



The National Committee for Macroprudential Oversight

Annual Report 2019



Annual Report
of the National Committee
for Macroprudential Oversight
for the year 2019

NOTE

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Organisation

The National Committee for Macroprudential Oversight (NCMO) comprises:



The National Bank of Romania. The NBR has an intrinsic role in maintaining financial stability, given its responsibilities arising from its 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

At international level, risks to financial stability increased during 2019. Consequently, the consolidation of macroprudential policy continued, as most European countries implemented restrictive measures in an uncertain global macro-financial environment. Cyclical systemic risks called mainly for the adoption of mitigation measures, such as the build-up of countercyclical capital buffers, with half of the EU Member States choosing to use this macroprudential tool, while structural risks prompted the recalibration of buffers in some member countries. As regards the regulatory framework, the adoption of the CRD V¹/CRR II² package seeks to ensure enhanced flexibility for macroprudential authorities and increased effectiveness of the tools employed.

In Romania, external and domestic vulnerabilities led to the adoption of a prudent macroprudential policy stance, primarily by keeping in place the measures concerning borrowers and the capital reserves built up in previous years. During 2019, the National Committee for Macroprudential Oversight assessed the need to recalibrate or implement the macroprudential instruments at its disposal, in line with the regulatory framework in force, and issued five recommendations to the National Bank of Romania regarding the capital buffers (four recommendations on the countercyclical capital buffer and one regarding the buffer for other systemically important institutions):

- ➡ As regards the countercyclical capital buffer (CCyB), the assessments made in the course of 2019 provided mixed signals on the opportuneness of increasing the requirement related to this macroprudential tool, the decision being to maintain the buffer rate at 0 percent.
- ➡ Looking at the buffer for other systemically important institutions (O-SII), nine systemically important institutions were identified; they were applied a differentiated buffer ranging between 1 and 2 percent of the total risk exposure amount. For the year 2020, the list of systemically important banks did not see any changes, the capital requirement being raised in the case of a single credit institution, in line with that applicable to the parent bank in the country of origin.

¹ Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures.

² Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012.

- The systemic risk buffer (SyRB) was kept throughout 2019 at the same level at which it was introduced in June 2018, the objectives being to ensure an adequate management of credit risk from a macroprudential perspective and safeguard financial stability, assuming that the tensions surrounding domestic macroeconomic equilibria and regional and global uncertainties persist. Given the steady improvement in the indicators on the non-performing loan ratio and the coverage ratio, the actual requirements regarding the SyRB witnessed a downward trajectory during 2019.

The NCMO activity during 2019 materialised in the issuance of a total of six recommendations on macroprudential instruments (capital buffers) and other aspects pertaining to macroprudential policy, as well as in the setup of inter-institutional working groups for: (i) analysing the impact of the tax on bank assets, (ii) mitigating the vulnerabilities from the widening of the trade deficit on account of the agri-food industry, and (iii) analysing sovereign exposures. The findings of the working groups are compiled into reports submitted for analysis to the General Board with a view to identifying potential measures to address the identified vulnerabilities. Moreover, in line with its mandate and complying with the principle of transparency and institutional accountability, the NCMO continued the communication activity in 2019, by posting press releases on its website after each meeting, as well as the adopted recommendations.

The year 2020 brings fresh challenges for the macroprudential policy, consisting in the effects of the global shock induced by the SARS-CoV-2 pandemic on the domestic and external macro-financial framework. In this sense, the National Bank of Romania has implemented a decision providing for the possibility of a temporary non-compliance with the built-up capital buffers, while also keeping in place the legal requirements for such flexibilities. The capital reserves built up during previous years, pursuant to NCMO recommendations, may be used by the banking sector to avoid any sudden halt in financing and to support the real economy in a period marked by uncertainty, thus fulfilling their fundamental objective.

1. The National Committee for Macroprudential Oversight's activity in 2019

1.1. Macroprudential policy framework in Romania and the European Union

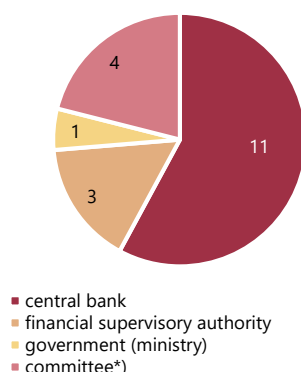
The strengthening of the macroprudential policy framework, since the establishment of the European Systemic Risk Board (ESRB) in 2010, continued in 2019 all across the European Union, via the creation of a national macroprudential authority (Spain) or the amendments made to the legal framework or to the macroprudential policy strategy (Germany, Lithuania).

The domestic macroprudential framework is based on the macroprudential authority, established pursuant to Recommendation ESRB/2011/3 on the macroprudential mandate of national authorities, having a clear mandate to identify, monitor and assess risks to financial stability, as well as to implement policies to achieve its objective by preventing and mitigating those risks. As for macroprudential instruments, the ESRB Recommendation states that the macroprudential authority must have control over appropriate instruments to achieve its objectives, ensuring flexibility for each Member State to assign the powers on macroprudential policy instruments. In this respect, the European regulatory framework defined by Directive 2013/36/EU of the European Parliament and of the Council 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 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRD IV/CRR), which intermediated the implementation of macroprudential policy instruments (capital buffers, risk parameters or flexibility measures), provides the establishment of a competent or designated authority to manage this portfolio of instruments.

Institutional arrangements in this field reveal two major trends at European level: the establishment of a single designated macroprudential authority³ or the assignment of the

³ The wording "macroprudential authority" makes reference to the tasks derived from ESRB Recommendation of 22 December 2011 on the macroprudential mandate of national authorities (ESRB/2011/3), whereas "designated authority" involves the macroprudential instruments described 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 and the provisions of Article 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 (EU) No 648/2012.

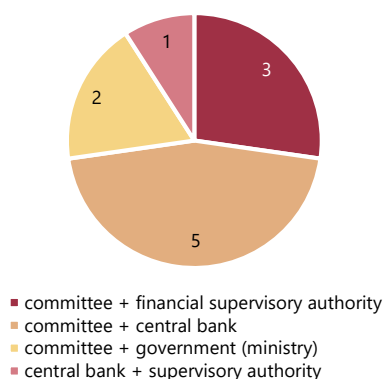
Chart 1.1. Macroprudential authority and designated authority when their roles are undertaken by the same institution(s)



*) The United Kingdom fell into the committee category, as the Financial Policy Committee is an independent body operating within the Bank of England.

Source: ESRB

Chart 1.2. Macroprudential authority and designated authority when their roles are undertaken by different institutions



Note: For Italy, no macroprudential authority has been established and the designated authority is the central bank.

Source: ESRB

two roles to separate institutions or authorities. In the first category there are 19 Member States, most of them being in favour of the central bank having a leading role, whereas some countries, such as Romania, France or Poland, set up distinct structures, in the form of interinstitutional committees, which coordinate macroprudential policies at domestic level. Similarly, the central bank plays an important part in the countries that opted for distinct institutions or authorities, the most frequent institutional arrangement being that of the macroprudential authority represented by an interinstitutional committee, whereas one of the sectoral supervisory authorities (the central bank or the financial supervisory authority) takes over the role of designated authority.

Furthermore, the countries that opt for an institutional framework in which the financial supervisory authority is the designated authority for macroprudential instruments are generally those where this authority is in charge with the supervision of both financial markets and the banking sector (Germany, Austria, Sweden or Finland).

The institutional framework for implementing macroprudential policy, which is applicable in Romania, based entirely on an interinstitutional committee, is a solution for a small number of Member States. A comparative analysis between Romania, Poland and France can outline similarities, as well as significant differences, such as:

- Committee members: the National Committee for Macroprudential Oversight has nine members from the boards of the National Bank of Romania, the Financial Supervisory Authority and the Ministry of Public Finance. The NCMO Chairman is the Governor of the National Bank of Romania, and the General Director of the Bank Deposit Guarantee Fund participates in the NCMO meetings without having a voting right.

France's Haute Conseil de Stabilité Financière (High Council for Financial Stability – HCSF) has eight members: five *ex officio* members (the Minister of Finance who chairs the committee meetings, the Governor of Banque de France, the Chairman and vice-Chairman of the Prudential Supervisory and Resolution Authority, the Chairman

of the Financial Markets Authority and the Chairman of the Accounting Standards Authority, and three qualified members, selected based on their expertise in the field of economics and finance, which are appointed for a five-year term by the Chairman of the French National Assembly, the Chairman of the Senate, and the Minister of Finance and Public Accounts.

Poland's Financial Stability Committee has a small number of members, the authorities being represented only by the leaders of institutions making up the committee (the President of Narodowy Bank Polski, the Minister of Finance, the President of the Financial Supervision Authority and the President of the Bank Guarantee Fund). Conversely, taking into account the committee structure ensured by its dual mandate on macroprudential policy and crisis management, the President of the central bank is the Chairman of the Macroprudential Policy Committee, whereas the Minister of Finance chairs the Crisis Management Committee.

- Objectives, mission, strategy: all three committees adopted a set of common objectives, transposed mainly from Recommendation ESRB/2013/1 on intermediate objectives and instruments of macroprudential policy. Apart from the intermediate objectives of macroprudential policy, the three committees also give particular attention to the exchange of information between the institutions making up the committee, as well as to soft power interventions, by issuing recommendations and warnings to the addressees, press releases or opinions formulated by the committee.
- Macroprudential instruments: the macroprudential instruments available to the three committees are capital buffers (CCyB, O-SII/G-SII, SyRB) or the flexibility measures mentioned in Article 458 of Regulation (EU) No 575/2013. By contrast, there are differences regarding the decision-making related to the implementation of macroprudential instruments.

The NCMO may issue recommendations to the National Bank of Romania with regard to all three capital buffers, taking into consideration that, unlike France and Poland, the central bank has the exclusive task of banking sector supervision.

In Poland, the decisions regarding the countercyclical capital buffer, the systemic risk buffer or the flexibility measures are adopted through a regulation of the Ministry of Finance, whereas the Financial Supervision Authority issues administrative decisions, after consultations with the Financial Stability Committee on designating systemically important institutions (O-SIIs/G-SIIs).

In France, the HCSF may decide on the implementation of the countercyclical capital buffer or the systemic risk buffer at the proposal of the Governor of Banque de France, while the Prudential Supervisory and Resolution Authority may implement, in cooperation with the HCSF measures regarding the capital buffer for systemically important institutions (O-SII/G-SII).

- Transparency and communication: the French, Polish and Romania committees hold meetings at least on a quarterly basis. After every meeting a press release is issued summarizing the main discussed topics. Moreover, an important tool of communication used in the macroprudential policy strategy of the three committees

is the *Annual Report*, published on the websites of the committees. In France and Romania, the *Annual Report* is also submitted to the Parliament to give information about the macroprudential policy decisions adopted throughout the year.

The comparative analysis allows the identification of factors affecting the macroprudential policy framework in which the macroprudential authority and the designated authority are represented by an interinstitutional committee, namely: (i) inaction bias and (ii) the complexity of the decision implementation, as a result of the multilateral involvement of authorities and institutions ensuring the supervision of the financial system. On the other hand, such an arrangement ensures a framework for the collaboration and coordinated action of the authorities playing a significant part in safeguarding macroeconomic and financial stability.

Mention should be made that Romania is the only EU country that assigned the role of designated authority for the implementation of macroprudential instruments set forth in CRD IV/CRR to an interinstitutional committee, although the central bank is the domestic authority tasked with the regulation and supervision of credit institutions. The current framework establishes that, in Romania, there are two competent authorities (the NBR for credit institutions and the FSA for investment firms) that fulfil the functions and tasks provided for in Directive 2013/36/EU and Regulation (EU) No 575/2013, being therefore mandated in accordance with the national law to supervise institutions as part of the oversight system in place.

A solution to simplify the decision-making process is set forth in the National Euro Changeover Plan, amid the growing importance of macroprudential policy acting as a stabiliser after renouncing monetary policy once the euro is adopted, which calls for ensuring an effective framework, both institutionally and operationally, which is a primary objective in getting the financial sector ready to join the euro area. The proposal in the National Euro Changeover Plan stipulates the amendment by the Parliament of Law No. 12/2017 on the macroprudential oversight of the national financial system, by assigning the National Bank of Romania the role of designated authority responsible for the implementation of 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). This institutional arrangement, in which the macroprudential authority is represented by a committee and the central bank is the designated authority, is used in several countries, including the Netherlands, Spain, Slovenia, Hungary, and it may ensure a balance between interinstitutional coordination and the enhanced efficiency in implementing macroprudential policy by avoiding inaction, especially in the event of rapid knock-on shocks when the authorities' reaction speed may be decisive. Such an institutional arrangement would allow greater efficiency in implementing macroprudential policy measures, and at the same time it would ensure the coordination of policies across the financial system via the activity of the National Committee for Macroprudential Oversight.

1.2. 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. During the year, the General Board can hold extraordinary meetings 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 2019, the NCMO convened six times, namely on 4 February, 18 February, 6 June, 11 September, 10 October and 16 December.

The NCMO General Board convened on 4 February 2019 to debate on the impact study prepared by the National Bank of Romania with regard to the financial asset tax introduced by Government Emergency Ordinance No. 114/2018 instituting certain measures in the public investment field and certain fiscal and budgetary measures, amending and supplementing some normative acts and extending some deadlines – for credit institutions, lending and economic growth. The General Board members decided to set up a working group of the Technical Committee on systemic risk within the NCMO, comprising representatives of the Ministry of Public Finance and of the National Bank of Romania tasked with making more in-depth analyses. The conclusions of the interinstitutional working group were presented to the General Board on 18 February 2019 and, based on the documents submitted, the NCMO identified possible solutions to adjust Government Emergency Ordinance No. 114/2018, in compliance with the legislation in force. For further details, see Section 1.3 on the activity of working groups.

During the meeting of 6 June 2019, Board members discussed issues focusing on macroprudential policy such as: (i) the regular analysis on the recalibration of the countercyclical capital buffer, (ii) the draft 2018 *Annual Report* of the National Committee for Macroprudential Oversight, (iii) the review of government securities market, (iv) the appropriateness of reciprocating the macroprudential measures adopted by France and Sweden, (v) the assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates and (vi) the strategy regarding the implementation of the International Financial Reporting Standards (IFRS) by non-bank financial institutions (NBFIs), entities under the NBR supervision, as a basis of accounting and for preparing individual financial statements, and the methodology for identifying the critical functions of credit institutions.

On this occasion, the NCMO General Board was informed of: (i) the systemic risks identified in the national financial system, (ii) developments in solvency of the banking sector in Romania and (iii) the macroprudential measures set forth in the National Euro Changeover Plan. Furthermore, during the meeting, a first draft was presented of the NCMO internal regulation on the confidentiality of information and documents and archiving rules, compiled for the purpose of enforcing the provisions of Article 12 para. (3) of Law No. 12/2017 on the macroprudential oversight of the national financial system.

The agenda of the meeting of 11 September 2019 brought to the attention of the NCMO General Board the following issues: (i) the regular analysis on the recalibration of the countercyclical capital buffer, (ii) the manner of implementing the capital buffer for other systemically important institutions in the course of 2020, and (iii) the regular analysis on the implementation of the systemic risk buffer. On this occasion, the NCMO General Board was also informed of the systemic risks identified in the national financial system.

During the meeting of 10 October 2019, the Board was informed by the Financial Supervisory Authority of the technical functioning of record-keeping mechanisms for holdings of instruments traded on the capital market and discussed various options for the improvement of those mechanisms. In addition, the NCMO Board discussed issues related to the macroprudential policy and systemic risk.

The NCMO General Board held the last meeting of 2019 on 16 December when the following issues were brought forward for discussion: (i) the regular analysis on the recalibration of the countercyclical capital buffer, (ii) the worsening of the external imbalance from the perspective of macroeconomic stability and (iii) the situation of savings and loan banks. Moreover, the NCMO General Board members were informed about macroprudential policy issues, such as the systemic risks identified in the national financial system, the impact of credit institutions' funding plans on the flow of credit to the real economy, as well as about the results of the solvency stress test of the banking sector.

In keeping with its mandate and with the principles of transparency and institutional accountability, in 2019, 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.

1.3. The activity of working groups within the NCMO

1.3.1. Interinstitutional working group on the financial asset tax imposed by Government Emergency Ordinance No. 114/2018

Articles 86-89 of Government Emergency Ordinance No. 114/2018 instituting certain measures in the public investment field and certain fiscal and budgetary measures, amending and supplementing some normative acts and extending some deadlines (hereinafter referred to as Government Emergency Ordinance 114/2018) instituted a financial asset tax, payable by credit institutions as of 1 January 2019, if the simple arithmetic mean calculated based on the average 3M and 6M ROBOR rates for the quarter/semester preceding the calculation period exceeded a reference threshold set at 2 percent.

Given the central bank had identified a number of elements that could affect the stability of the banking sector and the efficiency of the monetary policy transmission mechanism, a working group of the NCMO Technical Committee on systemic risk was set up, comprising representatives of the Ministry of Public Finance and the National Bank of Romania, with a mandate to find solutions of possible scenarios to adjust Government Emergency Ordinance No. 114/2018, in compliance with the legislation in force.

The consultations in National Committee for Macroprudential Oversight (NCMO) paved the way for correcting the provisions of Government Emergency Ordinance No. 114/2018 via Government Emergency Ordinance No. 19/2019 on amending and supplementing a number of legal acts (published in *Monitorul Oficial al României* No. 245 of 29 March 2019). Thus, the vulnerabilities identified in the original version of the regulation as regards the calculation of the tax on bank assets have been significantly mitigated. In its amended form, the methodology implies: (i) an annual tax rate of 0.2 percent or 0.4 percent, depending on the asset market share (a 1 percent threshold is used), (ii) a tax base consisting of financial assets adjusted for items such as cash, interbank exposures, balances with the central bank, sovereign exposures or exposures secured by central government guarantees, non-performing loans, (iii) a tax reduction mechanism depending on the increase in lending and the narrowing of interest margins, and (iv) a tax exemption for banks that record losses or that are subject to restrictions on lending. These amendments helped maintain the stability of the banking sector and boost financial intermediation, while encouraging the reduction of costs incurred by customers through increased efficiency of operations carried out by credit institutions.

1.3.2. Working group on reducing vulnerabilities from the widening trade deficit via the agri-food industry

The aim of this working group set up under the auspices of the NCMO Technical Committee on systemic risk is to identify possible solutions for reducing the trade imbalance via agri-food trade. The solutions envisaged to be proposed will be in line with the provisions of the National Euro Changeover Plan, whereby it is necessary to “design a reindustrialisation policy for Romania, with links to global value chains, based on transparent principles, with a view to regaining the domestic market and increasing competitiveness on external markets” (a measure included in the section entitled “Financial soundness of the nonfinancial corporations sector”).

Given the complexity of the topic, the working group also comprises, apart from representatives of the Government and the National Bank of Romania, representatives of:

- relevant government authorities;
- credit institutions with a major role in lending to those business sectors;
- the National Association of Romanian Exporters and Importers;
- the main food industry associations.

According to its mandate, the working group will round off its activity with a proposal for a recommendation to: (i) the Government, to implement solutions to reduce the vulnerability to financial stability stemming from the trade imbalance and to (ii) the National Bank of Romania, in case the identified structural credit market disruptions are considered to have contributed to the above-mentioned vulnerability. Credit institutions' exposures to companies in agriculture account for 8 percent of total corporate loan portfolio, while loans to companies in the food industry amount to 5.5 percent. At individual level, four banks show significant concentration, with exposures above 20 percent in this business sector.

1.3.3. Interinstitutional working group on sovereign exposures

After concluding its mission under the Financial Sector Assessment Program (FSAP) in 2018 H1, the International Monetary Fund made a series of recommendations to the Romanian authorities, aimed at strengthening the institutional framework in the field of financial regulation and supervision, as well as proposals for measures to manage the identified risks and vulnerabilities. One of these recommendations refers to "introducing a carefully calibrated systemic risk buffer (SyRB) to increase the resilience against risks from large exposures to the sovereign". This recommendation was incorporated in the action plan for the implementation of FSAP recommendations on macroprudential policy, which was approved in the NCMO General Board meeting of 24 September 2018. Against this background, an interinstitutional working group consisting of NBR, MPF and FSA representatives was set up, with an aim to make an impact analysis and an opportunity analysis.

In the meeting of 6 June 2019, the members of the General Board of the National Committee for Macroprudential Oversight examined, in a first reading, the proposals for implementing a macroprudential measure to reduce the interaction between the state and the banking sector. Following discussions, the General Board decided to carry on with the impact and opportunity analyses related to the implementation of this measure within the interinstitutional working group, several meetings on this topic taking place in 2019.

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

2.1. Assessment of risks and vulnerabilities at global level

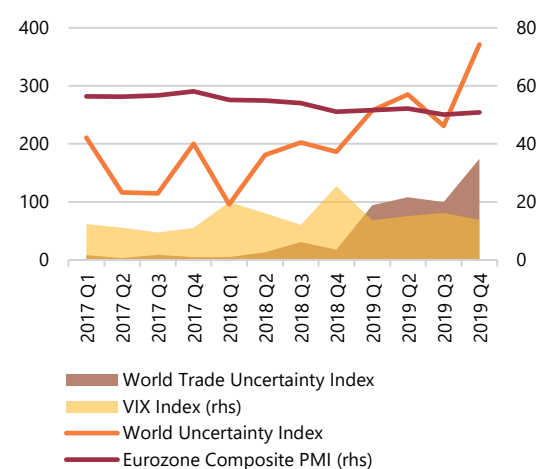
In 2019, global economic growth slowed for the second consecutive year, being estimated at 2.9 percent⁴, the lowest reading since the global financial crisis of 2007-2008. The key factors behind this evolution were the China-US trade row, the escalating geopolitical risks and, in Europe, Brexit. Against this background, global uncertainty rose to unprecedented levels (Chart 2.1).

Advanced economies continued to post a slowdown in economic growth towards the long term (according to the IMF, up 2.2 percent in 2018 and 1.7 percent in 2019). As for the US, heightening uncertainty about the policies, especially those on international trade, and the fading-away of the effects of the USD 1.5 trillion fiscal stimulus introduced in 2018 put a drag on investment, confidence in business environment and trade. In the euro area, economic growth was contained by an increase in uncertainty and geopolitical tensions, the decline in exports, while the uncertainties surrounding Brexit weakened UK growth further. According to the IMF, euro area growth slowed to 1.2 percent in 2019, from 1.9 percent in 2018.

The outbreak of the COVID-19 pandemic in January 2020 clouded the global economic outlook. The measures taken with a view to containing the number of SARS-CoV-2 infections in the badly-hit countries led to retrenchment or even closure of some economic sectors and falling consumer demand, with preliminary estimates showing significant declines in economic activity.

The IMF identified a number of key vulnerabilities of the global financial system in 2019, according to the analysis⁵, were as follows: (i) rising debt, especially corporate debt, (ii) the persistence of the search for yield, with a bearing on risk assessment and, in the case of institutional investors, of increasing holdings of riskier and more illiquid assets and

Chart 2.1. Global economic developments

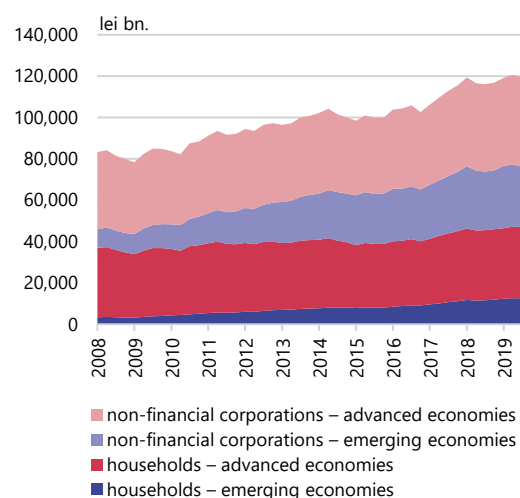


Source: Caldara, D. and Iacoviello, M. (2018) – “Measuring Geopolitical Risk”; Ahir, H., Bloom, N. and Furceri, D. (2018) – “World Uncertainty Index”, Stanford mimeo

⁴ IMF, *World Economic Outlook*, January 2020.

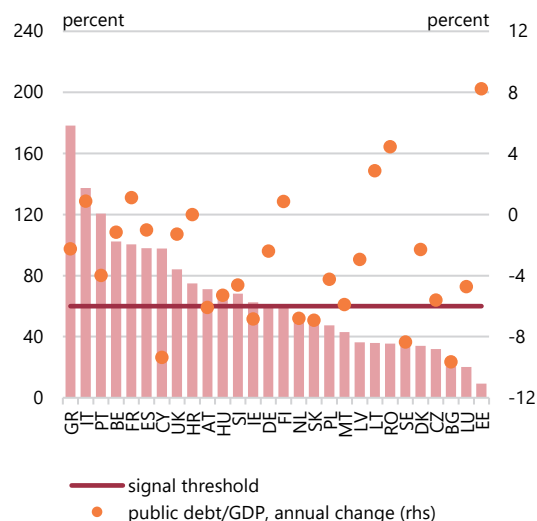
⁵ IMF, *Global Financial Stability Report*, October 2019.

Chart 2.2. Private debt in emerging and advanced economies



Source: BIS

Chart 2.3. Public debt/GDP, 2019 Q3



Source: Eurostat

(iii) greater reliance on external borrowing by emerging economies. Adding to these are the risks concerning the economic growth outlook and intensifying geopolitical tensions (between the US and Iran in particular), social risks, worsening trade ties between the US and its main partners and stronger economic frictions at global level, as well as those deriving from climate risk.

The elevated level of private and public sector debt is still a major structural vulnerability. Compared to early 2008, private sector debt in emerging and advanced economies augmented by about 43 percent, owing especially to non-financial corporations (Chart 2.2). At European level, 14 countries reported public debt-to-GDP ratios above the alert threshold stipulated in the Growth and Stability Pact (Chart 2.3).

Corporate debts are already a drag for some systemically important economies as a result of higher indebtedness and weaker debt servicing capacity. In international financial markets, global trade tensions put pressure on lowering policy rates, but these moves acted towards narrowing the monetary authorities' room for manoeuvre to respond to future shocks. Adding to this are the uncertainties related to the post-Brexit deal. Moreover, the persistently-low interest rates which, combined with flattening yield curves, put pressure on the profitability and returns of financial institutions, encourage the high-yield strategies and fuel the repricing risks. The transition to a more sustainable economy and social, governance and environmental risks may also pose challenges to the viability of business models with high exposures to the sectors vulnerable to climate change.

The measures envisaged to mitigate these risks are as follows: (i) mapping out intervention plans by financial and supervisory institutions, also taking into account scenarios of persistently low interest rates for a long time period, (ii) addressing unprofitable banks' issues and their business models in order to boost resilience in a more competitive economic environment, and (iii) identifying exposures vulnerable to climate risks and assessing the impact of ensuing losses.

2.2. Main challenges at national level

The map of the risks to financial stability identified in Romania at end-2019 highlighted three high systemic risks, one moderate risk and one low systemic risk. The risks assessed as being high were the following: (i) tensions surrounding domestic macroeconomic equilibria, (ii) weakening in investors' sentiment towards emerging economies and (iii) the risk of an uncertain and unpredictable legislative framework in the financial and banking sector.

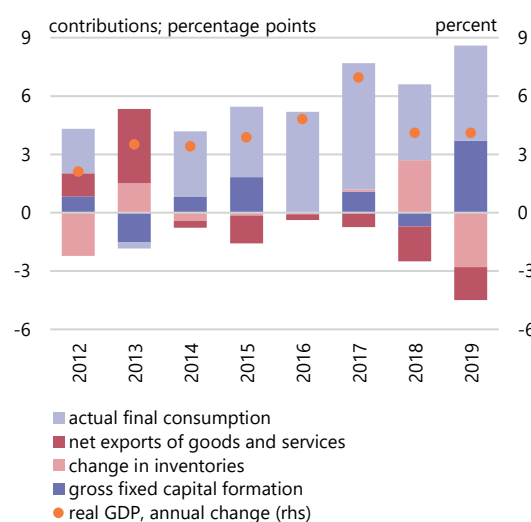
The default risk for credit to the private sector is viewed as being low, while the structure and cost of financing of the current account deficit and budget deficit are moderate. No severe risks were reported, yet at aggregate level risks to financial stability follow an upward trend and prospects are in place for this trend to continue over the short and medium term.

The analysis of developments in 2019 shows economic growth to be similar to that of 2018, i.e. 4.1 percent⁶, above the euro area average of 1.2 percent. Even though the advance in gross domestic product was expected to stand at 3.8 percent in 2020, according to the pre-COVID-19 pandemic forecasts⁷, the effects induced most likely by the public health-related restrictions will prompt a significant adjustment of the economy this year.

In 2019 too, the main driver of economic growth continued to be final consumption (up 4.9 percentage points; Chart 2.4), while the pick-up in gross fixed capital formation (up 3.7 percentage points) pinpoints an improvement in the growth pattern, due however mainly to economic activity in the residential real estate sector and, to a lesser extent, to investment in infrastructure and equipment purchase. Negative contributions made the change in inventories and net exports (down 2.8 percentage points and 1.7 percentage points respectively). The breakdown by sector shows that trade and construction (up 0.9 percentage points each) were the major resources behind GDP formation and growth in 2019.

The bright picture in the construction sector is also highlighted by the number of completed dwellings, up 13 percent year on year in 2019, and the increase in the volume of construction works for residential buildings (up 10 percent in December 2019 versus December 2018). It is also noteworthy the negative contribution of the industrial sector (down 0.3 percentage points). Against this background, with a view to ensuring sustainable economic growth, it

Chart 2.4. Determinants of GDP dynamics

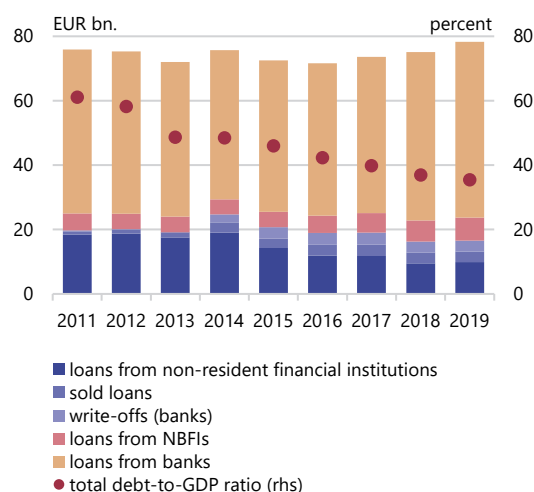


Source: NIS, NBR calculations

⁶ In 2019, fourth-quarter GDP was 1.5 percent higher in real terms than in the previous quarter.

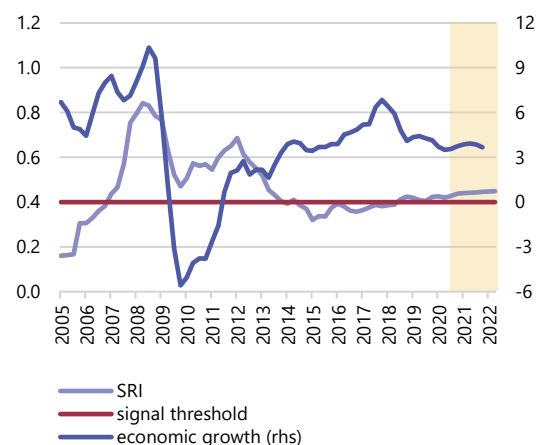
⁷ The European Commission's Winter 2019 Economic Forecast.

Chart 2.5. Corporate and household debt by creditor



Source: NBR, NIS, NBR calculations

Chart 2.6. Systemic risk indicator (SRI), alert threshold for a period of potential financial distress and economic growth



Source: NBR, NIS, NBR calculations

is necessary to implement the strategic objectives set out in the National Euro Changeover Plan, which aims, inter alia, to increase EU funds absorption, to better harness the foreign direct investment mechanism, to correct economic imbalances and to develop key areas, in particular those with high technological and knowledge input so as to ensure sustainable economic growth.

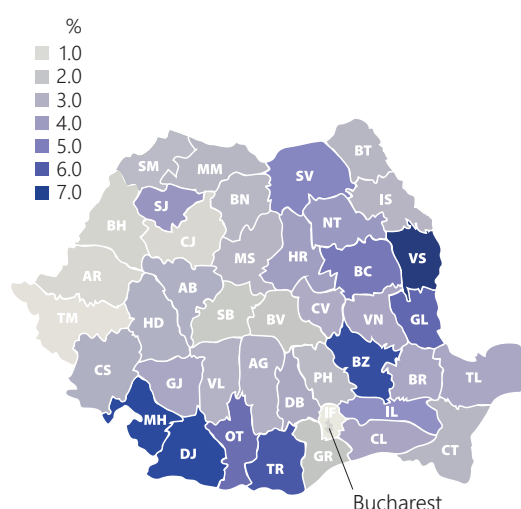
Romania's labour market stayed on the trend seen in recent years, with the unemployment rate falling to 3.8 percent in 2019 Q3, from 3.9 percent in 2018 Q3 and 4.7 percent in 2017 Q3. However, still lingering are major structural vulnerabilities such as regional disparities⁸ (Chart 2.7), the skill mismatch, the high youth inactivity rate and low workforce availability. Employment rate posted a favourable performance in the recent period, reaching 66.7 percent⁹ in 2019 Q3, compared to 66.2 percent in 2018 Q3. Nevertheless, 68.8 percent of the population aged 15-24 years is inactive in Romania, above the EU-27 average of 59.5 percent (data as at 2019 Q3).

The budget deficit widened to 4.6 percent at end-2019, amid the increase in public wage bill and social transfers. Against this backdrop, the public debt-to-GDP ratio added 0.7 percentage points to 35.4 percent in December 2019, compared to December 2018 (Chart 2.8), remaining below the European Commission's reference value. In absolute terms, public debt increased by 13 percent in 2019. By creditor, 82 percent of the general government debt were accounted for by private banks, whereas 22 percent of domestic credit institutions' assets were claims on the general government. As for the regional public debt, according to Eurostat News Release No.15/2020 of 21 January 2020, at the end of 2019 Q3, 14 Member States reported public debt-to-GDP ratios above the 60 percent reference value under the Maastricht Treaty, with Romania (35.4 percent of GDP) ranking seventh among the countries with the lowest indebtedness (Chart 2.3).

⁸ In Romania, the highest and lowest unemployment rates in December 2019 were recorded in Vaslui and Ilfov counties, i.e. 7.4 percent and 0.4 percent respectively.

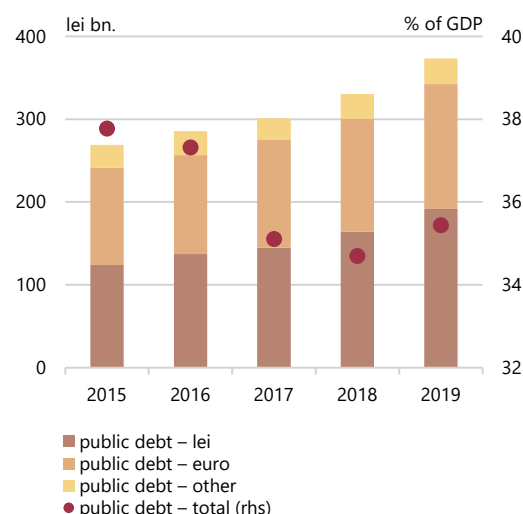
⁹ Employment rate for persons aged 15-64 years, seasonally unadjusted data.

Chart 2.7. Unemployment rate by county (December 2019)



Source: NIS, NBR calculations

Chart 2.8. Public debt breakdown by currency



Source: MPF, NBR calculations

The private sector continued to make borrowings (Chart 2.5), yet at a lower rate than economic growth, and the total debt-to-GDP ratio shed 1.6 percentage points year on year to 35.4 percent in 2019. Noteworthy is the increase in NBFIs' loans by 9 percent in annual terms in 2019, as well as the rebound in foreign currency loans, primarily in the case of non-financial corporations. In the course of 2019, the households sector was the main driver behind the increase in credit institutions' assets, while the default risk for loans to the private sector remained low. Structural vulnerabilities in the non-financial corporations sector were still manifest. The share of companies posting a level of capitalisation below the regulated threshold, albeit on the wane, remains elevated (38 percent, or 259.5 thousand firms). Moreover, a large number of enterprises had no employees at the end of 2018 (287 thousand, or 42 percent of total) and almost one fourth of the companies did not conduct economic activity (162.3 thousand companies reported zero turnover).

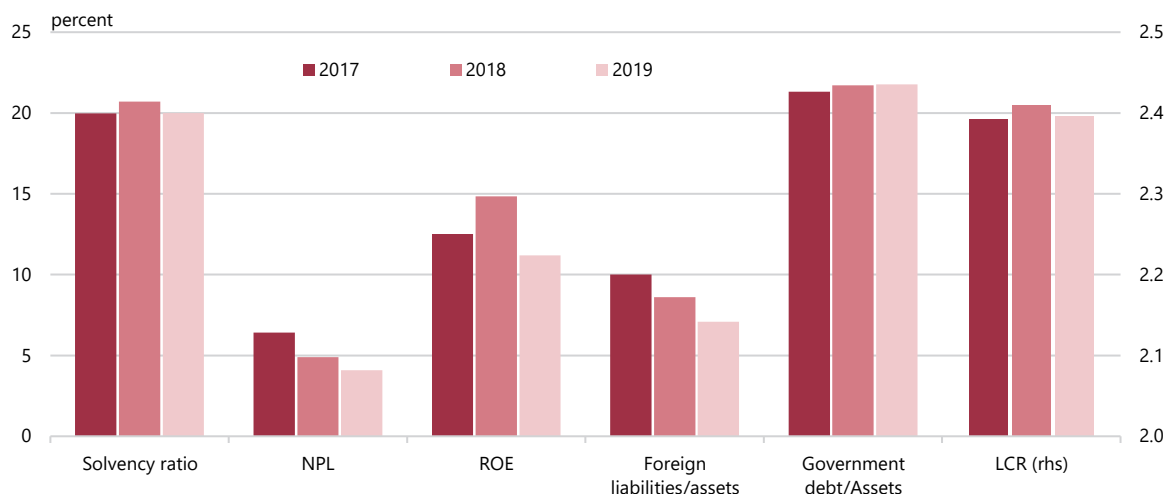
Overall, the level of systemic risk to financial stability in Romania follows an upward trend and the probability of a period of financial distress is on the rise, with this trend looking set to persist over the next 3 years (Chart 2.6). Under the scenario of an increase in the systemic risk indicator following the materialisation of a medium-sized systemic risk (approximately 0.5 standard deviations), the increase may lead to a deepening of economic recession by as much as -1.3 percentage points (according to GDP-at-Risk¹⁰).

2.2.1. Banking sector

The solvency and liquidity ratios of the banking sector are at adequate levels relative to risks, profitability was significant, and asset quality improved marginally throughout 2019. Thus, the Romanian banking sector's soundness remained robust. Bank assets increased

¹⁰ The GDP-at-Risk methodology implies estimating the impact of the change in the level of systemic risk (quantified by the systemic risk indicator) on the 5th percentile of the distribution of real GDP growth rate.

Chart 2.9. Banking sector indicators

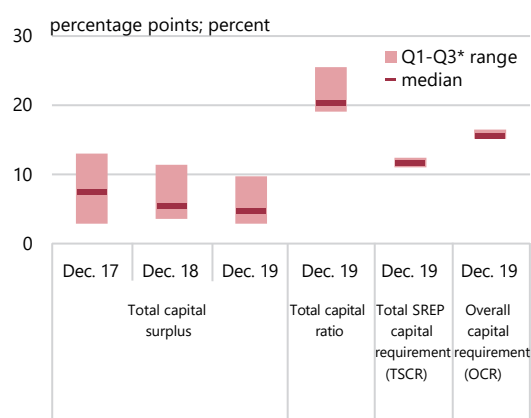


Source: NBR

significantly in 2019 (by 9.7 percent), yet financial intermediation, expressed as the asset-to-GDP ratio, reached 50.6 percent, one of the lowest values EU-wide.

The level of capital adequacy indicators shows a good capacity to absorb unexpected losses (Chart 2.9). The total capital ratio places the Romanian banking sector within the EBA's low risk bucket (20 percent, December 2019), higher than the EU average (19 percent, September 2019), according to EBA. While complying with both microprudential and macroprudential capital requirements by implementing capital buffers, the banking sector holds a sizeable capital reserve (4.4 percentage points, median value, December 2019). Excess capital relative to prudential requirements declined gradually in 2019, yet asymmetry at individual level contracted (Chart 2.10).

Chart 2.10. Total capital surplus relative to minimum requirements and micro- and macroprudential requirements



*) Q1 and Q3 – the 25th and the 75th percentile

Source: NBR

Chart 2.11. Composition of risk-weighted assets



Source: NBR

The balance sheet expansion trend reflected in the faster pace of growth of risk-weighted assets (10 percent in 2019, compared with an annual average of 6 percent in the previous three years, Chart 2.11), and in real sector financing. Most credit institutions, Romanian legal entities, i.e. more than 80 percent, saw rises, while more than half of them witnessed two-digit increases. Looking at risk coverage by capital requirements, the structure of the Romanian banking sector has remained unchanged over time, with credit risk prevailing (82 percent of total risk-weighted assets), followed by operational risk (14 percent) and market risk (4 percent).

The leverage ratio of the Romanian banking sector, calculated based on the full definition¹¹, has an average value of 9.1 percent (December 2019), decreasing slightly, yet standing considerably above the 3 percent minimum requirement, leaving room for an increase in financial intermediation in Romania. All credit institutions, Romanian legal entities, comply with these requirements. The relatively high level compared with that EU-wide (5.2 percent) shows the prevalence of non-trading book financial assets in total assets (which led to higher capital requirements).

Banking sector liquidity remained adequate throughout 2019, in terms of its specific indicators and the balance sheet structure (Chart 2.9). The liquidity coverage ratio (LCR) stood at approximately 240 percent at end-December 2019, with elevated levels recorded throughout the year, amid a sizeable liquidity reserve (made up especially of government securities). This indicator points to a good resilience of Romanian banks to withstand short-term liquidity shocks (over a 30-day period), conditional on credit institutions' opportunity to resort to refinancing operations in relation with the central bank and on their capacity to turn part of their holdings into liquidity on the secondary market for government securities. The net stable funding ratio (NSFR) confirms a good level of long-term structural liquidity of banks, which unanimously meet the specific minimum requirements¹² for the total component and the leu-denominated component.

A number of structural vulnerabilities specific to the banking sector or the legal environment persisted in 2019 as well. These refer to: (1) the low operational efficiency of some credit institutions, amid weak financial intermediation, which materialised in polarised profitability; (2) the significant focus on government sector financing, which contributed to increasing concentration risk; (3) the composition of funding sources; (4) the slower capacity of improving asset quality; (5) the contribution of legislative initiatives to the higher uncertainty of the financial and banking legal framework.

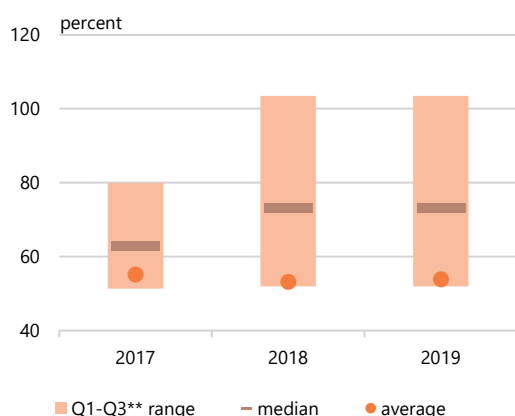
A first structural risk comes from the weak operational efficiency of most medium- and small-sized banks¹³ in Romania. The analysis in terms of the average cost-to-income ratio

¹¹ The ratio of Tier 1 capital (according to the full definition) to credit institutions' exposures.

¹² The net stable funding ratio (NSFR) has not yet entered into effect as a specific liquidity requirement (the expected term is 2021), the minimum required threshold being 100 percent.

¹³ Medium- and small-sized banks have net asset holdings between 1 and 5 percent of total and below 1 percent of total respectively.

Chart 2.12. Distribution of cost-to-income ratio across banks*



*) December 2019 data are not audited

**) Q1 and Q3 – the 25th and the 75th percentile

Source: NBR

shows that, at end-2019, the national banking sector stood in the medium-risk bucket according to the EBA's prudential limits associated with operational efficiency (50-60 percent) and below the EU average (Chart 2.12). The operational efficiency asymmetry across credit institutions widened in this year. Banks differentiated profit-making capacity depending on size persists and indicates the need for furthering consolidation, the success of which also depends on the existence of adequate governance. Low financial intermediation diminishes the possibility to obtain economies of scale, proliferating business models focused on the retail segment and on relatively high margins.

The polarised profitability of the banking sector is another aspect closely related to operational efficiency. In 2019, the Romanian banking sector strengthened its profitability, yet the aggregate contribution of large banks¹⁴ (87.6 percent) to the financial result exceeded, to a major extent, their cumulative market share (76.7 percent), while the share in net assets of loss-making banks (2.6 percent) remained at a 12-year low. Profitability improved primarily on account of the increase in operating profit and of the further historical low level of net expected credit losses which, however, resumed an uptrend.

The net financial result of lei 6.4 billion¹⁵ was affected by an event associated with the method used by a home savings bank to allocate the state subsidy, which caused the significant hike in provisions for litigation costs. At the same time, payments related to the tax on net financial assets were made. The main profitability indicators, i.e. ROA (1.4 percent) and ROE (12.3 percent, Chart 2.9) stood at high levels, yet the capacity of maintaining these values could be affected by the cost of risk aligning with historical values.

The persistence of a large share of bank exposures to the government sector fuels concentration risk, which was also signalled in the National Euro Changeover Plan in order to be handled by applying a systemic risk buffer. Banking sector claims on the government sector accounted for 22 percent of total assets in December 2019, i.e. one of the highest values among EU countries. These exposures play a major role in maintaining adequate bank prudential indicators.

The significant share of government securities in banks' balance sheet contributed to the considerable asset-liability duration and sensitivity mismatches, thus increasing interest rate risk. The analysis of the impact that certain shocks have on the yield curve shows a

¹⁴ Large banks have net assets of over 5 percent of total bank assets.

¹⁵ Data as at December 2019 are not audited.

potential loss of up to 14 percent of own funds across the banking sector¹⁶, caused by the duration mismatch between interest rate-sensitive assets and liabilities, particularly given the sizeable share of fixed-interest assets in the balance sheets of credit institutions. Losses are unevenly distributed across credit institutions, depending on the specific balance sheet structure. As a result of a retail funding structure, Romanian credit institutions are, however, able to cover part of this shock by gradually adjusting interest rates.

An important funding risk is related to preserving the stability of the main funding source of the banking sector, i.e. deposits taken from the real sector (accounting for 69 percent of total liabilities in December 2019), given that a large share comes from demand deposits. This risk has subsided compared with the previous years. Specifically, the swift growth trend of the share of demand deposits in total balance sheet liabilities softened between 2014 and 2018 (by around 15 percentage points, the share reaching approximately 34 percent of total liabilities), the increase being marginal in 2019, i.e. around 3.5 percentage points, amid the moderate rise in interest rates. To mitigate the liquidity risk specific to demand deposits, banks should develop strategies encouraging longer-term saving.

One advantage of banks' traditional financing model, focused on their relationship with households, is the high granularity of deposits, associated with the significant deposit guarantee. Nevertheless, historical developments support the low risk of possible withdrawals in the event of adverse economic conditions materialising. On the other hand, the banking sector's reliance on foreign financing declined by approximately 19 percent from the previous year, down to EUR 5.2 billion at end-2019, accounting for 7 percent of total liabilities. The breakdown shows that financing from parent banks (amounting to two thirds of total foreign financing) remained relatively stable, about half of which with a maturity of over two years and only a third with a maturity of up to one year. The further growth of deposits from the real sector (especially households), along with the lower reliance on foreign funding contributed to gradually easing the liquidity risk in the past years.

The asset quality indicators relevant for assessing credit risk improved in 2019, amid a low risk cost. The non-performing loan ratio fell to 4.1 percent at end-2019, placing the Romanian banking sector into the EBA-defined intermediate risk bucket. The downward trend in the NPL ratio was slower in 2019, and given the expected increase in the probability of default across the real sector in 2020 and the reduced possibilities of selling outstanding non-performing loans, it is currently more difficult to achieve convergence with the low risk category. Maintaining in 2019 the systemic risk buffer, calibrated based on the NPL coverage by provisions and the non-performing loan ratio respectively, provided a stimulus to the favourable developments in asset quality indicators. NPL coverage by provisions increased to 60.6 percent, standing in the "best bucket" according to EBA criteria.

¹⁶ According to the most severe scenario considered, which foresees an upward shift in the leu-denominated yield curve by 250 percentage points.

In addition to the structural vulnerabilities across the banking sector, the laws promulgated and the legislative initiatives in the financial and banking fields enhanced risks, either as a result of some initiatives aimed solely at consumer protection or by implementing the tax on assets. Against this background, banks continued in 2019 to perceive the risk of an uncertain and unpredictable legislative framework in the financial and banking sector as a severe systemic risk, with implications for banking sector solvency. However, (i) the decisions taken by the Constitutional Court in 2019 on amending the law on debt discharge, (ii) the adoption of Government Emergency Ordinance No. 19 in March 2019, which revised the mechanism of the tax on bank assets established by Government Emergency Ordinance No. 114/2018, and, ultimately (iii) the removal of this tax in January 2020 mitigated the legislative risk.

Throughout 2019, the main legislative initiatives aimed at protecting consumers of financial products focused on amending the law on debt discharge, on setting interest rate ceilings, on the treatment applicable to sold loans (considered as speculative), on removing the enforceability of loan contracts, on the treatment of foreclosures and on the conversion of foreign currency-denominated loans. The bill to amend the law on debt discharge was submitted for review to the Constitutional Court.

The introduction of the tax on bank assets in December 2018 by Government Emergency Ordinance No. 114/2018 was a major source of uncertainty, in terms of the tax amount, coverage and interactions with the ROBOR. The NBR assessed the impact of these provisions and signalled the need for an explicit analysis by the NCMO. The NBR presented during the NCMO meeting of 4 February 2019 the impact study it had prepared with regard to the tax on bank assets introduced by Government Emergency Ordinance No. 114/2018, which referred to the impact of this tax on credit institutions, lending and economic growth. The Board decided to set up a working group of the Technical Committee on systemic risk within the NCMO, consisting of MPF and NBR representatives, for an in-depth review. The conclusions of the working group were discussed in the NCMO meeting of 18 February 2019. Based on these analyses, Government Emergency Ordinance No. 19/2019 was adopted at end-March 2019, revising the calculation and payment mechanism of the tax on bank assets by granting incentives in the sense of lowering the tax if the bank contributed to the narrowing of interest rate margins and to the increase in lending. By Government Emergency Ordinance No. 1/2020, the tax on bank assets was removed, being applicable only to banking activities performed in 2019.

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 2019, in line with the trend manifest on most capital markets across the region.

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.

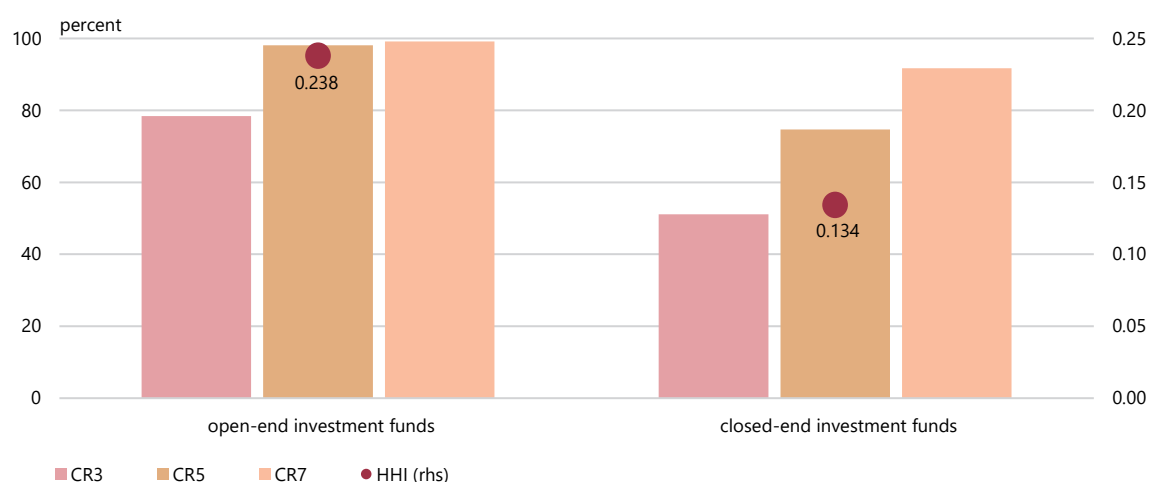
Table 2.1. Number of undertakings for collective investment and investment management companies

Category	No. of entities	
	31 December 2018	31 December 2019
Investment management companies	18	18
Open-end investment funds	78	82
Closed-end investment funds	24	26
Financial investment companies	5	5
Fondul Proprietatea	1	1
Depositaries	4	4

Traditionally, a large number of entities operate in the market for undertakings for collective investment (investment funds classified in various types by investment structure, investment management companies and depositaries), each such category of entities facing specific risks in the day-to-day activity (Table 2.1).

Currently, on the market for depositaries of investment funds' assets (Table 2.2), one of the relevant risks is high concentration. A similar conclusion, based on the values of concentration indicators given below, also holds valid for the market for closed-end and open-end investment funds (Chart 2.13).

Chart 2.13. Concentration on the investment funds market in Romania (in terms of net assets as at 31 December 2019)



Source: FSA

Table 2.2. Depositories of undertakings for collective investment

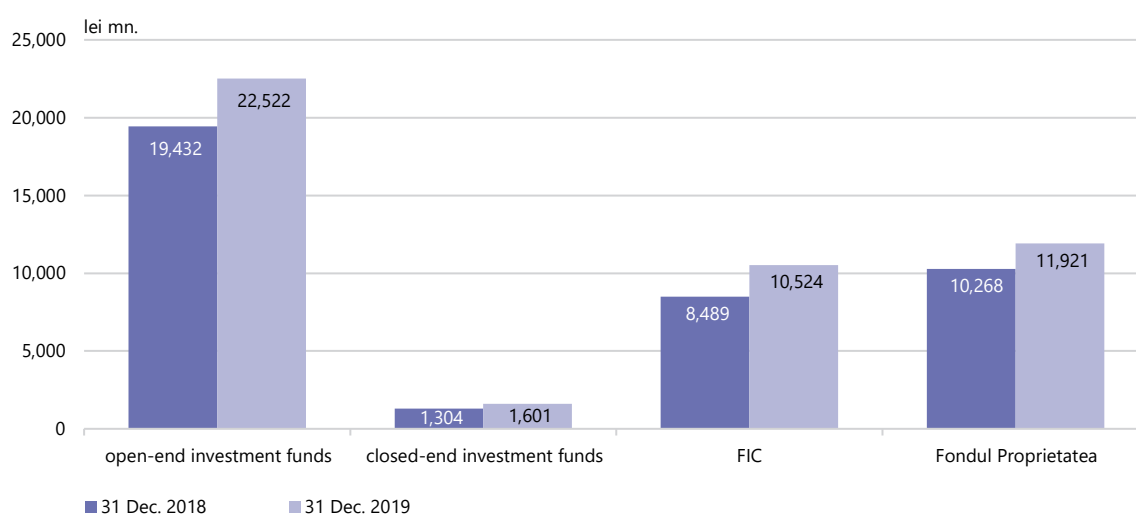
Depository	Total assets (lei million) as at 31 December 2019
BRD – Groupe Société Générale S.A.	28,464.3
Banca Comercială Română S.A.	10,190.4
Raiffeisen Bank S.A.	7,643.1
UniCredit Țiriac Bank S.A.	270.3
Total assets	46,568.1

Assets of UCIs in Romania totalled lei 46.57 billion at end-December 2019 (Table 2.3), up almost 18 percent from end-December 2018.

Table 2.3. Total assets by UCI category

Category	Total assets (lei million)	
	31 December 2018	31 December 2019
Open-end investment funds	19,432	22,522
Closed-end investment funds	1,304	1,601
Financial investment companies	8,489	10,524
Fondul Proprietatea	10,268	11,921
Total UCIs	39,493	46,568

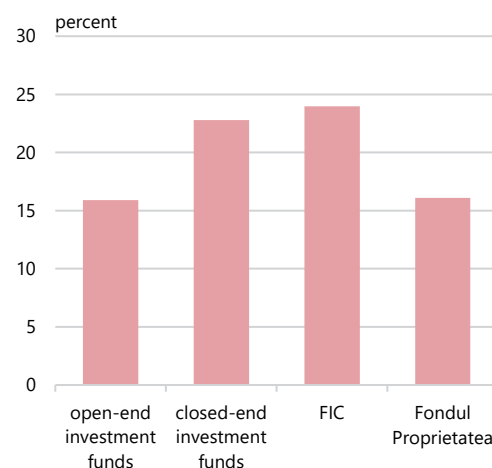
Source: FSA

Chart 2.14. Total assets by UCI category

Source: FSA

Chart 2.15. Change in total assets by UCI category as at 31 December 2019 vs 31 December 2018

The breakdown by UCI category shows that, at the end of 2019 Q4, total assets of open-end investment funds (OEIFs) increased by approximately 16 percent against end-December 2018. Financial investment companies (FICs) and Fondul Proprietatea reported rises in their total assets by about 24 percent and 16 percent respectively versus end-2018 (Chart 2.14). Total assets of Fondul Proprietatea were worth approximately lei 11.92 billion as at end-December 2019.



Source: FSA

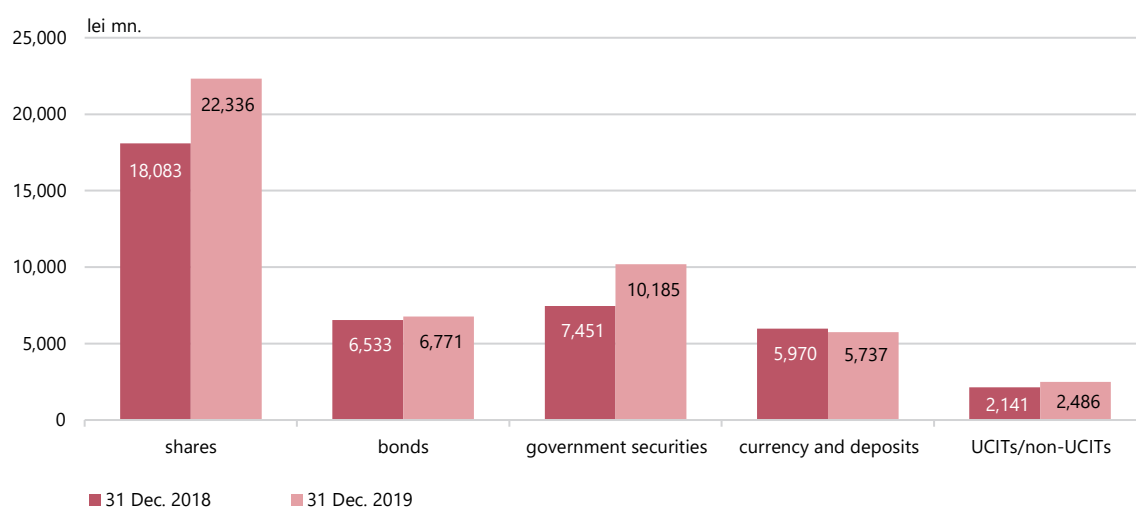
As of end-December 2019, total assets of OEIFs and CEIFs accounted for 48.4 percent and approximately 3.4 percent of total assets of the local UCIs.

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, however, indicative of a bias towards purchases of fixed-income/money market instruments totalling approximately lei 22.69 billion (accounting for about 49 percent of UCIs' total assets). Purchases of stocks across the board amounted to lei 22.34 billion, making up approximately 48 percent of UCIs' total assets (Chart 2.16).

As at end-December 2019 versus end-2018, purchases of stocks, government securities and UCITS/non-UCITS rose by 23.5 percent, 36.7 percent and 16.1 percent respectively, while deposits and cash saw a 3.9 percent decline.

Chart 2.16. Strategic allocation of UCI portfolios



Source: FSA

Table 2.4. Investment portfolio breakdown by UCIs and asset class

Total assets (lei million) 31 December 2019	Open-end investment funds	Closed-end investment funds	Financial investment companies	Fondul Proprietatea
Shares	1,060.2	1,196.6	8,666.2	11,413.1
Bonds	6,491.4	53.9	225.7	-
Government securities	10,047.4	-	-	137.3
Deposits and cash	4,865.2	109.1	392.0	370.3
UCITS/non-UCITS	1,122.5	168.5	1,195.4	-
Other	-1,064.9	73.1	44.4	0.7
Total	22,521.8	1,601.2	10,523.7	11,921.3

Source: FSA

The above-mentioned portfolio breakdown shows 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 the UCIs and the stock exchange. In 2019, local and international stock-market indices posted significant rises (Table 2.5), hence the BSE provided investors with the possibility of producing higher yields than its peers amid low volatility¹⁷.

Table 2.5. Capital market yields (%)

International indices (%)	3M	6M	12M	BSE indices (%)	3M	6M	12M
EA (EUROSTOXX)	5.14	7.48	22.97	BET	4.21	13.19	35.13
FR (CAC 40)	5.29	7.93	26.37	BET-BK	6.67	13.75	29.68
DE (DAX)	6.61	6.86	25.48	BET-FI	11.59	22.54	37.27
IT (FTSE MIB)	6.33	10.70	28.28	BET-NG	1.53	8.95	30.26
GR (ASE)	5.56	5.55	49.47	BET-TR	4.22	13.21	46.90
IE (ISEQ)	15.04	16.75	31.09	BET-XT	5.67	14.79	34.45
ES (IBEX)	3.29	3.81	11.82	BET-XT-TR	5.77	14.90	45.57
UK (FTSE 100)	1.81	1.57	12.10	BETPlus	4.29	13.16	34.26
US (DJIA)	6.02	7.29	22.34	ROTX	4.69	13.63	36.12

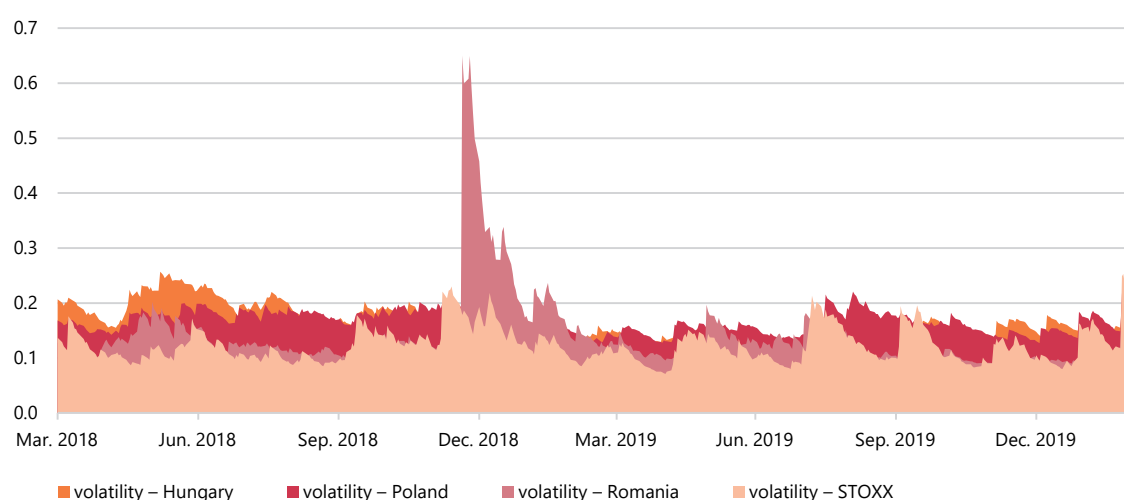
Note: 3M = 31 December 2019/30 September 2019; 6M = 31 December 2019/28 June 2019; 12M = 31 December 2019/31 December 2018; maximum values are shown in dark colours and minimum values in light colours, being fixed at ± 4 percent (3M), ± 8 percent (6M) and ± 15 percent (12M).

Source: Thomson Reuters Datastream, FSA calculations

In its simplest form, volatility is the degree to which the price of an investment fluctuates within a period of time, being often risk-related, so that higher volatility is characterised by greater uncertainty. In 2019 Q4, the volatility of Romania's capital market remained at around 10 percent (Chart 2.17).

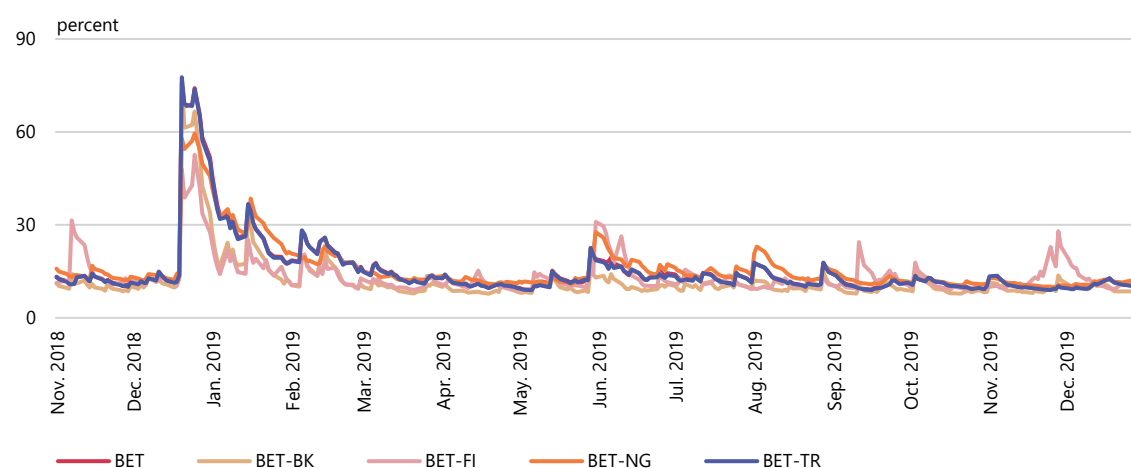
¹⁷ BSE volatility saw an upsurge at end-2018, but thereafter it abated and stabilised at low levels in the course of 2019.

Chart 2.17. Stock market indices in terms of volatility



Source: Datastream, FSA calculations

Chart 2.18. Volatility of local stock market indices



Note: Volatility is estimated based on GARCH model (1,1).

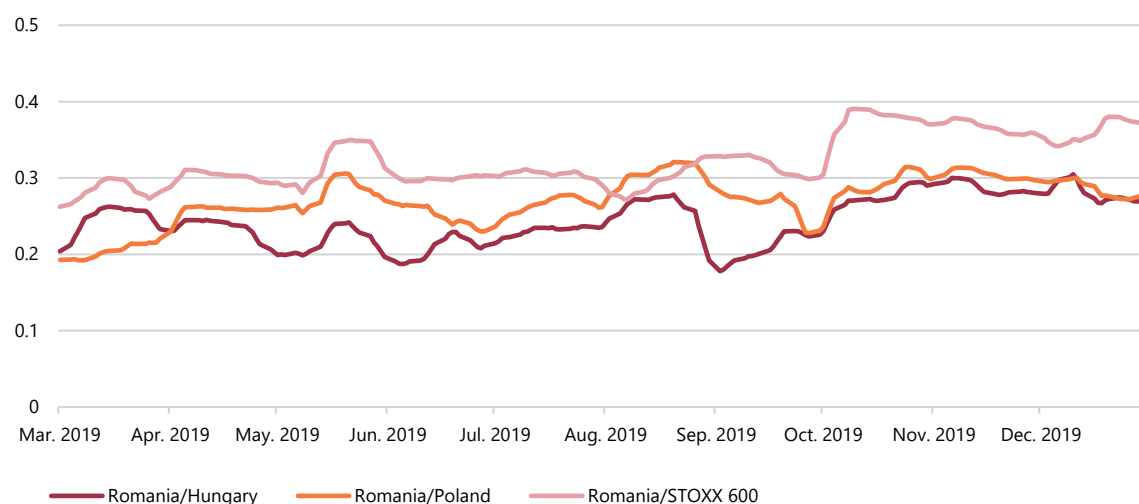
Source: FSA

The contagion index for the capital market in Romania is calculated based on the yields of the major European stock markets. Contagion between European stock markets edged up somewhat in the first part of 2019 Q4, before posting a decline following the US-China trade row (Chart 2.19).

In 2019, total trades on these markets dropped 14.55 percent, from lei 14.23 billion in 2018 to lei 12.15 billion in 2019. The absence of public offerings on Romania's stock market was the chief driver of the contraction in stock market trades.

Dealings in government securities issued by the Ministry of Public Finance made up 0.03 percent of total trades conducted in 2019. Stocks are further the prevailing asset class, accounting for 81.54 percent of BSE trades in 2019 (Table 2.6).

Chart 2.19. Correlations between capital markets in Romania, Hungary, Poland and STOXX 600



Source: Datastream, FSA calculations

Table 2.6. Breakdown of BSE trades (main market and Alternative Trading System – ATS) in 2019 by value of each type of instrument

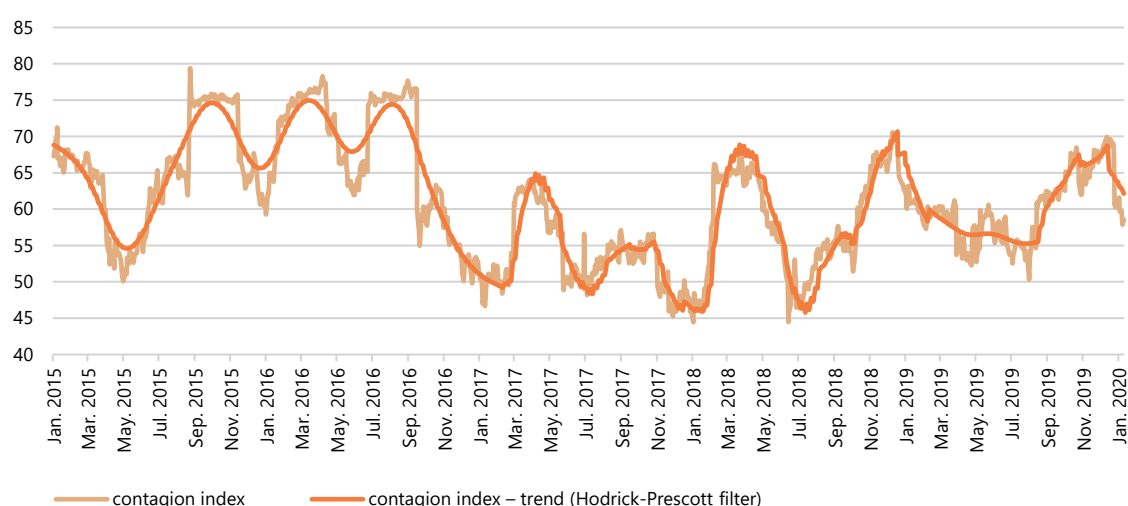
Type of instrument	31 December 2018			31 December 2019			% change	
	No. of trades	Value (lei million)	%	No. of trades	Value (lei million)	%	No. of trades	Value
Shares, including rights	566,601	11,672.8	82.06	512,807	9,911.0	81.54	-9.49	-15
Other securities, including EUR-BOND, EUR-TBILLS	2,758	2,073.0	14.57	6,218	2,047.4	16.84	125.45	-1.2
Structured	74,306	335.5	2.36	56,861	185.9	1.53	-23.48	-44.5
Government securities	313	134.4	0.94	91	4.1	0.03	-70.93	-96.9
Fund units	2,747	9.5	0.07	2,719	7.0	0.06	-1.02	-26.4
Total	646,725	14,225.2	100	578,696	12,155.3	100	-10.52	-14.5

Source: FSA

As of end-2019, trading on the BSE were 26 intermediaries, of which 18 firms for financial investment services (FFIs), three local credit institutions and five entities licensed in other EU Member States (Table 2.7).

Dealing on the MTS in 2019 were 20 intermediaries, of which 16 firms for financial investment services (FFIs), three local credit institutions and one investment firm licensed in another EU Member State (Table 2.8).

Chart 2.20. Contagion index on European capital markets



Source: Bloomberg, FSA calculations

Table 2.7. Types of intermediaries on the BSE's regulated market

Category	BSE – spot market
Firms for financial investment services (FFIs)	18
Local credit institutions	3
Investment firms from other EU Member States	2
Credit institutions from other EU Member States	2
Branch of a credit institution from other EU Member States	1
Total	26

Source: BSE, FSA calculations

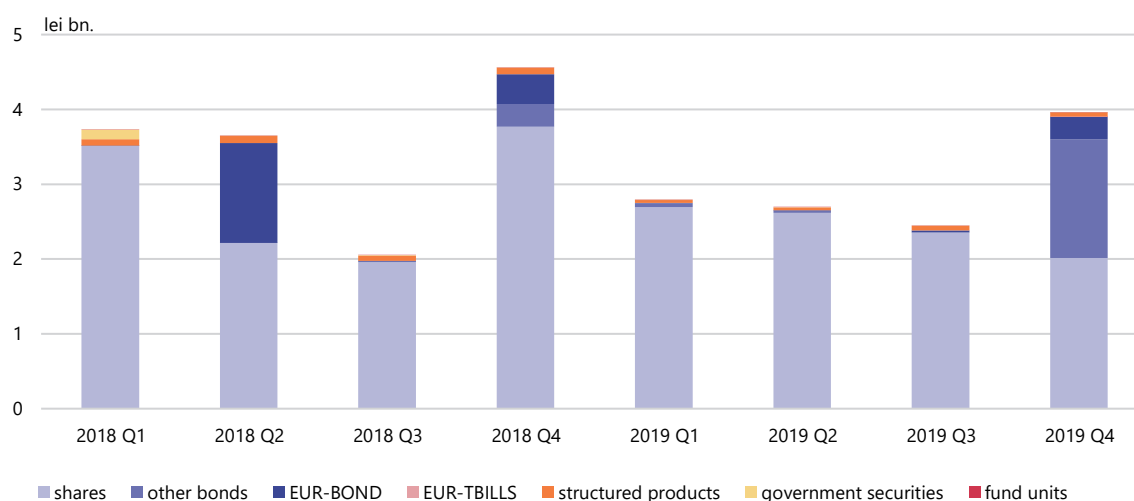
Table 2.8. Types of intermediaries on the BSE's Multilateral Trading System

Category	BSE – MTS
Firms for financial investment services (FFIs)	16
Local credit institutions	3
Investment firms from other EU Member States	1
Total	20

Source: BSE, FSA calculations

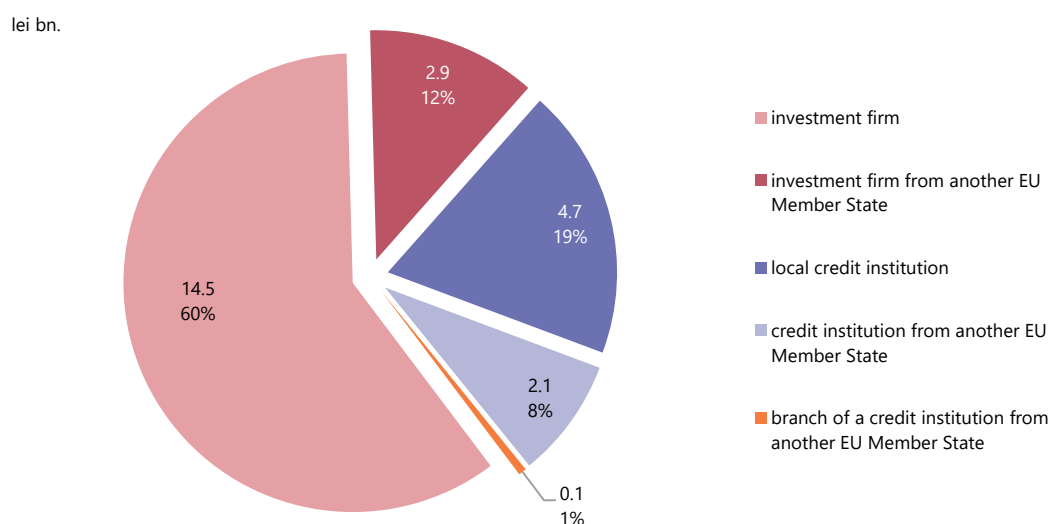
Firms for financial investment services (FFIs) recorded the heaviest trading on the BSE (spot market and the Multilateral Trading System – MTS) at end-2019, their average value coming in at approximately lei 14.55 billion. Local intermediaries (firms for financial investment services and credit institutions) accounted for almost 79 percent of the total value of trades. Of the intermediaries licensed in other EU Member States that conducted trades on spot markets, investment firms reported the heaviest trading, with a 12 percent market share (Chart 2.22).

Chart 2.21. Quarterly breakdown of trades on the BSE main market in January 2017 – December 2019



Source: FSA

Chart 2.22. Traded value on spot markets by intermediary as at 31 December 2019

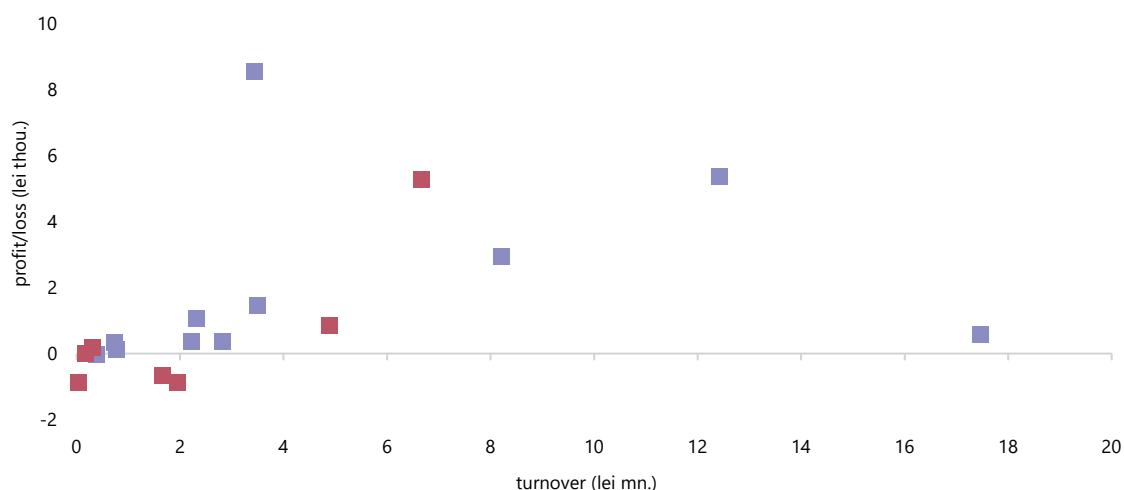


Source: FSA

On the market for intermediation of trades, profitability risk remained at a medium level, similarly to the previous year. Specifically, in 2019, 14 out of 18 investment firms recorded profit, with a cumulated value of approximately lei 27.56 million. The cumulative loss incurred by the four FIICs that reported a negative financial result came in at roughly lei 2.46 million.

In terms of solvency risk, the FIICs' total own funds amounted to about lei 173 million as at 31 December 2019, whereas the cumulated value of assets held in custody was of around lei 11.02 billion (approximately EUR 2.31 billion), comprising both customers' cash and their holdings of financial instruments.

Chart 2.23. Financial results of investment firms (31 December 2019)



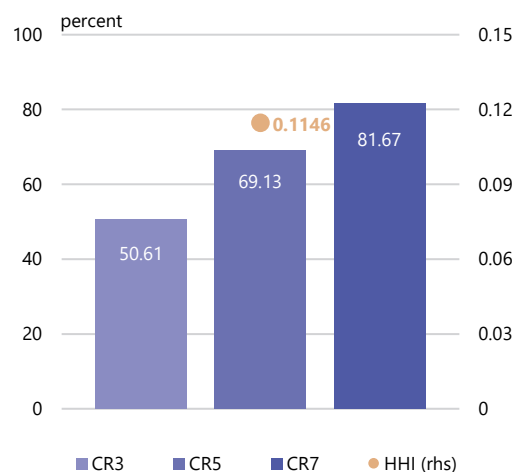
Source: FSA

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 50 percent in 2019 (Chart 2.24).

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 22.4 million new contracts in 2019) and in terms of the role played by insurance in risk management and economic operations.

Chart 2.24. Concentration of intermediaries on the BSE in 2019



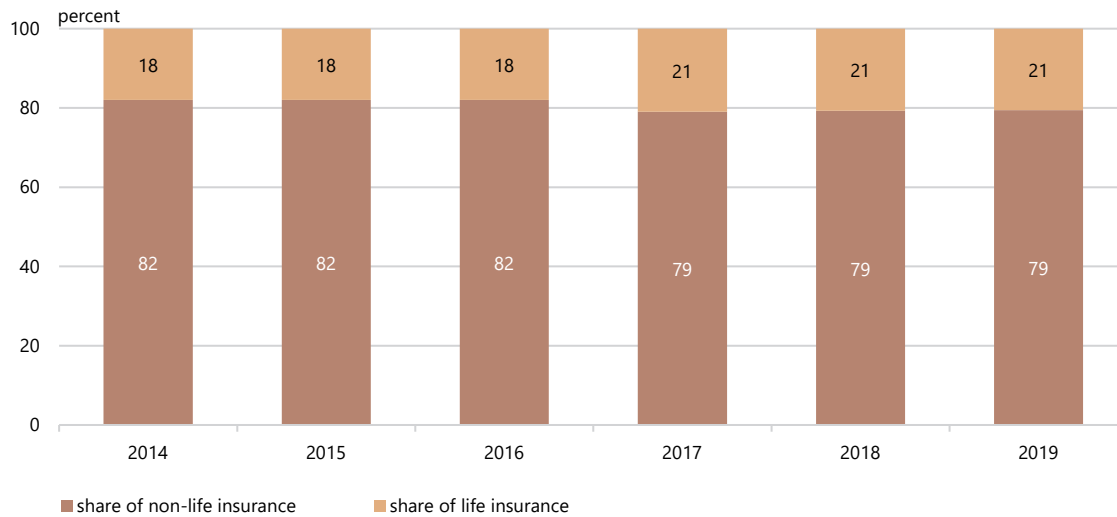
Source: FSA

The SCR ratio¹⁸ 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 ratio¹⁹ shows the coverage of the minimum capital requirement. The financial soundness of the Romanian insurance sector is confirmed by the fact that, throughout 2019, the SCR and MCR ratios calculated for the entire market were well above one (the minimum legally required level).

¹⁸ Solvency Capital Requirement.

¹⁹ Minimum Capital Requirement.

Chart 2.25. Concentration of gross written premiums by type of insurance activities



Source: FSA

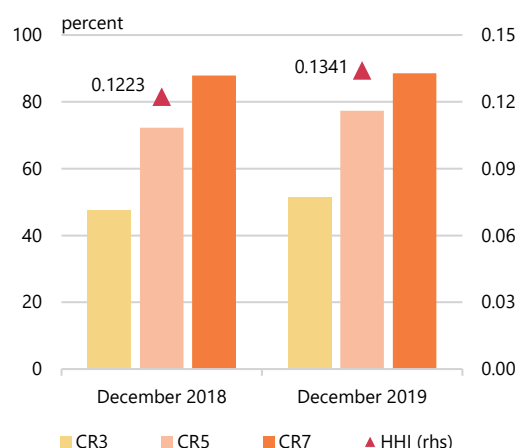
In 2019 Q4, the SCR ratio for the entire insurance market in Romania stood at 1.78, while the MCR ratio came in at 4.18. Both indicators are slightly on the rise compared to 2018 Q4.

Table 2.9. Concentration of gross written premiums by class of insurance for non-life insurance

Class	GWP 2018	GWP 2019	2019 vs 2018 change (%)	Share of GWP by class of non-life insurance in total (%), 2019
A10	3,741,919,989	3,985,812,855	6.52	45.68
A3	2,073,377,389	2,317,589,590	11.78	26.56
A8	1,064,538,857	1,165,500,203	9.48	13.36
Total – first 3 classes	6,879,836,235	7,468,902,648	8.56	85.60
A15	229,727,434	276,369,543	20.30	3.17
A13	251,353,918	272,887,529	8.57	3.13
A2	230,012,472	213,944,495	-6.99	2.45
A9	155,437,814	176,161,384	13.33	2.02
A18	121,289,342	138,011,170	13.79	1.58
A1	53,459,232	58,103,069	8.69	0.67
A7	34,917,692	36,808,149	5.41	0.42
A16	25,134,327	27,762,568	10.46	0.32
A11	16,764,951	18,405,424	9.79	0.21
A6	22,210,800	14,918,828	-32.83	0.17
A5	10,716,567	12,101,680	12.92	0.14
A12	5,972,149	6,131,988	2.68	0.07
A4	3,921,994	3,609,295	-7.97	0.04
A14	1,242,816	556,099	-55.25	0.01
A17	73,395	218,439	197.62	0.00

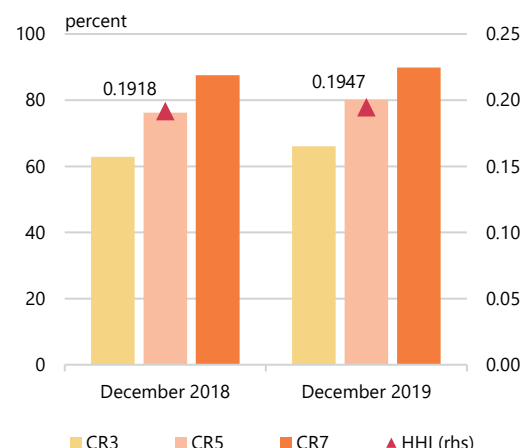
Source: FSA

Chart 2.26. Concentration risk in non-life insurance (based on GWP as at 31 December 2019)



Source: FSA

Chart 2.27. Concentration risk in life insurance (based on GWP as at 31 December 2019)



Source: FSA

In addition, as at 31 December 2019, with the exception of one company with a very low market share, all insurance corporations met the requirements for the liquidity coefficient.

The liquidity coefficient is calculated as the ratio of insurance corporations' liquid assets to short-term liabilities. The indicator stands at 2.24 for total non-life insurance market, declining somewhat from December 2018 (2.32). The liquidity coefficient for the corporations also offering life insurance amounted to 4.44 in December 2019, compared to 4.55 in December 2018.

Profitability risk for insurance companies is higher in 2019 than in 2018, as a result of the increase in the combined ratio for the non-life insurance market (108.26 percent in 2019 versus 102.28 percent in 2018), as well as for motor vehicle insurance (classes A3 and A10).

The domestic insurance market is traditionally dominated by non-life insurance, taking 79 percent of gross written premiums (GWP). In addition, the insurance market in Romania remains reliant on 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), which 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 (Table 2.9).

The insurers' concentration risk²⁰ 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 (Charts 2.26 and 2.27).

²⁰ In order to measure the concentration level, Charts 2.26 and 2.27 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.

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, maintained a very low credit risk (as a result of the investment structure dominated by sovereign bonds).

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

Chart 2.28. Strategic allocation of Pillar II and Pillar III pension fund portfolios

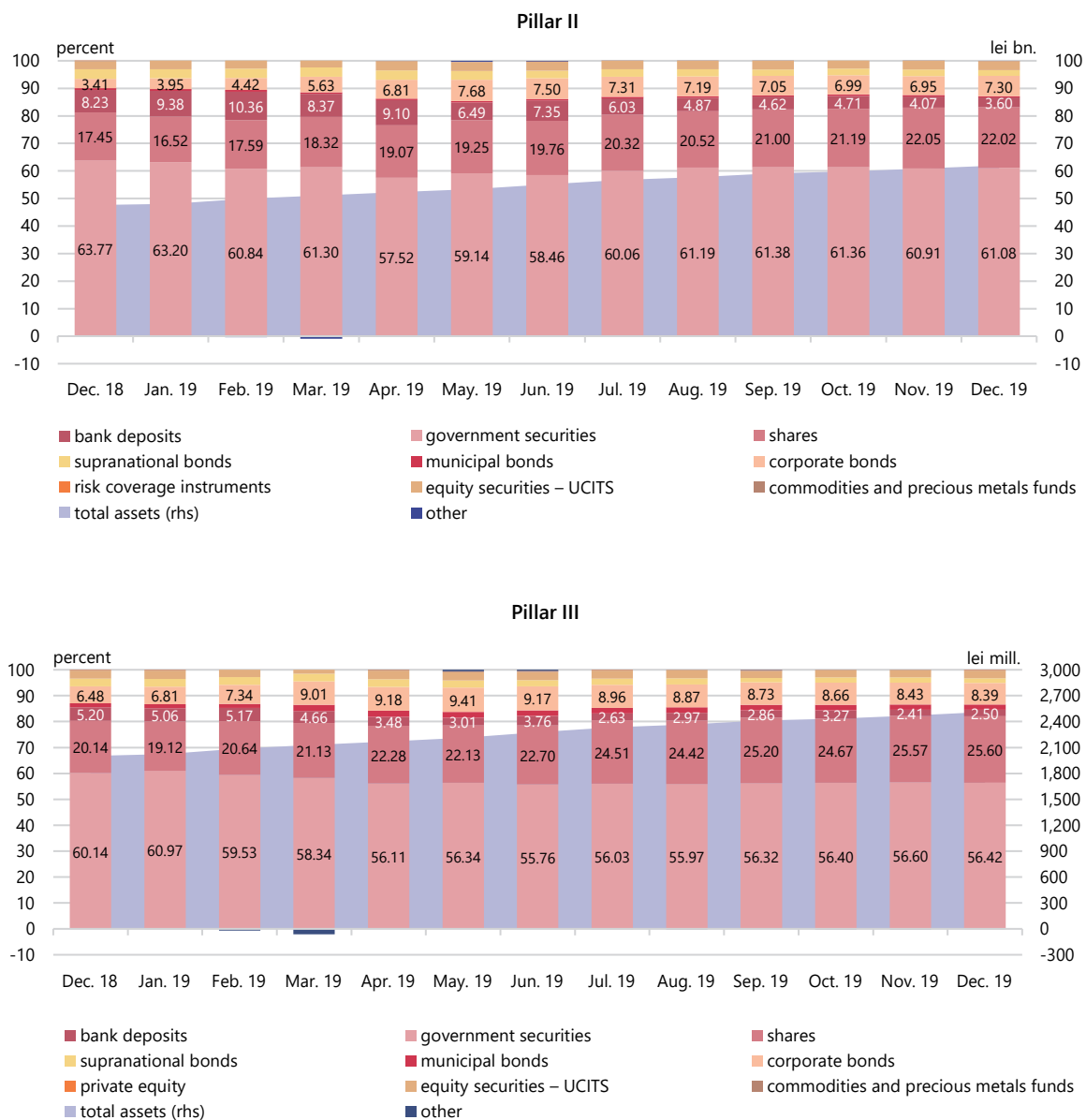
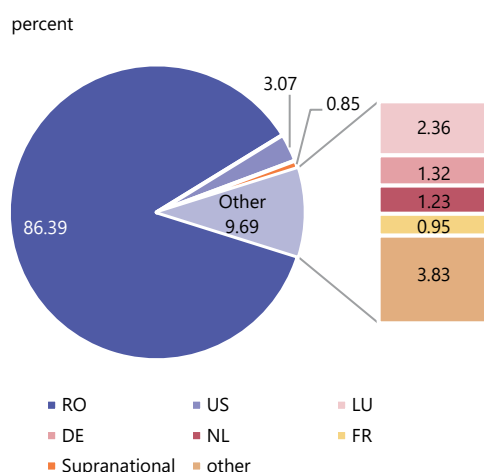
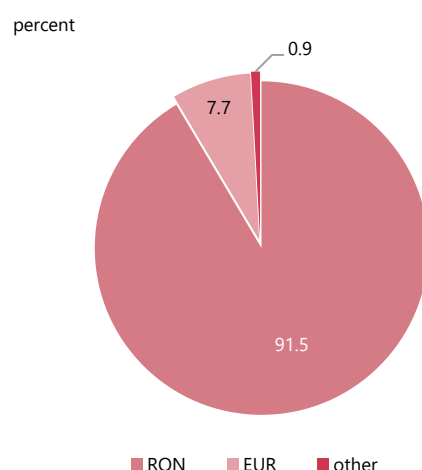


Chart 2.29. Private pension funds – breakdown by country as at 31 December 2019



Source: FSA

Chart 2.30. Private pension funds – breakdown by currency as at 31 December 2019



Source: FSA

safety and performance of investments to the benefit of future pensioners, as well as on protecting their interests. At end-2019, the total assets of private pension funds amounted to lei 64.5 billion.

As at 31 December 2019, government securities held the largest share in the portfolio structure of private pension funds, i.e. 61.08 percent of total assets in Pillar II and 56.42 percent in Pillar III. In 2019, fund managers tended to increase gradually investment in shares relative to total assets (Chart 2.28).

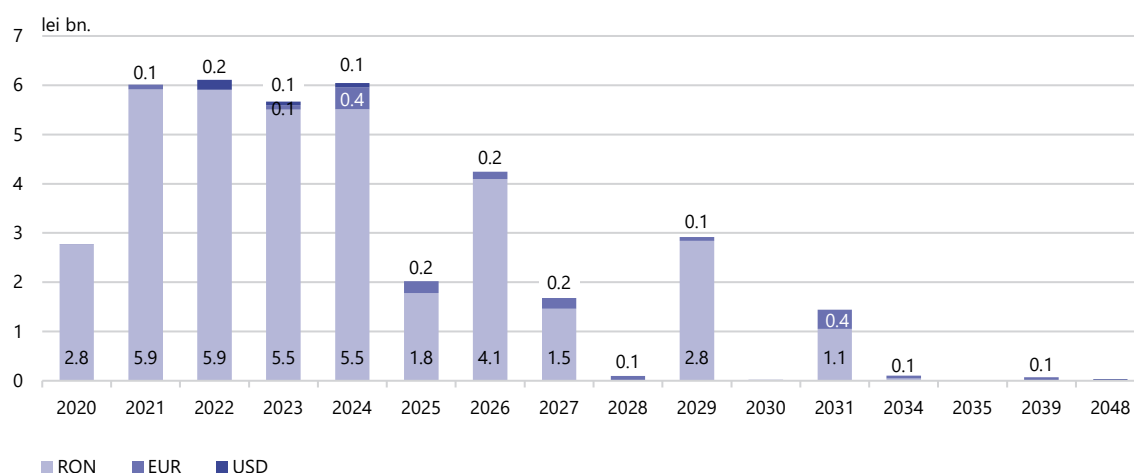
As at 31 December 2019, private pension funds held 86.39 percent of assets comprising Romanian financial instruments, while 12.76 percent of private pension fund assets were invested in foreign assets, most of which were issued in the US (3.07 percent) and Luxembourg (2.36 percent) (Chart 2.29).

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

As at 31 December 2019, private pension funds' investments in government securities amounted to lei 39.28 billion. In terms of maturity, 67.73 percent of investments in government securities issued by Romania held by private pension funds will mature between 2020 and 2024, while 32.27 percent will mature between 2025 and 2048.

Currency risk is also low, because 91.5 percent of the assets of the private pension system are denominated in the domestic currency (Chart 2.30). The foreign currency exposure of the private pension system was 8.55 percent of total assets of the private pension system, of which EUR-denominated investments accounted for 7.67 percent of assets.

Chart 2.31. Government securities issued by Romania – breakdown by currency and maturity as at 31 December 2019

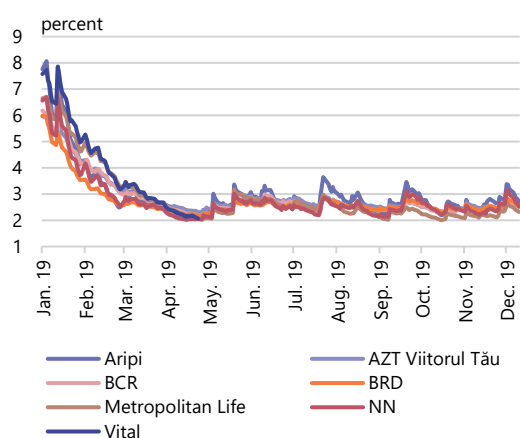


Source: FSA

The annualised volatility of fund units started at a high level in January 2019, declining gradually afterwards until May and remaining significantly lower than that of the financial instruments markets where funds invest, as a result of portfolio diversification (Charts 2.32 and 2.33). Of the total assets held by private pension funds as at 31 December 2018, 90.8 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.

Return on NAVPS went up compared to the previous years, insofar as at 31 December 2019 compared to 31 December 2018, the average nominal rate of return of private pension funds (Pillar II) increased from 2.72 percent to 6.34 percent. No private pension fund recorded a rate of return lower than the minimum rate for its risk category.

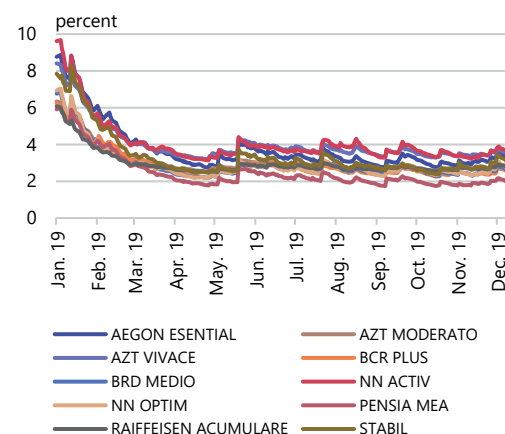
Chart 2.32. Annualised daily volatility of Pillar II pension funds in 2019



Note: The model used is GARCH (1,1) for conditional volatility.

Source: FSA calculations

Chart 2.33. Annualised daily volatility of Pillar III pension funds in 2019



Note: The model used is GARCH (1,1) for conditional volatility.

Source: FSA calculations

As at 31 December 2019 compared to 31 December 2018, the nominal rate of return of voluntary pension funds (Pillar III) that fall into the intermediate risk bucket increased from 1.6 percent to 4.77 percent, while the nominal rate of return of voluntary pension funds that fall into the high risk bucket rose from 2.58 percent to 5.82 percent. No private pension fund recorded a rate of return lower than the minimum rate for its risk category.

3. Measures implemented for achieving national macroprudential objectives

In 2019, the EU regulatory framework governing the formulation and implementation of macroprudential policy was amended as follows:

- The European System of Financial Supervision (ESFS): the review of the EU supervisory framework, along with the strengthening of consultation and accountability mechanisms or the conferral of new supervisory tasks. This comprehensive package was aimed at amending the EBA, ESMA and EIOPA Regulations, Regulation (EU) No 600/2014 on markets in financial instruments (MiFIR), along with the ESRB Regulation (for further details, see the next indent).
- The European Systemic Risk Board (ESRB): the changes in the ESRB statute were intended for enhancing the efficiency and effectiveness of the ESRB activity in the area of macroprudential policies and systemic risk identification. Moreover, the approved amendments are designed to tailor 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 concerning the Banking Union and the efforts to create a Capital Markets Union. Furthermore, the institution's mandate is clearly defined, i.e. to monitor systemic risks regardless of their source (such as technological or social factors) or geographical distribution.
- The adoption of risk reduction measures in the banking sector ("banking package"): This package of measures brings significant changes to the regulatory framework for macroprudential policy, primarily through the (i) clear separation of micro and macroprudential instruments (Pillar II is used solely for microprudential purposes), (ii) increased flexibility of the systemic risk buffer (for further details, see Section 3.2.1.3 on this instrument), and (iii) greater role of the ESRB in monitoring the consistency and sufficiency of the national macroprudential measures (for further details, see Box A).
- The implementation of the CRD IV/CRR package in the European Economic Area (EEA) countries: as of January 2020, the CRD IV macroprudential tools are also applicable in Iceland, Liechtenstein and Norway (member states of the European Free Trade Association).

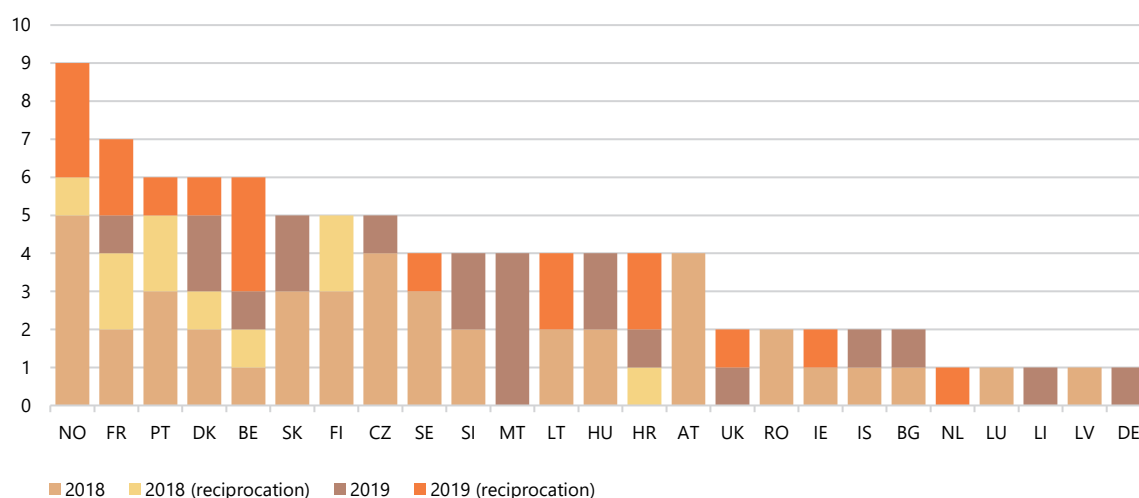
- The review of the prudential rules for the insurance sector (Solvency II): following the consultations conducted by EIOPA in the course of 2019, the ESRB General Board approved a response²¹ containing proposals for measures that can be implemented to limit procyclicality, increase resilience in a low interest rate environment and create a harmonised recovery and resolution framework at EU level.

3.1. Macroprudential measures adopted in the EU in 2019

The macroprudential policy stance at EU level was further restrictive (Table 3.1), but its intensity, as measured by the number of macroprudential measures notified to the ESRB, dropped considerably compared to the preceding year (Chart 3.1). The types of macroprudential measures implemented in the EU in 2019 point to an increased use of cyclical instruments with an impact on loan supply and demand, i.e. the countercyclical capital buffer and borrower-based measures, such as caps on the loan-to-collateral ratio (loan-to-value or LTV) or the indebtedness level (debt service-to-income or DSTI).

Other less used macroprudential tools were the flexibility measures under Article 458 of CRR, concerning risk weights, large exposures or changes in the calibration methodologies for structural capital buffers (the buffer for systemically important institutions or the systemic risk buffer).

Chart 3.1. Number of macroprudential measures notified in 2018 and 2019



Source: ESRB, *A Review of Macroprudential Policy in the EU in 2019*

²¹ "ESRB response to the EIOPA Consultation Paper on the 2020 review of Solvency II", 2020.

Table 3.1. Macroprudential policy stance in 2019

	AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	GR	HU	IE	IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK	S	U	NO
CCyB																															
Real estate sector																															
SyRB																															
O-SII/G-SII																															
Other																															

Note: A strengthening of the macroprudential policy is highlighted in orange, while an easing of the policy is shown in green.

Source: ESRB, *A Review of Macroprudential Policy in the EU in 2019*

However, the number of implemented macroprudential measures should be assessed in relation to each country's specific vulnerabilities and systemic risks so as to be able to draw robust conclusions on the macroprudential policy stance. Therefore, the higher number of measures applied in the Nordic countries to reduce the vulnerabilities from real estate markets cannot be compared, in absolute terms, with the lack of macroprudential measures in countries such as Italy, Greece or Spain, given the completely different macrofinancial context and financial cycle stage.

As regards the recognition through voluntary reciprocity of the measures taken by other Member States, it can be noticed that such measures are concentrated in countries with developed financial sectors that have significant crossborder exposures. Consequently, Central and Eastern European countries are expected not to use the option of recognition through voluntary reciprocity of the measures applied in other Member States, given that the banking sectors in this region have exposures primarily to the jurisdictions they operate in.

New amendments to the Capital Requirements Directive and the Capital Requirements Regulation (CRD V/CRR II) were adopted in 2019, with effect as of end-2020. The aim of these new rules is to ensure the ESRB plays a central role in coordinating macroprudential measures, monitors the sufficiency and consistency of Member States' macroprudential policies, including by monitoring whether tools are used in a consistent and non-overlapping manner (for further details, see Box A. The role of the ESRB in coordinating macroprudential measures and centralising notifications, in accordance with the new provisions of the CRD V/CRR II).

Box A. The role of the ESRB in coordinating macroprudential measures and centralising notifications, in accordance with the new provisions of the CRD V²²/CRR II²³

One of the most important changes in the regulatory framework refers to the information transmission channels. According to the CRD IV, the national macroprudential or designated authorities were required to report planned measures to the ESRB, the European Commission, the EBA, as well as to the relevant competent and designated authorities at national level (i.e. home country authorities performing micro and macroprudential supervision of parent banks having subsidiaries in the respective Member States). Following the amendments to the CRD V, national authorities shall notify only the ESRB of the adopted or planned macroprudential measures, and the latter shall be responsible for centralising and forwarding notifications to the other relevant authorities at EU and national level. As a result, the ESRB becomes an intermediary in the transmission of information from national macroprudential authorities to the relevant EU institutions. Specifically, the ESRB shall forward the notifications of measures concerning the capital conservation buffer (CCoB), the countercyclical capital buffer (CCyB), the buffer for other systemically important institutions (O-SII) and the systemic risk buffer (SyRB) to the European Commission, the European Banking Authority and the relevant competent or designated authorities. An exception to the above is the reciprocation of measures related to the SyRB buffer, which shall be also forwarded to the macroprudential authorities of the Member States. As regards the information concerning the national macroprudential measures/instruments or the flexibility measures (Article 458 of the CRR) applied by Member States, the ESRB shall forward it to the European Parliament, the Council of the European Union and the European Banking Authority.

Another change brought by the new regulatory framework concerns the information the ESRB is required to publish. According to CRD IV, the macroprudential authority at EU level had the obligation to publish only the CCyB rates applied in the Member States. With the CRD V amendments, in addition to the above-mentioned requirements, the ESRB shall publish: the names of all systemically important institutions in the Member States, the risk weights and the criteria for related exposures, as well as the Loss Given Default (LGD) values for the measures taken by the Member States in order to adjust the risk parameters set out in the CRR II for the exposures secured by mortgages on immovable property.

²² Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures.

²³ Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012.

Another important aspect refers to the ESRB's obligation to issue an opinion if the competent or designated authority of a Member State intends to apply to a credit institution: (i) an O-SII buffer rate higher than 3 percent, (ii) a SyRB buffer rate of over 5 percent, or (iii) a structural systemic risk buffer (O-SII + SyRB) rate exceeding 5 percent. For this measure the ESRB shall seek the authorisation of the European Commission and shall send an opinion to the Commission on the adequacy of the buffer.

Moreover, the ESRB's role in the development of the macroprudential policy framework will grow through the collaboration with the EBA, aimed at drawing up guidelines for the O-SII buffer calibration methodology or for setting exposures for the application of the SyRB buffer at sectoral level.

3.2. Macroprudential measures adopted in Romania in 2019

3.2.1. Capital buffers

In 2019, 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 (four recommendations on the countercyclical capital buffer and one recommendation on the capital buffer for other systemically important institutions).

Table 3.2. Implementation of capital buffers in 2019

	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4
Capital conservation buffer (CCoB)								
Countercyclical capital buffer (CCyB)								
Buffer for other systemically important institutions (O-SII buffer)								
Systemic risk buffer (SyRB)								

0% 0-1% 1-2% 2-3% >3%

Source: NBR

Overall, the requirements for macroprudential capital buffers remained unchanged versus 2018, apart from the capital buffer for other systemically important institutions (O-SII), which has been applied distinctively starting 1 January 2019 (for further details, see Section 3.2.1.2. on this macroprudential instrument), and the capital conservation buffer, which has reached the 2.5 percent threshold, pursuant to the provisions of the CRD IV regulatory framework at EU level (Table 3.2).

The capital conservation buffer (CCoB) reached the 2.5 percent target level as at 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.

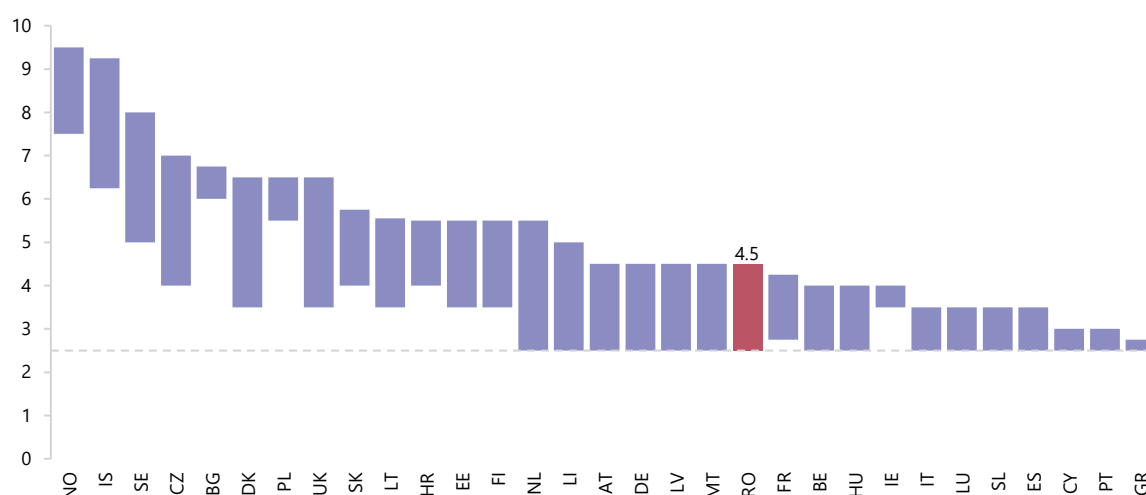
As regards the countercyclical capital buffer (CCyB), the assessments made in the course of 2019 sent out mixed signals regarding the appropriateness of increasing the requirement for this macroprudential instrument (for further details on Romania's experience and the heterogeneity of implementation at EU level, see Section 3.2.1.1).

Looking at the buffer for other systemically important institutions (O-SII), nine systemically important institutions were identified; they were applied a differentiated buffer ranging between 1 percent and 2 percent of the total risk exposure amount (for further details, see Section 3.2.1.2). For 2020, the list of systemically important banks has remained unchanged, only one credit institution being subject to a higher capital requirement, in line with that applicable to the parent bank in the home country.

In 2019, the systemic risk buffer (SyRB) was kept unchanged at the level it had been introduced in June 2018, with the aim to ensure an adequate management of credit risk from a macroprudential perspective and safeguard financial stability, in the assumption that the tensions surrounding domestic macroeconomic equilibria and regional and global uncertainties persisted. Given the steady improvement in the non-performing loan ratio and in the non-performing loan coverage by provisions, the actual systemic risk buffer requirements declined during 2019 (for further details, see Section 3.2.1.3).

The year 2020 bring fresh challenges for the macroprudential policy, consisting in the effects of the global shock induced by the COVID-19 pandemic on the domestic and external macro-financial framework. In this sense, the National Bank of Romania has implemented a decision providing for the possibility of a temporary noncompliance with the built-up capital buffers and liquidity requirements, while also keeping in place the legal requirements for such flexibilities. The capital reserves built up during the previous years pursuant to NCMO recommendations may be used by the banking sector to avoid any sudden halt in financing and to support the real economy in a period marked by uncertainty, thus fulfilling their fundamental objective.

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



Source: ESRB

As a result, for the first time since the macroprudential policy framework has been established in response to the global financial crisis, it seems it will be possible to assess the effectiveness of implementing macroprudential instruments from the perspective of financial system resilience and real economy financing.

The European comparison shows an overall upward trend in combined buffer requirements versus the preceding year (Chart 3.2). In this context, while in the previous NCMO's *Annual Report* Romania stood close to the European average, the latest available data place the country among the second third of EU states (including the EEA countries) as regards the combined buffer requirements applicable at national level. This is mainly due to the increase in countercyclical capital buffer requirements, as well as to the gradual phase-in of the structural buffer requirements in several countries, while the buffers rates applicable in Romania in 2019 remained unchanged from the preceding year. By comparison, Central and Eastern European countries generally rank in the first third of EU Member States (Czechia, Bulgaria or Poland), given that small and open economies are more vulnerable to external shocks and need higher capital reserves to overcome hard times.

3.2.1.1. Countercyclical capital buffer

Implementation framework of the macroprudential instrument

One of the main macroprudential instruments increasingly set to positive rates by some Member States in the course of 2019 is the countercyclical capital buffer (CCyB). The implementation of this instrument across EU Member States complies with Recommendation ESRB/2014/1 on guidance for setting countercyclical buffer rates. The Recommendation comprises four sub-recommendations and sub-recommendation A sets forth the principles underlying the implementation of the macroprudential instrument (Table 3.3).

Table 3.3. Principles underlying the implementation of the countercyclical capital buffer (CCyB)

A(1)	Decisions on the appropriate countercyclical buffer rate should be guided by the objective of protecting the banking system against potential losses associated with a build-up of cyclical systemic risk, thereby supporting the sustainable provision of credit to the real economy
A(2)	The deviation of the ratio of credit-to-GDP from its long term trend – the credit-to-GDP gap – should serve as a common starting point in guiding decisions on countercyclical buffer rates in each Member State. However, designated authorities should also take into account other quantitative and qualitative information
A(3)	In order to calibrate the CCyB, designated authorities should assess the information contained in the credit-to-GDP gap and any other relevant variables or models that combine variables
A(4)	Designated authorities should promptly or gradually release the countercyclical capital buffer when risks materialise
A(5)	Designated authorities should develop a clear strategy for communicating their decisions on the countercyclical capital buffer, in coordination with other designated authorities as well as the ESRB
A(6)	In addition to the mandatory reciprocity arrangements set by Union law, designated authorities should generally recognise the countercyclical buffer rates applied in other Member States
A(7)	The countercyclical capital buffer is part of a suite of macroprudential instruments and designated authorities should consider when to use the buffer in isolation, when to use other instruments instead of the buffer and when to combine the buffer with other instruments

Source: ESRB

In May 2019, the ESRB published the first assessment of the level of implementation of Recommendation ESRB/2014/1 by Member States and the European Central Bank. According to the results of the assessment, Romania was given an overall grade of fully compliant (FC) with the Recommendation, as well as with sub-recommendations A, B and C. A large number of EU countries, including Romania, were graded sufficiently explained (SE) for sub-recommendation D, because the CCyB was equal to zero percent at the time of reporting and the methodology for reducing or releasing the buffer had not been put in place yet.

Using the CCyB instrument is designed to mitigate excessive credit growth which counts among the intermediate objectives of the macroprudential policy at the level of EU Member States. The initiative is aimed at enhancing the resilience of the Romanian banking sector to potential losses generated by the unfavourable dynamics of the real economy credit cycle. The use of the countercyclical capital buffer has an impact (via the adjustment of credit supply in the banking sector) on credit institutions holding the additional capital to further finance real economy, and, therefore, can prevent the rise in financial cycle volatility.

The countercyclical capital buffer is designed to help reduce cyclical systemic risks. Thus, it is appropriate to increase it during the financial cycle's expansionary phases, when credit in the economy rises faster than its long-term trend and the business cycle alike, while in the contractionary phases, when credit shrinks, it is recommended to reduce the buffer rate. These countercyclical measures act to smooth the credit cycle, by building up reserves in the expansionary periods and using them as an incentive during recessions.

Apart from the countercyclical capital buffer there are other macroprudential instruments which can be used to diminish the risk of excessive credit growth in the economy. They include: (i) the macroprudential leverage ratio, (ii) sectoral capital requirements, or (iii) borrower-based instruments. For the purpose of limiting the use of the CCyB, mention should be made that the measures regarding this buffer do not have an immediate impact on the financial sector and real economy, as NCMO Regulation No. 2/2017 provides for the implementation of measures 12 months after the date of their announcement and this period can be shortened only under exceptional circumstances.

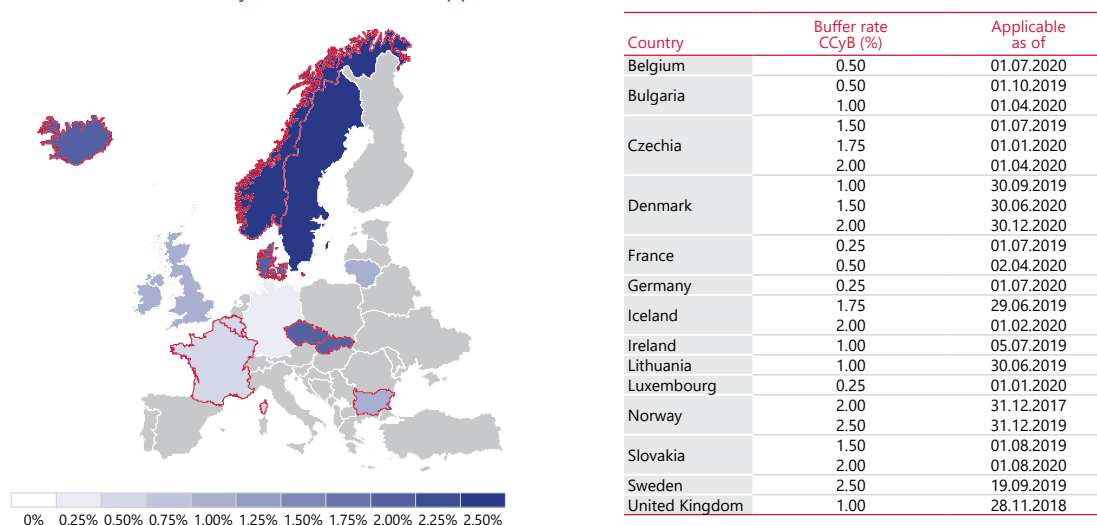
The experience across the EU

During 2019, the countercyclical buffer rate was kept unchanged by some EU Member States and increased by others as compared to end-2018. The decision to implement these measures was aimed at tightening lending conditions and building up capital reserves.

Two of the countries that made changes, i.e. Belgium and Germany, decided for the first time to introduce non-zero CCyB rates of respectively 0.5 percent and 0.25 percent.

Out of the 14 states shown in Chart 3.3, three kept their CCyB rates unchanged in 2019, namely Ireland, Lithuania and Norway. Bulgaria decided in 2019 Q1 to increase the CCyB rate from 0.5 percent to 1 percent, and, later on, in Q3 announced its decision to raise the buffer rate by another 0.5 percentage points to 1.5 percent. The macroprudential authority in Czechia decided during the second meeting in 2019 to raise the buffer rate from 1.75 percent to 2 percent; in 2019 Q1, Iceland took a similar decision. Denmark decided on two successive increases from 1 percent to 1.5 percent and from 1.5 percent to 2 percent, applicable as of 2020 Q2. The United Kingdom reported a similar situation, but the macroprudential authority took only one decision to raise the buffer rate from 1 percent to 2 percent.

Chart 3.3. The countercyclical buffer rates applicable at EU level



Note: The countries marked in red announced that they would implement a positive CCyB rate or raise it in the coming period.

Source: ESRB

In France, the macroprudential authority decided at its second meeting in 2019 to increase the CCyB rate from 0.25 percent to 0.5 percent; Luxembourg's authority announced a similar measure in its last meeting of 2019. Slovakia also decided to increase the buffer rate by 0.5 percentage points from 1.5 percent to 2 percent. Sweden remains the EU country with the highest CCyB rate, i.e. 2.5 percent ever since 2019 Q4. Norway is to implement the same maximum buffer rate starting with 2020 Q1.

It is noteworthy that the information presented above refers to the EU Member States' planned decisions and measures on the implementation of the countercyclical capital buffer notified to the ESRB at end-2019.

According to Recommendation ESRB/2014/1, the decision to change the CCyB rate is based on the analysis of the indicator measuring the deviation of the credit-to-GDP ratio from its long-term trend (i.e. credit-to-GDP gap, called the Basel indicator). The long-term trend of the credit-to-GDP ratio is determined based on the Hodrick-Prescott filter, using a recursive (unilateral) method and starting from the assumption that the financial cycle is considerably longer than the business cycle. Apart from this indicator, which is used for substantiating the decisions to calibrate the countercyclical capital buffer in each Member State, there are additional indicators that provide specific information about cyclical risks. Actually, the majority of countries that decided to implement buffer changes relied much more on the additional indicators that provide signals on lending to the real sector rather than on the Basel indicator. Considering the significant differences between the alternative methodologies used for calibrating the buffer rate, it may be concluded that there is high heterogeneity in the methodology for calibration of macroprudential measures across the EU Member States (Box B presents the experience of the United Kingdom in calibrating the countercyclical capital buffer).

Box B. The experience of other Member States in applying the countercyclical capital buffer – case study: United Kingdom

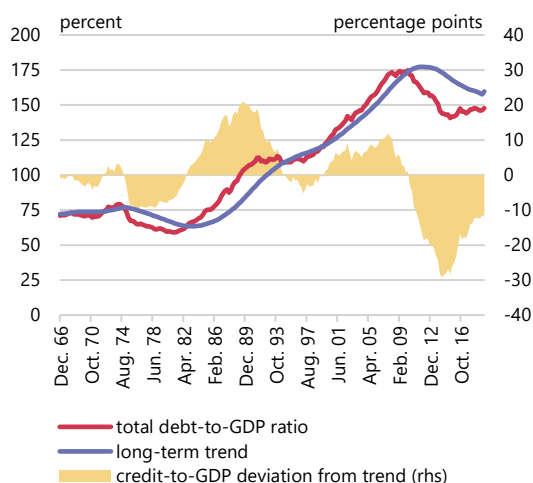
The United Kingdom is one of the states using an innovative procedure in the countercyclical capital buffer calibration mechanism. The macroprudential authority in this country builds on the premise that the CCyB rate should not be set at 0 percent in the beginning, as it was decided by most countries, but at an equilibrium level of 1 percent. Based on this outlook, there is a larger room for manoeuvre for macroprudential measures ever since they started to be assessed and, as long as the CCyB rate cannot fall below zero, the decisions on the buffer use should consider the previously mentioned aspect over the entire spectrum of the financial cycle.

Based on this precautionary measure, the UK's Financial Stability Committee can gradually diminish the buffer rate and thus reduce the economic costs incurred in the event of an economic shock.

The 1 percent equilibrium level, deemed to be the standard in a moderate risk macro-financial context, was set by taking into account that banks have the capacity to build up capital

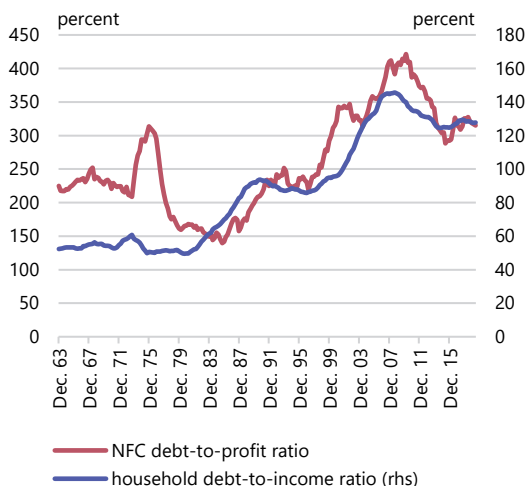
reserves up to this level, without prejudice to their current activity and, therefore, can finance economic activity. In this light and taking into account the favourable macroeconomic context, the Financial Stability Committee decided at end-2019 to raise CCyB from 1 percent to 2 percent starting with 2021 Q1, namely 12 months after taking the decision to implement the change.

Chart B.1. The Basel indicator for the United Kingdom (a long financial cycle)



Source: Bank of England

Chart B.2. Additional indicators used to calibrate the countercyclical capital buffer



Source: Bank of England

The signals considered by the macroprudential authority when deciding on the recalibration of the countercyclical capital buffer include:

- (i) the analysis of domestic and global financial imbalances to identify those situations that can have material consequences for UK economic activity;
- (ii) the analysis of how financial shocks could translate into losses for households and non-financial corporations;
- (iii) the analysis of banks' capacity to absorb losses on their UK exposures, and
- (iv) banks' sensitivity to shocks from real economy.

The Basel indicator, which measures the deviation of the credit-to-GDP ratio from its long-term trend, is one of the elements considered for analysis, but it is not pivotal to the decision to recalibrate the buffer. The analysis of indicator dynamics shows that the United Kingdom uses a positive CCyB rate, while the credit-to-GDP gap continues to be negative (Chart B.1).

Moreover, a series of additional indicators are also considered in buffer calibration, i.e. the growth rate of credit in the economy, net foreign assets-to-GDP ratio, external debt-to-GDP ratio, current account-to-GDP ratio, long-term real interest rate, VIX index, corporate bond spread, capital requirements, leverage ratio, return on assets, the short-term financing ratio or household and corporate indebtedness indicators (Chart B.2).

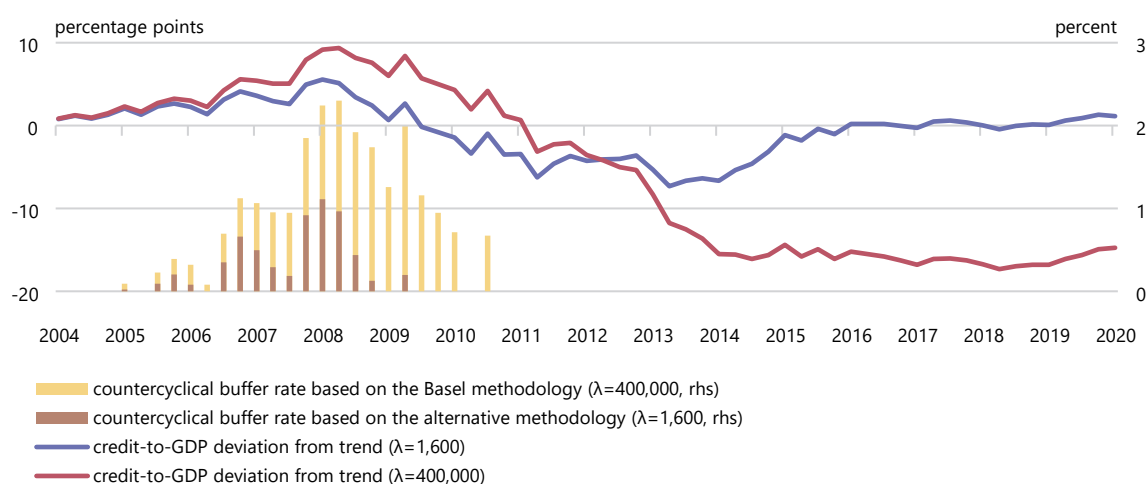
Implementation of the countercyclical capital buffer in Romania

During the meetings of the NCMO General Board, discussions refer to the results of the quarterly assessments on the CCyB recalibration; subsequently the NCMO issues recommendations to the National Bank of Romania, in its capacity as competent authority responsible for the supervision of the banking sector.

In 2019, the countercyclical capital buffer remained unchanged at 0 percent, as the Basel indicator showed that total indebtedness had still been below the potential level calculated based on the Hodrick-Prescott filter. However, the additional Basel indicator (the short financial cycle) exceeded the 1 percentage point alert threshold as early as 2019 Q3, which is indicative of a possible build-up of short-term pressures on credit dynamics (Chart 3.4).

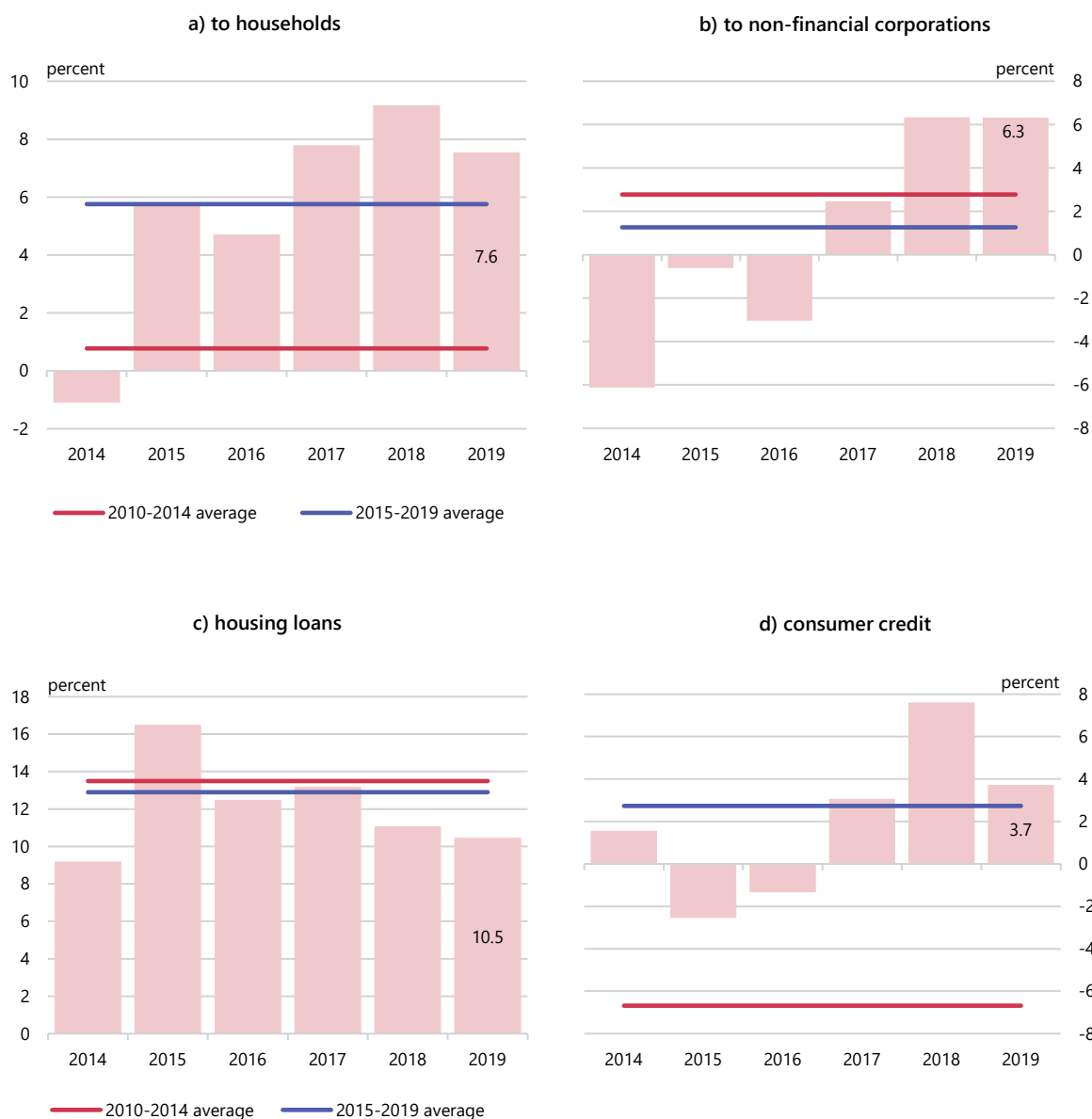
The results of the latest CCyB assessment, based on the data available at 31 December 2019, revealed a further positive deviation of the credit-to-GDP ratio from its long-term trend, assuming a short financial cycle (1.11 percentage points in December 2019), standing below the previous reading (1.28 percentage points in September 2019). Based on the Basel definition, whereby the financial cycle spans approximately 30 years, the deviation is still in negative territory (-14.76 percentage points), but its growth rate was positive in 2019, on a trajectory towards its long-term trend. Relative to household credit, the analysis of the additional Basel indicator calculated at end-2019 shows a 0.27 percentage point deviation of the credit-to-GDP ratio from its long-term trend, i.e. on an upward trend during the year under review, yet below the 1 percentage point alert threshold. In the case of credit to non-financial corporations, the Basel indicator calculated based on a short-term financial cycle posted a 0.84 percentage point deviation from the long-term trend at end-2019, running further below the 1 percentage point alert threshold.

Chart. 3.4. Analysis of the deviation of the credit-to-GDP ratio from its long-term trend (the Basel indicator and the additional indicator) and the countercyclical buffer rate in Romania



Source: NBR

Chart 3.5. Nominal annual credit growth



Source: NBR

From a methodological perspective, the analyses were based on both the requirements recommended by the Basel Committee and the indicators of the national banking sector specificities. These included a series of additional indicators that can capture the financial cycle (private sector indebtedness, total household indebtedness, total corporate indebtedness or by type of loan, Chart 3.5) alongside some structural indicators (real estate market, financial standing of the banking sector and lending standards, the macroeconomic environment). These indicators show the characteristics of lending at national level and add to the general picture resulting from applying the EU-recommended methodology.

Thus, aside from the indicators used in the analysis of the deviation of the credit-to-GDP ratio from its long-term trend, which stood below the EU-wide signalling thresholds in 2019, there are also other indicators that can provide relevant information in the decision-making

process concerning a buffer rate increase. One main category is that of structural indicators, with residential property prices counting among them. In September 2019, they rose by 3.95 percent in nominal terms versus the same month of 2018. In real terms, the increase versus September 2018 was of merely 0.44 percent, with both values running significantly below the 6 percent alert threshold and the 10 percent signalling threshold.

3.2.1.2. Buffer for other systemically important institutions

The buffer for other systemically important institutions (O-SII buffer) is the macroprudential instrument recommended by the European Systemic Risk Board in order to achieve the macroprudential objective of “limiting the systemic impact of misaligned incentives with a view to reducing moral hazard”.

The O-SII buffer consists in applying additional capital requirements to large banks, helping mitigate the structural systemic risk generated by the size of credit institutions.

This instrument is implemented so as to increase the loss-absorption capacity of banks, lower the likelihood of financial difficulties and reduce their severity, and ensure business continuity during stressed periods.

The experience across the EU

Identifying systemically important institutions is based on an EU common methodology developed by the European Banking Authority (EBA), laid down in the 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.

The EBA methodology ensures the comparability and transparency of the identification of systemically important institutions in each Member State (based on the obligation of national authorities to use a set of mandatory indicators) and captures the specificities of the national financial systems, providing the Member States with the opportunity to identify systemically important institutions based on a set of optional indicators (chosen by the national authorities in a pre-defined list developed by EBA), in order to allow the fair quantification of the connection between the financial system, the banking system and the real economy. All EU countries submit to the ESRB the results of the annual assessments made in compliance with the EU harmonised methodology. There is still no uniform methodology at EU level for setting the O-SII buffer rate, the regulatory framework leaving a certain flexibility margin available for the national authorities, provided they comply with the maximum buffer rate applicable to credit institutions with domestic capital (2 percent of total risk exposure amount) and credit institutions with foreign capital (the maximum value between: a) 1 percent and b) the O-SII buffer rate applicable to the parent bank, identified as a systemically important institution in the home country). Within the new CRD V regulatory framework, the limits for the O-SII buffer cap were eased, further details being presented in Box C.

Box C. Changes in the framework for operationalising the capital buffer for other systemically important institutions (O-SII) by implementing the CRD V/CRR II package

According to the CRD IV provisions, the O-SII buffer rates are currently subject to significant limitations, as they cannot exceed the 2 percent threshold of the total risk exposure amount or even less in the case of foreign bank subsidiaries, these levels being not correlated with the systemic importance of the credit institution. In line with the EU regulations, where a national systemically important institution is a subsidiary of either a G-SII or an O-SII which is an EU parent institution and subject to an O-SII/G-SII buffer on a consolidated basis in the host country, the O-SII buffer rate applicable in the home Member State cannot exceed the higher of a) 1 percent of the total risk exposure amount and b) the G-SII or O-SII buffer rate applicable to the group at consolidated level. Consequently, some Member States considered that these thresholds were insufficient for the adequate coverage of risks arising from the size of credit institutions and used other instruments to complement these requirements (the systemic risk capital buffer or Pillar II requirements). The competent/designated authorities of host countries (including Romania), where the subsidiaries established in a host country have a greater systemic importance for the national banking sector than that of the parent bank in the home country, are currently acting within a limited framework.

According to the provisions of the new CRD V regulatory framework, these limitations are significantly eased in order to enable Member States to use this macroprudential instrument exclusively to cover the risks arising from the size of credit institutions, in the context of changes to the implementation framework for the systemic risk buffer (for further details, see the box in Section 3.2.1.3. dedicated to this instrument). The threshold of O-SII buffer rate is raised by 1 percentage point to 3 percent of the total risk exposure amount, while the national competent authorities have the option to apply a rate above 3 percent with the approval of the European Commission, which will also take into account the ESRB and EBA opinions. In addition, the limit applicable in the host country to foreign bank subsidiaries is also eased, the buffer that can be applied on an individual or sub-consolidated basis for systemic banks being the lower of: (a) the sum of the highest G-SII or O-SII buffer rate applicable to the group on a consolidated basis and 1 percent of the total risk exposure amount calculated in accordance with Article 92(3) of Regulation (EU) No 575/2013 and (b) 3 percent of the total risk exposure amount calculated in accordance with Article 92(3) of Regulation (EU) No 575/2013 or the rate higher than 3 percent of the total risk exposure amount as authorised by the Commission, as mentioned above.

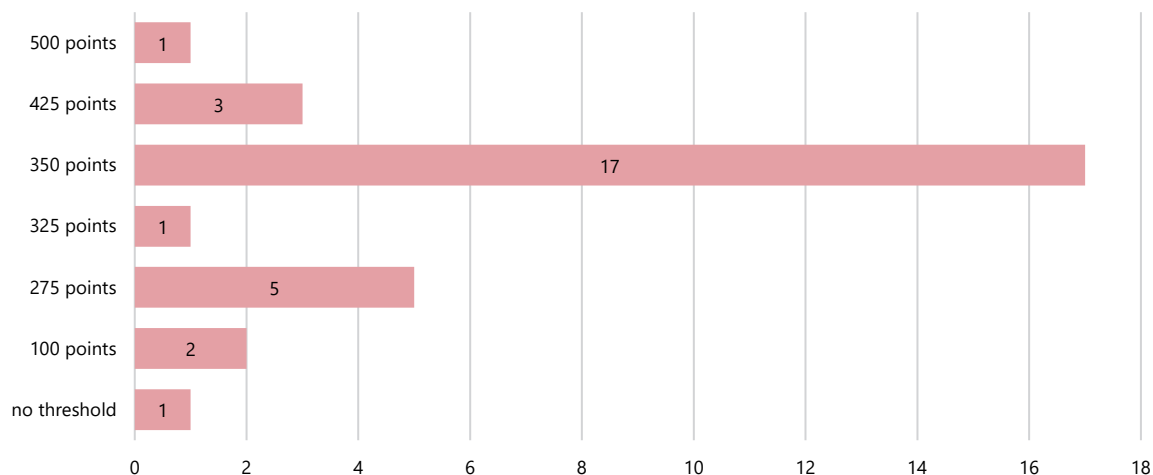
The 2018 *Annual Report* of the NCMO included a thematic box dwelling on the high heterogeneity of the methods used by Member States for the calibration of the O-SII buffer. Consequently, the group of experts who contributed to preparing the ESRB's Final

report on the use of structural macroprudential instruments in the EU²⁴ suggested 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. CRD V translates into the recommendation that, by 31 December 2020, the EBA will submit to the European Commission a report on the appropriate methodology for calibrating the O-SII buffer rates in order to foster harmonisation of the O-SII buffer setting at EU level.

The measures adopted by the European authorities are likely to contribute to increasing the level of homogeneity between banking groups and their subsidiaries established in other Member States with regard to capital requirements for systemically important banks and, at the same time, to ensure a balance between the adequate coverage of systemic risks arising from the size of institutions and the conditions for complying with the principle of the free movement of capital in the EU.

A number of 195 systemically important institutions (SIIs), three fewer than in the previous year, were identified in 2019 in the EEA. The number of O-SIIs ranges from 15 in the United Kingdom to two in Norway, depending on the concentration and the development level of each national banking sector. As for global systemically important institutions (G-SIIs), their number remained unchanged from a year ago, the 11 G-SIIs being concentrated in the six largest Member States by GDP volume (Germany, Spain, France, Italy, the Netherlands and the United Kingdom).

Chart 3.6. Breakdown of countries by identification threshold for systemically important institutions



Source: ESRB

²⁴ Final report on the use of structural macroprudential instruments in the EU, December 2017, available at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report180227_finalreportmacroprudentialinstruments.en.pdf?e4bc0b82d37c7be4d32ca15fd9cd90ff.

Since 2016, the first year when the capital buffer for systemically important institutions has been implemented at EU level, there has been a slight decrease in the number of systemically important institutions in Member States, with 199 O-SIIs at that time, i.e. 12 more than today (not including Norway, Iceland and Liechtenstein). The EBA Guidelines provide flexibility to Member States when choosing a materiality threshold for the identification of O-SIIs, in the range of 275-425 basis points, so that they can take into account the specificities of the national banking sector and the statistical distribution of scores. While most countries use the standard threshold of 350 basis points, four countries chose a higher threshold and nine countries, including Romania, opted for lower thresholds in order to ensure the homogeneity of the group of O-SIIs (Chart 3.6).

In 2019, five Member States deviated from the guidelines by excluding a series of mandatory indicators, assigning different weights to some indicators in the overall score or scoring above the standard threshold from which institutions are automatically designated as O-SIIs.

Implementation in Romania

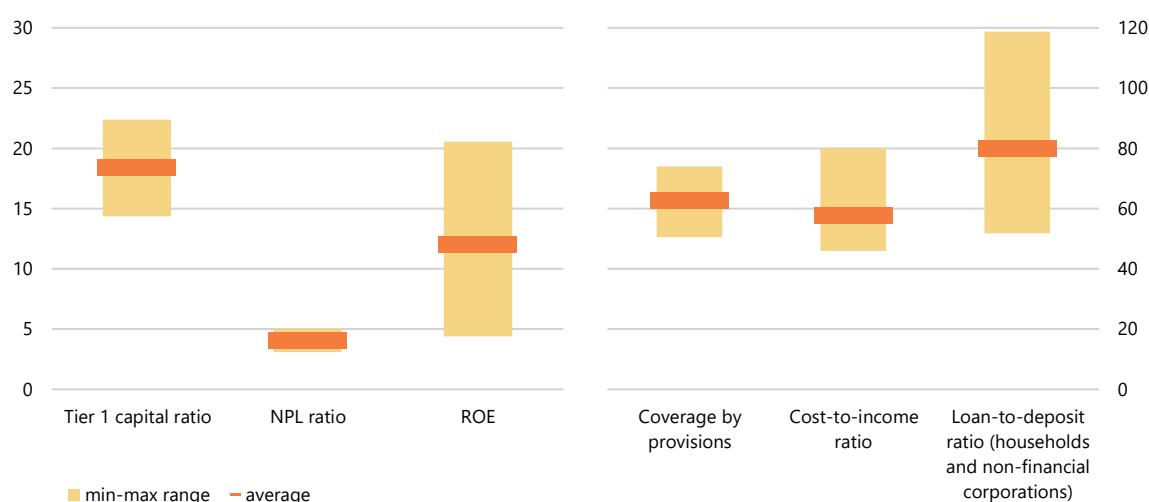
The regular assessment of the national banking sector is made in accordance with Art. 21 para. (1) of NCMO Regulation No. 2/2017 on the methodology and procedure used for setting capital buffers and the scope of these instruments. The methodology applied by the NBR, in its capacity as competent authority, 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).

In 2019, the NBR implemented NCMO Recommendation No. R/6/2018 on the capital buffer for other systemically important institutions in Romania²⁵ addressed to the central bank via 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)²⁶. The NCMO recommendation focused on the analysis made by the central bank based on the data reported by credit institutions as at 30 June 2018, which showed that nine banks recorded scores above 275 basis points when mandatory indicators were calculated. Therefore, the NCMO recommended the National Bank of Romania to impose, starting 1 January 2019, a capital buffer for other systemically important institutions (O-SII), 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, 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 România S.A. (consolidated level) and (iii) 1 percent for

²⁵ NCMO Recommendation No. R/6/2018 on the capital buffer for other systemically important institutions in Romania was published on the NCMO website (<http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor/>).

²⁶ 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 (which entered into force on 28 December 2018).

Chart 3.7. Prudential and efficiency indicators of systemically important institutions (2019 Q4)



Source: NBR

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).

In 2019, a new assessment was made with a view to identifying the systemically important banks, which relied on the data available for 2018 Q4. In the first assessment stage consisting in the calculation of mandatory indicators, nine credit institutions, Romanian legal entities, recorded a score above 275 basis points, which is higher than the threshold set for the automatic designation of entities as O-SIIs, as follows: Banca Transilvania, UniCredit Bank, BCR, BRD – Groupe Société Générale, Raiffeisen Bank, Alpha Bank, CEC Bank, OTP Bank and Garanti Bank. The group of credit institutions identified as having a systemic nature has the same composition as that resulting from the previous assessment. The assessment was made at the highest consolidation level, in compliance with EBA Guidelines.

The calculation of additional indicators, representing the second stage of the assessment, provided the same result, as no systemic entities were identified apart from those established in the stage of determining the score based on mandatory indicators. The result coherence 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. Consequently, the results obtained in the two assessment stages are homogeneous.

The 2019 assessment revealed that the O-SIIs play a decisive role in the Romanian banking sector, in terms of all the assessment criteria recommended by the European Banking Authority, as follows: (i) they held 77.9 percent of bank assets as at 31 December 2018; (ii) they provide a significant part of financial services to the real economy, i.e. 76.5 percent of loans in stock, 78.5 percent of deposits taken, and 58.4 percent of payments made; (iii) in terms of complexity, they conduct 95.5 percent of transactions in OTC derivatives, they place 91.4 percent of cross-border assets and raise 82.6 percent of foreign liabilities, while (iv) in terms of interconnectedness with the other undertakings conducting financial activities, they provide 70.9 percent of intra-financial assets, they use 80.7 percent of intra-financial liabilities and hold 97.6 percent of bonds issued.

From a prudential perspective, the O-SIIs are well capitalised (with an average Tier 1 capital ratio of over 18 percent), have a good asset quality (as reflected by the low NPL ratio, i.e. 4 percent and the high non-performing loan coverage by provisions, i.e. more than 60 percent), as well as adequate operational efficiency (profitability – ROE of over 12 percent and cost-to-income ratio of 55 percent) (Chart 3.7). Moreover, the loan-to-deposit ratio calculated in relation to non-financial corporations and households (80 percent as at 31 December 2019) indicates the potential of systemic institutions to ensure the further financing of real economy.

Art. 269 para. (1) of NBR Regulation No. 5/2013 on prudential requirements for credit institutions, as subsequently amended and supplemented, stipulates that the credit institutions identified as O-SIIs should 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 instruments, the NCMO 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.

Out of the nine banks identified as having systemic importance based on the data reported as at 31 December 2018, seven are subsidiaries of foreign banks in other Member States, all of them having systemic importance in the home country, namely France (BRD), Italy (UniCredit), Hungary (OTP Bank), Greece (Alpha Bank), Spain (Garanti Bank) and Austria (BCR, Raiffeisen Bank). Where an O-SII is a subsidiary of either a G-SII or an O-SII which is an EU parent institution and subject to an O-SII buffer on a consolidated basis, the O-SII buffer rate that applies on an individual or sub-consolidated basis 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. Two out of the nine systemically important banks at a national level have domestic capital, i.e. CEC Bank (state-owned capital) and Banca Transilvania (majority Romanian capital).

In this context, according to the limitation set forth in Art. 23 para. (3) of NCMO Regulation No. 2/2017²⁷, the maximum O-SII buffer rate applicable to O-SIIs in Romania during 2020 is 2 percent for BCR, Raiffeisen Bank, OTP Bank, CEC Bank and Banca Transilvania and 1 percent for UniCredit Bank, BRD, Alpha Bank and Garanti Bank.

Given the aforementioned assessment elements, the NCMO General Board issued Recommendation No. R/4/2019 on the capital buffer for other systemically important

²⁷ This limitation represents the application at national level of Article 131(8) – Global and other systemically important institutions – 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.

institutions in Romania²⁸, whereby the National Bank of Romania is recommended to impose, on an individual or consolidated basis, starting 1 January 2020, a capital buffer for other systemically important institutions (O-SII), 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 31 December 2018, as follows: (i) 2 percent for Banca Comercială Română (consolidated level), Raiffeisen Bank S.A. (consolidated level), Banca Transilvania (consolidated level), CEC Bank (individual level) and OTP Bank România (consolidated level) and (ii) 1 percent for UniCredit Bank (consolidated level), BRD – Groupe Société Générale (consolidated level), Alpha Bank (individual level) and Garanti Bank (individual level).

The results on the identity of systemic banks, their scores according to the assessment based on the data reported as at 31 December 2018 and the applicable O-SII buffer rate as of 1 January 2020 have been summarised in Table 3.4. The information was published on the NCMO website²⁹, in accordance with the transparency requirements of the national and European regulatory framework.

Table 3.4. O-SIIs identified in 2020

Credit institution	Score based on mandatory indicators (EBA Guidelines)	O-SII requirement (% of the total risk exposure amount)	Applicability of O-SII buffer
UniCredit Bank S.A.	1,839	1	consolidated basis
Banca Transilvania S.A.	1,527	2	consolidated basis
Banca Comercială Română S.A.	1,229	2	consolidated basis
BRD – Groupe Société Générale S.A.	1,137	1	consolidated basis
Raiffeisen Bank S.A.	879	2	consolidated basis
Alpha Bank România S.A.	468	1	individual basis
OTP Bank Romania S.A.	357	2	consolidated basis
CEC Bank S.A.	324	2	individual basis
Garanti Bank S.A.	287	1	individual basis

Source: NCMO

The NCMO Secretariat notified the European Commission, the ESRB, the EBA, the ECB, the competent and designated authorities, as well as the credit institutions concerned of the requirement to maintain the O-SII buffer, in compliance with the CRD IV/CRR regulatory framework implemented at national level. No observations or comments were submitted with regard to the macroprudential measure recommended by the macroprudential authority in Romania.

²⁸ NCMO Recommendation No. R/4/2019 on the capital buffer for other systemically important institutions in Romania was published on the NCMO website (<http://www.cnsrmro.ro/en/politica-macroprudentiala/lista-recomandarilor/>).

²⁹ <http://www.cnsrmro.ro/politica-macroprudentiala/lista-recomandarilor/lista-actualizata-a-bancilor-sistemic-si-amortizorul-pentru-alte-institutii-de-importanta-sistemic-amortizorul-o-sii-aplicabil-in-anul-2020/>.

After the NCMO issued Recommendation No. R/4/2019 on implementing macroprudential instruments for achieving the intermediate objectives included in the Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight, the NBR assumed the implementation of the macroprudential instrument, namely the buffer for other systemically important institutions (O-SII), to achieve the intermediate objective limiting the systemic impact of misaligned incentives with a view to reducing moral hazard. In this context, the NBR implemented NCMO Recommendation No. R/4/2019 on the capital buffer for other systemically important institutions in Romania by issuing Order No. 10/2019 on the buffer for credit institutions authorised in Romania and identified by the National Bank of Romania as other systemically important institutions (O-SIIs)³⁰.

Since the O-SII buffer has been implemented in Romania, the buffer rate applicable to domestic institutions has followed an uptrend, given the approach of the authorities in the home countries of parent banks with subsidiaries in Romania consisting in the gradual implementation of this macroprudential instrument at the level of entities under the supervisory scope. In this context and in view of the limitations imposed by European regulations to the authorities in host countries with regard to the maximum O-SII buffer rate that could be applied to subsidiaries of foreign banks, the risks arising from the systemically important credit institutions could not be adequately covered.

Thus, in the period from 1 January 2016 to 31 December 2018, an O-SII buffer rate of 1 percent was applied to all nine credit institutions identified as having systemic importance. In the period ahead, insofar as the macroprudential policy has become more restrictive in the home countries of parent banks having subsidiaries in Romania, the NCMO began to impose a flexibility margin in setting the level of the buffer for systemically important institutions (O-SII), so that it could also be calibrated based on the systemic importance of the entities. Specifically, in 2019, the O-SII buffer requirement was 2 percent for four banks, 1.5 percent for one bank, while the remaining four institutions had to maintain a rate of 1 percent. As of January 2020, the number of banks which are applied an O-SII buffer rate of 2 percent rose to five, after the increase from 1.5 percent to 2 percent in the O-SII buffer rate applicable to OTP Bank, in correlation with the level of the buffer that the parent bank must establish in its home country.

3.2.1.3. The systemic risk buffer (SyRB)

Implementation framework of the macroprudential instrument

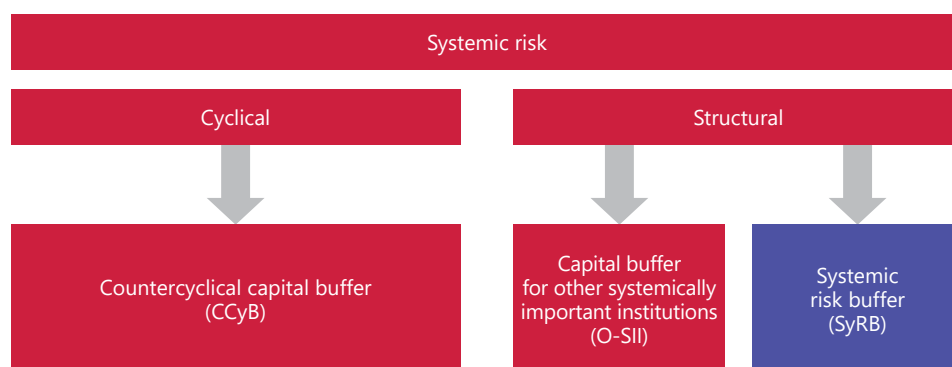
The systemic risk buffer (SyRB) is designed to cover losses incurred as a result of certain structural risks of a systemic nature becoming manifest, which may affect financial stability, with effects on the real economy. Within the range of measures available to national macroprudential authorities, the SyRB may be used to achieve the intermediate objective

³⁰ NBR Order No. 10/2019 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. 933 of 20 November 2019 (which entered into force as at 20 November 2019).

of “strengthening the resilience of financial infrastructures”. Other instruments used to achieve the same intermediate objective are, for instance, margin and haircut requirements on CCP clearing, as well as increased disclosure³¹.

The SyRB, the same as the O-SII buffer, is meant to contribute to mitigating the structural systemic risk. The difference between them is that the O-SII buffer has the role of mitigating systemic risk generated by the size of credit institutions, whereas the SyRB manifests its structural nature in terms of risk distribution across the financial system, by type of exposure, institution, sector or any other form of manifestation of structural vulnerabilities. The position of each buffer in the European/national macroprudential policy architecture is illustrated in Figure 3.1.

Figure 3.1. Macroprudential policy architecture – layout of capital buffers



Source: ESRB

The SyRB was designed as a flexible instrument available to national macroprudential authorities, given that the CRD IV European legislative package does not provide for limitations to its application. Hence, the national authorities may select, taking into account financial system specificities, the indicators based on which the buffer calibration is decided upon. This macroprudential tool may be applied to exposures of institutions, groups of institutions or the banking sector as a whole, on a consolidated, sub-consolidated or individual basis. In this sense, taking into consideration the specific vulnerabilities identified across the domestic financial system, the NBR may impose – at the recommendation of the NCMO – different levels of the buffer for various financial system subcomponents.

In terms of operationalising the SyRB, the ESRB recommends three specific categories of risks that can be mitigated following the calibration of the tool: (i) propagation and amplification of shocks across the financial system, (ii) structural characteristics of the banking system, and (iii) risks to the banking sector from the real economy.

³¹ Recommendation of the European Systemic Risk Board of 4 April 2013 on intermediate objectives and instruments of macroprudential policy (ESRB/2013/1) – https://www.esrb.europa.eu/pub/pdf/recommendations/ESRB_2013_1.en.pdf.

The experience across the EU

The EU-wide experience so far shows Member States' increased interest in using the systemic risk buffer, given the high degree of flexibility in its implementation and calibration. Thus, by end-2019, 17 countries had already operationalised this macroprudential instrument (Table 3.5). Finland and the UK introduced a systemic risk buffer during 2019, while countries such as Hungary, Austria, Denmark or the Netherlands adjusted the buffer rates. As regards the buffer level, most countries have opted for a 3 percent threshold, given the higher complexity of the notification and authorisation procedures for values above this threshold. The only exception is Norway, which applies rates of up to 5 percent for banks identified as systemically important and which will implement the provisions of the CRD IV regulatory framework starting 2020.

Table 3.5. SyRB arrangements in Europe

Member State	Rate (%)	Exposures to which the SyRB applies	Systemic risk category
Austria	1 – 2	all exposures	I + II
Bulgaria	3	domestic exposures	III
Croatia	1.5 – 3	all exposures	I + III
Czechia	1 – 3	all exposures	I + II + III
Denmark	1 – 3	all exposures	I
Denmark	3	domestic exposures (Faroe Islands)	III
Estonia	1	domestic exposures	II + III
Finland	1 – 3	all exposures	I + II + III
Hungary	0	domestic exposures	II
Iceland	3	domestic exposures	III
Liechtenstein	2.5	all exposures	I + II + III
The Netherlands	3	all exposures	I
Norway	2 – 5	all exposures	I + II + III
Poland	3	domestic exposures	III
Romania	1 – 2	all exposures	I + III
Slovakia	1	domestic exposures	I + III
Sweden	3	all exposures	I + II
UK	1 – 2	all exposures	I

Note: Systemic risk category refers to: I – risks stemming from structural characteristics of the banking sector; II – risks stemming from the propagation and amplification of shocks within the financial system; III – risks to the banking system stemming from the real economy.

Source: ESRB

There is an elevated degree of heterogeneity across Member States in terms of both the buffer level (usually ranging between 0.5 percent and 3 percent) and the risks based on which the calibration decisions are taken. However, national authorities use the SyRB primarily to address the vulnerabilities stemming from structural characteristics of the banking sector (category I risk), followed by risks stemming from the real economy (category III). This latter risk category is invoked by the majority of Central and Eastern Europe countries (Romania,

Czechia, Poland, Slovakia, Croatia), considering that higher domestic macroeconomic volatility or the emergence of external shocks may have a significant impact on banking sectors in the region.

Some countries have decided to apply the same rate for all institutions, whereas others have applied different rates depending on each financial institution's systemic risk magnitude, similarly to the manner of implementing the capital buffer for systemically important institutions. However, the practice of covering risks regarding the systemic importance of credit institutions using the SyRB will no longer be possible in the period ahead, as a result of changes to the CRD IV via the legislative package aimed at mitigating risks in the banking sector (see Box D below for further details on the key changes).

Box D. Changes to the SyRB operationalisation framework by implementing the CRD V/CRR II package

The systemic risk buffer (SyRB) was introduced in the CRD IV legislative package in 2013 to prevent or mitigate long-term non-cyclical systemic risks, other than those generated by excessive lending. Nevertheless, recent years' experience has hinted at the overlapping of the three structural buffers (G-SII, O-SII and SyRB), which called for the need to narrow, specialise and separate these macroprudential tools.

The set of measures in the new CRD V legislative package aims to provide some flexibility in using the SyRB at a sectoral level, thus enabling the exclusive targeting of a sector where imbalances build up, such as the real estate sector – historically proven as a major source of episodes of financial stress. Hence, even if the previous SyRB version also allowed for the targeting of exposures to a particular sector of the economy, the new legislative framework enhances the aspects pertaining to the buffer calibration depending on risk, reciprocity, transparency and implementation speed. Furthermore, given the possibility of a targeted use of the buffer, an explicit possibility was also introduced to apply multiple buffer rates for all exposures or for sets/subsets of exposures, so as to address different sources of structural systemic risk, thus resulting in a combined SyRB rate. The CRD V mentions a set of sectoral exposures that the SyRB can be applied to, while the EBA is to issue – by 30 June 2020 and after consultation with the ESRB – the guidelines on the subsets of exposures to which the SyRB may be applied.

In order to draw a clear line between the O-SII buffer and the SyRB, the new CRD V framework no longer allows for the use of the latter to address risks stemming from the systemic importance of institutions. Therefore, the rates of the two structural buffers will be cumulative under the new regulatory framework, the option to apply the maximum rate being eliminated. Moreover, the new legislative package provides for a series of changes to the cumulated buffer threshold and to the related notifications. The new legislation sets a new threshold of 5 percent, made up of the rates of the two structural buffers: G-SII/O-SII and SyRB. If the sum of the SyRB rate and that of the O-SII/G-SII buffer applicable to a credit institution exceeds this level, the competent or designated

authority planning to implement the measure will have to obtain the authorisation of the European Commission, after the EBA and the ESRB have formulated their opinion.

Since a clear delineation between the structural and cyclical components is difficult to achieve in practice, there is the risk that certain opportune interventions be delayed by the lack of solid arguments regarding the structural nature of systemic risk. Thus, the CRD V sets forth that the systemic risk buffer should not overlap with the countercyclical capital buffer, in the sense that it needs to address other risks than those regarding excessive lending during economic upturns.

With a view to coordinating macroprudential measures at a European level, when a country requests the reciprocation of the systemic risk capital buffer, it will be determined whether systemic risk is already taken into account in the calibration of the other Member States' own SyRB. If they are found to be distinct risks, the buffer for which reciprocation has been requested adds to the nationally-applicable buffer; where the same risk is targeted, the higher rate of the two systemic risk buffers shall apply.

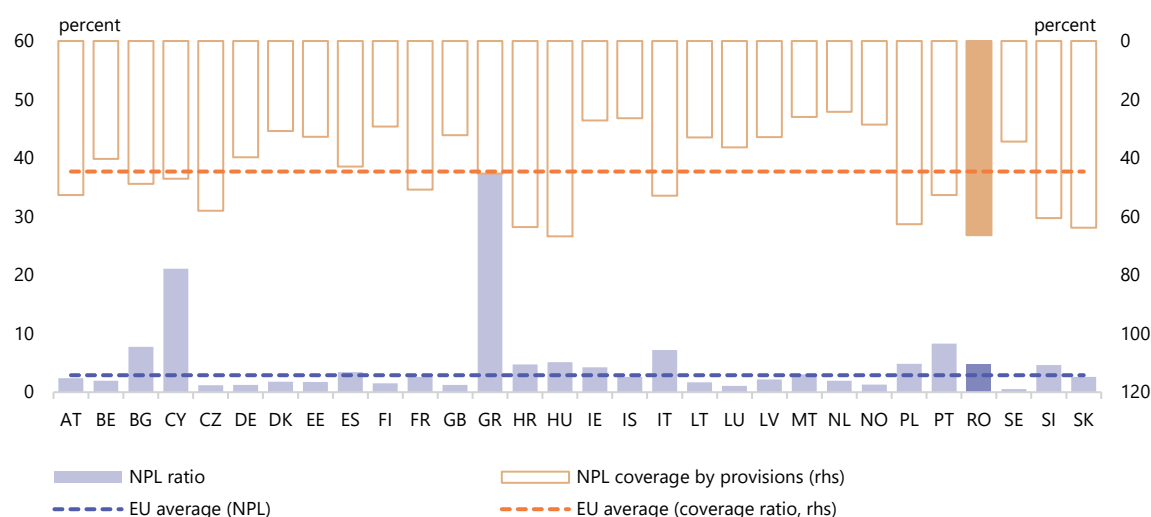
As regards notification requirements, where the combined SyRB rate stands below 3 percent, the competent or designated authority shall notify the ESRB one month prior to publishing the decision. Where the combined rate ranges between 3 and 5 percent, the competent or designated authority shall request the European Commission's opinion and comply with it or provide arguments for non-compliance. If the cumulated rate exceeds the 5 percent threshold, an authorisation from the European Commission is required, after the ESRB has formulated its opinion. The EBA may also submit an opinion to the Commission. In the case of branches of credit institutions in other Member States, the national authorities setting a systemic risk buffer rate may request the ESRB to issue a recommendation to one or several Member States that may recognise the SyRB rate.

In terms of communication, each competent or designated authority shall publish at least the following information on its website: the systemic risk buffer rate or rates, the institutions to which the systemic risk buffer applies, the exposures to which the systemic risk buffer rate or rates apply, a justification for setting or resetting the systemic risk buffer rate or rates, the date from which the institutions shall apply the setting or resetting of the systemic risk buffer, and the names of the countries where exposures are recognised.

Implementation in Romania

The systemic risk buffer was implemented in Romania in December 2017, following the issuance by the National Committee for Macroprudential Oversight of Recommendation No. 9/2017 on the systemic risk buffer in Romania. This recommendation was addressed to the National Bank of Romania, effective 30 June 2018. In this context, the NBR launched the implementation process 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.

Chart 3.8. NPL ratio and NPL coverage by provisions – European comparison (September 2019)



Source: EBA

The underlying objectives of this recommendation relate to adequately managing credit risk at a macroprudential level and enhancing banking sector resilience to potential unanticipated shocks. At the level of each credit institution, the degree of fulfilment of the aforementioned objectives is measured through indicators reflecting asset quality (non-performing loan ratio and coverage ratio). Moreover, the introduction of the systemic risk buffer was also warranted by a domestic financial environment marked by the following vulnerabilities: (i) the issue of non-performing loans, a hotly debated topic among decision-makers both in the European Union and worldwide, (ii) the tensions surrounding domestic macroeconomic equilibria, and (iii) lingering uncertainties about the regional and international context.

According to the methodology, the buffer may be set at 0 percent, 1 percent or 2 percent, depending on the values of the indicators on the non-performing loan ratio and the coverage ratio, as against the reference thresholds. The methodology employed for determining each buffer level is presented in Table 3.6.

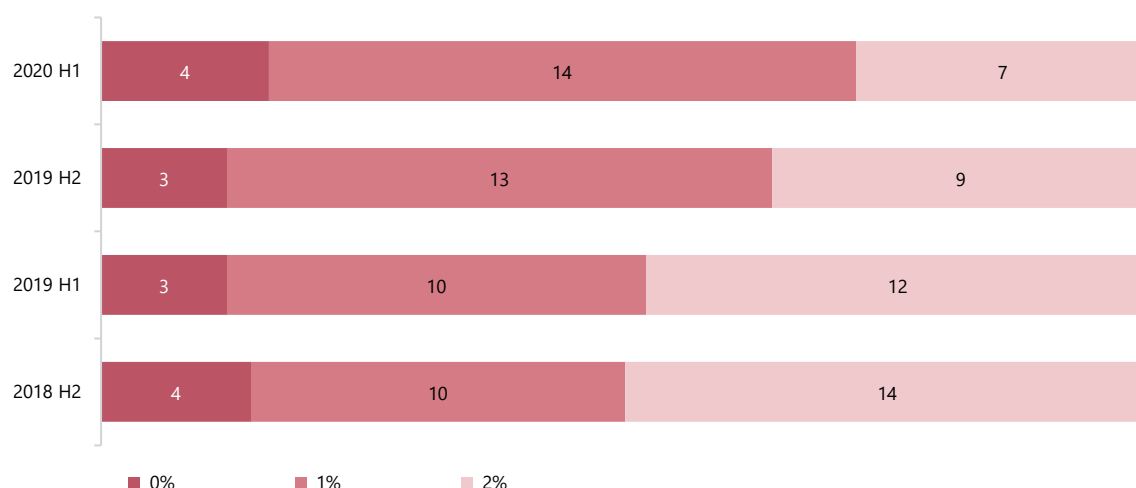
Table 3.6. Calculation methodology of the systemic risk buffer

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

Source: NCMO, NBR

A major methodological aspect is that the calculation base of these indicators used for buffer calibration consists in an average value recorded over a 12-month period previous to the buffer maintenance period, determined based on a standardisation set by NBR Order No. 8/2018 on the systemic risk buffer (published in *Monitorul Oficial al României*, Part I,

Chart 3.9. Breakdown of credit institutions by SyRB rate



Source: NBR

No. 1031 of 5 December 2018). Pursuant to NCMO Recommendation No. R/7/2018 on the systemic risk buffer in Romania, the buffer is recalibrated half-yearly, to enable real-time monitoring so as to assess progress at both individual and consolidated levels. Another methodological aspect is that the base on which the systemic risk buffer is applied consists of all exposures of the credit institution, with the buffer being implemented at the highest consolidation level.

Thus, the SyRB and the O-SII buffers are applied to the same calculation base, namely the level of credit institutions' total exposures. Therefore, in line with the provisions of the regulatory framework in force, the capital requirement for each credit institution is determined as the highest rate of the two structural capital buffers. That is why SyRB-related capital requirements are more important for medium- or small-sized credit institutions, because for systemically important institutions the additional requirement to that of the O-SII buffer is usually low or even nonexistent (where the SyRB rate is the same as or lower than the O-SII rate). Hence, the maximum capital requirement for a credit institution, considering the two structural buffers implemented in Romania, is of 2 percent of all risk exposures.

In recent years, as a result of credit institutions' sustained efforts in the balance sheet clean-up process, the non-performing loan ratio has trended downwards, falling below the 5 percent threshold in 2019 (Chart 3.8). In spite of the favourable dynamics of this indicator, Romania still stands above the EU average of 2.9 percent.

At the same time, Romania boasts one of the highest coverage ratios in the EU. Specifically, it reached 66.7 percent in September 2019, significantly above the average calculated for EU Member States, where NPL coverage by provisions further stands below 45 percent.

The breakdown of credit institutions by SyRB rate is indicative of favourable dynamics recorded ever since the introduction of the macroprudential tool, as the number of entities with a 2 percent applicable rate halved by end-2019 (Chart 3.9). While a large number of

credit institutions in the weakest category moved to the group of banks with a 1 percent SyRB applicable rate, the number of entities to which the 0 percent rate applies has remained relatively constant. Consequently, although the NPL ratio and the coverage ratio witnessed visibly positive dynamics at a consolidated level, developments are still heterogeneous at an individual level, requiring additional efforts in the balance sheet clean-up process to ensure that SyRB rates are distributed as close to zero.

3.2.2. Other macroprudential instruments

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

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

In order to avoid regulatory arbitrage at the level of the EU Member States, the ESRB recommends the relevant authorities in every country to recognise the macroprudential measures adopted by other Member States. The reciprocation mechanism ensures that exposures to similar risks are subject to the same macroprudential treatment, regardless of the Member State where they are located. In this vein, whenever a Member State adopts a macroprudential measure, it may submit a request for reciprocation and the ESRB, in its capacity as macroprudential authority at EU level, may issue a recommendation to the other Member States.

The national macroprudential authorities may respond to such a recommendation either by implementing the recommendation or by justifying the reasons why it is not necessary to implement it. The main factor underlying this decision is the level of exposures of credit institutions in that Member State to a specific category of borrowers in the Member State requesting reciprocation. In order to make this endeavour easier, with the submission of the request for reciprocation, the Member State in question will also send the materiality thresholds, expressed in both absolute and relative terms, from which it is recommended to implement the measure by reciprocation.

The reciprocation measure should be implemented in those Member States where the level of exposures in the jurisdiction that submitted the request is above the materiality threshold. Nevertheless, should the measure be deemed as appropriate, with a view to safeguarding financial stability, the other Member States may also decide to implement it through voluntary reciprocity. The measures that are subject to recognition through voluntary reciprocity may be imposed on banks holding exposures in the jurisdiction requesting to reciprocate a measure, either directly (cross-border exposures) or through their branches. Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures is the framework underlying the implementation of voluntary reciprocity.

In 2019, the NCMO analysed and approved two decisions on recognising the macroprudential measures adopted by France and Sweden. The macroprudential measure taken by France was included in Recommendation ESRB/2018/8 amending Recommendation ESRB/2015/2, published in the Official Journal of the European Union on 1 February 2019. The measure consists in a tightening of the large exposure limit provided for in Article 395(1) of Regulation (EU) No 575/2013, applicable to exposures to highly-indebted large non-financial corporations having their registered office in France to 5 percent of eligible capital. This measure shall be applicable to all systemically important institutions (O-SII or G-SII) at the highest level of consolidation. To implement this measure, a non-financial corporation is considered as large if its original exposure is equal to or larger than EUR 300 million, and a financial corporation is considered highly-indebted if it has a leverage ratio that is greater than 100 percent and a financial charges coverage ratio that is below three. The proposed materiality threshold for exposures of financial institutions (O-SII or G-SII), considered at the highest level of consolidation relative to the non-financial corporations sector in France is EUR 2 billion.

The macroprudential measure of Sweden was subject to Recommendation ESRB/2019/1 of 15 January 2019 amending Recommendation ESRB/2015/2. The measure consists in imposing a floor of 25 percent for the exposure-weighted average of the risk weights applied to the portfolio of retail exposures to obligors residing in Sweden secured by immovable property. This measure is applicable to all credit institutions authorised in Sweden and using the Internal Ratings Based (IRB) Approach. At the same time, the Swedish authority proposed that banks in Member States with exposures to the Swedish immovable property market, either through branches or through direct cross-border exposures should use the same treatment. The materiality threshold for the exposures of a credit institution to a Member State on the Swedish retail immovable property market is SEK 5 billion.

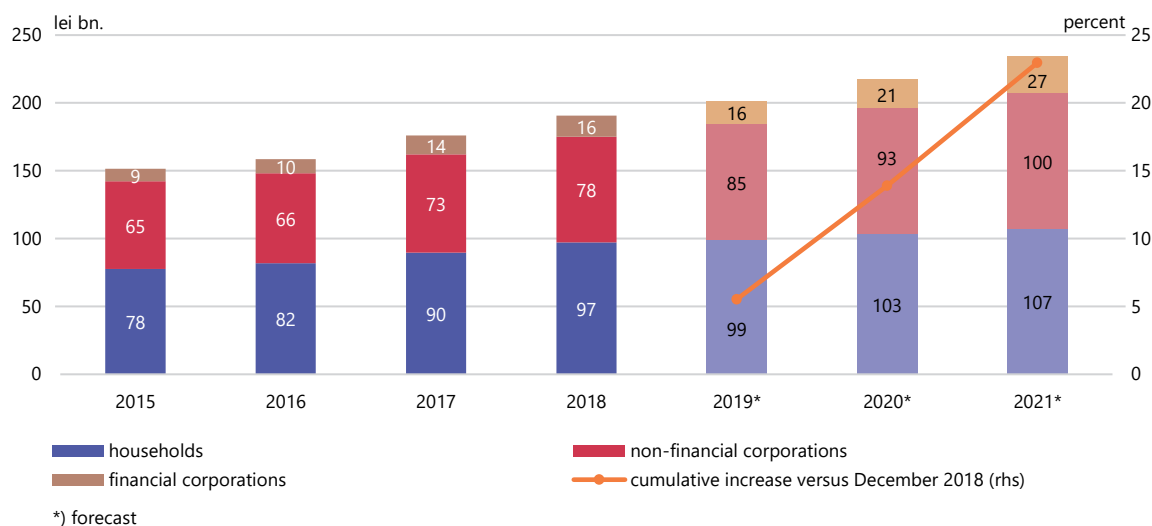
Considering that the exposures of credit institutions (O-SII) in Romania to the non-financial corporations sector in France are well below the materiality threshold, and exposures such as real estate loans of Romanian credit institutions granted to debtors residing in Sweden are well below the threshold proposed by Sweden's macroprudential authority, the NCMO decided not to reciprocate the macroprudential measures taken by France and Sweden³². Against this backdrop, the NCMO recommended the NBR to monitor on a regular basis the credit institutions' cross-border exposures to other EU Member States and take the necessary steps where such exposures become material.

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

The ESRB is mainly responsible for the macroprudential oversight of the EU financial system in order to prevent and mitigate the potential for a build-up of systemic risks. In this respect, one of the important matters that needs to be analysed is the evolution of

³² NCMO Decision No. D/1/2019 on not applying through voluntary reciprocity the macroprudential policy measures adopted by France and Sweden.

Chart 3.10. Lending forecast at aggregate level and by component



Source: NBR, credit institutions' reports on funding plans

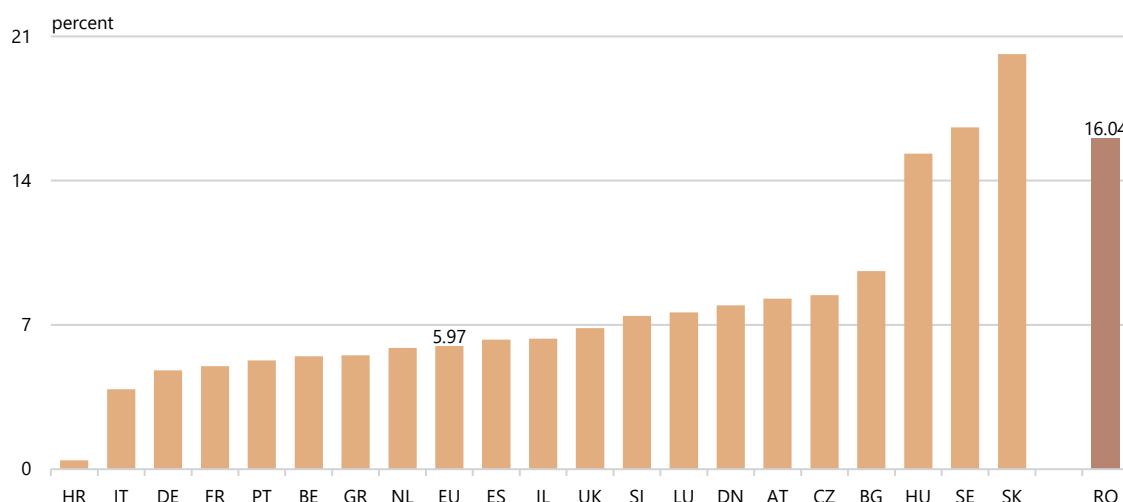
financial sector's lending to the real economy. As a result, the ESRB issued Recommendation ESRB/2012/2 on funding of credit institutions, with a view to ensuring the sustainability of funding plans and the effective funding risk management by credit institutions. Based on Subrecommendation A3 of Recommendation ESRB/2012/2, the national supervisory authorities and other authorities with a macroprudential mandate are recommended to assess the impact of credit institutions' funding plans on the flow of credit to the real economy.

In this context, at national level, following the issue of NCMO Recommendation No. 10/2017 on the impact of credit institutions' funding plans on the flow of credit to the real economy, the National Bank of Romania has made annual assessments of the impact of credit institutions' funding plans on the flow of credit to the real economy, which are presented to the NCMO General Board. The results of the 2019 assessment were put on the agenda of the NCMO General Board's meeting of 16 December 2019.

The assessment of the Romanian banking sector is made on the basis of the data reported by the seven largest banks, namely Banca Transilvania, BCR, BRD, Raiffeisen, UniCredit, CEC Bank, Alpha Bank.

According to the funding plans submitted by credit institutions in 2019, banking activity will make a positive contribution 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 2018 – December 2021) shows the following forecasted lending developments: (i) increase in the financing of both real and financial sectors, (ii) the three-year cumulative rise of 18.5 percent in credit to the real sector, estimated for both segments, i.e. households (up 10.4 percent) and non-financial corporations (up 28.6 percent), (iii) a faster growth pace of lending to financial corporations (three-year cumulative figure of 73.3 percent) and (iv) the three-year 16 percent expansion in assets, due mainly to lending to the real sector.

Chart 3.11. Projected cumulative growth of assets in the EU³³ (2019-2021)



Source: EBA, credit institutions' reports on funding plans

Housing loans to residents will further play an important part in banks' lending policy (up 11.5 percent), maintaining its share in total household loans (66 percent at end-2021). A marginal change in banks' corporate lending strategy is expected over the next three years, the share of loans to SMEs declining further, from 54.1 percent in December 2018 to 51.4 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 (16 percent) in the balance sheets of the seven banks are loans to the real sector. Loans to households and non-financial corporations contribute by 3 percentage points and 6.5 percentage points respectively to the rise in total assets. These dynamics changed versus the previous reports. In 2017, banks reported a balanced growth structure between loans to households and loans to non-financial corporations, both of them hovering around 5 percentage points. The latest data point to banks' increased focus to corporate lending, both to financial and non-financial corporations, which could indicate a change in the business model of main credit institutions in Romania.

Based on the European comparison, Romania ranks among the top EU countries, coming in third after Slovakia and Sweden, in what concerns the cumulative increase in assets over the three-year period. As for the dynamics of household lending, Romania stood below the EU average in 2019, but is seen reaching a level very close to the EU average in 2020 and 2021. Conversely, in terms of the growth rate of loans to non-financial corporations, Romania ranks high among EU countries in all the three years under review.

³³ Based on the data in the *EBA Report on Funding Plans* published in August 2019. Romania was excluded from the 2019 analysis, as two of the three largest Romanian banks consolidate information at European group level. Eight other EU Member States are in a similar situation. The funding plans reported at national level by the seven banks were used to complete the information.

Structure of liabilities and sources of loan financing

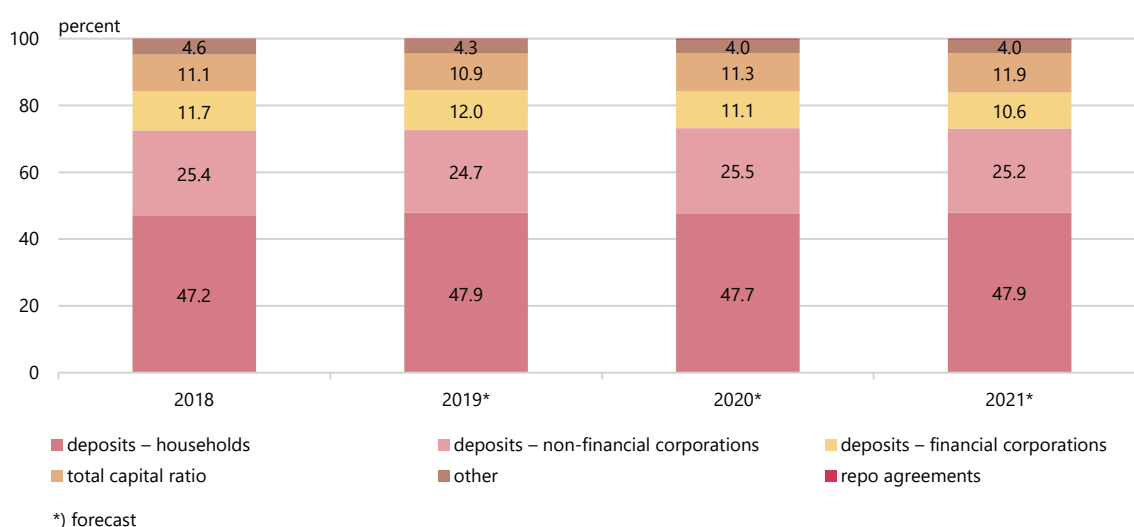
According to funding plans, banks aim to cover the growth of loans to the private sector of approximately lei 32 billion first through (i) higher household deposits, (ii) increasing non-financial corporations' deposits and (iii) rising equity.

In the period between 2018 and 2021, deposits will remain the main sources of loan financing, their share in liabilities remaining unchanged at approximately 80 percent. Financing via long-term debt security issues will be further insignificant in absolute terms, despite the prospects showing a trebling of its figure in the next three years up to 2 percent of liabilities.

Romania ranks among top ten EU countries in what concerns the share of deposits in total liabilities and the rates of increase of deposits in the next three years, which are above the EU average. Credit institutions' funding plans could be used in formulating guidelines on macroprudential policies. Based on the data provided by credit institutions, forward-looking information can be extracted 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 the macroprudential instruments, thereby increasing their efficiency and effectiveness.

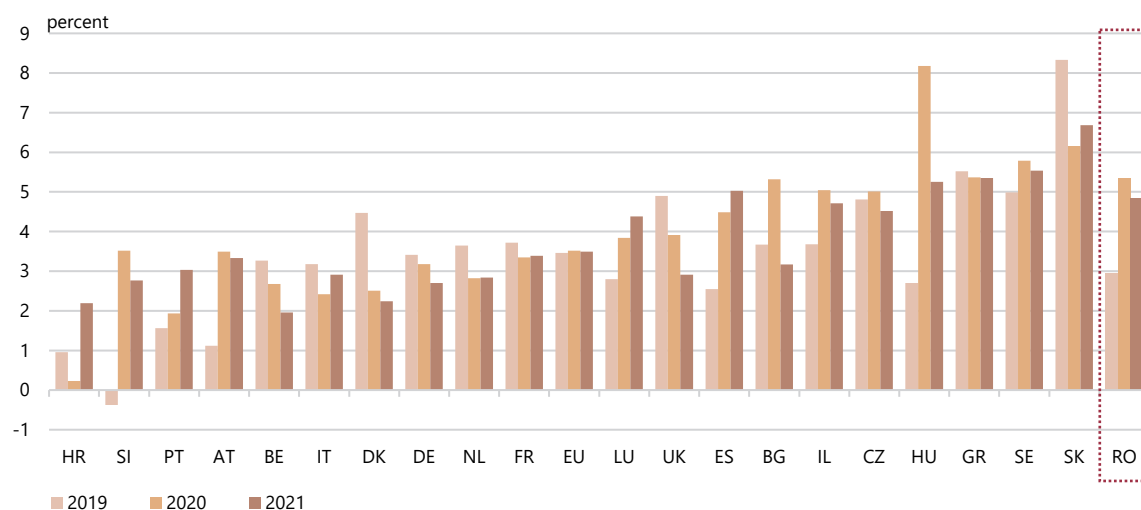
In addition to the funding plans of the seven reporting systemically important banks, the National Bank of Romania also monitors closely the lending activity of non-resident banks to Romanian companies. The monitoring of credit flows of these banks aims to prevent the potential effects on financial stability, such as the excessive increase in

Chart 3.12. The current and forecasted liabilities structure



Source: NBR, credit institutions' reports on funding plans

Chart 3.13. Projected growth rates of deposits from households and non-financial corporations



Source: EBA

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.

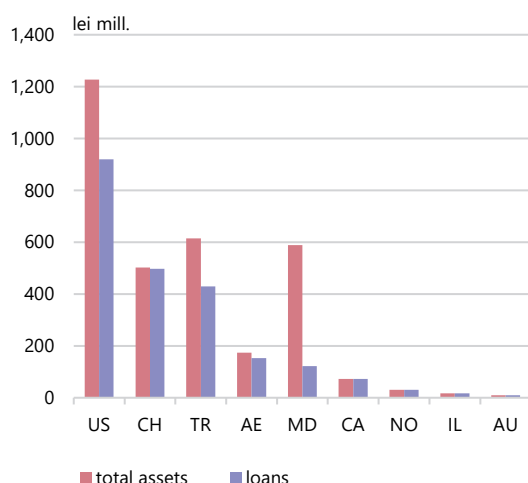
3.2.2.3. Assessment of materiality of third countries for the Romanian banking sector in relation to the recognition and setting of countercyclical buffer rates

Pursuant to Recommendation ESRB/2015/1 on recognising and setting countercyclical buffer rates for exposures to third countries, transposed into national law by 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, the NBR assesses on a regular basis the exposures of the Romanian banking sector to third countries and submits them to the NCMO for analysis.

The analysis to identify material third countries is made at both national and European levels by the competent authorities and by the ESRB. Where one of the states subject to supervision reports excessive credit growth, Directive 2013/36/EU (CRD IV) allows designated authorities, under certain circumstances, to set a countercyclical buffer rate for exposures to a third country that domestically authorised institutions have to apply to calculate their institution-specific countercyclical capital buffer.

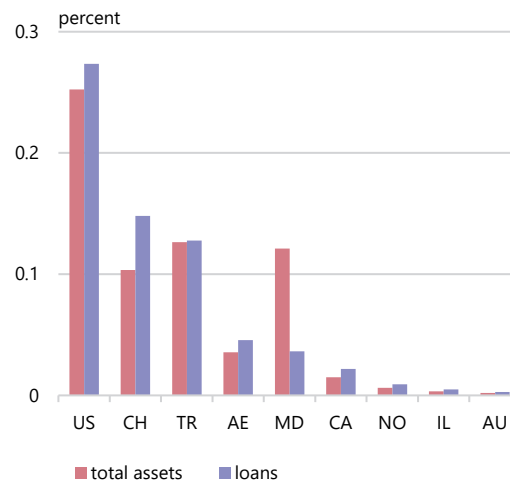
The methodology for identifying the material third countries recommended by the ESRB is based on three exposure metrics: (1) risk-weighted-assets; (2) original exposure; and (3) defaulted exposures. According to the Europe-wide harmonised methodology, these metrics are calculated by using COREP reporting forms. A third country is defined as material when meeting one of the following two criteria: (i) the exposures are higher than 1 percent for at least one of the aforementioned metrics in each of the two quarters

Chart 3.14. Total exposures and credit exposures to third countries (value)



Source: NBR

Chart 3.15. Total exposures and credit exposures to third countries (percent)



Source: NBR

preceding the reference date, and (ii) the arithmetic mean of exposures to the third country in the eight quarters preceding the reference date is at least 1 percent for at least one of the three metrics.

The ESRB makes this assessment at EU level, by using aggregate data from credit institutions' reports. Furthermore, the ESRB centralises the data on the third countries identified by each national authority. At European level, the following third countries were identified as material as of 2019: the United States of America, Hong Kong, Singapore, Switzerland, China, Turkey, Brazil and Russia.

The ESRB methodology has the disadvantage that credit institutions must fill out the COREP forms on the geographical distribution of exposures by country only where the ratio of non-domestic original exposures to total original exposures (both domestic and non-domestic) is equal to or higher than 10 percent. Given that the Romanian banking system has a high concentration of exposures to the domestic market, the analysis made for Romania based on this methodology yielded inconclusive results.

In this context, the analysis at the national level also included a series of additional indicators. Thus, based on the data from the monetary balance sheets of credit institutions, on 31 December 2018, exposures to third countries accounted for 0.7 percent of total loans. The breakdown by country (Charts 3.14 and 3.15) shows that the US is the most important non-EU financial partner of Romanian banks, ahead of Switzerland, Turkey, the United Arab Emirates and the Republic of Moldova. However, it is worth mentioning that most exposures come from exposures to financial institutions rather than from loans to the real sector.

Furthermore, the analysis also used data sets in COREP reports, other than those recommended by the ESRB methodology. These data do not allow for the breakdown of exposures by home country, providing instead information on the composition of domestic banks' exposures. Thus, on 31 December 2018, the share of non-domestic original exposures

(to both Member States and third countries) of the Romanian banking sector in total exposures stood at roughly 7 percent, while total exposures to third countries generated a low capital requirement of 0.13 percent. The analysis was also supported by the data from FINREP reports showing that at the end of the previous year, loans to non-financial corporations and households in Romania accounted for 99.4 percent of total corporate loans.

In this light, the NCMO General Board issued NCMO Decision No. D/2/2019 on identifying material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates, stating that no material third countries for the Romanian banking sector were identified in 2019.

4. Implementation of macroprudential policy

In order to implement the measures necessary for preventing or mitigating systemic risks at a national level, in accordance with the provisions of Art. 4 para. 1 of Law No. 12/2017 on the macroprudential oversight of the national financial system, the National Committee for Macroprudential Oversight (NCMO) is empowered to: (a) issue recommendations and warnings to the National Bank of Romania and the Financial Supervisory Authority, in their capacity of national financial supervisory authorities at a sectoral level and (b) issue recommendations to the Government for the purpose of safeguarding financial stability. The recipients shall inform the NCMO of the measures adopted or, in cases where the recipients have not taken such measures, they should provide adequate justification for any inaction. If the NCMO finds that its recommendation has not been followed up or that the recipients have not adequately justified their inaction, it shall inform the recipients under strict confidentiality (Art. 4 para. (3) of Law No. 12/2017 on the macroprudential oversight of the national financial system).

Pursuant to Regulation No. 1 of 9 October 2017 on the organisation and functioning of the National Committee for Macroprudential Oversight, the General Board has the power to monitor the measures taken by the recipients following the adopted warnings and recommendations through the two Technical Committees³⁴. The Committees assess the adopted measures and/or the justifications for not adopting the measures that were previously communicated by the recipients of the issued recommendations, and inform the General Board.

In this context, regular analyses on the manner of implementation of the recommendations issued by the NCMO are prepared. Specifically, in the period from December 2018 to December 2019, the NCMO issued six recommendations, as follows:

- ➡ in its meeting of 17 December 2018 – NCMO Recommendation No. R/8/2018 on the countercyclical capital buffer in Romania;
- ➡ in its meeting of 6 June 2019 – NCMO Recommendation No. R/1/2019 on the countercyclical capital buffer in Romania and NCMO Recommendation No. R/2/2019 on the strategy regarding the implementation of the International Financial Reporting Standards (IFRS) by non-bank financial institutions (NBFIs) as a basis of accounting and for preparing individual financial statements;

³⁴ Pursuant to the provisions of Art. 5 of Law No. 12/2017 on the macroprudential oversight of the national financial system, the NCMO organisational structure includes the Technical Committee on systemic risk and the Technical Committee on financial crisis management.

- ➡ in its meeting of 11 September 2019 – NCMO Recommendation No. R/3/2019 on the countercyclical capital buffer in Romania and NCMO Recommendation No. R/4/2019 on the capital buffer for other systemically important institutions in Romania;
- ➡ in its meeting of 16 December 2019 – NCMO Recommendation No. R/5/2019 on the countercyclical capital buffer in Romania.

In order to assess the manner in which the requirement set forth in Art. 4 para. (2) of Law No. 12/2017 on the macroprudential oversight of the national financial system was fulfilled, the Technical Committee on systemic risk carried out an analysis on how the recommendations issued by the National Committee for Macroprudential Oversight between December 2018 and December 2019 were implemented, based on the information received from the recipients. The analysis result is summarised in the Annex (Table A.1), which also comprises the recommendations issued in the previous period, which were not completed or which are applicable on a permanent basis, involving the preparation of regular assessments.

Annex

Table A.1. The developments in the implementation of the recommendations issued by the NCMO from December 2018 to December 2019, as well as of the recommendations issued in the previous period, which were not completed or which are applicable on a permanent basis

NCMO recommendation	Addressee	Manner of implementation
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 (permanent basis)	NBR	The NCMO recommendation was implemented by regular assessments made by the NBR, which were analysed and decided upon by the NCMO General Board, as follows: (i) NCMO Decision No. D/8/2018 on identifying material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates and (ii) NCMO Decision No. D/2/2019 on identifying material third countries for the Romanian banking sector in terms of recognising and setting countercyclical buffer rates. According to these decisions, for 2018 and 2019, no material third countries were identified for the banking sector in Romania in terms of recognising and setting countercyclical buffer rates.
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 recommendation by developing and conducting a survey on real estate and commercial real estate markets in Romania, which was sent to: (1) credit institutions in Romania playing an important role in the real estate sector, (2) non-financial corporations participating directly or indirectly in the Romanian real estate market (77 companies), (3) insurance companies, pension funds and investment funds. The results of the survey were published in the June and December 2018 editions of the <i>Financial Stability Report</i> (published on the NBR website: http://www.bnr.ro/Regular-publications-2504.aspx). Considering all the difficulties encountered by Member States when collecting information, primarily that on the commercial real estate market, the European Systemic Risk Board issued Recommendation of 21 March 2019 amending Recommendation ESRB/2016/14 on closing real estate data gaps (ESRB/2019/3), which sets forth new deadlines for submitting to the ESRB the reports on the data availability for a number of indicators (by 31 December 2020, national macroprudential authorities are requested to deliver to the ESRB and the Council a final report on the implementation of recommendations).
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 (permanent basis)	NBR	The recommendation was implemented through the assessments for 2018 (based on the reports with the reference date of 31 December 2017) and for 2019 (based on the reports with the reference date of 31 December 2018) on the impact of credit institutions' funding plans on the flow of credit to the real economy, also in terms of macroprudential policy (the analyses showed the projected developments in credit to the real sector and the level of financial intermediation, total debt-to-GDP ratio, the dynamics of the funding and liquidity profile of credit institutions, the impact of credit institutions' funding plans on solvency ratios, etc.).

NCMO recommendation	Addressee	Manner of implementation
NCMO Recommendation No. R/4/2018 on implementing macroprudential instruments for achieving the intermediate objectives included in the Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight (permanent basis)	NBR, FSA	<p>The NBR makes regular assessments of the risks and vulnerabilities in the financial system and the real economy, as well as of the appropriateness of implementing/recalibrating/deactivating macroprudential instruments. 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); the systemic risk buffer (SyRB); requirements for the loan-to-value ratio (LTV); requirements for the debt service-to-income ratio (DSTI). The FSA makes regular assessments of the risks and vulnerabilities identified in the three non-bank financial markets under its supervision, as well as of the appropriateness of implementing the existing macroprudential instruments. To date, the following macroprudential policy measures have been implemented:</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/6/2018 on the capital buffer for other systemically important institutions in Romania	NBR	The recommendation was implemented by NBR Order No. 9/2018 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs), published in <i>Monitorul Oficial al României</i> , Part I, No. 1110/28 December 2018 (entry into force: 28 December 2018).
NCMO Recommendation No. R/8/2018 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation by maintaining the countercyclical capital buffer rate at 0 percent as set forth in NBR Order No. 12 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). Furthermore, the NBR closely monitors the developments in the macroeconomic and financial framework, including in terms of indebtedness at aggregate and sectoral level.
NCMO Recommendation No. R/1/2019 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation by maintaining the countercyclical capital buffer rate at 0 percent as set forth in NBR Order No. 12 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). Furthermore, the NBR closely monitors the developments in the macroeconomic and financial framework, including in terms of indebtedness at aggregate and sectoral level.

NCMO recommendation	Addressee	Manner of implementation
NCMO Recommendation No. R/2/2019 on the strategy regarding the implementation of the International Financial Reporting Standards (IFRS) by non-bank financial institutions (NBFIs) as a basis of accounting and for preparing individual financial statements	NBR	The recommendation was implemented by NBR Order No. 8/2019 on the application of International Financial Reporting Standards by non-bank financial institutions (published in <i>Monitorul Oficial al României</i> , Part I, No. 908/11 November 2019, entry into force: 11 November 2019).
NCMO Recommendation No. R/3/2019 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation by maintaining the countercyclical capital buffer rate at 0 percent as set forth in NBR Order No. 12 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). Furthermore, the NBR closely monitors the developments in the macroeconomic and financial framework, including in terms of indebtedness at aggregate and sectoral level.
NCMO Recommendation No. R/4/2019 on the capital buffer for other systemically important institutions in Romania	NBR	The recommendation was implemented by NBR Order No. 10/2019 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs), published in <i>Monitorul Oficial al României</i> , Part I, No. 933/20 November 2019 (entry into force: 20 November 2019).
NCMO Recommendation No. R/5/2019 on the countercyclical capital buffer in Romania	NBR	The NBR implemented the NCMO recommendation by maintaining the countercyclical capital buffer rate at 0 percent as set forth in NBR Order No. 12 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). Furthermore, the NBR closely monitors the developments in the macroeconomic and financial framework, including in terms of indebtedness at aggregate and sectoral level.

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	Finanial 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

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