



The National Committee for Macprudential Oversight

Annual Report

2018



Annual Report
of the National Committee
for Macroprudential Oversight
for the year 2018

NOTE

All rights reserved.
Reproduction for educational and non-commercial purposes
is permitted provided that the source is acknowledged.

National Bank of Romania
25, Lipscani St., postal code 030031, Bucharest – Romania
Telephone: 40 21/312 43 75; Fax: 40 21/314 97 52
<http://www.cnsmro.ro/>

ISSN 2601-8802
ISSN-L 2601-8802

Contents

Organisation	5
Overview	6
1. The National Committee for Macroprudential Oversight's activity in 2018	8
1.1. Establishment and organisation of the National Committee for Macroprudential Oversight	8
Box 1. The objective and tasks of the National Committee for Macroprudential Oversight	9
1.2. The European macroprudential oversight system	10
1.3. Topics discussed during the NCMO meetings	12
Box 2. Macroprudential policy and access to the euro area	14
1.4. The activity of working groups within the NCMO	16
1.4.1. Working group on implementing the International Financial Reporting Standards (IFRS) in the NBFIs sector	16
1.4.2. Working group on assessing the "First Home" programme	17
1.4.3. Working group on firms' financial soundness	18
2. Overview of the main risks and vulnerabilities to financial stability	21
2.1. Assessment of risks and vulnerabilities at global level	21
2.2. Main challenges at national level	24
2.2.1. Banking sector	26
2.2.2. Capital market	30
2.2.3. Insurance market	35
2.2.4. Private pension market	37
3. Measures implemented for achieving national macroprudential objectives	41
3.1. Adoption of the macroprudential policy strategy of the NCMO	41
Box 3. Guidelines for assessing the macroprudential stance	47
3.2. Macroprudential measures adopted in the EU in 2018	48

3.3. Macroprudential measures adopted in Romania in 2018	50
3.3.1. Capital buffers	50
Box 4. The relationship between the Basel reference indicator and the countercyclical buffer rate	54
Box 5. Calibration methods for the O-SII buffer in the EU	59
3.3.2. Other macroprudential instruments	68
4. Implementation of macroprudential policy	76
Annexes	78
Abbreviations	82
List of tables	83
List of figures	83
List of charts	83

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 double capacity as monetary and prudential authority. Financial stability objectives are pursued both by way of its prudential regulatory and supervisory 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 Public Finance. The MPF 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

Risks to financial stability are on the rise worldwide, in Europe as well as at a national level. The uncertainties surrounding economic and financial developments have remained high globally, and in many cases the macroprudential authorities' response consisted in the implementation of new safety measures that may be resorted to in the event of risks materialising. At EU level, the tightening trend of macroprudential policy continued throughout 2018. Most Member States implemented restrictive measures that address in particular cyclical systemic risks or vulnerabilities from the real estate sector. In line with the recommendations issued by the European Systemic Risk Board (ESRB) on the build-up of capital buffers in good times, several European countries have implemented positive rates of the countercyclical capital buffer (CCyB), in a context in which the standard methodology has not pointed to clear signals of any emerging episodes of excessive credit growth. Nevertheless, the additional indicators under scrutiny, as well as the macro-financial conditions, provided sufficient arguments for the build-up of countercyclical capital buffers that may be used in case of unfavourable developments. Other macroprudential measures implemented were the instruments addressed to borrowers, i.e. debt service-to-income (DSTI) and loan-to-value (LTV) requirements, for ensuring sustainable lending growth and debtors' increased resilience to unanticipated shocks.

The macroprudential policy in Romania was in line with similar policies in many Member States. Prudential measures concerning borrowers were implemented, to simplify households' access to loans and safeguard average- and below-average income earners. During 2018, the National Committee for Macroprudential Oversight (NCMO) recommended the following: (a) to maintain the countercyclical capital buffer at 0 percent and closely monitor developments in view of identifying the build-up of sectoral vulnerabilities, (b) to maintain the systemic risk buffer at 1 or 2 percent of the total risk exposure amount and reassess its level for each credit institution, Romanian legal entity, depending on the average values over the past 12 months for the indicators on the non-performing loan ratio and the coverage ratio, and (c) to apply a buffer for other systemically important institutions (O-SIIs) equal to between 1 and 2 percent of the total risk exposure amount to a number of nine identified institutions starting 1 January 2019 (the maximum level between the systemic risk buffer and the buffer for systemically important institutions will apply).

During 2018, the NCMO issued eight recommendations to the competent authorities, covering the area of systemic risk monitoring. The 18 recommendations issued by the NCMO in the period from 2017 to December 2018 are in various stages of implementation by the respective addressees, as follows:

- 14 recommendations have been implemented by the recipient authorities
- 1 recommendation is currently being implemented
- 3 recommendations are applicable on a permanent basis, implying the preparation of regular analyses by the addressees. All three recommendations in this category were implemented by the recipients both for 2017 and for 2018.

With a view to increasing transparency of the national macroprudential authority's work towards preventing or mitigating systemic risks, the NCMO General Board decided, in its meeting of 17 December 2018, to publish on the NCMO website a list of actions taken by the addressees in order to implement the recommendations issued by the NCMO in the period from 2017 to September 2018¹. Moreover, in line with its mandate and complying with the principle of transparency and institutional accountability, the NCMO continued the communication activity 2017 through 2018, by posting press releases on its website after each meeting.

¹ <http://www.cnsmro.ro/en/politica-macroprudentiala/modul-de-implementare-de-catre-destinatari-a-recomandarilor-emise-de-cnsm/>.

1. The National Committee for Macroprudential Oversight's activity in 2018

1.1. Establishment and organisation of the National Committee for Macroprudential Oversight

The National Committee for Macroprudential Oversight (NCMO) was established in 2017² as an interinstitutional cooperation structure without legal personality. Its mission is 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.

The NCMO is made up of the authorities that play a leading role in safeguarding financial stability in Romania, namely the National Bank of Romania, the Financial Supervisory Authority and the Government. Each authority has appointed, according to the legislation in force, three representatives with a voting right in the NCMO General Board. A representative of the Bank Deposit Guarantee Fund also attends the NCMO meetings as an observer. The NCMO General Board is chaired by the Governor of the National Bank of Romania, as appointed by law.

By establishing a distinct entity, explicitly mandated and legally authorised to adopt measures for safeguarding financial stability at a national level, the fragmentation of regulatory and supervisory responsibilities of national sectoral authorities (the NBR, the FSA, the Government and the FGDB) with financial stability responsibilities ceased to be a problem. Specifically, the set-up of this new national authority laid the groundwork for the macroprudential oversight framework in Romania. This measure is in line with the institutional measures and developments in Europe and worldwide, stemming from the lessons learned from the financial crisis, which proved that the pre-crisis mechanisms focusing on microprudential oversight were not enough to avert the build-up of excessive risks in the financial system, as the tools used in preventing adverse developments at a macroprudential level and analysing the interlinkages between the macroeconomic environment and the financial system were unavailable. An overview of the NCMO's objective and tasks is to be found in Box 1 and further details are provided in the NCMO's *Annual Report for 2017*.

² The National Committee for Macroprudential Oversight was established by Law No.12/2017 on the macroprudential oversight of the national financial system.

At a European level, the NCMO's corresponding authority is the European Systemic Risk Board (ESRB). According to the provisions of the current regulatory framework, the ESRB is responsible for the macroprudential oversight of the EU financial system in order to contribute to the prevention or mitigation of systemic risks to financial stability in the Union which arise from developments within the financial system and taking into account macroeconomic developments, so as to avoid periods of widespread financial distress. Moreover, through its activity, the ESRB supports the smooth functioning of the internal market and thereby ensures a sustainable contribution of the financial sector to economic growth.

During the Romanian Presidency of the Council of the European Union, the national authorities, the NBR, the FSA and the Government played an active part in managing the legislative files on financial and banking services. From the perspective of the institutional framework of macroprudential policy, one of the key projects technically coordinated by the NBR refers to the revision of Regulation (EU) No 1092/2010 on European Union macroprudential supervision of the financial system and establishing a European Systemic Risk Board (ESRB), as part of a broader package aimed at reviewing the regulatory framework governing the European System of Financial Supervision (ESFS review)³. The NBR experts participated in the negotiations carried out at technical and political level which were completed during the Romanian Presidency of the Council of the European Union, the entire package of legislative proposals being adopted by the European Parliament in its plenary meeting of 16 April 2019.

The changes in the ESRB statute were intended for tailoring the structure of this institution consistent with the developments in the micro and macroprudential institutional framework of EU Member States, while also taking into consideration the recent institutional changes at EU level related to the Banking Union and the efforts to create a Capital Markets Union. Moreover, the approved amendments were designed to enhance the effectiveness and efficiency of the ESRB activity in the area of macroprudential policies and systemic risk identification.

Box 1. The objective and tasks of the National Committee for Macroprudential Oversight

Pursuant to Law No. 12/2017 on the macroprudential oversight of the national financial system, the fundamental objective of the NCMO is to "contribute to safeguarding financial stability, also by strengthening the resilience of the financial system and by containing the build-up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth".

³ The ESRB and the European Supervisory Authorities (ESAs) are the micro and macroprudential pillars of the European System of Financial Supervision (ESFS) in charge of ensuring the supervision of the EU's financial system.

Its most important tasks are: (i) identifying, monitoring and assessing systemic risks, (ii) identifying the systemically important financial institutions and financial system structures, (iii) preparing the strategy on macroprudential policy for the purpose of achieving the fundamental objective, (iv) issuing recommendations and warnings in order to prevent or mitigate systemic risks to the stability of the national financial system, and (v) setting, reassessing on a regular basis and monitoring the intermediate objectives of macroprudential policy.

In order to implement the measures necessary for preventing and mitigating systemic risks at national level, the NCMO is empowered to: (i) 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, (ii) issue recommendations to the Government for the purpose of safeguarding financial stability, and (iii) request the European Systemic Risk Board to issue a recommendation for the recognition by one or more Member States of the macroprudential instruments recommended by the NCMO. The addressees 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 addressees shall inform the NCMO of the measures adopted; in cases where the addressees have not taken such measures, they shall provide adequate justification for any inaction ("act or explain"). A similar mechanism is used in the case of the European Systemic Risk Board (ESRB).

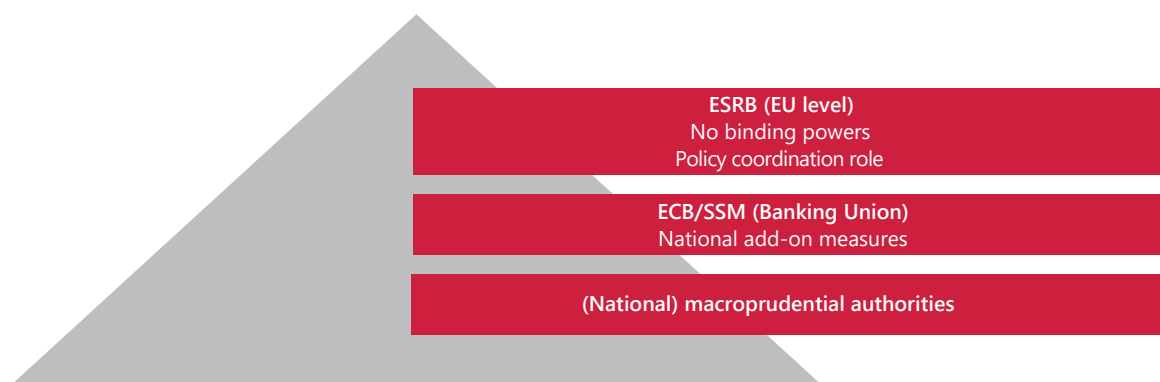
In the discharge of its duties, the NCMO acts as: (i) macroprudential authority within the meaning of the Recommendation ESRB/2011/3 on the macroprudential mandate of national authorities, (ii) designated authority within the meaning of provisions contained in Sections I and II, Chapter 4, Title VII of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (CRD IV), and (iii) designated authority within the meaning of Art. 458 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 (CRR).

1.2. The European macroprudential oversight system

At EU level, the European Systemic Risk Board (ESRB) was set up following the recommendations made by a group of experts, chaired by Jacques de Larosière, to consider how financial supervision could be strengthened to better protect European citizens and rebuild trust in the financial system, in response to the global financial crisis. The institutional response was the entry into force in 2010 of Regulation (EU) No 1092/2010 on European Union

macroprudential oversight of the financial system and establishing a European Systemic Risk Board whereby the ESRB was tasked with the macroprudential oversight of the EU's financial system and the prevention and mitigation of systemic risks. In order to fulfil its role as defined in the regulation, the ESRB monitors and assesses systemic risks and, where necessary, issues warnings and recommendations.

Figure 1.1. The structure of the framework for macroprudential oversight across the EU



Source: ESRB

Considering that the ESRB has a macroprudential policy coordination role in the European Union (Figure 1.1), one of the first recommendations issued refers to the macroprudential mandate of national authorities (Recommendation ESRB/2011/3), recommending Member States “[...] to designate in the national legislation an authority entrusted with the conduct of macroprudential policy, generally either as a single institution or as a board composed of the authorities whose actions have a material impact on financial stability”. In order to comply with the provisions of the recommendation, the National Committee for Macroprudential Oversight (NCMO) was established in Romania, as an interinstitutional cooperation structure, pursuant to Law No. 12/2017.

The comparison between the two committees shows a number of important similarities and differences:

- Scope: the ESRB is responsible for the oversight of the EU financial system overall, whereas the NCMO is in charge with overseeing the national financial system. At the same time, where a series of macroprudential measures are to be adopted, the ESRB may play a part in the approval of the national measures proposed by the NCMO (especially as regards structural capital buffers).
- Objectives and instruments: while both committees share the same primary objective on safeguarding financial stability and the intermediate objectives under Recommendation ESRB/2013/1⁴ were transposed into the macroprudential policy strategy of the NCMO, a number of country-specific objectives were, however,

⁴ Recommendation ESRB/2013/1 on intermediate objectives and instruments of macroprudential policy.

additionally set forth for Romania (for further details see Section 3.1. on the macroprudential strategy of the NCMO).

- Organisation: the structure of the two committees is similar, both of them being run by the General Board, chaired by the President of the ECB (for the ESRB) and the NBR Governor (for the NCMO). The committees include several sub-committees or committees (the Advisory Technical Committee, the Advisory Scientific Committee – ESRB or the Technical Committee on systemic risk and the Technical Committee on financial crisis management – NCMO), as well as the Secretariat, providing administrative and logistical support.
- The decision-making process: both committees take decisions by the vote of General Board members and the main instruments resorted to are warnings and recommendations based on a “comply or explain” mechanism – the recipients inform the Committee of the measures adopted in order to comply with the recommendation or, in cases where the recipients have not taken such measures, they provide adequate justification for any inaction.
- Reciprocation: the ERSB plays a decisive role in the reciprocation of macroprudential measures, in its capacity as coordinator at EU level, while the NCMO may recommend the reciprocation of some measures implemented in Romania or may decide on the application, by way of reciprocation, of some measures implemented by Member States.

To sum up, the National Committee for Macroprudential Oversight was established in compliance with the provisions of Recommendation ESRB/2011/3 on the macroprudential mandate of national authorities and it is an integral part of the European Union macroprudential oversight system, coordinated by the European Systemic Risk Board.

1.3. Topics discussed during the NCMO meetings

The ordinary meetings of the NCMO take place at least four times a year, based on an agreed calendar. The General Board can hold extraordinary meetings during the year at the request of any of its members. The ordinary or extraordinary meetings of the General Board are convened by the NCMO Chairman and usually take place at the NBR headquarters. In 2018, the NCMO held four ordinary meetings (on 26 February, 21 May, 24 September 2018 and 17 December), and in June 2018 a written procedure was prepared for the approval of the *Annual Report* and of some decisions on the reciprocation of some macroprudential measures implemented in other Member States.

The General Board of the National Committee for Macroprudential Oversight (NCMO) convened on 26 February 2018 to debate (i) the conclusions of the draft report of the FSAP mission (Financial Sector Assessment Program) that visited Romania in the period

from October 2017 to January 2018, which focuses on the macroprudential policy and systemic risk and (ii) the preliminary results of the analyses and proposals on firms' financial soundness, the implementation of some measures for mitigating risks to financial stability from household overindebtedness, as well as the recalibration of the "First Home" programme, formulated by the working groups established based on NCMO Recommendations No. 6/2017 and No. 7/2017.

Furthermore, during the NCMO meeting, discussions were held, according to the legal tasks, regarding the organisation and functioning of the NCMO and the composition of its technical committees, namely the Technical Committee on systemic risk and the Technical Committee on financial crisis management.

The second meeting (of 21 May 2018) was dedicated to macroprudential policy aspects such as: (i) the regular analysis on the recalibration of the countercyclical capital buffer (CCyB), (ii) the recalibration of the "First Home" programme and the impact on households' access to financing, (iii) the analyses of firms' financial soundness carried out within the NCMO's Working Group, (iv) the draft *Annual Report* of the NCMO for 2017, (v) the NCMO's overall macroprudential strategy framework and (vi) the stress test results for the banking sector in Romania.

The main topics on the agenda of the NCMO General Board's meeting of 24 September referred to: (i) the regular analysis on the recalibration of capital buffers (the countercyclical capital buffer, the buffer for other systemically important institutions and the systemic risk buffer) and (ii) the implementation of recommendations on macroprudential policy and systemic risk laid down in the IMF's "Romania: Financial Sector Assessment Program". The NCMO adopted a decision on approving the action plan for implementing the FSAP recommendations and the joint assessment procedure at NCMO level of systemic risks.

In the NCMO General Board's meeting of 17 December 2018, discussions referred to macroprudential policy matters, such as (i) the regular analysis on the recalibration of the countercyclical capital buffer, (ii) the appropriateness of reciprocating the macroprudential measure adopted by Belgium, (iii) the impact of credit institutions' funding plans on the flow of credit to the real economy, (iv) the strategy regarding the implementation of the International Financial Reporting Standards (IFRS) by non-bank financial institutions (NBFIs), entities under the NBR supervision, as basis of accounting and for preparing individual financial statements, and (v) the methodology for identifying the critical functions of credit institutions.

On this occasion, the NCMO General Board was informed of the systemic risks identified in the national financial system, as well as of the results of the solvency stress test of banks. Moreover, NCMO members were notified of the way in which the recommendations issued by the NCMO in the period from 2017 to September 2018 had been implemented by the national authorities that had received those recommendations.

The issuance in March 2018 of Government Emergency Ordinance No. 24/2018 on the establishment, organisation and functioning of the National Committee for Substantiation of the National Euro Changeover Plan was a landmark in the evolution of macroprudential policies in Romania. The National Committee is charged with preparing the calendar for Romania's entry into the Single Supervisory Mechanism and adoption of the euro, as well as the necessary steps for preparing the Romanian economy and society, agreed on by consensus by all participants in this process, to be included in the National Euro Changeover Plan. The NCMO member authorities are represented in the National Committee for Substantiation of the National Euro Changeover Plan⁵ and participate in: a) the drafting of the National Plan and calendar for the steps necessary for the euro adoption; b) the regular assessment of the progress in meeting the convergence criteria; c) the assessment of the legislative framework in place and the preparation of new legislative projects for adopting the euro, *inter alia*, from the macroeconomic policy perspective.

According to the National Plan, the authorities are to implement two important proposals in the near future (for further details, see Box 2).

Box 2. Macroprudential policy and access to the euro area

Once with the euro adoption, the growing importance of macroprudential policy calls for ensuring an efficient framework, both institutionally and operationally, becoming a primary objective in preparing the financial sector for the euro area. Thus, in a section dedicated to macroprudential policy, the National Euro Changeover Plan includes two fundamental proposals:

1. Amendment by the Parliament of Romania of Law No. 12/2017 by:

- designating the National Bank of Romania as the authority responsible for implementing the macroprudential instruments provided for in CRD IV and CRR, by subsequently amending Art. 3, para. (2) letters b) and c) and para. (3) of Law No. 12/2017, for ensuring a fast, efficient implementation of macroprudential policy measures applicable to credit institutions (including capital buffers);
- identifying new solutions for enhancing the efficiency in implementing macroprudential policy and avoiding inaction.

2. Compliance by competent authorities with the recommendations on macroprudential policy in the FSAP mission report, drafted by the IMF in 2018 (for observing the recommendation in the ECB's *Convergence Report*):

- apply a stressed DSTI limit to household loans;

⁵ The structure of the National Committee for Substantiation of the National Euro Changeover Plan is set forth in Art. 2 of GEO No. 24/2018. The Committee is headed by the Prime Minister and the President of the Romanian Academy, in their capacity as co-presidents, and the Governor of the National Bank of Romania and a Vice Prime Minister appointed by the Prime Minister, as vice-presidents.

- apply the IFRS 9 standards to the NBFIs sector for ensuring compliance of provisioning requirements with those applicable to banks, with a view to avoiding the regulatory arbitrage;
- enforce a currency-differentiated LCR;
- recalibrate the “First Home” programme to mitigate risks in the real estate sector and support the effectiveness of the LTV limits;
- use the systemic risk buffer to mitigate risks from banks’ exposure to sovereign debt.

The IMF mission that assessed the financial system in Romania during the FSAP exercise in 2018 made a series of recommendations on the macroprudential policy stance and the potential instruments that can be implemented for safeguarding financial stability. The implementation of these recommendations by competent authorities may provide benefits, such as (i) enhancing the resilience of the banking sector, *inter alia*, ahead of the euro adoption, (ii) improving investor perception on the soundness of the banking sector after complying with the recommendations and (iii) fulfilling the requirements set forth in the ECB’s *Convergence Report*⁶ on the implementation of recommendations from international institutions.

To sum up, both literature and practical experience confirm the importance of macroprudential policy to the economic policy mix, especially in the case of membership to a monetary union. Therefore, the National Bank of Romania, alongside all decision-makers involved in drafting the National Euro Changeover Plan, must actively contribute to the completion of an effective macroprudential policy framework and of a set of instruments to be efficiently used in the process of joining the euro area, as well as subsequently.

In keeping with its mandate and with the principles of transparency and institutional accountability, in 2017-2018, the NCMO carried on its communication activity, publishing press releases on its website after each meeting. The NCMO General Board members discussed and agreed on the contents of press releases during the meetings.

⁶ In order to build confidence in the financial system, the competent authorities must continue to improve the supervision practices, also by implementing the recommendations from relevant EU and international institutions, as well as by cooperating with the national supervisory authorities in other EU Member States within supervisory colleges.

1.4. The activity of working groups within the NCMO

1.4.1. Working group on implementing the International Financial Reporting Standards (IFRS) in the NBFIs sector

The NCMO General Board meeting of 26 February 2018 adopted NCMO Decision No. D/3/26.02.2018 on implementing FSAP recommendations on macroprudential policy and systemic risk, whereby the action plan for applying the IMF recommendations was approved. The latter include the IMF recommendation on tightening the provisioning requirements for NBFIs in line with the application of IFRS 9 to banks in order to prevent regulatory arbitrage, for which the IMF set a period of 1 to 3 years. In relation to this recommendation, the NCMO General Board decided to set up a joint MPF-NBR working group to analyse the appropriateness of including non-bank financial institutions in the scope of IFRS 9.

Against this background, the interinstitutional working group on IFRS implementation by NBFIs was established, with the participation of NBR and MPF representatives. The working group met in the period from August to September 2018. The activity of the working group materialised in NCMO Note No.40/2018 approving the strategy regarding the implementation of the International Financial Reporting Standards (IFRS) by non-bank financial institutions as a basis of accounting and for preparing individual financial statements, which was analysed in the NCMO General Board meeting of 17 December 2018. The Note provided information on the measures taken following the IMF recommendation, namely:

A) At the level of the NCMO: set-up of the MPF-NBR working group;

B) At the level of the NBR: organising in August and September 2018 meetings between representatives of the NBR and the MPF (as observers) within the working group, as well as with representatives of the professional associations of non-bank financial institutions (Asociația Societăților Financiare – ALB and Patronatul Creditului IFN), with a view to presenting the NBR's proposed approach vis-à-vis the manner of implementing the IMF recommendation; conducting a consultation, at the beginning of October 2018, of all NBFIs by submitting – via the Supervision Department – an assessment questionnaire for IFRS implementation by these entities and also informing on this topic the working group set up at the level of the professional associations of non-bank financial institutions for the purpose of shifting to IFRS.

The proposal laid down in the NCMO Note referred to IFRS implementation starting 2019, as follows:

- in the period from 2019 to 2021, the NBFIs entered in the General Register shall prepare, solely for information purposes, a set of IFRS-compliant individual annual financial statements, by restatement of items in the financial statements drawn up consistent with the national regulations according to European directives;

- starting 2022, the NBFIs entered in the General Register shall implement the IFRS and use only these standards as a basis of accounting and for preparing individual financial statements; starting 2022, individual financial statements shall no longer be prepared consistent with the national regulations according to European directives;
- putting in place a transitory regime by using off-balance sheet accounting to affect the own funds calculated by the NBFIs entered in the Special Register, from 2019 to 2021, i.e. decreasing them by the additional allowances for expected credit loss following the shift to IFRS 9, obtained by restatement of the financial statements drawn up consistent with the national regulations according to European directives.

1.4.2. Working group on assessing the “First Home” programme

Pursuant to NCMO Recommendation No. R/7/2017 to the Government, via the Ministry of Public Finance, and the National Bank of Romania, a working group was set up with the task of conducting in-depth analyses on household indebtedness. The objectives of the working group, made up of representatives of the Government, through the Ministry of Public Finance, of the National Bank of Romania and of the Financial Supervisory Authority, included among others the analysis of the impact of recalibrating the “First Home” programme.

The “First Home” government programme was launched in July 2009, representing a social measure, aimed both at supporting the priority economic sectors and at the resumption of lending⁷.

The programme had a positive contribution in terms of lending to households, inter alia via the shift in the flow of housing loans towards the domestic currency component starting August 2013. At present, the volume of loans extended under the “First Home” programme has grown to a systemic dimension, accounting for 45 percent of the stock of housing loans (lei 34 billion, March 2019) and 31 percent of the flow of new housing loans (lei 3.8 billion – annualised data as of March 2019). Alongside the systemic nature of this portfolio, the granting of loans with an LTV ratio of up to 95 percent, amid the surge in residential property prices, may generate vulnerabilities in the event of unfavourable macroeconomic developments.

The systemic dimension of the programme may give rise to certain vulnerabilities from the perspective of financial stability, by: (i) providing further impetus to housing loans, despite their significant dynamics; (ii) overstimulating housing demand, amid considerable movements in real estate prices; (iii) increasing the government’s exposure vis-à-vis the banking sector; (iv) borrower overindebtedness, as debtors with “First Home” loans have a high level of indebtedness even amid low interest rates and higher income.

⁷ Government Emergency Ordinance No. 60/2009 on certain measures with a view to implementing the “First Home” programme.

Moreover, although the period marked by difficult access to finance is over, the programme has drifted from its social purpose: (i) the share of “First Home” loans granted to high-income earners is important, (ii) lower-income borrowers tend to be overindebted, and (iii) the programme does not impose caps for the maximum value of the purchased dwelling or the obligation for the property to be a permanent residence.

Against this background, the NCMO issued Recommendation No. R/1/2018 on recalibrating the “First Home” programme, whereby the government is recommended to assess the opportunity of recalibrating the “First Home” programme from a social perspective by revising the requirements to access this programme while preserving a sustainable level of indebtedness.

1.4.3. Working group on firms’ financial soundness

Concerns over the implications of companies’ financial soundness in the context of economic agents’ loose payment discipline prompted the NCMO to adopt, in its meeting on 9 October 2017, Recommendation No. 6/2017 setting forth the establishment of an inter-institutional working group to identify possible measures in this respect. The working group on firms’ financial soundness was made up of representatives of the Government, through the Ministry of Public Finance, of the National Bank of Romania and of the Financial Supervisory Authority. Its objective was to conduct in-depth analyses on firms’ financial soundness and identify solutions for improving budget constraints in both public and private sectors. In carrying out the analyses, the group benefited from the support of the Ministry of Public Finance, via the National Agency for Fiscal Administration, for information on companies’ financial standing.

The report prepared by the working group analysed the situation of non-financial corporations with a poor financial standing (namely firms with net assets worth below 50 percent of capital) and their impact on economic growth and the banking sector, as well as the situation of the non-financial corporations’ sector in CEE countries. Furthermore, the report assessed possible policy measures, as follows: (i) more sustainable solutions for companies’ market entry, by analysing the framework in place as regards the share capital requirements for setting up companies in other European countries; (ii) easier solutions for companies’ market exit, by analysing the possibilities of cessation of activity and business closure in other European states; (iii) measures for a better enforcement of the action steps laid down in Law No. 31/1990 from the perspective of companies with net worth below the regulatory threshold; (iv) measures leading to firm budget constraints irrespective of company ownership; (v) possible improvements of the corporate insolvency procedure.

According to the working group’s report, recapitalisation needs for companies with equity below the regulatory threshold are substantial and have continued to grow also in the period when the economy recorded positive developments. Under the circumstances, determining the package of measures required for reducing the number of companies with capital shortfalls should take into account the large number of such companies and the

possible implications for the economy. The analysis prepared by the working group showed that these companies with negative equity had, on one hand, lower levels of output, sales and average labour productivity and, on the other hand, a significantly higher level of debt per employee. Moreover, the findings pointed to these firms' equity persistently remaining in negative territory over time (it was the case of 40 percent of these companies over a period of at least five years).

The assessment at a macroeconomic level of the role played by negative equity firms on economic growth indicated that the dynamics of these companies' activity were not correlated with aggregate economic activity, hinting at the weak involvement of these firms in determining the economy's cyclical behaviour. Furthermore, in a counterfactual scenario, assuming average labour productivity of firms with negative equity had been equal to that of firms with non-negative equity, nominal GDP would have been approximately EUR 10 billion larger in 2016.

The analysis of the situation of companies with a low level of capitalisation has indicated that: (i) a significant volume of capitalisation needs is accounted for by insolvent companies, so that revising the corporate insolvency framework may help reduce the number of these companies; (ii) the balance sheet consolidation of firms, with shareholders bearing the losses by reducing the value of the subscribed share capital (according to the legal framework) may also alleviate the sector's capital shortfall, but fully solves the problem only for a small number of companies; (iii) implementing measures on the conversion of debts payable by shareholders to equity and restricting the distribution of dividends to shareholders/partners unless the company complies with the minimum level of capital provided by law might also help improve payment discipline in the economy.

As regards the market entry and exit solutions for firms, the report does not identify a common practice across the EU. In particular, two legal structures are more frequent – in both cases the shareholders' liability is limited to subscribed capital contribution and there are no additional responsibilities in case of bankruptcy –, namely joint-stock companies and limited liability companies. Moreover, there are two ways – albeit in various forms – of closing a company in European countries: voluntary closure of business and compulsory closure, as a result of insolvency or bankruptcy. While the terms and conditions differ across states, voluntary winding-up is only possible if the company is solvent. The report places Romania among the countries with the lowest share capital requirements for setting up limited liability companies and joint-stock companies.

In terms of possible measures to improve payment discipline in the economy, the report has identified the following: (i) the amendment of Art. 153²⁴ of Law No. 31/1990 with a view to explicitly stipulating the entity acting as a stakeholder on behalf of the state in order to cut the number of undercapitalised companies; (ii) the full transposition of the provisions of Directive EU 2017/113 conditioning the distribution of dividends to shareholders on the fulfilment of net assets requirements; (iii) amending Art. 210 para. (2) of Law No. 31/1990 for enabling easier conversion of debts payable by shareholders/partners to equity and for introducing requirements for the increase in the subscribed share capital by converting

debts payable by shareholders where net assets stand below the minimum level provided by law; (iv) prohibiting financing of undercapitalised firms via debts payable by shareholders/partners.

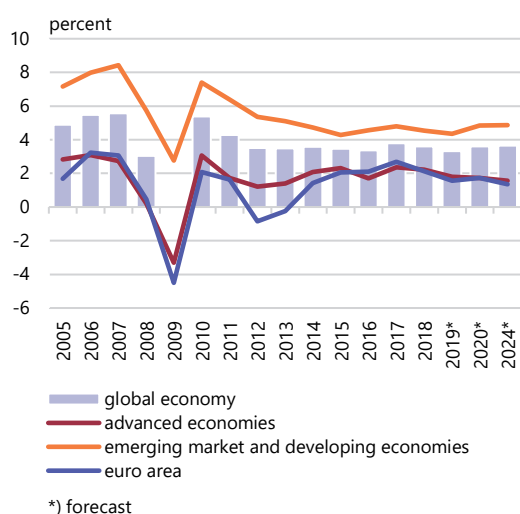
After discussing the solutions in the report prepared by the working group, the NCMO decided to adopt Recommendation No. R/2/2018 whereby the Government was recommended to look into the possibilities of improving the regulatory framework governing non-financial corporations, after having consulted with businesspersons and social partners. In light of this recommendation, the Government approved in its meeting of 4 October 2018 the Memorandum on “measures/proposals for improving the regulatory framework governing non-financial corporations so as to mitigate the decapitalisation of companies”.

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

2.1. Assessment of risks and vulnerabilities at global level

The worldwide economic picture is characterised by elevated uncertainty amid the maintenance of accommodative financial conditions, combined with events such as the US-China trade dispute, the manner of dealing with Brexit, and investors' heightened risk aversion. Main risks to global financial stability are as follows: (i) public and private sector debt sustainability⁸, (ii) financial imbalances in China and potential spillover effects^{9,10}, (iii) volatile capital flows on emerging markets, and (iv) price adjustments in the residential real estate sector.

Chart 2.1. Global economic growth



Source: IMF, *World Economic Outlook*, April 2019

Global economic growth stood at 3.2 percent in 2018, and for 2019 and 2020 it is estimated at 3.3 percent and 3.6 percent respectively¹¹ (Chart 2.1).

Monetary policy normalisation has started in 2018 in some advanced economies (USA, Canada, UK), but has slowed starting in 2019 amid concerns about the evolution of global economic growth. The maintenance of accommodative financial conditions worldwide, amid a significantly higher level of indebtedness than 10 years ago, is expected to play a role in fuelling vulnerabilities. Specifically, the global debt-to-GDP ratio advanced to 217 percent in September 2018, from 182 percent of GDP in December 2008.

In the European Union and the euro area, the pace of economic growth moderated in 2018 to 2 percent and 1.9 percent respectively, down from 2.4 percent in 2017. This development is ascribable to both external factors such as uncertainty surrounding trade policies, higher oil prices, and domestic factors. The latter include the uncertain fiscal policies in some EU Member States, public and private debt sustainability, and the unfolding of Brexit.

⁸ European Systemic Risk Board, Risk dashboard, March 2019.

⁹ ECB, *Economic Bulletin*, February 2019.

¹⁰ OECD, *Interim Economic Outlook*, March 2019.

¹¹ IMF, *World Economic Outlook*, April 2019.

As for Brexit, although in April 2019 the European Council granted the United Kingdom a flexible extension of the deadline for leaving the Union until 31 October 2019, the possibility of a no-deal Brexit remains an important risk to the EU-UK trade relations. The direct effects on Romania are not expected to be significant, given the reduced trade ties and the low presence of British credit institutions in Romania's banking sector. Nevertheless, indirect effects associated with the weaker growth prospects in Member States and with an increase in risk premia can emerge, because of the increased lack of confidence of global investors.

The first two systemic risks in the euro area, according to the European Central Bank's assessments¹², which may entail negative implications for sustainable medium-term economic growth, refer to the repricing of risk premia in international financial markets and to the public and private sector debt sustainability concerns.

International financial markets were marked by turmoil in early 2018, after a period of low volatility that characterised 2017. The end of 2018 saw a "flight to safety", which sent prices of risky assets lower and caused corporate bond spreads to widen. Investors' risk perception towards emerging economies was different. Capital flight affected some major emerging economies facing macroeconomic imbalances (Argentina, Brazil, Turkey, etc.), but did not spread over to all emerging markets. At EU level, asset prices remained relatively stable and financial market uncertainty did not change notably¹³.

Investor confidence may also be affected by factors such as the pick-up in public and private sector debt. At regional level, 12 and 14 countries respectively report private and public debt-to-GDP ratios above the alert thresholds set forth in the European Commission's Macroeconomic Imbalance Procedure¹⁴ (Charts 2.2 and 2.3). A European feature is the significant build-up of debt by non-financial issuers that are rated below investment grade (BBB rating), which, in the event of adverse economic developments, may lead to a more pronounced worsening of their financial statements, with an impact on debt servicing capacity.

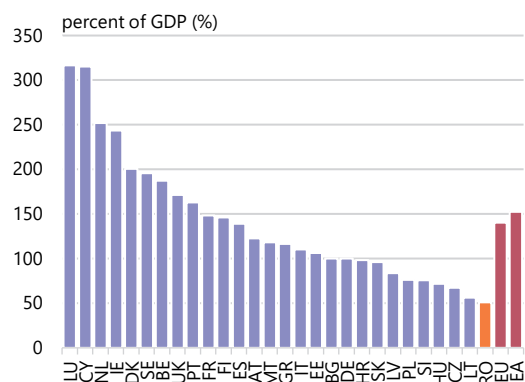
Imbalances at EU level can also pass through to the national level via either the trade channel or the exposures to the domestic banking sector, both directly and through the common creditors. An analysis of interlinkages between financial systems worldwide reveals that countries such as Austria, France or Italy have a large proportion of external bank exposures to Romania, as well as exposures to countries grappling with economic woes (e.g. Turkey).

¹² ECB, *Financial Stability Review*, May 2019.

¹³ European Systemic Risk Board, Risk dashboard, March 2019.

¹⁴ According to the Macroeconomic Imbalance Procedure Scoreboard.

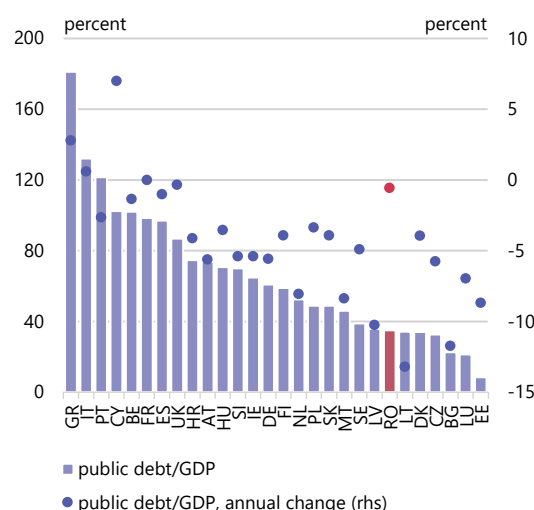
Chart 2.2. Private debt, 2017



Note: Private sector debt is the stock of bonds held by non-financial corporations, households and non-profit institutions serving households. The instruments considered for compiling private sector debt are securities and loans.

Source: Eurostat

Chart 2.3. Public debt, 2018



Source: Eurostat

Europe’s banking sector recorded positive developments, amid an improving loan portfolio in 2018, accompanied by an increase in liquidity and the maintenance of adequate solvency ratios. The stock of non-performing loans remains elevated in a number of countries (see Chart 3.8 in Section 3.3.1.3) and is a major concern for the European authorities. At the same time, market risk and credit risk are relevant given the upward trend in indebtedness, but also following the developments in residential real estate markets. Against this background, the European Central Bank is putting pressure on banks¹⁵ to clean up their balance sheets by reducing the stock of non-performing loans, in particular the unpaid loans inherited from the last recession.

Risks to the European financial system stemming from the non-bank sector are still manageable, but tighter monitoring is needed in light of this sector’s increased relevance. Risks from the insurance sector remain low, while for the pensions sector, the risk of repricing of fixed-income securities may prompt significant losses in this area. Furthermore, the expansion of investment funds sector could pose risks to financial stability, its renewed increase being a cause for concern at a European level.

Another intensively-monitored area at international level is Fintech¹⁶, owing to its implications for financial stability. The major risks triggered by developments in Fintech are as follows¹⁷: (i) contagion, (ii) procyclicality, (iii) excess volatility, and (iv) the failure of some systemically important entities. Moreover, a global priority is to manage and mitigate cyber risks, due to the increased frequency of cyber-attacks on the financial system.

¹⁵ <https://www.reuters.com/article/ecb-banks-credit/ecb-inspectors-find-10-bltn-euro-problem-in-banks-loan-book-idUSL8N1R83PK>.

¹⁶ According to the exercise run by the European Banking Authority (*Discussion Paper on the EBA’s approach to financial technology (FinTech)*, 2017), the main groups of financial products or services within the scope of financial innovation are: (i) credit, deposit and capital raising services, (ii) payments, clearing and settlement services, (iii) investment services/investment management services, and (iv) other financial-related activities.

¹⁷ Financial Stability Board, *Financial Stability Implications from FinTech*, 2017.

2.2. Main challenges at national level

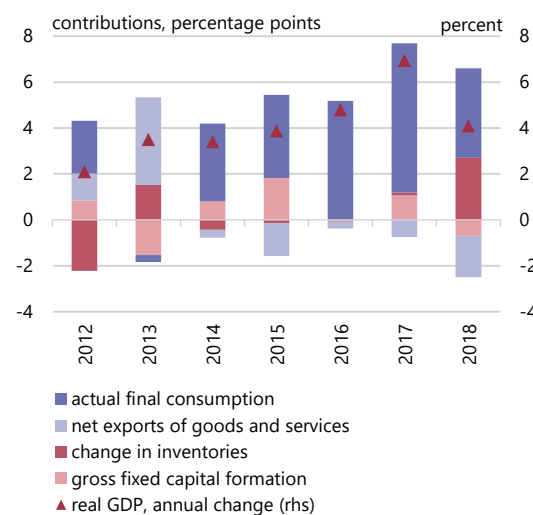
The main risks to financial stability in Romania are as follows: (i) tensions surrounding domestic macroeconomic equilibria, (ii) the risk of an uncertain and unpredictable legislative framework in the financial and banking sector, with implications for banking sector solvency, (iii) the deterioration in investors' sentiment towards emerging economies, also amid uncertainties about economic developments in the EU (Brexit and the euro area sovereign debt concerns), (iv) the structure and cost of financing of the current account deficit and the budget deficit, and (v) the default risk for loans to the private sector. Of these, the first three are assessed as high systemic risks (the first two are seen rising and the third to remain unchanged). The other two are assessed as moderate and low respectively.

After posting one of the highest growth rates in 2017 (7 percent), the likelihood of an increase in the degree of overheating of Romania's economy receded during 2018, but the risk of tensions surrounding domestic macroeconomic equilibria continued to be manifest. Economic growth ran at 4.1 percent in 2018, yet it remained above the EU and euro area averages of 2 percent and 1.9 percent respectively. By contrast, growth forecasts for 2019 and 2020 were subject to downward revisions¹⁸.

However, the economic growth composition remains suboptimal. The main, albeit declining, contribution is that of consumption (3.9 percent), followed by the change in inventories, whereas investment had again a negative contribution compared to 2017 (Chart 2.4). Against this background, economic growth should feature more balanced developments by major component, together with policies capable of ensuring the sustainable increase of potential GDP and improve the use of production factors¹⁹.

The labour market painted a brighter picture in the course of 2018, but structural vulnerabilities such as regional disparities, emigration or early school leaving still linger. The unemployment rate contracted, hitting in March 2019 a 10-year low of 3.8 percent (seasonally adjusted data), while employment (for persons aged 20-64) reached 69.9 percent in 2018 (from 68.8 percent in 2017). Labour productivity per hour worked also witnessed positive developments, i.e. up 3.8 percent compared to 2017, causing Romania to rank second in the European Union (after Poland) and significantly above the EU average of 0.7 percent.

Chart 2.4. Determinants of GDP dynamics



Source: NIS, NBR calculations

¹⁸ According to the European Commission's Winter 2019 Economic Forecast, the economic growth is seen to decrease to 3.8 percent in 2019 and 3.6 percent in 2020, while according to the IMF's *World Economic Outlook* Romania's economy is expected to grow by 3.1 percent in 2019 and 3 percent in 2020.

¹⁹ Liviu Voinea, presentation delivered at the Macroeconomics Panel – 2018 FP Investor Days, Bucharest, 6 September 2018.

A notable structural vulnerability of the labour market refers to the demographic problem, owing to both the natural decline in population and emigration. The natural population change was -3.1 percent in 2017, while elderly population, aged 65 years or over, accounted for 30 percent of Romania's total number of inhabitants. In addition, emigration expressed as a share of total population and total labour force in Romania rose markedly in 2017 to 14 percent and 37 percent respectively. Moreover, according to a Eurostat study²⁰, Romania displayed the highest emigration level EU-wide among the persons aged 20–64 residing in EU Member States (19.7 percent in 2017), up 12.3 percentage points from 2007. Although at aggregate level the composite social inclusion index²¹ improved noticeably in 2017, it points to the fact that regional disparities are still pronounced.

A cause for concern is the evolution of twin deficits (the fiscal deficit and the current account deficit), with a possible negative impact on financial stability over the medium term (Chart 2.5). The annual dynamics of the current account deficit-to-GDP ratio worsened in 2018. Compared to its peers in the region, Romania reported the highest current account deficit-to-GDP ratio (4.5 percent in December 2018), which can suggest external competitiveness losses of the Romanian economy. The structural deficit significantly exceeded its medium-term target²² (1 percent), standing at 3.3 percent of GDP in 2018 and being projected by the European Commission at 4.8 percent of GDP in 2020, up from 3.6 percent of GDP in 2019, against the background of higher social security spending. To these added the risk associated with the structure and cost of current account deficit and fiscal deficit financing. With regard to the former, the deficit was covered by fewer stable flows and non-debt-creating flows such as direct investment and EU funds in the form of capital transfers.

Seen from the perspective of external debt, vulnerabilities to financial stability remain low. While external debt increased in absolute terms in the course of 2018, its share of GDP continued to decline to 49 percent (Chart 2.6), the lowest level in the region. Nevertheless, close monitoring is called for, considering the lower short-term external debt coverage (70 percent in March 2019 versus 79 percent at end-2017).

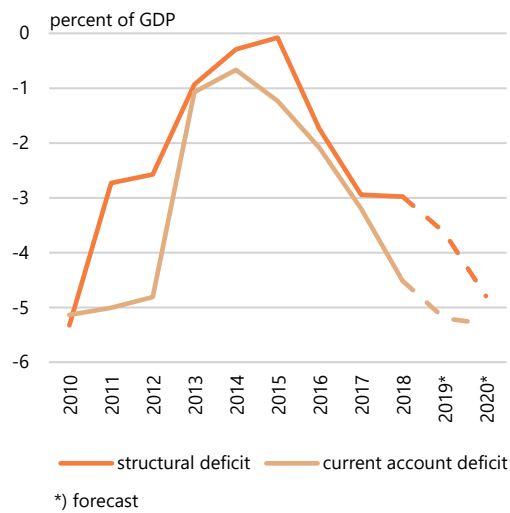
As far as households and non-financial corporations are concerned, a number of vulnerabilities that might fuel default risk have become manifest. Specifically, with household indebtedness on the rise, the identified macroeconomic risks could be felt at individual level, i.e. by highly leveraged borrowers. Furthermore, the asymmetry between the debt service-to-income ratio for low-income debtors (below the average wage economy-wide) and high-wage earners (above double the average wage) is still critical, for housing loan borrowers in particular.

²⁰ <https://ec.europa.eu/eurostat/documents/2995521/8926076/3-28052018-AP-EN.pdf/>.

²¹ The indicator is built using the principal component analysis (PCA) and comprises the following variables: unemployment rate, the NEET rate, youth unemployment rate, long-term unemployment rate, employees with only primary education, material deprivation rate, share of people in households with low labour intensity, share of people at risk of poverty. The change implying a decline in variables points to an improvement in the conditions for labour market inclusion, so that a decrease is treated as a positive development (*Job Creation and Local Economic Development 2018, Preparing for the Future of Work*, OECD).

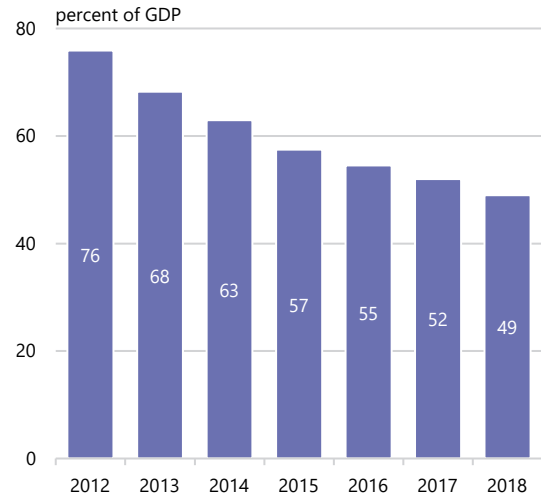
²² The target set by Fiscal Responsibility Law No. 69/2010, as subsequently amended and supplemented, and by the Stability and Growth Pact.

Chart 2.5. Twin deficits



Source: Eurostat, European Commission

Chart 2.6. External debt



Source: NBR, Eurostat

Moreover, the substantial share of floating-rate loans in the stock and the flow of housing loans and corporate loans is a driving force amid the new interest-raising cycle. Entering this interest rate cycle could pose a risk of increasing foreclosure on collateral provided under the “First Home” government programme, with an impact on fiscal spending. There were, however, favourable developments as well. Households’ balance sheet recorded positive dynamics, on the back of the sector’s higher net wealth, also due to wage increases, whereas the share of debtors with fixed-rate loans widened from 11.4 percent (in annualised terms, March 2018) to 25.2 percent (in annualised terms, March 2019).

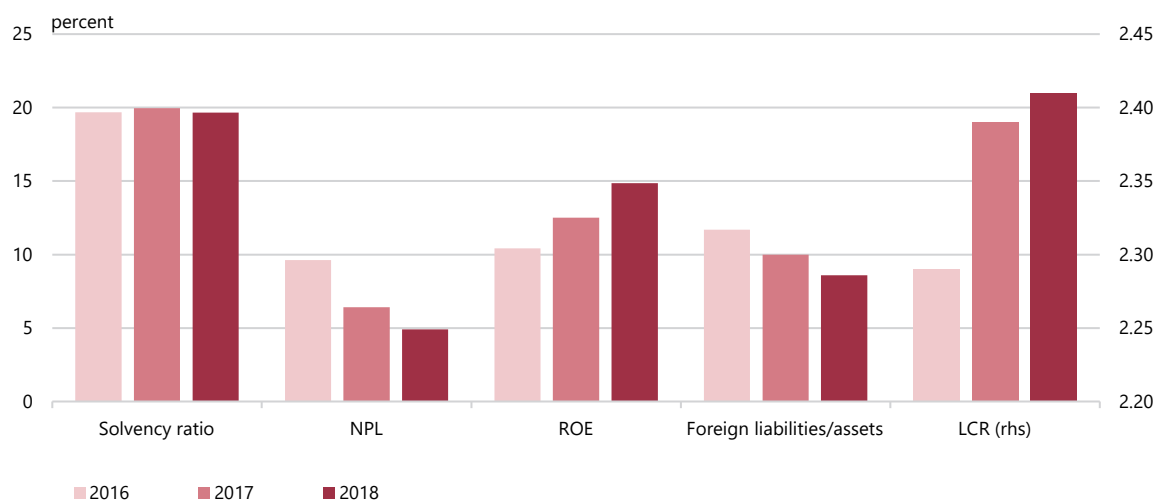
A relevant vulnerability associated with non-financial corporations is the weak payment discipline in the economy, reflected by soft budget constraints in the private sector as well. It contributes to fuelling vulnerabilities to financial stability through: (i) an inefficient resource allocation, (ii) the increase in non-performing loan ratio, (iii) the distortion of market signals, or (iv) the creation of quasi-money with negative effects on inflation. The main risk factors to financial stability refer to: (i) the undercapitalisation of a significant number of companies, largely on the back of losses or high indebtedness in certain sectors, and (ii) poor capacity to recover commercial claims, especially at the level of micro-enterprises.

The risk associated with real estate market developments is on the wane, amid the deceleration in the dynamics of residential prices in the course of 2018, owing to the contraction of demand, and the slowdown in construction and real estate sub-sectors.

2.2.1. Banking sector

The banking sector is the main player of the financial system in Romania, accounting for 76 percent of total financial system assets (December 2018). The Romanian banking sector’s soundness remained robust in 2018, amid adequate solvency and liquidity ratios, consistent profitability and an improving trend in asset quality (Chart 2.7).

Chart 2.7. Banking sector indicators



Source: NBR

However, certain structural vulnerabilities specific to the banking sector, namely an operational framework saddled with relatively instable legislation applicable to the financial and banking field, fuel risks. Asset quality indicators show room for improvement in easing credit risk. A number of structural risks associated with the banking sector are closely monitored and refer to: (i) lower operational efficiency amid weak financial intermediation and polarised profitability, (ii) the potentially excessive focus on financing the government sector, which contributes to increasing concentration risk, (iii) the interest rate risk reflected by the asset-liability mismatch, and (iv) the composition of funding source.

Capital adequacy indicators ensure the resilience of the Romanian banking sector to losses and provide resources for increasing lending. The total capital ratio runs inside the specific low risk bucket (19.66 percent, December 2018, Chart 2.7) and is comparable to EU averages. However, the median distribution of the total capital ratio for credit institutions in Romania surpasses that of banks under BIS oversight (Chart 2.8).

The leverage ratio, calculated based on the full definition, has a median value of 9.3 percent (December 2018) in the Romanian banking sector, decreasing slightly, yet standing comfortably above the minimum requirement of 3 percent. In addition, all credit institutions, Romanian legal entities, not only exceed this threshold, but are also markedly above the values of similar indicators at international level (Chart 2.9). The relatively high value of this macroprudential indicator confirms a traditional banking activity in Romania, at the same time leaving room for a rise in financial intermediation.

Banking sector liquidity remained adequate throughout 2018, in terms of its specific indicators. The liquidity coverage ratio (LCR, Chart 2.7) and the net stable funding ratio (NSFR) reported values above one in the case of all credit institutions²³ in Romania, which indicates good liquidity management that was also confirmed by the stress scenarios applied to various time horizons (ranging from one week to one year).

²³ The indicators related to the total component (for all exposures, regardless of the denomination currency).

Chart 2.8. Distribution of total capital ratio

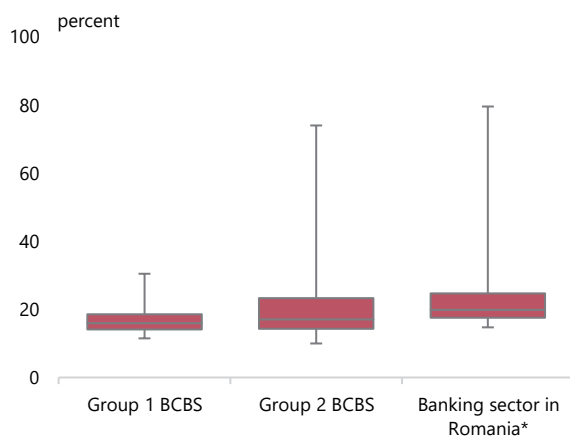
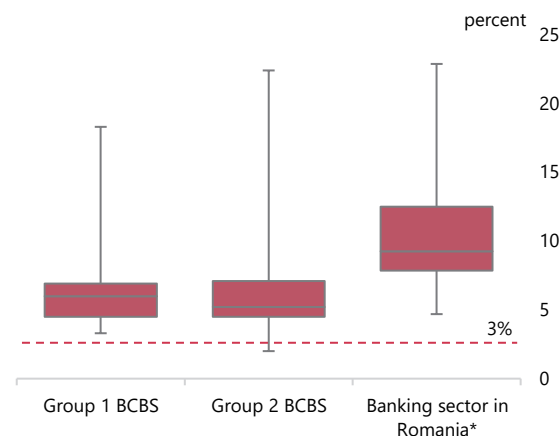


Chart 2.9. Distribution of leverage, broad definition



*) BCBS data as at June 2018 and data on Romania as at December 2018. BCBS data cover 189 banks, of which 106 are very large banks (group 1 with Tier 1 capital of more than EUR 3 billion) and 83 are large banks (group 2).

Source: Basel Committee on Banking Supervision (BCBS), NBR

These indicators are, in fact, macroprudential instruments included in Recommendation ESRB/2011/3 on the macroprudential mandate of national authorities, although they can be regarded as microprudential, considering the manner in which they are determined.

The funding risk is mainly associated with the stability of the prevailing funding source for the banking sector, i.e. deposits taken from the real sector. The latter have become more important over the past years, reaching 64 percent of total liabilities at end-2018. The high granularity of deposits from the real sector, as well as the significant deposit guarantee²⁴, sustain the low risk associated with withdrawals in the event of liquidity shocks materialising. In addition, the empirical evidence throughout a business cycle confirms the relative stability of this source compared to other types of funding (e.g. wholesale funding). The upward trend of financing from the real sector, in particular, i.e. the reduced reliance on foreign funding (currently representing 8.6 percent of total funding sources, as opposed to 30.6 percent at end-2008) led to a gradually declining liquidity risk (Chart 2.7).

Although relatively stable at aggregate level, the main funding source of the banking sector (deposits from the real sector) has lately witnessed structural developments that induce some vulnerabilities. Specifically, there is a relatively important rise in demand deposits in total balance sheet liabilities. This appears to be the mainstream at a European level (especially in Central and Eastern European countries), amid low interest rates that do not encourage longer-term saving. In the particular case of Romania, credit institutions' balance sheet liabilities consist, to a substantial extent (more than a third), of overnight deposits. From this perspective, banks in Romania seem to adopt a riskier financing strategy in order to maximise interest income by applying low interest rates to time deposits, which, in most cases, implies negative real interest rates.

²⁴ According to the Bank Deposit Guarantee Fund, 65.2 percent of the total balance on deposits from the real sector eligible for guarantee are covered by the national deposit guarantee scheme. The number of covered depositors is 99.5 percent of the total number of depositors, individuals and legal entities (December 2018).

The asset quality indicators relevant for assessing credit risk improved in 2018, amid the resolution of non-performing loans and low risk cost in the past years. The non-performing loan ratio fell to 4.9 percent at end-2018, yet it remains higher than the EU average and places the Romanian banking sector in the intermediate risk category (Chart 2.7). NPL coverage by provisions increased to 58.5 percent, standing in the 'best bucket' according to EBA criteria. The prospects for continuing the resolution of non-performing loans should be encouraged. To this end, one solution would be to maintain the systemic risk buffer in 2019. This macroprudential tool is calibrated depending on the coverage ratio and the NPL ratio (for details, see sub-section 3.3.1.3). On the other hand, the fiscal provisions introduced starting with 2018 on tax deductibility relative to loan sales do not foster NPL resolution.

The need to mitigate the risk posed by the concentration of exposures to the central government was signalled in the National Euro Changeover Plan by the recourse to the systemic risk buffer. This recommendation is also included in the report of the latest FSAP mission conducted in 2018 by the IMF and the World Bank.

With this end in view, an interinstitutional working group comprising NBR and MPF representatives was created within the NCMO. This entity is tasked with conducting an in-depth impact analysis, followed by an analysis on the opportunity to introduce a carefully calibrated systemic risk buffer to mitigate risks stemming from banking sector exposure to sovereign debt.

The interest rate risk outside the trading book (bank portfolio), also as a result of the share of government security holdings, contributes to the significant asset-liability duration mismatch. In this respect, the analysis of the impact of certain shocks on the yield curve shows a potential loss of up to 14 percent of own funds across the banking sector²⁵, caused by the duration mismatch of interest rate-sensitive assets and liabilities. Losses are unevenly distributed across credit institutions, the potential impact ranging from -24.7 percent to +5.18 percent of own funds, depending on the balance sheet structure of each bank.

Another structural risk stems from the heterogeneous operational efficiency of banks in Romania. The cost-to-income ratio tended to improve in 2018 (Chart 2.10). Nevertheless, this indicator stands in the intermediate risk bucket according to the EBA's Risk Dashboard (50-60 percent). At individual level, a number of small and medium-sized credit institutions have recorded values exceeding 60 percent, potentially indicating the need for further consolidation efforts.

A positive financial result allows the banking sector to compensate shareholders and to strengthen the capital position, thus paving the way for lending growth. At the same time, it creates room for investments meant to increase operational efficiency or to facilitate wider access for customers to banking services. As a consequence of the business cycle

²⁵ According to the most severe scenario considered, which foresees an upward shift in the leu-denominated yield curve by 250 percentage points.

phase, the banking sector was characterised by significant profitability in 2018. Declining net impairment losses (also as a result of low default rates), higher loan stock and strenuous efforts to change the funding structure (increasing the share of funding from the real sector with a beneficial impact on interest expenses) contributed to these developments in profitability. In December 2018, the main profitability indicators, i.e. ROA (1.6 percent) and ROE (14.8 percent) stood at adequate, albeit not excessive, levels (Chart 2.10). Banks' individual profit-making capacity remains, however, heterogeneous, with positive financial results being concentrated in large banks.

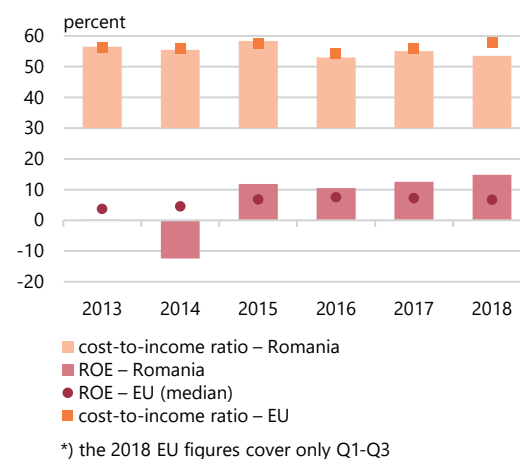
The prospects for maintaining adequate profitability to cover the cost of capital over the next years are conditional on the rise in financial intermediation, the abatement of legislative uncertainties, as well as on the evolution of default rates, which are currently at historical lows. Banks' profitability may be negatively affected by a change in the position in the business cycle, which may be amplified by financial market volatility, thus fuelling risk cost. Furthermore, starting with 2019, a hike in banks' expenses is likely once a tax on financial assets is introduced via GEO No. 114/2018, as subsequently amended and supplemented.

The risk associated with legislative uncertainty in the banking and financial field increased in 2018, amid draft laws concerning debtors' contracts and due to the introduction of the tax on credit institutions' financial assets. Banks deemed this risk to be severe, which has been recurring in the assessments over the past years. The main legislative initiatives for supporting debtors focused on setting interest rate ceilings, limiting the amount collected from debtors to double the purchase price of sold loans, or removing the enforceability of loan contracts. These draft laws were submitted for review to the Constitutional Court. Moreover, another legislative initiative adopted by the Senate at end-2018 refers to amending Law No. 77/2016 on debt discharge by defining the term "unpredictability". The initial form of the tax on financial assets introduced in December 2018 by GEO No. 114/2018 contributed to the heightened unpredictability perceived by investors, in terms of the tax amount, coverage (financial assets subject to taxation) and the overlap with the NBR's exclusive fields of competence, by associating the tax with ROBOR developments.

2.2.2. Capital market

The two main segments of the local capital market, i.e. undertakings for collective investment and the stock exchange, experienced rising volatility throughout 2018, in line with the trend manifest on most capital markets across the region.

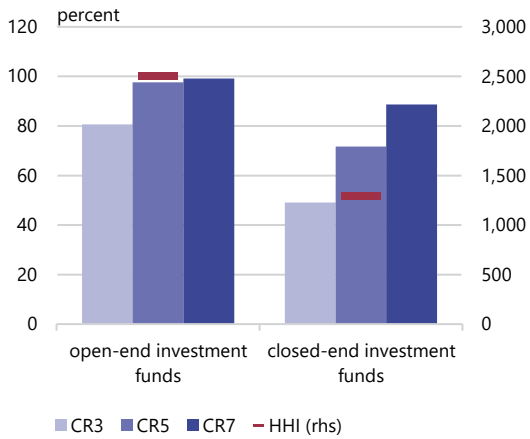
Chart 2.10. Efficiency (cost-to-income) and profitability (ROE) indicators in Romania and the EU*



Source: NBR (individual data), ECB (consolidated data)

In fact, the market for undertakings for collective investment (UCIs) is strongly interlinked with developments in markets for financial instruments trading and the banking market, as both funds' performance and net capital flows targeting these entities depend on the level of market rates, bond yields and stock market indices.

Chart 2.11. Concentration on the investment funds market in Romania (in terms of net assets as at 31 December 2018)



Source: FSA

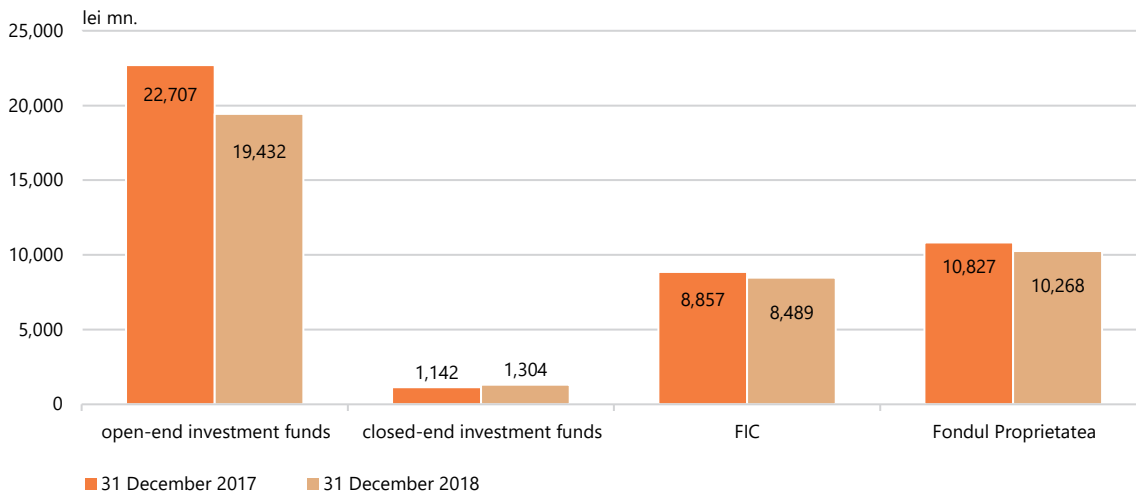
Currently, on the market for depositaries of investment funds' assets one of the relevant risks is high concentration. A similar conclusion, based on the values of concentration indicators, also holds valid for the market for closed-end and open-end investment funds.

Assets of UCIs in Romania totalled lei 39.49 billion at end-December 2018, down almost 9 percent from end-December 2017.

The breakdown by category of UCI shows that, at end-December 2018, open-end investment funds' (OEIFs) assets contracted by approximately 15 percent against end-December 2017. Turning to closed-end investment funds (CEIFs), their total assets climbed by about

16 percent. Financial investment companies (FICs) reported a reduction in their total assets, down about lei 368 million, or 4 percent, whereas the total assets of Fondul Proprietatea dropped more than 5 percent.

Chart 2.12. Total assets by UCI category



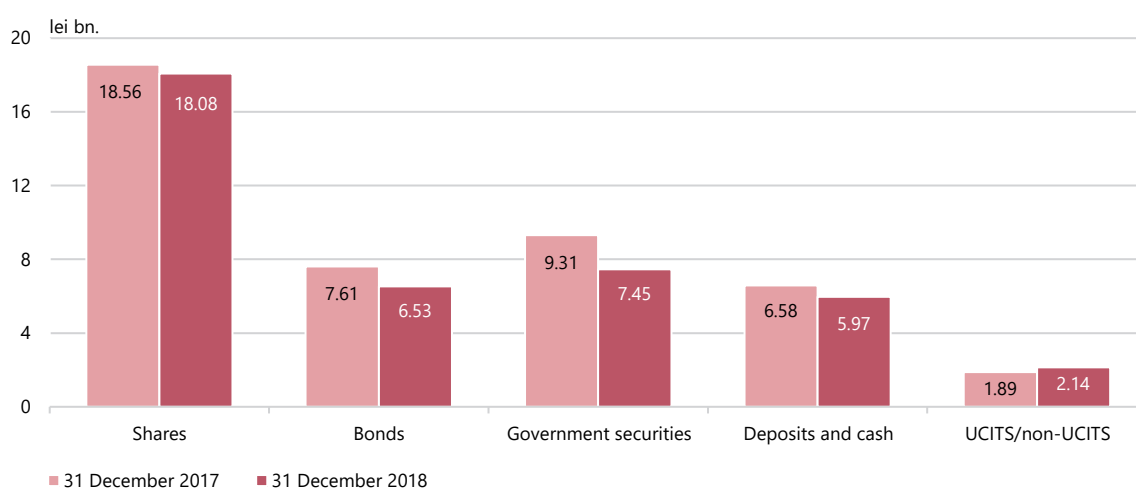
Source: FSA

In terms of risks generated by investment structure, OEIFs are largely oriented towards fixed-income instruments (government securities and bonds), while CEIFs, FICs and

Fondul Proprietatea invested chiefly in stocks. On the market as a whole, the consolidated investment structure of all UCIs is indicative of a balanced mix between purchases of fixed-income/money market instruments totalling nearly lei 20 billion (accounting for more than 51 percent of UCIs' total assets) and of stocks (amounting to lei 18.08 billion, making up about 46 percent of UCIs' total assets).

The above-mentioned portfolio breakdown pinpoints that market risk (relating mostly to the change in bond and stock prices) and contagion risk are relevant not only for the capital market as a whole, but also for UCIs and the stock exchange.

Chart 2.13. Strategic allocation of UCI portfolios



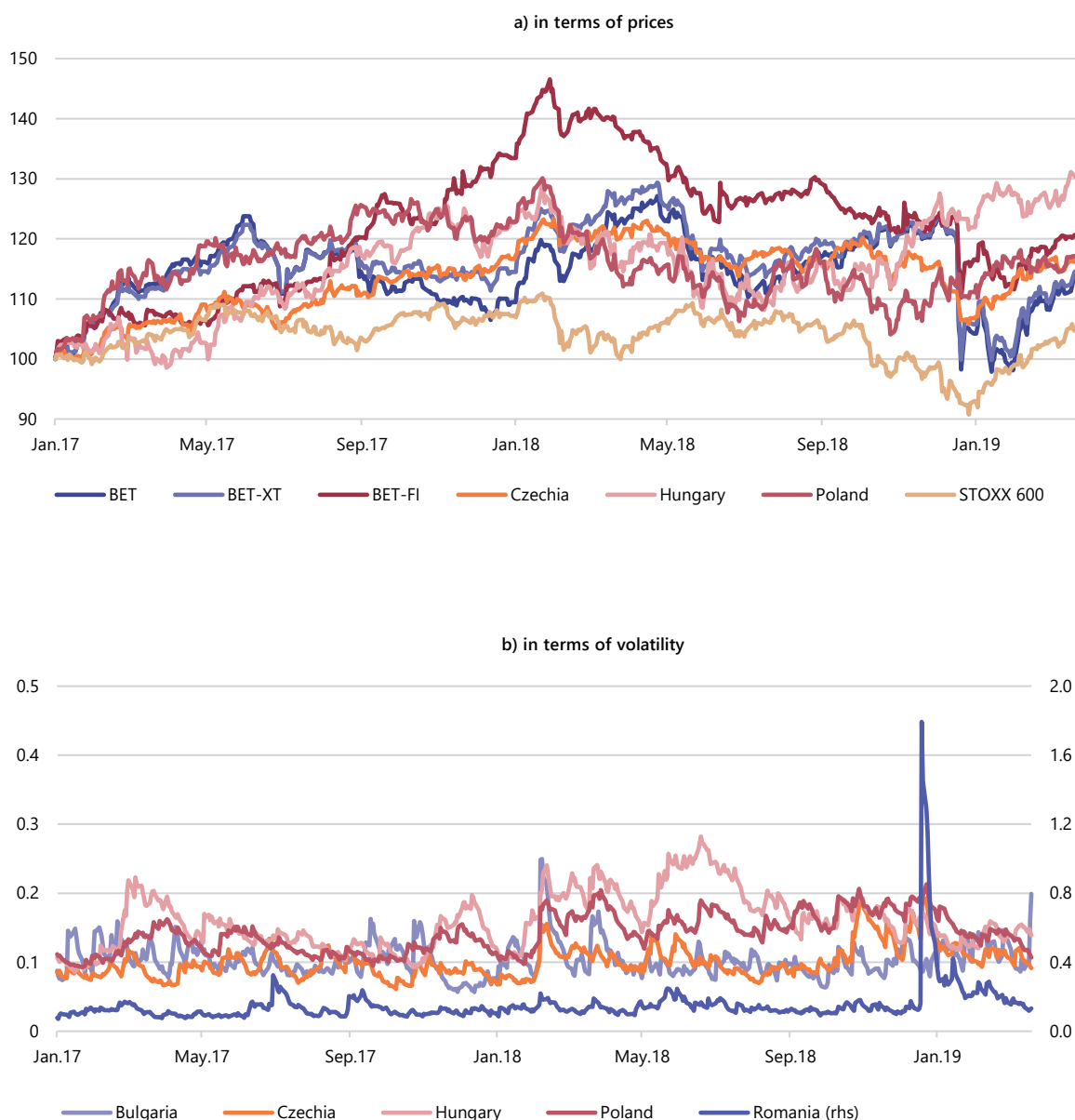
Source: FSA

Following the rising volatility that characterised both the local and the European equity markets throughout 2018, Q4 in particular, key stock market indices in Romania and elsewhere posted significant declines as at 30 December 2018.

Chart 2.14 sets out the increase in market risk (based on the prices of listed shares) both domestically and Europe-wide.

As for market contagion, although in 2018 Q4 the correlation between domestic indices and Europe's leading equity indices remained unchanged at around 0.4, Romania's capital market decoupled from its peers' performance starting in early December, owing to its own internal dynamics governed by domestic factors.

Chart 2.14. Stock market indices

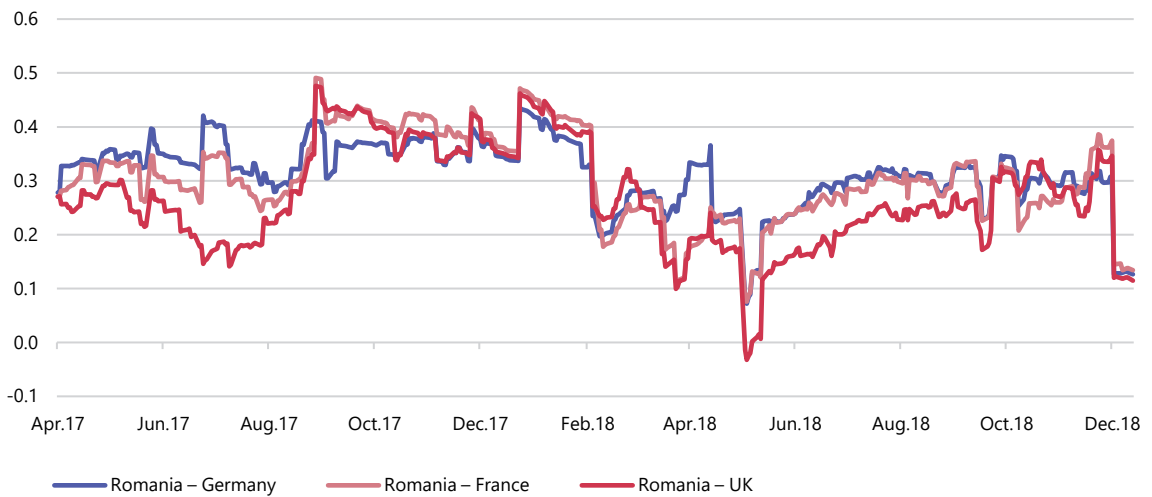


Source: Datastream, FSA calculations

The equity market liquidity risk increased slightly in the early months of 2018, but improved in Q4. Having fallen at end-2017, liquidity expanded in March 2018, before contracting in May and June, then recovering in late July. The stagnation in August 2018 was followed by a significant rise in liquidity in September to levels that remained elevated October through December 2018.

While the value of trades in shares decreased by nearly 3 percent in the course of 2018, the total traded value on the BSE (including all instruments and market segments both on the main market and the ATS market) grew by about 2 percent year on year to lei 14.23 billion in 2018.

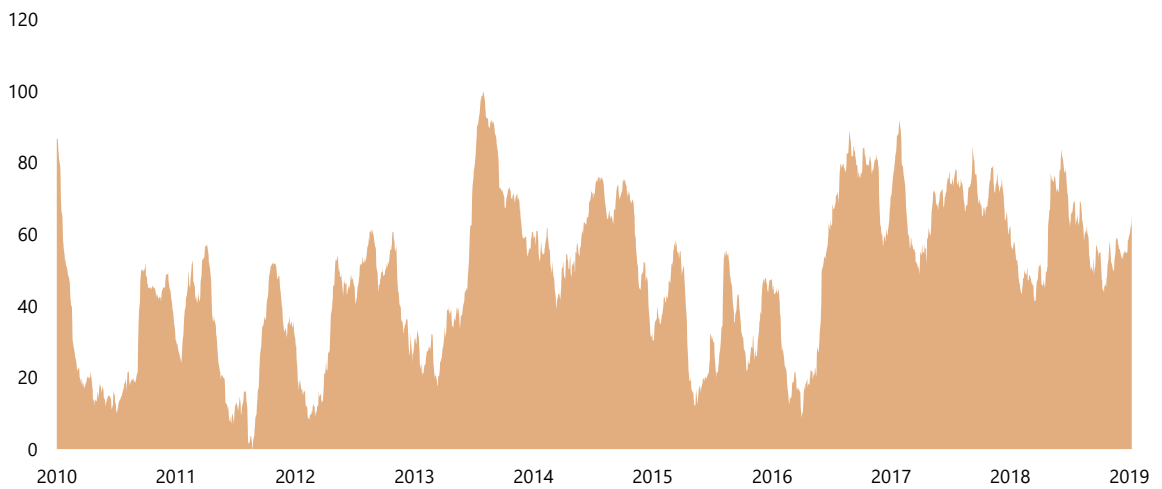
Chart 2.15. Correlations between capital markets in Romania, France, Germany and the UK



Source: Datastream, FSA calculations

On the market for intermediation of trades, profitability risk remained at a medium level, similarly to the previous year. Specifically, in 2018, nine out of 21 investment firms recorded profit, with a cumulated value nearing lei 24.92 million, whereas the cumulated loss of the 12 investment firms that reported negative financial results stood at about lei 14.69 million.

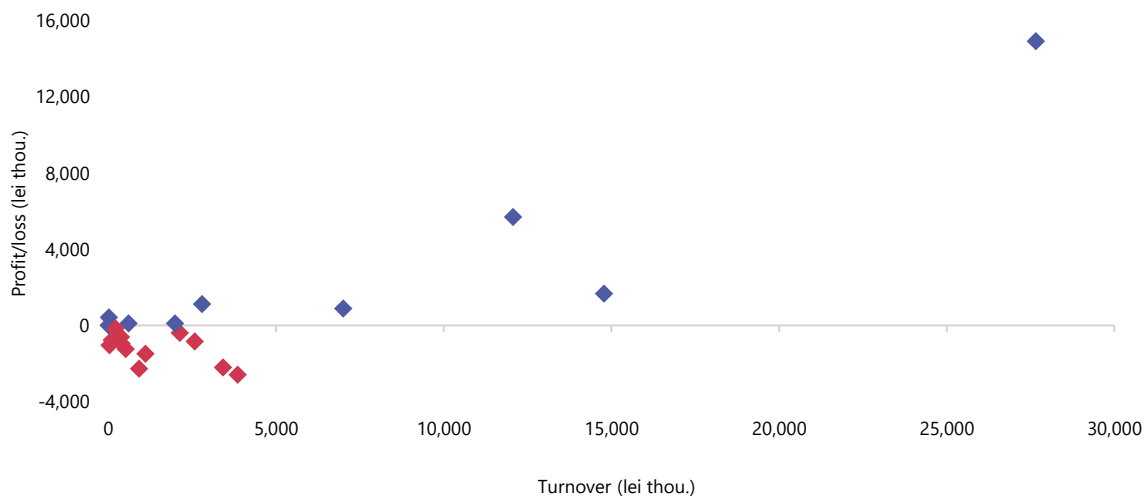
Chart 2.16. BSE liquidity ratio (trades, main market, analysis by key component)



Source: Datastream, FSA calculations

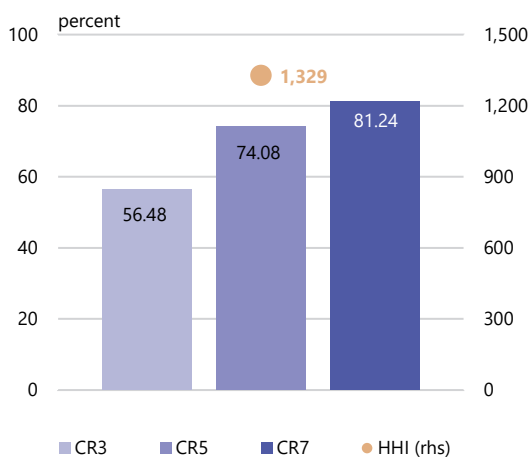
In terms of solvency risk, the investment firms' own funds came in at roughly lei 157 million as at 31 December 2018, while the cumulated value of assets held by custodians was of around lei 8.79 billion (approximately EUR 1.89 billion), comprising both customers' cash and their holdings of financial instruments. All investment firms fulfilled the capital requirements for conducting licensed intermediation activities as at 31 December 2018.

Chart 2.17. Financial results of investment firms (31 December 2018)



Source: FSA

Chart 2.18. Concentration of intermediaries on the BSE in 2018



Source: FSA

Concentration risk remained at a medium level in the services market of intermediaries on the BSE, with market shares of top three intermediaries by total traded value exceeding 56 percent in 2018.

2.2.3. Insurance market

The local insurance market is an important segment of the non-bank financial market and has a significant impact on households and companies, both in terms of the number of insured persons and insurance contracts concluded annually (approximately 15 million contracts in 2018) and in terms of the role played by insurance in risk management and economic operations.

The financial soundness of the Romanian insurance sector is confirmed by the fact that, throughout 2018, all insurance corporations fulfilled the prudential requirements on solvency ratios (SCR and MCR), with relatively unchanged developments compared with the previous year. Solvency risk on the insurance market is therefore low. Across the board, solvency ratios stand close to those observed in other markets in the region and to the EU average (according to reports and statistical information published by the European Insurance and Occupational Pensions Authority – EIOPA).

The SCR ratio is determined as the ratio of eligible own funds to the solvency capital requirement (calculated based on existing risks in insurers' portfolios, both on the assets and liabilities sides and from an operational standpoint) and indicates the latter's coverage by insurance corporations' own funds, while the MCR ratio shows the coverage of the minimum capital requirement.

In 2018 Q4, the SCR ratio for the entire insurance market in Romania stood at 1.71, while the MCR ratio came in at 3.87. Both indicators are well above one (the minimum legally required level).

Table 2.1. Concentration of gross written premiums by class of insurance for non-life insurance

Class	GWP 2017	GWP 2018	2018 vs 2017 change (%)	Share of GWP by class of non-life insurance in total (%), 2018
A10	3,822,822,278	3,741,920,039	-2.12	46.53
A3	1,895,009,247	2,073,239,261	9.41	25.78
A8	1,004,837,472	1,064,680,480	5.96	13.24
Total – first 3 classes	6,722,668,997	6,879,839,780	2.34	85.55
A13	225,163,571	251,350,525	11.63	3.13
A2	131,876,526	230,012,472	74.42	2.86
A15	169,520,028	229,879,255	35.61	2.86
A9	166,438,583	155,437,143	-6.61	1.93
A18	102,654,300	121,289,342	18.15	1.51
A1	55,839,568	53,456,256	-4.27	0.66
A7	35,790,445	34,890,258	-2.52	0.43
A16	21,324,699	25,132,982	17.86	0.31
A6	22,027,050	22,210,800	0.83	0.28
A11	14,823,146	16,764,951	13.10	0.21
A5	8,168,331	10,716,567	31.20	0.13
A12	7,499,134	5,972,149	-20.36	0.07
A4	3,566,313	3,921,994	9.97	0.05
A14	1,044,502	1,197,816	14.68	0.01
A17	73,160	73,395	0.32	0.00

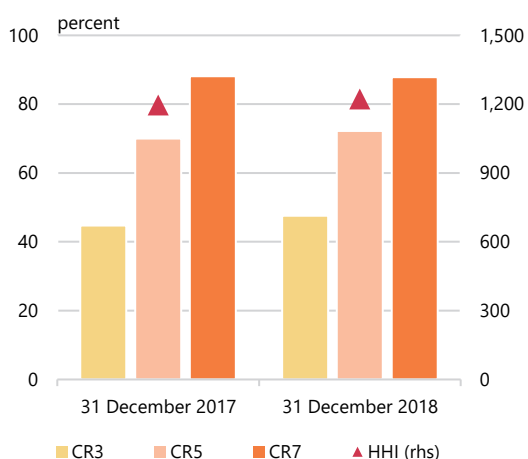
Source: FSA

In addition, at 31 December 2018, all insurance corporations met the requirements for the liquidity coefficient, while the liquidity risk was also low, yet slightly on the rise as compared to December 2017 for both insurance categories (life and non-life).

The liquidity coefficient is calculated as the ratio of the insurance corporations' liquid assets to short-term liabilities. The indicator stands at 2.34 for total non-life insurance market, declining somewhat from December 2017 (2.40). The liquidity coefficient for the corporations also offering life insurance amounted to 4.55 in December 2018, compared to 4.98 in December 2017.

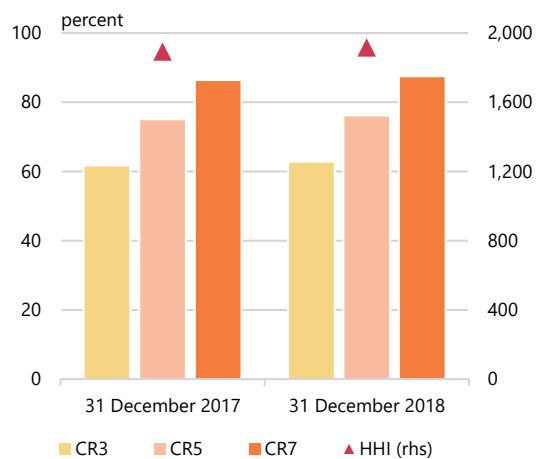
Profitability risk for insurance corporations is higher in 2018 than in 2017, as a result of the increase in the combined ratio for the non-life insurance market (102.83 percent in 2018 versus 97.63 percent in 2017), as well as for motor vehicle insurance (classes A3 and A10).

Chart 2.19. Concentration risk in non-life insurance (based on GWP as at 30 December 2018)



Source: FSA

Chart 2.20. Concentration risk in life insurance (based on GWP as at 30 December 2018)



Source: FSA

The domestic insurance market is traditionally dominated by non-life insurance, taking 79 percent of gross written premiums (GWP). However, the concentration risk by class of insurance posted slightly favourable developments compared to 2017, due to a decrease in the share of GWP for motor vehicle insurance.

Specifically, motor vehicle insurance (class A10 – which includes the compulsory motor third-party liability insurance and class A3 – concerning the voluntary motor third party liability insurance) holds a cumulative share of approximately 72 percent of total GWP for non-life insurance and 57 percent of total GWP of insurance corporations authorised and regulated by the FSA.

The insurers' concentration risk²⁶ on the non-life insurance market has risen slightly over the past year, also with respect to developments on the compulsory motor third-party liability insurance segment.

2.2.4. Private pension market

Private pension funds (Pillars II and III), the most significant segment under FSA supervision in terms of asset value, maintain a very low credit risk (as a result of the investment structure dominated by sovereign bonds).

In fact, the evolution of the private pension system was positive throughout its functioning, the number of participants and the value of their personal assets increasing steadily. The regulatory and supervisory framework focused on ensuring a balance between the

²⁶ In order to measure the concentration level, Charts 2.19 and 2.20 set out the evolution of the CR3, CR5 and CR7 concentration ratios, calculated by adding the market shares of the top three, five and seven corporations based on the value of gross written premiums in the period under review. Moreover, they also show the evolution of the HHI (Herfindahl-Hirschman Index) calculated by adding the squares of market shares of all corporations.

safety and performance of investments to the benefit of future pensioners, as well as on protecting their interests.

As at 31 December 2018, government securities held the largest share in the portfolio structure of private pension funds, i.e. 63.62 percent (Chart 2.21). Compared to December 2017, shares and other financial instruments²⁷ witnessed a decline (Chart 2.22). At the same time, private pension fund portfolios saw an increase in the share of fixed-income securities²⁸.

At end-2018, private pension funds held 89.56 percent of assets comprising Romanian financial instruments (Chart 2.23), while 6.57 percent of private pension fund assets were invested in foreign assets, most of which were issued in Luxembourg (1.64 percent), France (0.98 percent), Germany (0.93 percent) and the Netherlands (0.78 percent). A share of 3.87 percent of total assets was invested in supranational bonds.

The portfolio structure and the further low value of payments relative to the contributions collected render the liquidity risk for private pension funds virtually nil.

Specifically, in terms of liquidity, the private pension system can withstand any demand, mainly because it is in the accumulation period, and system outputs (death, disability, retirement, transfer) are few compared to the volume of pension fund assets. December 2017 through December 2018, liquidity over a 10-day period posted an increase both in the aggregate private pension system (from 3.39 percent to 4.80 percent) and in Pillar II (from 3.41 percent to 4.84 percent) and Pillar III (from 5.63 percent to 6.09 percent).

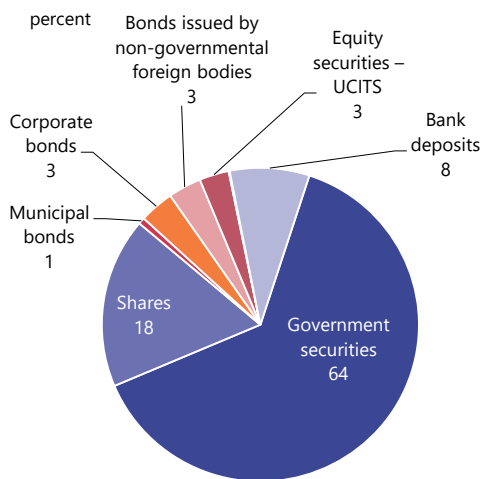
Currency risk is also very low, because the assets of the private pension system are mainly denominated in the domestic currency²⁹. The foreign currency exposure of the private pension system was only 8.20 percent of total assets of the private pension system, yet by using the instruments to cover currency risk for foreign currency-denominated assets, net total currency exposure in the private pension system decreased to 7.93 percent of total assets.

²⁷ Including bank deposits, UCITS, commodities and precious metals funds, risk coverage instruments, floats, private equity.

²⁸ Including government securities and corporate, municipal and supranational bonds.

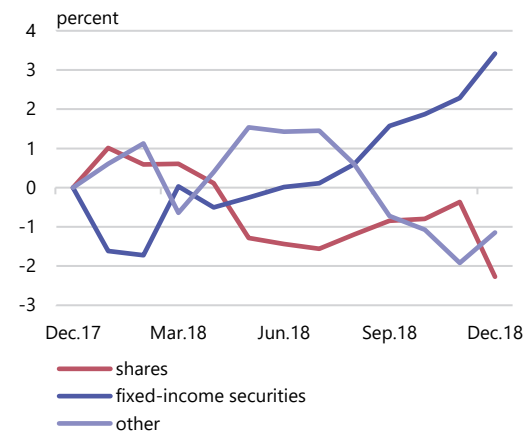
²⁹ At end-2018, exposure to the RON was 91.80 percent of total assets of the private pension system.

Chart 2.21. Private pension funds – allocation by financial instrument as at 31 December 2018



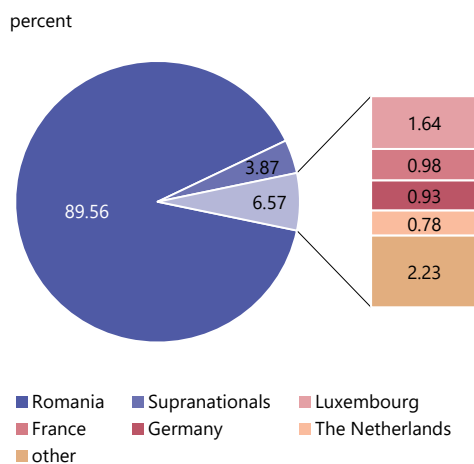
Source: FSA

Chart 2.22. Private pension funds – monthly allocation by financial instrument (December 2017=100)



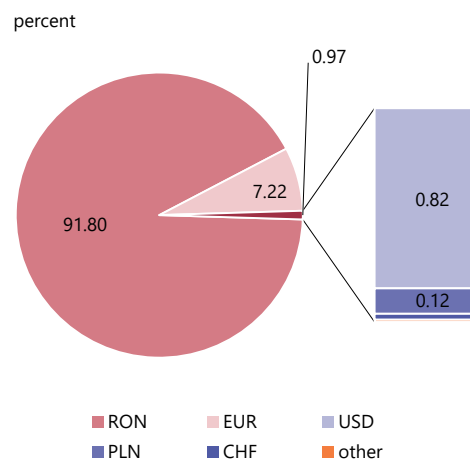
Source: FSA

Chart 2.23. Private pension funds – breakdown by country as at 31 December 2018



Source: FSA

Chart 2.24. Private pension funds – breakdown by currency as at 31 December 2018



Source: FSA

Throughout 2018, the volatility of the value of fund units (net asset value per share – NAVPS) remained significantly lower than that of the financial instruments markets where funds invest, as a result of their diversification, yet it rose slightly, especially in 2018 Q4. Of the total assets held by private pension funds as at 31 December 2018, 88.57 percent were shares traded on the Bucharest Stock Exchange (BSE), so that the volatility of BSE-listed share prices fed through to the net asset value per unit of pension funds. December 2018 was marked by the high volatility of shares listed on the BSE, but also on the representative markets in Austria, France and Germany, where 9.26 percent of the shares held by private pension funds are traded.

Return on NAVPS diminished compared to the previous years, due to mixed or negative developments in stock market indices and the lower prices of leu-denominated bonds in the portfolio (following the increase in the current market yields of these instruments).

As at 31 December 2018, compared to 31 December 2017, the nominal rate of return of private pension funds (Pillar II) decreased from 3.95 percent to 2.72 percent. No private pension fund recorded a rate of return lower than the minimum rate for its risk category.

As at 31 December 2018, compared to 31 December 2017, the nominal rate of return of voluntary pension funds (Pillar III) that fall into the intermediate risk bucket declined from 3.19 percent to 1.60 percent, while the nominal rate of return of voluntary pension funds that fall into the high risk bucket dropped from 4.87 percent to 2.58 percent. No private pension fund recorded a rate of return lower than the minimum rate for its risk category.

For private pension fund managers, there was an increase in risk (for Pillar II managers), as the new legislative changes impact profitability risk and concentration risk (tighter requirements for the share capital, likely to be implemented at end-2019) for these entities.

However, the solvency risk for pension fund managers (both Pillar II and Pillar III) remains low, as these entities hold enough capital to fulfil obligations to participants in the private pension system, which ensures efficient protection for participants, as well as the financial stability of the private pension system. Specifically, the value of assets corresponding to the technical reserves that are effectively held by managers is higher than the value required, as reflected by the actuarial calculations of technical reserves for 2018. In addition to the technical reserves, managers pay annual contributions to the Rights Guarantee Fund in the Private Pension System Rights Guarantee Fund (FGDPSPP).

Moreover, credit risk for private pension fund managers is further low, as the largest exposure in these managers' portfolios of guaranteed contributions (all of Pillar II and two funds of Pillar III) is to the Ministry of Public Finance, i.e. 71 percent of the value of assets corresponding to the technical reserves are invested in Romanian government securities.

3. Measures implemented for achieving national macroprudential objectives

3.1. Adoption of the macroprudential policy strategy of the NCMO

During its meeting on 21 May 2018, the General Board of the NCMO approved the Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight. The document sets:

- a) the ultimate objective of macroprudential policy;
- b) the intermediate objectives pursued to achieve the ultimate goal of macroprudential policy;
- c) the principles underpinning the macroprudential strategy;
- d) the instruments required to effectively and efficiently achieve the intermediate objectives of macroprudential policy, within the jurisdiction of the National Committee for Macroprudential Oversight;
- e) the steps of the decision-making process of the macroprudential policy;
- f) the communication process of the macroprudential policy decisions;
- g) cooperation with other European and international institutions.

The ultimate objective of macroprudential policy is to safeguard financial stability, also by strengthening the resilience of the financial system and by containing the build-up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth. In achieving the ultimate objective, the NCMO aims to meet the following intermediate macroprudential policy objectives:

A. Mitigate and prevent excessive credit growth and leverage

B. Mitigate and prevent excessive maturity mismatch and market illiquidity

C. Limit direct and indirect exposure concentration

D. Limit the systemic impact of misaligned incentives with a view to reducing moral hazard

E. Strengthen the resilience of financial infrastructures

F. Increase financial intermediation in a sustainable manner

G. Increase financial inclusion

H. Protect the insurance system against the consequences of the insolvency of some insurers

I. Mitigate the negative impact of operational risks generated by the use of ICT

Objectives A-E are included in Recommendation ESRB/2013/1 on intermediate objectives and instruments of macroprudential policy and have been broadly integrated in most macroprudential policy strategies of EU Member States. Conversely, given the characteristics of the national financial system, marked by a low level of financial intermediation, as well as the relatively limited access to financial services, the NCMO introduced in its strategy the national objectives F and G. Moreover, due to the vulnerabilities identified in the non-bank financial sector, the NCMO introduced two additional national objectives, at the proposal of the Financial Supervisory Authority (FSA).

The NCMO identifies, monitors and assesses systemic risks, and identifies the institutions and structures of the financial system that are systemically relevant. Moreover, in the period ahead, the NCMO will set, pursue and reassess on a regular basis the intermediate objectives and the instruments of macroprudential policy in order to mitigate the risks to the stability of the national financial system.

The NCMO is also responsible for the coordination of financial crisis management, meaning that it will issue recommendations for establishing the necessary measures to mitigate the risk of contamination, when one or more participants in the financial system face difficulties that have a systemic impact, and will monitor their implementation.

In order to achieve these objectives, the NCMO Strategy relies on the compliance with the following principles:

- Continuity – the need for policy coherence;
- Predictability – the preparation and implementation of policies;
- Legality – the fulfilment in good faith of the assumed obligations;
- Proportionality – the suitability of necessary actions.

Romania's macroprudential strategy establishes the appropriate instruments for fulfilling the intermediate objectives of macroprudential policy (Figure 3.1). The strategy points out that the competent authorities will identify the situations in which the macroprudential policy instruments need to be used and will make proposals with a view to establishing the appropriate instrument, its level, timing and institutions to which the instrument applies, which will be subject to the analysis and decision of the National Committee for Macroprudential Oversight. The NCMO's decisions on the activation and deactivation of macroprudential instruments will be implemented at the level of financial institutions by the competent authorities.

Moreover, the competent authorities will periodically assess the appropriateness and effectiveness of the instruments in achieving the macroprudential policy objectives for the components of the financial system within the field of competence of these authorities, informing the NCMO of the results of their analyses. Based on the assessments performed by the competent authorities, the NCMO adopts decisions on strengthening the macroprudential policy strategy, including on instruments not established in Union legislation, the transmission mechanism of these instruments, as well as on the identification of indicators that may inform decisions on their application, deactivation and calibration. Where additional intermediate objectives or instruments are necessary, the list will be extended accordingly. The selection of additional macroprudential instruments will be based on an analysis of their efficiency and effectiveness in mitigating structural and cyclical risks within the financial system.

Furthermore, the NCMO General Board issued 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, whereby the National Bank of Romania and the Financial Supervisory Authority are recommended to implement, where applicable, the macroprudential instruments for achieving the intermediate objectives included in this document.

The NCMO adopts macroprudential policy decisions independently, without seeking or taking instructions from public authorities or from any other institution or authority. The implementation of decisions will take into account the economic and monetary policies and the microprudential regulations applied to the financial system. The NCMO adopts macroprudential policy decisions (i) on its own initiative, (ii) at the proposal of competent authorities (the NBR, the FSA, the Government) in the field of macroprudential oversight of the national financial system, or (iii) taking into consideration the ESRB recommendations and warnings on systemic risk.

Figure 3.1. Macroprudential instruments and objectives of the NCMO strategy



Source: NCMO

Macroprudential policy decision-making is a four-step process:

1. Identification and assessment of systemic risks

Systemic risk monitoring is achieved through a set of indicators that will be expanded once macroprudential instruments become operational, in the process of implementation of intermediate objectives; the latter will also facilitate decision-making by the NCMO regarding the activation/deactivation and calibration of instruments.

The list of indicators will be expanded in parallel with the development and implementation of macroprudential instruments. The decision on the publication of the thresholds for individual indicators that macroprudential policy decisions will refer to (activation/deactivation and calibration of instruments) will be adopted by the NCMO General Board.

2. Selection and calibration of macroprudential instruments

Decisions on the selection and calibration of macroprudential instruments will be made by the NCMO based on the following criteria:

- effectiveness and efficiency in achieving the objectives of macroprudential policy – mitigation or elimination of risks;
- proportionality of the instrument – the implementation effort should be proportional with the contribution to the systemic risk;
- simplicity of implementation – definition, requirements, implementation;
- efficiency of the instrument – in terms of costs and benefits;
- avoidance of regulatory arbitrage in defining and selecting the instrument (in cooperation with other macroprudential authorities);
- avoidance of negative cross-border spillovers;
- compatibility of the instrument with other macroprudential and microprudential instruments at national and EU level.

3. Implementation of macroprudential instruments

The underlying principles are listed below:

- independence of macroprudential policy → macroprudential policy decisions should be independent, without internal pressures (exerted by monetary policy and microprudential policy) and without external pressures (from financial institutions and fiscal policy), so that decision-making should focus exclusively on achieving the ultimate objective of the macroprudential policy;
- transparency → timely publication of macroprudential policy decisions gives the financial sector and the general public a better understanding of macroprudential policy, unless publication could have a disruptive effect on financial stability;
- responsibility → the NCMO will pursue its ultimate objective by activating or deactivating macroprudential instruments, taking into account indicators and other tools in a transparent manner;

- avoidance of inaction bias → the explicit formulation of the objectives, as well as of the aim/aims of each instrument ensures the timely activation and calibration of macroprudential instruments, in response to the developments in the financial system, thus avoiding the inaction or action bias;
- guided discretion → given that macroprudential instruments can generate multiple effects on the financial system, the macroprudential policy decisions on the activation/deactivation and calibration of macroprudential instruments should not be based entirely on strict rules, allowing the macroprudential authorities a high degree of flexibility and the possibility of entering qualitative factors in the decision-making process;
- flexibility → the macroprudential policy should have at its disposal a sufficient range of instruments available to be implemented in order to mitigate or prevent the emergence of systemic risks;
- legal framework → an adequate legal framework is required in order to ensure timely implementation and control over the macroprudential instruments;
- coordination → the efficiency of the macroprudential policy depends on coordination with monetary policy and microprudential supervision, as well as with the other supervisory authorities, national and European institutions (the ECB, the ESRB, the SSM, the EBA and the EC).

4. Evaluation of macroprudential instruments

The following principles will be taken into account in the assessment of the macroprudential instruments:

- periodic reevaluation of macroprudential objectives and instruments: the NCMO will regularly reassess the appropriateness of the intermediate objectives, in view of the experience gained in operating the macroprudential policy framework, structural developments in the financial system and the emergence of new types of systemic risks. The NCMO will also periodically review the effectiveness and efficiency of the macroprudential instruments in achieving the ultimate and intermediate objectives of macroprudential policy. In the event of identifying new risks to financial stability that cannot be satisfactorily managed by using the existing set of macroprudential instruments, the replacement or introduction of adequate instruments or, when appropriate, the activation/deactivation or recalibration of existing instruments will be decided accordingly;
- reciprocity for macroprudential instruments established by the authorities in other Member States: the NCMO will take into account the provisions of the relevant legal framework of the European Union and will decide on the appropriateness of amending the macroprudential policy, following the information on macroprudential policy decisions in other Member States. This will ensure a level playing field at EU level and the removal of regulatory arbitrage opportunities.

Sections V and VI of the Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight give an overview of the main coordinates as regards the communication of decisions and the cooperation with other institutions at EU level.

Drawing a parallel with monetary policy, policy makers must regularly assess the policy stance in relation to the objectives and the possible risks hindering their achievement. While in the case of monetary policy, the objective of price stability is traditionally included in the mandate of most central banks, the multiple objectives pursued by macroprudential authorities, as well as the various sources of systemic risks, turn the assessment of the macroprudential policy stance into a complex undertaking, both theoretically and practically. For further details on recent initiatives to assess the macroprudential policy stance, see Box 3.

Box 3. Guidelines for assessing the macroprudential stance

The number of macroprudential measures adopted at EU level in 2018 rose from the previous year. Most of them referred to the countercyclical capital buffer (CCyB), taking into account both the activation and the recalibration of the buffer. Behind the macroprudential decisions on the countercyclical capital buffer stood heterogeneous signals relative to financial cycle developments. Specifically, the financial cycle followed a downward trend in few countries, while the majority of them reported an expansion of lending. Against this background, they considered it appropriate to tighten the countercyclical capital buffer. By the end of 2018, 12 EU countries had decided to activate the countercyclical capital buffer. Although the CCyB instrument has benefited from strong methodological support in terms of references, there is currently no standardisation across Member States regarding its use. More precisely, given the existing limitations on the credit-to-GDP ratio, which is recommended as a reference indicator for macroprudential decisions regarding the financial cycle, many countries have resorted to developing their own methodologies that signal the opportunity to adopt a positive CCyB.

In the course of 2018, some Member States decided to implement measures designed to address the risks and vulnerabilities stemming from the real estate sector. Several of the measures adopted in 2018 targeted narrower geographical areas than the country. The instruments used for the medium-term real estate vulnerabilities concerned both measures regarding the capital of credit institutions and instruments aimed at strengthening borrowers' repayment capacity.

Looking at structural risks, at end-2018, there were 16 Member States with a SyRB in place. As regards the buffer for other systemically important institutions (O-SIIs), the changes adopted by the Member States were mainly oriented towards identifying new SIIs. There are currently significant differences in the calibration of O-SII buffer rates across the EU.

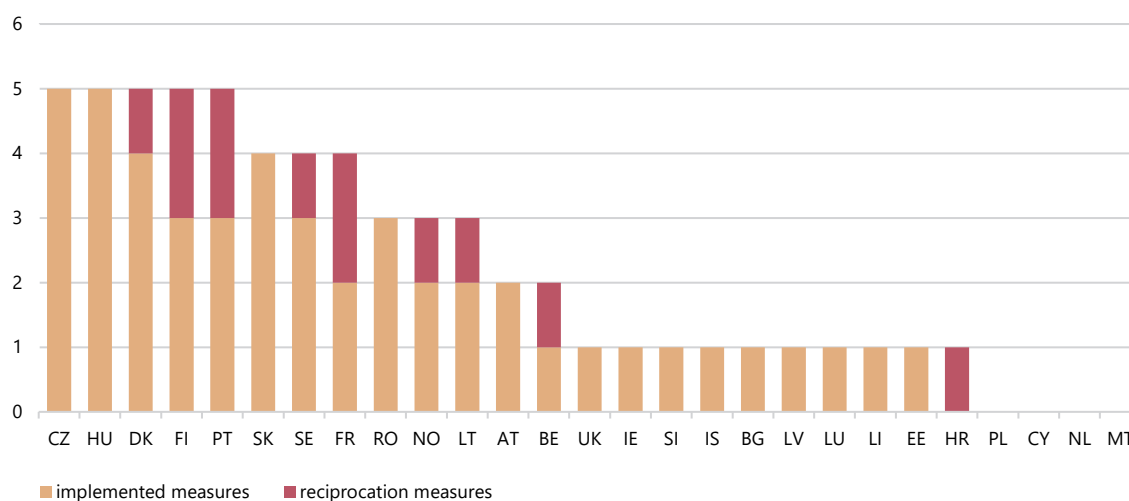
Some Member States chose to use measures under Article 458 of the CRR to help mitigate other systemic risks. In this regard, the risks tackled by Member States have ranged from increasing vulnerabilities in the real estate sector, to a liquidity shock and high indebtedness of the non-financial corporation sector.

3.2. Macroprudential measures adopted in the EU in 2018

Macroprudential policy at EU level was further restrictive in 2018. The Review³⁰ of Macroprudential Policy in the EU in 2018, published annually by the European Systemic Risk Board (ESRB), points to an increase in the number of macroprudential measures adopted in 2018 versus 2017, proving that macroprudential authorities currently pay particular attention to set up buffers, in order to be able to cope with unfavourable future developments. Specifically, a number of Member States introduced a countercyclical capital buffer (CCyB) or increased the CCyB rate, while others targeted certain structural vulnerabilities, using the systemic risk buffer (SyRB).

Looking at the number of notifications sent to the ESRB regarding the macroprudential measures adopted in 2018 (Chart 3.1), countries from central and eastern Europe (Czechia, Hungary, Romania, Slovakia), as well as from northern Europe (Denmark, Sweden, Finland) were active in implementing such instruments. Moreover, activity in the field of reciprocation of macroprudential measures intensified during 2018, taking into account the ESRB recommendations on voluntary reciprocity for the macroprudential policy measures adopted by Finland and Belgium.

Chart 3.1. Number of macroprudential measures notified by European countries in 2018



Source: ESRB, *A Review of Macroprudential Policy in the EU in 2018*

As regards the real estate sector, most Member States are actively using measures to mitigate the risks arising from the residential sector (in particular, setting limits on indebtedness or the loan-to-collateral ratio), while nearly half of all countries adopted new measures aimed at the commercial real estate sector. So far, five Member States have used flexibility measures under Article 458 of the CRR, in particular by introducing additional requirements or caps on the risk weights associated with the different types of exposures.

³⁰ European Systemic Risk Board (2019), *A Review of Macroprudential Policy in the EU in 2018*.

Finland and Sweden decided to introduce risk weight floors associated with retail exposures secured by residential real estate, the authorities aiming to increase banking sector resilience to high household indebtedness risks (Table 3.1). A similar measure was adopted in Belgium as well, but the macroprudential authority decided to apply a risk weight add-on of 5 percentage points for retail exposures secured by residential immovable property located in the country. Given the importance of cross-border lending, all Member States (with the exception of Cyprus, which applied a temporary liquidity measure) decided to request the reciprocation of measures implemented at national level, in order to ensure the effectiveness of the macroprudential policy transmission.

Table 3.1. Measures adopted under Article 458 of the CRR

	Belgium	Cyprus	Finland	France	Sweden
Risk addressed	Overvaluation of property Household indebtedness	Transition to the EU liquidity regulations	Household indebtedness	Exposure to highly indebted large non-financial corporations	Overvaluation of property Household indebtedness
Economic tool	Risk weight add-on	Add-on to the liquidity coverage requirement	Risk weight floor	Large exposure limit	Risk weight floor
Designated authority	National Bank of Belgium	Central Bank of Cyprus	Finanssivalvonta	Haut Conseil de Stabilité Financière	Finansinspektionen
Targeted institutions	All IRB credit institutions	All credit institutions and branches	All IRB credit institutions	Systemically important institutions	All IRB credit institutions
Targeted exposures	Retail exposures secured by immovable property located in Belgium	No targeted exposures	Residential mortgage loans	> EUR 300 million	Retail exposures secured by immovable property located in Sweden
Date of introduction	May 2018	November 2017	June 2017	May 2018	August 2018
Request for reciprocation	Yes	No	Yes	Yes	Yes

Source: ESRB, *A Review of Macroprudential Policy in the EU in 2018*

The macroprudential authority of France (Haut Conseil de Stabilité Financière – HCSF) used an innovative approach to the flexibility measures implemented under Article 458 of the CRR. The HCSF set a 5 percent limit for significant exposures to large and highly indebted non-financial corporations (NFCs). A NFC is considered large and highly indebted if it meets the following conditions:

- a credit institution's original exposure to this NFC or group of connected NFCs equals EUR 300 million or more;

- its financial charges coverage ratio³¹, calculated at the highest level of consolidation, is lower than 3, and its net leverage ratio³² is higher than 100 percent.

The measure applies only to institutions that have been identified as globally or otherwise systemically important institutions (G-SIIs or O-SIIs) and to NFCs whose ultimate parent is French (in this case the large exposure limit applies to the net exposures towards the entire group), as well as to French subsidiaries of foreign NFCs (the limit applies to the net exposures of NFCs with a registered office in France and to any of their connected clients that have their registered office in France and all their subsidiaries).

The HCSF explains that this measure aims to (i) strengthen the resilience of systemically important institutions in the event of a default by large and highly indebted NFCs, and (ii) send a warning signal regarding the risks associated with the increased leverage of French NFCs, given the trends seen in recent years.

A number of Members States have identified vulnerabilities to financial stability stemming from the non-bank financial sector, in some cases implementing macroprudential measures, despite the limited range of instruments dedicated to this sector.

3.3. Macroprudential measures adopted in Romania in 2018

3.3.1. Capital buffers

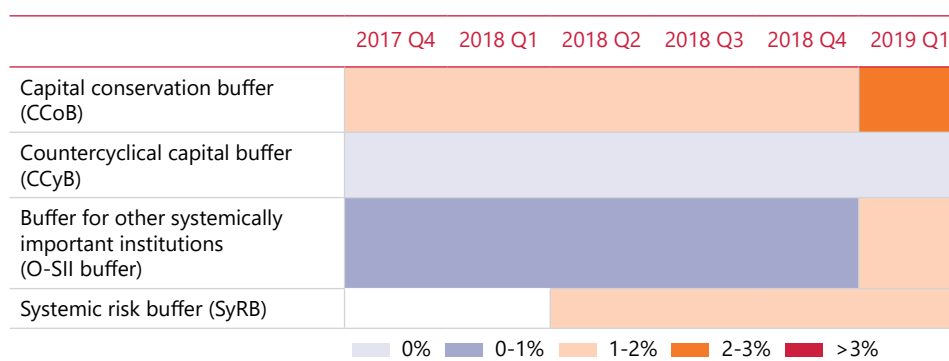
In 2018, the National Committee for Macroprudential Oversight assessed the need to recalibrate or implement the macroprudential instruments at its disposal according to the regulatory framework in place and issued five recommendations to the National Bank of Romania regarding the capital buffers.

Overall, the requirements for macroprudential capital buffers remained unchanged versus 2018, apart from the capital buffer for other systemically important institutions (O-SII buffer), which has applied differentially starting 1 January 2019, and the capital conservation buffer, which has reached the 2.5 percent threshold, pursuant to the provisions of the CRD IV/CRR regulatory framework at EU level (Table 3.2).

³¹ Defined as the ratio between (a) the value added, plus operating subsidies less (i) payroll, (ii) operating taxes and duties, (iii) other net ordinary operating expenses excluding net interest and similar charges and (iv) depreciation and amortisation, and (b) interest and similar charges.

³² Defined as the ratio between total debt net of cash and equity.

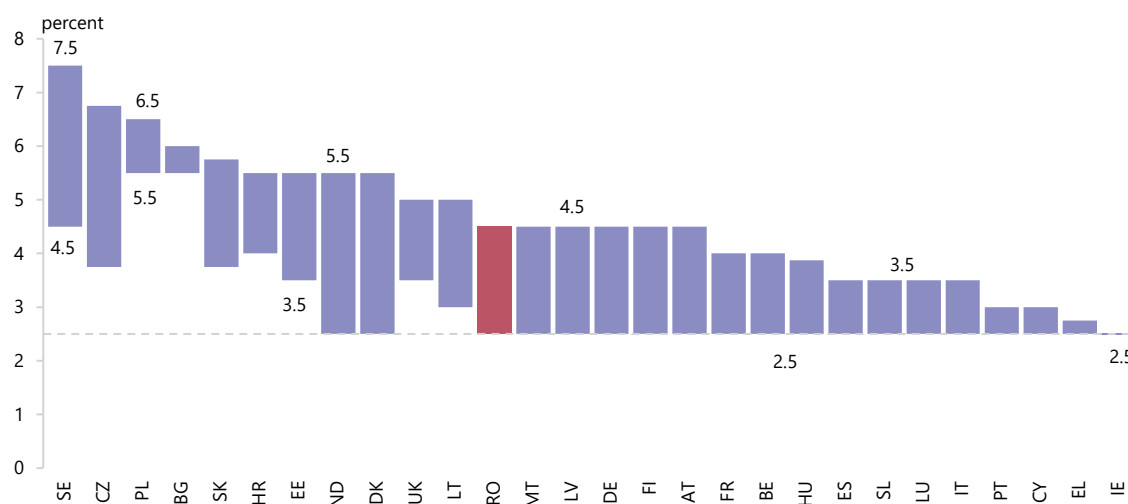
Table 3.2. Implementation of capital buffers in 2018



Source: NBR

Compared to the picture seen in the EU, Romania stands at the median level (slightly below average) as regards capital buffer requirements imposed by Member States (Chart 3.2). The EU picture is heterogeneous, given that some Member States have activated multiple buffers (as is the case of Sweden and Czechia), while others apply solely the capital conservation buffer, which is automatically introduced via the CRD IV regulatory framework. The discrepancy is mainly due to systemic risk assessments made by the national macroprudential authorities, notably having to do with the identification of structural or cyclical vulnerabilities building up across national financial systems.

Chart 3.2. Combined capital buffer applicable in 2019 – European comparison



Source: ESRB

The capital conservation buffer (CCoB) reached the 2.5 percent target level as of 1 January 2019, following the gradual phase-in of 0.625 percent per annum, which aimed (i) to avoid putting pressure on banks' cost of capital, as well as (ii) not to hinder lending to the real sector. The capital conservation buffer is designed to increase credit institutions' resilience, namely their capacity to absorb potential losses arising from the banking activity.

As regards the countercyclical capital buffer (CCyB), the assessments made in the course of 2018 did not reveal signs of excessive credit growth at an aggregate level (for further details, see sub-section 3.3.1.1).

Looking at the buffer for other systemically important institutions (O-SIIs), nine systemically important institutions were identified; they were applied a differentiated buffer of 2 percent, 1.5 percent or 1 percent of the total risk exposure amount starting 1 January 2019 (for further details, see Section 3.3.1.2).

The systemic risk buffer (SyRB) is applicable as of 30 June 2018, being aimed at: (i) ensuring an adequate management of credit risk from a macroprudential perspective, amid the possible return of non-performing loan ratio onto an upward path, in the context of unfavourable circumstances related to credit institutions' potential future efforts to clean up their balance sheets, and (ii) safeguarding financial stability, assuming that the tensions surrounding domestic macroeconomic equilibria and regional and global uncertainties will persist. Given the downward trend followed by the NPL ratio in 2018, a decrease may occur in the number of institutions to which the SyRB requirements apply, as well as in the applicable level of this instrument (for further details, see Section 3.3.1.3).

3.3.1.1. Countercyclical capital buffer (CCyB)

The countercyclical capital buffer (CCyB) is one of the macroprudential instruments implemented at EU level, which was introduced by Recommendation on guidance for setting countercyclical buffer rates (ESRB/2014/1).

This instrument is designed to help achieve the macroprudential policy intermediate objective on mitigating and preventing excessive credit growth and leverage. The main objective of the CCyB is to improve the banking sector's resilience to potential losses generated by these developments and, thus, contribute indirectly to smoothing the credit cycle. Therefore, it is recommended to implement the countercyclical buffer and build up capital reserves during the lending boom and release them during periods of credit crunch, with a view to helping credit institutions absorb losses, while preventing the adverse effects on real economy.

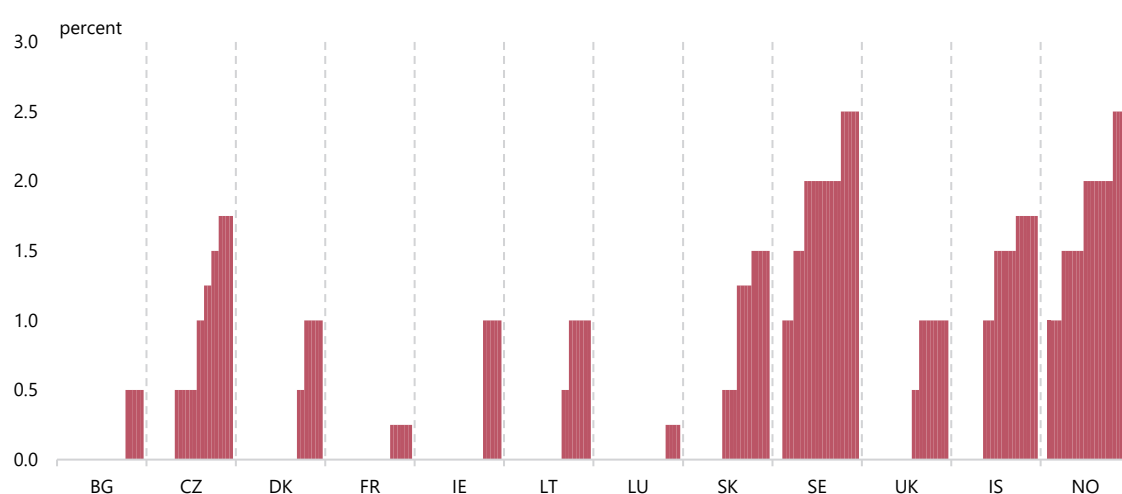
The countercyclical capital buffer can be implemented both separately and in combination with other instruments, given its low effectiveness in addressing specific risks from lending to the real sector. At European level, there are several instruments recommended by the ESRB, defined and calibrated so as to address credit market risks, such as (i) sectoral capital requirements, (ii) the macroprudential leverage ratio, (iii) loan-to-value (LTV) caps, as well as (iv) loan-to-income ratio (LTI) and debt service-to-income ratio (DSTI) caps. Unlike them, the CCyB has a broad scope and its impact on the economy is not immediate, the decision

to build up additional capital reserves being generally taken in periods when the capital is readily available³³.

The experience across the EU

The experience of EU countries that calibrated the countercyclical capital buffer at a level above 0 percent, as a measure of tightening lending conditions, is relatively recent and starts with 2016. Thus, several Member States notified the ESRB of the implementation of non-zero CCyB rates or of the hike in the currently applicable rate starting in 2019 or 2020 (Chart 3.3). In all other countries, the countercyclical capital buffer is further set at 0 percent.

Chart 3.3. Implementation of the countercyclical capital buffer in 2015-2020



Source: ESRB

Thus, out of the 12 states shown in Chart 3.3, three kept their CCyB rates unchanged in 2018, but announced an increase for 2019. Sweden decided to raise the applicable level from 2 percent to 2.5 percent, while Iceland and Norway announced an increase in these levels from 1.25 percent and 2 percent to 1.75 percent and 2.5 percent respectively in 2019. Conversely, three countries raised their CCyB rates in 2018. Czechia implemented a 1 percent rate, compared to 0.5 percent, and announced a number of gradual rises up to 1.75 percent as of 2020. Slovakia raised its CCyB from 0.5 percent to 1.25 percent in 2018 and announced a 1.5 percent rate for 2019, whereas the United Kingdom required rate of 1 percent at end-2018. Six additional Member States, i.e. Lithuania, Bulgaria, France, Luxembourg, Ireland and Denmark, announced a positive CCyB rate in 2019-2020.

According to Recommendation ESRB/2014/1, the deviation of the ratio of credit-to-GDP from its long-term trend should serve as a common starting point in guiding decisions on countercyclical buffer rates, most notably in the build-up phase. This is called the Basel

³³ Caruana, J. – *Macroprudential Policy: Could it Have Been Different This Time?*, People's Bank of China Seminar on Macroprudential Policy in Cooperation with the International Monetary Fund, 2010.

indicator and it involves measuring the deviation of the ratio of credit-to-GDP from its long-term trend based on the Hodrick-Prescott filter, using a recursive (unilateral) method and a smoothing parameter (λ) of 400,000. Consequently, the competent authority in each Member State uses the Basel indicator as a benchmark to substantiate the decision to implement and recalibrate the CCyB.

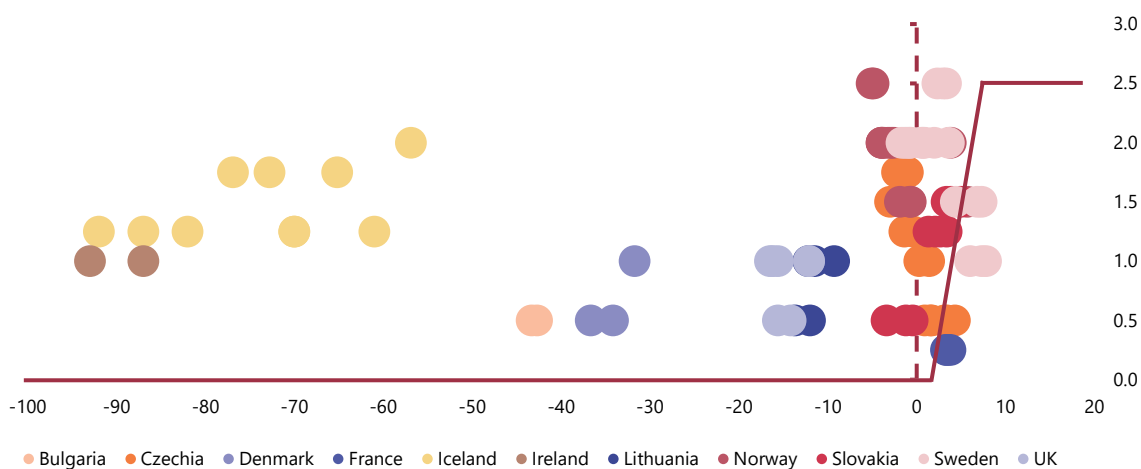
However, decision-makers also take into consideration other qualitative and quantitative information as well as additional indicators, which reflect country-specific features, when assessing the cyclical risk system-wide and setting the adequate CCyB rate. For further details on the use of the Basel indicator and of the additional indicators in setting the countercyclical buffer rate, see Box 4.

Box 4. The relationship between the Basel reference indicator and the countercyclical buffer rate

According to Recommendation ESRB/2014/1, where designated authorities deem that a measurement and calculation of the credit-to-GDP gap different from the standard methodology would better reflect the specificities of the national economy, they are recommended to measure and calculate quarterly an additional credit-to-GDP gap further to the standardised gap. As a result, most EU Member States chose to calculate a complementary indicator for setting the optimal countercyclical buffer rate and also included in their analyses quantitative and qualitative information in order to capture the main cyclical vulnerabilities related to lending.

The experience of the countries that implemented a strictly positive CCyB rate shows a clear preference for using additional information in the calibration decisions, the majority standing well below the 2 percentage point threshold of the Basel indicator (Chart A).

Chart A. Basel reference indicator and the countercyclical capital buffer



Source: ESRB

Only in three out of 12 EU Member States that decided to implement a non-zero CCyB rate, namely Sweden, France and Slovakia, the ESRB-recommended Basel indicator stood above the recommended signal threshold (of 2 percentage points) at the time of announcing the decision to implement the CCyB. As for the other countries, the decision was warranted by the increase in risks from real sector lending, particularly from household and/or mortgage-backed loans. Specifically, it notes that the countercyclical macroprudential measures are relatively heterogeneous, based on the evolution of financial cycles in EU Member States and on the variety of specific alternative indicators and methodologies implemented in those countries.

To sum up, given that EU Member States activated the countercyclical buffer in the absence of signals conveyed by the standard methodology and based on complementary indicators or other considerations regarding the build-up of cyclical vulnerabilities, the idea of setting up cyclical buffers can take shape. They should be created in good macro-financial times in order to be released in case of a recession/crisis.

Implementation in Romania

The analysis on the recalibration of the countercyclical capital buffer is discussed during the meetings of the National Committee for Macroprudential Oversight (NCMO), in its capacity as macroprudential authority. In order to implement this measure, the NCMO issues a recommendation addressed to the National Bank of Romania, as competent authority responsible for the supervision of the banking sector.

In the period from 2016 to 2017, the countercyclical buffer rate applicable in Romania was set at 0 percent, as the results of the analysis on total indebtedness showed no signals of an excessive rise in aggregate indebtedness. Conversely, developments in lending to households point to a potential excessive increase, this component being more closely monitored.

The methodology implemented in Romania for setting the countercyclical buffer rate is compliant with the reference techniques recommended by the Basel Committee, being adapted, however, to reflect the specificities of the national banking sector. Specifically, the Basel indicator and the alternative indicator³⁴ of the credit-to-GDP gap are used, both indicators being taken from the EU-recommended methodology. Additional indicators (private sector indebtedness, households' total indebtedness, non-financial corporations' total indebtedness) and structural indicators (real estate market, financial standing of the banking sector and lending standards, macroeconomic framework), which reflect the characteristics of lending at national level, are also used.

³⁴ Unlike the standard approach that advances the use of a smoothing parameter, an alternative indicator is applied as well in the case of Romania, where $\lambda=1,600$.

Chart 3.4. Analysis of the countercyclical capital buffer in Romania (2000 Q1 – 2018 Q4), assuming a short financial cycle (alternative indicator)

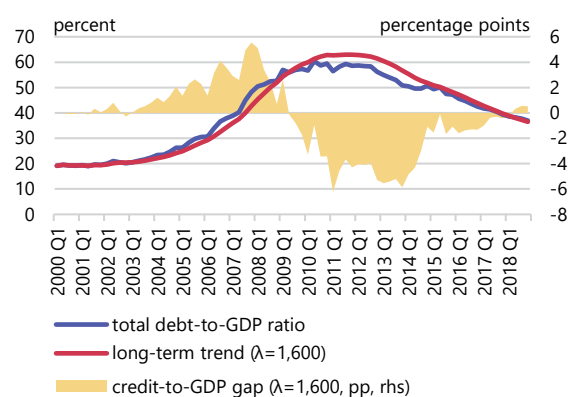
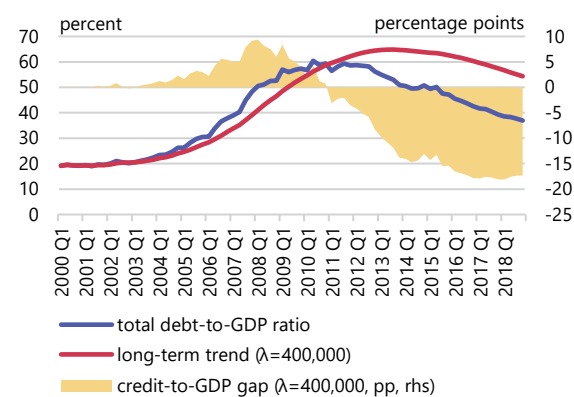


Chart 3.5. Analysis of the countercyclical capital buffer in Romania, assuming a long financial cycle (Basel indicator)



Note: The value of smoothing parameter, i.e. $\lambda=1,600$, is used for cycles similar in length to business cycles, referred to in the literature as short cycles (less than 8 years).

Source: NBR, NIS

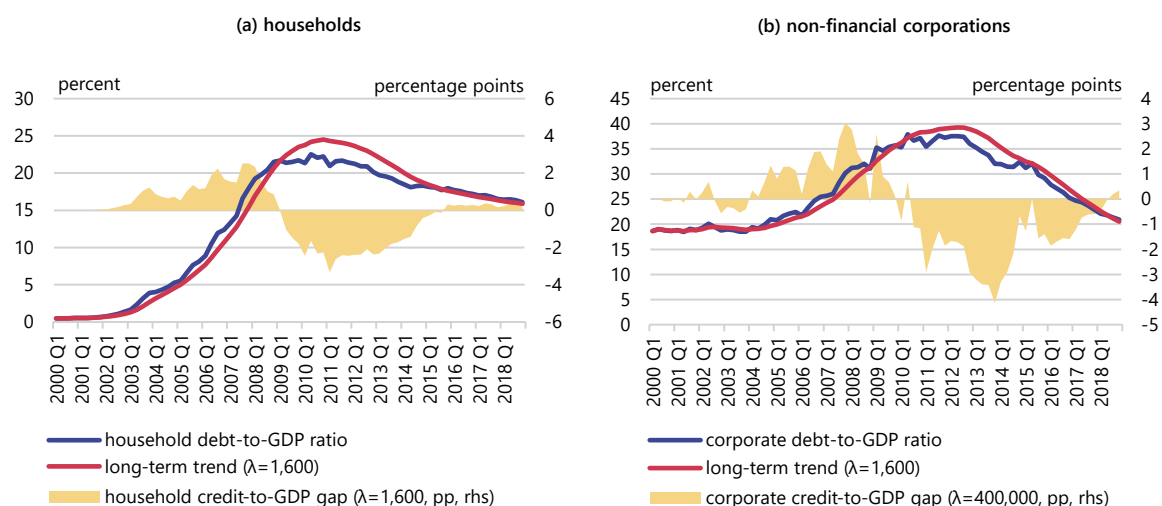
The results of the latest reassessment of the countercyclical capital buffer, based on the data available at 31 December 2018, revealed a further positive deviation of total indebtedness from its long-term trend, assuming a short financial cycle (0.53 percentage points in December 2018), remaining relatively unchanged from the previous readings (0.54 percentage points in September 2018). Based on the Basel definition, whereby the financial cycle spans approximately 30 years, the deviation is still in negative territory (-17.34 percentage points), but embarks on a trajectory towards its long-term trend (Charts 3.4 and 3.5).

Moreover, the analysis of the additional indicators calculated for December 2018 reveals positive values of the deviation from the long-term trend for loans to both households and companies. Specifically, the deviation of household lending from its long-term trend (assuming a short credit cycle) stands at 0.18 percentage points, while that of corporate lending comes in at 0.35 percent, assuming the same length of the financial cycle (Chart 3.6).

However, some additional indicators capturing the dynamics of vulnerabilities in the system exceeded the warning threshold. In fact, in most EU countries that introduced this capital buffer, the authorities based their response decision on the deterioration of additional indicators, given that the indicators covering the positive deviation of lending from its long-term trend remained further below the threshold values at EU-level. National authorities continue to monitor closely all relevant indicators, while a certain decision to increase the countercyclical capital buffer rate will depend on the entire package of macroprudential measures already implemented or currently under implementation.

In 2018, the National Bank of Romania recalibrated the prudential measures regarding borrowers' maximum indebtedness level. Specifically, Regulation No. 6/2018 amending and supplementing NBR Regulation No. 17/2012 on certain lending conditions entered into force on 1 January 2019. The provisions of the Regulation were enforced as a result of identifying a vulnerability to financial stability arising from high household leverage.

Chart 3.6. Analysis of the countercyclical capital buffer, assuming a short financial cycle



Source: NBR, NIS

Limiting the indebtedness level increases debtors' resilience in the event of adverse economic conditions, particularly for low-income earners.

The main provisions of the new regulation set an aggregate cap of 40 percent on the level of indebtedness (adjusted for the currency risk, the interest rate risk and the risk of income contraction) and of 20 percent on the share of monthly payment obligations stemming from loans or other repayable funding denominated in foreign currency or indexed to the exchange rate of the currency of the net income, for unhedged borrowers. The measures were calibrated to reduce as much as possible the limitation of access to financing of individuals who are in need of loans to accommodate basic consumption needs or purchase a home, while ensuring a sustainable level of indebtedness. Hence, the above-mentioned levels are raised by 5 percent for first-time home buyer loans. Moreover, the Regulation makes it possible to exempt 15 percent of the flow of new loans extended in each quarter (consumer loans and real estate investment loans) from the maximum level of indebtedness mentioned above, thus ensuring the necessary flexibility for banks to grant loans to debtors with good payment history or high payment capacity.

3.3.1.2. The buffer for other systemically important institutions (O-SII buffer)

The European Systemic Risk Board (ESRB) recommends macroprudential authorities to use the buffer for other systemically important institutions (O-SII buffer) in order to achieve the macroprudential objective of "limiting the systemic impact of misaligned incentives with a view to reducing moral hazard"³⁵.

³⁵ Recommendation A – Definition of intermediate objectives and Recommendation B – Selection of macroprudential instruments in Recommendation ESRB/2013/1 on intermediate objectives and instruments of macroprudential policy, published on the ESRB website. The objective of this Recommendation is to take the necessary steps towards an operational macroprudential oversight. The enforcement of the ESRB Recommendation in all EU Member States ensures the uniform implementation of macroprudential policies, similar functioning conditions for credit institutions and a predictable regulatory framework.

The O-SII buffer consists in applying additional capital requirements to large banks, contributing to mitigating the structural systemic risk generated by the size of credit institutions³⁶, via the following channels: (i) increase the loss-absorption capacity of banks; (ii) lower the likelihood of financial difficulties and reduce the severity of their potential impact; (iii) ensure the continuous provision of financial intermediation services during stressed periods and, implicitly, support economic growth. Considering that this macroprudential instrument is addressed to large credit institutions, the implementation of the O-SII buffer contributes directly to ensuring financial system stability.

The experience across the EU

Identifying systemically important institutions in the EU is based on a common methodology developed by the European Banking Authority (EBA)³⁷, laid down in the Guidelines on the criteria to determine the conditions of application of Art. 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs)³⁸. The EBA methodology ensures the comparability and transparency of the assessment of systemically important institutions EU-wide (by using harmonised databases and definitions for calculating mandatory indicators) and captures the specificities of the national financial systems (due to Member States' flexibility to develop the methodology for identifying systemically important institutions based on a set of optional indicators, in order to strengthen the existing relations in the financial system and the connections between the banking system and the real economy). All EU countries submit to the ESRB the results of the annual assessments on identifying systemically important banks³⁹.

The competent authorities set the O-SII buffer rate according to the national methodology. In 2018, 20 European countries⁴⁰ reported they used the buffer for systemically important institutions (the global systemically important institutions buffer – G-SII buffer⁴¹ and/or the buffer for other systemically important institutions – O-SII buffer⁴²). A number of 198 systemically important institutions (SIIs), four fewer than in the previous year, were identified in the EU, Norway, Iceland and Liechtenstein. The number of SIIs varies across countries, i.e. from 15 in the United Kingdom to two in Norway, depending on the concentration of each banking sector (Chart 3.7). Further details on the heterogeneity of calibration methods for the O-SII buffer are presented in Box 5.

³⁶ The size of credit institutions does not depend on the stage of the business cycle, but rather on the long-term strategy approved by shareholders. From this perspective, the O-SII buffer is a macroprudential instrument that aims the structural dimension of systemic risk.

³⁷ Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority) sets forth in Article 16(3) that competent authorities shall make every effort to comply with the guidelines and recommendations issued by the European Banking Authority, by implementing their provisions into national supervision practices.

³⁸ The Guidelines are published on the websites of the European Banking Authority, the National Bank of Romania and the National Committee for Macroprudential Oversight.

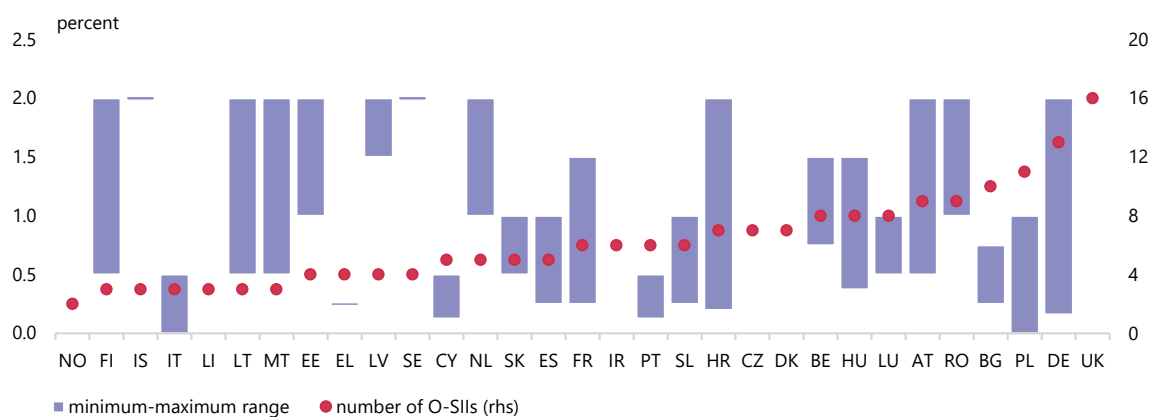
³⁹ https://www.esrb.europa.eu/national_policy/systemically/html/index.en.html.

⁴⁰ Austria, Belgium, Bulgaria, Croatia, Estonia, France, Finland, Germany, Hungary, Iceland, Italy, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden.

⁴¹ Global Systemically Important Institutions (G-SII).

⁴² Other Systemically Important Institutions (O-SIIs).

Chart 3.7. Number of systemically important institutions and the O-SII buffer rate



Note: The Member States with no O-SII buffer rates do not use this macroprudential policy instrument, although they identify systemically important institutions on a yearly basis; some countries apply other capital requirements to systemically important institutions, e.g. the systemic risk buffer (SyRB).

Source: ESRB

Moreover, in view of the constraints imposed by the European regulatory framework⁴³ in force (limiting the maximum O-SII buffer rate at 2 percent of the total risk exposure amount and the possibility of implementing the O-SII buffer as of 1 January 2016), six Member States⁴⁴ reported they used the systemic risk buffer (SyRB) to mitigate the structural systemic risks either as a single macroprudential instrument or as an add-on to the O-SII buffer.

Box 5. Calibration methods for the O-SII buffer in the EU

The comparative studies conducted at the ESRB level highlighted that Member States used different practices to calibrate the O-SII buffer rate. While the scores of each institution were set based on the EBA Guidelines on the assessment of O-SIIs, which ensured the EU-wide harmonisation of the methodology to identify systemically important institutions, the European regulations do not provide guidelines for the effective buffer calibration, the decision being delegated to the national competent authorities.

As a result, in many EU Member States, the relationship between the scores of individual institutions and the O-SII buffer rate is not direct, but rather depends on the calibration methodology and the prospective decisions on including institutions with scores lower than the cut-off score, taking into account a series of prudential considerations.

The ESRB's *Final report on the use of structural macroprudential instruments in the EU* reviews the calibration methods used across the Union and defines two types of approaches based on the relationship between the systemic importance scores and the buffer rates. In the first case, there is direct mapping between the scores and the O-SII

⁴³ Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC and 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.

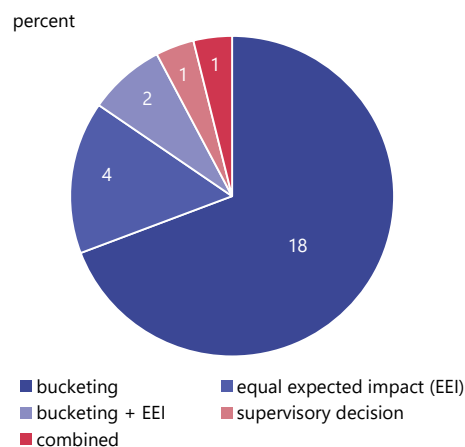
⁴⁴ Czechia, Croatia, Denmark, the Netherlands, Sweden, Slovakia.

buffer rate, a proportional and linear relationship being generally assumed. This category includes: (i) the bucketing approach, used by most Member States (Chart A), which implies the setting of buckets (i.e. ranges of systemic importance scores) for each buffer level and (ii) the linear interpolation approach. These approaches have the advantages of being easily understood and disseminated to the public, but also the major disadvantage of relying significantly on expert judgement.

Conversely, the approaches that do not imply a direct relationship between the systemic importance scores and the buffer rates are more complex, but have stronger economic fundamentals. The most frequently used methods are: (i) the equal expected impact (EEI) approach assumes that the expected impact on the economy of the failure of a systemically important institution and a non-systemically important institution should be the same, (ii) funding advantages, which implies the estimation of funding cost advantages of systemically important institutions based on their size and (iii) network analysis.

Considering the heterogeneity of approaches used by Member States, the experts that contributed to preparing the ESRB's *Final report on the use of structural macroprudential instruments in the EU* suggest that harmonised recommendations or methodologies should be formalised to calibrate the O-SII buffer, also in the form of EBA Guidelines similarly to those used for determining the scores of systemically important institutions.

Chart A. Calibration methods for the O-SII buffer in the EU



Source: *Final report on the use of structural macroprudential instruments in the EU*, December 2017, ESRB

Implementation in Romania

Pursuant to Art. 21 para. (1) of NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments⁴⁵, the NCMO periodically assesses the Romanian banking sector by identifying systemically important institutions. The NBR, in its capacity as competent authority, uses this methodology that is harmonised with the recommendations included in EBA 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)⁴⁶.

⁴⁵ According to Art. 21 para. (1) of NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments, "the Committee shall identify on an individual, sub-consolidated or consolidated basis, as applicable, other systemically important institutions, hereinafter referred to as O-SIIs, Romanian legal entities".

⁴⁶ The methodology harmonised with the recommendations in EBA 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) is published on the NBR website (<http://www.bnr.ro/Methodology-for-identifying-systemic-credit-institutions-15316.aspx>) and was detailed in the 2017 *Annual Report* of the NCMO (pp. 39-42, Table A.2 – p. 74).

The 2018 assessment to identify systemically important banks relied on the data available for 2018 Q2, the additional capital requirements consisting in the buffer for other systemically important institutions (O-SII buffer) at national level being applicable as of 1 January 2019. Specifically, in calculating the mandatory indicators recommended by EBA Guidelines, there were nine credit institutions, Romanian legal entities, that recorded scores higher than the threshold set for automatic designation of systemically important institutions (275 basis points), namely Banca Transilvania⁴⁷, UniCredit, BCR, BRD, Raiffeisen Bank, Alpha Bank, CEC Bank, OTP Bank and Garanti Bank. The assessment was made at the highest consolidation level, in compliance with EBA Guidelines. In the analysis made in the second stage of evaluation, i.e. the calculation of additional indicators, the same systemically important institutions were identified (the coherence of results is ensured by using the 2.75 percent threshold for additional indicators, which is the equivalent of 275 basis points set for the first stage of analysis), the results of the first two stages of assessment being homogeneous. As compared with the situation as at 31 March 2017, which underlined the adoption of the measure to implement the O-SII buffer applicable in 2018, OTP Bank⁴⁸ returned to the group of systemically important institutions, while Bancpost was acquired by Banca Transilvania through merger by absorption.

Thus, in 2018, NBR Order No. 12/2017 on the buffer for credit institutions authorised in Romania and identified by the National Bank of Romania as other systemically important institutions (O-SIIs)⁴⁹ was effective, setting forth that nine banks (Banca Comercială Română S.A., BRD – Groupe Société Générale S.A., UniCredit Bank S.A., Raiffeisen Bank S.A., Banca Transilvania S.A., Alpha Bank România S.A., Garanti Bank S.A., CEC Bank S.A. and Bancpost S.A.) are required to maintain, on an individual or consolidated basis, as appropriate⁵⁰, an O-SII buffer of 1 percent of the total risk exposure amount, starting with 1 January 2018. The NBR Order was issued after NCMO Recommendation No. 5/2017 on the capital buffer for other systemically important institutions in Romania⁵¹.

The analysis made in 2018 showed that systemically important credit institutions play a decisive role in the Romanian banking sector, in what concerns all EBA-recommended assessment criteria, namely (i) they held 78.5 percent of bank assets as at 30 June 2018, (ii) they provide a significant part of financial services to the real economy, i.e. 77.35 percent of loans in stock, 78.9 percent of deposits taken, and 59.5 percent of payments made,

⁴⁷ Banca Transilvania reported the taking-over of Bancpost in the FINREP statement at a consolidated level on 30 June 2018.

⁴⁸ As compared to the previous assessment, as at 30 June 2018, the following changes were made in the financial and accounting statements of OTP Bank: (i) rise in bank assets, (ii) higher importance of the bank due to the larger volume of payment transactions at national level and the step-up in the activity on the market of loans to non-financial corporations, (iii) the increased complexity of activity, via the expansion in the volume of transactions in OTC derivatives and cross-border liabilities and (iv) the enhanced interconnectedness of intra-financial liabilities.

⁴⁹ NBR Order No. 12/2017 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. 1009 of 20 December 2017.

⁵⁰ The O-SII buffer has been implemented at the highest consolidation level, corresponding to the level of consolidation at which credit institutions were identified as having systemic importance.

⁵¹ Recommendation No. 5/2017 on the capital buffer for other systemically important institutions in Romania is published on the NCMO website.

(iii) in terms of complexity, they conduct 95.6 percent of transactions in OTC derivatives, they place 93.3 percent of cross-border assets and raise 85.8 percent of foreign liabilities, while (iv) in terms of interconnectedness with the other undertakings conducting financial activities, they provide 71.8 percent of intra-financial assets, they use 74.4 percent of intra-financial liabilities and hold 98.4 percent of bonds issued.

Art. 269 para. (1) of NBR Regulation No. 5/2013 on prudential requirements for credit institutions stipulates that the credit institutions identified by the NCMO as O-SIIs shall maintain – on a consolidated, sub-consolidated or individual basis, as applicable – an O-SII buffer imposed by an NBR order issued at the recommendation of the NCMO. Pursuant to Art. 23 para. (1) of NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments⁵², the Committee may recommend the national sectoral financial supervisory authorities to require O-SIIs to maintain an O-SII buffer of up to 2 percent of the total risk exposure amount calculated in accordance with Art. 92 para. (3) of Regulation (EU) No 575/2013. The buffer must consist of Common Equity Tier 1 capital and add to the other Common Equity Tier 1 capital requirements.

Moreover, according to Art. 23 para. (3) of NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments, where an O-SII is a subsidiary of either a G-SII or an OSII which is an EU parent institution and subject to an O-SII buffer on a consolidated basis, the O-SII buffer rate that applies at individual or sub-consolidated level shall not exceed the higher of: a) 1 percent of the total risk exposure amount calculated in accordance with Art. 92 para. (3) of Regulation (EU) No 575/2013 and b) the G-SII or O-SII buffer rate applicable to the group at consolidated level. Out of the nine banks identified as having systemic importance based on the information available as at 30 June 2018, seven are subsidiaries of foreign banks in other Member States (Austria – BCR, Raiffeisen; Italy – UniCredit; Greece – Alpha Bank; France – BRD; Spain – Garanti Bank; Hungary – OTP Bank), which are systemically important institutions in their home country. Only two banks in the group of systemically important institutions have Romanian capital (CEC Bank) or majority Romanian capital (Banca Transilvania). In this context, the O-SII buffer that may be imposed to subsidiaries of foreign banks in Romania is limited to the level stipulated in Art. 23 para. (3) of NCMO Regulation No. 2/2017. The measures adopted by the competent authorities for systemically important parent banks in their home country that have subsidiaries in Romania are presented in Table 3.3.

Given the constraints imposed by the European and national regulatory frameworks in this field, the NCMO issued Recommendation No. R/6/2018 on the capital buffer for other systemically important institutions in Romania⁵³, whereby the National Bank of Romania was recommended to impose, starting 1 January 2019, a capital buffer for other systemically

⁵² NCMO Regulation No. 2/2017 on the methodology and procedure used for setting capital buffers and the scope of these instruments is published on the NCMO website (<http://www.cnsmro.ro/content/reg-2-2017-en.pdf>).

⁵³ NCMO Recommendation No. R/6/2018 on the capital buffer for other systemically important institutions in Romania was published on the NCMO website.

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 2018, as follows: (i) 2 percent for Banca Comercială Română S.A. (consolidated level), Raiffeisen Bank S.A. (consolidated level), Banca Transilvania S.A. (consolidated level), and CEC Bank S.A. (individual level), (ii) 1.5 percent for OTP Bank Romania S.A. (consolidated level) and (iii) 1 percent for UniCredit Bank S.A. (consolidated level), BRD-Groupe Société Générale S.A. (consolidated level), Alpha Bank România S.A. (individual level) and Garanti Bank S.A. (individual level).

Table 3.3. Measures adopted by the competent authorities for systemically important parent banks in their home country that have subsidiaries in Romania

Home country	Credit institution to which the measure applies (parent bank)	Macroprudential instrument/Applicable level/ Timeline of the instrument
Austria	Erste Group Bank Raiffeisen Bank International AG (RBI)	Both institutions should meet the following capital requirements: a) the systemic risk buffer (SyRB) applicable to all exposures, which is implemented in four equal increments between 1 January 2016 and 1 January 2019, as follows: 0.25% on 1 January 2016; 0.5% on 1 January 2017; 1% on 1 January 2018; 2% on 1 January 2019; b) the O-SII buffer, set at 2%, which is implemented in four equal increments between 1 June 2016 and 1 January 2019, as follows: 0.25% on 1 January 2016; 0.5% on 1 January 2017; 1% on 1 January 2018; 2% on 1 January 2019. In this context, given the FMA notification, the above-mentioned banks are subject to a systemic risk buffer.
Greece	Alpha Bank	The credit institution should meet the O-SII buffer requirement set at 1% and phased in over seven years (1 January 2016 – 1 January 2022), as follows: 0% on 1 January 2016; 0% on 1 January 2017; 0% on 1 January 2018; 0.25% on 1 January 2019; 0.5% on 1 January 2020; 0.75% on 1 January 2021; 1% on 1 January 2022.
Italy	UniCredit SpA	UniCredit Group SpA was identified as a global systemically important institution, being subject to a G-SII buffer of 1%. In addition, Unicredit Group SpA was identified as a domestic systemically important institution, the level of the O-SII buffer being set at 1% and phased in as follows: 0.25% on 1 January 2018; 0.50% on 1 January 2019; 0.75% on 1 January 2020; 1% on 1 January 2021; 1% on 1 January 2022.
France	Société Générale Group	The banking group should meet the capital requirements listed below: a) the G-SII buffer, set at 1% and implemented in four equal increments from 2016 to 2019, as follows: 0.25% on 1 January 2016; 0.5% on 1 January 2017; 0.75% on 1 January 2018; 1% on 1 January 2019; b) the O-SII buffer, set at 1% and implemented in four equal increments from 2016 to 2019, as follows: 0.25% on 1 January 2016; 0.5% on 1 January 2017; 0.75% on 1 January 2018; 1% on 1 January 2019. The two buffers overlap in terms of level and phase-in period; according to the CRD IV provisions, a single buffer applies to the aforementioned group.

The Netherlands	G. Netherlands B.V.	G. Netherlands B.V., based in the Netherlands, which operates as a subsidiary of the Spanish Banco Bilbao Vizcaya Argentaria S.A. (BBVA), holds 99.9% of Garanti Bank S.A. Moreover, Garanti Bank România is part of TGB (Turkiye Garanti Bankasi AS), a Turkish group registered in a third country (where CRD IV does not apply), but is however consolidated, through global consolidation, by BBVA. According to the notification submitted by Banco de España to ESRB, the BBVA group is subject to a G-SII buffer of 0.75%, which is implemented in two increments: 0.5625% as of 1 January 2018; 0.75% as of 1 January 2019.
Hungary	OTP Bank Nyrt.	According to the notification submitted by Magyar Nemzeti Bank to ESRB, the OTP group is subject to an O-SII buffer of 2%, which is implemented in three increments: 1% as of 1 January 2018; 1.5% as of 1 January 2019; 2% as of 1 January 2020.

Source: NBR

The NCMO recommendation took into account the following: (i) the proposal to be in line with the trend manifest at EU level to increase the capital requirements applicable to systemically important banks, (ii) in 2018, macroeconomic developments were affected by rising vulnerabilities, that could translate into high risks to the financial system, a situation which required a stricter approach from the perspective of macroprudential measures, (iii) in recent years, the profitability of the Romanian banking system saw a favourable evolution, which allowed the build-up of capital reserves that could be used in periods of financial stress, (iv) the capital requirement for systemically important institutions is limited to the higher level between the O-SII buffer rate and the systemic risk buffer rate⁵⁴.

In compliance with the applicable provisions of the European and national regulatory frameworks⁵⁵, the NCMO Secretariat notified the European Commission, the ESRB, the EBA, the ECB, as well as the competent and designated authorities of the intention to implement the requirements on the O-SII buffer starting with 1 January 2019. In the prior notification period of 30 days, the European/national competent authorities made no observations or comments about the content of the NCMO recommendation to the NBR.

After the NCMO issued 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 Oversight⁵⁶, the NBR, in its capacity as competent authority, assumed the implementation of the macroprudential instrument to achieve the intermediate objective limiting the systemic impact of misaligned

⁵⁴ In compliance with the provisions of the European CRD IV/CRR regulatory framework, which were implemented nationally, where the systemic risk buffer is determined based on banks' total exposures, the capital requirements for structural buffers (the O-SII and systemic risk buffers) do not apply cumulatively. This method of implementing structural buffers puts lower pressure on systemically important credit institutions with regard to meeting capital requirements, as compared to the method of applying them concurrently (in the assumption of applying the systemic risk buffer on domestic exposures, according to CRD IV regulatory framework).

⁵⁵ The obligation of national competent authorities to previously notify their intention to implement the O-SII buffer is laid down as follows: in point 18 of EBA Guidelines on the criteria to determine the conditions of application of Art. 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of O-SIIs, in Art. 23 para. (4) and para. (8), in Art. 24 para. (2) of NCMO Regulation No. 2/2017 on the methodology and procedures used for setting capital buffers and the scope of these instruments.

⁵⁶ Recommendation No. R/4/2018 is published on the NCMO website (<http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor/>).

incentives with a view to reducing moral hazard, namely the buffer for other systemically important institutions (O-SII buffer). In this context, the NBR implemented NCMO Recommendation No. R/6/2018 on the capital buffer for other systemically important institutions in Romania via the issue of Order No. 9/2018 on the buffer for credit institutions authorised in Romania and identified by the National Bank of Romania as other systemically important institutions (O-SIIs)⁵⁷.

3.3.1.3. The systemic risk buffer (SyRB)

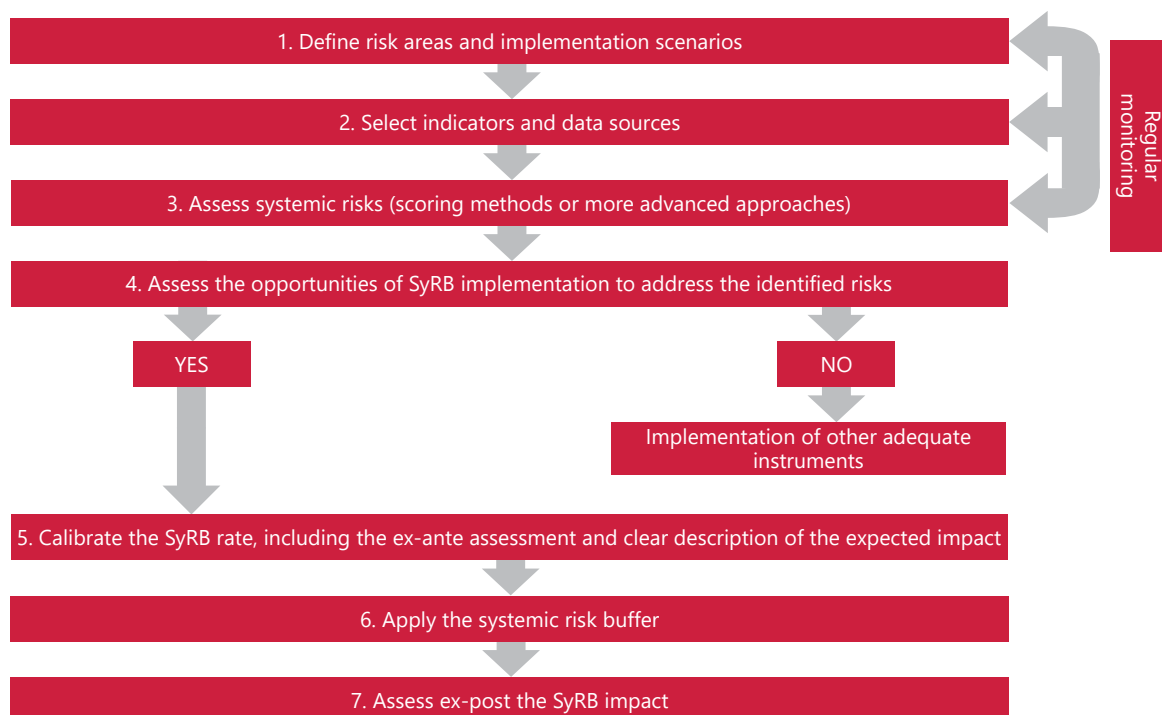
The systemic risk buffer (SyRB) is designed to cover losses incurred as a result of certain risks becoming manifest, excluding the risks generated by excessive lending, which may affect the financial stability of the entire sector. The instrument may be used to achieve the intermediate objective of “strengthening the resilience of financial infrastructures” as a macroprudential tool to prevent and mitigate long-term non-cyclical systemic or macroprudential risks that do not fall under the scope of Regulation (EU) No 575/2013, which may disrupt the financial system and the real economy of a certain Member State.

The macroprudential instrument consisting in imposing the systemic risk buffer aims at the structural dimension of systemic risk, namely that relative to risk distribution across the financial system. Systemic risk is a broad, multi-layered concept, which characterises the situation where shocks in a particular sector (i.e. the financial sector) affect the activity of other sectors as a result of existing interlinkages. Hence, systemic risks have both a spatial dimension and a temporal dimension. The current macroprudential architecture provides for the use of two instruments to address systemic risks: the systemic risk buffer and the other systemically important institutions (O-SII) buffer. The decision to combine the two instruments is up to the national authorities, given the specificities of each economy.

Specifically, this buffer is designed as a flexible instrument available for competent authorities, which may be applied to high-risk exposures (exposures located in Romania, in other Member States or in third countries), institutions, groups of institutions or the banking sector as a whole, on a consolidated, sub-consolidated or individual basis, as applicable. The buffer level may vary among institutions, depending on each institution’s contribution to the risk build-up. The CRD IV/CRR legislative package does not specify the criteria for applying the systemic risk buffer. These criteria will be established by the national competent authorities that need to calibrate the indicators used for the activation/deactivation of the buffer based on the specificities of the national financial system. Figure 3.2. describes the activation of the buffer from the regular monitoring of systemic risks to the implementation stages of the buffer, including the ex-post impact assessment.

⁵⁷ NBR Order No. 9/2018 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. 1110 of 28 December 2018.

Figure 3.2. Activation of the systemic risk buffer



Source: ESRB

The experience across the EU

Most EU Member States transposed the systemic risk buffer provisions into the national legislation. At present, 13 countries have implemented a systemic risk buffer, for both total exposures and domestic exposures (Table 3.4).

Table 3.4. Systemic risk buffer rates in EU Member States

Member State	SyRB rate (%)	Exposures to which the SyRB applies
Austria	0.5 – 2	total exposures
Bulgaria	3	domestic exposures
Croatia	1.5 – 3	total exposures
Czechia	1 – 3	total exposures
Denmark	0.5 – 3	total exposures
Denmark	2 – 3	domestic exposures (Faroe Islands)
Estonia	1	domestic exposures
Finland	1 – 3	total exposures
Hungary	0 – 1	domestic exposures
The Netherlands	3	total exposures
Poland	3	domestic exposures
Romania	1 – 2	total exposures
Slovakia	1	domestic exposures
Sweden	3	total exposures

Source: ESRB

Implementation in Romania

At the level of the domestic banking sector, the National Committee for Macroprudential Oversight issued, in its meeting of 18 December 2017, NCMO Recommendation No. 9 of 18 December 2017 on the systemic risk buffer in Romania⁵⁸. According to it, the National Bank of Romania is recommended to implement a systemic risk buffer applicable to all exposures, starting 30 June 2018, with the aim of supporting the adequate management of credit risk and enhancing banking sector resilience to potential unanticipated shocks, amid unfavourable structural circumstances. The recommendation was issued in the context of identifying the following vulnerabilities across the national financial system: (i) the possibility of a renewed increase in non-performing loan ratios, following the rise in interest rates and the slowdown in the balance sheet clean-up process; (ii) the tensions surrounding macroeconomic equilibria.

Moreover, it was recommended that the buffer level be calibrated at 0 percent, 1 percent or 2 percent, depending on the average values over the past 12 months of the indicators on the non-performing loan ratio and the coverage ratio, presented in Table 3.5.

Table 3.5. Calculation methodology of the systemic risk buffer

NPL ratio	NPL coverage by provisions	SyRB level (% of Tier 1 capital ratio)
< 5%	> 55%	0%
> 5%	> 55%	1%
< 5%	< 55%	1%
> 5%	< 55%	2%

Source: NBR

The National Bank of Romania implemented NCMO Recommendation No. 9 of 18 December 2017 on the systemic risk buffer in Romania by issuing NBR Order No. 4/2018 on the systemic risk buffer, published in *Monitorul Oficial al României*, Part I, No. 433 of 22 May 2018.

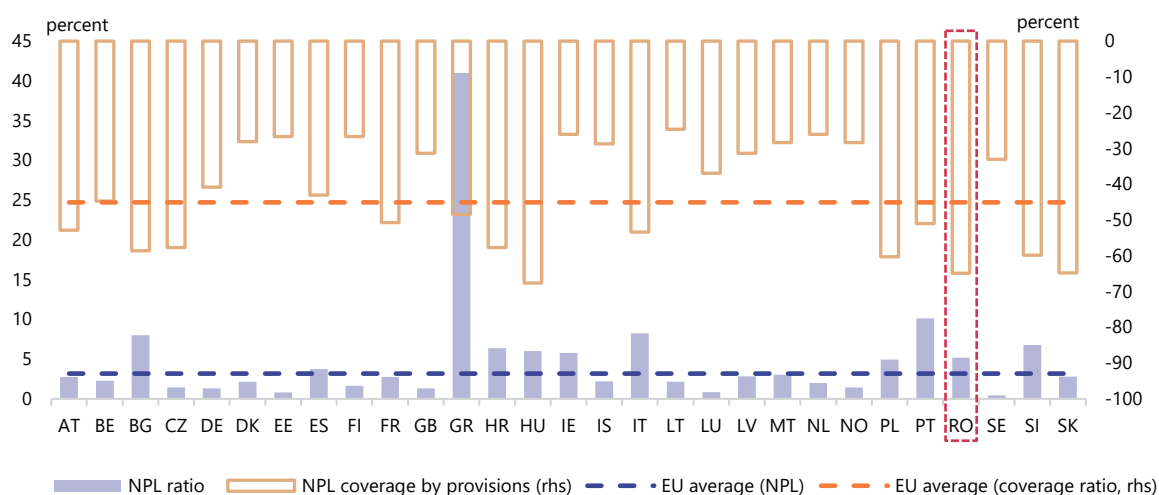
The National Committee for Macroprudential Oversight recommended the National Bank of Romania to reassess the indicators and thresholds in the calibration of the systemic risk buffer. Furthermore, NCMO Recommendation No. 9/2017 on the systemic risk buffer in Romania stipulates that the monitoring of NPL resolution should be carried out in real time, so as to assess the progress both at individual level and across the entire sector. Consequently, the analysis on the recalibration of the systemic risk buffer was repeated using the period from July 2017 to June 2018 in order to ensure an up-to-date picture of the identified vulnerabilities. As a result of this analysis, the National Committee for Macroprudential Oversight issued NCMO Recommendation No. 7/2018 on the systemic risk buffer in Romania⁵⁹, whereby the National Bank of Romania was recommended, while implementing NCMO Recommendation No. R/9/2017, to make the semi-annual

⁵⁸ NCMO Recommendation No. 9/2017 on the systemic risk buffer in Romania is available on the NCMO website (<http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor-2017/>).

⁵⁹ NCMO Recommendation No. 7 of 24 September 2018 on the systemic risk buffer in Romania is available on the NCMO website (<http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor/>).

re-assessment and set the 12-month reference interval for the average values of the indicators based on which the systemic risk buffer is determined, as well as the level at which credit institutions apply this buffer, namely on individual and/or consolidated level. The issuance of NCMO Recommendation No. R/7/2018 had in view the need to update the reference period for calculating the asset quality indicators set according to the methodology laid down in NCMO Recommendation No. 9/2017 with a view to calibrating the systemic risk buffer, so as to ensure an ongoing monitoring, based on the latest data, of the progress in NPL resolution. The National Bank of Romania implemented NCMO Recommendation No. R/7/2018 on the systemic risk buffer in Romania by issuing NBR Order No. 8/2018 on the systemic risk buffer, published in *Monitorul Oficial al României*, Part I, No. 1031 of 5 December 2018).

Chart 3.8. NPL ratio and NPL coverage by provisions – European comparison (December 2018)



Source: EBA

The non-performing loan ratio in the national banking sector stood at a relatively low level in December 2018 (5.2 percent), yet remained above the EU average of 3.2 percent. On the other hand, the coverage ratio was the second highest in the EU, i.e. 64.9 percent, significantly above the 45.1 percent average calculated for EU Member States (Chart 3.8).

3.3.2. Other macroprudential instruments

The instruments presented below are implemented by the NBR at the NCMO's recommendation and are applicable to the banking sector

3.3.2.1. Reciprocity for macroprudential measures

Having regard to the ESRB Recommendation on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2015/2), the

European Systemic Risk Board (ESRB) recommends the relevant national authorities to reciprocate the macroprudential measures adopted by other Member States. To this end, the Member States that take a macroprudential measure may choose to submit a request for reciprocation to the ESRB, based on which the ESRB may issue a recommendation for the other Member States to reciprocate the respective measure. Member States may exempt certain individual institutions from applying a reciprocating macroprudential policy measure or may not recognise the measure in question if the credit institutions in those Member States have non-material exposures to the Member State requesting reciprocation (*de minimis* principle).

Specifically, each Member State requesting reciprocation for a macroprudential measure should also set an institution-specific materiality threshold for exposures, based on which the other Member States may exempt the institutions from applying that measure. If the material exposure stems from several banks with small exposures or in order to safeguard financial stability, Member States may choose lower thresholds. The proposed threshold is validated by the ESRB and should be considered a maximum threshold. The other Member States will be able to set a lower threshold or no threshold at all if they acknowledge reciprocity as a matter of principle.

Macroprudential measures generally apply only to resident banks and the subsidiaries of foreign banks. Reciprocity ensures the same prudential treatment for similar risk exposures in a Member State by extending the applicability of macroprudential measures also to direct exposures or through the branches of foreign banks in that Member State. According to the reciprocity principle, based on the voluntary recognition provided by the European and national regulatory framework, the NCMO may recognise the measures taken by other Member States.

In 2018, the NCMO analysed and approved two decisions on recognising the macroprudential measures adopted by Finland and Belgium. The macroprudential measure taken by Finland was included in Recommendation ESRB/2018/1⁶⁰, published on 3 February 2018, whereby Member States' relevant authorities are recommended to recognise it. The measure introduces a 15-percent floor for the average risk-weight (RW) on residential mortgage loans secured by a mortgage on housing units in Finland applicable to credit institutions using the internal ratings-based (IRB) approach for credit risk. The materiality threshold proposed by the Finnish authorities stands at EUR 1 billion, accounting for 1 percent of the residential mortgage lending market in Finland.

Furthermore, on 21 September 2018, the ESRB issued Recommendation ESRB/2015/2⁶¹ whereby Member States' relevant authorities are recommended to reciprocate the macroprudential measure adopted by Belgium. The measure consists of a risk-weight add-on for retail exposures secured by residential immovable property located in Belgium,

⁶⁰ Recommendation ESRB/2018/1 of 8 January 2018 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures

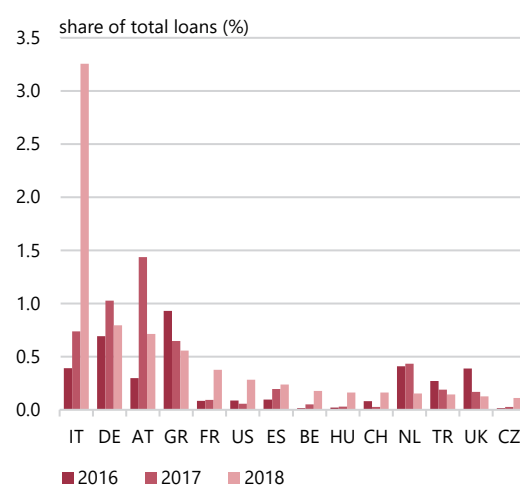
⁶¹ Recommendation ESRB/2018/5 of 16 July 2018 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures.

applied in accordance with Article 458(2)(d)(vi) of Regulation (EU) No 575/2013 and imposed on credit institutions authorised in Belgium using the IRB approach to calculate regulated capital requirements. It is composed of the following components: (a) a flat risk-weight add-on of 5 percentage points and (b) a proportionate risk-weight add-on consisting of 33 percent of the exposure-weighted average of the risk-weights applied to the portfolio of retail exposures secured by residential immovable property located in Belgium. At the same time, the Belgian authorities proposed an institution-specific materiality threshold of EUR 2 billion.

Credit institutions in Romania that use the IRB approach do not have branches operating in Finland and Belgium, while direct exposures to loans eligible to these two countries are low, well below the proposed materiality thresholds. All this considered, the NCMO's decisions were not to recognise the macroprudential measure adopted by Finland and Belgium. Against this backdrop, the NBR assesses credit institutions' exposures to other EU Member States on a regular basis and will recommend the necessary measures where such exposures become material.

At the level of the Romanian banking sector, exposures from external loans amounted to lei 22 billion, accounting for approximately 7.5 percent of total loans as at 31 December 2018, but most of them are loans granted to other financial institutions. The main foreign exposures of banks, Romanian legal entities, are located in Italy (3.25 percent), Germany (0.79 percent), Austria (0.71 percent) and Greece (0.55 percent, Chart 3.9).

Chart 3.9. External loans of the Romanian banking sector



Source: NBR

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

In the meeting of the NCMO General Board of 17 December 2018, the National Bank of Romania presented the results of the annual assessment of the impact of credit institutions' funding plans on the flow of credit to the real economy. The assessment was made in compliance with NCMO Recommendation No. 10/2017 on the impact of credit institutions' funding plans on the flow of credit to the real economy⁶², whereby the National Bank of Romania was recommended to assess this impact on a regular basis.

The NCMO Recommendation was issued pursuant to ESRB Recommendation of 20 December 2012 on funding of credit institutions (ESRB/2012/2), which aims to ensure

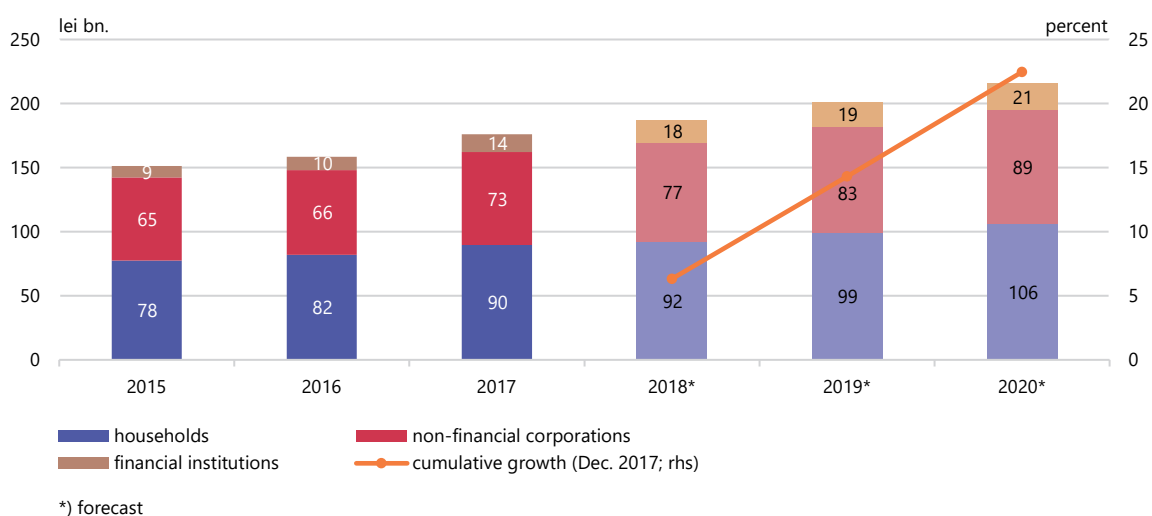
⁶² NCMO Recommendation No. 10/2017 on the impact of credit institutions' funding plans on the flow of credit to the real economy is published on the NCMO website (<http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor-2017/>).

adequate funding risk management by banks and sustainability of funding plans. According to Recommendation A – Monitoring and assessment of funding risks and funding risk management by supervisors, national supervisory authorities with responsibility for banking supervision are recommended to intensify their assessments of the funding and liquidity risks incurred by credit institutions, as well as their funding risk management, within the broader balance sheet structure.

In the Romanian banking sector, eight credit institutions⁶³ report data on funding plans.

According to the funding plans submitted by credit institutions, banking activity will make a positive contribution to lending to the real economy in the period ahead for all types of loans under review. The assessment of funding plans of reporting credit institutions for a three-year horizon (December 2017 – December 2020) shows the following forecasted lending developments: (i) increase in the financing of both real and financial sectors, (ii) the three-year cumulative rise of 20.1 percent in credit to the real sector, estimated for both segments, i.e. households (up 18.3 percent) and non-financial corporations (up 22.2 percent), Chart 3.10, (iii) a faster growth pace of lending to financial corporations (three-year cumulative figure of 50.3 percent) and (iv) the three-year 9.72 percent expansion in assets, due mainly to lending to the real sector.

Chart 3.10. Lending forecast at aggregate level and by component

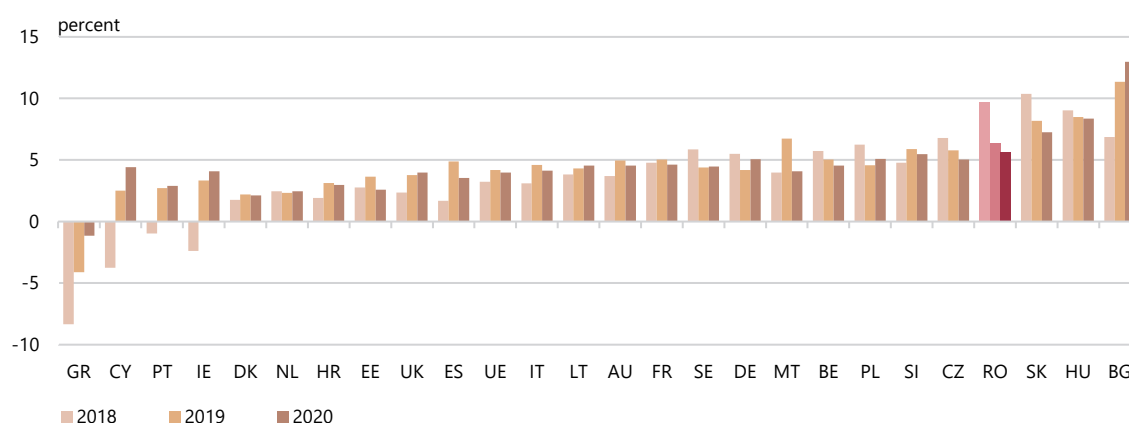


Source: NBR, credit institutions' reports on funding plans

Housing loans granted to residents will further play an important part in banks' lending policy (up 18.4 percent), maintaining its share in total household loans (60.7 percent at end-2020). A marginal change in banks' lending strategy is expected in the period ahead, the share of loans to SMEs further declining marginally, from 55.2 percent in December 2017

⁶³ The obligation to submit regular reports on funding plans was imposed on the eight largest banks in the Romanian banking system, i.e. BCR, BRD, Banca Transilvania, Raiffeisen, Unicredit, CEC Bank, Alpha Bank, Bancpost.

Chart 3.11. Projected growth rates of household loans EU-wide⁶⁴ (2018-2020)



Note: The data for Luxembourg were eliminated as they point to an increase of approximately 30 percent in 2019 and, therefore, distort the results.

Source: EBA

to 53.7 percent at end-2020, against the background of faster-paced growth in loans to large companies.

The breakdown by balance sheet component shows that the main assets contributing to the three-year cumulative increase (9.72 percent) in the balance sheets of the eight reporting banks are loans to the real sector (Chart 3.10). Loans to households and non-financial corporations contributed by 5.07 percentage points and 4.98 percentage points respectively to the rise in total assets. Conversely, cash and balances with central banks will make a negative contribution, which may hint at credit institutions' intention to use the available holdings to support lending.

Based on the European comparison, Romania ranks among the top EU countries in what concerns the intention to increase assets, as well as the evolution of loans to households and non-financial corporations (Chart 3.11).

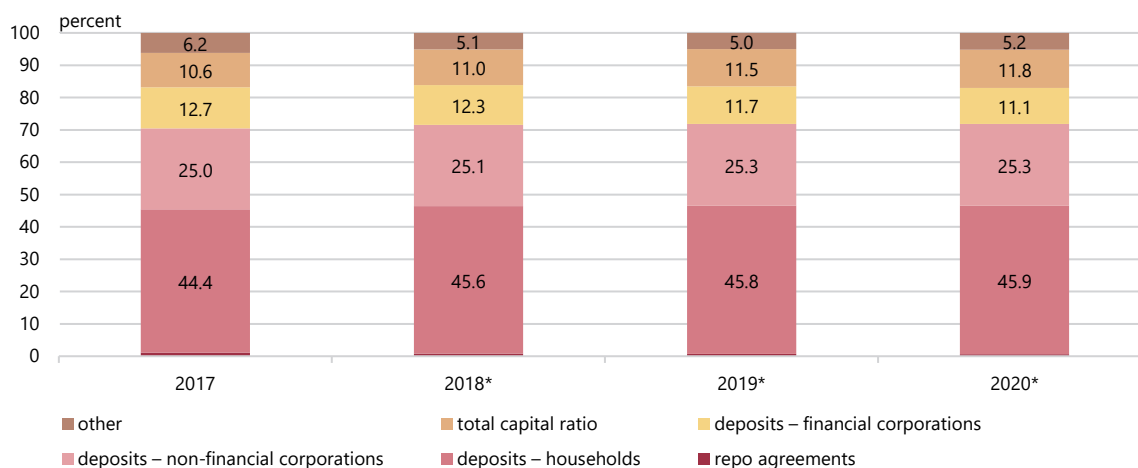
Structure of liabilities and sources of loan financing

According to funding plans, banks aim to cover the growth of loans to the private sector of approximately lei 39 billion first through (i) higher household deposits, then by (ii) using the available funds resulting from the reduction in cash and balances with central banks, (iii) increasing non-financial corporations' deposits and (iv) rising equity.

In the period between 2017 and 2020, deposits will further be the main sources of loan financing, their share in liabilities remaining unchanged at approximately 80 percent (Chart 3.12), in a persistently low interest rate environment. Financing via long-term debt security issues is insignificant, despite the prospects showing a doubling of its figure in the next three years up to 1.3 percent of liabilities.

⁶⁴ Based on the data in the *EBA Report on Funding Plans* published in September 2018. In Romania's case, the data reported by the three largest banks that have the obligation to report information on funding plans to the EBA were taken into consideration.

Chart 3.12. The current and forecasted liabilities structure

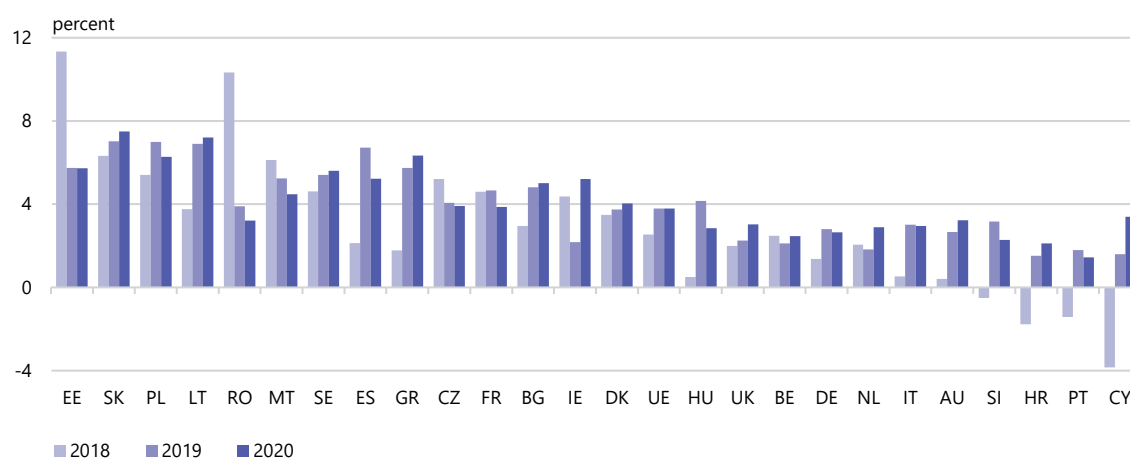


*) forecast

Source: NBR, credit institutions' reports on funding plans

Romania ranks among top EU countries in what concerns the share of deposits in total liabilities and the projected rates of increase of deposits in the next three years (Chart 3.13). Credit institutions' funding plans could be used in formulating guidelines on macroprudential policies, as well as an opportunity to use macroprudential instruments in the period ahead. Based on the data provided by credit institutions, forward-looking information can be obtained with regard to lending developments or the early identification of vulnerabilities and the build-up of potential risks to financial stability, which could allow the preparation and early activation/deactivation of macroprudential instruments, thereby increasing their efficiency and effectiveness.

Chart 3.13. Projected growth rates of deposits from households and non-financial corporations EU-wide⁶⁵ (2018-2020)



Source: EBA

⁶⁵ In Romania's case, the data reported by the three largest banks that have the obligation to report information on funding plans to the EBA were taken into consideration.

In addition to the plans of banks in Romania to finance households and corporates, the authorities also monitor closely the loans granted by non-resident banks to domestic firms in particular (further details were presented in the previous *Financial Stability Reports* prepared by the NBR). The monitoring aims to ensure that these debt flows do not affect financial stability through the significant increase in private external debt, the further lower level of financial intermediation, keeping a riskier structure in resident banks' balance sheets in terms of debtors' capacity to repay loans, etc.

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

The European Systemic Risk Board monitors annually the exposures of European banks to non-EU countries. If there is an unsustainable growth in lending to a third country, the CRD IV legal framework allows the imposing of a countercyclical capital buffer, applicable at national level, on cross-border exposures to the country in question.

The methodology for identifying material third countries is based on data reported by credit institutions at aggregate level in COREP. The indicators used are: risk-weighted assets, original exposure and defaulted exposures to various non-EU countries. In 2018, the material third countries for the European banking sector identified by the ESRB were: the United States of America, Hong Kong, Singapore, Switzerland, China, Turkey, Brazil and Russia.

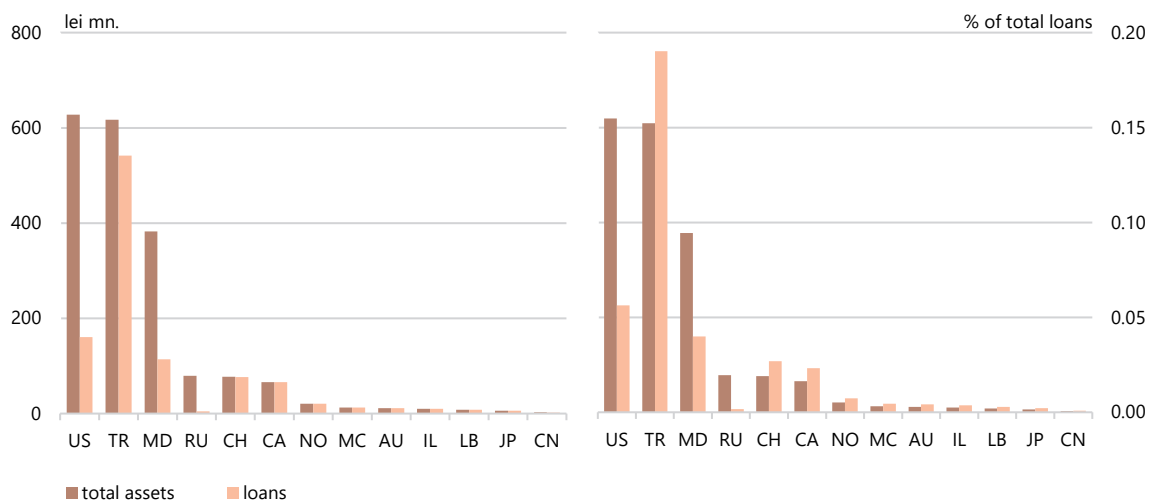
The ESRB recommends the same analysis to be conducted at national level and the material third countries identified to be reported to the European forum. Moreover, the ESRB offers every country the freedom to use for its own analysis other indicators that may be more relevant in a national context.

The methodology used by the NBR to this end was developed based on the ESRB procedures for assessing the materiality of third countries for the EU banking sector in terms of recognising and setting countercyclical buffer rates. To ensure the robustness of the results, the ESRB approach was supplemented at national level by including additional indicators, which would allow the non-domestic exposures to be determined most precisely, in line with the methodology approved in the NCMO meeting of 14 June 2017.

The results of the analysis performed using data for end-2017 show there is no third country to which the Romanian banking system has material exposures. In line with the ESRB methodology, the cumulative share of all reported exposures to third countries is extremely low, as follows:

- 0.77 percent of risk-weighted assets;
- 0.46 percent of the original exposure;
- 0.06 percent of defaulted exposures.

Chart 3.14. Total exposures and credit exposures to third countries



Source: NBR

At the same time, using also data from the monetary balance sheets of credit institutions in Romania, lending to third countries and the total assets held by banks in these countries further recorded low values. Among the third countries, the most significant credit exposures of the Romanian banking sector are in Turkey (lei 0.54 billion, i.e. 0.24 percent), the United States of America, the Republic of Moldova and Switzerland (Chart 3.14).

To sum up, both the findings obtained based on the ESRB methodology and the additional assessments conducted in line with the national methodology point to an extremely low foreign exposure of the Romanian banking sector to non-EU countries, meaning that there is no material third country in terms of recognising and setting countercyclical buffer rates.

4. Implementation of macroprudential policy

Manner of implementation by the recipients (the NBR, the MPF and the FSA) of the recommendations issued by the NCMO from 2017 to December 2018

In accordance with the provisions of Art. 4 para. 1 of Law No. 12/2017 on macroprudential oversight of the national financial system, in order to implement the measures necessary for preventing and mitigating systemic risks at national level, the NCMO is empowered to: (a) issue recommendations and warnings to the NBR and the FSA, in their capacity as national financial supervisory authorities at a sectoral level, (b) issue recommendations to the Government for the purpose of safeguarding financial stability.

Due to the fact that the National Committee for Macroprudential Oversight was established as an interinstitutional cooperation structure without legal personality, the recommendations issued by the NCMO's General Board are implemented by the member authorities (the National Bank of Romania, the Financial Supervisory Authority, the Government), which are the addressees of the NCMO recommendations.

The addressees of the NCMO recommendations or warnings may adopt the appropriate measures, including the issue of regulations in order to observe the recommendations or, where appropriate, may take action to mitigate the risks they were warned about. The addressees should inform the NCMO of the measures adopted; in cases where they have not taken such measures, they should provide adequate justification for any inaction (Art. 4 para. 2 of Law No. 12/2017). If the NCMO finds that its recommendation was not followed up or that the addressees failed to adequately justify their inaction, it should inform the addressees in strict confidentiality (Art. 4 para. 3 of Law No. 12/2017).

Pursuant to the provisions of Art. 30 para. 1 of 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 Decision No. D/1/2018), the General Board shall monitor the measures taken by the addressees following the adopted warnings and recommendations through the two Technical Committees. The Committees assess the adopted measures and/or the justifications for not adopting the measures, which were previously communicated by the addressees of the issued recommendations, and inform the General Board thereupon. In this context, regular analyses on the manner of implementation of the recommendations issued by the NCMO are required.

The NCMO issued 10 recommendations in 2017 and eight recommendations in 2018, all of them within the scope of the Technical Committee on systemic risk.

In order to assess the manner in which the requirement set forth in Art. 4 para. 2 of Law No. 12/2017 was fulfilled, the Technical Committee on systemic risk carried out an analysis on how the recommendations issued by the NCMO from 2017 to September 2018 were implemented, based on the information received from the addressees. This analysis was presented during the NCMO General Board meeting of 17 December 2018 for information purposes only.

Compared to December 2018, the NCMO General Board issued one more recommendation, i.e. NCMO Recommendation No. 8 of 17 December 2018. The current stage of implementing the recommendations issued by the NCMO from 2017 to December 2018 is presented in detail in the Annexes to this *Report*.

The conclusions of this analysis, namely the stage of implementation by the addressees of the 18 recommendations issued by the National Committee for Macroprudential Oversight from 2017 to December 2018, are summarised below:

- 14 recommendations were implemented by the addressee authorities;
- one recommendation (on enhancing statistical information required for the analyses on the real estate market) is currently being implemented; and
- three recommendations are ongoing and permanent, requiring addressees to carry out analyses on a regular basis. Addressees implemented all three recommendations for both 2017 and 2018.

In order to increase the transparency of the national macroprudential authority's activity aimed at preventing and mitigating systemic risks, the NCMO General Board decided, in its 17 December 2018 meeting, to publish on its website the developments in the implementation by the addressees of the recommendations issued by the National Committee for Macroprudential Oversight from 2017 to September 2018⁶⁶.

⁶⁶ <http://www.cnsmro.ro/en/politica-macroprudentiala/modul-de-implementare-de-catre-destinatari-a-recomandarilor-emise-de-cnsm/>.

Annexes

The developments in the implementation of the recommendations issued by the National Committee for Macroprudential Oversight from 2017 to December 2018

NCMO recommendation	Addressee	Manner of implementation
NCMO Recommendation No. 1 of 14 June 2017 on the countercyclical capital buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/24 December 2015 on the capital conservation buffer and the countercyclical capital buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 980/30 December 2015).
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	NBR	The recommendation was implemented by issuing NCMO Decision No. D/8/2018 on identification of significant third countries for the Romanian banking sector in terms of recognition and setting countercyclical buffer rates, stating that for 2018 no significant third countries were identified for the Romanian banking sector in terms of recognition and setting the countercyclical capital buffer.
NCMO Recommendation No. 3 of 14 June 2017 on enhancing statistical information required for the analyses on the real estate market	NBR, FSA	The NBR and the FSA implemented the NCMO recommendation by developing and conducting a questionnaire on real estate and commercial real estate markets in Romania, which was sent to: (1) credit institutions in Romania having an important role in the real estate sector; (2) non-financial companies participating directly or indirectly in the Romanian real estate market (77 companies); and (3) insurance companies, pension funds and investment funds. The results of the questionnaire were published in the June 2018 edition of the <i>Financial Stability Report</i> , which was published on the NBR website (http://www.bnr.ro/Regular-publications-2504.aspx). The NBR continues to assess the results of the questionnaire on real estate and commercial real estate markets and will submit this assessment to the NCMO for analysis in the following period.
NCMO Recommendation No. 4 of 9 October 2017 on the countercyclical capital buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/24 December 2015 on the capital conservation buffer and the countercyclical capital buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 980/30 December 2015).
NCMO Recommendation No. 5 of 9 October 2017 on the capital buffer for other systemically important institutions in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/2017 on the buffer for credit institutions authorised in Romania and identified by the National Bank of Romania as other systemically important institutions (O-SIIs) (published in <i>Monitorul Oficial al României</i> , Part I, No. 1009/20 December 2017).

NCMO recommendation	Addressee	Manner of implementation
NCMO Recommendation No. 6 of 9 October 2017 on setting up a working group on the firms' financial soundness	Government, NBR	The Working Group on the firms' financial soundness was established, consisting of representatives of the Government (through the Ministry of Public Finance) and the NBR, with the participation of the FSA as an observer. A Working Plan of the interinstitutional group within the NCMO was established and the analyses made by the group were discussed at the NCMO meetings of 26 February 2018 and 21 May 2018. The recommendation was implemented by issuing NCMO Recommendation No. R/2/2018 on implementing some measures related to firms' financial soundness, addressed to the Government.
NCMO Recommendation No. 7 of 9 October 2017 on setting up a working group on household overindebtedness	Government, NBR	The Working Group on household overindebtedness was established, consisting of representatives of the Government (through the Ministry of Public Finance) and the NBR, with the participation of the FSA as an observer. A Working Plan of the interinstitutional group within the NCMO was established and the analyses made by the group were discussed at the NCMO meetings of 18 December 2017, 26 February 2018 and 21 May 2018. The recommendation was implemented by: (i) issuing NCMO Recommendation No. R/1/2018 on recalibrating the "First Home" Programme, addressed to the Government; (ii) issuing NBR Regulation No. 6/2018 for amending and supplementing NBR Regulation No. 17/2012 on certain credit conditions (published in <i>Monitorul Oficial al României</i> , Part I, No. 950/9 November 2018).
NCMO Recommendation No. 8 of 18 December 2017 on the countercyclical capital buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 980/30 December 2015).
NCMO Recommendation No. 9 of 18 December 2017 on the systemic risk buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 4/2018 on the systemic risk buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 433/22 May 2018).
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	NBR	The recommendation was implemented for 2018. The NBR reassessed the impact of the credit institutions' funding plans on the flow of credit to the real economy, based on reports with 31 December 2017 as cut-off date, which include the credit institutions' estimations for June 2018 – December 2020. The results of the analysis conducted by the NBR from the perspective of macroprudential policy were presented, for information purposes only, in the NCMO General Board meeting of 17 December 2018.
NCMO Recommendation No. R/1/2018 on recalibrating the "First Home" Programme	Government	The recommendation can be deemed as completed according to the strategy of the "First Home" Programme endorsed at end-2016; hence, two years from the strategy's approval (i.e. in 2019), the Ministry of Public Finance will undertake an analysis of the Programme, which will aim at better targeting the "First Home" Programme from a social perspective. According to the NCMO decisions, an interinstitutional working group made up of MPF and NBR representatives is about to be set up, and its objective will be to analyse the impact of a potential increase in the NPL ratio, also from the perspective of a hike in interest rates.

NCMO recommendation	Addressee	Manner of implementation
NCMO Recommendation No. R/2/2018 on implementing some measures related to firms' financial soundness	Government	The recommendation was implemented by preparing the Memorandum on "Measures/proposals to improve the regulatory framework governing the non-financial corporations sector in order to reduce firms' disinvestment", which was approved by the Government in its meeting of 4 October 2018.
NCMO Recommendation No. R/3/2018 on the countercyclical capital buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/24 December 2015 on the capital conservation buffer and the countercyclical capital buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 980/30 December 2015).
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	NBR, FSA	<p>The NBR carries out periodical analyses on the risks and vulnerabilities identified at the level of the financial system and of the real economy, as well as on the opportunity to implement macroprudential instruments. 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 regarding the loan-to-value ratio (LTV); requirements regarding the debt service-to-income ratio (DSTI). The FSA conducts regular analyses on the risks and vulnerabilities identified at the level of the three non-bank financial markets in its supervisory area, as well as on the opportunity to implement the existing macroprudential instruments. So far, the following macroprudential measures have been implemented:</p> <ul style="list-style-type: none"> (i) at the level of firms for financial investment services (FFIs): the capital conservation buffer (which was implemented in four annual increments of 0.625 percent of the total risk-weighted exposure from 1 January 2016 to 1 January 2019); (ii) in the case of insurance companies: the liquidity index of insurance undertakings; the recovery plan; (iii) in the case of the private pension market: limits on significant exposures; (iv) in the case of administrators of private pension funds: limiting 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; and (v) for all entities under its supervision, the FSA applies requirements on IT system security.
NCMO Recommendation No. R/5/2018 on the countercyclical capital buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 980/30 December 2015).
NCMO Recommendation No. R/6/2018 on the capital buffer for other systemically important institutions in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 9/2018 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SII) (published in <i>Monitorul Oficial al României</i> , Part I, No. 1110/28 December 2018).

NCMO recommendation	Addressee	Manner of implementation
NCMO Recommendation No. R/7/2018 on the systemic risk buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 8/2018 on the systemic risk buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 1031/5 December 2018).
NCMO Recommendation No. R/8/2018 on the countercyclical capital buffer in Romania	NBR	The recommendation was implemented by issuing NBR Order No. 12/24 December 2015 on the capital conservation buffer and the countercyclical capital buffer (published in <i>Monitorul Oficial al României</i> , Part I, No. 980/30 December 2015).

Abbreviations

ATS	Alternative Trading System
BSE	Bucharest Stock Exchange
CCoB	Capital Conservation Buffer
CCyB	Contercyclical Capital Buffer
CRD IV	Capital Requirements Directive IV
CRR	Capital Requirements Regulation
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
ESRB	European Systemic Risk Board
EU	European Union
Eurostat	Statistical Office of the European Communities
FIC	Finial Investment Companies
FSA	Financial Supervisory Authority
G-SII/O-SII	Global/Other Systemically Important Institutions
IRB	Internal Rating Based approach
MPF	Ministry of Public Finance
NBR	National Bank of Romania
NCMO	National Committee for Macroprudential Oversight
NIS	National Institute of Statistics
NPL	non-performing loans
SSM	Single Supervisory Mechanism
SyRB	Systemic Risk Buffer

List of tables

Table 2.1	Concentration of gross written premiums by class of insurance for non-life insurance	36
Table 3.1	Measures adopted under Article 458 of the CRR	49
Table 3.2	Implementation of capital buffers in 2018	51
Table 3.3	Measures adopted by the competent authorities for systemically important parent banks in their home country that have subsidiaries in Romania	63
Table 3.4	Systemic risk buffer rates in EU Member States	66
Table 3.5	Calculation methodology of the systemic risk buffer	67

List of figures

Figure 1.1	The structure of the framework for macroprudential oversight across the EU	11
Figure 3.1	Macroprudential instruments and objectives of the NCMO strategy	44
Figure 3.2	Activation of the systemic risk buffer	66

List of charts

Chart 2.1	Global economic growth	21
Chart 2.2	Private debt, 2017	23
Chart 2.3	Public debt, 2018	23
Chart 2.4	Determinants of GDP dynamics	24
Chart 2.5	Twin deficits	26
Chart 2.6	External debt	26
Chart 2.7	Banking sector indicators	27
Chart 2.8	Distribution of total capital ratio	28
Chart 2.9	Distribution of leverage, broad definition	28
Chart 2.10	Efficiency (cost-to-income) and profitability (ROE) indicators in Romania and the EU	30
Chart 2.11	Concentration on the investment funds market in Romania (in terms of net assets as at 31 December 2018)	31
Chart 2.12	Total assets by UCI category	31

Chart 2.13	Strategic allocation of UCI portfolios	32
Chart 2.14	Stock market indices	33
Chart 2.15	Correlations between capital markets in Romania, France, Germany and the UK	34
Chart 2.16	BSE liquidity ratio (trades, main market, analysis by key component)	34
Chart 2.17	Financial results of investment firms (31 December 2018)	35
Chart 2.18	Concentration of intermediaries on the BSE in 2018	35
Chart 2.19	Concentration risk in non-life insurance (based on GWP as at 30 December 2018)	37
Chart 2.20	Concentration risk in life insurance (based on GWP as at 30 December 2018)	37
Chart 2.21	Private pension funds – allocation by financial instrument as at 31 December 2018	39
Chart 2.22	Private pension funds – monthly allocation by financial instrument (December 2017=100)	39
Chart 2.23	Private pension funds – breakdown by country as at 31 December 2018	39
Chart 2.24	Private pension funds – breakdown by currency as at 31 December 2018	39
Chart 3.1	Number of macroprudential measures notified by European countries in 2018	48
Chart 3.2	Combined capital buffer applicable in 2019 – European comparison	51
Chart 3.3	Implementation of the countercyclical capital buffer in 2015-2020	53
Box 4		
Chart A	Basel reference indicator and the countercyclical capital buffer	54
Chart 3.4	Analysis of the countercyclical capital buffer in Romania (2000 Q1 – 2018 Q4), assuming a short financial cycle (alternative indicator)	56
Chart 3.5	Analysis of the countercyclical capital buffer in Romania, assuming a long financial cycle (Basel indicator)	56
Chart 3.6	Analysis of the countercyclical capital buffer, assuming a short financial cycle	57
Chart 3.7	Number of systemically important institutions and the O-SII buffer rate	59
Box 5		
Chart A	Calibration methods for the O-SII buffer in the EU	60

Chart 3.8	NPL ratio and NPL coverage by provisions – European comparison (December 2018)	68
Chart 3.9	External loans of the Romanian banking sector	70
Chart 3.10	Lending forecast at aggregate level and by component	71
Chart 3.11	Projected growth rates of household loans EU-wide (2018-2020)	72
Chart 3.12	The current and forecasted liabilities structure	73
Chart 3.13	Projected growth rates of deposits from households and non-financial corporations EU-wide (2018-2020)	73
Chart 3.14	Total exposures and credit exposures to third countries	75

