)



Note: The PTI shows the number of years needed to purchase a 2-room dwelling (55 sqm), excluding subsistence expenses, savings and bank loans. PTI calculation was based on the market values provided by the National Association of Romanian Authorised Valuers (ANEVAR).

Source: ANEVAR, NIS, NBR calculations

The commercial real estate market started to recover from the negative adjustments experienced during the COVID-19 pandemic. From January to September 2022, the volume of investment expanded by 16 percent from the same year-earlier period, remaining, however, below the pre-pandemic level[34]. Investment in office spaces raised increasing interest that same year, especially in Bucharest (55 percent of total transactions). Lending to companies in the construction and real estate sectors carried on at a sustained pace. The loans extended to companies in these sectors amounted to lei 33 billion at end-2022, up 20 percent against end-2021.

The need for sustainable growth of financial intermediation is a major concern for the NBR and the NCMO. In 2022, the NCMO issued a recommendation (NCMO Recommendation No. R/3/2022[35]) on the sustainable increase in financial intermediation. The recommendation covers the following: (i) to support the structural shift of the economy to a higher value added economy, *inter alia* by using EU funds more extensively, (ii) to improve entrepreneurs' financial education and enhance the professional training of staff in the financial system, and (iii) to diversify in a sustainable manner the sources that may increase financial intermediation. Moreover, as from May 2022 (following NCMO Recommendation No. 6/2021[36]), the NBR started collecting information on green loans

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33 A 12.8 percent increase in the net annual income was also considered (according to NIS data for August 2022).

34 CBRE, *Romania Investment Market Snapshot*, 2022 Q3.

35 NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation

36 NCMO Recommendation No. R/6/2021 on supporting green finance

from credit institutions. Green lending is a market under development with the potential to improve the low financial intermediation. Exposures consisting in green housing loans to households account for 3.8 percent of total housing exposures, while only 1 percent of the corporate loan stock are green loans.

2.2.1. Banking sector

Amid the macroeconomic imbalances exacerbated by the onset of geopolitical tensions in the region, the banking sector remained resilient in the face of new challenges. However, 2022 was marked by the build-up of vulnerabilities in the financial and real sectors, which were likely to change certain positive trends registered after the end of the pandemic crisis. In a still uncertain macroeconomic environment, characterised by increased risks to financial stability, a series of challenges to the Romanian banking sector are taking shape, in line with expectations at European level.

The main developments recorded in 2022 show the banking sector's further good resilience to shocks stemming from the existing macroeconomic imbalances, yet exacerbated by the geopolitical situation in the region:

- The solvency ratio decreased in 2022 (from 23.3 percent in December 2021 to 21.8 percent in December 2022, unaudited data), on account of the resumption of dividend distribution, the increase in lending, and the impact of market risk. However, after auditing the financial statements, the value of this indicator as at December 2022 is expected to be similar to that for 2021, due to the partial retention of the profit for 2022.

- Liquidity indicators posted declines, credit institutions resorting to the central bank's lending facility, amid firm liquidity control policy. Towards the end of 2022, credit institutions' liquidity improved in terms of standing facilities in relation to the central bank and key liquidity indicators.

- The balance sheet evolution of the Romanian banking sector in 2022 shows a weaker appetite for government securities, a slower pick-up in real sector's deposits, concurrently with an increase in external financing and a faster growth of foreign currency lending to non-financial corporations.

- Asset quality improved, with the NPL ratio declining (to 2.7 percent in December 2022 versus 3.4 percent in the previous year) and the NPL coverage by provisions ranking highest in the EU (65.4 percent in December 2022 versus 66.1 percent at end-2021).

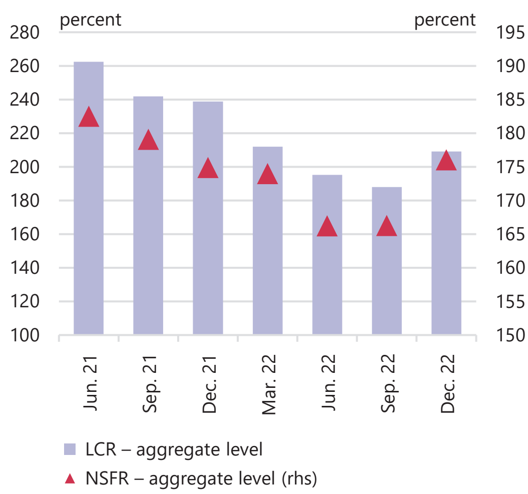
- Profitability strengthened, exceeding pre-pandemic levels, with a net profit of lei 10.2 billion (with the ROE and ROA running at 16.6 percent and 1.5 percent respectively), recording a lei 2 billion increase compared to the previous year based on the growth of operating profit, especially of net interest income, given the fast-paced interest rate rise.

The solvency ratio continued to fall in 2022 as well, from a historical high of 25.1 percent in December 2020 to 21.8 percent in December 2022 (unaudited data), due mainly to the resumption of dividend distribution (including from the profit retained in previous years), the increase in lending, and the impact of market risk. However, the total capital ratio of credit institutions in Romania further surpasses the 75th centile, specific to the distribution of European values (21.6 percent, September 2022[37]). At the same time, the same indicator (as at December 2022) is expected to increase amid the partial retention of interim profit.

The effects of the three transitional adjustments of the CRR "quick fix"[38] used by the Romanian banking sector are significant and expire gradually, accounting, at the date mentioned, for 2.7 percentage points of risk-weighted assets. Specifically, the total capital ratio would have been 19 percent in December 2022, in the absence of CRR "quick fix".

In order to ensure that capital adequately reflects growing risks, tightening the NBR's policies (in line with the ESRB general warning of September 2022) was deemed appropriate; one of the measures taken by the NBR was the recommendation for some credit institutions (relevant for financial stability) to not distribute dividends from the financial result of 2022. This measure was aimed at increasing the resilience of the banking sector should financial risks materialise.

Chapter 2.10. Evolution of the main liquidity indicators (LCR and NSFR)



Source: NBR

The results of the solvency stress test covering the 2022-2024 period show the Romanian banking sector further has a good capacity to cope with challenges in an unfavourable macroeconomic environment characterised by high uncertainty. Generally, banks have the capacity to generate operating profit even under unfavourable conditions (especially large banks, which are more efficient in this respect).

The year 2022 was marked, to a large extent, by a worsening of banking sector's liquidity, which saw a slight recovery towards the end of the period. After the outbreak of the war in Ukraine, the local banking sector was faced with a liquidity shortfall, mainly in March-September 2022. Against this backdrop, credit institutions resorted to the lending (Lombard) facility to cover liquidity needs, given the central

[37] According to the *EBA Risk Dashboard*, September 2022.

[38] The relevant provisions for the Romanian banking sector refer to: (i) introducing new transitional arrangements according to IFRS 9; (ii) reintroducing transitional arrangements for credit risk capital requirements for exposures to central governments and central banks where those exposures are denominated in the domestic currency of another Member State; (iii) advancing by one year the implementation of the revised SME supporting factor and an infrastructure supporting factor.

bank's policy of firm liquidity control. The liquidity coverage ratio (LCR) reached a historical low of 188 percent in September 2022 (Chart 2.10), owing largely to a lower liquidity reserve than at end-2021, as a result of the drop in exposures to central governments (-7.1 percent) and in withdrawable central bank reserves (-41.7 percent). Subsequently, the LCR went up to 209.1 percent in December, remaining above the EU average (162.5 percent, September 2022), the banking sector regaining its net creditor position vis-à-vis the central bank towards end-2022.

The net stable funding ratio (NSFR) also went down in the first three quarters of 2022 (particularly following an increase in lending and the resumption of dividend distribution), rebounding to 176.1 percent in December 2022 (compared to 174.9 percent at end-2021). The NSFR stays well above the EU average of 126.9 percent (September 2022).

The results of the latest liquidity stress test at the level of credit institutions, Romanian legal entities (June 2022), show a worsening in liquidity in the short term, the potential liquidity shortfalls affecting a rising number of banks. However, despite some emerging vulnerabilities, tests for higher funding costs (calibrated in line with the NBR's macroeconomic projections) indicate credit institutions' good capacity to manage potential shocks in this area. Similarly to previous tests, there is a polarisation of results at individual level, as large banks have the capacity to absorb potential shocks associated with withdrawals of funding sources or decline in the liquidity of assets.

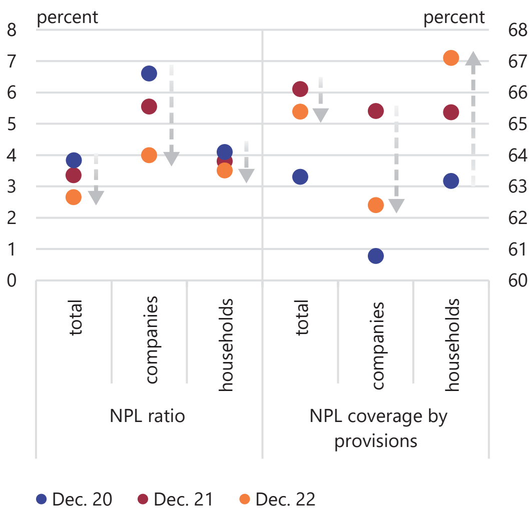
In 2022, the balance sheet developments of the Romanian banking sector show lower appetite for investments in debt securities issued by the government. Amid swift increases in the yields on these securities in 2022, banks had to recognise significant losses from their marking to market. Interest rates are expected to remain high in the coming period, which has prompted banks to no longer fully renew maturing securities. In this context, the annual dynamics of the stock of claims on the government sector (loans and securities) decelerated, standing at 1.8 percent at end-2022 (from an average annual increase of 21 percent in 2022-2021). This resulted in this class of exposures narrowing its share in the aggregate balance sheet from 24 percent in December 2021 to 22.4 percent in December 2022.

Given the growing interest rates and a relatively stable EUR/RON exchange rate, new foreign currency loans to non-financial corporations expanded in 2022, whereas the volume of new leu-denominated loans remained at a level similar to that of 2021 (approximately lei 90 billion, with 57 percent of loans granted to households). In 2022, new foreign currency loans witnessed an 88 percent rise (up to approximately EUR 7 billion, December 2022) and were granted almost exclusively (97 percent) to legal entities, considering the restrictive measures imposed by the NBR to households who take loans in other currencies than their income currency[39].

39 The DSTI (debt service-to-income) limit for households is 40 percent for leu-denominated loans and 20 percent for foreign currency-denominated loans.

Deposits from the private sector posted a subdued positive evolution during 2022, their share in aggregate bank liabilities contracting by approximately 2 percentage points (to 67 percent). Specifically, after the 2020-2021 period, characterised by the reinforced importance of deposits from the real sector in banks' balance sheets, 2022 marked a lower propensity for saving. Although currently there is a shift towards longer-term saving, amid the search for higher yields in an inflationary environment, the share of demand deposits in total deposits further prevailed. The slower rate of deposit-taking from the real sector was partly offset by a rise in foreign funding.

Chart 2.11. Asset quality indicators



Source: NBR

Bank asset quality improved during 2022, the relevant indicators standing in the EBA-defined low-risk bucket. The non-performing loan (NPL) ratio declined marginally, amid the rise in lending and balance sheet clean-up, to 2.7 percent (December 2022, Chart 2.11), further tending to converge towards the EU average. Heterogeneity across credit institutions persists. In December 2022, a single credit institution posted an NPL ratio above the 5 percent threshold (which is relevant for setting the systemic risk buffer), yet without falling into the high-risk bucket (over 8 percent). Looking at debtor sectors, non-financial corporations remains the riskiest segment. In the current macroeconomic environment, debtors' repayment capacity is expected to deteriorate.

In terms of the NPL coverage by provisions, the Romanian banking sector stands at the top of the EU ranking (65.4 percent, December 2022 compared to 44.1 percent in the EU, September 2022), which reflects the prudent behaviour of banks in Romania regarding credit risk, while also taking into account the current economic and geopolitical environment.

No bank has a high risk in terms of the NPL coverage by provisions, but four out of 24 banks recorded a coverage ratio below the 55 percent threshold, specific to one of the two criteria to set the systemic risk buffer. Turning to institutional sectors, loans to households are covered by provisions to a greater extent, this trend being manifest both during the pandemic and subsequently (Chart 2.11). Conversely, in the case of lending to non-financial corporations, during the health crisis, banks' prudence increased significantly, but it diminished slightly in 2022.

The Romanian banking sector continued to strengthen its profitability, recording a net profit of lei 10.2 billion in 2022 (up 25 percent compared to 2021). This was mainly attributable to the increase in net interest income, based on the central bank resuming the tightening cycle of monetary policy. Although higher funding costs were reflected in interest expenses, the flows of interest payments on credit agreements posted a steeper upward adjustment, resulting in a widening of the net interest margin (from 2.72 percent in December 2021 to 3.08 percent in December 2022).

Compared to 2021, the profitability indicators of the local banking sector fared better, i.e. the return on assets (ROA) stood at around 1.5 percent, up 0.2 percentage points from end-2021, whereas the return on equity (ROE) added 3.3 percentage points to 16.6 percent (December 2022). Profitability also went up at European level, yet its dynamics were slower: the ROE added 0.4 percentage points to 7.7 percent[40], while the ROA grew marginally to 0.48 percent (September 2022).

The polarisation of profitability persisted. Large banks showed a better profit-making capacity, based on increased operational efficiency. At individual level, seven credit institutions – five subsidiaries and two branches (with a 0.7 percent market share) – recorded losses in the financial year 2022. The cost-to-income ratio improved moderately by approximately 2 percentage points to 51.9 percent, standing in the medium-risk bucket according to the EBA's prudential limits.

Interest income continued to be the main component of operating income (70.3 percent, December 2022), rising by 4.5 percentage points from the previous year. Net fees and commissions income accounted for 19 percent of operating income. Although banks recorded net impairment losses going up by approximately lei 0.6 billion (to lei 1.9 billion), profitability remained high.

Risks and challenges to the banking sector amplified with the onset of the geopolitical tensions in the region, pointing to the need for credit institutions to maintain prudential risk management policies in the coming period. The central bank, as supervisory authority with a role in safeguarding financial stability, aims at implementing micro- and macropudential policies that should mitigate banks' vulnerabilities in case of potential shocks. The risks that could affect the financial and prudential positions of credit institutions include:

- An increase in private sector debt servicing can amplify credit risk, in an environment characterised by high interest rates and a deterioration of purchasing power.

- Significant exposure to the government sector may lead to a further high concentration risk, as well as interest rate risk, in an environment marked by a possible decline in public debt sustainability (*inter alia* via pressures on the sovereign rating).

- The further rise in financing costs, a potential deterioration in asset quality, and a slowdown in new lending posed challenges to banking sector profitability, as bank profit is expected to decline in the next two years.

[40] According to the EBA, September 2022.

- Certain pressures on banking sector solvency after the CRR "quick fix" provisions dissipate. Specifically, the total capital ratio is expected to decrease by approximately 2 percentage points (*ceteris paribus*) from 2023 until end-2025. This negative impact may become more pronounced following the full transposition of the Basel III framework into EU law, which will increase capital requirements for certain exposures. In this context, the NBR recommendation on the restrictions on dividend distribution by certain credit institutions (important for preserving financial stability) and the increase in the countercyclical buffer rate, implemented pursuant to the NCMO recommendation, are aimed at maintaining adequate capital reserves in an uncertain macroeconomic environment.

- Further high operational risk (also in terms of cyber risk), amid banks' ongoing digitalisation, competition from Fintech/BigTech, and the onset of the geopolitical conflict.

Rising interest rates and the impact of the inflationary environment on households and non-financial corporations will test the debt sustainability of these borrowers in the coming period. Specifically, there is a prospective worsening of the asset quality indicators, especially the NPL ratio. In addition, bank measures to support debtors (including debt restructuring measures) are likely to become more important over the following period. Debtors' low recourse to the legislative moratoria introduced by Government Emergency Ordinance No. 90/2022 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions shows that these were applied in a less critical period for borrowers. Given the overlap with other government support measures (such as energy price capping), banks received only 6,605 applications and approved 42 percent of them, covering exposures in amount of lei 0.9 billion (September 2022). The small number of applications can also be explained by the fact that banks were proactive and reacted in favour of customers, allowing individuals to switch from ROBOR to IRCC and thus benefit from lower loan instalments.

A significant vulnerability of the Romanian banking sector arises from concentration risk, given the close interdependence between the banking sector and the government sector. Specifically, among European countries, the banking sector in Romania has the highest share of exposures to the government sector in the balance sheet (mainly in the form of loans and securities issued by central and local governments).

The relationship between the Romanian government and banks manifests both through direct exposures (securities and loans granted to central and local governments), accounting for 21.8 percent (December 2022, down from 24.2 percent at end-2021), and through state guarantees on loans granted by credit institutions to the real sector, making up 7.1 percent of assets (via programmes such as IMM INVEST, IMM INVEST PLUS, "First Home", etc.). Moreover, government ownership is another contributor to strengthening interconnections with the government sector. At end-2022, 11.6 percent of bank assets were held by banks with majority state-owned capital (up from 5 percent in 2008).

Government security holdings can increase interest rate risk. The assessment of the impact of interest rate risk on credit institutions, Romanian legal entities, shows that in the event of the fast steepening of yield curves, banks would witness a significant reduction in capital; however, the recognition of potential losses would not lead to non-observance of minimum capital requirements.

As the NBR resumed the rate hiking cycle, but also as a result of the worsening investor sentiment regarding the financial markets in the region, government securities yields increased, with a negative impact on the market value of government securities portfolios held by banks. The yield of long-term instruments (10 years) followed an upward trend throughout 2022, reaching 820 basis points at year-end (compared to 295 basis points at end-2021), while short-term government securities (one year) were traded at end-2022 at a yield of 710 basis points (compared to 380 basis points at end-2021). In order to reduce the impact of interest rate hikes on the capital position or the profit and loss account, as of 2022 H2, some banks adjusted both their purchase policy (given that they no longer renewed maturing securities) and their classification policy, as they classified these instruments at amortised cost (held-to-maturity instruments).

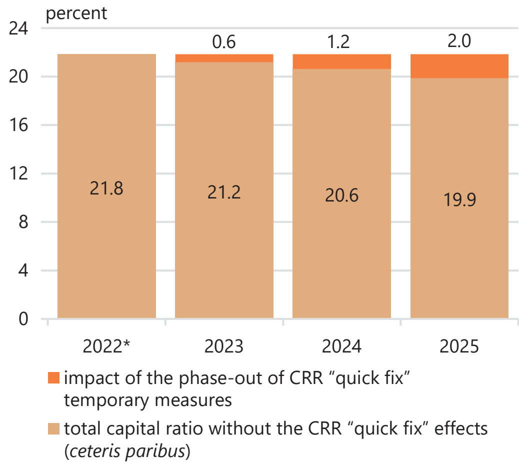
From the government's perspective, the concentration of a significant share of government securities issued at the level of the banking sector can have consequences in terms of funding risk.

On the back of some challenges to the banking sector, such as higher funding costs (primarily in the case of time deposits), the anticipated deterioration in asset quality, as well as the decline in new loans, bank profitability is expected to diminish in the coming period (compared to 2022).

The end of 2022 brought about additional pressures on the capital position of the local banking sector, amid the dissipating effects of the CRR "quick fix" package (adopted in June 2020 in response to the pandemic crisis), with the total capital ratio being expected to decrease after the gradual fading-out of these provisions as of 2023 (*ceteris paribus*, Chart 2.12).

These pressures on solvency will also test banks' capacity to comply with the resolution requirements (MREL), as a potential decrease in own funds or an increase in capital requirements would force banks to issue a larger amount of eligible liabilities, with a significant impact on the cost of compliance with resolution requirements. At the same time, the full transposition of the Basel III framework into

Chart 2.12. Impact on solvency of the phase-out of CRR "quick fix" measures



*) unaudited data

Source: NBR

EU legislation may entail an increase in capital requirements for certain exposures. Under the circumstances, the NBR issued a recommendation on restriction of dividend distribution by certain credit institutions and raised the CCyB rate, in line with the NCMO recommendation, in order to maintain adequate capital reserves in an uncertain macroeconomic framework (Box D).

The banking sector went on with the accelerated digitalisation of bank services, as confirmed by the ongoing uptrend in related expenses. In 2017-2021, digitalisation expenses amounted to approximately lei 3.37 billion, whereas the expenses budgeted for 2022-2023 are estimated at roughly lei 3 billion[41]. Banks have started to feel the benefits of digitalisation investments, which translated into improved operational efficiency (cost-to-income ratio) in 2022 for most respondent banks. The accelerated digitalisation process and the pressures on information security amid the lingering conflict in Ukraine fuel cyber risk, assessed on the rise by most banks in Romania. In addition, this risk is perceived as the main source likely to generate operational risk, both for the local banking sector (according to the NBR questionnaire) and for EU credit institutions (according to an EBA questionnaire[42], 2022 Q3). On the domestic front, the list of main threats to operational resilience is completed by money laundering, terrorist financing, and non-compliance with sanctions, as well as by geopolitical risk given Romania's proximity to military conflict areas.

Most banks in Romania faced cyber attacks[43] in 2022, yet these attacks did not result in disruptions or major hindrances to the provision of bank services to customers, and did not cause major operational incidents. In 2022, there was an increase in cyber attacks on the energy and telecommunication infrastructures of EU Member States, which supports the functioning of the financial system. However, the fast rise in these attacks did not materialise in significant threats to financial stability at national or EU level. From this perspective, efforts are undertaken to increase the resilience of the European financial system.

Banks have shown growing interest in developing solutions based on artificial intelligence, including through machine learning techniques. These are used by credit institutions in Romania in such processes as: (i) detecting and preventing fraudulent transactions, (ii) assessing and classifying customers, (iii) collecting and extracting data, (iv) risk management, and (v) financial consultancy (by developing chatbots). Moreover, there are credit institutions that currently use Big Data approaches to build customer profiles. According to the NBR questionnaire, there is a high share of banks that currently use various applications based on these technologies, while another share of credit institutions intend to allocate resources to develop such systems in the near future.

41 According to an NBR questionnaire on the impact of recent developments in digitalisation, sent to the top 15 credit institutions by market share (subsidiaries and branches), covering 94 percent of bank assets, September 2022.

42 *Risk Assessment Questionnaire* – Summary of Results Autumn 2022.

43 Most frequently phishing and DDoS (Distributed Denial of Services) attacks.

Box D. NBR Recommendation on the restriction of dividend distributions for some credit institutions in Romania

The geopolitical conflict in the region led to or amplified a series of vulnerabilities at European level, significantly worsening the macroeconomic environment. Against this background, on 22 September 2022, the European Systemic Risk Board (ESRB) adopted a warning on a number of risks to the European Union's financial stability, encouraging the use of micro and macroprudential tools to strengthen the resilience of the financial system.

Aside from the deterioration of European outlook, Romania has certain specificities (that tend to worsen), such as the persistence of structural vulnerabilities associated with twin deficits and with Romania being under excessive deficit procedure or challenges to public and private debt sustainability, conducive to a less favourable positioning relative to the EU as a whole. These are likely to create additional challenges for credit institutions in Romania, by impacting their financial and prudential statements. Moreover, a series of measures related to the CRR "quick fix" package (adopted in June 2020) will expire in 2023, the total capital ratio in the Romanian banking sector being expected to decrease by approximately 2 percentage points starting 2023.

These pressures may be exacerbated by the emergence of new exogenous shocks, such as: (i) an escalation of the conflict in Ukraine and further sanctions imposed on Russia as a result of the war; (ii) unexpected GDP or inflation changes; (iii) higher agri-food prices, triggered by climate change; (iv) a resurgence of COVID-19 infections.

In addition, after the expiry of the ESRB recommendations (30 September 2021) on restrictions of distributions (adopted in the context of the COVID-19 pandemic and transposed in Romania via NCMO recommendations), banks increased dividend distributions. In addition to the resumption of lending, higher capital requirements and the materialisation of market risk, they led to a decline in the total capital ratio from 25.1 percent in December 2020 to 21.5 percent in September 2022, below the pre-pandemic level.

Therefore, given the need to strengthen the banking sector's capacity to absorb potential losses associated with some rising risks, certain prudential measures were taken to consolidate the solvency of the banking sector, in order to adequately respond to the turmoil that may become manifest in the near future. Specifically, in October 2022, the NCMO encouraged credit institutions to have a very prudent conduct in the period ahead as regards the dividend distribution policy. Subsequently, the NBR recommended some credit institutions (deemed important in terms of financial stability) not to distribute dividends from the profit for the financial year 2022. Considering the increased efficiency of the previous recommendations on this topic, the measures taken are expected to result in the enhanced resilience of the banking sector, in the event of financial risks materialising in an environment marked by high uncertainty.

2.2.2. Non-bank financial markets

In the domestic capital market, the analysis of systemic risk measures for the companies in the BET index showed an increase in this risk in December 2018, March-April 2020, December 2021 – March 2022 and at end-September 2022. Regardless of the systemic risk measure employed, the systemic risk specific to companies in the BET index recorded instances of growth. As a result, those companies showed simultaneous patterns with substantial growth potential, irrespective of the business sector.

The investment fund sector was broadly stable. Nevertheless, the higher interest rate risk led to a weaker performance of investment funds, triggering redemption demands particularly in the case of bond funds. Monetary funds also experienced significant outflows in 2022 Q1, as investors gave up fixed-income funds.

The insurance market is further highly concentrated, which remains a vulnerability in terms of exposure by class of insurance and the market shares held by a small number of insurance companies.

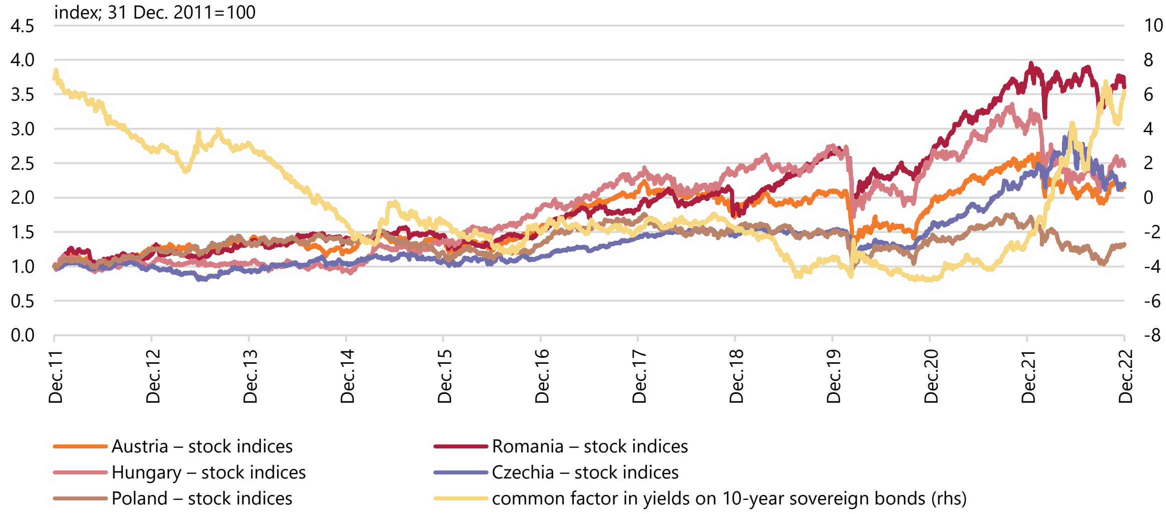
In March 2023, the Board of the Financial Supervisory Authority decided to withdraw the operating licence of Euroins România and found indications that the company had become insolvent. As a result of the FSA's supervisory and control activities and large-scale investigations, the authority found serious deficiencies in the functioning of Euroins România, including the significant deterioration of solvency ratios. Those issues showed that the company no longer fulfilled the necessary conditions to continue insurance market operations, given the substantial decline in solvency ratios and the impossibility to re-establish the level of own funds to cover the solvency capital requirement.

The private pension system was affected over the short term, in the latter part of 2022, by the materialisation of market risk through the broad-based increase in inflation and interest rates, which resulted in a decrease in the market value of fixed-income instruments in the portfolios of private pension funds (marking to market valuation). However, once risk factors stabilised and the prospects for a further pick-up in inflation were substantially weaker, the value of fixed-income securities began to rise again. The private pension system in Romania remains in an accumulation phase, the volume of outflows being further very low.

Interconnectedness of non-bank financial markets

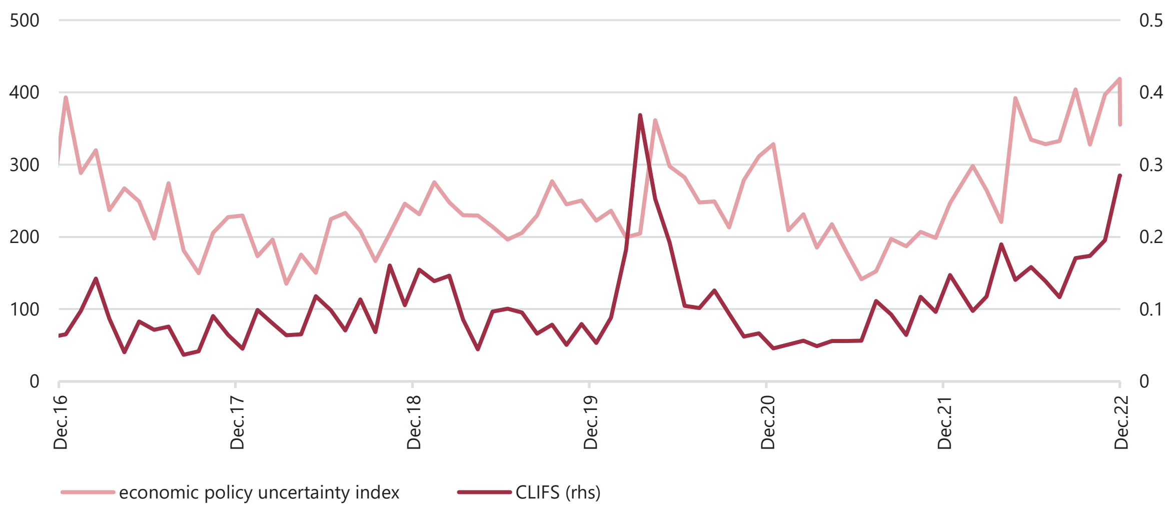
In 2022, financial conditions tightened significantly as economic imbalances grew. The new vulnerabilities to the financial system (high inflation, fuelled mainly by rising energy prices, and the uncertainty stemming from the current geopolitical context) overlapped with an economy weakened by the effects of the COVID-19 pandemic, putting a break, at least temporarily, on the recovery of European economies. Thus, tighter financial conditions and heightened uncertainty had strong dampening effects on economic activity, which translated into companies' postponement of investment projects along with a decline in household consumption.

Chart 2.13. Monetary policy tightening and easing cycle. Dynamics of capital markets



Source: Refinitiv, FSA calculations

Chart 2.14. Indicators of economic policy uncertainty (EU) and financial stress (Romania)

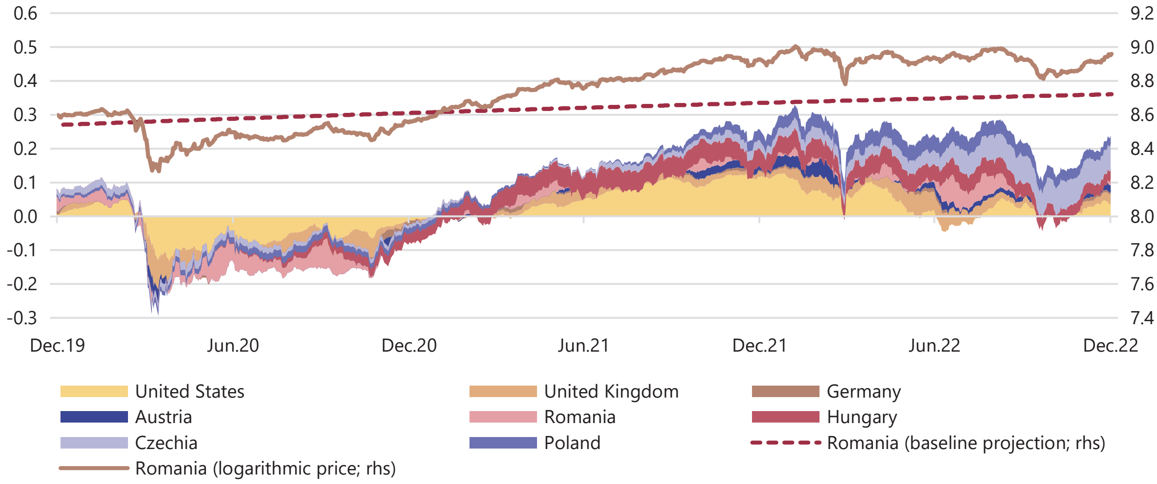


Source: European Central Bank, Economic Policy Uncertainty, FSA processing

In order to combat inflation, central banks resorted to successive policy rate hikes throughout 2022. Hence, the increase in policy rates in Europe led to a high level of contagion in sovereign government bond yields for all maturities. Nevertheless, a longer-term analysis of the developments in the contagion index for government bonds shows that it is currently lower than in 2020.

Although the domestic capital market recorded positive dynamics during 2021, amid the increase in listing and the enhanced attractiveness for foreign investors, the monetary policy tightening in 2022 resulted in capital market contraction. These results converge with similar estimations in relevant papers, indicating a decline in financial markets, amid higher inflation, a worsening economic outlook and elevated uncertainty.

Chart 2.15. Influence of foreign stock exchanges on the domestic stock market yields (historical shock decomposition – VAR model)



Source: Refinitiv, FSA calculations

The structural shock of the COVID-19 pandemic on the European economy, which subsequently overlapped with the events of 2022 as well, brought about an unstable and fragile investment climate sensitive to capital market contagion. Nonetheless, from the perspective of the CoVaR (Conditional Value at Risk) measure, which gauges the expected shortfall driven by the influence of a variable on another, the strength of economic shocks in 2021-2022 to the domestic capital market is lower than the level seen in March 2020 (the outbreak of the COVID-19 pandemic).

Although Chart 2.13 shows only some capital markets, all capital markets in Europe posted similar dynamics: the monetary policy easing cycle that began after the 2007-2009 financial crisis facilitated an advance in capital markets. The launch of the monetary policy tightening cycle in 2022 led to a readjustment of capital markets, but without sudden corrections.

In 2022, Romania experienced an increase in financial stress, amid the mounting economic uncertainty worldwide, according to CLIFS (Chart. 2.14), which is the Country-Level Index of Financial Stress calculated by the European Central Bank.

The higher systemic risk in the Romanian economy is largely accounted for by exogenous shocks. Thus, a high co-dependence of CLIFS and the economic policy uncertainty index calculated for Europe's economy in 2022 can be observed.

The interconnectedness of European economies and financial markets allowed for an instantaneous reaction and uniform pass-through of shocks to all economies.

Historical shock decomposition shows the degree to which a stock exchange was influenced by the past developments in other stock exchanges. Thus, the shocks to the stock market index in Romania (calculated by Refinitiv similarly with the BET-C index) indicate that in 2022 the local stock exchange was exposed to a mix of external shocks (Chart 2.15).

Capital market

In 2022, the elevated uncertainty associated with the geopolitical and macroeconomic context amid the war in Ukraine and higher inflation rates heavily affected global financial markets.

Internationally, in year-on-year comparison, all capital market indices rang up losses (Table 2.1). Romania's stock market indices reported negative performance at end-2022 against end-2021. The BET benchmark index, which captures developments in the most heavily traded companies on the BSE regular market, stood 10.7 percent lower at end-2022 against end-2021. The BETAeRO index recorded the most significant decline, i.e. 22 percent, reflecting the price performance of the representative companies listed on the AeRO market selected according to liquidity and free-float capitalisation criteria. The BET-NG index, which measures the evolution of companies listed on the BSE regulated market whose core business covers energy and related utilities, fell by approximately 5 percent as at 30 December 2022. The BET-FI index, used to gauge the performance of financial investment companies (FICs) and other assimilated entities, stood 3.6 percent lower at the end of the year.

Table 2.1. Capital market yields as at 30 December 2022

Global market indices	3M	6M	12M	BSE indices	3M	6M	12M
EA (EUROSTOXX)	12.44%	7.18%	-14.38%	BET	9.63%	-5.13%	-10.70%
FR (CAC 40)	12.35%	9.30%	-9.50%	BET-BK	9.90%	-2.13%	-12.40%
DE (DAX)	14.93%	8.92%	-12.35%	BET-FI	6.50%	-0.24%	-3.59%
IT (FTSE MIB)	14.81%	11.33%	-13.31%	BET-NG	3.25%	-8.97%	-4.98%
GR (ASE)	17.26%	14.73%	4.08%	BET-TR	9.67%	-2.66%	-1.85%
IE (ISEQ)	12.63%	13.23%	-15.82%	BET-TRN	9.67%	-2.79%	-2.34%
ES (IBEX)	11.71%	1.61%	-5.56%	BET-XT	8.05%	-5.10%	-10.85%
UK (FTSE 100)	8.09%	3.94%	0.91%	BET-XT-TR	8.12%	-2.58%	-2.59%
US (DJIA)	15.39%	7.71%	-8.78%	BET-XT-TRN	8.12%	-2.71%	-3.04%
IN (NIFTY 50)	5.91%	14.73%	4.33%	BETAeRO	-1.36%	-10.78%	-22.23%
SHG (SSEA)	2.16%	-9.09%	-15.10%	BETPlus	10.06%	-4.73%	-10.25%
JPN (N225)	0.61%	-1.13%	-9.37%	ROTX	7.72%	-5.34%	-7.32%

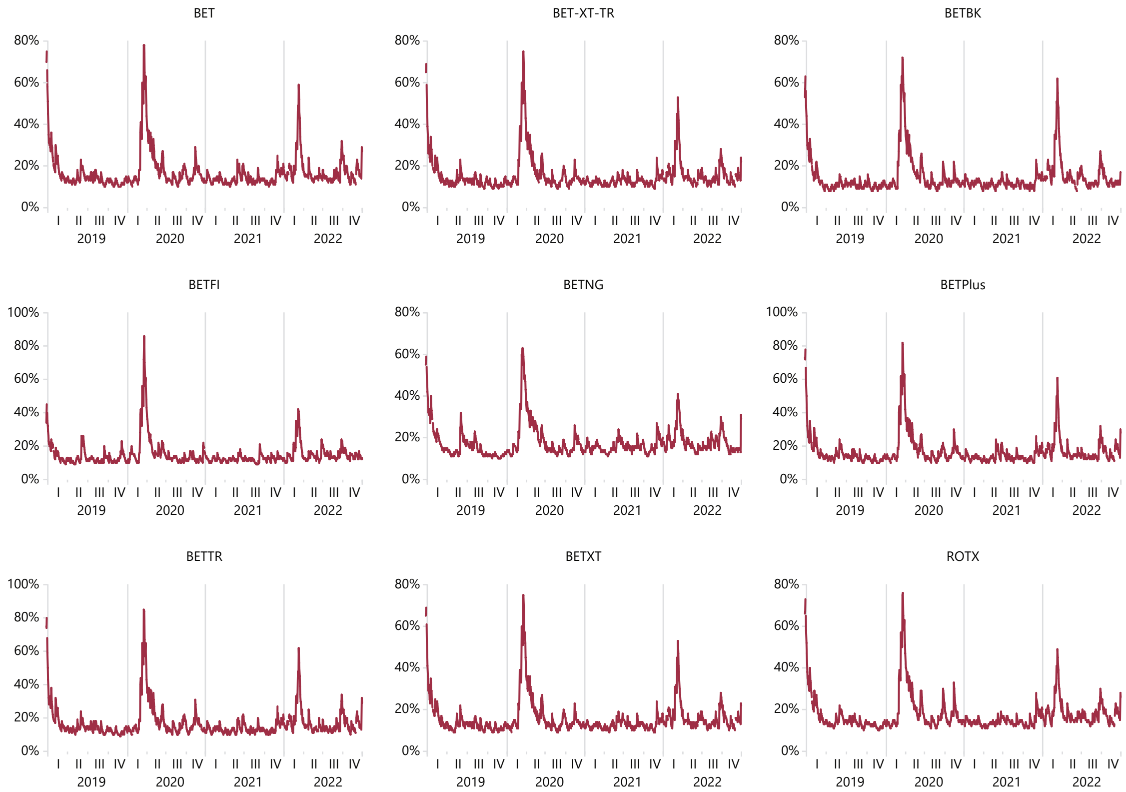
Note: 3M = 30 December 2022/30 September 2022; 6M = 30 December 2022/30 June 2022;
12M = 30 December 2022/31 December 2021

Source: Refinitiv, FSA calculations

Volatility is used to measure the risk of facing the uncertainty that investors consider when buying financial assets. In times of uncertainty, market volatility increases, along with contagion effects, and markets become more highly correlated with each other.

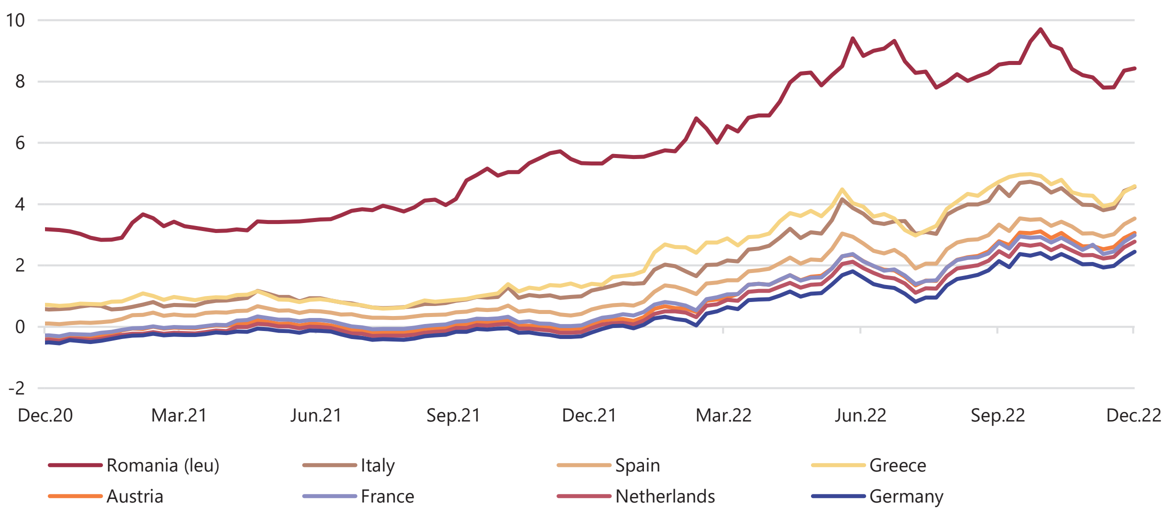
During 2021 volatility of the Bucharest Stock Exchange indices (Figure 2.1) was much lower than in the prior year (March 2020 saw the first wave of the COVID-19 pandemic), but a significant new episode of volatility was recorded in March 2022, amid the tensions

Figure 2.1. Volatility of BSE-GARCH indices (1,1)



Source: FSA calculations based on BSE data

Chart 2.16. Yields on 10 year sovereign bonds



Source: Refinitiv

between Ukraine and Russia. However, the episode was shorter than that of March 2020, and in early April 2022 it reverted to the pre-war threshold. September 2022 experienced a new episode of volatility, but that was not as strong as that registered in March 2022.

Against the backdrop of elevated inflation and growth forecasts for the period ahead, yields on the sovereign bond market were stuck to the upward trend that started in 2021, thus exceeding the levels at the onset of the pandemic.

At end-2021 yields on 10-year sovereign bonds for Romania (Chart 2.16) equalled 5.27 percent, while at end-2022 they rose to 8.37 percent/year. In Austria, the increase ranged from 0.03 percent to 3.01 percent, in Germany from -0.24 percent to 2.39 percent, and in France from 0.13 percent to 2.93 percent.

Market capitalisation dropped by about 14 percent on 30 December 2022 against end-2021, but advanced by approximately 4.5 percent on 16 January 2023 over end-2022. Compared to the end of 2020, market capitalisation went up by approximately 28 percent.

Assets of undertakings for collective investment (UCIs) in Romania amounted to about lei 42.47 billion at 31 December 2022, down around 15 percent from the end of the previous year. At the end of 2022, operating in Romania were 17 administrators, of which 6 were licensed solely as investment management companies, 2 were licensed solely as alternative investment fund managers, and 9 were dual licenced. Moreover, licences were granted to 89 undertakings for collective investment in transferable securities (UCITS), 36 alternative investment funds (AIFs) comprising the 6 financial investment companies (FICs) and Fondul Proprietatea. The largest category of administrators remains that of banking groups controlling the bulk of aggregate assets managed by the investment management companies.

Insurance market

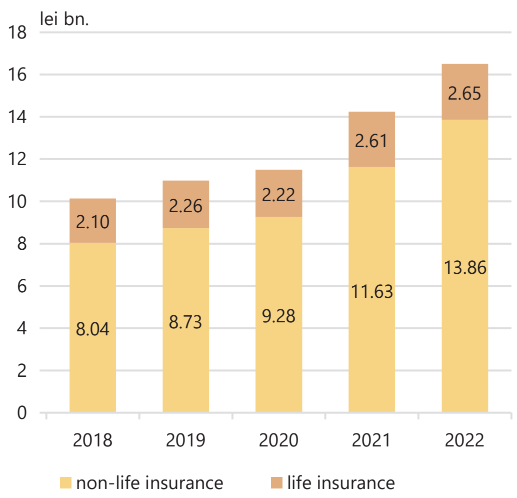
In 2022, gross premiums written by insurance companies licensed and regulated by the FSA and by branches in Romania (FoE) amounted to approximately lei 18.4 billion, up by 19 percent from the previous year. Specifically, the total subscription volume for non-life insurance stood at lei 15.1 billion, up 23 percent from 2021, holding an 82 percent share of total gross premiums written (GPW) by insurers licensed and regulated by the FSA and branches. The total value of GPWs for life insurance was lei 3.4 billion, up 4 percent compared to 2021.

The gross compensations paid by insurers licensed and regulated by the FSA, by branches, and by the Insurance Guarantee Fund (IGF) amounted to lei 8.9 billion in 2022. Gross compensations paid by insurers licensed by the FSA and by branches for non-life insurance stood at lei 6.5 billion, whereas those for life insurance totalled approximately lei 1.8 billion. The total sums approved by the IGF for claims payment amounted to approximately lei 655 million, of which roughly 93 percent account for sums approved for the payment of damages related to compulsory motor third-party liability insurance (lei 606 million).

In 2022, 26 insurance companies licensed and regulated by the FSA operated on the insurance market in Romania. In March 2023, the FSA Board decided to withdraw the operating licence of Euroins România and to determine the signs of insolvency. Based on the FSA's supervisory and control activities and on extensive investigations, the Authority found serious deficiencies in the functioning of Euroins România, including the significant deterioration of the company's solvency ratios. Those issues showed that the company no longer fulfilled the conditions to continue its activity on the insurance market, given the significant worsening of the solvency ratios and the impossibility to re-establish the level of own funds to cover capital requirements. Therefore, at 30 September 2022, although the company reported to the FSA that it had held an adequate level of own funds to cover capital requirements, the FSA – following the deficiencies found in exercising its supervisory and control activities – made the necessary adjustments, which resulted in an own funds deficit of lei 2.19 billion to re-establish the solvency capital requirement (SCR), and of lei 1.75 billion to cover the minimum capital requirement (MCR). The significant differences between the values reported by the company and those resulting after the FSA adjustments were attributed primarily to Euroins stretched asset valuations, along with its undervaluation of liabilities. Specifically, the decision to withdraw the operating licence was taken, in accordance with the legal provisions, as a result of the MCR deterioration, of failing to restore the SCR in due time, as well as of the obvious impossibility to re-establish the two capital requirements.

In 2022, gross premiums written by insurance companies licensed and regulated by the FSA amounted to approximately lei 16.5 billion, up by roughly 16 percent from 2021 (data presented in Chart 2.17).

Chart 2.17. Volume of gross premiums written in 2018-2022



Source: FSA

The insurance market in Romania remains focused on non-life insurance business, with an 84 percent share in total gross premiums written (GPW) by insurance companies licensed and regulated by the FSA.

The volume of gross premiums written for life insurance stood at lei 2.65 billion, slightly up from 2021 (lei 2.61 billion). The positive dynamics were supported by the increases in subscriptions for class C1 (Life insurance, annuities and additional life insurance) and class A2 (Health insurance) by approximately 5 percent and 35 percent respectively. The step-up in life insurance was mitigated by a decrease in the value of subscriptions for class C3 (Life insurance and annuities related to investment funds: -16 percent).

The non-life insurance market is further dominated by motor vehicle insurance, which includes class A3 (motor third-party liability insurance for land vehicles, other than railway rolling stock) and class A10 (compulsory motor third-party liability insurance), and therefore make up for approximately 77 percent of total GPW for non-life insurance and 64.5 percent of total GPW by insurance companies in 2022.

The high concentration of the insurance market in Romania remains a vulnerability from the perspective of not only exposure by main class of insurance, but also of the significant size of market shares held by a relatively small number of insurance companies.

The value of gross premiums written for motor vehicle insurance (class A3 – the voluntary motor third party liability insurance – CASCO and compulsory motor third party liability insurance – RCA) exceeded the lei 11 billion[44] threshold in 2022, with 28 percent of the volume being subscribed for CASCO and 72 percent for RCA.

Concentration is elevated both on the CASCO market and on the RCA market. Specifically, the top three insurance companies on the CASCO segment hold a 73 percent market share of the volume of gross premiums written, whereas the top three companies on the RCA market hold a combined share of 72 percent[45] of the RCA insurance portfolio in Romania.

Health insurance continued to post positive dynamics in 2022, with a subscription volume of about lei 670 million, up by approximately 35 percent versus 2021 (lei 497 million), holding a share of 4.1 percent in total GPW by insurance companies licensed and regulated by the FSA.

The solvency ratios (SCR and MCR), calculated at aggregate level for the entire insurance market, stood at above-one levels at end-December 2022. If taking into account data from Euroins according to FSA adjustments at 30 September 2022, the SCR ratio at market level was only 108 percent, while the MCR ratio was 257 percent. Excluding the data from Euroins, the ratio of own funds eligible to cover solvency capital requirements to the SCR ratio for the insurance market is 165 percent, whereas the MCR ratio is 395 percent.

At end-2022, the assets and liabilities of insurance companies (measured in accordance with Solvency II requirements) recorded higher values year on year. Total assets went up by 7 percent, while total liabilities of insurance companies rose by 16 percent at 31 December 2022 compared to the same year-earlier period. Total assets and liabilities at market level include the data recalculated by the FSA at 30 September 2022 for Euroins, given the large differences between the company's reports and those resulting from the supervisory and control activity. In the case of Euroins România, there was a correction of lei 822 million in total assets, i.e. from lei 2.5 billion reported by the company to lei 1.7 billion according to the FSA's adjustments. In terms of liabilities, Euroins undervalued their debts, the FSA calculating the total liabilities of Euroins at lei 3.2 billion of, i.e. over lei 1 billion more than the value reported to the FSA.

In 2022, the volume of gross premiums written by insurance companies licensed in other EU Member States, based on the freedom of establishment (FoE) in Romania, via

44 The value of the gross premiums written for RCA also includes the premiums written by the two branches that operate on the Romanian insurance market.

45 Idem 44.

15 branches, amounted to approximately lei 1.9 billion (10.4 percent of total GPW by local companies licensed by the FSA and branches), up by roughly 58 percent compared to 2021.

At end-2022, the total value of gross technical reserves of insurance companies stood at roughly lei 23.6 billion[46], up by 14.9 percent versus end-2021 (approximately lei 20.6 billion). Out of the total value of gross technical reserves, 61 percent are reserves for non-life insurance, whereas 41 percent of total technical reserves are for life insurance.

In 2022, premiums distributed by brokers stood at over lei 12 billion, up by approximately 26 percent from 2021. The positive dynamics are attributable to the higher volume of premiums distributed for both non-life insurance (+26 percent) and life insurance (+17 percent). Specifically, brokers distributed approximately 76 percent of the total volume of gross premiums written by insurers for both insurance categories, non-life insurance holding the larger share with a level of distribution of around 87 percent. If taking into account only premiums distributed for companies licensed in Romania, the level of distribution in 2022 was 68 percent, i.e. 78 percent for non-life insurance and roughly 14 percent for life insurance.

Private pension market

At end-December 2022, private pension funds (Pillar II and Pillar III) totalled assets worth lei 100.08 billion, 8.17 percent higher than at the end of 2021 (Chart 2.18). Compared to September 2022, the value of assets rose by 8.73 percent. As a share of GDP, total assets of the private pension system stood at more than 7.09 percent[47] at end-2022.

As at 31 December 2022, the investment policy of private pension funds further focused on the local capital market. The share of investments in fixed-income securities accounted for approximately 71 percent of the total investment portfolio of private pension funds and equity investments made up 22 percent.

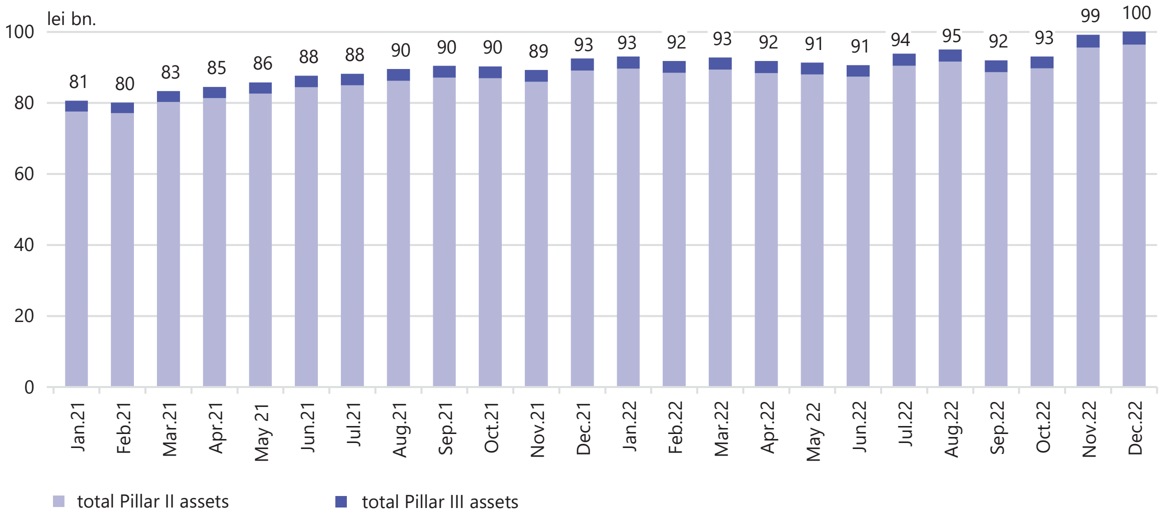
Financial instruments in private pension fund portfolios traded on financial markets are valued as marked-to-market, regardless of the duration they are expected to be held in portfolios. As such, developments in the net asset value per share of private pension funds may include potential episodes of volatility in the short run, being influenced by them. On the other hand, private pension funds have a long investment horizon, with funds proving resilient to the shocks that hit financial markets in the past.

Market risk is the risk of loss following adverse fluctuations in interest rates, exchange rates or other market prices in general. It is assessed to remain elevated, as a result of higher interest rates stemming from stronger inflationary pressures, as well as from the escalation

46 In the case of Euroins România, the gross technical reserves as at 30 September 2022 are included to incorporate the adjustments made by the FSA following the supervisory and control activity regarding the incurred but not reported (IBNR) reserve.

47 The GDP is computed as the sum of the last four quarters.

Chart 2.18. Total assets of the private pension system



Source: FSA

of tensions between Russia and Ukraine. All private pension funds recorded declines in annualised rates of return at end-December 2022 compared to the same year-earlier period, amid heightened risks on financial markets at the beginning of 2022 Q4, when market risk increased. Nevertheless, in the run-up to the end of the year, the policies implemented internationally and locally caused risk perception to go down, exerting a positive impact on the value of asset portfolios.

Credit risk remains low due to high-quality issuers of fixed-income instruments in fund portfolios, the vast majority being government securities and bonds issued by international financial institutions. The share of deposits with credit institutions and corporate bonds (rated as investment grade) runs at about 11 percent. Private pension funds are only allowed to make investments in fixed-income securities rated as investment grade. At end-December 2022, about 63 percent of the system's assets were invested in Romanian government securities.

Leu-denominated government securities make up a significant proportion of total government securities held by private pension funds as at 31 December 2022, i.e. 91 percent, whereas EUR- and USD-denominated bonds accounted for 8 percent and 1 percent respectively of the bond stock. Taking into account the limited exposure of foreign currency-denominated securities, foreign exchange risk stands at a very low level, being contained in 2022 via the management of the share of foreign currency-denominated assets in total assets and the use of financial derivatives.

In terms of liquidity, the private pension system is currently resilient to any requests for asset payments due to its going through the accumulation phase, whereas outflows (prompted by death, invalidity, retirement, transfer) are still low.

Solvency risk also remains low thanks to several mechanisms to protect participants (separation between the manager's assets and the fund's assets, the setting-up of technical provisions, the Private Pension System Rights Guarantee Fund).

3. Measures implemented for achieving national macroprudential objectives

Looking at the overall picture of the general macroprudential policy framework in the European Economic Area (EEA) as a whole, it is noticeable that a large number of EEA countries have made changes, which became effective in 2022 or were announced for the following period, as regards the recalibration or the operationalisation of macroprudential instruments, with a view to strengthening the resilience of the banking and financial systems.

The adjustment of the macroprudential toolkit targeted both capital buffers and borrower-based measures (Table 3.1). In addition to the common developments and uncertainties identified at the European level, national authorities also took into account the vulnerabilities specific to their jurisdictions. Given the NCMO's role as the designated authority for setting the capital buffers laid down in the Capital Requirements Directive (CRD), this chapter will focus on these types of instruments.

Table 3.1. Summary of macroprudential measures taken in 2022

Country	Buffer				Borrower-based measures		
	CCoB	CCyB	O-SII	SyRB	LTV	DSTI	DTI
Austria							
Belgium							
Bulgaria							
Croatia							
Cyprus							
Czechia							
Denmark							
Estonia							
Finland							
France							
Germany							
Greece							
Hungary							
Ireland							
Iceland							
Italy							
Latvia							

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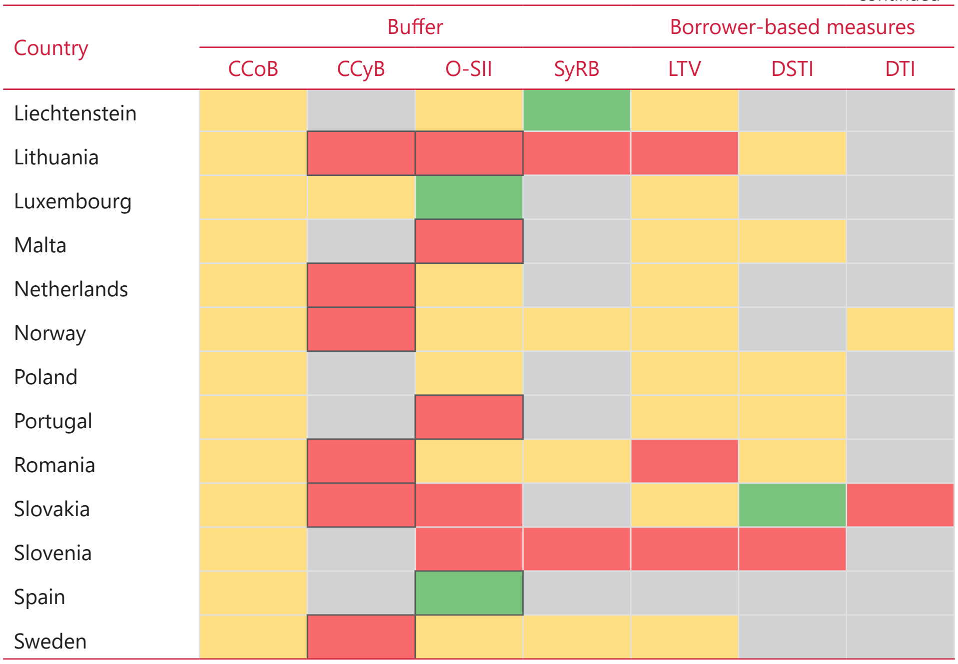


Note: The Table is based on the ESRB information available up to 23 November 2022 and shows the decisions to adjust the macroprudential instruments applied or announced in 2022, as well as the increases made following a number of phase-in decisions taken in previous years and applicable in 2022 or 2023. As for the CCyB rate, phase-in decisions were considered where at least two successive measures were taken to raise the CCyB rate.

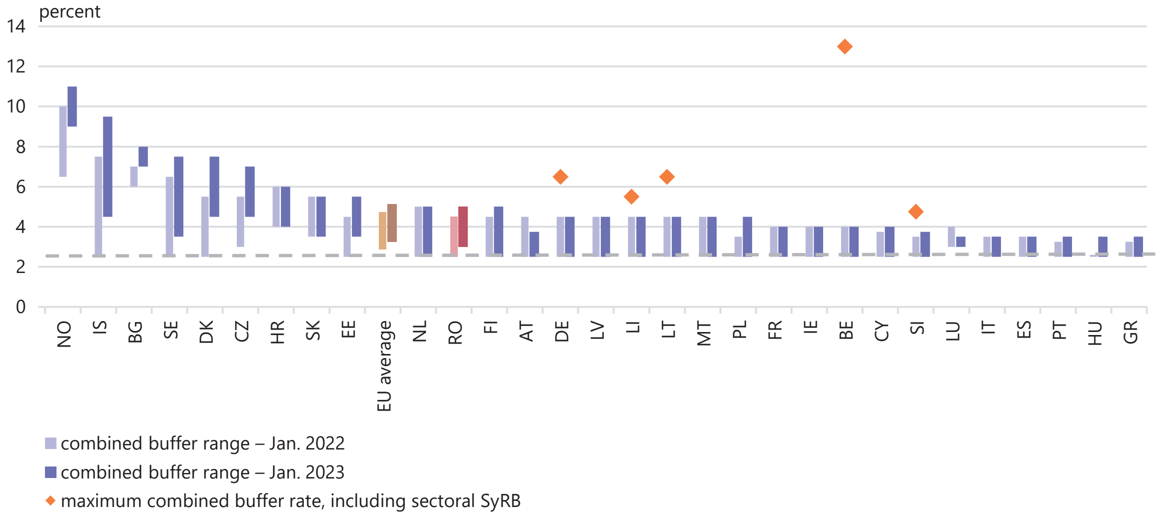
Legend:
the instrument is not applicable in that country or its rate is zero
the instrument's rate and scope have remained unchanged
the instrument's rate and scope have been adjusted to strengthen the requirements
the instrument's rate and scope have been adjusted to ease the requirements or replace it with another measure
instruments that were introduced through a phase-in decision

Source: ESRB, NBR adaptation

The main instrument used by the national authorities was the countercyclical capital buffer (CCyB), with 17 countries deciding to increase the CCyB rate in 2021 and 2022. These measures are generally implemented one year after such a decision is taken, hence some of them became effective in 2022, while others in 2023. Compared to the pre-pandemic period, the CCyB has been increasingly both in terms of the frequency of decisions to raise the buffer rates across the EEA, with countries like Germany applying this buffer for the first time, and in terms of the magnitude of the applicable rates, with some countries announcing a level of 2.5 percent, which is the standard threshold set by European regulations (Czechia, Denmark and Norway). The trend was supported, on the one hand, by the economic recovery following the easing of restrictions applied during the COVID-19 pandemic, alongside the step-up in lending and the intensification of vulnerabilities and, on the other hand, by the need to create a leeway for macroprudential policy in case cyclical or exogenous risks materialise.

As regards the buffer for other systemically important institutions (O-SII), a number of 12 countries have made adjustments: either they have identified more credit institutions as

Chart 3.1. Combined capital buffer applicable in January 2022 and January 2023 – European comparisons



Source: ESRB

being systemically important or they have increased the buffer rates for some institutions within their jurisdiction, both cases indicating a strengthening of macroprudential policy. In addition, the gradual strengthening of the requirements applicable in certain Member States is set to reach the currently applicable maximum threshold in 2023-2025.

The operationalisation of the CRD V legislative framework highlighted two trends have been observed in terms of the recalibration of the systemic risk buffer (SyRB): (i) the adjustment of the buffer, if it had been previously used to address risks arising from an institution's systemic importance or (ii) the introduction of sector-specific capital requirements (Belgium, Germany, Liechtenstein, Lithuania and Slovenia). While this buffer is the least used by EEA countries, the implementation of such an instrument is likely to gain in importance due to the flexibility stemming from the possibility of targeting specific exposures.

The adjustments have also affected the combined buffer requirement[48] across European countries (Chart 3.1). Looking ahead, in light of the announced measures that are pending implementation in the coming period, the level of capital requirements in EEA countries will continue to rise over the period 2023-2024, although buffer rate dynamics will differ from one country to another.

In Romania, the introduction of capital buffers has significantly improved the macroprudential space, the combined capital buffer rate ranging from 3 percent to 5 percent at end-2022 for individual banks, depending on the quality of their loan portfolio and their systemic importance. Moreover, this macroprudential space is foreseen to widen by 0.5 percentage points as of 23 October 2023, following the recalibration of the countercyclical capital buffer rate, according to NCMO Recommendation No. R/4/2022 on the countercyclical capital buffer in Romania (see Section 3.1.1). The decisions on tightening the macroprudential

[48] "Combined buffer requirement" means the total Common Equity Tier 1 capital required to meet the requirement for the capital conservation buffer extended by: (a) an institution-specific countercyclical capital buffer, (b) a G-SII buffer, (c) an O-SII buffer and (d) a systemic risk buffer, as applicable (according to Article 128 CRD).

instruments that have been recently adopted for the Romanian banking sector are in line with the European trends in macroprudential policy stance, as they use the available instruments in a timely and precautionary manner.

Specifically, credit institutions in Romania apply, in addition to the minimum capital requirements and those set on an individual basis under Pillar II, a set of macroprudential requirements, i.e. the capital buffer requirement (Table 3.2), which consists of Common Equity Tier 1 capital.

Table 3.2. Capital buffer requirements for credit institutions in Romania

Capital buffer	Buffer rate	
	2022	2023
Capital conservation buffer (CCoB)	2.5%	2.5%
Countercyclical capital buffer (CCyB)	0.5%*	1%**
Systemic risk buffer (SyRB)	0%,1% or 2%	0%,1% or 2%
Other systemically important institutions buffer (O-SII buffer)	0.5%, 1%, 1.5% or 2%	0.5%, 1%, 1.5% or 2%

*) as of 17 October 2022, credit institutions have applied a CCyB rate of 0.5 percent; prior to this date, the buffer rate was 0 percent

**) as of 23 October 2023, credit institutions will apply a CCyB rate of 1 percent

Source: NBR

3.1. Capital buffers

3.1.1. The countercyclical capital buffer

Implementation framework of the macroprudential instrument

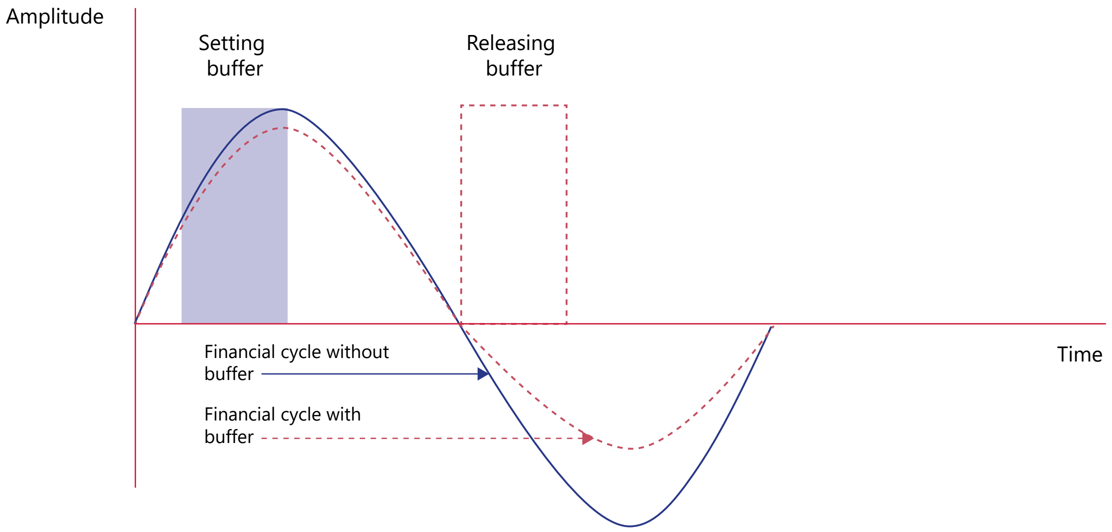
On 18 June 2014, the European Systemic Risk Board issued Recommendation on guidance for setting countercyclical buffer rates (ESRB/2014/1), whereby it sets the basic principles that designated authorities should adhere to when assessing and setting the countercyclical buffer rates applicable to Member States. The Recommendation is composed of four subrecommendations regarding the following: (i) principles guiding the setting of CCyB rates (Figure 3.1), (ii) guidance on the calculation of the benchmark buffer rate, (iii) variables that indicate the build-up of risks in the financial system and (iv) variables that indicate that the buffer should be maintained, reduced or fully released.

Figure 3.1. Principles recommended by the ESRB for calibrating the CCyB rate

Objective	Decisions on the appropriate countercyclical buffer rates should be guided by the objective of protecting the banking system against potential losses associated with the build-up of cyclical systemic risk, thereby supporting the sustainable provision of credit to the real economy throughout the financial cycle.
Buffer guide	The deviation of the ratio of credit-to-GDP ratio from its long-term trend – the credit-to-GDP gap – should serve as a common starting point in guiding decisions on countercyclical buffer rates, most notably in the build-up phase. However, designated authorities should also take into account other quantitative and qualitative information when assessing cyclical system-wide risk and setting the appropriate countercyclical buffer rate. This includes information that reflects national specificities. Designated authorities should explain to the public what information is used, and how it is taken into account in setting the relevant buffer rate.
Risk of using misleading information	Designated authorities should assess the information contained in the credit-to-GDP gap and any other relevant variables or models that combine variables, being mindful that the information they provide may be misleading. Designated authorities should take this assessment into account when exercising their judgement regarding the sustainability of credit growth in order to set the appropriate countercyclical capital buffer rate. The usefulness of these variables and models should be regularly reassessed.
Release of the buffer	Designated authorities should promptly release the countercyclical capital buffer when risks materialise. This can mitigate the pro-cyclical behaviour of credit institutions by helping them absorb losses, while still maintaining lending to the real economy and complying with solvency requirements. When risks do not materialise but are judged to recede, a gradual release of the buffer may be more appropriate. If a designated authority reduces the existing buffer rate, it should decide on an indicative period during which no increase in the buffer rate is expected.
Communication	Designated authorities should develop a clear strategy for communicating their decisions on the countercyclical capital buffer. As part of this strategy, they should establish a mechanism for coordinating with other designated authorities as well as the ESRB. They should also establish transparent stable processes and well-defined channels of communication to key stakeholders and the public.
Recognition of buffer rates	In addition to the mandatory reciprocity arrangements set by Union law, designated authorities should generally recognise the countercyclical buffer rates applied in other Member States. Designated authorities should consider the cross-border implications of not recognising a buffer rate for exposures to another Member State in excess of the mandatory level. When not recognising a buffer rate set by the designated authority of another Member State in excess of the mandatory level, designated authorities should notify: (a) the ESRB; (b) the designated authority setting the buffer rate; (c) the ECB, where at least one of the designated authorities setting or not recognising the buffer rate is from a Member State participating in the Single Supervisory Mechanism in accordance with Regulation (EU) No 1024/2013.
Other macroprudential instruments	As part of their macroprudential policy strategy, designated authorities should consider when to use the countercyclical capital buffer in isolation, when to use other instruments instead of the countercyclical capital buffer, when to use other instruments instead of the buffer and when to combine the buffer with other instruments.

Source: ESRB

Figure 3.2. The mechanism for setting and releasing the countercyclical capital buffer



Source: ESRB, *Flagship Report on Macro-prudential Policy in the Banking Sector*

Considering the rationale underlying its introduction into EU legislation, the CCyB buffer is intended to help address cyclical systemic risks in the financial system. This capital buffer should be set up when the cyclical systemic risk increases, with a view to ensuring the resilience of the banking sector when systemic risks are manifest, in which case the capital buffer should be released. The proper use of the buffer helps, on the one hand, maintain the credit supply in all phases of the financial cycle and, on the other hand, leads to a reduction in the magnitude of the financial cycle (Figure 3.2).

The CCyB buffer consists of Common Equity Tier 1 capital, ranging from 0 percent to 2.5 percent of the total risk-weighted exposure amount, calibrated in steps of 0.25 percentage points. However, it should be noted that, where very high systemic risks are identified, the EU rules allow for the use of a buffer rate higher than the 2.5 percent upper limit.

The predictability of the measure is an important element distinguishing the CCyB buffer from the other macroprudential instruments, as an increase in the CCyB rate will be implemented at least 12 months after the macroprudential authority took the decision. The period between the decision-making and the actual implementation of the measure provides time for credit institutions to adapt to the new requirements, on the one hand and, on the other hand, ensures flexibility to the macroprudential authority so that the measure can be revised, if necessary, until the actual implementation date. By contrast, a buffer reduction shall take effect immediately, without any waiting time between the decision and its implementation. The measures to lower the CCyB rate, taken in March 2020 following the outbreak of the COVID-19 pandemic, are an example in this respect, as they were implemented shortly after the decision was made.

Once every three years, Member States shall send to the ESRB a report on the actions they take in response to Recommendation ESRB/2014/1 on guidance for setting countercyclical buffer rates. The first reporting deadline was 30 June 2016. The next deadline set for 30 June 2019 was initially postponed by one year, by Decision ESRB/2019/15, and then cancelled in accordance with Decision ESRB/2020/10. Under the circumstances, the second reporting deadline to the ESRB on the implementation of this recommendation was 30 June 2022. The reports submitted by each Member State are analysed within a European working group. In May 2019, the ESRB published the first assessment of the level of implementation of Recommendation ESRB/2014/1 by Member States and the European Central Bank based on the 2016 reports. According to the assessment results, 26 out of the 28 countries under analysis were given an overall grade of fully compliant (FC) with the Recommendation, Romania included.

The experience across the EU

After the outbreak of the pandemic, in order to support bank lending to the real sector, the Member States that had activated the countercyclical buffer in the past, acted to reduce the buffer rates applicable to exposures in their jurisdictions in part or in full (Chart 3.2). However, taking into account the boom in lending particularly in the first part of the year, but also the prudential indicators showing a period favourable for the build-up of capital buffers, amid the pessimistic economic forecasts in the near future, during 2022 many Member States decided to increase the CCyB rate (Chart 3.3).

These measures were taken in the context in which the ESRB, in the warning issued at end-September 2022, encourages national supervisory authorities to make prudent assessments so as to ensure the resilience of financial institutions and the related financial market infrastructures, in the event of future shocks materialising. Thus, Norway, Sweden, Denmark, Iceland, Romania, Czechia, Bulgaria, Estonia, Germany, Croatia, Hungary, Ireland, the Netherlands, France, Slovakia, Lithuania and Cyprus decided to raise the CCyB buffer rate over 2023-2024. Considering the CCyB rate hikes to be applied, capital requirements in the Member States will be higher, in addition to the increases already recorded during 2022.

Chart 3.2. CCyB rate in EEA countries at end-2020

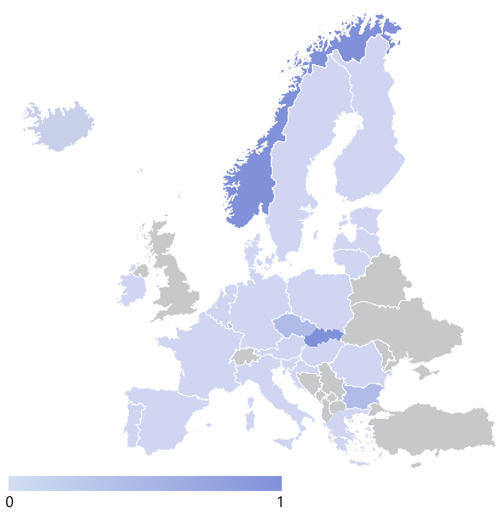
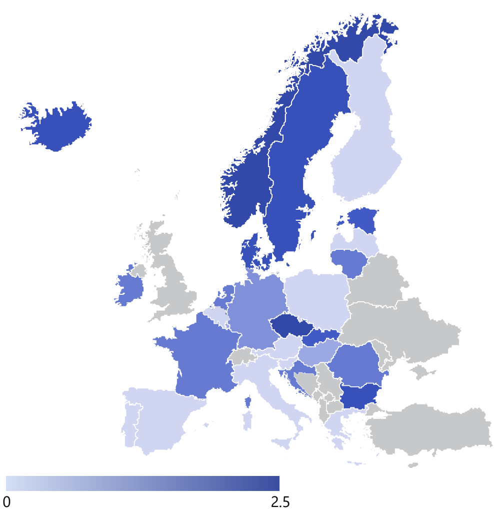


Chart 3.3. CCyB rate in EEA countries announced for 2023-2024



Source: ESRB

Some European countries (Lithuania, Estonia and Sweden) use an approach that implies a positive neutral countercyclical capital buffer rate in the periods when no excessive credit growth is reported yet. In these cases, the national macroprudential authorities built on the premise that the CCyB rate should not be set at 0 percent in the beginning, as most countries decided to do, but at a positive value.

In December 2022, 10 out of the 30 European Economic Area (EEA) countries had in place a positive CCyB rate. The maximum level was recorded in Iceland, where the applicable CCyB rate was 2 percent, followed by Norway and Czechia with 1.5 percent. In Bulgaria, Denmark, Slovakia, Sweden and Estonia, the buffer rate was set at 1 percent, while in Romania and Luxembourg at 0.5 percent (Table 3.3).

Table 3.3. CCyB rates applied by EEA countries at the end of 2022 and CCyB rates announced for 2023-2024

Country	CCyB rate (%) at end-2022	CCyB rate (%) announced for 2023-2024
Austria	0	0
Belgium	0	0
Bulgaria	1	2
Croatia	0	1
Cyprus	0	0.5
Czechia	1.5	2.5
Denmark	2	2.5
Estonia	1	1.5
Finland	0	0
France	0	1
Germany	0	0.75
Greece	0	0
Hungary	0	0.5
Iceland	2	2
Ireland	0	1
Italy	0	0
Latvia	0	0
Liechtenstein	0	0
Lithuania	0	1
Luxembourg	0.5	0.5

– continued –

Country	CCyB rate (%) at end-2022	CCyB rate (%) announced for 2023-2024
Malta	0	0
Netherlands	0	1
Norway	2	2.5
Poland	0	0
Portugal	0	0
Romania	0.5	1
Slovakia	1	1.5
Slovenia	0	0
Spain	0	0
Sweden	1	2

unchanged 0.5 pp increase 0.75 pp increase 1 pp increase

Source: ESRB

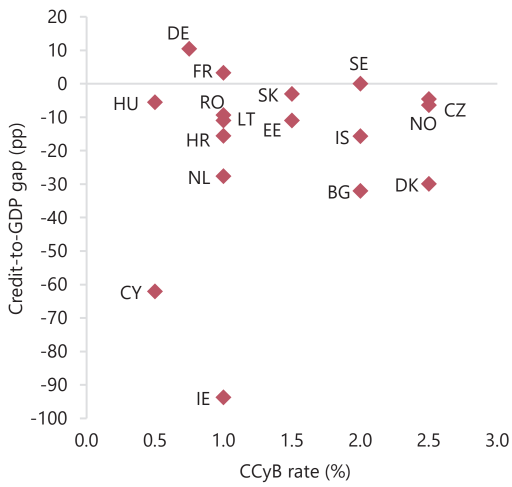
Prior to the outbreak of the COVID-19 pandemic, the countercyclical buffer rates were increased especially in Northern EEA countries (Norway, Sweden, Denmark and Iceland) and Eastern EEA countries (Czechia, Slovakia and Lithuania). In the current context, the upward trend in buffer rates was broad-based, with countries such as Germany or the Netherlands, which had never applied positive CCyB rates, taking similar measures. As for CEE countries, Czechia has recently announced it will apply a maximum 2.5 percent CCyB rate as of 1 April 2023, while Bulgaria will implement a 2 percent buffer rate as of 1 October 2023 and Croatia a 1 percent rate starting with 31 December 2023. While some countries decided to gradually increase the countercyclical capital buffer rate (e.g. Czechia raised the CCyB rate four times in succession), other states implemented significant hikes based on one single measure (e.g. Iceland increased the buffer rate from 0 percent to 2 percent as of 29 September 2022). Therefore, the NCMO Decision to recommend the introduction of a 1 percent CCyB buffer starting 23 October 2023 is in line with the macroprudential policy trends at European level.

Looking at the arguments put forward by the European macroprudential authorities for the positive calibration of this instrument, other indicators are often considered in addition to the Basel standard indicator. Most of the countries that decided to increase the CCyB rate reported a negative deviation of the credit-to-GDP ratio from its long-term trend at the time of the decision (Box E). According to the ESRB recommendation, the CCyB buffer should be increased to the extent to which this standard indicator enters positive territory and exceeds the 2 percentage point threshold. Under the circumstances, even if the Basel indicator showed no signs, some countries decided however to increase the CCyB rate, out of the need to build up capital buffers that can be released in the event of systemic risk materialising, by taking into account other indicators in the calibration process.

Box E. The use of the credit-to-GDP gap when taking decisions to increase the CCyB rate

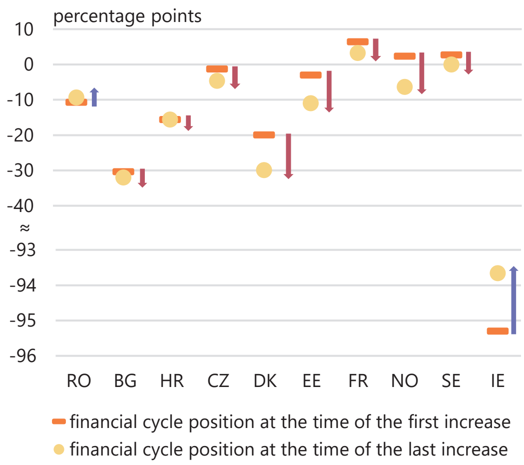
The deviation of the credit-to-GDP from its long-term trend (credit-to-GDP gap) is one of the most important early warning indicators of financial crises, as confirmed by numerous research papers[49] on this topic. This prompted the Basel Committee to recommend calibrating capital requirements based on the phase of the financial cycle, which resulted in the creation of the countercyclical capital buffer. Therefore, ever since its establishment, the CCyB has been linked to the credit-to-GDP ratio, this association being thereafter used in the CRD/CRR regulatory framework too. The Basel Committee also proposed a formula for calibrating the buffer based on the credit-to-GDP gap[50], noting that this could be a starting point for the analysis carried out by the national authorities, without recommending a mechanical application of the buffer[51].

Chart E.1. Credit-to-GDP gap at the time of the last decision to increase the CCyB in 2021-2022[52]



Source: ESRB, Member States' notifications

Chart E.2. The financial cycle position at the time of the first and last decision to increase the CCyB in 2021-2022[50]



Source: ESRB, Member States' notifications

Although countries have developed advanced methodologies for setting countercyclical buffer rates, the credit-to-GDP gap remains a worldwide standard; therefore, any changes to the CCyB shall be disclosed by the states alongside the calculation of its rate. In addition, the European regulations require the designated national authorities

49 Alessi, L., & Detken, C. – "Real time early warning indicators for costly asset price boom/bust cycles. A role for global liquidity", *ECB Working Paper* No 1039, 2009.
Borio, C. E., & Drehmann, M. – Assessing the risk of banking crises – revisited, *BIS Quarterly Review*, March 2009.
Drehmann, M., Borio, C. E., Gambacorta, L., Jiménez, G., & Trucharte, C. – "Countercyclical capital buffers: exploring options", *BIS Working Paper* No 317, July 2010.

50 The deviation of the standard indicator is calculated based on a Hodrick-Prescott filter, with lambda set at 400,000.

51 Guidance for national authorities operating the countercyclical capital buffer, December 2010 (bis.org)

52 Credit-to-GDP deviation from trend was calculated based on the Hodrick-Prescott filter with lambda set at 400,000.

to publish on a quarterly basis the relevant credit-to-GDP ratio and its deviation from the long-term trend. Given the recent wave of CCyB increases over the past two years, this moment represents an opportunity to assess the adequacy of the indicator in the context of the new macroprudential policy decisions.

Based on the premise of a calibration performed strictly through the mechanism proposed by the Basel Committee, no country should have a positive countercyclical capital buffer rate if the credit-to-GDP gap is in negative territory. But, at European level, the financial cycle position and the adopted CCyB rate are highly heterogeneous (Chart E.1). Out of the 17 European countries that increased the CCyB in 2021 and/ or 2022, only two (Germany and France) recorded a positive deviation of the Basel indicator at the time of the decision. However, even in the case of these two countries, the Basel methodology provides for different CCyB rates than the rates adopted by the states referred to: 2.5 percent instead of 0.75 percent for Germany, 0.5 percent instead of 1 percent for France.

Another relevant aspect refers to the evolution of the deviation from trend in countries that increased the CCyB several times in 2021 and 2022. In the initial theory, a successive CCyB rise is substantiated only if lending continues to overheat. However, in 8 out of the 10 multiple growth states, the financial cycle thus calculated contracted between the time of the first and the last decision (Chart E.2). Ireland and Romania were the exceptions that posted a narrowing of the deviation from trend by little more than 1 percentage point in the period between the two decisions to raise the CCyB.

In support of the use of the credit-to-GDP gap, mention should be made that the problem may arise only from the filtering method opted for and not from the indicator itself. Several European countries report alternative filtering measures to the ESRB. In Romania, Czechia, Cyprus, Hungary, Lithuania, Ireland and Norway, the financial cycle is in a higher position according to the alternative methodologies, compared to the standard deviation-from-trend calculation. Conversely, in the case of France, Germany and Estonia, the alternative measures point to a lower financial cycle. Only in Romania, Czechia and Norway the deviation from trend calculated alternatively stood so high as to suggest the imposition of a CCyB. In addition, countries operating multiple interventions in the countercyclical capital buffer are further associated with a financial cycle contraction between the time of the first and the last measure, even based on the alternative calculation, with Czechia being the only exception.

To sum up, the recent countercyclical buffer rate increase points to a shift in the outlook from slowing the excessive growth of lending to ensuring the resilience of the financial system through a flexible instrument that allows continued financing of the real sector in adverse situations. The extension of the CCyB scope is not yet provided for in the official legislation itself, which continues to link the buffer with the credit-to-GDP gap, although other factors relevant to its calibration are taken into consideration. However, there are signs that this outlook could change in the future, both at European level, given the response of the European authorities to the consultation launched by the EC in regard to the future macroprudential policy strategy, and at international level, given the BCBS release[53] acknowledging the possibility of using a positive-cycle neutral CCyB rate, decoupled from the financial cycle.

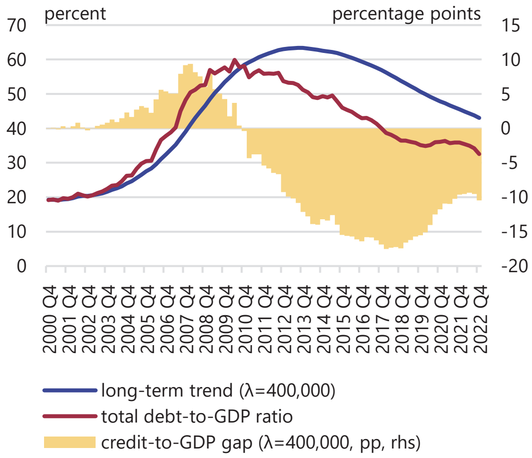
Implementation of the countercyclical capital buffer in Romania

In Romania, the CCyB buffer rate was raised from 0 to 0.5 percent, for the first time since its implementation into national law (2016), following the NCMO General Board's decision of 14 October 2021. Based on the application methodology of the buffer, the increase became effective on 17 October 2022, namely 12 months after the announcement of the approval of NCMO Recommendation No. R/7/2021 on the countercyclical capital buffer in Romania. This measure was taken in the context in which, at the time of the decision: (i) lending increased fast, amid the recovery from the economic contraction seen in the context of the pandemic outbreak, (ii) the tensions surrounding macroeconomic equilibria persisted, especially via the twin deficits, (iii) the high levels of voluntary capital reserves built up by the banking sector and of liquidity indicators, exceeding the EU averages, allow capital to be conserved, without affecting the loan supply, and (iv) the eligible borrowers had access to finance, with credit institutions estimating credit standards to remain unchanged in the case of for loans to non-financial corporations and for both categories of loans to households. The NBR implemented NCMO Recommendation No. R/7/2018 by issuing NBR Order No. 6 of 19 November 2021 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer.

During 2022, a decision was taken to further raise the countercyclical capital buffer rate, from 0.5 percent to 1 percent. The decision was adopted following the third meeting of the NCMO General Board on 20 October 2022. Considering the manner this buffer is applied, the increase in its rate shall become effective 12 months after the approval of NCMO Recommendation No. R/4/2022, i.e. as of 23 October 2023. The new decision to increase the CCyB rate was taken in the context in which recent experience showed the importance of proactively building up capital buffers to mitigate possible shocks and allow the banking sector to subsequently support economic recovery. At the same time, the ESRB warning, published at the end of September 2022, was also taken into account, drawing attention to the growing risks and the need for both credit institutions and national supervisory authorities or EU institutions to make prudent assessments so as to ensure the resilience of financial institutions and financial market infrastructures, in the event of adverse scenarios materialising. Moreover, at national level, credit institutions are expected to take a cautious approach, inter alia by consolidating the capital base, where: (i) an additional build-up of risks to financial stability is found compared to the previous analysis; (ii) the growth rate of lending remains among the highest in the European Union; (iii) and vulnerabilities associated with current account deficit and budget deficit persist. The liquidity and profitability levels of the banking sector allow for an increase in the countercyclical buffer rate, without

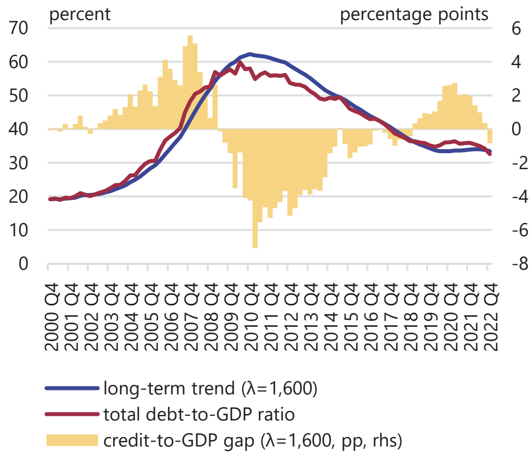
[53] Newsletter on positive cycle-neutral countercyclical capital buffer rates (bis.org)

Chart 3.4. Analysis of the countercyclical capital buffer in Romania (2000 Q1 – 2022 Q4), assuming a long financial cycle (Basel indicator)



Source: NBR, NIS, NBR calculations

Chart 3.5. Analysis of the countercyclical capital buffer in Romania (2000 Q1 – 2022 Q4), assuming a short financial cycle[54] (alternative indicator)



Source: NBR, NIS, NBR calculations

negatively affecting banks' loan supply to eligible borrowers. The NBR implemented the recommendation by issuing Order No. 7 of 25 November 2022 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer.

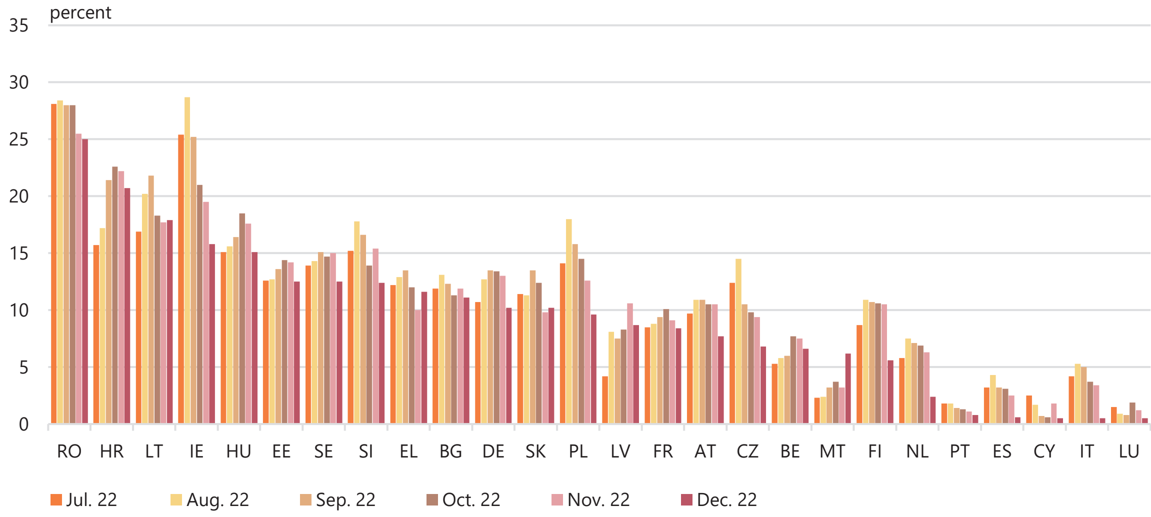
Based on the analyses underlying the latest decision to increase the buffer rate, the measure will not require any effort (such as a new capital infusion) on the part of credit institutions, considering the available capital surplus; instead it will preserve part of the capital given that, on the one hand, (i) the additional capital buffers are expected to dissipate following the expiry of the recommendation on the restriction of dividend distributions and other measures included in the "quick fix" package during the COVID-19 pandemic, and, on the other hand, (ii) increasing credit risk vulnerabilities are accumulating.

Among the tools used to substantiate the decisions on setting the CCyB rate are the Basel standard indicator and the alternative indicator[55], which measure the deviation of the credit-to-GDP ratio from its long-term trend for developed economies (a long financial cycle of over 20 years) and a variant better adapted to the specificities of the domestic economy (a short financial cycle with a similar length to that of the business cycle). Based on the Basel definition, according to which the financial cycle spans approximately 20 years, the deviation is negative (-10.48 percentage points) at the end of December 2022 (Chart 3.4). This indicator is the buffer guide proposed by the ESRB in the above mentioned recommendation and is calculated and monitored on a quarterly basis by all Member States. Based on the additional approach, adapted to the characteristics of the national economy, the deviation from the long-term trend is negative (-0.84 percentage points in December 2022), down from the levels recorded in previous quarters (Chart 3.5).

[54] The smoothing parameter of 1,600 is used in cycles similar in length to business cycles, referred to as short cycles (less than 8 years) in the literature.

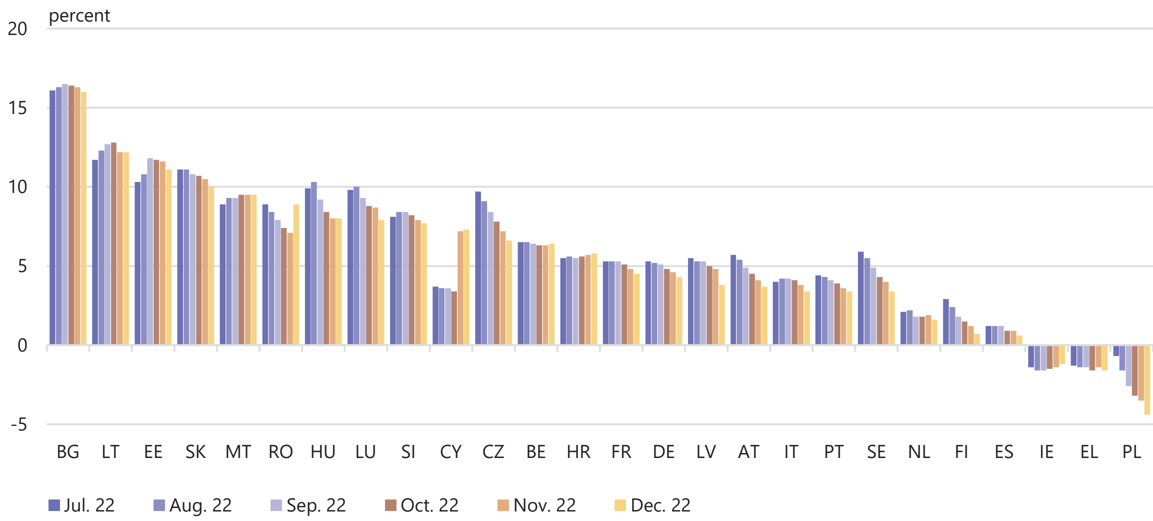
[55] Both methodologies use the Hodrick-Prescott filter; the difference between them is given by the smoothing parameter.

Chart 3.6. Annual growth rates of loans to non-financial corporations



Source: ECB, Statistical Data Warehouse

Chart 3.7. Annual growth rates of loans to households

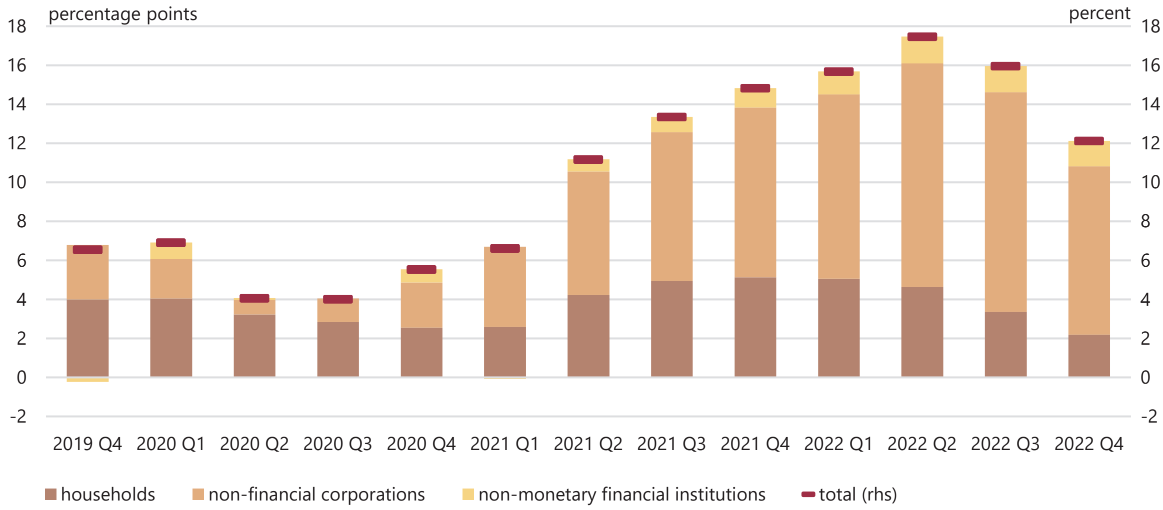


Source: ECB, Statistical Data Warehouse

Looking at developments in lending, the data for December 2022 indicate the growth rate of loans to non-financial corporations remaining in positive territory in all EU Member States (Chart 3.6). At the same time, loans to households also recorded upward dynamics (for December, only three Member States posted a contraction in the stock of loans to this sector). According to ECB data, in December 2022 Romania recorded the strongest increase in the volume of loans to non-financial corporations across the EU, followed by Croatia and Lithuania. The growth rate of loans to households (Chart 3.7) ranks sixth across EU Member States (December 2022).

Looking at the data for the last two years, the share of loans granted to non-financial corporations by the Romanian banking sector in total loans to the private sector saw a significant increase in quarter-on-quarter terms, in contrast to the structure observed before

Chart 3.8. Contribution to the annual dynamics of loans to the private sector by institutional sector



Source: NBR

the pandemic, when lending to households made the largest contribution (Chart 3.8). Thus, the rise in the additional indicator, used as a benchmark in the calibration of the CCyB buffer, stemmed largely from the indebtedness of the non-financial corporations sector.

3.1.2. Buffer for other systemically important institutions

Implementation framework of the macroprudential instrument

In the macroprudential regulatory framework, the buffer for other systemically important institutions (O-SII buffer) is deemed as an instrument to mitigate the potential negative effects that large and highly important financial institutions can have on the economic environment and financial stability of a country. The global systemically important institutions buffer (G-SII buffer) is used to address the risks to the international financial system that may be affected by large institutions with significant coverage and cross-border operations.

At European level, the ESRB recommends macroprudential authorities to define and pursue the fulfilment of intermediate macroprudential objectives set for their national financial system as a whole. These intermediate objectives also include that of "limiting the systemic impact of misaligned incentives with a view to reducing moral hazard". This refers to the risks that large financial institutions, identified as having systemic importance for the national or international financial systems (O-SIIs or G-SIIs), can spread across the financial system as a whole or the real economy due to their importance, the interconnectedness with other financial institutions, as well as the perception that they are "too big to fail".

Year 2022 was marked by uncertainties caused by the effects of the COVID-19 pandemic, the outbreak of the war in Ukraine, tensions in the energy market and the central banks' response, which tightened the monetary policy in fighting inflation. As concerns the macroprudential policy, its stance was eased at European level at the onset of the pandemic, as part of the support measures for the real and financial sectors, and was tightened in 2022, once with the economic recovery and the advance in lending, together with the mounting sectoral vulnerabilities. With regard to the O-SII buffer, introduced as a macroprudential instrument in line with the CRD IV regulatory framework in order to enhance the resilience of key banks in periods of economic downturn, its manner of implementation changed, following the transposition of CRD V into national law.

The main amendments brought about by the shift to the new regulatory framework refer to the obligation that the O-SII and SyRB buffers[56] need to be cumulative, while ensuring a clear definition of the different role of the two buffers. However, where the sum of the O-SII and SyRB buffer rates would be higher than 5 percent, the national authorities shall seek the approval of the European Commission before the measure becomes effective. In most European countries, the transposition of the new regulatory framework (CRD V) into the national law was completed, the implementation strategy of macroprudential instruments being adjusted accordingly.

The experience across the EU

In order to ensure a level playing field in the EU banking market and to harmonise the EU countries' methods of designating systemically important institutions, the European Banking Authority (EBA) developed a common methodology for identifying systemically important banks (Guidelines EBA/GL/2014/10[57]), with the help of national authorities. The methodology outlines a number of guidelines that apply to the analyses on identifying systemically important banks, while also leaving room for flexibility to the national authorities, given the significant differences in the specificities of Member States' financial systems.

The methodology is developed in two steps. In the first step, a specific score is determined for each institution based on the calculation of 10 indicators that are covered by the following criteria: (a) size; (b) importance for the economy of the relevant Member State, capturing substitutability and the financial institution infrastructure; (c) complexity of cross-border activity; (d) interconnectedness of the institution or group with the financial system. This step ensures comparability and transparency in the assessments to designate systemically important institutions among Member States. In the second step, the specificities of the national financial systems are taken into account and a set of optional indicators may be used, so as to capture a fair view of the links between financial systems and the real economy. Following the annual assessments to identify systemically important institutions, all EU Member States submit the results to the ESRB.

[56] According to CRD IV, systemically important credit institutions had the obligation to establish the buffer at the higher of the O-SII buffer and systemic risk buffer (where it applied to total exposures).

[57] Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs) – EBA-GL-2014-10_RO_GL on O-siis.pdf.

Chart 3.9. Number of O-SIIs in EEA countries in 2023

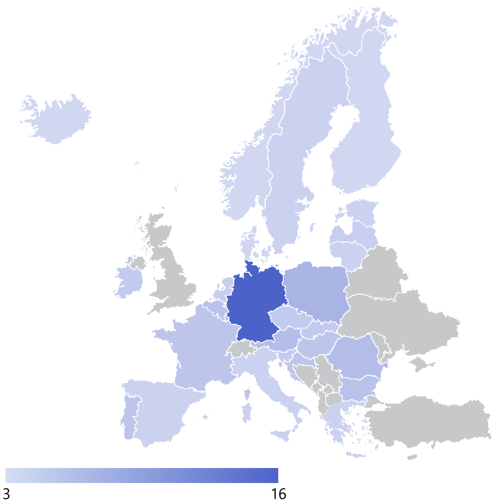
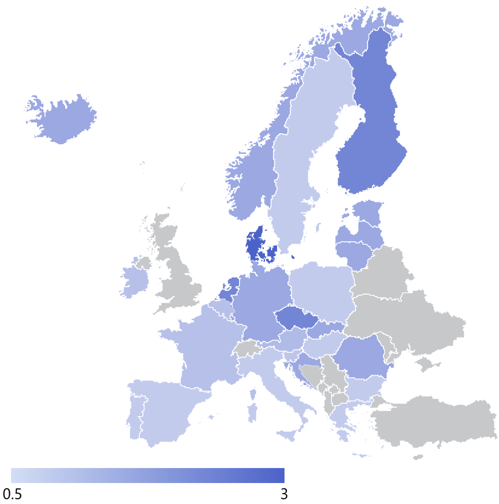


Chart 3.10. Maximum O-SII buffer rate in EEA countries in 2023



Source: ESRB

In 2022, 181 systemically important institutions were identified in the EEA (Chart 3.9), on a rise from the year before, when 173 entities were classified as O-SIIs, which shows the tightening of macroprudential policy and O-SII buffer requirements. The most significant changes were reported by Germany and Norway, as each of those countries added two entities to the list of O-SIIs. In Czechia, France, Lithuania, Portugal, Romania and Slovakia, the number of O-SIIs rose by one entity in each case. Unlike the 2021 identification exercise, only Cyprus and Luxembourg reported declines in the number of O-SIIs: from six to five (Cyprus) and from seven to six (Luxembourg). The number of O-SIIs varies across Member States, i.e. from 16 in Germany to three in Finland, Iceland, Lichtenstein and Norway, depending on the concentration and specificities of every national banking sector.

The tightening trend of macroprudential policies can also be seen in the calibration of the buffer and the applicable buffer requirements. As for the maximum O-SII buffer rate[58], in 2022 (Chart 3.10), six countries increased the buffer requirements, i.e. Cyprus, Greece and Slovenia by 0.25 percentage points, Finland and Hungary by 0.5 percentage points, and Austria by 0.75 percentage points (the highest rise). Luxembourg was the only country where the maximum O-SII buffer rate was lowered from 1 percent to 0.5 percent. Additionally, the changes seen throughout this year can also be ascribed to the shift from CRD IV to CRD V or to phase-in measures, implying the gradual rise in the O-SII buffer rate in certain countries[59].

Moreover, in 2022, eight systemically important banks were identified in Europe, the same as in the year before. These institutions are based in France (4), Germany (1), Italy (1), the Netherlands (1) and Spain (1).

58 Most countries apply different O-SII buffer rates, based on the bucketing approach, depending on the systemic importance of the institution.

59 The maximum buffer rate is expected to be reached in 2023 or 2024 (e.g. in Malta, Hungary, Austria, Greece, Lithuania, Portugal, Slovenia and Spain).

In 2022, the European Commission launched a public consultation on the review of the EU macroprudential framework, with the participation of European institutions (EBA, ECB and ESRB), the national macroprudential authorities, the private sector and the academia. Although it was agreed that the macroprudential policy played a significant part in protecting financial stability during the COVID-19 pandemic, many participants in the survey conducted during the consultation were of opinion that the toolkit in use was too complex and that some instruments should be considerably simplified or even eliminated, in order to make the macroprudential framework more effective. The topics also covered the implementation of the O-SII buffer. To this end, it is acceptable that the differences between the O-SII buffer rates applicable to banks in different Member States are not fully justified, a more coherent approach to the identification of O-SIIs and calibration of the O-SII buffer rate being deemed necessary EU-wide. The proposals to solve this matter included that of mandating EBA to apply a minimum buffer rate in the O-SII buffer calibration methodology used in the EU, together with the methodology to identify systemically important institutions and provide guidelines for the ranges to be applied.

Implementation of the buffer for other systemically important institutions in Romania

In Romania, the National Committee for Macroprudential Oversight (NCMO) is the designated authority within the meaning of provisions contained in Sections I and II, Chapter 4, Title VII of Directive 2013/36/EU, being responsible for issuing recommendations to the national competent authorities with regard to the implementation of capital buffers applicable to credit institutions. Thus, in accordance with Art. 21 para. (1) and Art. 232 para. (6) of NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments, as subsequently amended and supplemented, the NCMO identifies on an individual, sub-consolidated or consolidated basis, as applicable, other systemically important institutions and reviews the buffer for other systemically important institutions (O-SII buffer) at least annually.

The methodology to identify systemic banks is harmonised with the recommendations of Guidelines EBA/GL/2014/10 and is applied by the NBR, in its capacity as sectoral supervisory authority. This methodology was updated in 2021 with the new provisions of the European regulatory framework (CRD V) for the buffer applicable to national systemically important banks. Moreover, a new O-SII buffer calibration method was implemented starting 1 January 2022, which takes into account the scores obtained by systemic banks in the first stage of the assessment to determine the mandatory indicators recommended by the European Banking Authority. It implies using the bucketing approach, i.e. 500-basis point buckets, which are assigned O-SII buffer values in ascending order based on systemic importance, in equal increments of 0.5 percentage points (from 0.5 percent to 3 percent), Table 3.4.

Table 3.4. O-SII buffer calibration methodology based on the bucketing approach

Bucket	Limits (minimum – maximum) – basis points –	O-SII buffer rate – % of total risk-weighted exposures –
1	275 – 500	0.5%
2	501 – 1,000	1%
3	1,001 – 1,500	1.5%
4	1,501 – 2,000	2%
5	2,001 – 2,500	2.5%
6	above 2,500	3%

Note: The first bucket has a minimum threshold of 275 basis points, from which banks are automatically designated as being systemically important, according to the methodology approved by the NBR, in its capacity as sectoral supervisory authority. Where a bank is assessed as being systemic based on additional indicators, but its score assigned by the mandatory indicators stands below the 275 basis point threshold, then the institution falls within the first bucket.

Source: NBR

NCMO Recommendation No. R/8/2021 on the capital buffer for other systemically important institutions in Romania whereby the National Bank of Romania is recommended to impose, starting 1 January 2022, a capital buffer for other systemically important institutions (O-SII buffer), on an individual or consolidated basis, as applicable, calculated based on the total risk exposure amount for all the credit institutions identified as having a systemic nature based on the data reported as at 30 June 2021, was applied in 2022, as follows: (i) 2 percent for Banca Transilvania S.A. (consolidated level), (ii) 1.5 percent for Banca Comercială Română S.A. (consolidated level), UniCredit Bank S.A. (consolidated level), BRD – Groupe Société Générale S.A. (consolidated level), (iii) 1 percent for Raiffeisen Bank S.A. (consolidated level) and (vi) 0.5 percent for CEC Bank S.A. (individual level), Alpha Bank România S.A. (individual level), OTP Bank România S.A. (consolidated level) and Banca de Export-Import a României EXIMBANK S.A. (consolidated level).

The latest assessment based on the data available as at 31 December 2021 had similar results to those obtained in the previous assessment. Specifically, the analysis showed there are nine systemically important banks, namely Banca Transilvania S.A., UniCredit Bank S.A., Banca Comercială Română S.A., BRD – Groupe Société Générale S.A., Raiffeisen Bank S.A., OTP Bank S.A., CEC Bank S.A., Alpha Bank S.A. and Banca de Export-Import a României EXIMBANK S.A. NCMO Recommendation No. R/5/2022 sets forth the additional capital requirements for systemically important institutions starting 1 January 2023 (Table 3.5). Six of the nine banks identified as having systemic importance are subsidiaries of foreign banks in other Member States (Austria – BCR, Raiffeisen; Italy – UniCredit; Greece – Alpha Bank; France – BRD; Hungary – OTP Bank) which are O-SIIs in their home countries[60]. Three credit institutions included in the group of systemic banks have Romanian capital (EXIMBANK and CEC Bank) or majority Romanian capital (Banca Transilvania). The O-SII buffer applicable to subsidiaries of foreign banks was set considering the limits established by the European

[60] The NBR may set an O-SII buffer for these institutions, but its maximum level is capped in accordance with the European regulations in force.

regulatory framework (CRD V) effective at national level. The National Bank of Romania implemented NCMO Recommendation No. R/5/2022 by issuing NBR Order No 2/2022[61].

Table 3.5. O-SIIs identified in 2023

Credit institution	Score based on mandatory indicators (EBA Guidelines)	O-SII requirement (% of the total risk exposure amount)	Applicability of O-SII buffer
Banca Transilvania S.A.	1,616	2.0	consolidated basis
UniCredit Bank S.A.	1,290	1.5	consolidated basis
Banca Comercială Română S.A.	1,253	1.5	consolidated basis
BRD – Groupe Société Générale S.A.	1,165	1.5	consolidated basis
Raiffeisen Bank S.A.	907	1.0	consolidated basis
OTP Bank România S.A.	458	0.5	consolidated basis
CEC Bank S.A.	433	0.5	individual basis
Alpha Bank România S.A.	351	0.5	individual basis
Banca de Export-Import a României EXIMBANK S.A.	289	0.5	individual basis

Source: NCMO

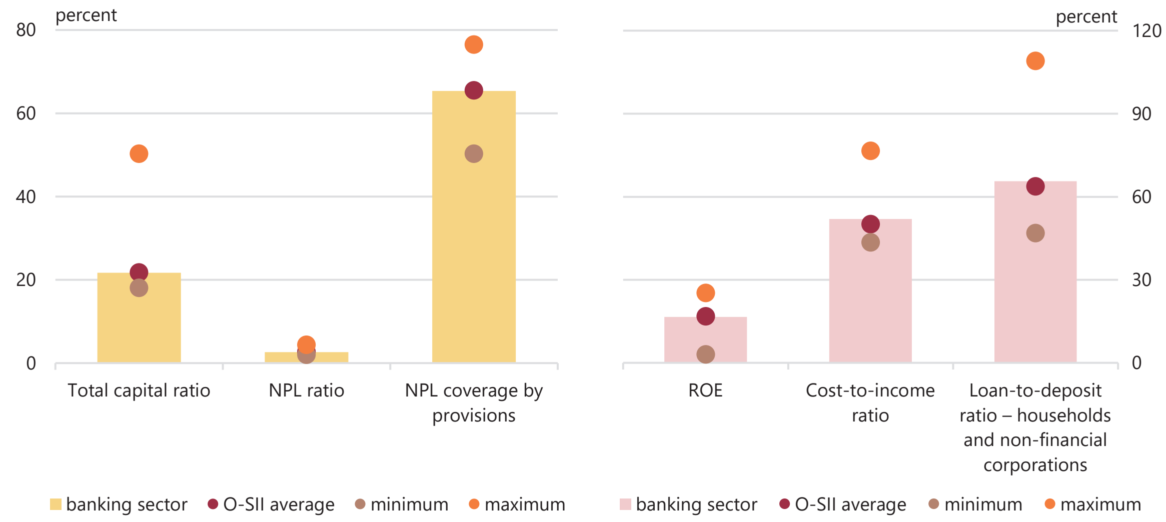
The O-SIIs play a key role in the Romanian banking sector, as shown by the following indicators: (i) they held 79.5 percent of bank assets as at 31 December 2021; (ii) they provide a significant part of financial services to the real economy, i.e. 78.4 percent of loans in stock, 79.1 percent of deposits taken, and 60 percent of payments made; (iii) in terms of complexity, they conduct 91 percent of transactions in OTC derivatives, they place 72.1 percent of cross-border assets and raise 75.1 percent of foreign liabilities, while (iv) in terms of interconnectedness with the other undertakings conducting financial activities, they provide 70.5 percent of intra-financial assets, they use 70 percent of intra-financial liabilities and hold 97.2 percent of bonds issued.

From a macroprudential perspective, the O-SIIs are well capitalised, with an average total capital ratio of 21.78 percent (December 2022, unaudited data), which declined slightly from 23.37 percent in the same year-ago period. As far as asset quality is concerned, it improved in the course of 2022, similarly to the trend seen in the banking sector as a whole. Specifically, the NPL ratio went down from 3.35 percent to 2.67 percent, while the coverage ratio remained high at approximately 66 percent. However, the uncertain macroeconomic environment and the upward trend in interest rates created conditions for the medium-term deterioration of borrowers' capacity to repay loans.

Systemically important institutions also recorded positive developments in terms of profitability and efficiency: return on equity of 16.8 percent versus 13.1 percent in December 2021 and a cost-to-income ratio of 50.1 percent versus 51.8 percent at

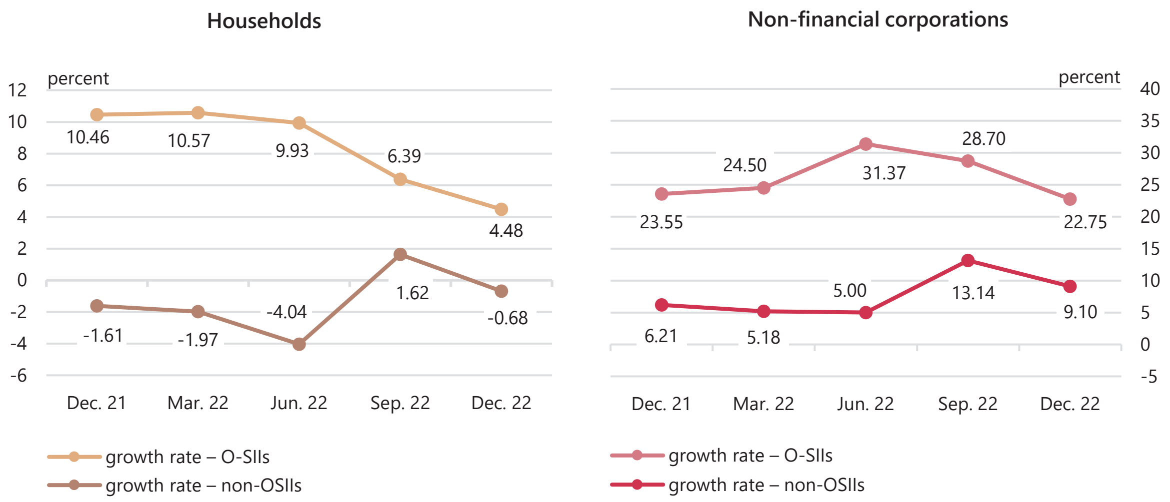
61 NBR Order No. 2/2022 on the buffer for credit institutions authorised in Romania and identified by the National Bank of Romania as other systemically important institutions (O-SIIs) was published in *Monitorul Oficial al României*, Part I, No 1187 of 12 December 2022.

Chart 3.11. Prudential and efficiency indicators of systemically important institutions (December 2022)



Source: NBR, prudential reporting

Chart 3.12. Annual growth rate of loans and advances granted to households and non-financial corporations by O-SIIs and non-O-SIIs



Source: NBR, prudential reporting

end-2021. As for operational efficiency, systemically important institutions also fared better than the banking sector as a whole (cost-to-income ratio of 51.9 percent in December 2022). Nevertheless, the situation was different for the loan-to-deposit ratio of households and non-financial corporations: despite seeing an improvement in the case of O-SIIs (from 61.7 percent to 63.8 percent), it stood below the sector's average (65.6 percent at end-2022), calling for additional efforts to increase financial intermediation (Chart 3.11).

In 2022, lending to the private sector remained on the upward trend seen after the outbreak of the COVID-19 pandemic, underpinned by government programmes intended to support the economy. However, amid macroeconomic uncertainty and geopolitical tensions, lending dynamics slowed down in 2022 H2, due inter alia to the rise in financing costs amid the tightening of both monetary policy stance and credit standards. Systemically important institutions made a significant contribution to the advance in lending, as they exceeded by far the annual growth rate of loans granted by non-systemically important institutions to both households (in which case O-SIIs reported an annual increase of 4.5 percent and non-O-SIIs a decrease of 0.7 percent in total loans as at 31 December 2022) and non-financial corporations, where loans from systemically important institutions and other credit institutions rose by 22.7 percent and 9.1 percent respectively. These developments pave the way for further bank concentration and the increasing divergence between the performance of O-SIIs and that of non-O-SIIs (Chart 3.12).

3.1.3. The systemic risk buffer

Implementation framework of the macroprudential instrument

The systemic risk buffer (SyRB) is the instrument available to macroprudential authorities in order to prevent and mitigate systemic risks of a non-cyclical nature, as well as to achieve one of the intermediate objectives of macroprudential policy, i.e. enhancing the resilience to shocks of the financial infrastructure. It is the key instrument that designated authorities can use, which can be tailored to national specificities in order to mitigate the risks that might jeopardise financial system stability in a particular jurisdiction. The SyRB is designed to prevent and mitigate macroprudential or systemic risks not covered by Regulation (EU) No 575/2013 and Directive 2013/36/EU, in the meaning of a risk of disruption in the financial system with the potential to have serious negative consequences to the financial system and the real economy in a specific Member State. The SyRB rate should apply to all exposures or to a subset of exposures and to all institutions or one or more subsets of those institutions, where the latter have similar risk profiles in their business activities.

The ESRB recommends designated authorities three sets of indicators[62] for the calibration of the systemic risk buffer:

(i) Indicators reflecting the structural characteristics of the banking sector

- size and importance for the financing of the economy and concentration of the domestic banking sector;
- foreign ownership;
- levels of NPLs or significant exposures to level 2 and level 3 assets.

(ii) Indicators of propagation and amplification of shocks within the financial system

- exposure concentration and asset commonality;
- financial interconnections and contagion;
- commonality in bank business models.

[62] The ESRB Handbook on Operationalising Macroprudential Policy in the Banking Sector

(iii) Indicators of risks to the banking sector stemming from the real economy

- economic openness;
- sectoral risks from the private non-financial sector, households and the public sector.

The adoption of the new CRD V legislative package has brought about several changes to the implementation framework of macroprudential policy. Specifically, it has consolidated the SyRB flexibility in addressing systemic risks, via the possibility to relate them directly to sectoral exposures. The amendments introduced by the CRD V set clearer boundaries between the risks addressed by the O-SII and SyRB buffers respectively. Moreover, the CRD V provides for the application of the cumulated value of the O-SII buffer and the SyRB in the case of systemic banks subject to a systemic risk buffer. Where the sum of the O-SII buffer rate and the SyRB rate is higher than 5 percent, competent/designated national authorities shall request the European Commission's approval before the measure becomes effective.

A particularly important amendment in terms of calibrating the instrument to achieve the intermediate objectives of macroprudential policy refers to introducing the possibility of multiple application of the SyRB to several types of exposures or at the level of total exposures. The value of the buffer is determined as the sum of individual requirements (Article 133(2) of the CRD V):

$$B_{SR} = r_T \cdot E_T + \sum_i r_i \cdot E_i$$

where B_{SR} is the combined buffer requirement applicable to an institution, $r_T \cdot E_T$ is the requirement applied at the level of total exposures (calculated as the product of the buffer rate and the total exposure amount), while $r_i \cdot E_i$ is the requirement applied at the level of a set/subset of exposures i (calculated similarly to the requirement for total exposures).

The methodology for the sectoral implementation of the systemic risk buffer has been set at European level via the Guidelines of the European Banking Authority on the appropriate subsets of sectoral exposures to which competent or designated authorities may apply a systemic risk buffer in accordance with Article 133(5)(f) of Directive 2013/36/EU – EBA/GL/2020/13. They set forth the manner of implementation, underlying principles and categories of eligible exposures.

The experience at European level

At end-2022, 14 countries either applied or announced the application of a SyRB rate higher than zero, the latter category including Slovenia and Germany, which were to apply a positive rate starting 1 January 2023 and 1 February 2023 respectively. Moreover, as of 2022, the changes to the CRD regulatory framework allowed for the introduction of a sectoral systemic risk buffer (sSyRB), so that five countries decided to broaden the set of macroprudential tools available to the national authority by opting for such a buffer (the experience of these Member States is described in Box F).

Aside from the changes occurring due to the introduction of a sectoral SyRB, compared with the previous year, another change has been recorded with regard to this buffer, Slovakia resorting to the deactivation of the SyRB. In Norway, the macroprudential authority decided to implement a systemic risk buffer with a gradual increase in the SyRB rate (phase-in): the first stage (the period from 2021 to 2022) saw the application of a differentiated SyRB rate (3 percent or 4.5 percent), depending on the internal models used by banks to determine their capital requirements (standardised versus internal models approach), while the period from 2023 onwards will see the implementation of a single SyRB rate of 4.5 percent for all banks.

The experience accumulated so far at European level points to Member States' keen interest in using the SyRB, given the high degree of flexibility in its implementation and calibration. The application of this buffer by Member States is highly heterogeneous in terms of both its rate (Table 3.6) and the risks depending on which calibration decisions are taken. However, national authorities use the systemic risk buffer primarily for addressing the vulnerabilities generated by the structural characteristics of the banking sector, ahead of the risks stemming from the real economy. The latter category of risk is flagged by the majority of CEE countries, given that the higher domestic macroeconomic volatility or the occurrence of external shocks may have a significant impact on banking sectors in this region.

Table 3.6. SyRB arrangements in EEA countries

Country applying the SyRB	SyRB rate (%) at end-2019	SyRB rate (%) at end-2022	Change in the SyRB rate from 2019 to date	Exposures to which the SyRB applies
Austria	1 – 2	0.5 – 1	↓	All exposures
Belgium	–	9	↑	Sectoral – Retail exposures secured by residential property
Bulgaria	3	3	→	Domestic exposures
Croatia	1.5 – 3	1.5	↓	All exposures
Czechia	1 – 3	–	↓	All exposures
	1 – 3	1 – 3	→	All exposures
Denmark	3	3	→	Domestic exposures (Faroe Islands)
Estonia	1	–	↓	Domestic exposures
Finland	1 – 3	0	↓	All exposures
Germany	–	2	↑	Sectoral – Exposures secured by residential property

– continued –

Country applying the SyRB	SyRB rate (%) at end-2019	SyRB rate (%) at end-2022	Change in the SyRB rate from 2019 to date	Exposures to which the SyRB applies
Hungary	0	0	↓	Domestic exposures
Iceland	3	3	→	Domestic exposures
Liechtenstein	2.5	1	↓	Sectoral – All retail exposures to natural persons secured by residential property and exposures to legal persons secured by commercial immovable property
Lithuania	–	2	↑	Sectoral – Retail exposures secured by residential property
Netherlands	3	0	↓	All exposures
Norway	2 – 5	4.5	↑	Domestic exposures
Poland	3	-	↓	Domestic exposures
Romania	0 – 2	0 – 2	→	All exposures
Slovakia	1	–	↓	Domestic exposures
Slovenia	–	1 or 0.5	↑	Sectoral – Retail exposures secured by residential property or Other exposures to natural persons
Sweden	3	3	→	All exposures

Source: ESRB, NBR adaptation

Looking at the manner of implementation, of the 17 states that activated the SyRB, seven apply it to all exposures, five to domestic exposures, and the remaining five to sectoral exposures. Denmark alone applies the SyRB in a differentiated manner depending on exposures, with banks in the autonomous region of the Faroe Islands applying a 3 percent rate on domestic exposures, while in the rest of the state rates range between 1 percent and 3 percent on all exposures. All institutions in Denmark with exposures in the Faroe Islands exceeding DKK 200 million are requested to reciprocate this measure.

Box F. The EU's experience with the sectoral systemic risk buffer (sSyRB)

Following the changes to the CRD V regulatory framework, many Member States decided to implement a sectoral systemic risk buffer. Based on the new provisions, macroprudential authorities can address multiple systemic risks occurring simultaneously across various layers of the financial system, through the possibility to use multiple SyRBs targeting specific exposures or total exposures. The value of the buffer is determined as the sum of individual requirements (Article 133(2) of CRD V).

Against this background, by end-February 2023, five Member States had decided to implement a sectoral systemic risk buffer (Table F.1). A case in point is the designated authority in Lithuania, which decided to implement a 2 percent sSyRB rate applicable to all retail exposures secured by residential property, starting with 1 July 2022. Another country that addresses in the same manner the rising risks on real estate markets is Belgium. Specifically, the National Bank of Belgium decided on the implementation of a 9 percent sSyRB rate on retail exposures secured by residential property, as from 1 May 2022, aimed at mitigating the risks stemming from banks' exposures to the residential real estate sector. The high level of the sectoral buffer rate owes to the fact that the macroprudential policy tool is meant to replace another, stricter measure, implemented pursuant to Article 458 of CRR, which had expired on 30 April 2022. Moreover, starting 1 May 2022, Liechtenstein introduced a 1 percent sSyRB on all retail exposures to natural persons secured by residential property and exposures to legal persons secured by commercial immovable property. Other European countries having adopted so far the decision to implement a sectoral SyRB are Slovenia (sSyRB of 1 percent for all retail exposures secured by residential property and of 0.5 percent for the other exposures to natural persons, applicable starting 1 January 2023) and Germany (2 percent sSyRB as of 1 February 2023).

Table F.1. Key aspects of sSyRB calibration – February 2023

Country	sSyRB rate (%)	Exposures to which it applies	Rationale	Indicators used for calibration
Belgium	9	Retail exposures secured by residential property	Vulnerabilities associated with retail exposures secured by residential property	The main indicators are: house prices (including indicators for price valuation), household debt ratio, mortgage loan growth, credit standards (LTVs, DSTIs, mortgage loan maturity, banks' interest rate margins)
Germany	2	All exposures secured by residential property	Vulnerabilities associated with exposures secured by residential property	The main indicators, are among others, the overvaluation of residential real estate, continuing high rates of price increases, mortgage loan growth, household debt ratio
Liechtenstein	1	All retail exposures to natural persons secured by residential property and exposures to legal persons secured by commercial immovable property	Vulnerabilities associated with both residential and commercial real estate markets	Several indicators, including mortgage loan volume, mortgage loan growth, household debt ratio, price dynamics of residential real estate, building activity
Lithuania	2	Retail exposures secured by residential property	Vulnerabilities associated with the real estate market, retail exposures secured by residential property	Several indicators pertaining to: (1) the structural characteristics of the banking sector, (2) the financial system, (3) specific sectors of the real economy that would affect the banking sector

– continued –

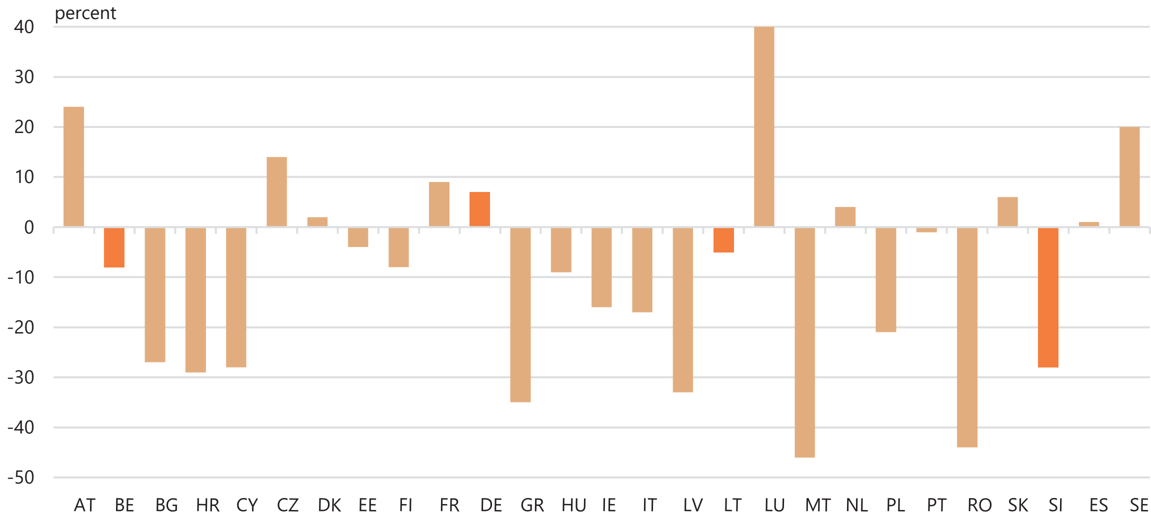
Country	sSyRB rate (%)	Exposures to which it applies	Rationale	Indicators used for calibration
Slovenia	1 or 0.5	Retail exposures secured by residential property or Other exposures to natural persons	Vulnerabilities associated with the residential real estate market	Several indicators, among which: the overvaluation indicator of residential real estate, price dynamics of residential real estate, mortgage loan growth, household debt, the ratio between real estate prices and disposable income, exposure of banks to the real estate market, distribution of LTV for new housing loans

Source: ESRB

It should be mentioned that, in these cases, a systemic risk buffer rate for total exposures is not applied. While in Germany, Belgium and Lithuania the buffer was introduced for the first time, Liechtenstein implemented a sectoral SyRB rate in lieu of a systemic risk buffer rate applicable to all exposures.

In all these cases, the buffer aims to enhance banking sector resilience to certain systemic risks that might stem from real estate markets. According to ECB assessments, the degree of over/undervaluation of the real estate market points to differences among Member States (Chart F.1). Real estate vulnerabilities, the likes of possible sharp drops in real estate asset prices following the boom phases during upturns, can substantially impact credit institutions' solvency positions, triggering a serious risk to the financial system and the real economy.

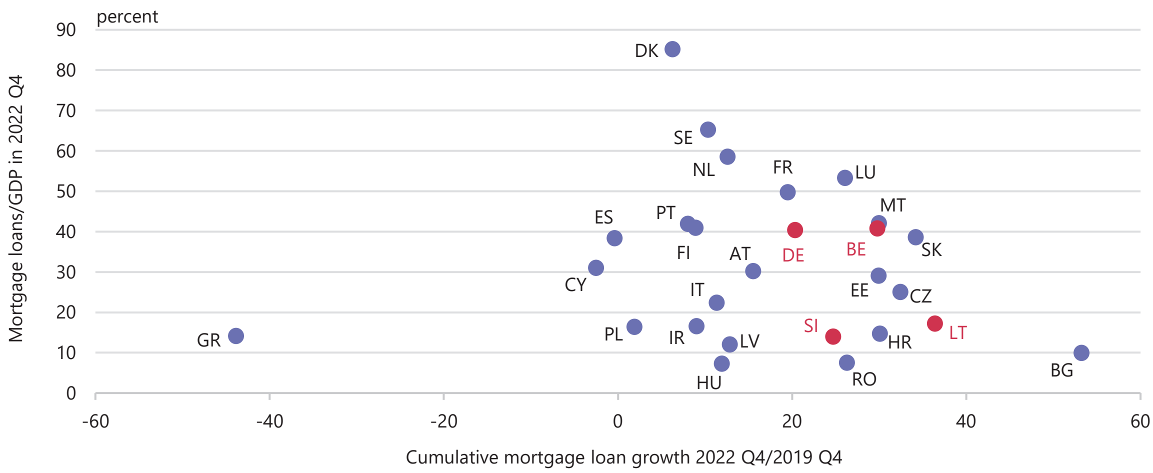
Chart F.1. Over/undervaluation of the real estate market in 2022 Q3



Source: ECB

The share of mortgage loans in GDP and the growth rate of mortgage lending are two of the most important indicators for determining the existence of a potential risk associated with the real estate market (Chart F.2). Of the EU Member States that have implemented a sectoral SyRB, both Germany and Belgium have a mortgage loan/GDP ratio in excess of 40 percent and a cumulated mortgage loan growth of around 21 percent and 30 percent respectively over the past three years. At the same time, Slovenia – although recording a relatively low share of mortgage loans in GDP compared to the other countries and a cumulated mortgage loan growth of around 25 percent over the past three years – decided to introduce a sectoral buffer based on other indicators (listed in Table F.1). This aimed to address potential vulnerabilities following the partial easing of DSTI requirements.

Chart F.2. Mortgage lending in the EU



Note: Countries in red have implemented a sectoral SyRB.

Source: ESRB, NBR, NBR calculations

Implementation of the systemic risk buffer in Romania

In the case of Romania[63], the SyRB in its current setup has been applied since 30 June 2018, based on NCMO recommendations, aiming to: (i) ensure adequate management of credit risk from a macroprudential perspective and (ii) safeguard financial stability, amid the tensions surrounding domestic macroeconomic equilibria and the potentially lingering regional and global uncertainties.

In terms of calibration methodology, the buffer-related capital requirement is determined based on the non-performing loan ratio and the coverage ratio. Thus, depending on the average recorded by the two indicators over a 12-month period prior to application, the SyRB rate is set at 0 percent, 1 percent or 2 percent, in relation to the reference thresholds illustrated in Table 3.7.

[63] NCMO Recommendation No. 9/2017 on the systemic risk buffer in Romania.

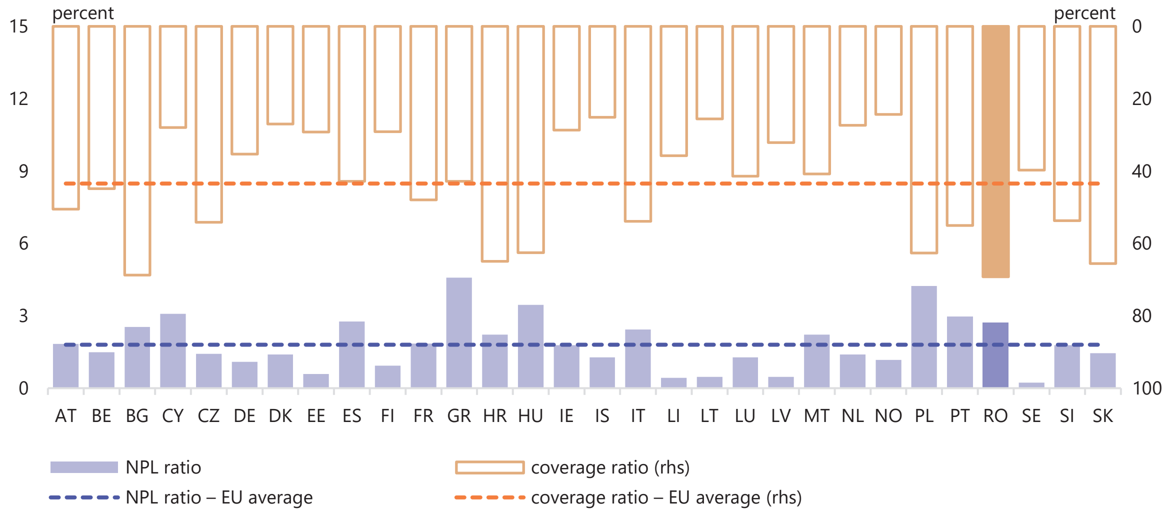
Table 3.7. Calculation methodology of the systemic risk buffer

NPL ratio	NPL coverage by provisions	Buffer rate[64]
<5%	>55%	0
>5%	>55%	1
<5%	<55%	1
>5%	<55%	2

Source: NCMO

Moreover, according to NCMO recommendations, the NBR reassesses the SyRB level on a half-yearly basis.

Chart 3.13. NPL ratio and coverage ratio in EU countries (December 2022)



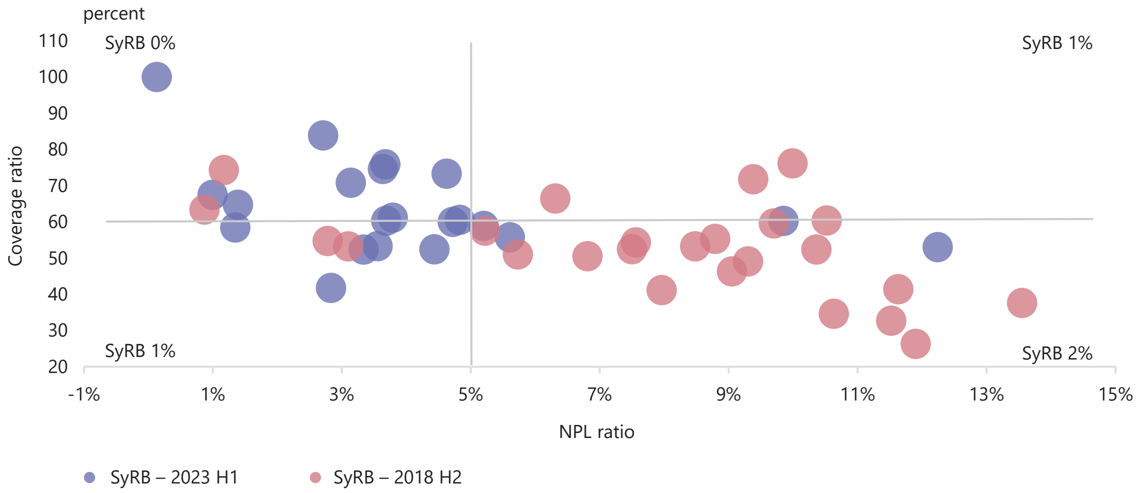
Source: EBA

In spite of credit institutions' sustained efforts in the balance sheet clean-up process and of the positive dynamics recorded by the NPL ratio, Romania still stands above the EU average (Chart 3.13). Conversely, it ranks among the best performing EU countries in terms of NPL coverage by provisions. In December 2022, the coverage ratio reached 69.2 percent (according to EBA data using a narrow sample of banks for Romania), well above the average value in the EU, where coverage by provisions stands at 43.4 percent.

The breakdown of credit institutions by SyRB rate is also indicative of an improvement during 2022, pointing to their migration towards categories with lower buffer rates. However, mention should be made that, although developments across the entire banking sector are positive in terms of curbing the NPL ratio and increasing the coverage ratio, additional efforts are still required at an individual level in the credit institutions' balance sheet clean-up process. Specifically, in the first half of 2023, a single credit institution

64 SyRB rates are applied to all exposures of the credit institution, at the highest consolidation level.

Chart 3.14. Breakdown of credit institutions from the perspective of the two indicators based on which the SyRB rate is determined



Source: NBR

applies the maximum buffer rate of 2 percent. At the same time, compared with the rates applied in 2018 H2 (when the SyRB was first introduced), credit institutions have migrated from a buffer rate of 2 percent to a 0 percent rate. Thus, the number of institutions to which a 0 percent SyRB rate applies has risen from two in 2018 H2 to 13 in 2023 H1 (Chart 3.14).

3.2. Other instruments with an impact on financial stability

The analyses described below are intended to support the implementation of the macroprudential policy and refer to instruments for which the initiator of the measure may be another national macroprudential entity (e.g. the reciprocity of macroprudential policy measures) or to prospective information that may guide NCMO decisions over the coming period.

3.2.1. Implementation through voluntary reciprocity of macroprudential policy measures taken by other Member States

The European financial system, which is characterised by the interdependence of national financial systems, ensured the faster transmission of the effects of economic policies via the liberalisation of capital flows and the free movement of goods and services. The strong interconnectedness may pose risks to financial stability through a step-up in financial contagion. Thus, with a view to countering the risks that may stem from the macroprudential policy measures taken by certain Member States, namely the risk of cross-border externalities or regulatory arbitrage, the concept of voluntary reciprocity was included in macroprudential policy regulations in the European Union. Moreover, the aim of this concept is to ensure a level playing field from a macroprudential perspective.

In this vein, the European Systemic Risk Board issued Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures. The voluntary reciprocity framework is based on the principle according to which national authorities may submit to the ESRB a request for reciprocation of their own macroprudential policy measures by the other EU Member States. In response to this request, the ESRB may recommend the designated macroprudential authorities in EU Member States to recognise the measures taken. Recommendation ESRB/2015/2 sets a de minimis principle based on which national authorities may exempt financial service providers under their jurisdiction from applying a particular reciprocating macroprudential policy measure, if these financial service providers have non-material eligible exposures to the activating country. In addition, authorities may also exempt financial service providers with non-material exposure to the identified macroprudential risk from applying the said measure. When applying a de minimis principle, the designated national authorities need to monitor future exposures from the perspective of regulatory arbitrage and leakage materialisation, granting a prudential treatment to exposures with a similar risk.

At end-2022, the list of active measures recommended by the ESRB for reciprocation consisted of seven items (Table 3.8).

Table 3.8. Measures recommended for reciprocation in Recommendation ESRB/2015/2

Country	Measure	Materiality threshold	Reciprocating countries
Germany	A 2 percent systemic risk buffer (SyRB) rate on all exposures to natural and legal persons secured by residential real estate located in Germany to be applied to all credit institutions using the internal ratings-based (IRB) approach and to those using the standardised approach (SA)	• EUR 10 billion, at credit institution level	By the end of 2022, no EEA country had reciprocated the macroprudential measure
Belgium	A 9 percent sectoral systemic risk buffer rate (sSyRB) on all retail exposures secured by residential immovable property for which the collateral is located in Belgium to be applied to all credit institutions using the internal ratings-based (IRB) approach	• EUR 2 billion, at credit institution level	France
Lithuania	A 2 percent sectoral systemic risk buffer rate (sSyRB) on all retail exposures secured by residential immovable property	• EUR 50 million, for the value of exposures from loans granted to debtors in Lithuania	Belgium and Sweden

– continued –

Country	Measure	Materiality threshold	Reciprocating countries
Netherlands	A minimum average risk weight of 12 percent on retail exposures secured by residential property located in the Netherlands assigned to a portion of the loan not exceeding 55 percent of the market value of the property that serves to secure the loan. A 45 percent minimum average risk weight is assigned to the remaining portion of the loan	• EUR 5 billion, at credit institution level	Belgium
France	A tightening of the large exposure limit applicable to exposures to highly-indebted large non-financial corporations having their registered office in France to 5 percent of eligible capital, applied to global systemically important institutions (G-SIIs) and other systemically important institutions (O-SIIs) at the highest level of consolidation of their banking prudential perimeter	• EUR 2 billion for the total original exposures of domestically authorised G-SIIs and O-SIIs • EUR 300 million applicable to G-SIIs and O-SIIs, for exposures meeting certain requirements • A threshold of 5 percent of the G-SII's or O-SII's eligible capital, for exposures identified in the measure	Belgium, Denmark, Ireland, Lithuania, Norway, Sweden and United Kingdom
Luxembourg	Legally binding loan-to-value (LTV) limits for new mortgage loans on residential real estate located in Luxembourg, with different LTV limits applicable to different categories of borrowers: (i) LTV limit of 100 percent for first-time buyers acquiring their primary residence; (ii) LTV limit of 90 percent for other buyers, i.e. non first-time buyers acquiring their primary residence; (iii) LTV limit of 80 percent for other mortgage loans (including the buy-to-let segment)	• EUR 350 million (1 percent of the total residential real estate mortgage market in Luxembourg) • EUR 35 million (institution-specific materiality threshold for the total cross-border mortgage lending to Luxembourg)	Belgium, France, Germany, Norway and Portugal
Norway	(1) a 4.5 percent systemic risk buffer rate for exposures in Norway; (2) a 20 percent average risk weight floor for residential real estate exposures in Norway applied to authorised credit institutions using the internal ratings-based (IRB) approach; (3) a 35 percent average risk weight floor for commercial real estate exposures in Norway applied to authorised credit institutions using the internal ratings-based (IRB) approach	(1) NOK 32 billion (2) NOK 32.3 billion (3) NOK 7.6 billion	(1) Belgium, France and Portugal (2) Belgium, Denmark, Finland, France and Sweden (3) Belgium, Denmark, Finland, France and Sweden

Source: ESRB

At national level, in 2022, the NCMO examined the macroprudential policy measures taken by the Netherlands, Lithuania, Belgium and Germany with a view to reciprocating them on a voluntary basis (the other measures included in Table 3.8 were discussed in the previous years)[65].

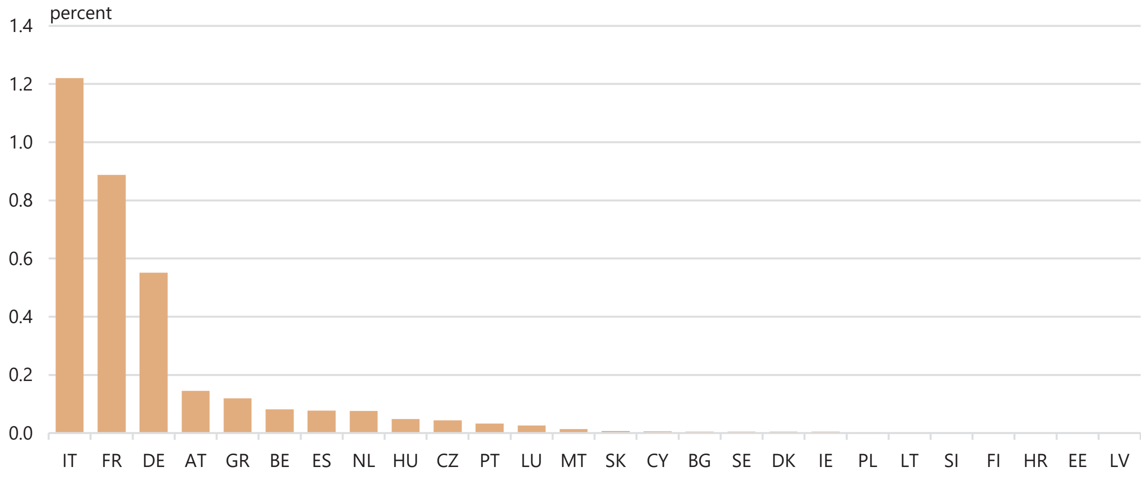
In its meeting of 31 March 2022, the NCMO issued Decision No. D/2/2022 according to which the measures adopted by the Netherlands and Lithuania would not be voluntarily reciprocated at national level. The Netherlands' macroprudential policy measure refers to a minimum average risk weight on retail exposures secured by residential property located in the Netherlands that is applied to credit institutions using the IRB approach. A 12 percent minimum average risk weight is assigned to a portion of the loan not exceeding 55 percent of the market value of the property that serves to secure the loan. A 45 percent minimum average risk weight is assigned to the remaining portion of the loan. Loans covered by the National Mortgage Guarantee scheme in the Netherlands are exempted from the measure. Given the data as at 31 December 2021, based on which the decision was taken, namely the fact that the exposure of the domestic banking sector to the Netherlands amounted to EUR 56.5 million, well below the materiality threshold of EUR 5 billion set by this measure, and that a small number of credit institutions in Romania use the IRB approach, the relevant exposure being immaterial, reciprocation was not necessary. As for Lithuania, the macroprudential policy measure refers to a 2 percent sectoral systemic risk buffer rate (sSyRB) on all retail exposures secured by residential immovable property. The materiality threshold that complements the measure amounts to EUR 50 million, representing exposures from loans to natural persons in Lithuania that are secured by residential property. As at 31 December 2021, the total exposure of banks in Romania was worth EUR 15,418, accounting for 0.03 percent of the suggested materiality threshold, so reciprocation in this case was not necessary.

In its meeting of 28 June 2022, the NCMO issued Decision No. D/4/2022 whereby it decided not to voluntarily reciprocate the macroprudential measure of Belgium, which refers to a 9 percent sectoral systemic risk buffer rate (sSyRB) on all retail exposures secured by residential immovable property for which the collateral is located in Belgium. The measure applies to all credit institutions using the IRB approach for calculating regulatory capital requirements and the maximum institution-specific materiality threshold is EUR 2 billion. According to data as of March 2022, based on which the decision was taken, the total exposure to Belgium amounted to EUR 59.9 million, whereas the exposures to natural persons secured by residential immovable property totalled EUR 1.4 million, well below the materiality threshold for the reciprocation of this measure.

The measure taken by the macroprudential authorities in Germany introducing a 2 percent systemic risk buffer (SyRB) rate on all exposures to natural and legal persons secured by residential real estate located in Germany was examined and decided upon in the meeting

65 See the dedicated sections on reciprocation measures in the previous NCMO *Annual Reports*, as well as the specific section on the NCMO website. Measures recommended for reciprocity to Recommendation ESRB/2015/02 between 2017-2022

Chart 3.15. Share of exposures of the Romanian banking sector to EU Member States (percent of total exposures)



Source: Monetary balance sheet data, NBR

of the General Board of the NCMO of 20 October 2022. Thus, NCMO Decision No. D/6/2022 did not to voluntarily reciprocate this measure, as the exposures to natural and legal persons secured by residential real estate located in Germany that the said measure refers to equalled EUR 7.4 million, the institution-specific materiality threshold set by the German authorities amounting to EUR 10 billion.

According to monetary balance sheet data as at 31 December 2022, the total exposures[66] of credit institutions, Romanian legal entities, amounted to lei 537.8 billion (EUR 108.7 billion). Out of them, domestic exposures accounted for 96.64 percent, whereas among those to EU Member States, Italy, France, Germany and Austria held the widest shares (Chart 3.15). Thus, the risk of financial contagion from other EU Member States to the Romanian banking sector via the external credit channel is deemed to have a low probability of materialising. The NCMO will monitor the related exposures on a regular basis and will take the necessary measures should they become material.

3.2.2. Assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates

Given the cross-border interactions of the domestic financial system with other countries' financial systems, pursuant to the European framework implying EU-wide coordination among Member States as regards the adoption of macroprudential decisions to ensure a level playing field across the Union, the NCMO takes into consideration – when substantiating its policy – the measures taken by other states as well, alongside the risks generated by foreign exposures. Looking at the countercyclical capital buffer, besides setting on a quarterly basis the buffer rate pertaining to domestic exposures, the NCMO

66 To the real and financial sectors.

can adopt recommendations on the recognition through voluntary reciprocity of the measures taken by other Member States or can set a CCyB rate for third-country exposures. Further details on the European mechanism for determining the institution-specific CCyB and the procedures for implementing a CCyB rate for third-country exposures are available in Section 3.2.2.2 of the 2021 NCMO *Annual Report*.

The assessments carried out by the NBR based on the data available for end-2021, pursuant to NCMO Recommendation No. 2 of 14 June 2017[67], were discussed at the NCMO meeting of 28 June 2022. Following the analysis of the information presented, the NCMO adopted Decision No. 5/2022, according to which no material third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates were identified. For the first time, the analyses included data provided by the National Bank of Moldova based on the cooperation agreement concluded in 2021 by the central banks of Romania and the Republic of Moldova. This agreement stipulates *inter alia* the exchange of information between the two states, in order to monitor the evolution of exposures arising from the activity of subsidiaries and branches operating in the neighbouring country.

The exposures of the banking sector in Romania continue to be mainly related to the domestic economy, non-domestic exposures in the form of credit to the real sector being further of low importance. The conclusion is based both on the results of applying the standardised methodology[68] and on the outcome of the alternative methodology. Moreover, exposures to third countries are of marginal significance in the Romanian banking sector, below 1 percent of original and risk-weighted exposures and 1.23 percent of defaulted exposures (Table 3.9).

Table 3.9. Exposures to third countries' real sector according to the standardised methodology (percent of total)

C 09	December 2021	Original exposures	Defaulted exposures	Risk-weighted exposures
	Total third countries	0.83%	1.23%	0.75%
	Top 3 exposures of third countries	Moldova: 0.47%	Moldova: 1.21%	Moldova: 0.63%
		Switzerland: 0.31%	Switzerland: 0.01%	US: 0.09%
		Guernsey[69]: 0.05%	US: 0.01%	UK: 0.04%

67 Whereby the NBR is recommended to assess on a regular basis material third countries for the banking sector in Romania in terms of recognising and setting countercyclical buffer rates and to propose the necessary measures should these exposures become material.

68 The procedure used by the NBR to identify material third countries starts from the ESRB methodology on determining material third countries for the European banking sector overall (described in Decision ESRB/2015/3 on the assessment of materiality of third countries for the Union's banking system in relation to the recognition and setting of countercyclical buffer rates), which has been complemented by including additional indicators.

69 Exposure stemming from retail loans and corporate credit granted by two banks.

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C 09	June 2021	Original exposures	Defaulted exposures	Risk-weighted exposures
	Total third countries	0.92%	1.19%	0.72%
	Top 3 exposures of third countries	Moldova: 0.53%	Moldova: 1.17%	Moldova: 0.56%
		Switzerland: 0.33%	Switzerland: 0.015%	US: 0.09%
		UK: 0.06%	Türkiye: 0.005%	UK: 0.06%

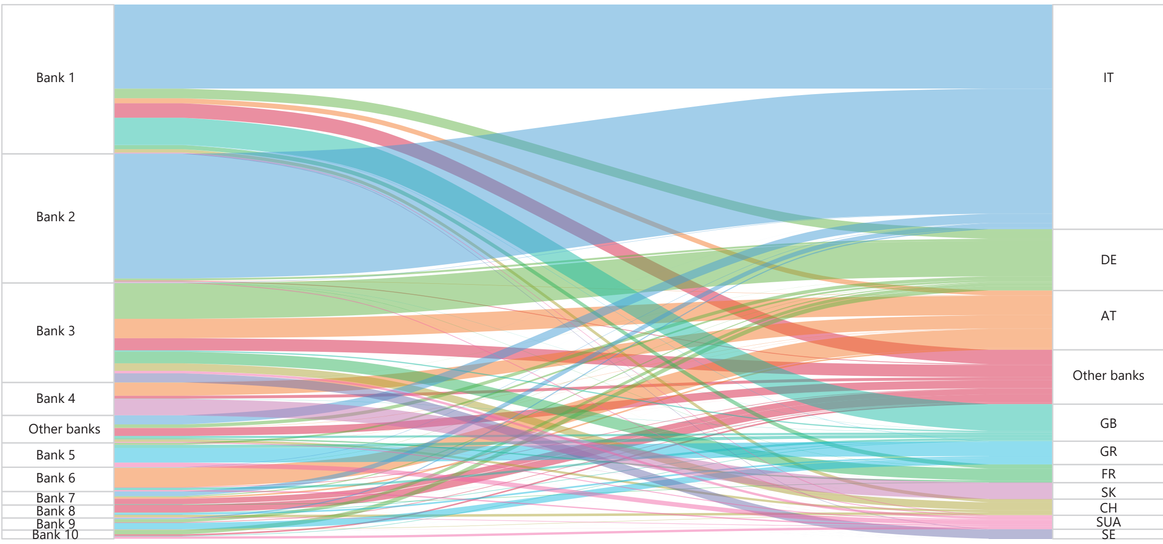
Source: COREP, NBR calculations

Banks in Romania have had the most significant connections with the Republic of Moldova, for all three types of exposures under the scope of the standardised methodology. It is noteworthy that most of the exposures vis-à-vis this country emerge indirectly, via the loans granted by the branches and subsidiaries that Romanian banking groups have in Moldova. Even though the 1 percent minimum threshold was exceeded during two periods in 2021 for exposures related to defaulted loans, the availability of data does not enable the confirmation of material exposure in eight consecutive quarters, according to the NBR's internal working procedures. In addition, the use of data submitted by the National Bank of Moldova (NBM) does not confirm that the 1 percent threshold for total exposures of the Romanian banking sector has been exceeded, pointing to certain differences in the risk approaches of domestic groups and of banks in Moldova. Other two slightly significant third countries for banks in Romania are Switzerland, especially for original exposures, and the United States, particularly for risk-weighted exposures.

Aside from the ESRB approach, the procedure developed at national level includes several additional indicators and alternative data sources to ensure the robustness of findings and have the most comprehensive picture of cross-border exposures. For instance, the reporting specific to the monetary balance sheet of credit institutions is a major source of data for Romanian banks' direct exposures at individual level. This provides additional information on the connections of the domestic banking sector with other countries, as regards both real sector financing and the relationships with financial or government sectors. The key gain is that there is no limit depending on which foreign exposures are reported[70]. The reporting for end-2021 indicates that domestic loans account for the prevailing share (93.6 percent) of the banking sector's portfolio in Romania. The breakdown of Romanian banks' foreign loans shows that the most important foreign exposures are vis-à-vis EU Member States (86 percent), such as Italy, Germany, Austria, Greece, France, Slovakia and Sweden. The non-EU countries with the largest exposures are the United Kingdom, the United States and Switzerland, but each of them accounts for less than 0.5 percent of the total loans granted (Chart 3.16). Moreover, monetary balance sheet reporting does not record any credit granted directly to the real sector in third countries.

[70] Unlike the ESRB methodology that uses data from COREP templates on the localisation of exposures, for which the reporting obligation arises only if a certain exposure threshold is exceeded, monetary balance sheet reporting does not imply a minimum reporting threshold. However, one shortcoming of this data source is that reporting is done at an individual level, without including in the scope of reporting the data pertaining to subsidiaries within the groups.

Chart 3.16. Connection between banks in Romania and other countries via on-balance-sheet loans



Source: NBR, credit institutions' monetary balance sheet data

There is generally a close connection between credit institutions, subsidiaries of foreign groups, with the countries where parent banks operate. Certain trends may be distinguished as regards the diversification of exposures: (i) banks that carry out relations primarily with a single state, (ii) banks with an investment strategy mainly in two countries, and (iii) banks diversifying their exposures across countries where they invest the funds. Furthermore, from the perspective of countries in relation to which the exposures are recorded, there are: (i) states in which most exposures come from the investments of a limited number of banks (Italy, UK, France, Greece, Slovakia and Sweden) and (ii) countries with exposures from a higher number of institutions (Austria, Germany, Switzerland, US).

Looking at the European banking sector, following the latest exercise to identify third countries conducted in June 2022, the ESRB released a list of ten material third countries for the EEA, namely: Brazil, China, Hong Kong, Mexico, Russia, Singapore, Switzerland, Türkiye, United Kingdom, and the United States.

3.2.3. Assessment of the impact of credit institutions' funding plans on the flow of credit to the real economy

The annual assessment of the impact of credit institutions' funding plans on the flow of credit to the real economy was presented in the NCMO meeting of 20 October 2022. The analysis was made under Subrecommendation A3 of Recommendation of the European Systemic Risk Board of 20 December 2012 on funding of credit institutions (ESRB/2012/2) setting forth that national supervisory authorities and other authorities with a macroprudential mandate are recommended "to assess the impact of credit institutions' funding plans on the flow of credit to the real economy". To apply this recommendation at national level, the NCMO issued Recommendation No. 10/2017 on the impact of credit institutions' funding plans on the flow of credit to the real economy, whereby the National Bank of Romania was recommended to assess this impact on a regular basis.

This analysis is useful for the macroprudential policy, due to the forward-looking information on lending developments, based on which vulnerabilities or the build-up of potential risks can be identified in a timely manner. Thus, macroprudential authorities can effectively use the policy toolkit in order to achieve the objective on safeguarding financial stability. Moreover, the annual monitoring of credit institutions' funding plans may (i) paint a picture on the growth outlook for lending, in general and by component, and the potential structural changes in credit institutions' activity, (ii) play also the role of a backtesting measure by comparing the credit institutions' achieved and projected levels with a view to checking the reliability of these data, and (iii) identify any changes in credit institutions' risk appetite.

The annual reporting of credit institutions' funding plans takes place in the first quarter of the year and includes reports over a three-year horizon. Mention should be made that in that period, the economic effects of the war in Ukraine and the economic crisis were still at an early stage of development. Monetary policy tightening to fight inflation is another element that can influence the reports of credit institutions, the effects of which could not be totally captured when making financial projections.

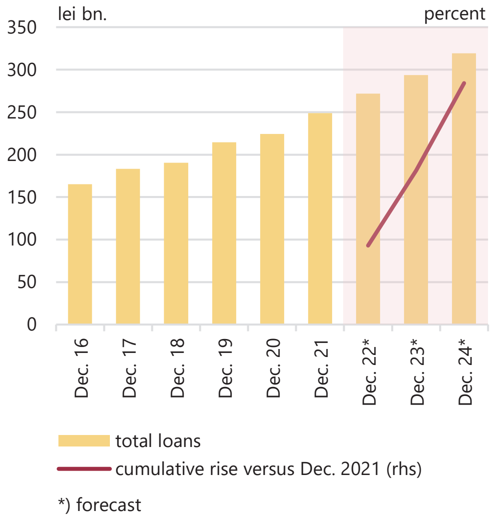
Ten reporting banks[71] participated in this annual assessment of the impact of credit institutions' funding plans. As at 31 December 2021, these institutions jointly accounted for approximately 81 percent of total assets and 79 percent of loans to the private sector, which ensures a good representativeness of the sample for the Romanian banking sector.

The assessment of the funding plans of credit institutions that reported lending forecasts shows a three-year cumulative rise of 29.3 percent in credit to the real sector, supported by both components: households (which would see a 32.4 percent advance within the projection horizon) and non-financial corporations (cumulative increase of 25.7 percent), Charts 3.17 and 3.18. The gap between household and corporate loans in total assets narrowed from 5.2 percentage points in 2020 to 3.3 percentage points in 2021. According to the reported data, the gap is expected to resume an upward trend (loans to households expand at a faster pace than corporate loans, as a share in total assets), and peak at 4.6 percentage points in 2024.

The growth rate of housing loans to residents is expected to slow down in the following years and post a cumulative rise of 34.4 percent, on a slight decline as compared to the dynamics seen by housing loans in 2018-2021, i.e. 36.6 percent for reporting banks. The share in total household credit is projected to widen from 69.3 percent in December 2021 to 70.4 percent at end-2024. No material changes in banks' strategy for lending to non-financial corporations are expected over the next three years, the share of loans to SMEs staying at around 57 percent.

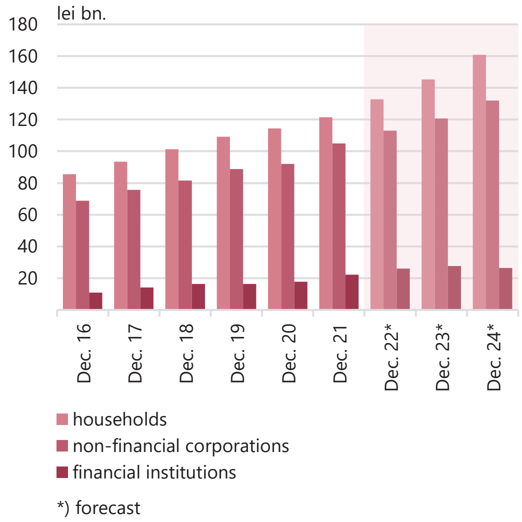
[71] Reports on funding plans were submitted individually by the following credit institutions in the Romanian banking sector: Banca Transilvania S.A., Banca Comercială Română S.A., BRD – Groupe Société Générale S.A., Raiffeisen S.A., Unicredit S.A., CEC Bank S.A., Alpha Bank S.A., OTP Bank S.A., Banca de Import-Export a României EXIMBANK S.A. and Crédit Agricole Bank S.A.

Chart 3.17. Lending developments



Source: NBR, credit institutions' reports on funding plans

Chart 3.18. Breakdown of credit by component



Source: NBR, credit institutions' reports on funding plans

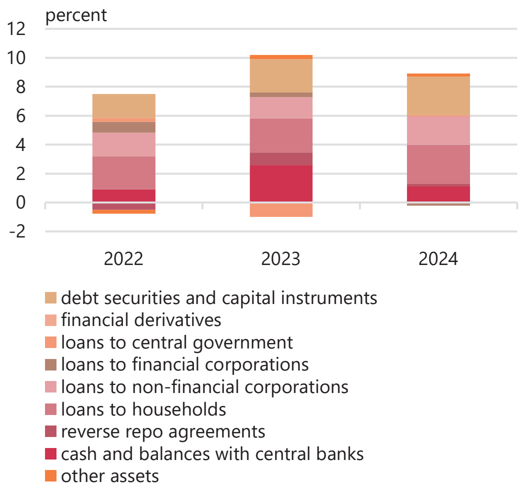
The ten reporting banks forecasted a cumulative rise of 26.7 percent in assets between 2022 and 2024 versus December 2021. The breakdown by balance sheet component shows that the main assets contributing to the balance sheet increase are loans to the real sector, debt securities, capital instruments and cash (Chart 3.19). Loans to households and non-financial corporations contribute by 7.9 percentage points and 5 percentage points respectively to the rise in total assets, while debt securities make a 7.2 percentage point contribution. As compared to the previous reporting, the following can be noticed: a change in order for the first three classes of assets and the higher importance of debt securities to the detriment of loans to non-financial corporations, due to the rise in yields on government securities and the increase in government financing needs. Currency also makes an important contribution to asset growth (5 percentage points versus 4.3 percentage points in 2021). This may show banks' shift in focus to safe and liquid assets, owing to the uncertain economic environment.

The in-depth analysis of banks'[72] forecasts on the advance in credit to the real sector shows enhanced heterogeneity over the 2022-2024 forecast interval, which may be ascribed to the size of credit institutions and their risk aversion, corroborated with the uncertainty caused by the geopolitical conflict in Ukraine and the high inflation rate, which called for monetary policy tightening. It is worth mentioning that, for 2022, only two banks anticipated that loan portfolio dynamics would slow down as compared with 2021, before gaining momentum in 2023 and 2024. Overall, the tendency of the first three largest banks already holding substantial loan portfolios is to forecast more conservative growth rates than the rest of banks that are keen on pursuing more rapid development.

As far as the projected annual growth of liabilities is concerned, the most important contributors were deposits of households (3.28-4.41 percent) and non-financial corporations

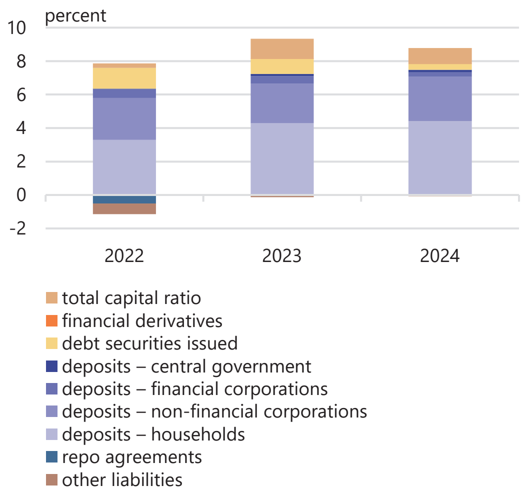
[72] Only eight credit institutions were included in the calculation of average, as two banks submitted incomplete reports of these values.

Chart 3.19. Contribution of assets to the annual increase (forecast)



Source: NBR, credit institutions' reports on funding plans

Chart 3.20. Contribution of liabilities to the annual increase (forecast)



Source: NBR, credit institutions' reports on funding plans

(2.36-2.63 percent), Chart 3.20. Thus, in the period between 2022 and 2024, deposits will further be the main source of funding, their share in liabilities remaining unchanged at approximately 81 percent. Turning to the share of deposits covered by a guarantee scheme, this will stay at around 58 percent of total deposits over the 2022-2024 reporting horizon.

From the perspective of the profit and loss account, banks' expectations may be summarised as follows: (i) the profit of banks will grow in the period under review due to a faster-paced rise in operating income than in operating expenses, as well as to reversal of provisions built in the previous years, (ii) ROA and ROE will increase slightly over the next years and (iii) the cost-to-income ratio (indicator of operational efficiency) will improve, dropping below 50 percent for this group of banks.

4. Implementation of macroprudential policy

In accordance with Art. 1 para. (2) of Law No. 12/2017 on the macroprudential oversight of the national financial system, the NCMO is mandated to ensure coordination in the field of macroprudential oversight of the national financial system by setting the macroprudential policy and the appropriate instruments for its implementation. In order to implement at a national level the measures necessary for preventing and mitigating systemic risks (Art. 4 para. (1) letters a) and b) of Law No. 12/2017), the NCMO is empowered to: (a) issue recommendations and warnings to the National Bank of Romania and the Financial Supervisory Authority, in their capacity of national financial supervisory authorities at a sectoral level; (b) issue recommendations to the Government for the purpose of safeguarding financial stability.

In Romania, the NCMO was established as an interinstitutional cooperation structure without legal personality and, in this context, the recommendations issued by its General Board are implemented by member authorities (the National Bank of Romania, the Financial Supervisory Authority, the Government), which are the recipients of the NCMO recommendations. In accordance with the provisions of Art. 4 para. (2) of Law No. 12/2017, the recipients of the NCMO recommendations or warnings may adopt the appropriate measures, including the issuance of regulations, in order to observe the recommendations or, where appropriate, may take action to mitigate the risks they were warned about. The recipients shall inform the NCMO of the measures adopted or, in cases where the recipients have not taken such measures, they should provide adequate justification for any inaction. If the NCMO finds that its recommendation has not been followed up or that the recipients have not adequately justified their inaction, it shall inform the recipients under strict confidentiality (Art. 4 para. (3) of Law No. 12/2017).

The NCMO General Board has the power[73] to monitor – via the two Technical Committees – the measures taken by the recipients following the adopted warnings and recommendations (Art. 30 para. (1) of the NCMO's Rules of procedure). The Technical Committees assess the adopted measures and/or the recipients' justifications for not adopting the measures based on the information communicated by the recipients of the recommendations, and inform the General Board thereof. For the purpose of this task, it is required to make regular analyses on the manner of implementing the NCMO recommendations.

[73] Regulation No. 1 of 9 October 2017 on the organisation and functioning of the National Committee for Macroprudential Oversight (the updated version according to NCMO Decisions No. D/1/2018 and No. D/1/2020).

In the period from January to December 2022, the NCMO issued seven recommendations, as follows:

- in its meeting of 31 March 2022 – NCMO Recommendation No. R/1/2022 on the countercyclical capital buffer in Romania;
- in its meeting of 28 June 2022 – NCMO Recommendation No. R/2/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation;
- in its meeting of 20 October 2022 – NCMO Recommendation No. R/4/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/5/2022 on the capital buffer for other systemically important institutions in Romania;
- in its meeting of 15 December 2022 – NCMO Recommendation No. R/6/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/7/2022 on compliance with Guidelines EBA/GL/2022/12 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators.

In order to assess the compliance with the requirement set forth in Art. 4 para. (2) of Law No. 12/2017 on the macroprudential oversight of the national financial system, an analysis was carried out on the progress in implementing the NCMO recommendations issued between January and December 2022, via information requests from the recipients.

The implementation progress made by the recipients of NCMO recommendations issued from January to December 2022, as well as in the previous period, which were not completed or which are applicable on a permanent basis, is as follows:

(i) seven recommendations were implemented by the recipient authorities: NCMO Recommendation No. R/1/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/2/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/4/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/5/2022 on the capital buffer for other systemically important institutions in Romania; NCMO Recommendation No. R/6/2022 on the countercyclical capital buffer in Romania; NCMO Recommendation No. R/7/2022 on compliance with Guidelines EBA/GL/2022/12 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators; NCMO Recommendation No. R/4/2020 on the implementation of Recommendation ESRB/2020/8 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic;

(ii) five recommendations are currently being implemented:

a) NCMO Recommendation No. 3 of 14 June 2017 on enhancing statistical information required for the analyses on the real estate market – the ESRB issued Recommendation of 21 March 2019 amending Recommendation

ESRB/2016/14 on closing real estate data gaps (ESRB/2019/3), which sets forth new deadlines for submitting to the ESRB the reports on the availability of indicators. Thus, the national macroprudential authorities are requested to deliver their final reports regarding subrecommendation D by 31 December 2025 (if the information referred to in point (a) of recommendation D(2) is not available by 31 December 2021);

b) NCMO Recommendation No. R/6/2020 on addressing vulnerabilities from the widening of the agri-food trade deficit – most of the measures which are the government's responsibility, namely those on implementing the strategy in the field of agriculture have an implementation period of 1-3 years, whereas the measure regarding the implementation of an industrial policy for the food sector that should lead to the improved fulfilment of the government's role in underpinning the agri-food sector has an implementation period of 3-5 years. Moreover, the NBR's responsibilities to review, at least once every two years, the methodology for identifying the firms that could be viewed as potential national champions in the agri-food sector and to disseminate additional statistical data for improving agri-food firms' access to finance have a regular implementation period starting December 2020. Thus, the tasks deriving from the aforementioned sub-recommendations become permanent; the lines of action are compliant with the recommendations; some of the subrecommendations were completed, while the rest are in different stages of implementation. Some proposals are subject to legislative changes, therefore their completion is work in progress;

c) Recommendation NCMO No. R/5/2021 for the implementation of Recommendation ESRB/2020/12 on identifying legal entities – this recommendation was implemented to a large extent, except for the update of the registers of non-bank financial institutions (the General Register and the Special Register) so as to include the LEI (Legal Entity Identifier) column; this operation is entrusted to the NBR and estimated to be completed during 2023;

d) NCMO Recommendation No. R/6/2021 on supporting green finance – subrecommendation 15 on encouraging non-financial reporting by SMEs via: (i) the publication of a simplified reporting model; (ii) the digitalisation of reporting and (iii) the allocation of funds to increase the reporting capacity of SMEs, including by compiling guidelines. Set up an automated framework for monitoring the reporting of non-financial statements. The recommendation is addressed to the Government and has the deadline for implementation set for 30 June 2023; some of the subrecommendations (I-1, I-2, I-6, II-8, II-11, III-12, III-13, III-16) were completed, while the rest are in different stages of implementation;

e) NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation – six subrecommendations have the deadline for implementation set for 2023. It is worth mentioning that, among the subrecommendations with implementation deadlines set for 2022, there are some that have not been completed (e.g. subrecommendation III.11 with the deadline on 31 December 2022) and some for which actions have been taken, but not necessarily in the right direction. The implemented measures should ensure that the objectives of the recommendation are better targeted;

(iii) three recommendations are applicable on a permanent basis, requiring recipients to carry out analyses on a regular basis. All three recommendations in this category (NCMO Recommendation No. 2 of 14 June 2017 on material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates, NCMO Recommendation No. 10 of 18 December 2017 on the impact of credit institutions' funding plans on the flow of credit to the real economy, NCMO Recommendation No. R/4/2018 on implementing macroprudential instruments for achieving the intermediate objectives included in the Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight) were implemented by the recipients via the analyses made in 2017, 2018, 2019, 2020, 2021 and 2022, which were reviewed by the NCMO General Board.

As for the NCMO recommendations that are currently being implemented, it should be noted that the implementation deadlines of some subrecommendations are overdue, which requires greater efforts on the part of the recipient authorities in order to complete their implementation.

The details concerning the measures adopted by recipients to implement the NCMO recommendations issued in 2022, as well as those that are applicable on a permanent basis are disclosed in the Annex.

As regards the recommendations that are currently being implemented, the details concerning the measures adopted so far by the recipient authorities are published on the NCMO website, in the section entitled Macroprudential Policy/Actions taken by recipients in order to implement the NCMO recommendations/Stages of implementation of NCMO recommendations – 2022 (http://www.cnsmro.ro/en/politica-macroprudentiala/modul-de-implementare-de-catre-destinatari-a-recomandarilor-emise-de-cnsm-2/).

Annex

The status of recommendations issued in 2022 by the National Committee for Macroprudential Oversight and of those that are applicable on a permanent basis, whose implementation was completed

NCMO recommendation	Recipient	Manner of implementation of the recommendation*
NCMO Recommendation No. R/2 of 14 June 2017 on material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates (permanent basis)	NBR	The recommendation was implemented based on the NBR's regular assessments that were reviewed and decided upon by the NCMO General Board, resulting in the adoption of the following: (i) NCMO Decision No. D/8/2018 on identifying material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates; (ii) NCMO Decision No. D/2/2019 on identifying material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates; (iii) NCMO Decision No. D/3/2020 on the assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates; (iv) NCMO Decision No. D/5/2021 on the assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates; (v) NCMO Decision No. D/5/2022 on the assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates. According to the above-mentioned decisions, for 2018, 2019, 2020, 2021 and 2022, no material third countries were identified for the banking sector in Romania in terms of recognising and setting countercyclical buffer rates.
NCMO Recommendation No. R/10 of 18 December 2017 on the impact of credit institutions' funding plans on the flow of credit to the real economy (permanent basis)	NBR	The recommendation was implemented through the assessments made in 2018 (based on the reports with the reference date of 31 December 2017), in 2019 (based on the reports with the reference date of 31 December 2018), in 2020 (based on the reports with the reference date of 31 December 2019), in 2021 (based on the reports with the reference date of 31 December 2020) and in 2022 (based on the reports with the reference date of 31 December 2021) on the impact of credit institutions' funding plans on the flow of credit to the real sector, also in terms of macroprudential policy, which were submitted in the course of the NCMO General Board meetings. The analyses showed the projected developments in credit to the real sector (for both non-financial corporations and households) and the level of financial intermediation, the total debt-to-GDP ratio, the dynamics of the funding and liquidity profile of credit institutions, and the impact of credit institutions' funding plans on solvency and profitability ratios.

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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
NCMO Recommendation No. R/4/2018 on implementing macroprudential instruments for achieving the intermediate objectives included in the Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight (permanent basis)	NBR, FSA	The NBR makes regular assessments of the risks and vulnerabilities in the financial system and the real economy, as well as of the appropriateness of implementing/recalibrating/deactivating macroprudential instruments, which are presented to the NCMO General Board for review and decision. To date, the NBR has implemented the following macroprudential instruments: the capital conservation buffer; the countercyclical capital buffer (CCyB); the buffer for other systemically important institutions (O-SII buffer); the systemic risk buffer (SyRB); requirements for the loan-to-value ratio (LTV); requirements for the debt service-to-income ratio (DSTI). The FSA makes regular assessments of the risks and vulnerabilities identified in the three non-bank financial markets under its supervision, as well as of the appropriateness of implementing the existing macroprudential instruments. To date, the following macroprudential policy measures have been implemented: (i) for financial investment companies (FICs): the capital conservation buffer (which was implemented in four annual increments of 0.625 percent of the total risk-weighted exposure amount from 1 January 2016 to 1 January 2019); (ii) for insurance companies: the liquidity indicator of insurance companies; the recovery plan; the Insurance Guarantee Fund; (iii) for private pension market: limits on significant exposures; (iv) for private pension fund managers: limit the exposure to an issuer to 5 percent of net assets; the exposure to a group of issuers and their affiliates may not exceed 10 percent of the private pension fund's assets; (v) for all entities under its supervision, the FSA applies IT system security requirements.
NCMO Recommendation No. R/4/2020 on the implementation of Recommendation ESRB/2020/8 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic	NBR, FSA, Government	The recommendation was implemented by the recipients. Regarding part A of NCMO Recommendation No. R/4/2020, the National Bank of Romania had a proactive role in assessing the impact of debt moratoria on financial stability, focusing on the banking and NBFI sectors (by conducting solvency and liquidity stress tests, by monitoring relevant prudential indicators and the flow of new loans). Along with the public moratorium (introduced by GEO No. 37/2020), other legislative initiatives were proposed in order to protect borrowers and defer payments, the NBR conducting the related impact assessments. At the same time, the NBR introduced a special weekly report, whereby banks should submit information on the number and volume of accepted requests for deferred payments, while also including additional requests for information in banks and NBFIs' monthly reports to the Central Credit Register (CCR) with a view to monitoring their credit portfolios and the changes in risk indicators. Another significant data source consists of the new bank reports on fiscal measures, set up following the EBA recommendations. Moreover, the NBR conducts regular analyses on the situation of non-financial corporations, based on semi-annual financial data, as well as on the household sector, while also monitoring the developments in the labour and the real estate markets.

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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
		The Financial Supervisory Authority adopted a series of microprudential measures in response to the COVID-19 pandemic, which are not of a fiscal nature and are not subject to NCMO Recommendation No. R/4/2020. These measures mainly refer to: extending report deadlines for the insurance market; recommendations on the transparency of issuers; using electronic means of communication; cutting 25 percent of all taxes charged by the FSA during the state of emergency; introducing the possibility to activate exceptional tools for investment fund participants; issuing cyber risk alerts; temporary derogation from the ceiling on investment in government securities for private pension funds. On the Government/MF side, in order to mitigate the negative economic effects generated by the COVID-19 pandemic, a number of government support programmes have been approved to support the activity of SMEs and small enterprises with medium market capitalisation (small mid-caps) via State guarantees. Furthermore, the government support scheme IMM INVEST PLUS was approved via GEO No. 99/2022, together with its components – IMM INVEST ROMANIA, AGRO IMM INVEST, IMM PROD, GARANT CONSTRUCT, INNOVATION and RURAL INVEST. This established a mechanism for granting State aid in the form of guarantees and loans with interest financed from the state budget, allowing liquidity access to the companies directly or indirectly impacted by the effects of Russia's invasion of Ukraine, including those generated by the sanctions imposed on Russia by the European Union and its international partners. The main adopted measures refer to: **Moratorium on loan repayments** Owing to the further negative impact of the COVID-19 pandemic, the Government of Romania approved Government Emergency Ordinance No. 227 of 30 December 2020 amending and supplementing Government Emergency Ordinance No. 37/2020 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions, which extended the measures enabling debtors to apply for a suspension of loan instalments, as follows: – Debtors may request that the payments of capital, interest and fees and commissions be deferred for at least 1 month and up to 9 months; the suspension can apply to loans that are already subject to deferral, as well as to loans for which a suspension request has not been previously submitted; – The overall length of 9 months also includes the period of actually applying the suspension of payment obligations based on the legislative moratorium laid down by Government Emergency Ordinance No. 37/2020 and/or the suspension periods granted under non-legislative moratoria; – Requests for the suspension of payment obligations could be submitted to the creditor by 15 March 2021, so that the latter could examine them and issue a decision no later than 31 March 2021;

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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
		– The beneficiaries of these facilities are debtors who signed loan agreements granted by 30 March 2020, which have not reached maturity and have not been called due by the lender by 31 December 2020; – Under the programme setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions (GEO No. 37/2020), 48 State guarantees totalling lei 499.38 million were granted. In the current context featuring higher prices, including for food and utilities, triggered directly or indirectly by the energy crisis and/or by Russia's invasion of Ukraine, GEO No. 90/2022 approved relief measures for debtors, individuals or legal entities, so that they benefit from the suspension of loan instalments representing payments of principal, interest and fees and commissions, as follows: **Relief measures for the deferral of loans under the "First Home"/"New Home" programmes:** The period during which loans under the "First Home"/"New Home" programmes can be deferred ranges between at least 1 month and up to 9 months. The repayment period for the instalments with deferred payment periods is 60 months. **Terms and conditions** This facility refers to loans granted by 30 April 2022. The final maturity date of the obligations to repay instalments, as laid down in the loan agreements, is subsequent to the date when the creditor approves the deferral request. Debtors can defer payment obligations only once for each loan. The deferral period of loan instalments (comprising payments of principal, interest and fees) is set at debtor's option, ranging between 1 and 9 months. Under the programme setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions (GEO No. 90/2022), 11 State guarantees were issued, amounting to lei 1.8 million. **Government guarantee programmes** In order to continue the IMM INVEST ROMANIA programme in 2022 too, the European Commission notified and approved the extension of the State aid scheme until 30 June 2022, as well as the introduction in 2021 of the AGRO IMM INVEST sub-programme with a view to supporting SMEs and small enterprises with medium market capitalisation (small mid-caps) in agriculture, fishery, aquaculture and the food sector. In 2022, under the IMM INVEST ROMANIA programme 10,195 State guarantees totalling lei 5,963.52 million were granted, whereas 2,385 State guarantees (amounting to lei 1,667.43 million) were issued under the AGRO IMM INVEST sub-programme. Since the start of the IMM INVEST ROMANIA programme and until 30 June 2022, 56,543 guarantees in amount of lei 31.80 billion were issued, out of which: 51,712 guarantees (totalling lei 28.05 billion) were granted under the IMM INVEST ROMANIA programme and 4,831 guarantees (amounting to lei 3.75 billion) were issued under the AGRO IMM INVEST sub-programme. At the same time, out of the total number of 56,543 guarantees issued by 30 June 2022, 208 SMEs underwent insolvency proceedings, and

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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
		the Ministry of Finance made payments under the guarantee enforcement value for 179 SMEs in total amount of lei 51.27 million. In addition, in the course of 2022 the financing of guarantee programmes in priority areas was approved (Government Emergency Ordinance No. 24/2022) – guarantee schemes with a State aid component, aimed at unlocking access to finance for beneficiaries facing difficulties caused by the COVID-19 pandemic, in order to develop investment projects and ensure business continuity. The State aid scheme for government programmes approved by GEO No. 24/2022 was valid until 30 June 2022, for the following government programmes: – IMM PROD – to provide liquidity and finance investments made by SMEs, including start-ups, in the urban area. Since the programme was implemented, i.e. in May 2022, and until 30 June 2022, 539 guarantees totalling lei 1.13 billion were issued. – RURAL INVEST – to ensure liquidity and finance investments made by eligible beneficiaries who locate their production in rural and small urban areas, in order to encourage business development in these areas. Since the programme was implemented, i.e. in May 2022, and until 30 June 2022, 588 guarantees amounting to lei 0.90 billion were issued. – GARANT CONSTRUCT – for projects to improve energy efficiency, green energy investment and alignment with the environmental objectives implemented by SMEs in the construction sector, and by territorial and administrative units. Under the GARANT CONSTRUCT sub-programme for SMEs, since its implementation in May 2022 and until 30 June 2022, 241 guarantees totalling lei 0.41 billion were issued. Under the GARANT CONSTRUCT sub-programme for territorial and administrative units, since its implementation in May 2022 and until 30 June 2022, one guarantee of lei 0.005 billion was issued. – INNOVATION – to support innovation capacity, and the export activities of SMEs active in trade and services, with a turnover of less than EUR 1 million, which operate in the exporting, clean industry. Furthermore, in 2022 the government support scheme IMM INVEST PLUS was approved via GEO No. 99/2022, together with its components – IMM INVEST ROMANIA, AGRO IMM INVEST, IMM PROD, GARANT CONSTRUCT, INNOVATION and RURAL INVEST. A mechanism was put into place for granting State aid in the form of guarantees and loans with government-backed interest, allowing the access to liquidity for the companies directly or indirectly impacted by the effects of Russia's invasion of Ukraine, including those stemming from the sanctions imposed on Russia by the European Union and its international partners. The government support scheme was prepared within the EU Temporary Crisis Framework adopted by the European Commission in context of Russia's invasion of Ukraine, and is valid until 31 December 2023.

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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
		– **IMM INVEST ROMANIA** IMM INVEST ROMANIA is a support programme for small- and medium-sized enterprises and for small enterprises with medium market capitalisation, which aims to provide facilities in the form of State guarantees for loans granted by credit institutions to small- and medium-sized enterprises and to small mid-caps. Since the programme was implemented, i.e. in October 2022, and until 31 December 2022, 4,929 guarantees totalling lei 5.14 billion were issued. – **AGRO IMM INVEST** AGRO IMM INVEST is a support programme for small- and medium-sized enterprises and for small enterprises with medium market capitalisation in agriculture, fishery, aquaculture and the food sector, which aims to provide facilities in the form of State guarantees for loans granted by credit institutions to such enterprises. Since the programme was implemented, i.e. in October 2022, and until 31 December 2022, 160 guarantees in amount of lei 0.20 billion were issued. – **IMM PROD** IMM PROD is a programme meant to provide liquidity and to finance investments made by SMEs, including start-ups, in the urban area. Since the programme was implemented, i.e. in October 2022, and until 31 December 2022, 603 guarantees totalling lei 743.99 million were issued. – **RURAL INVEST** RURAL INVEST is a support programme for small- and medium-sized enterprises, for small enterprises with medium market capitalisation and for large enterprises in agriculture, fishery, aquaculture and the food sector by providing facilities in the form of State guarantees for loans granted by credit institutions. Since the programme was implemented, i.e. in October 2022, and until 31 December 2022, 1,008 guarantees in amount of lei 0.9 billion were issued. – **GARANT CONSTRUCT** GARANT CONSTRUCT is a programme for projects to improve energy efficiency, green energy investment and alignment with the environmental objectives implemented by SMEs and small enterprises with medium market capitalisation in the construction sector, and by territorial and administrative units, and has two sub-components • the sub-component supporting investment projects for SMEs and for small mid-caps in the construction sector; • the sub-component supporting small investment projects for territorial and administrative units, which imply the financing of some construction activities. Under the GARANT CONSTRUCT sub-programme for SMEs, since the programme was implemented, i.e. in October 2022, and until 31 December 2022, 809 guarantees totalling lei 0.91 billion were issued. Under the GARANT CONSTRUCT sub-programme for territorial and administrative units, since the programme was implemented, i.e. in October 2022, and until 31 December 2022, one guarantee of lei 0.009 billion was issued.

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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
		– **INNOVATION** INNOVATION is a programme designed to support small- and medium-sized enterprises, small enterprises with medium market capitalisation that have an innovation component, the enterprises bringing inventions and innovations; it also supports the activity of SMEs to foster Romania's exports, and support Romania's international transactions and investments abroad. Since the programme was implemented, i.e. in October 2022, and until 31 December 2022, 3 guarantees in amount of lei 0.003 billion were issued. In the context of the COVID-19 pandemic, in accordance with the European Commission's State Aid Temporary Framework to support the economy, EximBank was mandated to implement support measures for large companies and small and medium-sized enterprises with a turnover of above lei 20 million by granting guarantees, in the name and on behalf of the State, which cover up to 90 percent for new loans or loans already granted by commercial banks or via financing with a State aid component. The government support scheme was valid until 30 June 2022, as set forth by the amended EU Temporary Framework, and had an estimated number of 425 beneficiaries. EximBank received 555 applications from eligible commercial companies, of which 218 were approved (large companies – 84 percent, SMEs – 16 percent) and 180 were signed and implemented (139 unique clients). The financing and guarantee facilities granted for the entire duration of the scheme totalled lei 3.53 billion. The Government of Romania approved the Memorandum on including the framework for state aid scheme in the context of the economic crisis generated by Russia's aggression against Ukraine, in the economic, fiscal and financial policies of Romania. Accordingly, EximBank can use the outstanding amounts available after the expiry on 30 June 2022 of the government support measures taken in response to the COVID-19 pandemic in order to implement new government support measures in the current global economic environment. The support measures proposed under this State aid scheme consist of: a) granting guarantees, in the name and on behalf of the State, which cover up to 90 percent of the principal in the case of investment and/or working capital loans granted to companies by commercial banks, with an estimated budget of lei 1.5 billion targeting about 120 beneficiaries; b) granting loans with subsidised interest rates to companies, in the name and on behalf of the State, for investment and/or for working capital, with an estimated budget of lei 1 billion for approximately 100 beneficiaries. The beneficiaries of this scheme are large companies and SMEs with medium market capitalisation. Following EXIMBANK's notification, the European Commission issued the decision authorising the scheme on 17 November 2022. Pursuant to the provisions of Law No. 96/2000, the scheme will be implemented based on rules that define specific financing and guarantee

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<table>
<tr><th>NCMO recommendation</th><th>Recipient</th><th>Manner of implementation of the recommendation*</th></tr>
<tr><td></td><td></td><td>products that were subject to the approval of the Interministerial Committee for Financing, Guarantees and Insurance (CIFGA). For transparency purposes, these Rules were published in Monitorul Oficial al României, Part I, 28 November 2022.
On 19 December 2022, the Government of Romania approved Government Decision No. 1513 to transfer an amount of money to the Ukraine State Aid Scheme, in the context of the economic crisis generated by Russia's aggression against Ukraine.
On 6 October 2022, the European Commission launched a consultation with the Member States regarding the amendment and prolongation of the State Aid Temporary Crisis Framework to support the economy in context of Russia's invasion of Ukraine, proposing the framework's extension until 31 December 2023 and 30 June 2024, respectively, for the conversion of repayable aid (e.g. guarantees or loans) into subsidies.
The NCMO General Board was informed on a quarterly basis of the fiscal measures adopted by Romania, according to the reports submitted to the ESRB in this regard, using the following indicators: type of aid granted, recipients and eligibility conditions, duration and other information (volume of the measure). At the same time, the potential financial stability implications of the fiscal measures were analysed. The NCMO Secretariat also submitted to the ESRB the quarterly reports containing information on the fiscal measures adopted in Romania, which were prepared by the competent national authorities (the NBR, the FSA, the Government), as follows:
<table>
<tr><th>Reference date for reporting the fiscal measures adopted in Romania</th><th>Date of submission to the ESRB</th></tr>
<tr><td>Reporting under Recommendation ESRB/2020/8 – 2021 Q1</td><td>29 April 2021</td></tr>
<tr><td>Reporting under Recommendation ESRB/2020/8 – 2021 Q2</td><td>29 July 2021</td></tr>
<tr><td>Reporting under Recommendation ESRB/2020/8 – 2021 Q3</td><td>28 October 2021</td></tr>
<tr><td>Reporting under Recommendation ESRB/2020/8 – 2021 Q4</td><td>31 January 2022</td></tr>
<tr><td>Reporting under Recommendation ESRB/2020/8 – 2022 Q2</td><td>29 June 2022</td></tr>
</table>
As of 2022 H2, the European Systemic Risk Board no longer requested national authorities to report on the fiscal measures adopted in the context of the COVID-19 pandemic, in line with Recommendation ESRB/2020/08.</td></tr>
<tr><td>NCMO Recommendation No. R/1/2022 on the countercyclical capital buffer in Romania</td><td>NBR</td><td>The NBR implemented the NCMO recommendation on maintaining the countercyclical buffer (CCyB) rate at 0.5 percent by issuing NBR Order No. 6/2021 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (published in Monitorul Oficial al României, Part I, No. 1130/26 November 2021).</td></tr>
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NCMO recommendation	Recipient	Manner of implementation of the recommendation*
NCMO Recommendation No. R/2/2022 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation on maintaining the countercyclical buffer (CCyB) rate at 0.5 percent by issuing NBR Order No. 6/2021 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (published in *Monitorul Oficial al României*, Part I, No. 1130/26 November 2021).
NCMO Recommendation No. R/4/2022 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation on raising the countercyclical buffer (CCyB) rate to 1 percent as of 23 October 2023 by issuing NBR Order No. 7/2022 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (published in *Monitorul Oficial al României*, Part I, No. 1187/12 December 2022).
NCMO Recommendation No. R/5/2022 on the capital buffer for other systemically important institutions in Romania	NBR	The NBR implemented the NCMO recommendation by issuing NBR Order No. 8/2022 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SII), published in *Monitorul Oficial al României*, Part I, No. 1187/12 December 2022.
NCMO Recommendation No. R/6/2022 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation on maintaining the countercyclical buffer (CCyB) rate at 1 percent as of 23 October 2023 by issuing NBR Order No. 7/2022 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (published in *Monitorul Oficial al României*, Part I, No. 1187/12 December 2022).
NCMO Recommendation No. R/7/2022 on compliance with Guidelines EBA/GL/2022/12 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators	NBR, FSA	Taking into account the NCMO recommendation on compliance with Guidelines EBA/GL/2022/12, the NBR Board decided, in its meeting of 9 December 2022, that on the date when a global systemically important institution (G-SII), Romanian legal entity, is identified, the NBR's specialised department must ensure its enforceability against the credit institutions covered by the EBA Guidelines. Namely, that department will carry out an analysis in order to identify an optimal solution to supplement the regulatory framework (issuing an instruction or a regulation/order that will include the disclosure requirements applicable to G-SIIs). To date, no global systemically important institutions (G-SII) have been identified within the Romanian banking system, given the relatively small-sized institutions active in the local banking market. An entity can be classified as a G-SII where its leverage ratio exposure measure exceeds EUR 200 billion (as provided for in point 6 of EBA/GL/2020/14) on a consolidated or individual basis.

Abbreviations

BSE	Bucharest Stock Exchange
CCoB	Capital Conservation Buffer
CCR	Central Credit Register
CCyB	Contercyclical Capital Buffer
CLIFS	Country-Level Index of Financial Stress
COREP	Common Reporting Framework
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
DSTI	debt-service-to-income
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
ESRB	European Systemic Risk Board
EU	European Union
Eurostat	Statistical Office of the European Communities
FDI	Foreign direct investment
FSA	Financial Supervisory Authority
GDP	Gross domestic product
GEO	Government Emergency Ordinance
G-SII	Global Systemically Important Institutions
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IRB	Internal Rating Based approach
LCR	Liquidity coverage ratio
LTV	Loan to value
MF	Ministry of Finance
NBFI	Non-bank financial institution
NBR	National Bank of Romania
NCMO	National Committee for Macroprudential Oversight
NIS	National Institute of Statistics
NPL	non-performing loans
O-SII	Other Systemically Important Institutions
ROA	return on assets
ROBOR	Romanian Interbank Offered Rate
ROE	return on equity
SMEs	Small and medium-sized enterprises
SyRB	Systemic Risk Buffer

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