



NATIONAL
BANK OF
ROMANIA

Annual Report 2021

Annual Report 2021

NOTES

The Annual Report for 2021 was examined and approved by the National Bank of Romania Board on 27 June 2022 and was submitted to the Parliament of Romania pursuant to Law No. 312/2004 on the Statute of the National Bank of Romania.

The statistical data used are those available at 17 June 2022. Some of the data for the period covered are provisional and will be updated as appropriate in the subsequent publications of the National Bank of Romania. Totals may not add up and minor differences from the percentage changes in charts and tables may occur, due to rounding.

The source of data used in charts and tables was indicated only when data were provided by other institutions.

All rights reserved.

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

National Bank of Romania,
25 Lipscani Street, postal code 030031, Bucharest
Telephone: +4021/312 43 75; Fax: +4021/314 97 52
Website: <http://www.bnr.ro>

ISSN 1453-3928 (print)
ISSN 1584-0921 (online)
ISSN 1584-0921 (e-Pub)

Contents

Overview	8
Chapter 1. Global environment and domestic macroeconomic developments	16
1. Global environment	17
Box 1. The impact of the COVID-19 pandemic on global production chains and the repercussions on activity and inflation in Europe	18
2. Domestic macroeconomic developments	27
2.1. Economic activity	27
Box 2. Structural dimension of the current account deficit: a sectoral perspective	32
2.2. Prices and costs	44
Box 3. Heat map of inflationary pressures in the economy	47
2.3. Fiscal developments	53
Chapter 2. The National Bank of Romania within the European System of Central Banks, EU-level bodies and fora	58
1. NBR participation in European structures	59
1.1. Participation in the ECB General Council meetings	60
1.2. NBR participation in the enlarged meetings of ESCB structures and substructures	60
1.3. NBR participation in the European Systemic Risk Board	60
1.4. Technical cooperation between the NBR and the National Bank of Moldova	61
1.5. NBR participation in other technical cooperation projects	63
1.6. NBR participation in the working structures and substructures of the European Banking Authority	64
1.7. NBR participation in structures of the EU Council and of the EC	64
1.8. NBR participation in the process of transposing, implementing and notifying EU legislation	65
1.9. NBR participation in the joint working platform with government authorities on European affairs	66
2. Developments in economic, financial and banking policies at European level	66
2.1. The European Semester	67
2.2. Developments in the establishment of a European Deposit Insurance Scheme (EDIS)	68

2.3. Policy initiatives at EU level	68
2.4. Technical assistance received by the NBR under the European Commission's Technical Support Instrument	70
Chapter 3. Monetary policy of the National Bank of Romania	72
1. Policy objective	73
2. Policy decisions	73
Box 4. The monetary policy stances of major central banks and of those in the region in 2021	76
Box 5. Credit to the private sector and liquidity in the economy	88
3. Use of monetary policy instruments	99
4. Policy outlook	104
Chapter 4. Financial stability	108
1. The NBR's role in implementing macroprudential framework	109
2. Main assessments on financial stability	113
Box 6. Sustainable increase in financial intermediation in Romania	114
2.1. Indebtedness of non-financial corporations and households	115
2.2. Banking sector	119
Box 7. New trends in banking activity in a pandemic context – outlook and risk implications	120
Box 8. Recourse to moratoria during the COVID-19 pandemic – developments and comparisons across Europe	125
2.3. Non-bank financial sector	127
2.4. Financial markets	128
3. Instruments supportive of prudential supervision and financial stability	129
3.1. Central Credit Register (CCR)	129
3.2. Payment Incidents Register (PIR)	132
Chapter 5. Licensing and regulation of financial institutions	134
1. Licensing and notification of financial institutions	135
2. Legal framework for institutions within the regulatory scope of the National Bank of Romania	136
2.1. Prudential regulation and bank recovery and resolution regulation	136
2.2. Regulation of non-bank financial institutions	139
2.3. Regulation of payment institutions	139
2.4. Accounting regulations	140
2.5. Other legal acts applicable to institutions within the scope of the NBR	140
3. Regulatory guidelines in 2022	143

Chapter 6. Prudential supervision of financial institutions	146
1. Supervision of credit institutions	147
1.1. Size and structure of the banking system	147
1.2. Performance of the banking sector	149
1.3. Assessment of banking risks	156
2. Supervision of guarantee schemes	160
3. Supervision of non-bank financial institutions, payment institutions and electronic money institutions	160
3.1. Non-bank financial institutions	161
3.2. Payment institutions	164
3.3. Electronic money institutions	164
4. Overseeing the prevention of money laundering and terrorist financing and applying international sanctions	165
 Chapter 7. Strengthening the bank resolution function of the National Bank of Romania	172
1. Planning and preparing the resolution	173
1.1. Current activity of resolution planning	173
1.2. Decision-making on the minimum requirement for own funds and eligible liabilities (MREL)	174
2. National and international communication and cooperation	175
3. Bank Resolution Fund	175
4. Regulatory framework for bank resolution	176
 Chapter 8. Currency issue	180
1. Developments in currency in circulation outside banks	181
2. NBR's cash payments and collections in its relation with credit institutions/the State Treasury	183
3. Currency processing and withdrawal from circulation of unfit currency	185
4. Numismatic issues	186
5. Detected leu counterfeits	187
 Chapter 9. Financial market infrastructures	188
1. ReGIS	189
2. SaFIR	191
3. TARGET2-România	193
4. Oversight of financial market infrastructures and payments	195
 Chapter 10. Management of international reserves	204
1. Developments in Romania's international reserves in 2021	205

2. Management of international reserves in a highly uncertain economic and financial environment	207
2.1. External economic and financial developments	207
2.2. The manner to achieve strategic goals	209
Chapter 11. Romania's balance of payments and international investment position	212
1. Current account and capital account	213
2. Financial account	215
3. Net international investment position	216
Chapter 12. International financial relations	220
1. International Monetary Fund	221
2. World Bank Group	222
3. Bank for International Settlements	222
4. European Bank for Reconstruction and Development	223
5. Organisation for Economic Cooperation and Development	223
6. Participation of the National Bank of Romania in foreign institutions and organisations	224
Chapter 13. The convergence of the Romanian economy and the EU economic governance framework	226
1. The convergence of the Romanian economy	227
Box 9. Next Generation EU: driving economic recovery and supporting fiscal consolidation	232
2. Developments in the European Union's economic governance	237
Chapter 14. Public communication of the National Bank of Romania	244
1. Public relations	245
2. Financial education	254
Chapter 15. Statistics and economic research	260
1. Statistical activity	261
2. Economic research	264
2.1. Macroeconomic modelling	264
2.2. Financial stability	268
2.3. Economic papers and analyses	270
2.4. Guidelines and objectives of the research activity in 2022	271
Chapter 16. Legal activity of the National Bank of Romania	272

Chapter 17. The institutional framework and the organisation of the National Bank of Romania	280
1. Decision-making bodies and corporate governance	281
Members of the National Bank of Romania Board	282
2. The relationship of the NBR with the Parliament of Romania and other state institutions	289
3. Organisational developments	291
3.1. Human resources management	291
Organisation Chart of the National Bank of Romania as at 31 December 2021	294
3.2. Information technology	296
Chapter 18. Financial statements of the National Bank of Romania as at 31 December 2021	300
1. Overview	301
2. Recognition of monetary policy operations	301
3. Recognition of foreign currency asset/liability management operations	303
4. Effects of changes in the exchange rates and in the market prices of international reserve assets	304
5. The NBR's budgeted income statement for 2021	305
6. Conclusions	306
Financial statements of the National Bank of Romania as at 31 December 2021 (audited by KPMG)	309
Independent Auditors' Report	311
Balance sheet as at 31 December 2021	314
Income statement for the year ended 31 December 2021	316
Notes to the financial statements for the year ended at 31 December 2021	317
Statistical section	353
Abbreviations	362
Tables	363
Charts	364



Overview

After having contracted in 2020, due to the outbreak of the COVID-19 pandemic, global economic activity reverted to an upward path in 2021 (6.1 percent¹), amid the vaccination campaigns and the fiscal and monetary stimulus introduced in many countries. Even though the pre-pandemic GDP level was exceeded – substantially in the emerging economies and only marginally in the advanced economies as a whole –, successive epidemic waves continued to leave their mark on economic developments, particularly via the imposed restrictions, which caused or exacerbated bottlenecks in global supply chains. The latter, along with the steep rise in energy prices as from 2021 H2, entailed – also amid the recovery of demand after the peak of the pandemic – increasingly strong inflationary pressures. They strengthened in the first part of 2022, *inter alia* against the background of the Russia-Ukraine war, so that the annual inflation rate reached high levels (in May 2022, it stood at 8.6 percent in the United States, while the HICP rate came in at 8.1 percent in the euro area, 10.8 percent in Hungary, 12.8 percent in Poland, 15.2 percent in Czechia and ranged between 17 percent and 20 percent in the Baltics). The risk of de-anchoring inflation expectations led to a shift in central banks' perspectives. In this environment, a gradual normalisation of monetary policy conduct was initiated in many advanced or emerging economies (the monetary policy rate is 6 percent in Poland, 7 percent in Czechia and 5.9 percent in Hungary, while the target range in the US is 1.5-1.75 percent); the increase in the key rate is announced as forthcoming in the euro area as well.

In Romania, the macroeconomic landscape was mixed in 2021: on the one hand, economic activity posted robust growth (5.9 percent), allowing real GDP to surpass the pre-pandemic level; on the other hand, twin deficits remained elevated and inflation rate saw its upward trend steepen significantly in the final part of the year amid the heightening energy crisis at European level.

However, the evolution of economic activity was not steady throughout the year, with a slowing trend becoming increasingly manifest in 2021 H2, under the impact of supply-side constraints – bottlenecks in global value and supply chains, hikes in commodity prices and transport costs –, but also of the new pandemic waves across Europe and domestically during this period. The prospects of a rebound in 2022, which emerged in the context of an alleviation of these constraints, receded after the outbreak of the Russia-Ukraine war. Against the background of heightening risks and uncertainties regarding the future economic activity, access to NGEU funds and, implicitly, compliance with milestones and targets under the Recovery and Resilience Facility have gained increased importance.

Since imports were spurred by the recovery in domestic demand, their dynamics outpaced those of exports, the latter being dampened by bottlenecks in global

¹ According to IMF estimates.

production chains to which certain segments of the domestic industry belong. Given the unfavourable developments in the trade balance (associated chiefly with the worsening of the terms of trade), 2021 exhibited a widening of the current account deficit (to 7 percent of GDP). Under the circumstances, even though non-debt-creating flows were on the rise, the coverage provided by them fell below 70 percent.

Nevertheless, the capacity to service foreign debt improved. Specifically, the gross external debt-to-GDP ratio went down 1.9 percentage points to 56 percent and gross external debt as a share of exports of goods and services shed 18.6 percentage points to 137.2 percent, while Romania's international reserves further displayed an adequate level. At end-2021, they amounted to EUR 45.8 billion, up by EUR 3.3 billion over end-2020, largely as a result of the increase in foreign exchange reserves to EUR 40.5 billion. The gold stock remained unchanged at 103.64 tonnes, out of which 61.24 tonnes stored with the Bank of England. The reserve adequacy indicators staying within the recommended limits enhances the capacity of the Romanian economy to withstand potential adverse shocks on financial markets and acts towards containing the government's and local companies' financing costs.

In 2021, the general government deficit-to-GDP ratio narrowed by 2.2 percentage points compared to end-2020, reaching 7.1 percent (according to the ESA 2010 methodology), lower than the 8 percent target envisaged by the 2021-2024 Convergence Programme. The adjustment reflects the improved cyclical position of the economy amid the expansion in 2021, but especially the contraction of the structural imbalance in public finance, *inter alia* via the expiry or reduction of the amount of pandemic-related support measures. However, Romania is still subject to the only ongoing excessive deficit procedure in the EU, which started in 2020 after the country's budget deficit exceeded as early as 2019 the 3 percent-of-GDP reference value under the Stability and Growth Pact. The European Commission's initial recommendation for Romania was to correct the excessive deficit by end-2022, yet the extraordinary macroeconomic and fiscal impact of the pandemic led to its revision in June 2021, with a new deadline set at end-2024.

The annual inflation rate stood at 8.19 percent at end-2021 (versus 2.06 percent at end-2020), about 80 percent of this rise coming from the hikes in prices of natural gas, electricity and fuels, all of them exogenous components of the CPI. While inflation rate ran below 4 percent in 2021 H1, thereafter it grew substantially, following a trend that persisted into early 2022, and exceeded 10 percent in March. With the gradual easing of restrictions imposed amid the pandemic, global demand for energy rebounded, and this overlapped with a lower storage level on the European natural gas market, as the imports from the main supplier could not be increased. The effects spread to the electricity market, all the more so as the thermal power plants using this type of fuel played an important role in the 2021 energy mix, compensating for the poor production from water and wind sources as well as the closure of some coal-fired power plants amid the faster transition to a green economy. The latter raised the cost of producing energy from fossil fuels by significantly upping the prices of carbon dioxide emission allowances; compared to the end of 2020, prices in European wholesale markets were up to four and seven times higher for electricity and natural

gas respectively in 2021. With regard to fuels, the Brent oil price advanced, upheld by global demand and relatively low OPEC+ production, yet at a slower pace than in 2020. On the non-motor fuel segment, the rise in prices reflected the gradual decline in domestic wood supply in recent years and effects related to demand for alternative energy sources.

As for the annual core inflation rate (which excludes administered prices, volatile prices, and tobacco product and alcoholic beverage prices from the CPI), it posted a more moderate performance, standing at 4.7 percent in December 2021, from 3.3 percent in December 2020.

As the performance of inflation and its outlook increasingly worsened throughout 2021, while the robust economic growth was achieved amid uneven developments – the fast-paced recovery in H1 was followed by a substantial moderation – with implications for the sign and pattern of the economy's cyclical position, the monetary policy implementation environment was quite challenging. The NBR promoted a balanced approach in designing monetary policy, consistently monitoring its adequacy to the macroeconomic and financial context, marked by divergent issues.

Specifically, the monetary policy stance witnessed a prompt yet prudent recalibration in 2021. After having brought the monetary policy rate down to a historical low of 1.25 percent per annum in January 2021, the central bank kept it unchanged in the first three quarters of the year. However, the NBR took steps towards the normalisation of the monetary policy stance by discontinuing in May the purchases of leu-denominated government securities on the secondary market and subsequently tightening the control over money market liquidity. At the onset of Q4, the NBR also embarked on a gradual policy rate hiking cycle. The key rate was raised on three successive occasions October 2021 through January 2022, by 0.25 percentage points each time, to 2.00 percent per annum. The measures were complemented by the two-step widening (in November 2021 and January 2022) of the corridor of interest rates on standing facilities around the policy rate to the standard width of ± 1.00 percentage points. The monetary authority increased the policy rate by a larger increment, i.e. 0.50 percentage points, in February 2022 and another 0.50 percentage points were added in April. In May 2022, the key rate was raised by 0.75 percentage points, to 3.75 percent per annum, as the projected path of the annual inflation dynamics had seen a sizeable upward revision across the entire horizon, under the strong impact of global supply-side shocks, compounded and protracted by the war in Ukraine and by the sanctions imposed on Russia.

The NBR's overall approach aimed to anchor inflation expectations over the medium term and hence prevent the second-round effects of the inflation bout triggered by adverse supply-side shocks, so as to bring the annual inflation rate back in line with the flat target in the medium run, in a manner conducive to achieving sustainable economic growth.

During 2021, the monetary authority continued to extensively use specific tools and means of communicating and detailing the rationale behind the monetary policy decisions. Through them, the NBR consistently highlighted the global nature of the

sizeable inflation bout, the importance of an adequate monetary policy response, as well as its determination to act in order to safeguard medium-term price stability.

The EUR/RON exchange rate witnessed only two small upward adjustments in 2021, followed by protracted periods of quasi-stability. During the reported year as a whole, the domestic currency recorded a nominal depreciation of 1.6 percent against the euro (based on the December exchange rate average versus the same month of 2020), lower than those witnessed over the same period by the Polish zloty and the Hungarian forint (2.9 percent and 2.3 percent respectively).

In February 2021, the European Central Bank and the National Bank of Romania agreed to extend the framework arrangement to provide euro liquidity to the NBR via a repo line until March 2022. The arrangement – initially made in 2020 to address possible euro liquidity needs amid market dysfunctions caused by the COVID-19 pandemic – was afterwards extended until 15 January 2023, following the geopolitical tensions triggered by the war in Ukraine. Activating this arrangement has not been necessary until now.

Risks to financial stability were further manageable throughout 2021. The risk of tensions surrounding domestic macroeconomic equilibria, due *inter alia* to the COVID-19 pandemic and the energy crisis, remained at the “severe” level, having a stable outlook. Moreover, the risk of a delay in implementing reforms and absorbing EU funds, especially via the National Recovery and Resilience Plan (NRRP), saw a significant increase, up to a high systemic level, and was assessed on the rise. The risk of global uncertainty amid the energy crisis and the COVID-19 pandemic and the default risk for loans to the private sector were also high, but with a stable outlook.

The Romanian banking sector adequately managed liquidity in the second year of the pandemic, amid the high share of liquid assets and the traditional funding model. Liquidity and solvency indicators remained adequate throughout 2021, at levels significantly higher than those deemed prudent. The results of the latest liquidity stress test (June 2021) show that credit institutions further have a good capacity to withstand adverse liquidity developments, such as the significant withdrawal of funding sources or a decline in the liquidity of asset holdings. The relevant asset quality indicators continued to improve: the non-performing loan ratio as at 31 December 2021 fell by 0.4 percentage points compared to end-2020 (down to 3.4 percent), while the non-performing loan coverage by provisions (66.1 percent in December 2021) places Romania well above the European average.

Total credit to the private sector increased by 14.8 percent in 2021 (as against 5.5 percent in 2020), the swifter pace being attributed to the substantial rise in leu-denominated loans (19.6 percent), also supported by the “IMM Invest Romania” and “New Home” government programmes. Due to the accelerating trend in lending and the persistent tensions surrounding macroeconomic equilibria, the NCMO issued a recommendation in October 2021, setting the countercyclical buffer rate at 0.5 percent, effective starting October 2022. The recommendation was reconfirmed in the NCMO General Board meetings held in December 2021 and March 2022.

An ongoing concern has been to identify the optimum measures to overcome the structural bottlenecks that contribute to the low level of financial intermediation and to ensure its sustainable increase. Therefore, in December 2021, the NCMO General Board decided to set up an interinstitutional working group mandated to support financial intermediation. The working group will submit its preliminary conclusions to the NCMO General Board in June 2022 and will release a final report in December 2022.

With regard to concerns about the green transition, it is worth mentioning that the working group tasked with identifying possible solutions to support green finance – established following the NCMO General Board's decision of October 2020, coordinated by the NBR and comprising representatives of the financial system, public authorities and private companies from relevant industries – prepared an in-depth report that was released to the general public in June 2021. According to the report, the stakes of climate change agenda for the Romanian economy and financial system are high in terms of opportunities, but also costs of a potential delay in green transition. Based on a thorough analysis, the working group formulated 16 proposals of recommendations to the authorities, covering three lines of action: (i) to sustainably increase the financing of green projects, (ii) to support structural changes in the economy towards generating higher value added, and (iii) to enhance transparency and raise awareness about the impact of climate change on the economy and the financial system.

In 2021, the NBR supplied the necessary currency in terms of quantity, value and denomination composition to ensure smooth money circulation. On 1 December 2021, the National Bank of Romania put into circulation a banknote with face value of lei 20. It is the first ever Romanian circulation banknote depicting the image of a female figure in the country's history: Ecaterina Teodoroiu, the heroine fallen in battle during World War I. The launch of the note and the events put on by the central bank on this occasion – the press conference of the NBR Governor and the exhibition dedicated to the figure of Ecaterina Teodoroiu, showcased by the NBR Museum (reopened for visitors starting 6 December 2021) in cooperation with the "King Ferdinand I" National Military Museum and the National History Museum of Romania – stirred great general interest, which was also mirrored on social media where the new denomination was promoted.

The Government of Romania and the National Bank of Romania maintain an ongoing multifaceted institutional cooperation. This includes the participation of central bank experts in the meetings of the Committee for planning the financial flows of the State Treasury and the NBR's support extended to the Ministry of Finance in the process of bond issuance on the international capital markets.

The ongoing dialogue between the National Bank of Romania and the Parliament of Romania takes many forms, such as: (i) formulation of opinions on draft legal acts at the request of parliamentary committees or initiators (the Ministry of Finance, the National Authority for Consumer Protection or other public authorities) or of the Ministry for Liaison with Parliament with a view to finalising the Government's position regarding those draft laws, (ii) formulation of opinions, preparation of supporting documents or participation in discussions/meetings of parliamentary

committees on issues such as monetary policy, financial stability, bank resolution, European affairs or payment systems, and (iii) preparation of replies to interpellations that Members of Parliament submitted to the central bank.

In keeping with the principles of transparency and institutional accountability, in 2021, the NBR continued to provide high-quality economic information in the form of both statistical data that the institution produces in compliance with the legal framework and research works and papers published. The reports issued by the central bank play a major role in ensuring communication with the public at large and the Parliament. The NBR sends to the presidents of the two chambers of Parliament and to the economic committees not only the *Annual Report* (a statutory duty), but also the *Inflation Report* and the *Financial Stability Report* – two of the central bank's key communication tools explaining its actions meant to ensure price stability and financial stability. Many topics relevant to central banking are discussed in public events or interviews by Board members, as well as during scientific seminars and symposiums; at the same time, economic research activities carried out within the NBR focus on such issues.

Given the growing importance of online communication, also in the pandemic environment, the NBR sought to integrate new digital tools and build on the existing ones for raising institutional transparency and efficiency in its bid to reach out to the general public. The central bank's main communication channel remained the official website, where, alongside the real-time dissemination of statistical data (exchange rates, interest rates, financial market news) and of other types of information such as press releases, publications, conferences or speeches, several visual materials (infographics, animations, banners) were alternatively promoted, aiming to highlight certain information sections or videos featuring the lei 20 note. In 2021, an important role further played the NBR blog, where central bank experts address topical issues, some of the articles published there being later shared on social networks as well.

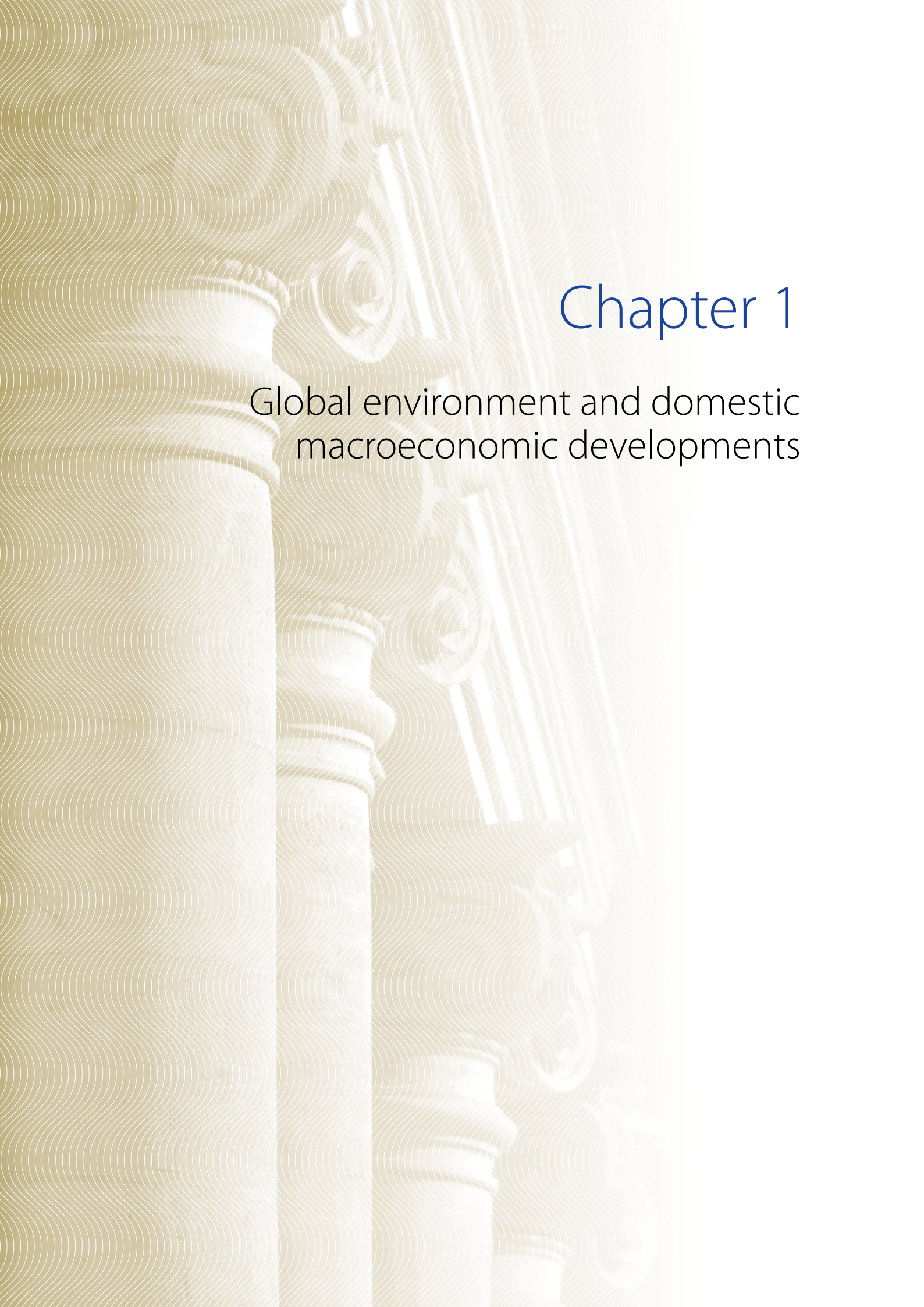
Financial education activities were tailored to the pandemic conditions and hence carried out mainly online, adapting the messages and contents to the particulars of this means of communication. The NBR continued to be concerned with expanding the range of resources for pupils, with 2021 marking, amongst other things, the launch of the animated video series entitled “Educație financiară cu Ana și Radu” (Financial education with Ana and Radu). In the course of 2021, about 80,000 pupils and students interacted physically or online with central bank professionals in the NBR's traditional or new educational projects involving more than 600 educational establishments in both urban and rural areas.

Since minimising cyber risks is increasingly important, the NBR implemented in 2021 a number of measures to increase the security of information systems and to upgrade software platforms.

In May 2022, the Payments Committee was established within the central bank. This advisory unit supports the NBR Board in fulfilling its tasks of promoting and monitoring the smooth functioning of payment systems and instruments in Romania, as well as tasks related to the authorisation and supervision of payment services and instruments.

The National Bank of Romania's financial position remained sound, its equity recording a significant positive value of lei 32,743.2 million at 31 December 2021, up 25 percent over the prior year. This sizeable level of equity reinforces the institution's capacity to fulfil its national legal obligations and the tasks related to its capacity as a member of the European System of Central Banks, while securing its financial independence and providing credibility to its operations.

Similarly to previous years, in 2021 too, the National Bank of Romania acted to ensure price stability and financial stability and to fulfil all other tasks set forth by law, without resorting to public funds. Furthermore, following its concern for efficiently using available resources, the NBR posted a positive financial result as at 31 December 2021 – due largely to an increase in profit from foreign currency asset/liability management operations and to monetary policy operations resulting in a profit –, transferring lei 1,610.2 million to the government budget.



Chapter 1

Global environment and domestic macroeconomic developments

1. Global environment

In 2021, global economic activity recovered (6.1 percent, according to IMF estimates), exceeding the pre-pandemic level in both emerging and advanced economies. Nevertheless, the pandemic continued to exert an adverse impact – the spread of the virus in various geographical areas led to the imposition of specific restrictions, triggering supply chain disruptions. Financial conditions remained stimulative throughout 2021, boosting the robust demand, whose overlapping with supply-side issues put strong upward pressures on commodity, producer and consumer prices. In this context, credit institutions' perception over the persistence of inflation changed in the latter half of the year, the danger of a de-anchoring of inflation expectations gaining prominence, so that the major central banks announced their intention to gradually withdraw the monetary support, while the central banks in more exposed countries started to tighten their monetary policy. The Russia-Ukraine war that broke out in late February 2022 and the tensions between Russia and the Western countries brought about a fast deterioration in the outlook for this year, especially amid the significant part that the directly involved countries play in the international commodity market (Chart 1.1).

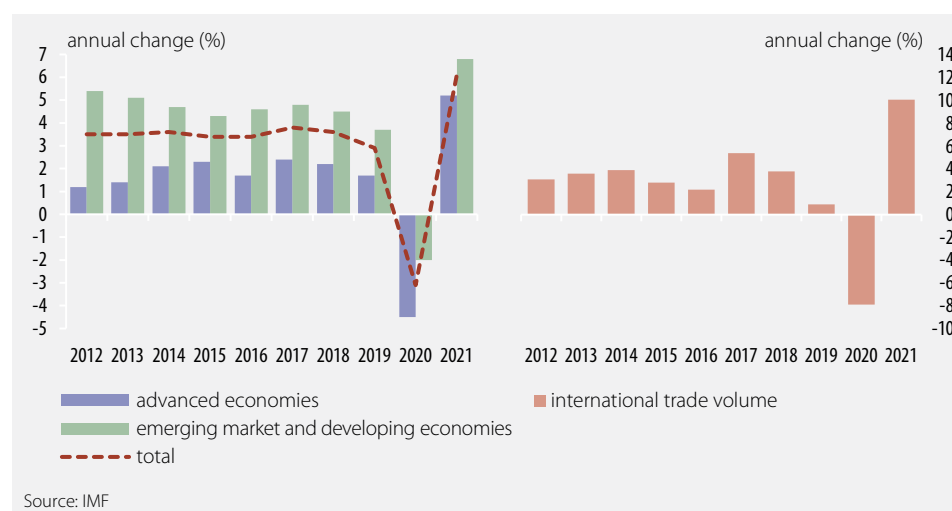


Chart 1.1
Global economic growth

In 2021, GDP in advanced economies grew by more than 5 percent, after a 4.5 percent contraction in the previous year. The roll-out of vaccination campaigns and the fiscal and monetary stimulus measures stood behind the rebound in activity, which marginally exceeded the pre-pandemic level. In the absence of the possibility to benefit from many market services, the shift in consumer demand to durables overburdened global supply chains, this problem being worsened by the impediments associated with the pandemic-related restrictions, as well as by the inherently fragile logistics strategy that involves low inventories (Box 1). In the US, real GDP dynamics stood at 5.7 percent

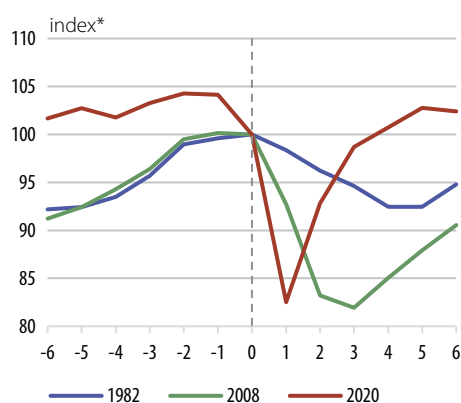
in 2021, after a 3.4 percent drop in 2020, consumer demand being bolstered by the stimulative policy and the favourable labour market conditions, whereas on the supply side industry further followed an uneven path. The euro area was more strongly impacted by the supply-side constraints, which resulted in an incomplete economic recovery as compared with 2020 (a 5.3 percent increase after a 6.4 percent decline). Thus, none of the first four euro area economies reverted to the level of activity recorded before the pandemic, against the background of weaker industrial output in the latter half of 2021, so that in Q4 Germany faced even an economic contraction, the slow growth rate of net exports reflecting the global issues in manufacturing. The economies of the United Kingdom and Japan performed similarly, failing to exceed the 2019 output in spite of their increases of 7.4 percent and 1.6 percent respectively. Economic activity rose by 6.8 percent in emerging economies in the period under review, following a 2 percent decrease in the previous year, given that China, the sole major economy that averted the recession in 2020, advanced by 8.1 percent in 2021. Despite the fast annual dynamics, in 2021 Q2 and Q3 China's economy was strongly affected by several adverse factors, including the disruptions in certain business sectors (particularly real estate), the disparate outbreaks of COVID-19, to which a "zero tolerance" approach was taken, the power cuts, but also the semiconductor crisis, yet the end of the year showed signs of a recovery. India's economy bore the brunt of the health crisis in early 2021, its subsequent rebound placing however the annual pace of increase at 8.9 percent, whereas real GDP growth in Brazil and Russia stood at 4.6 percent and 4.7 percent respectively, managing to offset the contraction in 2020.

Box 1. The impact of the COVID-19 pandemic on global production chains and the repercussions on activity and inflation in Europe

The global economic recovery in the course of 2021 was hampered by global supply chain disruptions, putting a strain on the production of goods. In the euro area, real GDP growth in 2021 was chiefly supported by a rebound in services, with the progress in immunisation and the easing of restrictions, whereas industry and construction contributed to a lesser degree than in the previous year, particularly in 2021 H2, mirroring the limited access to commodities, equipment and intermediate goods. These divergent developments across sectors originate in the pandemic crisis that broke out in 2020 Q1. Thus, after the sharp fall in international trade in goods and services – the first restrictions in Europe becoming effective in March 2020 –, the subsequent increase was notable, world trade returning to pre-pandemic levels by October 2021 – a very rapid rebound compared with that from other economic crises, which put significant pressure on supply chains (Chart A). Apart from the higher-than-expected rise in demand, the smooth operation of supply chains was disrupted by pandemic-specific factors (such as the reintroduction of restrictions owing to the resurgence of COVID-19 infections or the shifts in consumer behaviour), as well as by the shock in energy markets starting

Chart A

Trade patterns around global recessions: goods and services import volume



*) the goods and services import volume is normalised to 100 at the onset of the recession (t=0)

Source: IMF

in the summer of 2021. Under the circumstances, this box aims to identify and analyse the drivers of the disruptions in global value chains, as well as to reveal the effects on economic activity and prices, given that the role of international trade in the current economic environment has become even more significant².

Sources of value chain disruptions in 2021

Global supply chain disruptions have been the result of the interplay of several factors, which can be grouped into five main categories (ECB, 2021e): (i) strong rebound in global demand for manufacturing goods; (ii) supply shortages of specific semiconductors; (iii) logistical disruptions in the transport sector, primarily linked to container vessel activity; (iv) strict lockdown measures in some key Asian countries that produce intermediate inputs; (v) longer time needed to increase supply capacity of semiconductor production and of vessels.

In the initial phase of the pandemic-related crisis, European factories started to face difficulties because of the shutdowns at some suppliers operating in the Chinese regions affected by the spread of the virus. Subsequently, the mobility restrictions imposed in Europe led to trade bottlenecks or disruptions, resulting in a major economic contraction in 2020 Q2. The disruption spread along global value chains, its effects being compounded by the restrictions on the movement of persons, including logistics workers. Global value chains with a high degree of complexity were thus the hardest hit (Chart B).

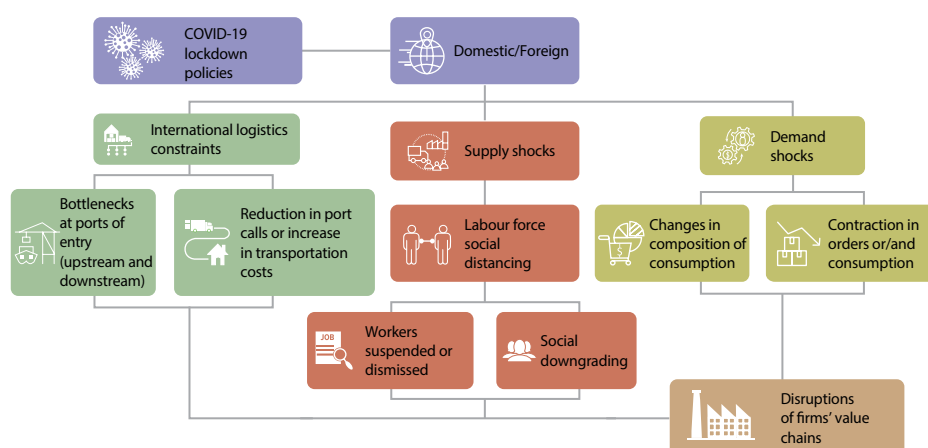


Chart B
Effects of COVID-19 lockdown policies on global value chains

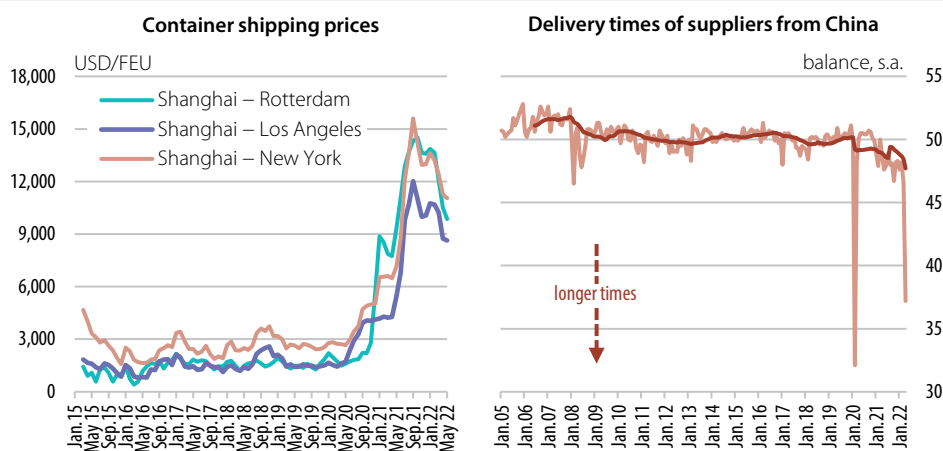
Source: World Bank

This sharp economic downturn was followed by a rapid rebound in 2020 Q3, due particularly to industry, given the fiscal and monetary stimulus of significant magnitude. However, the speed of economic recovery caused problems in turn, triggering what may be considered a second supply chain crisis. Stimulus packages in advanced economies, the savings buffer and pent-up demand contributed to a robust rise in global consumption. At the same time, the shift of households'

² See Box 1 "The impact of COVID-19 on global value chains" in the NBR's 2020 Annual Report.

disposable income to purchases of durables, with the limited consumption opportunities in the market services sector, was an additional source of pressure. Many companies underestimated the scale of the recovery and did not make sufficient medium- and long-term orders to cope with the change in consumer preference. These circumstances overlapped with the depleted stocks, which owed partly to the “just-in-time” strategy³, but also to the fall in production during lockdowns (ECB, 2021c). In addition, the temporary factory and port closures in the areas with lower vaccination rates (or with more contagious strains, particularly in Asia) and the substantial reduction in air traffic were other sources of bottlenecks, with cascading effects throughout the entire supply chain.

Chart C
Shipping



Source: World Container Index, China Federation of Logistics and Purchasing, Bloomberg

These deficiencies were mirrored in the delivery times, which hit historical highs, affecting almost all manufacturing sub-sectors. The Markit PMI surveys showed that shortages of material and equipment had limited production for about two in five European manufacturers, the highest proportion since records began in 1999 (ECB, 2021c). This context favoured the surge in global container shipping prices, given the limited capacity of ships and the fact that shipping lines cannot quickly increase their fleets in a meaningful way (Chart C). In addition, the overall shipping capacity was limited by delays at ports (with ships waiting for up to six days to dock in Rotterdam, the EU’s largest port – similar or even worse situations occurring in the US), a shortage of containers, which were stuck at congested ports, as well as by the insufficient number of port workers and drivers⁴ (ECB, 2021e). According to UNCTAD (2021), the average time spent by container vessels in ports in the first half of 2021 was 11 percent higher compared with the pre-pandemic average in 2018-2019.

Against the backdrop of large swings in demand, starting in 2020 particular mention should be made of the so-called global semiconductor crisis, which affected a vast array of sectors and manufacturers, mostly the automotive industry and the

³ The “just-in-time” (JIT) inventory management system is a management strategy that minimises storage times, coordinating orders for commodities directly with production stages. Companies use the JIT technique to enhance their efficiency by cutting storage costs. This method requires manufacturers to forecast demand accurately, its secondary effect being a strategic logistics-related vulnerability.

⁴ Difficulties reported especially by the road transport sector in the US with respect to labour.

manufacture of electronic products and household appliances. In this case, the effect of the pandemic overlapped with that stemming from a wider combination of circumstances, which refer to trade tensions between China and the US, the unusual cold snap in Texas at the beginning of 2021, which also caused power outages at semiconductor manufacturing plants, the drought in Taiwan⁵ in 2021 and a fire at one of the chip plants in Japan (ECB, 2021b). In anticipation of lower demand at the onset of the pandemic, car producers around the world reduced their orders for semiconductor chips to minimise storage costs during the lockdown. On the other hand, being compelled to spend more time at home, consumers started to purchase or to install modern electronic equipment⁶. Consequently, when the economy returned to normal, the automotive industry faced a chip shortage, as semiconductor producers had already shifted their production to the durables manufacturing sectors, which were thriving.

Production capacity constraints in this case also have a significant idiosyncratic component, as semiconductor chip manufacturing is a difficult, time-consuming and expensive process. The semiconductor industry is currently dominated by only three producers: Taiwan Semiconductor Manufacturing Company (TSMC), Intel and Samsung. The supply issues stemmed from the small number of manufacturers, with significant price effects amid the unexpected rise in demand. Pressures also mounted as several upstream industries swiftly embraced digital transformation, chip manufacturers and governments currently working together to expand the capacity of supply chains⁷. Before the outbreak of the Russia-Ukraine war, most signals from the industry indicated that it would take 12 to 18 months for the semiconductor market to achieve balance. Nevertheless, the recent political developments have brought new shocks, Russia and Ukraine being important suppliers of many intermediate goods⁸ in the production chains of the chip manufacturing industry.

Another issue that exacerbated these supply bottlenecks in the course of 2021 was the reintroduction of restrictions following the spread of the Delta variant in some countries of the Asia-Pacific region (including Malaysia, Singapore, Thailand and Vietnam), which are key to the semiconductor chip production, also in conjunction with the lower access of some countries to mass vaccination. The last Omicron wave in China (in March-April 2022) significantly disrupted the activity in the region, including flows of goods. According to ECB surveys (2021b) in the private sector, both semiconductor foundry capacity and cargo vessel capacity are expected to remain low until 2023.

⁵ Chip manufacturing requires large amounts of water and Taiwan, the biggest chip producer in the world, faced an over 18-month drought.

⁶ During this period, Sony released its new platform, PlayStation 5, with millions of pre-orders. In addition, the demand for graphics cards increased thanks to their being used in games, graphic production and cryptocurrency mining.

⁷ For instance, TSMC will invest USD 100 million in the next three years to expand chip production capacity, while Samsung, SK Hynix and the government in South Korea vowed to invest USD 451 million for the same purpose.

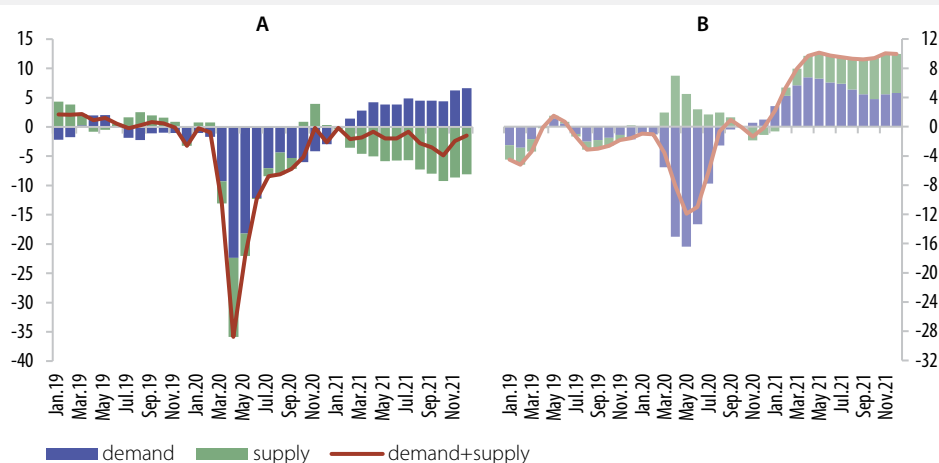
⁸ The price of neon, a noble gas needed for the lasers used in chip manufacture, increased sixfold between December 2021 and March 2022 because of the COVID-19 pandemic and the Russia-Ukraine war. About half of the global supply of purified neon gas (the gas being a by-product of Russia's steel industry) comes from Ukraine. The supply of krypton and xenon, of which Ukraine is also a major exporter, was affected as well. Russia exports approximately 40 percent of the global supply of metal palladium, which is used in certain chip components, and the supply of palladium might be affected by the trade sanctions imposed by Western governments.

To sum up, the pressures on supply chains increased to unprecedented levels at the outbreak of the COVID-19 pandemic and, after a significant easing in 2020 H2, they mounted again during 2021 and reached a new peak at the end of the year (IMF, 2022). Transportation costs rose steadily until September 2021, when they declined moderately. In 2021, delivery times lengthened and indicators of future delivery times show that supply chain disruptions will persist over the medium term (ECB, 2022b). This assortment of factors generates significant macroeconomic risks, supply chain links playing a critical role in the transmission of shocks worldwide (ECB, 2022b).

Effects on activity and prices

Amid the disruptions that affected suppliers, the dynamics of industrial activity in the euro area were dampened, the slowdown in late 2021 reflecting largely the contraction in Germany's manufacturing sector. An IMF paper (Celasun *et al.*, 2022a,b) gauges the impact of demand versus supply factors on industrial production and inflation in a number of countries using a vector auto regressive model. The findings suggest that during 2021 supply-side constraints hindered the increase in industrial output despite the dynamic demand, while also boosting price growth. Thus, the euro area industrial production was on average approximately 2.5 percent below trend in the last six months of 2021, demand shocks pushing output around 5 percent above trend, while supply shocks pushed it by about 7.5 percent below trend, the latter reducing euro area output in 2021 H2 (Chart D). The study concludes that, as far as EU Member States are concerned, the supply shocks recorded in 2021 exerted a notable negative impact of 17 percent and 15 percent respectively on manufacturing production in Romania and Slovakia and of about 12.5 percent in Germany, Czechia and Hungary.

Chart D
Euro area: contributions to industrial production fluctuations (A) and contributions to manufacturing PPI fluctuations (B)



Source: IMF estimates, Celasun *et al.* (2022)

Supply shocks in conjunction with demand factors also boosted the increase in manufactured goods prices, the annual growth rate of the producer price index (PPI) in the euro area averaging about 12.5 percent in the latter half of 2021, substantially higher than the 1.5 percent average in 2017-2019. Estimates indicate that nearly half of this rise came from the change in the contribution of supply shocks, which had mostly exerted downward pressure on manufacturing prices

in the pre-pandemic years (tantamount to -0.5 percentage points on average in the euro area in 2017-2019; Chart D). The contribution to the increase ascribable to supply shocks varies across countries, being estimated at approximately 50 percent for the euro area as a whole and for Germany, and at 60 percent for France. The estimate for Romania is over 70 percent, while the remaining share may be attributed to demand. Supply disruptions also had an impact on the inflation rate. The annual consumer price index (CPI) inflation excluding energy and food was about 1.4 percentage points higher in 2021 H2 than in the 2017-2019 reference period. Around half of this rise can be ascribed to supply constraints for manufactured goods. The smaller impact on core inflation is accounted for by the lower share of manufactured goods in the consumption basket.

In October 2021, the IMF cut the global growth projection, citing supply disruptions as one of the main reasons, particularly for the advanced economies. In a similar way, in its Winter 2022 European Economic Forecast, the European Commission put this development down to the issues associated with global shipping, whereas in the *World Economic Outlook* of April 2022 the IMF forecast for global growth was revised downwards again, as a result of Russia's invasion of Ukraine and due to the resurgence of the pandemic in China, events which acted as an additional drag on the smooth operation of cross-border production networks.

In addition, the question concerning the effects of such supply chain disruptions on potential growth was also raised. With the recent trade disputes⁹, the literature had already begun to explore the re-setting of trade relations and its long-term impact on the economy, the pandemic crisis and the recent political developments accelerating the setting of the new coordinates. The long-term supply chain disruptions may compel companies to revise or postpone their investment plans and hence change the evolution of their capital stock. On the other hand, global firms may reconfigure and optimise their global value chains. Greater resilience associated with shorter supply chains and local access to strategic goods, together with the widespread implementation of digitalisation via the adoption of e-commerce, the extensive use of videoconferencing and robots, may structurally change the composition of trade flows (more towards services) and eventually have a positive impact on total factor productivity (ECB, 2022a).

In the more complex post-COVID-19 world, in which demand-side inflationary factors dominate the global macroeconomic landscape, the smooth flow of goods within production chains would have had a paramount role in the slowdown of price dynamics. Given that the expansion of supply chains had substantial disinflationary effects in the past, their disruptions additionally fuelled inflation, even jeopardising the post-pandemic economic recovery, with the normalisation of monetary policies and the change in the fiscal policy stance. At end-2021, industry experts expected the car supply shortage to largely dissipate by mid-2022. The Omicron wave and the Russia-Ukraine war generated new uncertainty, supply-side disruptions being likely to persist even into 2023.

⁹ See Box 1 "Revival of protectionism and its implications on global economic activity" in the NBR's 2019 *Annual Report*.

References

- Celasun, O., Hansen, N., Mineshima, A., Spector, M., Zhou, J. – “Supply bottlenecks: Where, why, how much, and what next?”, *IMF Working Papers* WP/22/31, 2022a
- Celasun, O., Hansen, N., Mineshima, A., Spector, M., Zhou, J. – “Supply disruptions added to inflation and undermined the recovery in 2021”, *Vox Eu*, 16 March, 2022b
- Cigna, S., Gunnella, V., Quaglietti, L. – “Global value chains: measurement, trends and drivers”, *Occasional Paper Series* No. 289, 2022c
- ECB – “What is driving the recent surge in shipping costs?”, *Economic Bulletin*, Issue 3, 2021a, p. 26
- ECB – “The semiconductor shortage and its implication for euro area trade, production and prices”, *Economic Bulletin*, Issue 4, 2021b, p. 78
- ECB – “The impact of supply bottlenecks on trade”, *Economic Bulletin*, Issue 6, 2021c, p. 72
- ECB – “Supply chain disruptions and the effects on the global economy”, *Economic Bulletin*, Issue 8, 2021d, p. 51
- ECB – “Sources of supply chain disruptions and their impact on euro area manufacturing”, *Economic Bulletin*, Issue 8, 2021e, p. 87
- ECB – “How persistent supply chain disruptions could affect euro area potential output”, *Economic Bulletin*, Issue 1, 2022a, p. 36
- ECB – “Supply chain bottlenecks in the euro area and the United States: where do we stand?”, *Economic Bulletin*, Issue 2, 2022b, p. 51
- IMF – “Global trade and value chains during the pandemic”, *World Economic Outlook*, Chapter 4, April 2022
- UNCTAD – *Review of Maritime Transport*, 2021
- World Bank – “Reshaping global value chains in light of COVID-19 implications for trade and poverty reduction in developing countries”, 2022

In early 2022, the evolution of the global composite PMI index signalled an upturn in activity, yet the flash index for April showed a worsening of the outlook (Chart 1.2), with the continuation of the war in Ukraine, the series of sanctions adopted at international level and the resurgence in COVID-19 cases in China. Nevertheless, given that in most countries in Europe the restrictions associated with the Omicron wave

were lifted in March, the S&P Global Purchasing Managers' Index continued to expand, on the back of the resumption of activity in the services sector. The uncertainty adversely affected export orders, transportation and travel and the stronger pressures on a wide range of commodities compelled all the international institutions to significantly revise downwards their projections for the current year. Thus, in April 2022 the IMF cut its forecast for global growth by 0.8 percentage points, to 3.6 percent, the euro area being particularly

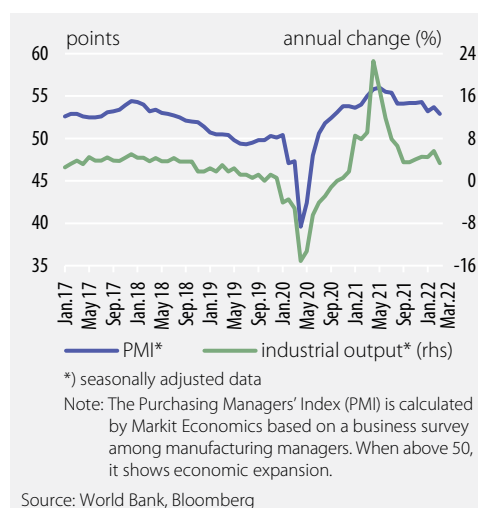


Chart 1.2
Outlook for global
economic growth

impacted (its expected annual increase was lowered, in this case, by 1.1 percentage points, to 2.8 percent).

In the course of 2021, commodity prices continued to rise, exceeding the pre-pandemic levels as early as the first part of the year (Chart 1.3). This trend was correlated with the rebound in economic activity, supply-side influences acting in the same direction. In addition, the annual paces of increase mirrored the significant statistical effects associated with the start of the pandemic. The World Bank's energy price index rose by 82 percent as compared with 2020 and the uptrend also persisted into 2022 Q1 (an approximately 80 percent annual pace of growth), the outbreak of the Russia-Ukraine war contributing to the steeper path as of March. The hike in the Brent oil price was initially underpinned, on the demand side, by the substantial recovery of the Chinese economy and subsequently by the restart of advanced economies. Even though the renewed waves of the pandemic had (short-lived) moderating effects, the strict production quotas set by the OPEC+ fuelled the price increase, so that during the year the Brent oil price hit the average pre-pandemic level as early as March 2021 (USD 65/barrel). Afterwards, it rose at a sustained pace, the average for March 2022 exceeding USD 112/barrel. Moreover, the natural gas market faced unprecedented tensions, with prices skyrocketing. This spike reflected pressures from a number of

influencing factors, the most important referring to excess demand from Asia and from the energy sector in Europe amid the green transition, the depleted gas inventories in Europe and Russia's decline to supply additional gas to Europe beyond its contractual obligations. Thus, the benchmark TTF gas prices increased on average by approximately 400 percent in annual terms in 2021 and the subsequent elevated uncertainty against the background of escalating geopolitical tensions in early 2022 favoured renewed rises.

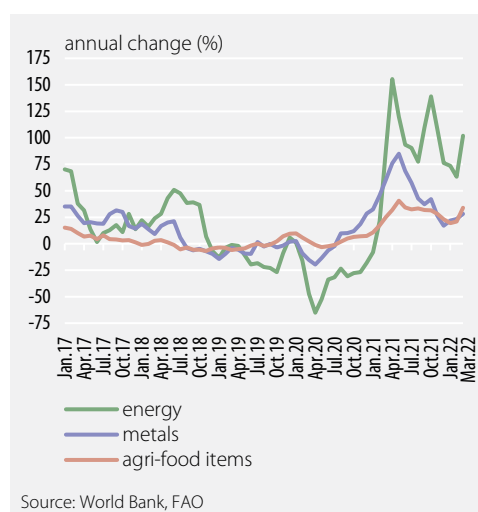


Chart 1.3
International prices
of main commodities

Industrial metal prices surged in 2021 as a whole (by around 47 percent), their uptrend being correlated with the resumption of industrial activity. Additional pressures stemmed from the green transition, which boosted the demand for metals used in the manufacture of electric batteries, as well as from supply-side constraints in some segments (halting of operations at some of the most important copper mines in the world because of strikes and political tensions in Chile and public pressure for compliance with environmental conditions in Peru). Price dynamics decelerated in the latter half of 2021, in line with the slowdown in China's economy. Nonetheless, with the outbreak of the war in Ukraine, in the first quarter of 2022, there was a renewed step-up in the pace of growth of industrial metal prices, so that the annual average for 2022 Q1 was 34.5 percent. At the same time, the heightened global uncertainty fuelled new episodes of rising gold price close to historical highs (Chart 1.4).

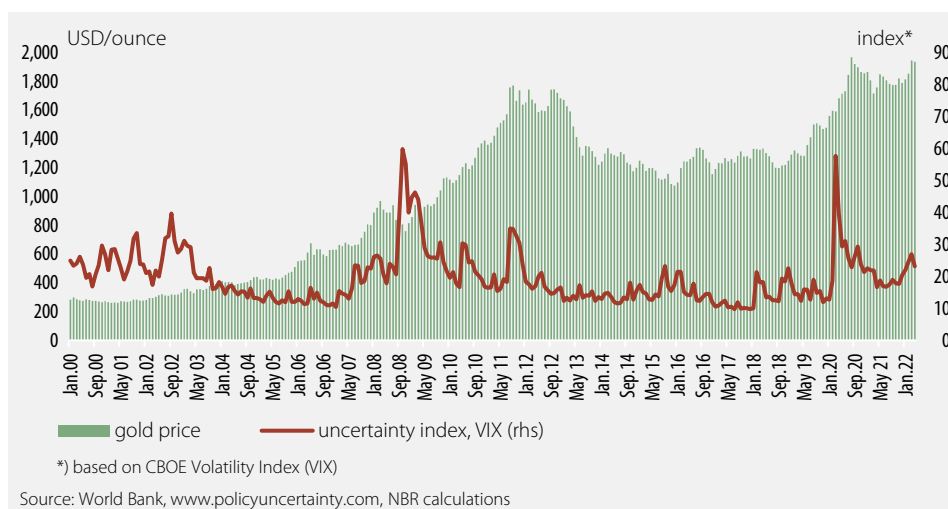


Chart 1.4
Gold price and uncertainty

According to FAO data, the prices of agri-food items went up by 28.1 percent in 2021, their broad-based upward trend being ascribable to the swift recovery of demand, amid weaker harvests. Even though the upswing lost momentum during 2021 Q3, adverse weather in several regions of the world resulted in the resumption of the steep uptrend and, with the start of the war in Ukraine, at end-2022 Q1 the FAO food price index hit a record high, rising in annual terms by approximately 25 percent.

Under the circumstances, world inflation¹⁰ at end-2021 moved up by 4.6 percentage points from December 2020, to 6.5 percent. The upward path continued in the first months of 2022, so that the annual rate of change of the indicator stood at 8.9 percent in March 2022 (Chart 1.5). Likewise, the annual dynamics of US consumer prices accelerated by 5.8 percentage points throughout 2021, to 7.1 percent in

December, the uptrend persisting into the first part of 2022, to 8.5 percent in March. In addition, the annual HICP inflation rate in the euro area picked up from a slightly negative value at end-2020 (-0.3 percent) to 5 percent 12 months later, reaching 7.5 percent in April 2022. The pressures also reflected, in a more limited manner, in underlying inflation in the euro area (HICP excluding energy and food), which rose by 2.4 percentage points during 2021 (to 2.6 percent in December) and climbed to 3.5 percent in April 2022.

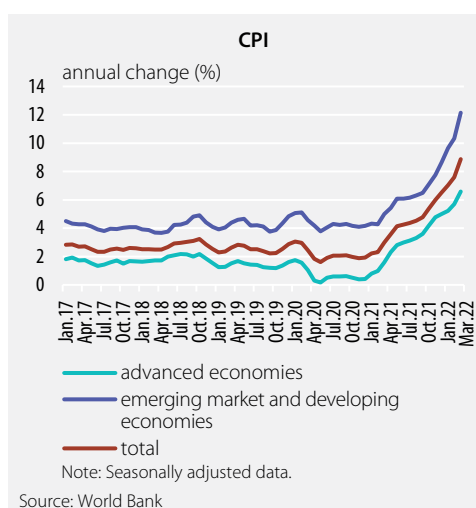


Chart 1.5
International consumer prices

The central banks' shift in perspective at end-2021 with respect to inflation developments led to a change in approaches to the withdrawal of monetary stimulus and the normalisation of monetary policy stances (Chart 1.6). In December 2021, the

¹⁰ According to World Bank data.

Chart 1.6
Policy rates

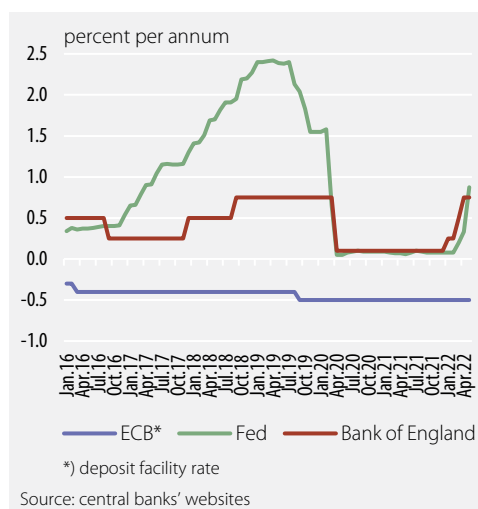
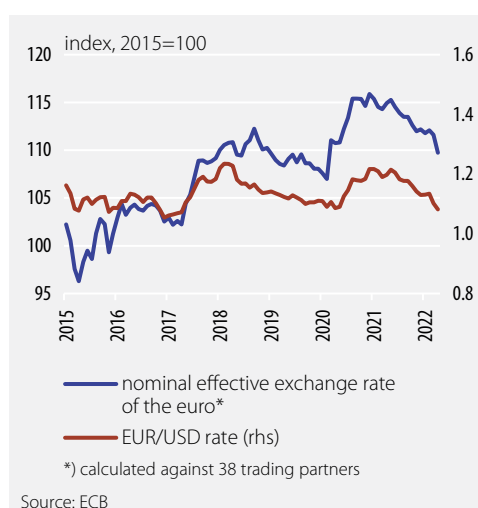


Chart 1.7
Euro exchange rate



Bank of England decided to reduce the size of its balance sheet and to launch the policy rate hiking cycle. In a similar manner, in November 2021 the Fed announced the reduction in the pace of asset purchases and also gradually began to offer some signal about the outlook for an increase in the federal funds rate, which in fact even occurred in March 2022 (up by 25 basis points) and in May (up by 50 basis points). Moreover, despite its far less advanced position in the business cycle, the European Central Bank resorted to a notable change in its rhetoric on the forward-looking conduct of monetary policy, publishing, at the same time, the new calendar for the conclusion of quantitative easing programmes (Chart 1.7). In this context, the single currency depreciated significantly versus the US dollar throughout the past year. The central banks in the region adopted substantial increases in monetary policy rates, given the sustained rise in inflation rates and the pressures in forex markets against the backdrop of the war in Ukraine.

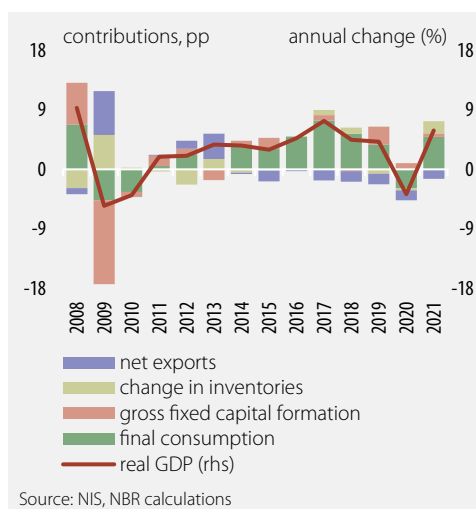
2. Domestic macroeconomic developments

2.1. Economic activity

Economic growth

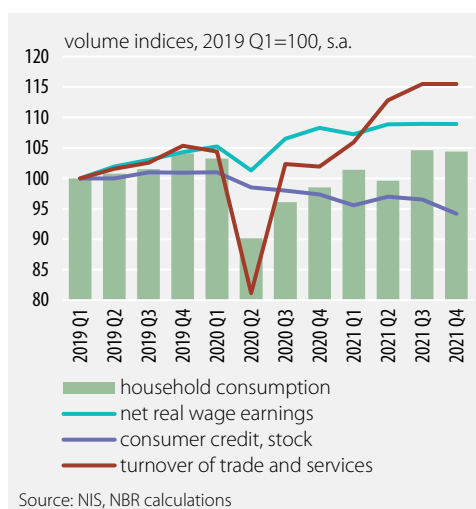
In 2021, economic activity grew by 5.9 percent, in Q2 real GDP managing to recoup the loss recorded following the outbreak of the COVID-19 pandemic (a development expected to be mirrored chiefly in the dynamics of the cyclical component and to a far lower extent in those of potential GDP). However, in the course of the year economic growth gradually lost momentum, under the impact of the ever larger disruptions in global value and supply chains, higher commodity prices and larger transportation costs. Although the easing, to a certain extent, of supply-side constraints at the turn of 2021 hinted at prospects for a pick-up in Romania's economy, the disturbances triggered subsequently by the Russia-Ukraine war dampened the optimistic expectations (Chart 1.8).

Chart 1.8
Demand



Household consumption increased, on average, by 6 percent, yet followed an uneven path in the course of 2021. Thus, leaving aside the influence of agricultural output (reflected in “self-consumption” and the “home industry”), which was negative in Q2, on account of the delayed harvests on the back of the adverse weather conditions, and strongly positive in the following quarter, also due to bumper crops, consumer demand posted slower dynamics in 2021 H2 (Chart 1.9).

Chart 1.9
Household consumption



The beginning of 2021 was marked by a recovery in household confidence, underpinned by the easing of mobility restrictions and the purchasing power remaining relatively robust, which mirrored in swifter-paced increases in purchases of goods and services (the average rise stood at 5.2 percent in Q1 and Q2). The easing of pandemic-related constraints (except for the end of Q1, which was affected by the third wave of the pandemic) restored consumption opportunities particularly in leisure activities and sales of clothing and cosmetics, which were also spurred by the upcoming

summer season. Moreover, the high average real wage and the attractive lending conditions, to which probably added the unlocking of savings accumulated in the previous year, allowed for the carrying-out of postponed purchases, as shown by the dynamics of motor vehicle sales (up by 12.9 percent, on average, in 2021 Q1 and Q2). At the same time, the upward path of consumer demand was marked by the consolidation of some trends in behaviour that the pandemic context had brought to the fore a year before, such as the widespread recourse to online purchases or the stronger propensity to purchase green (electric or plug-in hybrid) vehicles. Households' interest in electromobility was corroborated by the allocation, in June 2021, of additional funds to the “Rabla Plus” component (launched in April) of the car fleet renewal programme.

In the latter half of 2021, the purchases of goods and services embarked on a downward trend, the broad-based increase in consumer prices eroding the purchasing power (despite the government support schemes for household users of electricity and natural gas introduced as of November) and fuelling households' concern over a prudent management of expenses. Under the circumstances, as far as non-durables and particularly food items are concerned, a stronger preference for own brand products of

the main store chains or for purchases made at discount stores was noticeable (thus, the volume of sales rose slightly in 2021 Q4 as well). In addition, purchases of durables witnessed a trend reversal, the successive declines in Q3 and Q4 (on average by

2.5 percent) being driven also by the disruptions in global production chains, which diminished the level of domestic and external supply, notably of motor vehicles (the temporary easing of these constraints towards the end of the year favoured however the delivery of the orders made up to six months before; Chart 1.10).

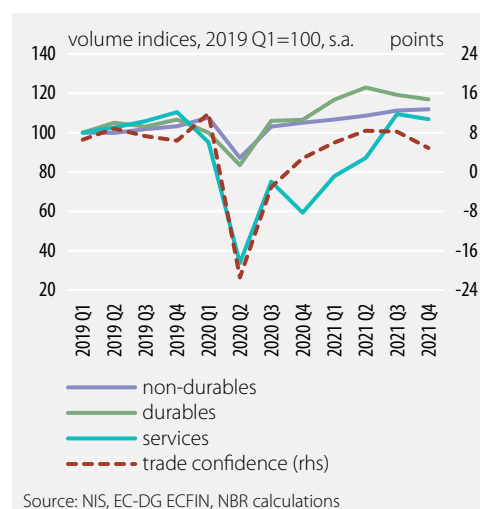


Chart 1.10

Trade and services to households

In 2021, gross fixed capital formation added 2.3 percent, posting however a slower pace of increase than in 2020, given that the growing supply-side difficulties worldwide affected the activity and the economic sentiment

of domestic companies, resulting in a fall in funds for investment. The pick-up in capital investment in the coming period will decisively hinge on the capacity of the domestic economy to turn to account the EU funds associated with the two standard multi-annual financial frameworks¹¹ overlapping with the Next Generation

EU programme, especially by fulfilling the objectives committed to under the six pillars of the National Recovery and Resilience Plan. The carrying-out of investment projects in infrastructure, digitalisation and increased energy efficiency included in this programme has the potential to act as a stimulus also for foreign investor interest, triggering a rebound in equity in the form of foreign direct investment (Chart 1.11).

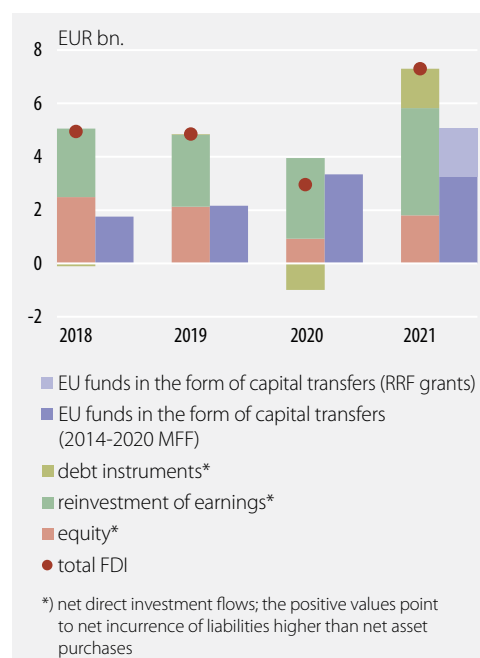


Chart 1.11

Direct investment and absorption of EU investment funds

After a first quarter in which they performed favourably, equipment purchases¹² embarked on a downward path, captured by the drop in purchases of capital goods (except for motor vehicles) from both the

¹¹ At the end of 2021, Romania still had available approximately 43 percent of the 2014-2020 MFF structural and investment funds that can be accessed for three more years after the completion date.

¹² The remarks concerning the evolution of this component and of construction investment are based on the quarterly data series on gross fixed capital formation (ESA 2010).

domestic market and abroad. Nonetheless, the companies' concerns further reflected the priorities that had emerged with the outbreak of the pandemic crisis – the enhancement of automation, the cut in the energy consumption of technological processes, the expansion of green energy production capacities, and the car fleet renewal of transport companies (Chart 1.12). Investment in construction stayed on an upward course, posting a swifter pace of increase than in 2020 over the year as a whole (to 6.1 percent). However, it lost momentum in the latter half of 2021, against the background of the growing difficulties faced by construction companies. Thus, the longer delivery times of inputs and the great differences between actual and

pre-contract prices (caused by the higher costs of building materials and energy) added to the already existing shortage of skilled labour, leading to delays in construction works or even the postponement of new projects. This context affected particularly the development of projects financed from private sources, where the residential component is further eroded by demand-side influences, associated with households' lower purchasing power and the gradual tightening of lending conditions. Nonetheless, starting in the autumn of 2021, the projects financed entirely or partly from public sources have received legislative support, as the companies involved in such projects can request an adjustment in the values of contracts for works and for the provision of goods (machinery and technological equipment), in line with the change in prices of materials¹³ (Chart 1.13).

The persisting trend of economic recovery and confidence restoration in the course of 2021 had a favourable impact also on global and implicitly Romania's trade. Thus, the volume of exports of goods increased by 11.4 percent as compared with the previous year, whereas that of imports rose by 12.4 percent (according

Chart 1.12
Investment excluding construction*

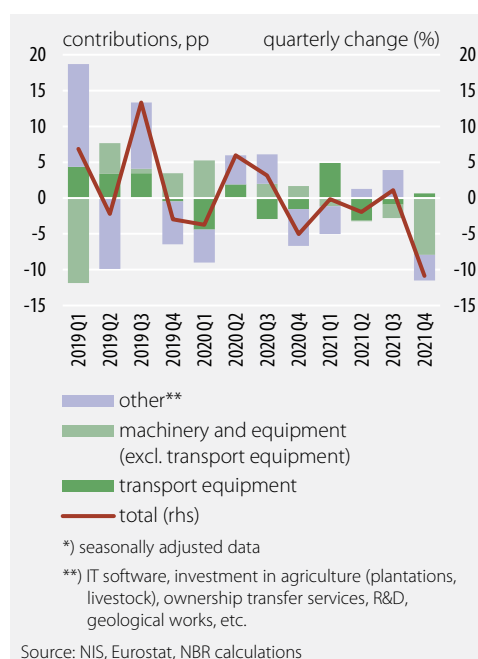
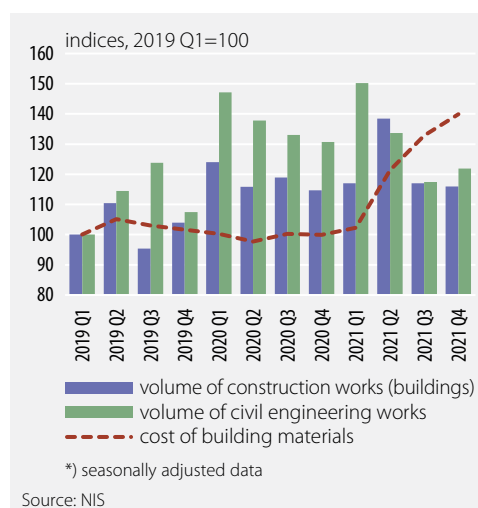


Chart 1.13
Construction activity*



¹³ According to Government Ordinance No. 15 of 30 August 2021 regulating some fiscal and budgetary measures, as approved by Law No. 281 of 2 December 2021, followed by Government Emergency Ordinance No. 47 of 14 April 2022.

to national accounts data). Nevertheless, this upswing incorporates substantial base effects, while the current activity in key segments of the domestic industry, deeply integrated in global value chains, was affected by the broader disruptions

in international production chains.

The clearest case is the automotive industry, which witnessed even temporary production halts owing to the external supply shortages of semiconductors. This context persisted January through September, impacting both exports (whose quarterly pace of growth did not exceed 0.4 percent) and imports (which remained however relatively more dynamic than exports).

The short-lived easing of tensions surrounding this context towards end-2021 somewhat boosted foreign trade, the quarterly rate of change

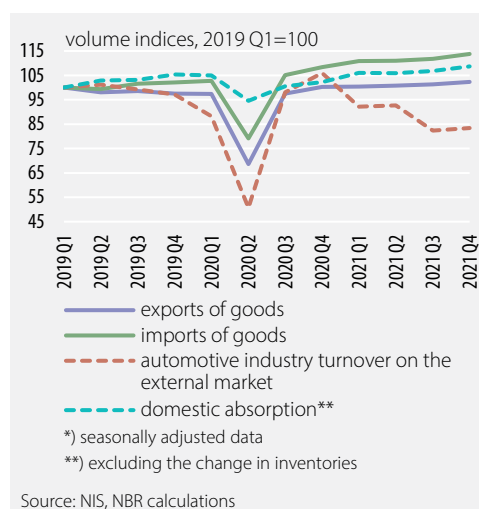


Chart 1.14
Foreign trade*

hitting 1 percent in the case of exports (with a significant contribution from sales of automotive products, electrical equipment, rubber, machinery and equipment, as well as of petroleum products, basic metals and fabricated metal products) and 1.8 percent in the case of imports, purchases of intermediate goods posting the swiftest dynamics (Chart 1.14).

External position

While the capacity to service external debt improved to a certain extent and the level of international reserves remained adequate overall also in 2021, the

worsening of the current account and of its financing structure paints a less favourable picture of Romania's external position compared to 2020 (Chart 1.15).

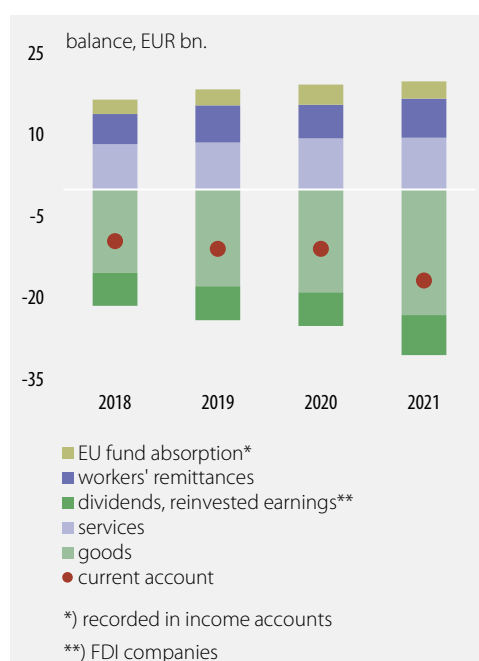


Chart 1.15
Current account and main components

2021 witnessed a renewed widening of the current account deficit (to EUR 16.8 billion, accounting for 7 percent of GDP), which is a vulnerability of the domestic economy. The incidental adverse developments over the recent period (the disruptions in global value chains, the deterioration of the terms of trade) only partially explain this situation, as the high level and the chronic nature of the current account deficit single out Romania among EU countries (Box 2).

The trade balance accounted for almost three fourths of the widening of the external imbalance, in a context where the pressures of robust domestic demand on imports compounded the negative effects induced by the synchronisation of economic recovery worldwide – supply bottlenecks and broad-based increases in commodity prices. On the one hand, the global semiconductor crisis translated into the lower momentum of the automotive industry, a sector that contributes more than 20 percent to Romania's exports. On the other hand, the domestic economy's position of net importer of numerous production inputs (with the notable exception of cereals and oleaginous plants) pushed the terms of trade to below one (99.2 percent in 2021 versus 100.1 percent in 2020), the price component accounting for almost half of the wider goods deficit (particularly on account of the higher energy bills). The primary and secondary income accounts also performed negatively (a EUR 1.7 billion deterioration), mainly on the back of the rise in outflows in the form of earnings reinvested by FDI companies, as well as of the lower absorption of EU funds for social objectives and agricultural development. By contrast, the balance on trade in services remained on an upward path, its surplus growing to EUR 9.5 billion (4 percent of GDP). A significant contribution further came from the ICT sector, IT companies benefiting from the keen interest in digitalisation, which emerged globally in the context of the pandemic and took on a strategic dimension at European level.

Box 2. Structural dimension of the current account deficit: a sectoral perspective

The external disequilibrium is one of the main vulnerabilities of the domestic economy and a decisive influence in this respect comes from structural deficiencies (Chart A)¹⁴. They explain to a large extent the magnitude of the deficit, but also its quasi-steady nature – basically, from 1990 onwards, Romania reported only external deficits, regardless of the phase of the domestic or external business cycle. This analysis aims to highlight a number of structural factors affecting the external position, based on a sectoral approach that facilitates the distinction between idiosyncratic issues and aspects transcending the particular framework of some areas of activity. The sectoral analysis also allows identifying coordinates of how a sudden adjustment of the external disequilibrium (the so-called “hard landing”) could unfold in terms of related costs.

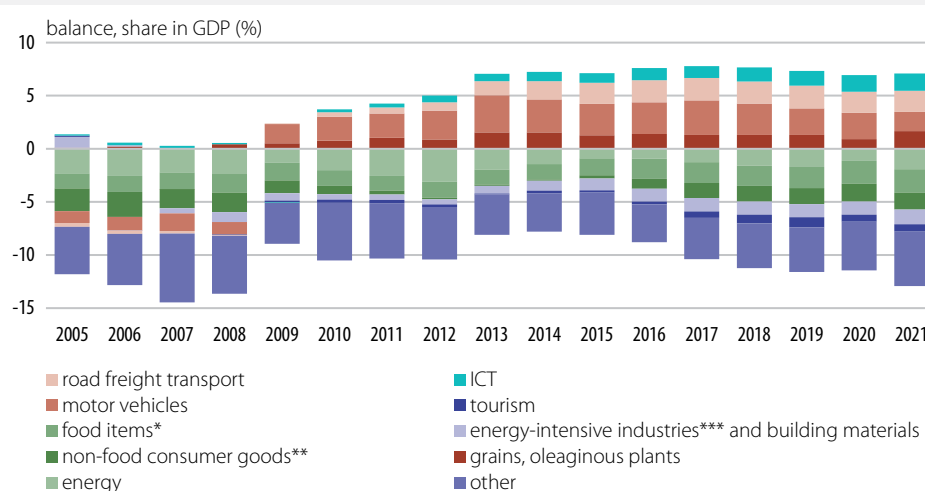
Structural factors of the external position

Energy

Romania is a net energy importer, a position maintained over the past few decades. In this period, energy consumption declined, in step with the global rate of improvement in energy efficiency. According to the International Energy Agency, energy intensity (measured as total energy supply per unit of gross domestic

¹⁴ The analysis draws on (fob-fob) trade balance data by group of goods, mainly based on the 2008 Classification of Products by Activity. The exceptions are the group of agri-food items (where the classification in the Combined Nomenclature was preferred, as it allows for a finer detail) and the group of non-food consumer goods (where the Classification by Broad Economic Categories was used, as it facilitates the exclusion of trade flows related to goods produced under processing arrangements).

product) decreased internationally by more than a third between 1990 and 2019. Romania's energy intensity followed a downward path, more pronounced than that at EU level – while in 1995 Romania's energy intensity was almost twice the EU-27 average¹⁵, in 2008 the indicators were at par, and in 2020 it made up about three fourths of the EU average. The increase in domestic energy efficiency entailed lower resource requirements, which attained a peak of the last decades in 1996, at the height of the business cycle. At the apex of the next boom phase in 2008, GDP stood almost 60 percent higher, on the back of gross domestic energy consumption lower by approximately 21 percent. The trend continued, so that at the next peak in 2019 GDP advanced 28 percent from 2008, whilst energy consumption decreased by another 17 percent.



*) Combined Nomenclature, Chapters 2-4, 7-9, 11, 13, 15-23

**) excl. the goods produced under processing arrangements

***) base metals, fertilisers, pesticides

Source: Eurostat, NIS, NBR calculations

Chart A
Balance on goods and services

The contraction in energy consumption was accompanied by a decline in domestic energy production. Reliance on energy imports¹⁶ ranged generally between 20 percent and 30 percent from 1990 onwards, in 2021 recording a value close to the upper bound of the historical variation range.

The information emerged in recent years about natural gas deposits in the Black Sea area, but also on-shore, suggests that energy independence – either on the whole or only in the natural gas segment – could have already been achieved assuming a swifter pick-up in prospecting activities and the integration of new resources in the exploitation circuit. The latent manifestation of the vulnerability posed by the reliance on energy imports (it posted fluctuations, as mentioned above, but did not worsen over time) appears to have limited the authorities' drive to promote more effectively the discovery and harnessing of new resources. In fact, legislative uncertainty and the interventions to cap energy firms' benefits eroded

¹⁵ Indicators were adjusted for the purchasing power.

¹⁶ The indicator is defined as the ratio of net energy imports and total energy delivered to and used in the economy.

the attractiveness of investment in this sector. In addition, the recent push towards reducing carbon emissions led energy producers to focus on renewable resources, possibly to the detriment of traditional ones.

Sources such as wind or solar energy have become more relevant locally in recent years, generating together about 14 percent of national electricity production in 2021 (with wind energy prevailing), whereas they were marginally important 15 years ago. The segment's buoyancy is based on extensive investment in the first half of the previous decade – gross fixed capital formation in the NACE division that includes production and distribution of electricity exceeded 10 percent of the economy-wide value for the period 2013-2014 and more than a third of industrial sector investment. The shift in the authorities' focus on the support for renewable energy producers, which is seen as overly generous and burdensome for the energy-intensive industry, put a cap on the development of production capacities after 2014. More recently, however, amid the commitments to achieve carbon neutrality, the upward path is expected to resume, with EU funds acting as an incentive.

The energy sector is currently very dynamic and challenges are great. Specifically, the across-the-board increase in commodity prices affects not only the value of energy imports, but also the feasibility of projects oriented towards renewable resources – the costs of such investment followed a downward track starting 2010, which has however reversed as of late¹⁷. Uncertainty further surrounds issues such as the role of nuclear energy (euro area's economic powerhouses, i.e. Germany and France, address this issue quite differently), but also the extent and pace at which fossil fuels are to be phased out. All these aspects are significantly influenced by technological innovations, with an intrinsically unpredictable nature. Moreover, if Romania were to capitalise on the opportunity provided by EU funds and make the necessary investment, it could significantly narrow its energy-related trade deficit over a few years.

Automotive sector

This economic segment expanded markedly over the past two decades¹⁸, its advance being discontinued by the COVID-19 pandemic alone. This area gradually came to generate a substantial trade surplus (somewhat lower in 2021: 1.8 percent of GDP). The expansion of the automotive sector is based on extensive investment aimed at creating, enlarging and streamlining production capacities, made with the participation of key global actors, whose know-how and financial resources played a major role. The business orientation is mainly aimed at meeting foreign demand, either directly or indirectly¹⁹, while the market share of automotive

¹⁷ According to *World Energy Investment 2019 and Renewables 2021. Analysis and forecast to 2026*, International Energy Agency reports.

¹⁸ For further details on the developments in the automotive industry, see the box entitled "The automotive sector – incidental disruptions and structural metamorphosis" in the November 2019 *Inflation Report*.

¹⁹ The activity of suppliers serving local producers also hinges largely on external demand for the models made by those manufacturers.

exports expanded gradually, from fractional values to nearly 1 percent in recent years²⁰. More recently, the sector has been taking steps towards integrating into the trend of electromobility – two major electric battery manufacturers announced their intention to open production capacities in Romania, while the next years could see the launch of hybrid and fully electric car models (currently, a mild hybrid model is being produced in the country).

However, further development of the sector is stymied by a number of structural problems. Specifically, the sorry state of transport infrastructure has a significant adverse impact, given the outward orientation of the activity, which implies the need for an easy connection with European transport routes. This weighs heavily on the firms' decisions to establish or enlarge capacities and contributes to maintaining a very uneven geographical distribution of production. The automotive industry ranks halfway in the top of the unit value of manufacturing exports (about EUR 10,400/tonne in 2021), illustrating that the share of transport costs is significant; ranking high are segments such as electronics or pharmaceuticals, where transport costs are less significant in relative terms. The unit value of car exports increased over time, also benefiting from qualitative improvements in domestically-manufactured car models; however, transport infrastructure remains a relevant issue.

The difficulties in hiring skilled staff began to prevail among the factors limiting production as of 2016 until the outbreak of the pandemic, according to an EC-DG ECFIN Survey. The relevance of the problem faded subsequently, as other factors came to the fore (the pandemic shock, input availability, etc.), but also amid automation efforts, further requiring, however, investment capacity.

Another structural factor with an adverse effect on the external position of the automotive industry concerns the insufficient increase in the national car fleet. Given this need, motorcar imports (for final consumer or investment demand) made a large negative contribution to the trade balance, as they grew sharply especially prior to the outbreak of the financial crisis, before posting more modest developments, yet still on a rising trend from 2013 to 2019. Nonetheless, Romania further ranked last in Europe by number of cars per inhabitant; the said increase in imports materialised essentially only in a narrowing of the gap between the before last and the last place (of Romania) in that ranking. This structural influence is expected to continue in the period ahead, given the economy's need for development and mobility. Of course, the perceptible pressure on the existing road infrastructure²¹, which puts the idea of a shortage of transport means in a counterintuitive light at first, highlights yet again the need to improve the road network.

²⁰ Given that the market share of exports of goods is below 0.4 percent.

²¹ As also indicated by the number of road accident fatalities, which is the highest in Europe and showed no signs of decline by the start of the pandemic.

Agri-food sector

The agri-food sector is characterised by a quasi-steady trade deficit (0.5 percent of GDP in 2021), despite the significant potential of agri-food production – agricultural area covers about 57 percent of the country's territory, allowing a variety of crops and livestock farming.

In agriculture, grain and oilseed production expanded in recent years, resulting in significant trade surpluses (1.7 percent of GDP in 2021). By contrast, the other key segments (fruit and vegetables, animal products) recorded higher deficits, with positive developments being detected only for a few items (nuts, honey, mutton), with marginal effects on the overall picture. Going beyond the explainable situation of exotic products, the local supply of vegetables, fruit or meat is systematically short and unable to keep the pace with the scale and qualitative requirements of domestic demand, which can easily be met by products from other countries in Europe or in the region.

Behind the good performance in agriculture stood the extensive investment made over the last two decades. A new impetus could benefit the underprivileged areas, but also those reporting favourable developments, amid the aim of improving yields and fostering integration into organic farming trends – only 3.5 percent of the country's farmland achieved or is about to see a conversion in this direction, the EU average being 9.1 percent.

In the food industry, investment was on the rise until 2008, but the financial crisis-related decline lingered on, spurred by weak demand. The situation changed markedly in the middle of the past decade, amid the reduction in the VAT rate on food and the higher income, while food trade has expanded by more than 5 percent every year starting in 2014; the major leap was in 2015-2016, when demand grew by more than a third overall. However, given the weak investment profile in the past, the boom entailed a pick-up mainly in imports and to a lower extent in local production. Similarly to the production of vegetables, fruit or animal products, the competitiveness of many countries in Europe or in the region eased the transmission of demand growth into imports. In the same direction acted the expansion of modern trade, with other quantitative or qualitative requirements than traditional trade.

The buoyant domestic demand, however, left its mark on local supply – gross fixed capital formation halted its decline, while the rate of business start-ups moved higher after 2016. Nonetheless, this reaction had little effect on the sector's overall picture, especially as start-ups are mainly small-sized (with up to 10 employees) and their economic performance and ability to gain a foothold on the market are generally lower than those of larger companies.

Processed food exports gained momentum in the last 10 to 15 years, yet the favourable path was overshadowed by the visible gap in relation to the potential level and the level of other European countries, as the values recorded in 2021 by Romania and Poland differ strongly in terms of size (EUR 2.1 billion and EUR 27 billion respectively).

Production of other consumer goods

A mismatch of industrial production with demand can also be observed in the case of other consumer goods, whereas exports were weak on the whole, the ensuing deficit standing at 1.6 percent of GDP in 2021. Given that such activities are mainly characterised by high labour intensity, producers of consumer goods responded unfavourably to the hikes in unit labour costs seen since 2014-2015; this is the case of the furniture industry, but especially those of wearing apparel, footwear and leather goods. It is true that longer-term developments do not favour the expansion of activities using cheap labour amid the convergence trend of wages to those at EU level. Hence, the decline in these areas includes an exogenous structural component, to which added, however, the effects of a generous income policy initiated at the middle of the last decade.

At the same time, pharmaceuticals accounted for a significant part of the consumer goods shortage, as they have followed a steady uptrend from 1999 onwards, reaching 1.3 percent of GDP in 2021, with exports lagging behind imports in terms of quantity and unit value. This is also based on structural factors, revealed by the concentration of activities with a key innovative component particularly in the advanced economies.

IT sector

The ICT sector has witnessed a sizeable expansion in recent years²², the related trade surplus coming in at 1.6 percent of GDP in 2021. Notable advantages in this regard are the availability of skilled workforce, as reflected by the number of ICT graduates and the favourable evolution of the communication infrastructure. Aside from this upward path, however, the sector is in a fledgling state, the activity being generally aimed at carrying out less complex works than other technological hubs.

The development avenues of the ICT sector include preserving the relation with external demand that is expected to remain robust amid the fourth industrial revolution, but also a possible boost in domestic demand from firms and the general government, given its starting from a low level, whereas the pandemic proved the benefits of using ICT tools. Specifically, the workforce needs to be trained in order to improve their digital skills, which would make it easier for local firms to access such solutions. Digitalisation can also benefit from EU funds, which is a major opportunity in terms of strengthening the position of the ICT sector and, at the same time, the productivity of the local economy.

Transport sector

The road freight transport sector also recorded a positive path, with net receipts equivalent to 2 percent of GDP in 2021. Although the sector's performance,

²² The box entitled "The post-pandemic economy and the new technological paradigm" in the NBR's 2020 *Annual Report* makes an in-depth analysis of the local ICT sector.

also reflected in its larger share in the European market, is bolstered by relatively high ULC competitiveness (compared to countries with more visible presence on Europe's roads, such as Poland, Czechia or Lithuania), a more in-depth analysis highlights some deficiencies. Thus, the advantage in ULC terms is attributed solely to low wages, whereas labour productivity is relatively modest, even if the capital stock per person employed is similar or even higher than in the above-mentioned countries. A possible explanation is the reduction in the quality of domestic fleets – for example, from 2015 to 2020, the journey of the load carried by vehicles more than 10 years old increased by about 7 percentage points (up to 28 percent), bucking the trend recorded in the comparison group. Another productivity erosion factor concerns the state of the country's road network, which is the culprit for the longer time needed to exit the country, larger fuel consumption and higher maintenance costs.

Maintaining a competitive position of the domestic road freight transport sector calls for solid investment. Specifically, the car fleet renewal is likely to curb intermediate consumption (as local firms are at a disadvantage), which could offset the adverse effects of implementing the EU Mobility Package starting in 2022. Such effects are expected to weigh on both wage costs (in light of the provision stipulating that drivers should be paid at least a specific national minimum wage when posted) and the expenses related to the obligation to return to the transport company's home country every eight weeks. As for infrastructure investment, the endeavour to expand and modernise the local network currently has a historical opportunity to materialise, due to the NRRP strategic framework for sustainable transport, decarbonisation, road safety and smart transport systems.

Tourism

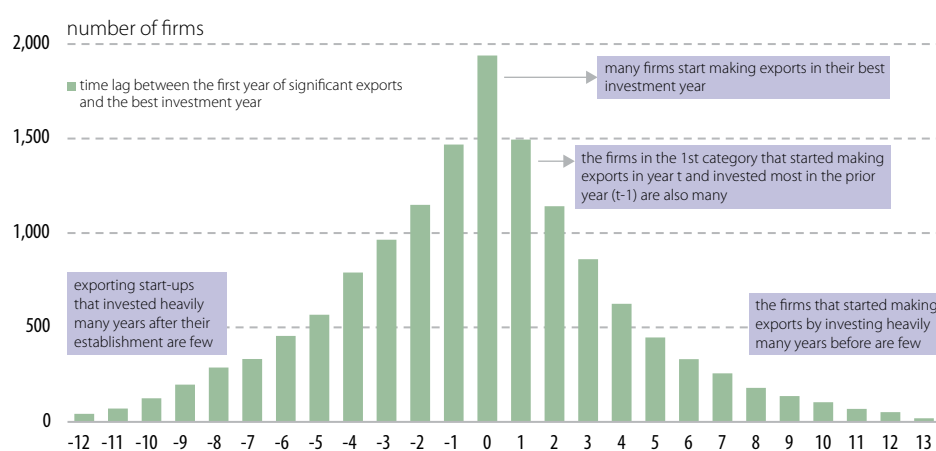
Romania counts among the countries where international tourism stepped up in recent decades amid looser cross-border travel conditions in a context of gradually rising standards of living. However, what differentiates the path of Romania's travel balance is its historical deficit, which is at odds even with the course of this balance in countries where international tourism is not a major income source.

Even though the Romanians' appetite for travelling abroad made a certain contribution to this imbalance, its pressure was generally moderate (imports of tourism services did not exceed 1.5 percent of GDP until 2017, yet it increased subsequently amid mounting consumer demand). In fact, the deficit on travel services in Romania owes mainly to poor receipts: on average, 1 percent of GDP in the 2007-2019 period, i.e. an EU-wide low. The tepid performance of this economic segment is due to a number of supply-side issues of a quantitative nature – the number of accommodation places stagnated over the last decades – but also qualitative nature – the occupancy rate rose mildly until 2019, the almost 40 percent level lagging well behind that of the countries in the region. The current context marked by subsidising demand via government-provided holiday vouchers,

profitability supported by low wages and partial tax compliance, as well as the problem of (road and rail) transport infrastructure, prevents this activity from reaching its potential level.

Overview

Romania's current account deficit is under multiple influences, confirming the assertion that the external balance is a mirror of the local economy, yet some issues keep coming to the fore, such as investment, transport infrastructure or the availability of skilled workforce.



Note: The chart depicts the difference between the year of exporting firms being recorded in the database (proxy for the first year of significant exports) and their best investment year. The pooling of values around 0 shows the importance of export and investment coordination. The database covers the 2007-2020 period. The analysis leaves out of account the companies making exports in 2007 (the first year in the sample), with the first exports preceding most likely this moment. The sample does not include the firms with less than 5 years in business.

Source: NIS, MF, NBR calculations

Chart B
Relationship between the pick-up
in investment dynamics and
presence on external markets

The analysis of various business sectors shows that a robust competitive position hinges on investment. At microeconomic level, virtually every momentous event in a company's lifetime revolves around the step-up in investment activity; this obviously refers to the setting up of the firm, but also the starting of an important trade relationship domestically or abroad (Chart B). An aspect that should not be ignored concerns investment efficiency, and from this perspective there is certainly room for improvement in the local economy, since the investment-to-GDP ratio has been comparable over time to that of Czechia, Hungary or Poland, while the competitive position has been more unfavourable, as shown by Romania's current account performance.

Poor transport infrastructure hampers the development and expansion of economic sectors, with major negative effects, including in social terms, given that in recent years Romania has been faced with the paradox of recording the highest traffic-related death rate in Europe, the lowest car ownership rate notwithstanding. Recent signals show that authorities are keen to see this issue solved, yet an integrated approach is needed to optimise competitiveness gains. For example, the

expansion of the motorway network will support local car producers, but also foreign firms delivering agri-food products to the domestic market, *inter alia* facilitating transport to tourist destinations outside the country. Given that local suppliers of food items and tourism services benefit from local road improvements, steps in this direction, together with the expansion of the motorway network, would exert a more pronounced positive effect on the overall competitive position.

The shortage of skilled workforce is an issue lingering in many areas of activity. One instance is the scarcity of staff with secondary technical education, an issue whose solving prospects are however somewhat more favourable, given the higher enrolment rates in vocational education over the previous decade (albeit from a very low level)²³. Furthermore, automation can be implemented more easily for repetitive tasks, and there are signs that this process has already started in a number of businesses. At the same time, the aim should be to enhance digital skills both at a basic level, with a view to increasing the use of ICT solutions in local companies, and at an advanced level, for the continuous development of the sector. Moreover, the sector also needs the integration of high-level business and management knowledge so as to offer better solutions.

The expansion of the ICT footprint in the economy, with its both sides – integration of related solutions into various economic activities and development of the sector generating those solutions – is all the more important as certain structural influences signal the risk of a middle income trap. Specifically, at one end, the convergence of wages towards the European average systematically erodes the price/cost competitive advantage of Romania's light industry, and at the other end, the level of economic development hinders the R&D investment that would allow, for instance, the production of innovative medicines. Attaining the status of an advanced economy is also feasible in the absence of major transitions, as the focus should be on adapting the sectors that have previously hinged more on the low-cost advantage to a new business strategy based on quality and productivity. In fact, these coordinates refer precisely to the creation of favourable conditions for inclusive development that fosters the preservation of social cohesion.

Fiscal policy plays an important role in improving the external imbalance. In this vein, one of the relevant aspects refers to an adequate calibration of the implemented stimuli in light of the evidence that producers are often not prepared to accommodate the full increase in demand, causing the current account deficit to widen. At the same time, heed should be paid to the implementation of a tax regime ensuring adequate incentives economy-wide; specifically, a preferential tax regime for small- and medium-sized enterprises supports the setting-up of firms, yet its differentiated nature may stifle the incentive to expand the business. Last but not least, fiscal discipline, legislative predictability and compliance with the commitments made will ultimately lead to improved credit ratings, a sustainable cut in interest rates and a boost in investment.

²³ Raport privind starea învățământului preuniversitar din România 2019-2020, Ministry of Education.

Apart from the around EUR 500 million rise in the net exports of this segment, the net receipts of companies providing road freight transport services also recorded a similar increase, against the background of the recovery in international trade. Conversely, the deficit under travel and passenger transport widened as compared with 2020, as the easing of restrictions on the movement of persons favoured the strong appetite of domestic consumers for travelling abroad becoming manifest.

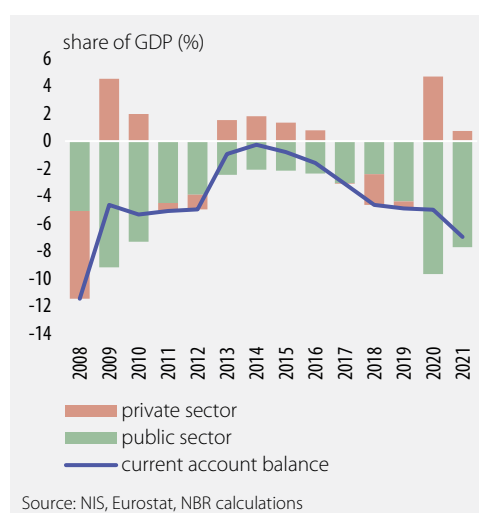


Chart 1.16
Public/private composition of the saving-investment balance

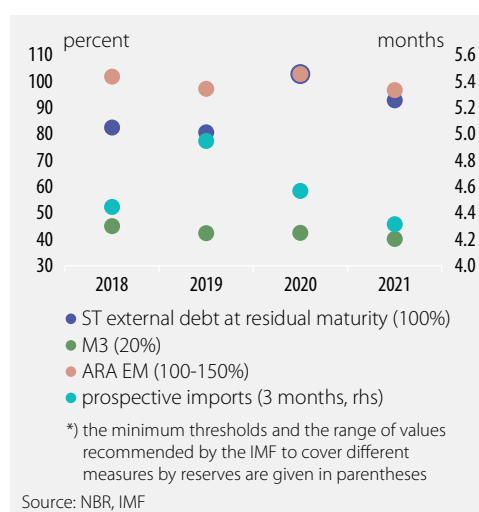


Chart 1.17
Reserve adequacy indicators*

The substantial widening (by 54 percent) of the current account deficit came with a decline below 70 percent of the coverage by non-debt creating flows, despite their upward movement – via both the channel of inflows in the form of equity in direct investment companies (as a result of reinvested earnings rising to higher levels than in the years prior to the pandemic) and the channel of absorption of non-repayable EU investment funds. As far as the latter are concerned, more than a third are accounted for by a first disbursement made by the European Commission under the Recovery and Resilience Facility (EUR 1.8 billion, equivalent to 13 percent of the grants allocated to Romania) to support the start of the implementation of investments and reforms included in the National Recovery and Resilience Plan.

In comparison with the previous year, when debt-creating flows were channelled chiefly towards financing the public component of the saving-investment balance (which reached a record high, in an effort to support

the economy, hit by the pandemic crisis), in 2021 government bond issues declined, so that the net portfolio investment inflows (EUR 3.1 billion) accounted for less than one fourth of the value posted in 2020. By contrast, the lower positive contribution of the private sector (amid the substantial imports driven by domestic absorption, the adverse developments in the terms of trade and the disruptions in production chains) translated into a wider recourse to financial sources in the form of debt (deposits, intercompany loans, etc.), Chart 1.16.

Therefore, in 2021 total external debt increased by 6.2 percent year-on-year, amounting to EUR 134.6 billion. Nonetheless, the debt servicing pressure slightly abated. Thus, as far as the debt repayment capacity is concerned, the ratio of gross

external debt to GDP fell by 1.9 percentage points (to 56 percent), while the ratio of gross external debt to exports of goods and services shrank by 18.6 percentage points (to 137.2 percent). At the same time, Romania continued to boast a comfortable position in terms of external liquidity. Specifically, the external debt service was further below the value of exports of goods and services (87.6 percent), while the level of international reserves, which added EUR 3.3 billion against 2020 (to EUR 45.8 billion), remained adequate as a whole (Chart 1.17).

Labour market

Labour market conditions improved in the course of 2021, with the recovery of economic activity and the adjustment of the business environment to the new pandemic context. Job retention schemes further played a role in containing layoffs, yet companies made a lower recourse to this support than at the peak of the health crisis, the measures being more targeted to the sectors/firms directly affected by the

restrictions imposed by the authorities.

For instance, throughout 2021, around 1.2 percent of employees (on average) were on such schemes, whereas in 2020 Q2 (the peak of the crisis) the beneficiaries accounted for almost 12 percent of the number of employees.

Headcount economy-wide increased by nearly 1 percent in 2021, the end of the year marking the surpassing of the pre-pandemic level and a historical high of the available data series. However, the rebound was not even or visible in all the

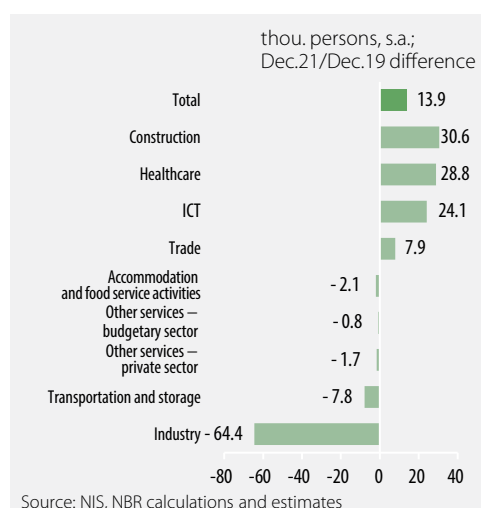


Chart 1.18
Evolution of the number of employees economy-wide

economic sectors, the new economic environment prompting a certain change in staff needs as well. Labour demand was further high in the areas compatible with social distancing or teleworking, such as construction, courier services and IT services (the sector being boosted by a step-up in digitalisation/automation too), but also in essential activities, such as healthcare – in these cases, the number of employees visibly exceeded the pre-pandemic level. A rebound in payrolls was noticeable in trade and accommodation and food service activities as well, the recovery in demand in these sectors being probably driven by the relative easing of restrictions and specialised firms' adjustment to the new pandemic context. Conversely, in other services sub-sectors such as transportation and storage, financial intermediation, real estate transactions and recreation, the pace of hiring was rather slow and industry showed a fairly modest performance overall, large layoffs occurring in the light industry, against the backdrop of the closure of some production facilities, and in the automotive sub-sector, partly following the automation of the manufacturing process (the new car models allow for higher robotisation). A notable exception was electrical equipment, given the swift rise in demand for durables (Chart 1.18).

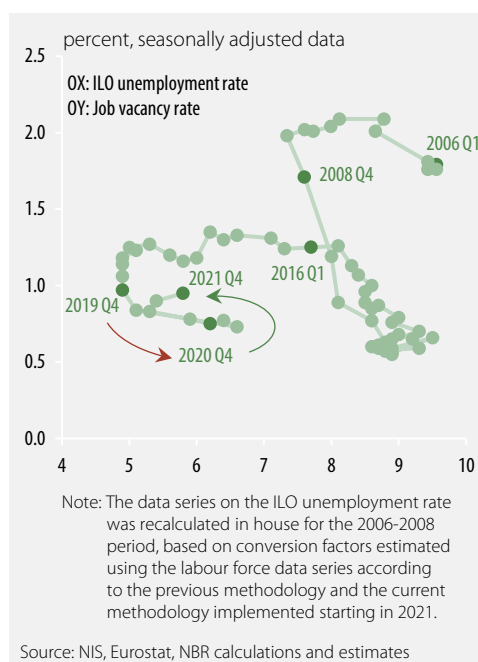


Chart 1.19
The Beveridge curve

At the same time, the labour market tightness/looseness indicators, namely the ratio of the job vacancy rate to the unemployment rate and the labour shortage perceived by companies (derived from the DG ECFIN Survey), gradually increased during 2021, remaining however below the pre-pandemic level. The ILO unemployment rate showed mixed developments in 2021. Specifically, it embarked on a downward trend in the first part of the year and fell to 5.4 percent during summer, significantly below the over 6 percent value it had recorded since the start of the pandemic, before moving up to 5.8 percent in Q4. Given the increase in employment, the higher

labour supply in this period largely mirrored the movement of some inactive working-age persons into the economically active population. At the same time, the ILO unemployment rate further running above the 4.9 percent low reached in 2019 may signal the faster pace of structural changes in the economy, namely the permanent destruction of some jobs in industry concurrently with the increase in payrolls in other economic sectors, in some cases with workers from outside the EU (a 67 percent rise in their number in 2021, to 50,000 persons, ahead of a doubling in 2022). The capacity of the economy to create jobs gradually expanded throughout the year, the job vacancy rate growing close to the pre-pandemic level. Apart from the structural influences (the higher activity rate, the reallocation of resources in the economy), the movements of the indicators were chiefly cyclical, along the slope of the Beveridge curve, being specific to the recovery phase of the business cycle. Labour market support schemes played a significant part in these developments, as companies had the possibility to retain human capital, thus containing the effects of costly layoffs during a recession followed by re-employment and training in the recovery phase (Chart 1.19).

In 2021, the growth rate of wages remained moderate, at approximately 7 percent (close to the 6.4 percent value posted in 2020 and markedly below the 13 percent threshold recorded in 2019). The improvement in labour productivity, with the fast economic recovery, exerted a positive effect on wage dynamics, while the change in labour market conditions generally has a lagged impact, the negative contribution observed in the course of 2021 mirroring actually the adverse developments having occurred in 2020. At the same time, some factors exogenous to the wage-setting mechanism exerted a significant positive influence, which may be linked to authorities' financial support for workforce retention, compositional effects, the bonuses granted to the medical staff involved in treating patients infected with the novel coronavirus or in the vaccination process, as well as to wage

rigidity. As far as the budgetary sector is concerned, the demonstration effects on the private sector are assessed to be diminishing, amid the capping of wages at end-2020 (Chart 1.20).

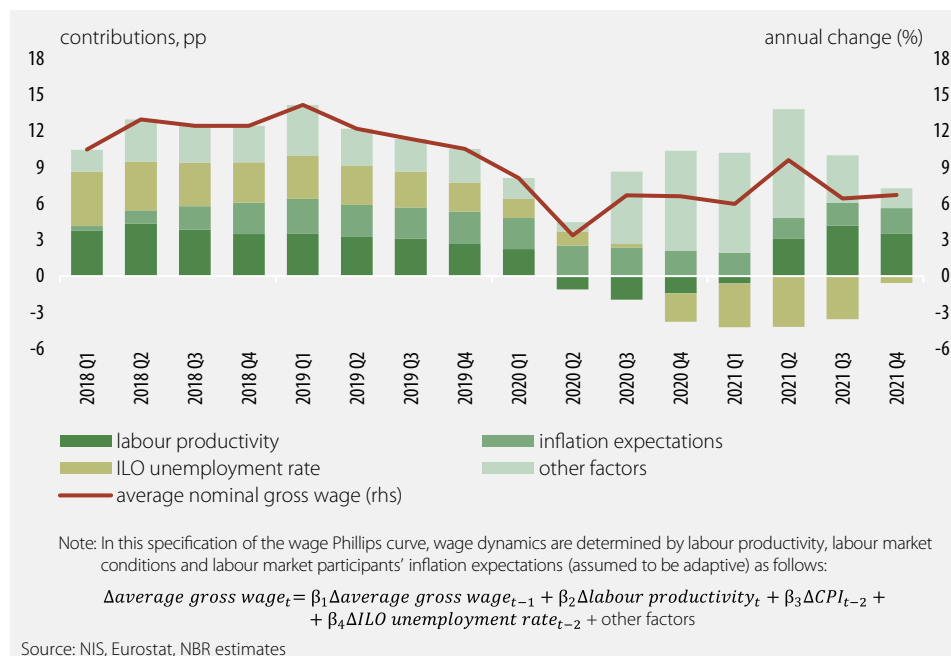


Chart 1.20
Contribution of determinants
to the dynamics of average gross
wage economy-wide

2.2. Prices and costs

Consumer prices

The annual CPI inflation rate increased significantly in 2021 as a whole, exceeding by far the upper bound of the variation band of the flat target (8.19 percent in December 2021, i.e. 6.13 percentage points above the level recorded 12 months prior), Chart 1.21. Looking at the inflation trajectory, the most relevant development was the occurrence of multiple shocks in the energy sector, both on the demand and supply sides, whose effects on prices were compounded by the mechanisms

underlying the functioning of the European energy markets, which, given the integration, also apply in Romania.



Chart 1.21
Annual inflation rate

Global demand for energy saw a fast recovery as the gradual easing of most pandemic-related restrictions led to a rebound in industrial activity. This overlapped with a lower storage level on the European natural gas market at the beginning of the cold season compared to that recorded in the previous year, against the backdrop of a natural decline in production in some relevant gas fields, but also of

the failure to increase imports from the main supplier. The effects spread to the electricity market, all the more so as the thermal power plants using this type of fuel played an important role in the 2021 energy mix, compensating for the poor production of electricity from water and wind sources, owing to adverse weather conditions, as well as the closure of some coal-fired power plants²⁴ amid EU policies

aimed at the faster transition to a green economy. In fact, the latter put extra pressure on the cost of producing energy from fossil fuels by significantly upping the prices of carbon dioxide emission allowances. In this context, prices in European wholesale markets were up to five and six times higher for electricity and natural gas respectively at end-2021 versus the same year-ago period. With regard to fuels, the Brent oil price averaged at USD 71 per barrel in 2021 as a whole (compared to about USD 43 per barrel in 2020), upheld by the strong recovery in global demand, while OPEC+ production remained

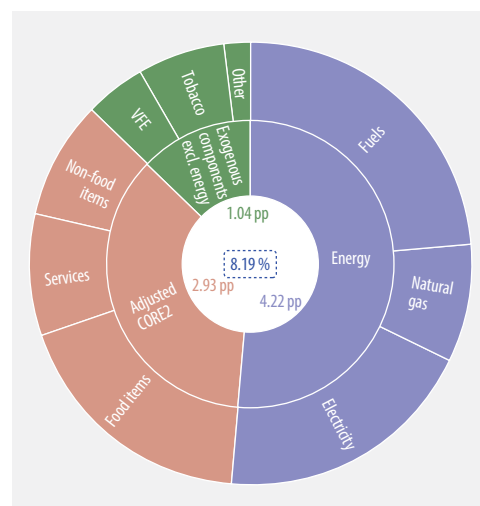


Chart 1.22
Contributions to the annual CPI
inflation rate (December 2021)

relatively low. On the non-motor fuel segment, the rise in prices reflected the gradual decline in domestic wood supply in recent years and effects related to demand for alternative energy sources.

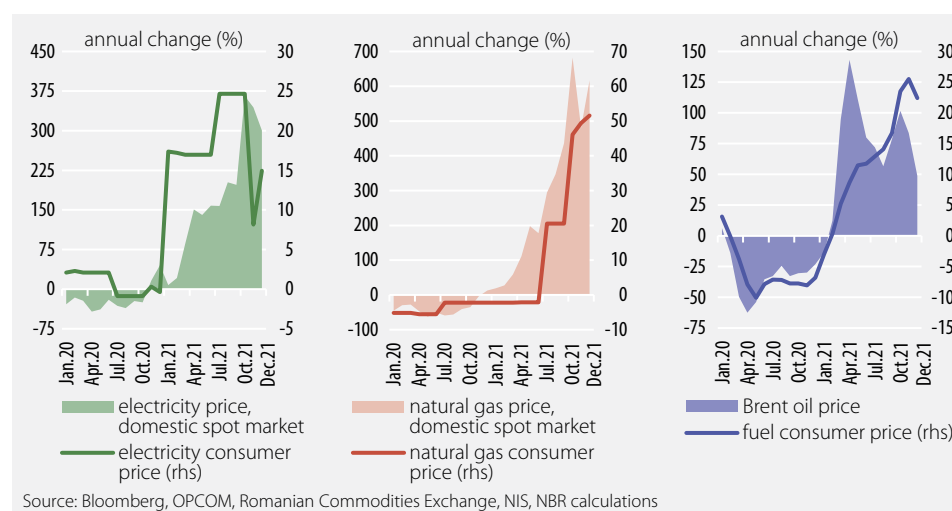


Chart 1.23
Energy prices

The impact on CPI dynamics was significant (Chart 1.22); the energy component²⁵, which makes up about 16.5 percent of the CPI basket, accounted for more than half of the annual inflation rate recorded in December 2021 and for 80 percent of its increase over the year (6.3 percentage points). As regards utilities, the bill capping

²⁴ Towards year-end, the prohibitive levels of natural gas prices even led to the reopening of coal-fired power plants.

²⁵ Comprising natural gas, electricity and fuels.

and compensation scheme, which became effective in November 2021, limited the impact of the above-mentioned developments on final prices, counterfactual estimates showing an around 0.8 percentage point higher inflation rate at year-end in the absence of these measures. While for natural gas a number of contract updates had already been implemented July through November following the shift in market conditions, for electricity most of them were scheduled for early 2022 – one year after the full liberalisation of the market. Moreover, the impact of the support scheme increased significantly at the beginning of 2022, exceeding 6 percentage

points, especially as a more lenient version of the scheme came into effect in February 2022. During 2021, natural gas and electricity bills rose by 51.6 percent and 14.9 percent, respectively. At the same time, fuel prices climbed by 22.4 percent, reflecting sharp hikes in both motor fuel and solid fuel prices (Chart 1.23).

The annual adjusted CORE2 inflation rate held relatively steady in 2021 H1, fluctuating around 3 percent, as the services segment continued to feel the adverse effects of mobility restrictions related to the management of the

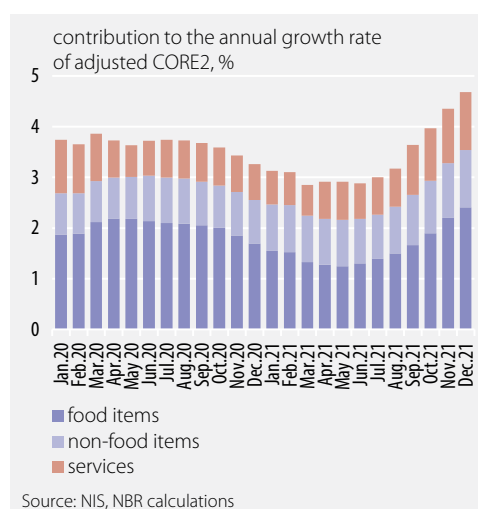


Chart 1.24

Main components of the adjusted CORE2 inflation

health crisis, and the goods segment was influenced by base effects associated with the strong increases in prices for some staples at the outbreak of the pandemic (given the panic-driven fast-paced rise in demand for these goods at the time). However, starting 2021 Q3, core inflation saw its upward path steepen, standing at 4.7 percent at year-end (1.4 percentage points higher than in December 2020). The sharp change in trend owed almost exclusively to supply-side factors (with a significant impact also on the aggregate indicator of inflationary pressures in the economy – for further details, see Box 3), i.e. the rise in corporate costs, especially for energy, as well as for other inputs, amid the persistent bottlenecks in global value chains (Chart 1.24). The energy shock rapidly passed through into final prices across all three components of core inflation starting September 2021, its magnitude making it difficult for corporate margins to absorb it. According to in-house estimates, this added at least half a percentage point to core inflation in 2021 H2, the calculations based on historical data series most likely underestimating its impact, given the unprecedented magnitude of the shock. Demand conditions economy-wide made a relatively modest contribution to core inflation developments in 2021, the output gap standing only marginally in positive territory throughout the year. Moreover, labour costs did not exert any pressure – although economic recovery triggered upward movements in labour market tightness/looseness indicators, the peaks reached during 2021 were well below pre-pandemic levels.

Box 3. Heat map of inflationary pressures in the economy

The practice of displaying economic indicators as heat map charts has been increasingly used by central banks, being intended to facilitate the interpretation of signals sent by a large number of economic variables. This multi-purpose toolkit is used to monitor economic activity²⁶, assess the financial system's soundness²⁷ and measure pressures on price developments²⁸.

Under the inflation targeting regime, such as that implemented by the NBR, the early identification of possible causes of inflation rate deviations from target is of the essence to ensure a prospective monetary policy, allowing their effective countering, *inter alia* by avoiding the de-anchoring of inflation expectations from the inflation target. In this context, the present analysis illustrates how a set of 24 monthly indicators relevant to the dynamics of prices in Romania are monitored by means of a heat map chart. These indicators may be categorised into four groups: core inflation measures, inflation expectations, domestic inflationary pressures and external inflationary pressures.

The first category includes three inflation measures built to reflect persistent inflationary pressures in the economy, given that the consumer price index (CPI) also incorporates the effects of some transitory factors²⁹. These were selected either from among the set of measures in NBR *Occasional Paper* No. 19/2007, "Modalități de cuantificare a inflației de bază. Analiză comparativă: cazul României" ("Measuring core inflation. Comparative analysis: Romania's case") – (i.e. trimmed-mean CPI measure³⁰) or from the extended set of measures developed following the publication of the mentioned *Occasional Paper* (i.e. supercore measure³¹ and the persistent CPI measure³²). Two surveys were used to show economic agents' inflation expectations, namely the NBR's *Survey among financial analysts* on the CPI inflation rate at the one- and two-year horizons and the European Commission's *Business Survey* (the balance of answers to the questions on the outlook for prices in industry, trade and services). The domestic inflationary pressures were captured by resorting to a series of indicators on the local dynamics of economic activity and labour market, as well as of producer prices of consumer goods. As regards the external environment, the focus was on the price of commodities relevant to

²⁶ See the case of Latvia (<https://www.fdp.gov.lv/en/publications-and-reports/monitoring/siltuma-karte>) or Turkey (*Inflation Report*, 2019-II – Box 4.3. "Heat Map for Economic Activity in Turkey"). The National Bank of Romania also uses this tool to monitor a series of indicators on the degree of economy overheating (see the box entitled "Corroborative evidence on the degree of economy overheating" in the November 2017 *Inflation Report*).

²⁷ See U.S. Federal Reserve Note of 5 August 2015 – "Mapping Heat in the U.S. Financial System: A Summary".

²⁸ For instance by the Federal Reserve of Saint Louis (<https://fredblog.stlouisfed.org/2015/07/is-inflation-running-hot-or-cold/>) or by Banco de España (*Economic Bulletin* 4/2018 – "Composite indicators of inflationary pressures").

²⁹ For instance, the impact of the agricultural output (as compared to a multi-annual average) on volatile food prices.

³⁰ The trimmed-mean CPI measure excludes from the consumer basket those components reporting the smallest and the largest price changes in a certain period, the share of removed items amounting to 30 percent for the present analysis.

³¹ The supercore measure includes those CPI components that are highly sensitive to the business cycle (component selection criterion: counting the output gap among the determinants of the component's inflation rate enhances its predictive performance compared to a first-order autoregressive model).

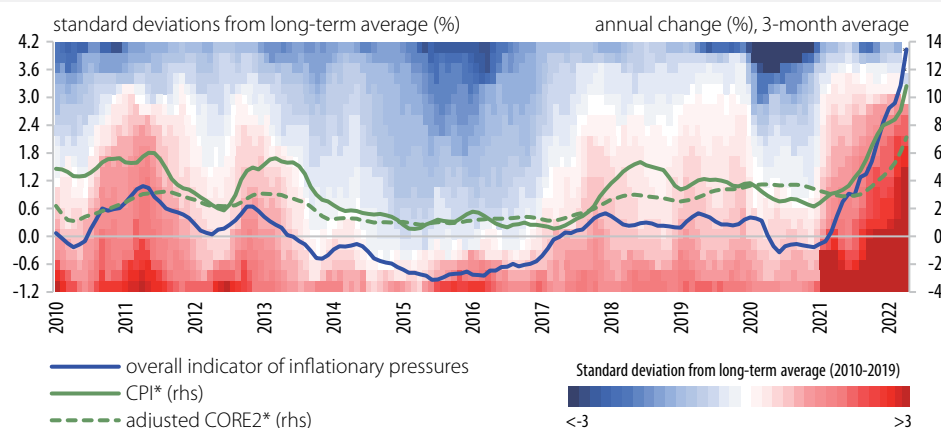
³² The persistent CPI measure is calculated based on an algorithm for the weighting of CPI components that depends on the persistence over time of the inflation rate for each component.

the domestic consumer basket (agri-food commodities and oil). Useful information was also provided by the HICP inflation rate excluding energy in the euro area and the EUR/RON exchange rate; these variables are important from the perspective of import price dynamics. Table A shows the entire set of monitored indicators.

Indicator group	Indicator	Number of indicators	Source
Measures of core inflation	Supercore; Trimmed-mean CPI; Persistent CPI	3	NIS, NBR calculations
Inflation expectations	Inflation expectations on annual CPI inflation rate at the one- and two-year horizons; Outlook for prices in industry (consumer goods; food industry*), trade (retail trade, except for trade in motor vehicles and motorcycles; trade in food items*), services	7	NBR (monthly <i>Survey among Financial Analysts</i>), EC (monthly <i>Business Survey</i>)
Domestic inflationary pressures	Industrial output; Retail sales (food and non-food items, excluding fuels); Turnover volume of market services to households; ILO unemployment rate; Net real wage in the private sector; Domestic producer prices (energy industry, food and non-food industry)	9	NIS, Eurostat, NBR calculations
External inflationary pressures	Commodity prices (agri-food items, oil); HICP excluding energy in the euro area; EUR/RON nominal exchange rate	5	ECB, Eurostat, NBR

*) the food component was separately considered in data capture given its relevance for the consumer basket (32 percent share)

Table A
Indicators monitored in order to identify (dis)inflationary pressures across the economy



*) excluding the first-round effects of VAT rate changes

Note: The variables under analysis are shown in the ascending order of the signals sent based on a colour-code system. Thus, for each period, inflationary pressures are highlighted in red (the indicator is above the long-term average, running below it in the case of the ILO unemployment rate), while disinflationary pressures are marked in blue colour (the indicator is below the long-term average, running above it for the ILO unemployment rate). The intensity of the signals sent by each variable on inflationary/disinflationary pressures in the economy is correlated with the colour intensity (the most intense colours indicate the largest deviations in absolute terms).

Source: ECB, Eurostat, NIS, NBR calculations

Chart A
Heat map of inflationary pressures in the economy

The variables were reported based on the standard approach, according to the literature; more exactly, the variables were expressed as standard deviations of the annual dynamics³³ – expressed as a three-month average to avoid false positive or negative signals on a possible turning point in inflation – from the long-term average. The latter, calculated for a period of 10 years, was determined for the

³³ Except for the indicators used to reflect economic agents' inflation expectations and the ILO unemployment rate, which were included in the analysis as data at level.

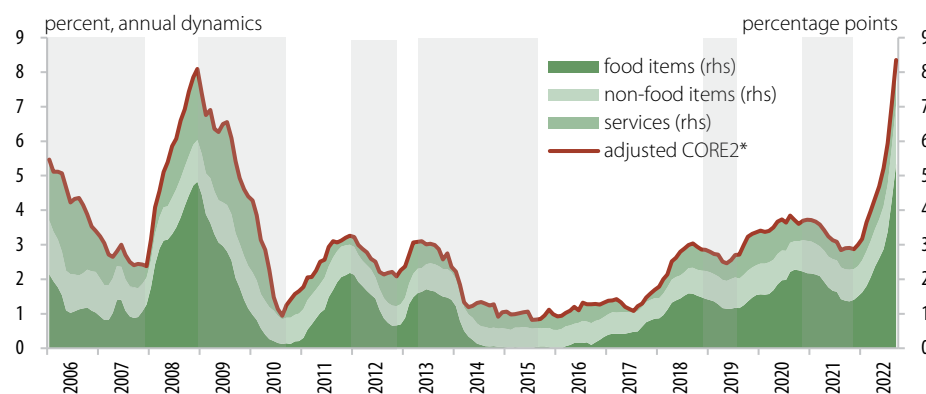
2010-2019 period in order to avoid distortions caused by the pandemic shock. To facilitate the interpretation of signals from the set of analysed variables, an overall indicator was also determined as the arithmetic mean of the variables used for the analysis (and processed according to the methodology described previously)³⁴. Chart A shows the inflationary pressures in Romania's economy, as captured by the variables under analysis, for the period that followed the global financial crisis, i.e. from January 2010 to April 2022.

The visual analysis of the heat map enables to identify the correspondence between the signals from the indicators and the evolution of the CPI inflation rate, excluding the first-round effects of VAT rate changes. Thus, the first part of the period under review featured two important episodes of higher inflation, namely March 2010 – May 2011, and May 2012 – January 2013, highlighted by the prevalence of inflation signals (marked in red in the chart). These are mainly associated with the increase in international commodity prices, reflected also in the hikes in domestic producer prices of consumer goods, as well as in economic agents' inflation expectations, *inter alia* in the context of rises in some administered prices at that time (electricity and natural gas prices). These two episodes were followed by a longer period with low inflation rates, in spite of a relatively robust economic activity domestically, yet against the background of the global disinflationary environment (highlighted in blue in the chart) and the increase in the relative importance of external factors in explaining the domestic price dynamics³⁵. From 2017 until the onset of the pandemic crisis, a new inflationary bout was manifest, being associated with the step-up in domestic inflationary pressures, reflected *inter alia* in specific labour market indicators (historical lows of the ILO unemployment rate, robust dynamics of private sector wage earnings). Mobility restrictions imposed after the outbreak of the health crisis led to a plunge in economic activity worldwide, as well as to a steep fall in energy prices, including oil price, the evolution of which was also mirrored by the domestic fuel prices. In this context, the annual CPI inflation rate entered a downward path, despite the adjusted CORE2 inflation rate remaining relatively elevated (in the latter case, at the beginning of the pandemic, the pronounced disinflationary pressures following the significant adjustment in domestic demand, were offset by the inflationary pressures associated with disruptions in global production and distribution chains of food items and durables, but also by the marked increase in the demand for non-durables). The (partial) lifting of mobility restrictions as of the second half of 2020 led to a reversal of the downward trend in headline inflation. The acceleration in headline inflation in the second half of 2021 and the first part of 2022, which was the most pronounced episode of higher prices for the inflation targeting monetary policy regime (implemented in August 2005), was ascribable to the fast growth of energy commodity prices, overlapping with additional

³⁴ Given the major impact (also singular for the period under review) of the pandemic shock on the dynamics of a subset of monitored indicators, i.e. the industrial output, the turnover volume of market services to households and the Brent oil price, in the context of the mobility restrictions imposed amid the first pandemic wave (March-April 2020), but also of the subsequent total/partial lifting of these restrictions (particularly in May-August 2020), for the calculation of the overall indicator of inflationary pressures in the economy, the annual growth rate of the mentioned variables was excluded in March 2020 – July 2021, being treated as an outlier.

³⁵ For details, see Box 1 entitled "The relevance of external factors to domestic inflation dynamics" in the August 2016 *Inflation Report* and Box 2 "The relationship between economic activity and inflation" in the May 2017 *Inflation Report*.

supply-side shocks, visible at a global level (substantial rises in agri-food prices, bottlenecks in global production and supply chains). These unfavourable developments were compounded by the conflict in Ukraine.

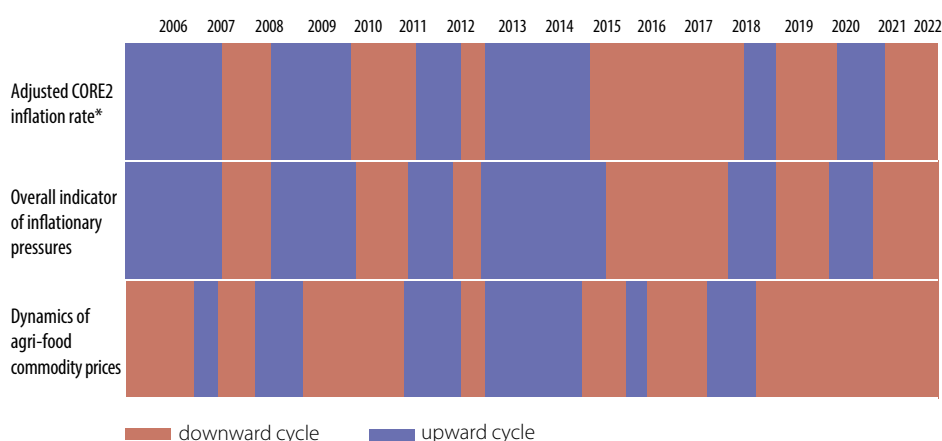


*) excluding the first-round effects of VAT rate changes

Note: The bands in grey colour mark disinflationary cycles.

Source: NIS, NBR calculations

Chart B
Adjusted CORE2 inflation rate* –
breakdown by sub-component



*) excluding the first-round effects of VAT rate changes

Source: NIS, ECB, NBR calculations

Chart C
Succession of inflationary/
disinflationary cycles
for selected indicators

The overall indicator of inflationary pressures shows a high degree of correlation with both headline inflation and adjusted CORE2 inflation (around 80 percent). In the latter case, the degree of correlation increases for lags in the overall indicator of inflationary pressures (the maximum level is reached for lag 3). This suggests that the indicator may provide forward-looking information on the adjusted CORE2 inflation. In this context, Chart C shows, for the period following the implementation of the inflation targeting regime, upward and downward cycles of the adjusted CORE2 inflation rate, excluding the first-round effects of VAT rate changes, the overall indicator of inflationary pressures and the dynamics of agri-food commodity prices. The latter were selected given their relevance to the food component of the consumer basket³⁶, which often prompts the evolution of the adjusted

³⁶ Food items account for 32 percent of CPI and 41 percent of the adjusted CORE2 index.

CORE2 inflation rate (Chart B). (Dis)inflationary cycles are defined as a minimum six-month period of consecutive (decreases) increases in the indicators under analysis, preceded and followed by a minimum six-month period of consecutive (increases) decreases thereof³⁷. The overall indicator provided early signals on the turning points in the evolution of adjusted CORE2 inflation, more accurately for disinflationary cycles (on average, by three months), while for inflationary cycles, the dynamics of agri-food commodity prices offered more forward-looking information.

In conclusion, the recent evolution of monitored indicators points to an unprecedented step-up in upward pressures on prices for the inflation targeting period, in the context of a global environment dominated by multiple and synchronised supply-side inflationary shocks. These developments reflect in the record highs of the annual CPI dynamics for the mentioned period seen over the last months. The overall indicator of inflationary pressures (that provides information on the start of periods with lower inflation rates), also running at record highs and following an upward path, indicates further unfavourable developments in the forthcoming periods as well.

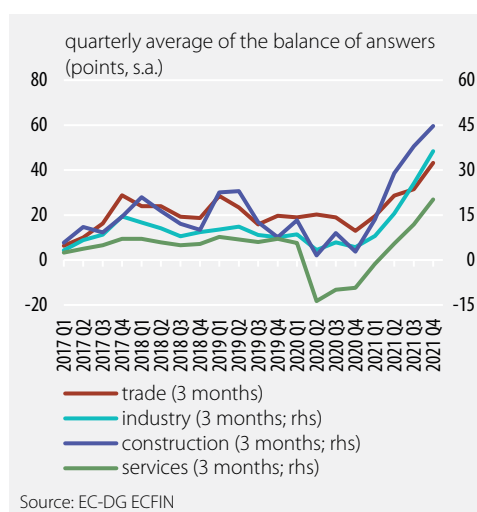


Chart 1.25

Expectations on price developments

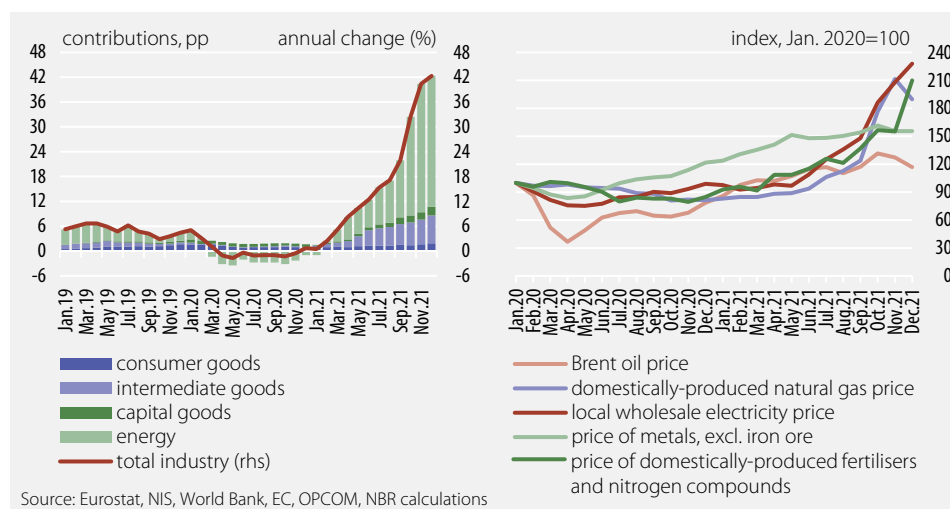
Economic agents' inflation expectations moved in line with the observed inflation rate, the balances of answers recording successive rises across all four categories of economic agents (in industry, trade, services, construction), Chart 1.25. At the same time, financial analysts' expectations over a one-year and two-year horizon witnessed repeated upward adjustments, exceeding the upper bound of the variation band of the target in both cases at end-2021.

Producer prices

The year 2021 saw the annual dynamics of industrial producer prices on the domestic market embark on a strongly upward path, hitting a high of the available data series at year-end (42.3 percent versus 0.7 percent at end-2020). The faster momentum was driven primarily by supply-side factors, which mirrored the swift increase in the prices of commodities and other inputs (Chart 1.26).

³⁷ While there is no consensus in the literature on the duration of a (dis)inflationary cycle, the six-month period is among the most frequent criteria and, in addition, it seems to capture with sufficient accuracy the cyclical evolution of the adjusted CORE2 inflation rate, with identified cycles having a magnitude of at least 0.5 percentage points.

Chart 1.26
Industrial producer prices on
the domestic market and their
determinants



Energy prices made the largest contribution to the step-up in the annual dynamics of industrial producer prices, the robust return of their annual growth rates to positive territory (up by 40.9 percentage points to 35.3 percent) owing firmly to the exponential rise in prices of natural gas and electricity, especially in the latter half of year. Specifically, spot prices for natural gas and electricity on the domestic wholesale markets went up, on average, four times and three times respectively versus the previous year, in line with the trend in external prices. In addition to external factors, this owed also to internal factors, the situation in Romania being relatively similar to that in the EU (low storage levels and natural decline in local production in the case of natural gas; low supply of electricity and strong pick-up in production costs for fossil fuel power plants). An upward influence came also from the hydrocarbon processing sub-sector, mirroring the hike in Brent oil prices.

Faster growth rates were also reported for the prices of capital and intermediate goods (up by 2.1 percentage points and 12.7 percentage points respectively), the impact of soaring energy prices being compounded by the upward path of prices for other commodities and materials, given also the supply bottlenecks. Specifically, the rationing of electricity in China (amid the authorities' efforts to reduce pollution and the higher coal prices) led to a sharp contraction in the manufacture of aluminium (one of the most energy-intensive industries) and, hence, to its prices rising. Moreover, the prices of other metals (nickel, zinc and lithium), used primarily in the electronics industry, stood close to their historical highs. Towards end-2021, the exponential rise in natural gas prices caused the global supply of fertilisers to dwindle³⁸ and pushed their prices significantly higher, with repercussions on agri-food commodity prices.

The annual growth rate of producer prices went up gradually throughout the year also for consumer goods, reaching 7.3 percent in December 2021; a significant contributor was the food industry, where the annual price dynamics reached 10.2 percent at year-end.

³⁸ China restricted exports and some major European producers reduced their activity.

Unit labour costs

In 2021, unit labour costs economy-wide contracted significantly, by almost -9 percent (compared to a growth rate of around +5 percent in 2020), owing less to economic factors, i.e. the recovery of economic activity, and more to the methodological change in employment, namely the exclusion from employed persons of a considerable number of households that produce agricultural goods exclusively or mostly for self-consumption. By adjusting the series for this effect³⁹, the magnitude of the downward correction is considerably lower, the annual growth rate of unit labour

costs standing at around 1 percent (Chart 1.27).

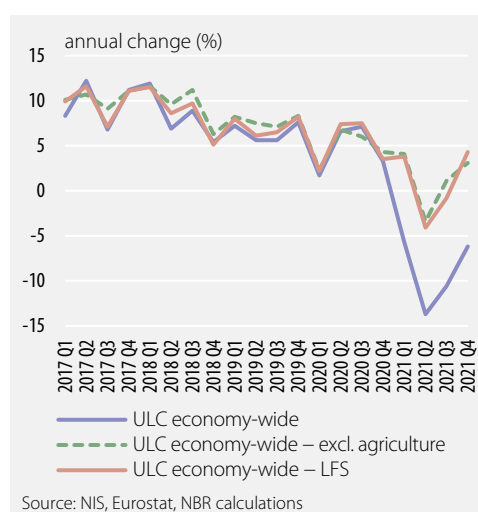


Chart 1.27

Unit labour costs economy-wide

The annual rate of change of unit wage costs slowed down in industry as well, to 1 percent in 2021 as a whole (-9 percentage points against 2020; Chart 1.28). However, in 2021 H2 industrial activity was strongly affected by global supply chain bottlenecks and higher production costs, especially for energy, which caused this indicator to climb to double-digit readings (above 15 percent) in industries producing intermediate goods (the manufacture of wood, the chemical industry, the manufacture of electrical equipment), capital goods (the automotive industry) and consumer goods (the furniture industry). Yet, moderate increases in unit wage costs in 2021 H2 (by about 5 percent in annual terms) were further seen in the food industry and the light industry. In the latter case, the massive layoffs after the outbreak of the pandemic, together with a slight recovery in demand as of recently, have fostered a more balanced ratio of productivity growth to wage cost dynamics.

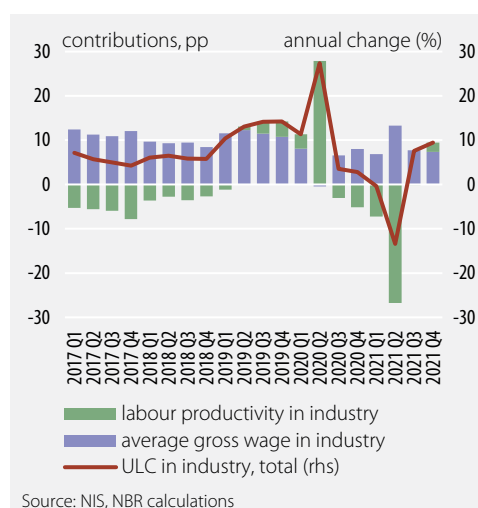


Chart 1.28

Unit wage costs in industry

2.3. Fiscal developments

In 2021, the general government deficit based on ESA 2010 methodology saw a marked adjustment to 7.1 percent of GDP (down 2.2 percentage points against end-

³⁹ The employment data series according to the national accounts methodology has not yet been revised, so for now the figures for 2021 are not comparable to those recorded in the previous years. Given that the indicators in the *Household Labour Force Survey* (LFS) were recalculated back to 2009 to determine the ULC index for the economy overall, the data on employed persons were taken from this statistical research.

2020), well below the 8 percent of GDP target set forth in the 2021-2024 Convergence Programme. An overperformance relative to the set target was also achieved in terms of the consolidated general government deficit calculated according to the national (cash-based) methodology. This was 6.8 percent of GDP, 0.4 percentage points below the 7.2 percent target set forth in the 2021-2023 Fiscal Strategy, down 2.8 percentage points from the end-2020 figure. The larger decrease in the cash-based fiscal deficit compared to the ESA 2010 deficit is the result of differences in the recognition of revenues related to tax deferrals granted in 2020: ESA 2010 revenues include them in 2020 (and to a lower extent also in 2019), matching the economic activity that generated them, while the revenues based on the national methodology reflect them at the time of their actual collection⁴⁰.

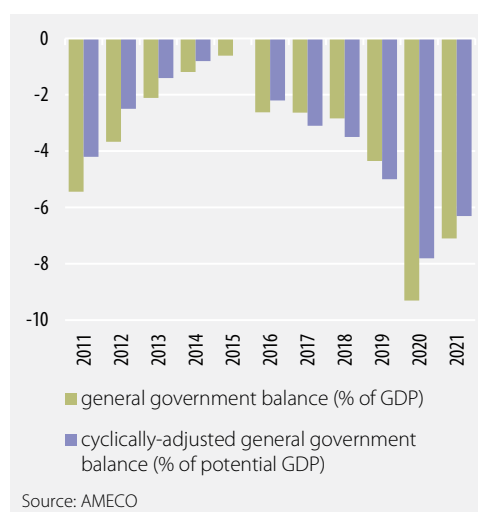


Chart 1.29
General government deficit

The narrowing of the consolidated general government deficit in 2021 was driven by both cyclical and structural factors. According to the European Commission's latest assessments, the improvement in the economy's cyclical position amid the fast-paced recovery in 2021⁴¹ contributed 0.7 percentage points to the fiscal deficit reduction (Chart 1.29). Nonetheless, most of the adjustment is of a structural nature, with the cyclically adjusted government deficit declining by 1.5 percentage points compared to the previous year.

The reduction in the structural deficit was attributed, on the one hand, to the expiry or the lower amount of pandemic-related support measures, given the normalisation of economic activity⁴², and, on the other hand, to the public sector wage freeze and the cut in domestically-funded public investment spending.

Romania is still the only EU Member State subject to the excessive deficit procedure, started in February 2020 after the country's budget deficit had exceeded in 2019 already the 3 percent-of-GDP benchmark under the corrective arm of the Stability and Growth Pact. The European Commission's initial recommendation for Romania was to correct the excessive deficit by end-2022 at the latest, yet the extraordinary pandemic-driven macroeconomic and fiscal impact led to its revision in June 2021, with a new deadline set at end-2024. The updated recommendation confirms the

⁴⁰ According to the EDP notification of April 2022, deferred tax revenues amounted to lei 12.8 billion, of which lei 10.9 billion were actually collected in 2021 and the remaining lei 1.9 billion are due for collection in 2022.

⁴¹ The European Commission estimates that the demand shortfall narrowed to 2.5 percent of potential GDP in 2021 from 4.8 percent in 2020.

⁴² For example, expenses on active measures (allowances granted while individual labour contracts were suspended or for fewer hours worked, allowances for self-employed people, allowances granted to parents who look after their children during the closure of educational establishments, partial settlement of gross wages of the employees kept in work) fell to lei 2.7 billion in 2021 from lei 8 billion a year earlier. On the revenue side, the period under review saw the termination of the bonuses granted in 2020 for the timely payment of profit tax and the tax on income of micro-enterprises in amount of lei 1.1 billion.

adjustment benchmarks set forth in the 2021-2024 Convergence Programme, i.e. deficits of 8 percent of GDP in 2021, 6.2 percent of GDP in 2022, 4.4 percent of GDP in 2023, and 2.9 percent of GDP in 2024.

In 2021, general government revenues widened as a share of GDP by 0.2 percentage points, whereas expenditures shed 2 percentage points, given that the flows of EU funds transiting the budget advanced by 0.3 percentage points to 1.9 percent of GDP.

Tax revenues (including those from social contributions, except for imputed social contributions⁴³) expressed as a share of GDP grew by 0.2 percentage points (from 26.2 percent in 2020 to 26.4 percent in 2021). The performance stems from the higher revenues from income and wealth taxes (up 0.39 percentage points) and those from taxes on production and imports (up 0.35 percentage points), partly offset by the decrease (down 0.54 percentage points) in income from social contributions, given that the wage bill dynamics⁴⁴ lagged behind those of nominal GDP (7.2 percent versus 11.6 percent); nevertheless, tax revenues expressed as a share of GDP remain among the lowest in the EU, higher only than Ireland's, well below the European average and even the antepenultimate country (Latvia, on 30.5 percent). Non-tax revenues (excluding current and capital transfers from the EU) as a share of GDP saw a 0.3 percentage point contraction, which was, however, offset by the above-mentioned good performance of EU funds absorption.

As for general government expenditure as a share of GDP, the developments in primary outlays are entirely accountable for its 2-percentage point decline, as interest expenditures stayed flat at 1.4 percent of GDP. The declines were recorded mainly in staff costs (down 1 percentage point amid the public sector wage freeze) as well as in public investment and subsidies (both down by 0.4 percentage points as domestically-

funded investment spending and expenses related to labour market support measures decreased). Lower-scale declines were recorded for social transfers and intermediate consumption (down 0.2 percentage points and 0.1 percentage points respectively), yet they were partly offset by the developments under "other current expenditure" (up 0.2 percentage points), where the increase came from larger transfers to the European Union.

The public debt-to-GDP ratio edged up in 2021, Romania counting among the

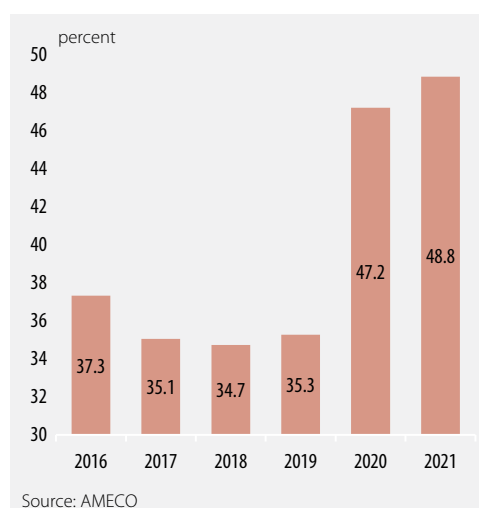


Chart 1.30
Public debt-to-GDP ratio

⁴³ Revenues from social security contributions (ESA 2010 methodology) include "imputed social contributions", representing the counterpart to unfunded social benefits paid directly by employers, without creating a special fund (military pensions are a case in point); the imputed contributions are equal in terms of value to the social security contributions necessary to cover the *de facto* social security contributions, but they are not actual receipts.

⁴⁴ Illustrated by "gross wages and benefits" under "compensation of employees" of GDP measured by the income method.

seven EU countries that reported an increase (along with Bulgaria, Czechia, Germany, Latvia, Malta and Slovakia). The 1.6 percentage-point rise (from 47.2 percent in 2020 to 48.8 percent at end-2021, Chart 1.30) was solely ascribable to the elevated primary deficit (5.7 percent of GDP, being surpassed only by two Member States, i.e. Latvia and Malta). The interest-growth differential was favourable, amid a fast-paced recovery in economic activity and a lower implicit interest rate (calculated as the ratio of interest expenditure and debt stock at the end of the previous year). The stock-flow adjustment stood in negative territory, with the increase in public debt stock

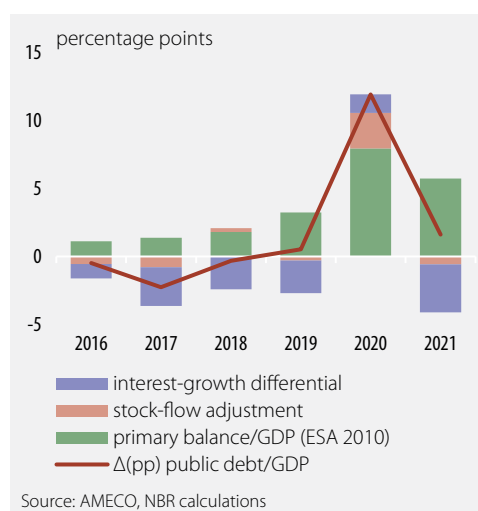
(by lei 77.3 billion) being lower than the ESA 2010 deficit by lei 6.7 billion, given the resort to the liquidity built up in previous years (Chart 1.31).

The share of public debt held by non-residents narrowed somewhat in 2021 (down 1.6 percentage points to 48.2 percent from 50.8 percent), yet simultaneously with a rise in the share of public debt denominated in foreign currency (up 1.1 percentage points to 53.34 percent from 52.27 percent), owing also to the slight softening of the leu versus the euro.

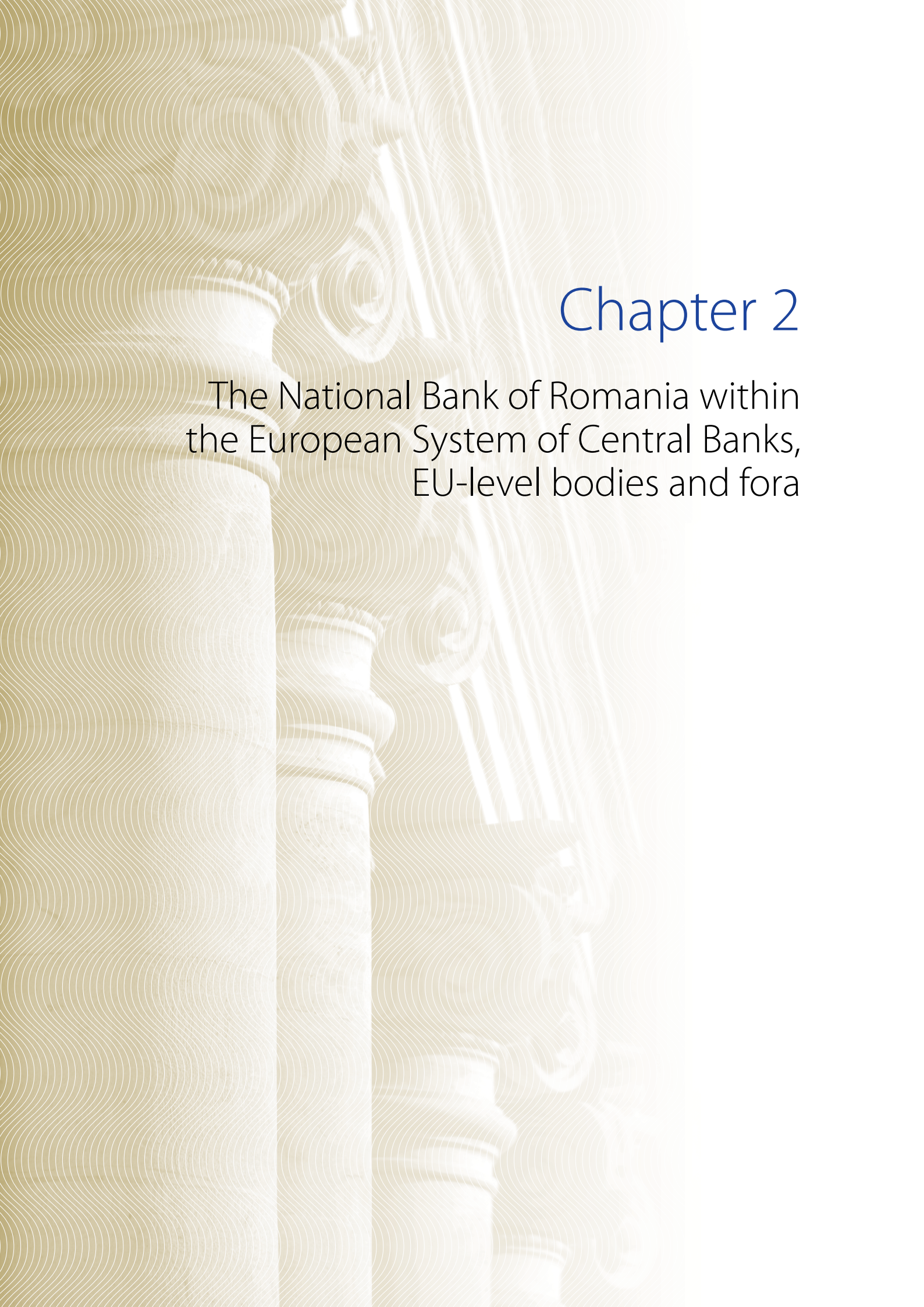
Bond issues on the international market

totalled EUR 7 billion, all of them featuring long-term maturities: 9 years (EUR 2 billion), 12 years (EUR 2 billion), 20 years (EUR 1.5 billion) and 21 years (EUR 1.5 billion). Adding to the above-mentioned bond issues were four EUR-denominated issues launched on the domestic market, with maturities ranging from 2.3 years to 5.5 years and amounting to EUR 1.65 billion, which ensured partial refinancing for domestic-market bond issues of EUR 2.12 million that reached maturity in the course of 2021. Average maturity of the public debt stock slid mildly from 7.7 years at end-2020 to 7.4 years at end-2021.

Chart 1.31
Decomposition of the change in
public debt-to-GDP ratio





The background of the slide features a faded, high-angle photograph of classical architectural columns. Overlaid on this is a pattern of thin, concentric, wavy lines in a light beige or gold color, creating a textured, ripple-like effect across the left and central portions of the image.

Chapter 2

The National Bank of Romania within
the European System of Central Banks,
EU-level bodies and fora

Romania's membership to the European Union involves, *inter alia*, the participation of national institutions and authorities, including the National Bank of Romania, in EU-level bodies and fora, in line with the particulars of their activity. Specifically, the National Bank of Romania is a member of the European System of Central Banks (ESCB), alongside the European Central Bank and the national central banks in the other EU Member States. The organisation, objectives and tasks of ESCB are set out in the Treaty on the Functioning of the European Union ("the Treaty"), and in the Protocol on the Statute of the European System of Central Banks and of the European Central Bank, annexed to the Treaty.

The primary objective of the ESCB is to maintain price stability, as provided for in Articles 127(1) and 282(2) of the Treaty. Without prejudice to the objective of price stability, the ESCB supports the general economic policies in the Union, with a view to contributing to the achievement of the objectives of the Union.

The framework of the NBR's activity is well defined by the EU legislation, which puts emphasis on the respect of the NCB's independence, a concept that covers four types of independence, i.e. functional, institutional, personal and financial. The principle of the NCB's independence is laid down in Article 130 of the Treaty, specifically: "When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the Statute of the ESCB and of the ECB, neither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body. The Union institutions, bodies, offices or agencies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks".

Pursuant to Article 131 of the Treaty, each Member State shall ensure that its national legislation including the statutes of its national central bank is compatible with the Treaties and the Statute of the ESCB and of the European Central Bank.

1. NBR participation in European structures

The NBR participates, through its representatives, in the meetings and procedures of various working structures and substructures of European bodies, as referred to below.

The measures adopted in all EU Member States at the onset of the pandemic to limit and prevent SARS-CoV-2 infection remained in place throughout 2021, all working structures of EU institutions holding their meetings exclusively in video conference format and with a high frequency, comparable to that of the pre-pandemic period. Starting in spring 2022, the meetings of certain working structures of the EU Council have been conducted with physical attendance.

1.1. Participation in the ECB General Council meetings

The NBR Governor attends the quarterly meetings of the ECB's General Council. This analysis and decision-making body had on the 2021 agenda topics, such as: (i) the regular macroeconomic analyses, reviews of key monetary, financial and fiscal developments both within and outside the euro area; (ii) the monetary policy stance of non-euro area EU Member States; (iii) compliance by the ESCB members with the provisions of Articles 123 and 124 of the Treaty on the Functioning of the European Union, stipulating the prohibition of credit facility and privileged access; (iv) the outcome of the ECB's monetary policy strategy review; (v) the Next Generation EU initiative and its economic impact.

1.2. NBR participation in the enlarged meetings of ESCB structures and substructures

As regards the decision-making mechanism at operational level, the NBR representatives attend the enlarged meetings of the ESCB committees, contributing to the preparation and implementation of the ECB General Council and Governing Council decisions. Along with the relevant ESCB substructures, these structures ensure a framework for assessment and decision-making according to their fields of competence. The NBR Board attaches particular attention to the central bank's participation in the ESCB structures and substructures by closely monitoring any related issues.

1.3. NBR participation in the European Systemic Risk Board

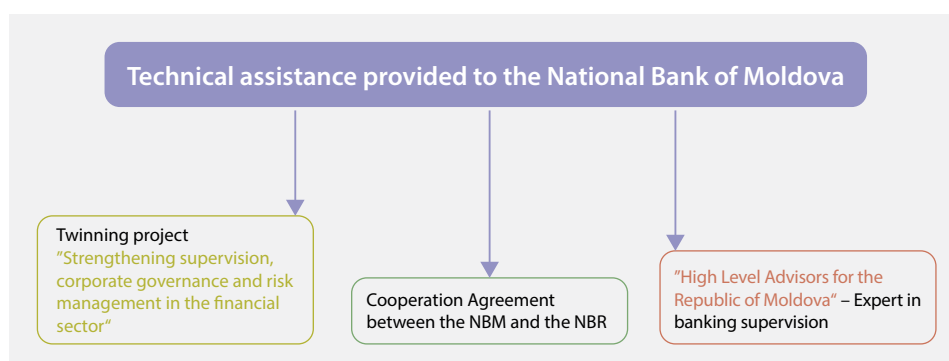
The NBR is represented in the quarterly meetings of the ESRB General Board by the NBR Governor, as a member with voting rights, along with a Deputy Governor, as a member without voting rights.

In 2021, the activity of the ESRB further focused on identifying, monitoring and assessing the risks to financial stability posed by the COVID-19 pandemic, specifically related to: (i) the implications of the support measures taken to protect the real economy in response to the COVID-19 pandemic; (ii) preventing and managing the insolvency of a large number of firms; (iii) systemic vulnerabilities in the money market fund (MMF) sector. Moreover, particular attention was also attached to climate change risks, systemic cyber risks, as well as to the existing vulnerabilities in residential real estate sectors across the European Economic Area countries. In this respect, the ESRB, under its mandate, issued a number of recommendations and warnings.

At a technical level, the NBR participated via experts in the meetings of the ESRB working structures, including the Advisory Technical Committee.

1.4. Technical cooperation between the NBR and the National Bank of Moldova

The NBR provides technical assistance through partnerships with other ESCB members, as well as bilaterally, based on requests from the beneficiary central banks. The cooperation with other ESCB members, but also with the ECB and the European Commission, focuses on implementing EU-funded technical assistance projects, among which institutional twinning projects hold a significant part⁴⁵.



The relation with the National Bank of Moldova (NBM) stands out among NBR's technical cooperation activities and includes notably technical assistance provision under the twinning project entitled "Strengthening supervision, corporate governance and risk management in the financial sector" – MD 20 ENI FI 01 21R2 (MD/36), dedicated to the financial sector in the Republic of Moldova and implemented by a consortium consisting of National Bank of Romania (project leader), De Nederlandsche Bank and Lietuvos bankas (junior partners), with the support of the Financial Supervisory Authority and the National Authority for Consumer Protection in Romania. The project has a EUR 1 726 355.44 budget and a 24-month implementation period. Its general objective is to support the Republic of Moldova in implementing reforms related to the Association Agreement between the European Union and the Republic of Moldova/the Deep and Comprehensive Free Trade Area (DCFTA) Agreement and the Association Agenda, by providing assistance so as to strengthen supervision, corporate governance and risk management in the financial sector.

The beneficiaries of the twinning project are the National Bank of Moldova and the National Commission for Financial Markets in the Republic of Moldova, and the areas covered by the project refer to:

- strengthening the macroprudential framework to cope with the build-up of systemic risks;
- designing and implementing a new legal framework for the supervision of the insurance sector and the motor third-party liability insurance sector, in line with the EU *acquis*;

⁴⁵ Twinning is an instrument for cooperation between Public Administrations of EU Member States and beneficiary countries (candidate countries and potential candidates to EU membership, as well as countries covered by the European Neighbourhood Policy).

- designing and implementing a new legal framework to strengthen the supervision of non-bank credit institutions;
- reviewing, developing and improving the NBM's internal regulations on the oversight of financial market infrastructure and payment services;
- aligning the Republic of Moldova's legislation and regulatory framework with the requirements of Single Euro Payments Area (SEPA) schemes and preparing the application procedure for SEPA membership as a non-EEA (European Economic Area) member.

The twinning project started on 18 October 2021 and benefits from the expertise of a senior project leader and two junior project leaders, a resident twinning advisor seconded to the Republic of Moldova, 53 short-term experts and 4 component coordinators. The assistance will be provided under 110 working missions with experts from beneficiary institutions.

In November 2021 – May 2022, several activities took place under the twinning project:

- The launch event of the twinning project was held on 18 January 2022 in a hybrid format (i.e. physical and online presence), bringing together the Governors of the NBM, the NBR, De Nederlandsche Bank, Lietuvos bankas, the President of Parliament of the Republic of Moldova, the Head of the EU Delegation to the Republic of Moldova, the Vice-President of the National Commission for Financial Markets, ambassadors of donor countries, and other representatives of donor and recipient institutions. The event was widely publicised through the NBM website, its social media profiles (Facebook, LinkedIn) and in the media, being also broadcast live on the NBM's Youtube channel and via the privesc.eu portal. It reiterated the commitments to develop the Moldovan financial sector in line with EU standards and to strengthen the institutional partnership between the members of the assistance donor consortium and the recipient institutions.
- The project's half-yearly work plans, the Communication and Outreach Plan and the first *Quarterly Progress Report* were drawn up and approved at the meetings of the Project Coordination Committee, and 29 technical assistance missions were carried out covering all project components, with a total of 203.5 working days per person.

Due to the global health crisis caused by the COVID-19 pandemic, technical assistance activities under the twinning project were adapted to the online format, in compliance with the commitments made and with a view to achieving the expected results.

Another pillar of the technical assistance provided to the National Bank of Moldova is the Cooperation Agreement between the NBM and the NBR, signed in Bucharest on 11 June 2021. This agreement extends the scope of the cooperation between the two central banks for the purpose of strengthening institutional capacities, in areas such as banking supervision, crisis management, the activity of payment service providers and electronic money issuers, financial market infrastructures, cash transactions, preventing and fighting against currency counterfeiting and forgery, statistics, combating money laundering and terrorist financing, as well as overseeing the enforcement of international sanctions applicable in the financial and banking sector.

Moreover, the NBR provides technical assistance over the medium term via an expert in the field of banking supervision, financed by the “EU High Level Advisers to the Republic of Moldova” Programme. The project furthers the same type of assistance previously provided by the NBR, which focuses on developing the NBM’s capacity to implement a full cycle of the Supervisory Review and Evaluation Process, which was finalised in April 2020. Given the success of this project, the NBM requested the input of an NBR expert in the field of banking supervision in order to continue efforts to ensure independent and effective supervision in line with EU standards and practices. During the ongoing project, lasting 120 working days and running from January to December 2022, the NBR expert will support the NBM in implementing international standards and best practices in the field of banking supervision.

1.5. NBR participation in other technical cooperation projects

In its capacity as an ESCB member, the NBR takes part in technical cooperation activities, providing technical assistance to central banks in candidate countries and potential candidate countries to EU membership, as well as in other EU neighbouring states or countries in the IMF/WB constituency, which Romania is part of.

The Working Group on Central Bank Cooperation, a structure created under the auspices of the International Relations Committee, coordinates technical cooperation within the ESCB.

In 2021, NBR experts further contributed, via remote meetings, in the regional technical cooperation programme dedicated to the central banks in Western Balkans, by:

- a) organising a seminar on financial stability on 20-22 October 2021, attended by speakers from the NBR, the National Bank of Belgium and the Bank of Greece;
- b) participating with a speaker in a seminar on European integration organised by the National Bank of Austria on 4-8 October 2021;
- c) participating with a speaker in the seminar on bank recovery and resolution organised by the National Bank of Hungary on 2-4 November 2021;
- d) providing bilateral technical assistance on bank resolution topics to their counterparts from the National Bank of Serbia by conducting online missions April through July 2021;
- e) organising a study visit for representatives of the Bank of Albania in the field of bank resolution in September 2021.

In the context of the programme’s successful completion in December 2021 and taking into account the technical assistance needs in the Western Balkans region, the European Commission is considering launching a new technical cooperation programme in the latter half of 2022. The budget of the programme is estimated at around EUR 3 million over a 3-year period.

In the framework of the Memorandum of Understanding made in 2018 between the NBR and the Central Bank of Turkey regarding several specific activities aimed at enhancing the exchange of information and the cooperation between the two central

banks, exchanges of experience took place in virtual format in 2021, in the area of human resources during two meetings held in April and May, and in the areas of communication and financial education in May.

1.6. NBR participation in the working structures and substructures of the European Banking Authority

The NBR, as the regulatory and supervisory authority for the banking sector in Romania, is a member of the European Banking Authority (EBA), an independent EU authority whose objective is to ensure effective and consistent prudential regulation and supervision across the EU banking sector. In this capacity, the NBR takes part in the EBA's decision-making process and working groups. Specifically, in the period under review, the NBR participated in a number of working structures and substructures of the EBA, namely:

- a) in the Board of Supervisors and the Resolution Committee;
- b) in other structures and substructures, such as: the Standing Committee on Regulation and Policy; the Standing Committee on Accounting, Reporting and Auditing; the Standing Committee on Payment Services; the Standing Committee on Anti-Money Laundering and Countering Terrorist Financing; the Subgroup on Ongoing Supervision; the Subgroup on Securitisation and Covered Bonds; the Subgroup on Governance and Remuneration; the Subgroup on Liquidity; the Subgroup on Resolution Planning Preparedness; the Subgroup on Resolution Implementation; the Working Group on Valuation; the special Working Group on Stress Testing; the special Working Group on Impact Study; and the special Working Group on Information Technology Risk Supervision;
- c) in supervisory colleges.

1.7. NBR participation in structures of the EU Council and of the EC

In 2021 and in the first part of 2022, amid the situation created by the COVID-19 pandemic, most of the meetings of the working structures and substructures of the EU Council and the EC were held online. The NBR participated, at different hierarchical levels, in such working structures and substructures, among which worth mentioning are:

- a) the participation in the Economic and Financial Committee, whose meetings are attended by a NBR Deputy Governor;
- b) the participation, along with representatives of the MF and/or other government institutions, in the meetings of various working structures and substructures of the EU Council and the EC, whose agendas are closely connected with the central bank's fields of competence (the Financial Services Committee; the Working Party on Financial Services and the Banking Union; the Committee on Monetary, Financial and Balance of Payments Statistics; the Expert Group on Banking, Payments and Insurance; the Expert Group on Money Laundering and Terrorist Financing; the Government Expert Group on Retail Financial Services; the Ad Hoc Working Party on the Strengthening of the Banking Union; the Euro Counterfeiting Experts Group, etc.).

In 2021 and in the first part of 2022, for the purpose of preparing the participation of the Minister of Finance in the meetings of the Economic and Financial Affairs Council (ECOFIN)⁴⁶ and at the request of the MF, the NBR submitted proposals for position papers or context-related matters, on topics such as: non-performing loans (NPLs), strengthening the common impact of monetary and fiscal policies, preparing for future challenges – how to ensure a virtuous cycle between the financial and non-financial sectors, sustainable financing, preventing money laundering and terrorist financing, the applicability of blockchain technologies outside the area of cryptocurrency transactions, financial sector regulation, the banking package for transposing the Basel III rules into EU law, the EU Council Slovenian Presidency progress report on strengthening the Banking Union.

1.8. NBR participation in the process of transposing, implementing and notifying EU legislation

a) Transposing and implementing EU regulations

EU regulations are binding in their entirety and directly applicable in all Member States and thus do not have to be transposed into national law. The NBR, in its capacity as an institution with regulatory and supervisory tasks, checks the EC database (Eur-lex) on a regular basis, to track any newly adopted EU regulations applicable to its scope of activity. The list of these regulations is sent to the Ministry of Foreign Affairs and is posted on the central bank's website, with a view to properly informing the entities under the NBR's regulatory/supervisory scope.

b) Informing the EC about the transposition of EU legislation

During the period under review, the NBR submitted to the Ministry of Foreign Affairs – so that the latter may duly notify the Commission – the transposition notification and the compliance table related to all articles in several Directives within the NBR's field of competence.

In 2021, the NBR and other competent institutions were involved in transposing the following directives:

- 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;
- Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC;
- Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU;

⁴⁶ Amid the improved pandemic situation, the French Presidency of the EU Council held the informal ECOFIN meeting on 25-26 February 2022 with physical presence only, the NBR being represented by a Deputy Governor and a Director.

- Directive (EU) 2019/2177 of the European Parliament and of the Council of 18 December 2019 amending Directive 2009/138/EC on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), Directive 2014/65/EU on markets in financial instruments and Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money-laundering or terrorist financing;
- Directive (EU) 2020/1504 of the European Parliament and of the Council of 7 October 2020 amending Directive 2014/65/EU on markets in financial instruments;
- Directive (EU) 2021/338 of the European Parliament and of the Council of 16 February 2021 amending Directive 2014/65/EU as regards information requirements, product governance and position limits, and Directives 2013/36/EU and (EU) 2019/878 as regards their application to investment firms, to help the recovery from the COVID-19 crisis;
- Commission Delegated Directive (EU) 2021/1269 of 21 April 2021 amending Delegated Directive (EU) 2017/593 as regards the integration of sustainability factors into the product governance obligations.

Of these, the transposition of Directives (EU) 2019/878 and (EU) 2019/879, for which the national implementing measures were notified to the European Commission, was completed.

1.9. NBR participation in the joint working platform with government authorities on European affairs

In line with its statutory tasks related to the *ex ante* advisory role played in the institutional relations with government authorities, the NBR is represented in the meetings of the Coordination Committee of the National System for the Management of European Affairs⁴⁷. The Committee is in charge of preparing the decisions and formulating Romania's stance with regard to European affairs.

2. Developments in economic, financial and banking policies at European level

Throughout 2021 and in the first part of 2022, the NBR continued to be actively involved in and contribute to the discussions at EU level in the broader context of a more in-depth approach to the Economic and Monetary Union and the completion of the Banking Union and of the Capital Markets Union. Moreover, the NBR took part, in accordance with its tasks, in the phases of the 2021 European Semester and 2022 European Semester.

In 2021 and in early 2022, activities at EU level focused on mitigating the significant negative economic, social and financial consequences of the COVID-19 pandemic. To

⁴⁷ The Committee is operating under the leadership of the Secretary of State for European Affairs at the Ministry of Foreign Affairs.

these have added, as of end-February 2022, the actions and measures taken in the context of Russia's military invasion of Ukraine.

Particularly important for managing the negative effects generated by the COVID-19 pandemic is the support coordinated at EU level via the new EU Multiannual Financial Framework for 2021-2027 and the "Next Generation EU" (NGEU). Under the Recovery and Resilience Facility (RRF), which is the key instrument at the heart of NGEU, the EU Council adopted Romania's National Recovery and Resilience Plan (NRRP) on 29 October 2021. Subsequently, in December 2021 and January 2022, the Commission disbursed approximately EUR 3.8 billion to Romania in prefinancing, as part of the NRRP's grant and loan component.

2.1. The European Semester

The 2021 European Semester, an integral part of the EU economic governance concept, started on 17 September 2020, when the European Commission released the Communication on the Annual Sustainable Growth Strategy 2021 (ASGS⁴⁸).

Considering the priority actions put forward by the EC in the ASGS 2021 and the 2020 country-specific recommendations, the Romanian authorities prepared and submitted to the Commission the 2021 National Reform Programme (NRP) and the Convergence Programme for 2021-2024. The NBR participated in the preparation of the NRP, providing information on the actions/measures proposed in this document, which fall into its scope, as well as contributing to the drafting of the progress reports on their implementation. As usual, its contribution to the Convergence programme, which is a programme document of the Romanian Government, consisted in the section on the monetary policy and the exchange rate policy. The 2021 European Semester was an exceptional cycle, being adapted for the implementation of the Recovery and Resilience Facility (RRF), as the Council of the EU did not adopt country-specific recommendations in 2021. The NRRP includes reforms and investments contributing to the implementation of the 2019 and 2020 Country Specific Recommendations (CSRs), as well as to the green and digital transition.

The 12th European Semester started on 24 November 2021, with the launch of the Commission's ASGS for 2022. On the same date, the Commission published its opinions on the 2022 Draft Budgetary Plans, the overall assessment of the budgetary situation and the fiscal stance in the euro area, together with the *Joint Employment Report 2022*.

As regards the Macroeconomic Imbalance Procedure (MIP), the European Commission published on 24 November 2021 the *Alert Mechanism Report* for 2022. This document identifies the Member States for which the EC considers that developments warrant further analysis (in the form of an in-depth review) to substantiate whether imbalances exist and consequently propose policy measures. The EC carried out

⁴⁸ Puts forth the overall economic and social priorities at EU level for the coming year.

in-depth reviews for 12 Member States⁴⁹, including Romania, and concluded that the country was experiencing macroeconomic imbalances⁵⁰.

For the 2022 European Semester cycle, the EC published the country reports and country-specific recommendations on 23 May 2022.

2.2. Developments in the establishment of a European Deposit Insurance Scheme (EDIS)

Talks at technical level continued also in 2021 within the Council's Ad Hoc Working Party on the Strengthening of the Banking Union and the Working Party on Financial Services and the Banking Union⁵¹. Although EDIS is aimed only at the Member States in the Banking Union, the discussions within the Working Party are attended by all 27 EU member countries, given the possibility of other EU Member States joining the Banking Union in the future.

Throughout 2021, the working group had six meetings, in video conference format, to which participated also NBR representatives, along with representatives of the Ministry of Finance and of the Permanent Representation of Romania to the European Union.

In March 2022, the Eurogroup meeting in inclusive format (with the participation also of finance ministers from non-euro area Member States) discussed mainly the way forward to agree on a work plan for all outstanding elements of the Banking Union and put forward a phased approach with four work streams, namely: establishing a common backstop for depositors, diversifying banks' sovereign exposures, improving the management of banks likely to fail and paving the way for a Single Market for banking services.

The discussions continued also in the High-Level Working Group on EDIS (HLWG), made up of representatives of finance ministries at state secretary level, and operating under the Economic and Financial Committee of the EU Council. Representation in the HLWG is ensured by the Ministry of Finance, while the NBR provided, at the latter's request, technical assistance in preparing the topics on the working group's agenda falling into the central bank's scope.

2.3. Policy initiatives at EU level

On 27 October 2021, the EC proposed a legislative package for revising the EU banking rules, ensuring that EU banks will become more resilient in the face of any

⁴⁹ Cyprus, Croatia, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Romania, Spain and Sweden. The Commission concluded that three of these countries, i.e. Cyprus, Greece and Italy, were facing excessive imbalances, whereas the others were experiencing economic imbalances.

⁵⁰ The vulnerabilities identified by the EC refer to the current account deficit, the net international investment position and the unit labour cost, these indicators exceeding the thresholds specified in Macroeconomic Imbalances Procedure scoreboard.

⁵¹ This working group was established by incorporating in the activity of the Working Party on Financial Services the work related to the Banking Union project that is carried out in the Ad Hoc Working Party on the Strengthening of the Banking Union, resulting in the new working group.

potential future economic shocks, while contributing to Europe's recovery from the COVID-19 pandemic and the transition to climate neutrality.

The legislative package marks the final step in the implementation of the Basel III agreement in the EU, aiming to make banks more resilient to possible economic shocks.

The review consists of the following legislative elements:

- a legislative proposal to amend the Capital Requirements Directive (Directive 2013/36/EU);
- a legislative proposal to amend the Capital Requirements Regulation (Regulation 2013/575/EU);
- a separate legislative proposal to amend the Capital Requirements Regulation in the area of resolution (the so-called "daisy chain" proposal).

NBR representatives participate in the working party set up at the EU Council level to discuss the legislative package.

Another initiative at European level was the launch by the EC of a public consultation on 22 November 2021 to complement the information gathered in the MCD (Mortgage credit directive)⁵² evaluation study and to collect further evidence to assess, in line with better regulation principles, the effectiveness, efficiency, coherence, relevance and EU value-added of the MCD. The NBR replied to this consultation by submitting its contribution to the EC's questionnaire. The deadline for replying to the consultation was 28 February 2022.

Moreover, on 30 November 2021, the EC launched a public consultation on the experience gained in the application of the EU's current macroprudential framework for the banking sector, in view of the legislative review referred to in Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, as subsequently amended. The NBR replied to this consultation by submitting its contribution to the EC's questionnaire. The deadline for replying to the consultation was 18 March 2022.

Furthermore, the negotiations on the Digital Finance Package launched by the EC on 24 September 2020⁵³ continued at EU level in 2021 and in the first part of 2022. The NBR participates in the technical discussions on these regulatory proposals in the dedicated EU Council working parties.

⁵² Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010.

⁵³ The package consists of a Digital Finance Strategy, a Retail Payments Strategy, legislative proposals for an EU regulatory framework on crypto-assets (a Regulation on Markets in Crypto Assets and a Regulation on a pilot regime for market infrastructures based on the distributed ledger technology) and proposals for an EU regulatory framework on digital operational resilience (a Regulation and a Directive on digital operational resilience for the financial sector).

2.4. Technical assistance received by the NBR under the European Commission's Technical Support Instrument

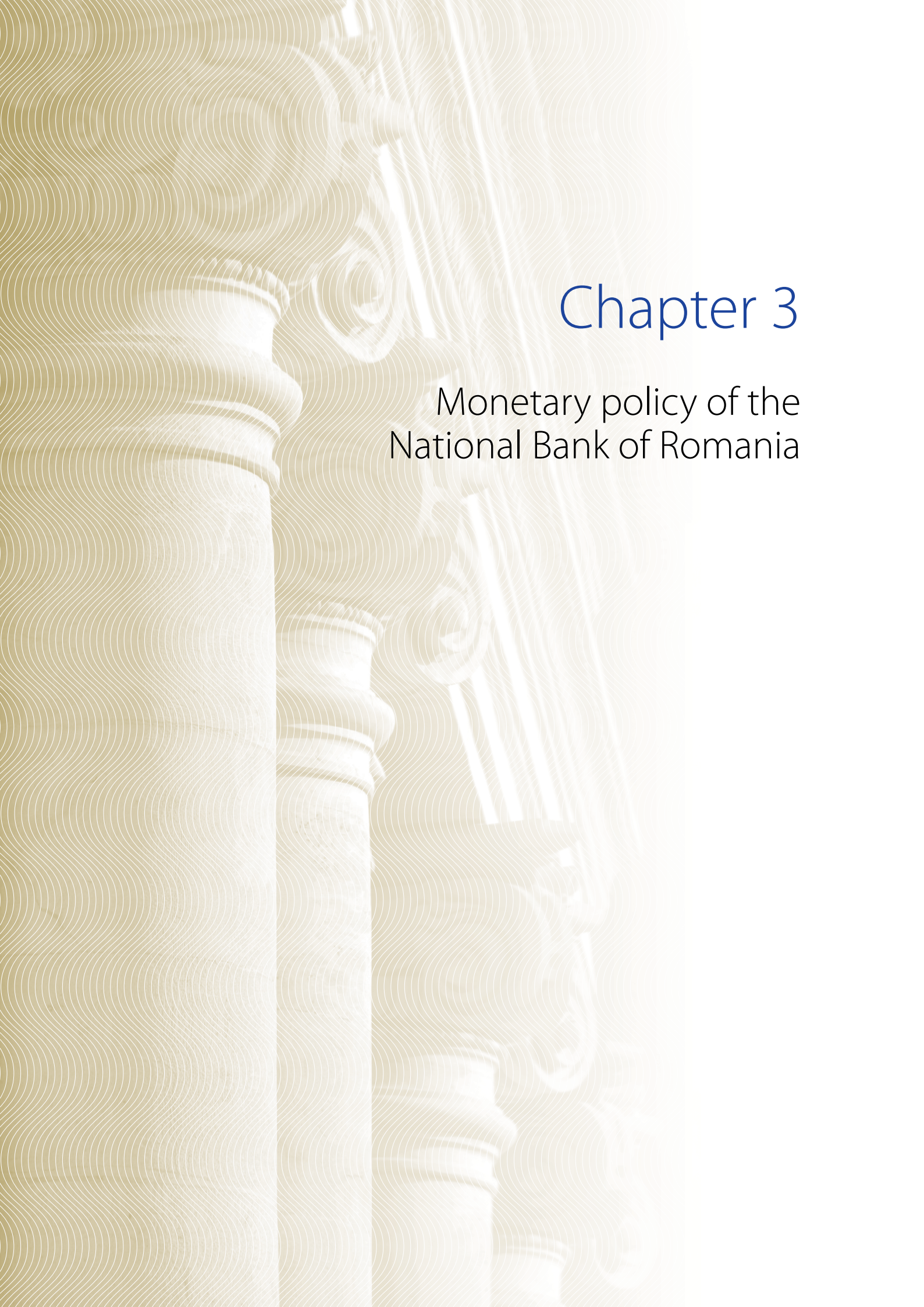
The EC has provided expertise to help deliver more than 1200 reform projects in 27 Member States since 2017, initially via the Structural Reform Support Programme (SRSP) and, as of 2021, via the Technical Support Instrument (TSI).

The support⁵⁴ granted through the TSI is demand driven and does not require co-financing from Member States. The instrument is an important pillar of the EU's initiative to help Member States mitigate the economic and social consequences of the outbreak of the COVID-19 crisis.

In 2020, the NBR submitted three projects to the Secretariat-General of the Government, as the national coordinating authority, under the TSI 2021 call for projects. Of these, the EC selected the "Climate risk assessment support for the National Bank of Romania" project. The project, funded by the EC, will be carried out jointly with the Austrian Financial Markets Authority, which submitted a similar application for funding. The implementation period is 18 months (October 2021 – March 2023).

⁵⁴ The TSI provides technical support to Member States in a wide range of policy areas. The budget is EUR 864 million for the period 2021-2027 (in current prices), while for 2021 the amount allocated was EUR 114 million.





Chapter 3

Monetary policy of the National Bank of Romania

1. Policy objective

The primary objective of the National Bank of Romania, in compliance with its Statute⁵⁵, is to ensure and maintain price stability. By fulfilling this objective, monetary policy – i.e. the key task of the monetary authority – can serve best to achieve lasting economic growth. The NBR designs and implements monetary policy in the context of inflation targeting⁵⁶, characterised by a flat inflation target of 2.5 percent ± 1 percentage point⁵⁷, compatible with the definition of medium-term price stability for the Romanian economy.

In the specific context of 2021, monetary policy was geared towards bringing the annual inflation rate back into line with the flat target over the medium term, *inter alia* via the solid anchoring of inflation expectations in the medium to long run, in a manner conducive to achieving sustainable economic growth. The aim implicitly was to pave the way for curbing the annual inflation rate over the longer term to a level compatible with the ECB's quantitative definition of price stability.

2. Policy decisions

The macroeconomic and financial context of 2021 was particularly challenging and marked by deeply divergent aspects, calling for a prompt, yet also prudent recalibration of the monetary policy stance, given the sizeable adverse supply-side shocks worldwide, in the context of the robust, albeit asynchronous recovery of activity, amid the reopening of economies and the progress of vaccination against COVID-19, but also the emergence of new pandemic waves.

The divergent nature of the effects exerted on consumer price dynamics and on economic activity by these global shocks – especially by the surge in prices of energy, agri-food commodities and crude oil, as well as by bottlenecks in production and supply chains – was compounded on the domestic front by the liberalisation, starting 1 January 2021, of the electricity market for household consumers, but also by the influences of the budget consolidation initiated in 2021⁵⁸, in line with the commitments under the excessive deficit procedure.

⁵⁵ Law No. 312/2004.

⁵⁶ The NBR moved to inflation targeting in August 2005.

⁵⁷ The NBR shifted to a multiannual flat inflation target of 2.5 percent ± 1 percentage point in December 2013.

⁵⁸ In 2021, the general government budget execution led to a deficit of lei 80.0 billion (6.7 percent of GDP, according to the national methodology), well below that posted in the same year-ago period (lei 101.8 billion or 9.6 percent of GDP) and at the same time slightly lower than the target set at the last budget revision in 2021 (lei 84.9 billion).

Specifically, after having fallen at end-2020 slightly below the mid-point of the flat target, i.e. to 2.06 percent, the annual inflation rate re-embarked in January 2021 on an upward path, which exceeded the upper bound of the variation band of the target in mid-Q2 and then witnessed an unexpectedly marked steepening, climbing to 8.19 percent in December 2021. Some 80 percent of the advance came from the increases in natural gas, electricity and fuel prices – exogenous CPI components –, while half of the contribution of only 15 percent made by core inflation⁵⁹ was attributable to processed food⁶⁰.

At the same time, after the downturn seen in 2020 under the impact of the pandemic shock, the economy recorded particularly robust growth in 2021⁶¹, yet amid uneven developments, with implications for the sign and pattern of the economy's cyclical position. Thus, economic activity further saw a much swifter-than-anticipated recovery in the first part of the year, although visibly more moderate than in 2020 H2⁶². On the other hand, subsequent data and assessments showed, contrary to expectations, a considerable slowdown in economic growth in H2, owing to the successive pandemic waves⁶³, the much higher energy and food prices, as well as to persistent bottlenecks in production and supply chains. The developments resulted in the re-opening of the positive output gap in 2021 Q1, much earlier than forecasted, but also in its probable significant narrowing in H2, to far lower-than-anticipated values⁶⁴. In parallel, the trade deficit recorded a considerably faster increase during the year under review, and the current account deficit also widened markedly, thus adding 54.4 percent from a year earlier.

In turn, labour market conditions witnessed a swift and above-expectations improvement during the first half of the year, *inter alia* with the support of government measures. Afterwards, particularly in Q4, they reflected the influences from bottlenecks in global production chains and from the fourth pandemic wave⁶⁵.

Moreover, the inflation outlook kept worsening during the reported year. Specifically, the anticipated path of the annual inflation rate was revised significantly upwards over the short term in the March and May 2021 forecasting rounds, but to a smaller extent over the latter segment of the projection horizon. Hence, under the impact of the larger hikes anticipated for fuel, electricity and natural gas prices, to which added the rise in some agri-food commodity prices⁶⁶ – conducive, on the other hand, to

⁵⁹ The annual adjusted CORE2 inflation rate posted a much more modest rise, to 4.7 percent in December 2021 from 3.3 percent in December 2020.

⁶⁰ Whose prices reflected the impact of the hikes in agri-food commodity prices, as well as of higher energy and transport costs.

⁶¹ The economy advanced 5.9 percent in 2021, after having contracted 3.7 percent in 2020.

⁶² GDP advanced 2.8 percent in 2021 Q1 and 1.8 percent in 2021 Q2 (versus 4.6 percent in 2020 Q4), implying, amid the base effect associated with the economic contraction in 2020, a pick-up in its annual dynamics to -0.2 percent in Q1, from -1.4 percent in 2020 Q4, and to 13 percent in Q2 (according to statistical data available at the time of conducting the monetary policy assessment).

⁶³ The fourth wave triggered by the Delta variant in the autumn of 2021, followed at the onset of 2022 by the Omicron-related wave.

⁶⁴ Also due to the notable downward revision of statistical data on the pace of economic advance in 2021 H1.

⁶⁵ Which worsened the public health crisis domestically, calling also for the reimposition of certain mobility restrictions.

⁶⁶ Affecting core inflation in particular.

disinflationary base effects in 2022 –, the annual inflation rate was expected to climb visibly above the upper bound of the variation band of the target in 2021 H2. It was then seen returning at the onset of 2022 and remaining afterwards in the upper half of the band⁶⁷, amid the earlier reopening of the positive output gap and its subsequent gradual widening.

In August, the anticipated inflation pattern was revised even more markedly upwards in the short term and, at the same time, the upward revision was somewhat more pronounced over the longer projection horizon⁶⁸. That was especially due to the likely much higher increases in natural gas, electricity and fuel prices in July⁶⁹, but also amid stronger inflationary pressures expected from excess aggregate demand over the forecast horizon. The strengthening trend of underlying inflationary pressures was seen to be slowed, however, by the relative improvement in the composition of aggregate demand in terms of its inflationary potential⁷⁰ and by the probable decline in unit labour cost dynamics well below pre-pandemic levels, also amid the still loose labour market. At the same time, the evolution of the pandemic and of the containment measures further posed significant uncertainties and risks to the new outlook, given the signs of a new pandemic wave emerging in Europe and the slowdown in the pace of vaccination domestically. High uncertainties were associated with the outlook on the absorption of EU funds, especially those under the Next Generation EU programme, as well as with the fiscal policy stance, in the context of the budget consolidation presumed to be launched in 2021 and carried out gradually over the medium term.

Global supply-side shocks strengthened beyond expectations in the latter part of 2021, as energy, other commodity and transport prices rose at a much faster pace, alongside more severe disruptions in production and supply chains, including the deepening of the semiconductor crisis. On the domestic front, the direct and indirect effects of these shocks triggered an even more severe worsening of current and anticipated inflation developments, *inter alia* amid increasingly high short-term inflation expectations and the large shares held in the CPI basket by food items, energy and fuels, but also by imported goods.

Thus, the anticipated path of the annual inflation rate witnessed a renewed substantial upward revision, especially prominent over the short term⁷¹, in the November 2021 forecasting exercise. The assessments updated at the beginning

⁶⁷ The medium-term forecasts updated in March and May saw the annual inflation rate at 3.4 percent and 4.1 percent respectively for December 2021, compared to the 2.5 percent level anticipated in November 2020. For end-2022, the anticipated values stood at 2.8 percent and 3 percent respectively, versus 2.4 percent forecasted in November 2020 for the end of the projection horizon (September 2021).

⁶⁸ According to the August medium-term forecast, the annual inflation rate was expected to climb more sharply above the variation band of the target in 2021 H2 than anticipated previously, to 5.6 percent in December 2021 and, following the downward corrections in the first part of 2022, to decline and to remain marginally below the upper bound of the band, at 3.4 percent.

⁶⁹ Presumably adding around 1 percentage point to the annual inflation rate. They were foreseen to amplify and protract the inflationary impact of supply-side shocks, yet also to exert, contrariwise, significant disinflationary base effects in 2022.

⁷⁰ Through a larger contribution from investment to foreseen economic growth to the detriment of that from private consumption, with implications for the future performance of potential GDP as well.

⁷¹ According to the November 2021 medium-term forecast, the annual inflation rate was expected to advance to 8.6 percent in June 2022, before declining gradually to 5.9 percent in December 2022 and 3.3 percent at the end of the forecast horizon.

of 2022 highlighted a renewed worsening of the near-term inflation outlook, even amid the capping and compensation of energy prices for households starting November 2021⁷², whose impact, also in terms of how they were to be included in the CPI calculation, was however uncertain.

Through its magnitude and duration, the inflation bout triggered and amplified in the period ahead by supply-side shocks risked deteriorating medium-term inflation expectations and thus generating second-round effects, possibly via a wage-price spiral. In the near run, this risk was, nevertheless, mitigated by the adverse implications for economic activity and the labour market stemming from the fourth pandemic wave, the energy crisis and global supply chain bottlenecks. Moreover, high uncertainties were further associated with the outlook on the absorption of EU funds, especially those under the Next Generation EU programme, as well as with the future fiscal policy stance, given the improvement in the budget execution for the first quarters of 2021, in line with commitments, but also the risks to budget consolidation progress induced by the successive pandemic waves and by the surge in energy prices, as well as by the political crisis in the autumn of 2021.

At the same time, high uncertainties and risks also stemmed from the strong pick-up in inflation worldwide and in Europe entailed by global supply-side shocks, which prompted central banks in emerging economies, including those in the region, to start in mid-2021 and then continue to raise key interest rates at a swift pace. To these added decisions and signals from major central banks on the earlier/faster normalisation of the monetary policy conduct (Box 4).

Box 4. The monetary policy stances of major central banks and of those in the region in 2021

In the US, euro area and in Central and Eastern European countries, economic activity witnessed a strong recovery in 2021, albeit uneven during the year, amid new pandemic waves and the ensuing disruptions. Inflation resumed or accelerated considerably its pick-up, especially in H2, and its outlook worsened progressively. This owed to the energy crisis and to bottlenecks in global production and supply chains, but also to some underlying inflation factors in certain countries, essential in terms of calibrating the central banks' monetary policy response.

Thus, the annual inflation rate exceeded significantly the central banks' targets in Q2 (in the US, Poland, Hungary; Chart A) or at the onset of H2 (euro area, Czechia). Moreover, at end-2021, it reached a historical peak in the euro area⁷³ and the highest readings in approximately 40 years in the US and for the past 10-20 years in countries in the region. The economic rebound was, however, delayed in the early months of the year under review by the resurgence of the pandemic and the reimposition of mobility restrictions. Afterwards, the

⁷² Support schemes presumed to be applied from November 2021 to March 2022.

⁷³ Data series available since January 1997.

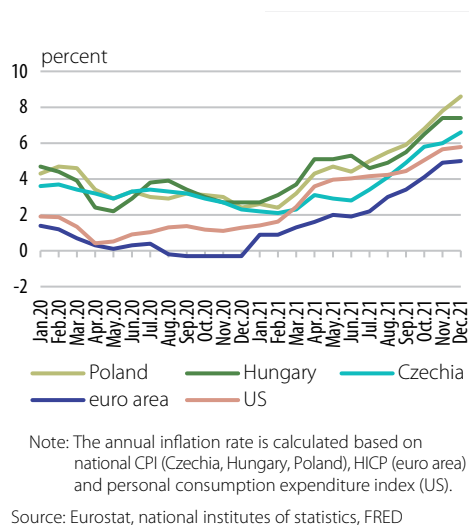


Chart A
Annual inflation rate
in the euro area, US and
countries in the region

uncertainties and risks stemming from developments in the epidemiological situation remained considerable, despite the progress in vaccination against COVID-19 and the easing of restrictive measures, particularly during the summer months. Furthermore, as of end-Q3, additional uncertainties and risks to economic activity came from more severe disruptions in global value chains, as well as from the energy crisis, especially in the case of European economies.

In the euro area, the pandemic wave at the beginning of the year and the tightening of associated restrictions had a relatively stronger impact on the economy. Moreover, the annual inflation rate started to rise from negative levels, while underlying price pressures remained virtually neutral, amid the persistence of significant slack in labour and product

markets. At the same time, according to ECB assessments updated in mid-year in the context of the gradual reopening of the economy, the annual inflation rate was expected to increase further in 2021 H2, but to decline in 2022, once with the fadeout of the temporary action of supply-side factors. Underlying inflationary pressures were anticipated to rise gradually, yet the annual rate of core inflation was expected to stay below 2 percent, the same as that of headline inflation.

Under the circumstances, in the first part of the year, the ECB preserved the high degree of monetary policy accommodation, by keeping key rates unchanged⁷⁴ and confirming the Governing Council's forward guidance on the future path of interest rates. Specifically, the Governing Council expected key ECB interest rates to remain at their present or lower levels until it saw the inflation outlook robustly converge towards the target within its projection horizon, and such convergence was consistently reflected in underlying inflation dynamics. Moreover, the ECB decided to maintain the volume of financial asset purchases under the pandemic emergency purchase programme (PEPP) at EUR 1,850 billion⁷⁵ and extend the horizon for net purchases until the coronavirus crisis phase was over and at least until the end of March 2022. Reinvestment of principal payments from maturing securities purchased under the PEPP was extended until at least the end of 2023, while the future roll-off of the PEPP portfolio would be managed to avoid interference with the appropriate monetary policy stance. At the same time, the Governing Council reconfirmed that net purchases under the asset purchase programme (APP) would continue at a monthly pace of EUR 20 billion and that it expected them to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it started raising the key ECB interest rates⁷⁶. The decisions were aimed

⁷⁴ The interest rates on the main refinancing operations, the marginal lending facility and the deposit facility were kept at 0.00 percent, 0.25 percent and -0.50 percent respectively.

⁷⁵ The envelope had been increased in December 2020, from EUR 1,350 billion.

⁷⁶ In addition, the Governing Council reiterated that it intended to continue full reinvestment of principal payments from maturing securities purchased under the APP for an extended period of time past the date when the key ECB interest rates were raised, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation. Moreover, the central bank reconfirmed that it would provide ample liquidity through its refinancing operations, with the third series of targeted longer-term refinancing operations (TLTRO III) playing a major role in supporting bank lending to firms and households.

at reducing uncertainty and bolstering economic agents' confidence, encouraging consumer spending and business investment, and therefore safeguarding medium-term price stability. Furthermore, in order to prevent a countercyclical tightening of financing conditions, the Governing Council decided in March and June to conduct net purchases under the PEPP at a significantly faster pace in Q2 and Q3 than in the first months of the year.

On 8 July 2021, the Governing Council approved the major changes in the ECB's monetary policy strategy, namely: (i) the adoption of a symmetric 2 percent inflation target over the medium term, with deviations from the target on both sides seen as equally undesirable, and (ii) a conditional commitment to take into account the implications of the effective lower bound on policy rates when conducting monetary policy in an environment of structurally low nominal interest rates, which would require especially forceful or persistent monetary policy measures to avoid negative deviations from the inflation target becoming entrenched. The Governing Council therefore revised its forward guidance on the key ECB interest rates at its 22 July monetary policy meeting, saying that they were expected to remain at their present or lower levels until it saw inflation reaching 2 percent well ahead of the end of the projection horizon, and durably for the rest of the projection horizon, and until it judged that realised progress in underlying inflation was sufficiently advanced to be consistent with inflation stabilising at 2 percent over the medium term. This may also imply a transitory period in which inflation is moderately above target.

The ECB forecast updated in September revised again the inflation projections for 2021 up, owing mainly to the higher cost pressures stemming from temporary shortages of commodities, materials and equipment, as well as from energy prices. However, inflation in 2023 was still seen going down to below 2 percent, although it was revised up slightly to reflect the better growth outlook. Against this background, the Governing Council decided on a moderately lower pace of PEPP net asset purchases than in the previous two quarters, given also the favourable financing conditions for firms, households and the public sector.

In December 2021 the Governing Council decided on a step-by-step reduction in the pace of asset purchases over the following quarters⁷⁷, implying primarily: (i) a new reduction in the pace of net asset purchases under the PEPP in 2022 Q1 and their discontinuation at end-March 2022, as well as (ii) a monthly net purchase pace under the APP of EUR 40 billion in the second quarter of 2022, EUR 30 billion in Q3 and EUR 20 billion from October 2022 onwards⁷⁸. At the same time, the level of the key ECB interest rates and the forward guidance on the future path of policy rates were reconfirmed, as the Governing Council's assessment showed that monetary accommodation would still be needed for inflation to stabilise at 2 percent over the medium term.

⁷⁷ The parameters of monetary policy instruments and measures had been kept unchanged at the October meeting.

⁷⁸ In addition, the Governing Council extended until 2024 the reinvestment horizon for the principal payments from maturing securities purchased under the PEPP and reiterated its intention to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time past the date when it started raising the key ECB interest rates and, in any case, for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

The decisions were taken in a context marked by new mobility restrictions and the uncertainties associated with the pandemic wave triggered by the Omicron variant of the coronavirus, as well as by shortages of materials, equipment and labour, alongside higher energy prices, restraining economic activity in 2021 Q4 and worsening its outlook, yet over the very short term. Under the same circumstances, the annual inflation rate continued to increase at a higher rate than projected in the closing months of 2021, but was expected to decline over the course of 2022, once with the fadeout of the action of supply-side shocks. The new forecast showed, however, that headline inflation tended to return to the Governing Council's target over the medium term, with the contribution of underlying inflation dynamics, amid the gradual pick-up of the economy to full capacity and further improvements in the labour market – reflected in faster wage growth –, to which added longer-term inflation expectations moving closer to 2 percent. Nevertheless, the annual rates of both headline and underlying inflation forecasted for 2024 remained slightly below the ECB target at 1.8 percent.

In turn, the Federal Reserve kept the target range for the federal funds rate at 0.00-0.25 percent in the first three quarters of the year and decided to continue the purchases of Treasury securities and mortgage-backed securities at monthly volumes of USD 80 billion and USD 40 billion respectively. The decisions were taken in a context in which both economic activity and labour market witnessed a swift recovery, but further reflected the effects of the COVID-19 pandemic, with the unemployment rate remaining considerably above pre-pandemic levels in the first half of the year. At the same time, the pick-up in the annual inflation rate, to more than 5 percent in Q2 and Q3, was largely attributable to transitory factors, including some base effects associated with price declines recorded in the same year-earlier period, as well as to price hikes triggered by supply chain bottlenecks.

In September, however, the FOMC noted some obvious progress toward the central bank's maximum employment and price stability goals, signalling in this context that a moderation in the pace of asset purchases could soon be warranted. This decision was taken in the immediately following meeting, i.e. in November⁷⁹. In December, the FOMC decided on a faster reduction in the monthly pace of net asset purchases⁸⁰, as recent developments pointed to a considerably tighter labour market, seen in the steep decline of the unemployment rate to a value compatible with the long-term equilibrium level, according to FOMC participants' estimates, as well as in the markedly faster wage growth. Moreover, the forecasted path of the annual inflation rate was revised upwards in the short run, although staying close to 2 percent over the longer horizon, while economic growth was anticipated to remain solid, albeit slightly more moderate than previously forecasted, due to the worsening of the epidemiological situation and the persistence of supply chain bottlenecks⁸¹.

⁷⁹ When the Fed decided to reduce the monthly pace of its net asset purchases by USD 10 billion for Treasury securities and USD 5 billion for mortgage-backed securities.

⁸⁰ They were to be diminished by USD 20 billion for Treasury securities and USD 10 billion for mortgage-backed securities.

⁸¹ Under the circumstances, the December projections hinted at an earlier launch of the rate hiking cycle by the Fed, the median of the anticipated midpoint of the target range for the federal funds rate being revised to 0.9 percent for 2022 (from 0.1 percent in the June projections) and to 1.6 percent for 2023 (from 0.6 percent).

In the region, the Polish central bank kept the monetary policy rate at the historical low of 0.1 percent during the first three quarters of the year and continued to purchase government securities and government-guaranteed debt securities in the secondary market. Behind the decisions stood primarily the transitory nature of the factors that prompted the annual inflation rate to resume and then accelerate its growth, as well as the uncertainties about the pace and magnitude of economic recovery, amid pandemic developments. At the onset of Q4, however, the central bank embarked on a relatively quick rate hiking cycle, raising the monetary policy rate in three consecutive steps of different sizes in October, November and December – by 0.4 percentage points, 0.75 percentage points and 0.5 percentage points respectively – to 1.75 percent⁸².

The decisions were taken given that the annual inflation rate had strongly accelerated its rise above the target band in H2⁸³, *inter alia* with the contribution of its core component⁸⁴, in a context marked by faster economic recovery during the first three quarters of the year and by a tightening trend of labour market conditions. The latter was especially reflected by the decline in the unemployment rate close to pre-pandemic lows, as well as by the increasingly steep upward path of wage dynamics. At the same time, the inflation outlook kept worsening. Specifically, according to the November forecast, the annual inflation rate was expected to climb until 2022 Q1 and, after a temporary return to the upper bound of the target band⁸⁵, to rise again towards the end of the projection horizon, amid inflationary pressures stemming from the gradual increase in excess aggregate demand. Moreover, the balance of risks to this outlook remained tilted to the upside across the policy-relevant horizon, given the ongoing economic recovery and the labour market tightening trend, but also the potential protraction of the impact exerted by external shocks on price dynamics.

The Czech National Bank embarked in mid-year on a gradual normalisation process of the monetary policy conduct, increasing the key rate in two steps of 0.25 percentage points each in June and August, to 0.75 percent⁸⁶, from the level close to the historical low reached in May 2020, i.e. 0.25 percent. However, the monetary authority then hastened considerably the policy rate hiking cycle, raising the key rate

⁸² Furthermore, the Lombard rate and the deposit rate were increased to 2.25 percent and 1.25 percent respectively, while their corridor was brought to a width of ± 0.5 percentage points, from a setup that had become asymmetrical (+0.40/-0.10 percentage points). In addition, starting November, the central bank no longer mentioned in its monetary policy statements the purchases of government securities and government-guaranteed debt securities on the secondary market (the last such transactions were carried out in November) and the refinancing of loans granted by credit institutions to the non-financial sector. Both types of operations had been introduced in response to the pandemic crisis. Moreover, the central bank normalised the required reserve ratio (raising it to 2.0 percent from 0.5 percent) and reiterated the possibility of resorting to forex market interventions, the timing and volume of which were to be determined based on financial market conditions.

⁸³ Inflation rose to 8.6 percent in December from 4.4 percent in mid-year and 2.4 percent at end-2020, owing mainly to increases in fuel, agri-food and electricity prices and in waste disposal charges, as well as under the influence of supply chain disruptions and hike in transport costs.

⁸⁴ The annual core inflation rate stepped up to 5.3 percent in December 2021 versus 3.5 percent in mid-year and 3.7 percent at end-2020.

⁸⁵ Amid the fadeout of effects from supply-side shocks.

⁸⁶ At the same time, the deposit facility rate was kept at 0.05 percent, while the lending facility rate was raised by 0.25 percentage points and 0.50 percentage points respectively, to 1.75 percent. Hence, the width of the related corridor was extended from +0.5/-0.20 percentage points to +1/-0.70 percentage points.

in three variable steps October through December, namely by 0.75 percentage points, 1.25 percentage points, and 1 percentage point respectively, up to 3.75 percent⁸⁷.

The approach was warranted by the sizeable and steady worsening of inflation developments and outlook in H2, particularly in terms of the core component, under the strong impact of global supply-side shocks, but also as a result of rising underlying pressures. The latter occurred amid the increasingly obvious labour market tightening, reflected *inter alia* by the unemployment rate tending to return towards its pre-pandemic lows, conducive to swifter wage dynamics.

Specifically, the annual inflation rate grew at a considerably faster tempo, also vis-à-vis expectations, climbing in Q3 well above the tolerance band around the target⁸⁸, while its anticipated path was revised markedly upwards in the central bank's August and November forecasting rounds⁸⁹. According to the November projection, the annual inflation rate was expected to remain on an upward path until 2022 Q1, reaching around 7 percent, mainly following the step-up in the

dynamics of its core component⁹⁰, under the influence of the quick rise in import prices, compounded by robust domestic demand⁹¹. To this added costlier agri-food commodities and the increase in fuel prices and some administered prices at the onset of 2022 (electricity, natural gas). The annual inflation rate was, however, anticipated to fall thereafter and near the target at the end of the monetary policy horizon, mainly amid the moderation of imported inflation. Nevertheless, the possible de-anchoring of inflation expectations was a major risk to this outlook, given *inter alia* the potential stronger inflationary effects from bottlenecks in global production chains, from energy prices and imputed rent, as well as the possible depreciation of the domestic currency, calling for a stronger monetary policy response amid labour market tensions.

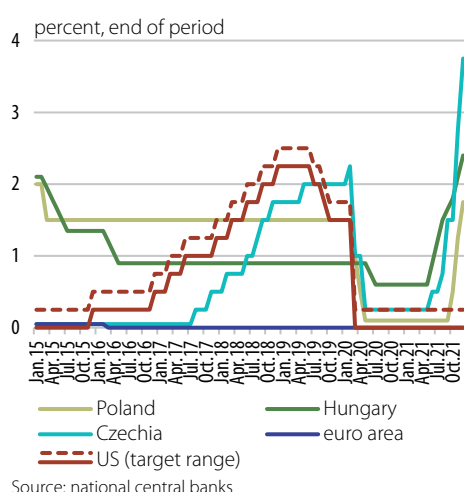


Chart B
Monetary policy rate
in the euro area, US and
countries in the region

The Hungarian central bank also embarked on a monetary policy rate hiking cycle in mid-year. The base rate was raised however by relatively more uniform increments June through December 2021, i.e. 0.15 and 0.30 percentage points⁹²,

⁸⁷ Furthermore, the lending facility rate was increased to 4.75 percent at the end of the year, while the deposit facility rate was brought up to 2.75 percent.

⁸⁸ The annual inflation rate picked up from 2.3 percent in December 2020 to 2.8 percent in June 2021 and to 6.6 percent at end-2021. The annual core inflation rate rose to 8.6 percent in December 2021 against 3.5 percent in June and 3.6 percent at end-2020.

⁸⁹ At the same time, the updated forecasts indicated an ongoing recovery of economic activity, as progress in the vaccination campaign against COVID-19 rendered unlikely the reimposition of major restrictions. Production and supply chain bottlenecks were, nevertheless, anticipated to weigh on output in certain sectors, especially export-oriented ones. In addition, GDP dynamics in Q3 fared better than expected, with the major contribution of private consumption, underpinned by the relatively quicker wage growth, *inter alia* amid the above-expectations labour market tightening.

⁹⁰ Core inflation dynamics were seen following a similar path, to peak at 6.3 percent in 2022 Q1.

⁹¹ The contribution of imputed rent to core inflation dynamics, which grew substantially in 2021, was also anticipated to remain high.

⁹² The key rate was increased by 0.3 percentage points in June, July, August, November and December, and by 0.15 percentage points in September and October.

although with a somewhat higher frequency, namely seven times. It was thus brought up to 2.40 percent from the historical low of 0.6 percent⁹³. Conversely, November through December the central bank hastened considerably the adjustment of the one-week deposit rate⁹⁴, raising it to 4.0 percent at end-December⁹⁵, after it had previously been increased in step with the base rate (Chart B). Moreover, the Hungarian central bank announced in June the termination of the FGS Go! Programme and, in December, the closure of the Bond Funding for Growth Scheme (for purchases of corporate bonds) and of the government securities purchase programme. In addition, it decided on the phasing out of the FX swap facility providing forint liquidity.

Table A. Macroeconomic developments and monetary policy stance in advanced economies and in the region

	Inflation target/ objective ^{b,c}	Annual inflation rate						Monetary policy rate ^{b,c}		Output gap ^{b,g}	General government balance, % of GDP**				Current account balance, % of GDP			
		2021 (average)	2021 (end of period)	Forecast ^{a,b,c}				Dec. 2020	Dec. 2021		2020	2021	Forecast*		2020	2021	Forecast*	
				2022 (average)	2023 (average)	2022 Q4	2023 Q4						2022	2023			2022	2023
Euro area	2 percent ***	2.6 ^a	5.0 ^c	3.2	1.8	1.9	1.8	0	0	negative, narrowing	-7.1 ^a	-5.1	-3.9 ^d	-2.4 ^d	1.9 ^d	2.4	1.8 ^c	1.9 ^c
US	2 percent	3.9 ^f	5.8 ^f	2.6	2.3	-	-	0-0.25	0-0.25	negative, narrowing	-15.3 ^d	-11.7	-7.9 ^d	-6.8 ^a	-2.9 ^d	-3.6	-3.6 ^d	-3.5 ^d
Poland	2.5 percent ±1 pp	5.1 ^e	8.6 ^e	5.8	3.6	4.4	3.6	0.10	1.75	slightly positive, gradually rising	-6.9 ^a	-1.9 ^a	-1.8 ^d	-2.1 ^d	2.9 ^a	-0.6	2.6 ^d	2.9 ^d
Hungary	3 percent ±1 pp	5.1 ^e	7.4 ^e	4.7-5.1	2.5-3.5	-	-	0.60	2.40	quasi-nil	-7.8 ^a	-6.8 ^a	-5.9 ^b	-3.9 ^b	-1.0 ^a	-3.0	(-2.5)- (-3.4) ^b	(-1.5)- (-2.4) ^b
Czechia	2 percent ±1 pp	3.9 ^e	6.6 ^e	5.6	2.1	4.1	2.0	0.25	3.75	slightly positive, gradually opening in the near term and gradually narrowing afterwards	-5.8 ^a	-5.9 ^a	-4.4 ^b	-4.2 ^b	2.0 ^a	-0.8	-0.4 ^b	0.5 ^b
Romania	2.5 percent ±1 pp	5.05 ^e	8.19 ^e	-	-	5.9	3.3 (Q3)	1.50	1.75	slightly positive, rising very slowly	-9.3 ^a	-7.1 ^a	-6.9 ^d	-6.3 ^d	-5.0 ^a	-7.0	-6.3 ^d	-6.1 ^d

*) forecasted values refer to the latest central bank projections in 2021 and to the European Commission's autumn economic forecast (November 2021) respectively.

**) calculated according to the ESA 2010 methodology

***) below, but close to 2 percent, prior to July 2021

Sources: a) Eurostat, b) national central banks, c) ECB, d) European Commission (AMECO), e) national institutes of statistics, f) US Bureau of Economic Analysis, g) IMF

The decisions were warranted by the steep rise in the annual inflation rate⁹⁶, under the impact of global supply-side shocks, and by the steady worsening of its outlook, implying that the annual dynamics of consumer prices would stay

⁹³ At the same time, the deposit rate was raised to a level similar to that of the monetary policy rate (2.40 percent), while the overnight and one-week collateralised lending rates were both increased to 4.40 percent.

⁹⁴ During 2021, the central bank continued to set the one-week deposit rate at weekly tenders. In the first half of the year, it stood below the monetary policy rate, the two levels being brought on par in June, at 0.9 percent.

⁹⁵ Thus, in the period from November to December, the one-week deposit rate was raised by 2.20 percentage points (the advances of 0.7 percentage points and 0.4 percentage points respectively decided in the latter half of November were followed by 0.2-0.3 percentage point adjustments during the next weeks), whereas the base rate was increased by 0.6 percentage points.

⁹⁶ It climbed from 2.7 percent in December 2020 to 5.3 percent in June 2021 and 7.4 percent at end-2021.

considerably above the tolerance band two quarters longer than previously forecasted. Specifically, according to the December projection, the annual headline inflation rate was expected to peak at around 7 percent in the closing months of 2021, before declining only gradually at the onset of 2022, amid some base effects and the cap on fuel prices. However, it was then seen falling at a faster pace towards end-2022 and returning to the central bank's tolerance band in Q4. By contrast, the annual core inflation rate was anticipated to stick to the upward path⁹⁷ and climb towards 6 percent in mid-2022. This was due, *inter alia*, to global production chain bottlenecks, but especially to the tighter labour market, the minimum wage rise at the beginning of 2022 and higher social transfers, implying swift dynamics of wages and disposable income. Afterwards, the annual core inflation rate was expected to go down gradually and return to the tolerance band around the target, also as a result of tightening the monetary policy conduct (Table A). Achieving the medium-term price stability objective was, however, conditional on preventing the second-round effects of the inflation bout, implicitly on the solid anchoring of inflation expectations, which called for a further gradual increase in the monetary policy rate and for the termination of asset purchase programmes.

Furthermore, international financial markets experienced renewed episodic increases in volatility during 2021, primarily owing to concerns about the evolution of the pandemic and to expectations on the Fed's monetary policy stance. Amid the widening of the external imbalance and the uncertainties associated with budget consolidation, these stronger volatility episodes were conducive to increased risks to the leu's exchange rate, with possible adverse implications for inflation and external vulnerability indicators.

The overall context called for prompt, but also prudent recalibrations of the monetary policy stance during 2021. Thus, after having brought the monetary policy rate down to a historical low of 1.25 percent in January 2021, yet above the key interest rates of central banks in the region, the NBR halted the lowering cycle. Over the following three quarters, the central bank kept unchanged both the policy rate and the interest rates on standing facilities⁹⁸, amid the discontinuation in May of the purchases of leu-denominated government securities on the secondary market and the subsequent tightening of control over money market liquidity. The NBR's actions and approach aimed to preserve price stability over the medium term in line with the 2.5 percent $\pm$ 1 percentage point flat inflation target, in a manner conducive to achieving sustainable economic growth in the context of fiscal consolidation, while safeguarding financial stability.

Moreover, in the first month of 2021 Q4, the NBR embarked on a gradual policy rate hiking cycle, yet at a relatively faster pace, raising the monetary policy rate on three successive occasions in October, November 2021 and January 2022, by 0.25 percentage points each time, to 2.00 percent. The increases were complemented

⁹⁷ It picked up to 6.4 percent in December, from 3.8 percent in June and 3.2 percent in December 2021.

⁹⁸ The lending facility rate and the deposit facility rate were kept at 1.75 percent and 0.75 percent respectively.

by the two-step widening of the corridor of interest rates on standing facilities around the policy rate to the standard width of ± 1.00 percentage points⁹⁹ in November 2021 and January 2022¹⁰⁰, as well as by maintaining firm control over money market liquidity. In addition, the NBR preserved the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions (8 percent and 5 percent respectively). These measures aimed to anchor inflation expectations over the medium term and hence prevent the second-round effects of the inflation bout triggered by adverse supply-side shocks, so as to bring back the annual inflation rate in line with the 2.5 percent ± 1 percentage point flat target in the medium run, in a manner conducive to achieving sustainable economic growth.

Against this background, key interbank money market rates saw their slightly downward path in the first part of the year reverse in mid-Q3 2021 and then rose at a faster pace, reaching at the end of the period the highest readings in the past almost two years. At the same time, the EUR/RON exchange rate witnessed only two small upward adjustments during 2021, followed by relatively protracted periods of quasi-stability¹⁰¹.

The monetary authority continued to extensively use specific tools and means of communicating and detailing the rationale behind the monetary policy decisions. Through them, the NBR consistently highlighted the worldwide nature of the current particularly sizeable inflationary bout and the nature of the global shocks behind it, but also the importance of an adequate monetary policy response, *inter alia* from the perspective of central bank credibility, as well as its determination to act in order to safeguard medium-term price stability.

The NBR's actions and tailoring of the monetary policy stance were decisive in anchoring inflation expectations over the medium term, hence in paving the way for annual inflation rate to return inside the variation band of the target over the longer time horizon, amid particularly solid economic growth in 2021.

Taking a closer look, the NBR Board's decisions in its meetings March through August 2021 were warranted by the deterioration of current and prospective inflation developments, especially over the short term. However, this was mainly under the impact of adverse supply-side shocks and amid high uncertainties and risks stemming from the evolution of the pandemic and of the associated containment measures, as well as from the fiscal policy stance.

Thus, the annual inflation rate witnessed a leap above expectations at the onset of 2021¹⁰², under the impact of the liberalisation of the electricity market for household

⁹⁹ The corridor defined by interest rates on standing facilities around the monetary policy rate had been narrowed to ± 0.50 percentage points in March 2020, in the context of the package of measures adopted for mitigating the economic impact of the pandemic.

¹⁰⁰ Consequently, in January 2022, the lending facility rate was raised to 3.00 percent, while the deposit facility rate was kept at 1.00 percent.

¹⁰¹ During 2021 as a whole, the domestic currency weakened 1.6 percent against the euro (based on exchange rate averages in December); over the same period, the Polish zloty and the Hungarian forint depreciated 2.9 percent and 2.3 percent respectively versus the single currency, whereas the Czech koruna strengthened 4.2 percent.

¹⁰² After having declined to 2.06 percent in December 2020, following an almost steady decrease during the year, from 4.04 percent at end-2019.

consumers, before further rising gradually over the next months. Specifically, it climbed as of mid-Q2 above the variation band of the target and reached 3.94 percent in June¹⁰³, due to costlier fuels amid higher oil prices.

At the same time, economic activity continued to recover during 2020 Q4 and 2021 Q1 at a considerably swifter-than-anticipated pace – the visible moderation in the latter period¹⁰⁴ notwithstanding – in the context of the pent-up demand unwinding amid the lifting of restrictions and the progress in vaccination, but also with the contribution of government support schemes. This resulted in the almost full recovery during 2021 Q1 of the economic contraction seen in 2020 Q2, as well as the absorption of the aggregate demand deficit at end-2020 to a considerably larger-than-envisaged extent, followed by the renewed reversal in the cyclical position of the economy in 2021 Q1, much earlier than in previous forecasts. Moreover, the July assessments pointed to robust economic growth in Q2 as well, although decelerating versus the prior quarter, which rendered likely the widening of the positive output gap in mid-2021. Developments were also associated with the steeper widening trend of the trade deficit against the same year-earlier period, as well as with the particularly sizeable step-up in the annual dynamics of the current account deficit during the first half of the year.

In turn, labour market parameters improved relatively quickly and above expectations as of March, given the further rebound in economic activity in a large number of sectors, as well as due to government's job retention schemes, without however returning to pre-pandemic levels.

At the same time, the almost broad-based uptrend in international commodity prices steepened during 2021 H1, entailing a fast-paced rise in inflation worldwide, while expectations on the pace of recovery of euro area and global economies improved as of the spring of 2021, *inter alia* amid the vaccination progress.

Against this background, the inflation outlook changed considerably, the anticipated path of the annual inflation rate being revised successively upwards in the March and May forecasting rounds, significantly in the short run and to a lower extent over the longer time horizon. In particular, according to the May projection, the annual inflation rate was expected to climb visibly above the upper bound of the variation band of the target in 2021 H2, to 4.1 percent in December¹⁰⁵, before returning at the onset of 2022 and remaining afterwards in the upper half of the band close to 3 percent¹⁰⁶.

¹⁰³ The annual adjusted CORE2 inflation rate continued, however, to decrease in Q1, albeit more slowly than in the previous months, before staying relatively steady, reaching 2.9 percent in June 2021, from 3.3 percent in December 2020, but mainly on account of disinflationary base effects associated with developments in the prices of some processed food items.

¹⁰⁴ Economic activity picked up 4.8 percent in 2020 Q4 from a quarter earlier (5.6 percent in 2020 Q3), thus reversing another significant part of the contraction witnessed in Q2; furthermore, amid the base effect, its decline in annual terms slowed to -1.4 percent from -5.6 percent in Q3. In 2021 Q1, GDP advanced 2.8 percent, while its annual dynamics picked up to -0.2 percent. Statistical data are those available at the time of conducting the monetary policy assessments in March and July 2021 respectively.

¹⁰⁵ Against 3.4 percent in the March 2021 medium-term forecast and 2.5 percent in the November 2020 projection.

¹⁰⁶ Versus 2.4 percent anticipated for September 2022 (end of the projection horizon) in the November 2020 projection and 2.8 percent indicated for December 2022 by the March 2021 forecast.

The worsening of the short-term inflation outlook was primarily attributable to the larger hikes anticipated over the short term for fuel, electricity and natural gas prices, as well as for processed food prices¹⁰⁷, conducive – on the other hand – to sizeable disinflationary base effects in 2022.

In August, the anticipated inflation pattern was revised even more markedly upwards in the short term and, at the same time, the upward revision was somewhat more pronounced over the longer projection horizon, due to the higher increases probably seen in July by natural gas, electricity and fuel prices¹⁰⁸, but also to stronger inflationary pressures expected from excess aggregate demand. This owed to the likely robust growth of the economy in 2022 as well, amid disbursements of EU funds under the Next Generation EU programme, which would at least partly offset the contractionary impact of budget consolidation. Under the circumstances, the annual inflation rate was expected to climb to 5.6 percent in December 2021 and, following the downward corrections in the first part of 2022 driven by base effects, to decline and to remain marginally below the upper bound of the band, at 3.4 percent¹⁰⁹.

The strengthening of underlying inflationary pressures was seen to be slowed, however, by the relative improvement in the composition of aggregate demand in terms of its inflationary potential¹¹⁰ and by the probable decline in unit labour cost dynamics well below pre-pandemic levels, also amid the still loose labour market. At the same time, the evolution of the pandemic and of the containment measures posed, at least in the near run, heightened uncertainties and risks to the new outlook. This was due to the resumed growth in domestic infections and the marked slowdown in the pace of vaccination, as well as to signs of a new pandemic wave emerging in Europe and elsewhere, amid the quick spread of the more contagious Delta coronavirus variant. High uncertainties were also associated with the outlook on the absorption of EU funds, especially those under the Next Generation EU programme – conditional *inter alia* on the approval by the EC of the National Recovery and Resilience Plan –, as well as with the future fiscal policy stance, considering the budget consolidation presumed to be launched in 2021¹¹¹.

In response to this context, the NBR Board halted the policy rate lowering cycle in March 2021, thus keeping the monetary policy rate at 1.25 percent, significantly above the key interest rates of central banks in the region. Moreover, the NBR Board extended the status-quo of both the policy rate and interest rates on standing facilities¹¹² in May, July and August, amid the discontinuation in May of

¹⁰⁷ Affecting core inflation.

¹⁰⁸ Presumably adding around 1 percentage point to the annual inflation rate. They were foreseen to amplify and protract the inflationary impact of supply-side shocks, yet also to exert, contrariwise, significant disinflationary base effects in 2022.

¹⁰⁹ The annual adjusted CORE2 inflation rate was anticipated to gain only some momentum in 2021 H2 and, after a small fluctuation, to stabilise at 3.4 percent versus 3.1 percent previously projected for the end of the forecast horizon.

¹¹⁰ Through a larger contribution from investment to foreseen economic growth to the detriment of that from private consumption, with implications also for the future performance of potential GDP.

¹¹¹ From this perspective, uncertainties stemmed from the upcoming budget revision, whose coordinates were unknown for the time being, and from the still pending budget consolidation strategy, presumed to be prepared by the autumn, in line with European institutions' recommendations.

¹¹² The lending facility rate and the deposit facility rate were kept at 1.75 percent and 0.75 percent respectively.

the purchases of leu-denominated government securities on the secondary market and the subsequent tightening of central bank control over money market liquidity. In addition, the NBR preserved the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions (8 percent and 5 percent respectively). The NBR's actions and approach aimed to preserve price stability over the medium term in line with the 2.5 percent ± 1 percentage point flat inflation target, in a manner conducive to achieving sustainable economic growth in the context of fiscal consolidation, while safeguarding financial stability.

Subsequent data and information showed a severe worsening of current and anticipated inflation developments, also compared with earlier forecasts, under the impact of global supply-side shocks, amid the much faster rise in energy, other commodity and transport prices in the latter part of the year, alongside growing bottlenecks in production and supply chains, including the deepening of the semiconductor crisis. On the domestic front, the direct and indirect effects of these shocks were compounded by the stronger demand for goods and services further manifest after the easing of mobility restrictions and by increasingly high short-term inflation expectations, but also by the large shares in the CPI basket of food items, energy and fuels, as well as of imported goods.

Specifically, the annual inflation rate gained momentum in Q3, climbing to 6.29 percent in September, considerably above the variation band of the target and significantly above the forecasted level. This was primarily the result of the sizeable increase in prices for natural gas and electricity in July and of the further rise in fuel prices, mainly on account of the non-petrol-diesel subgroup. At the same time, economic activity

picked up further in 2021 Q2 at a somewhat swifter-than-anticipated pace, although relatively more moderate than in Q1¹¹³, which made it likely for excess aggregate demand to rise in this period, in line with the August forecasts.

Furthermore, key interbank money market rates posted upward adjustments in Q3, amid the central bank's strict control over liquidity, but also the consolidation of expectations on the increase in the policy rate in the near future. The EUR/RON exchange rate saw, however, a sharp rise in

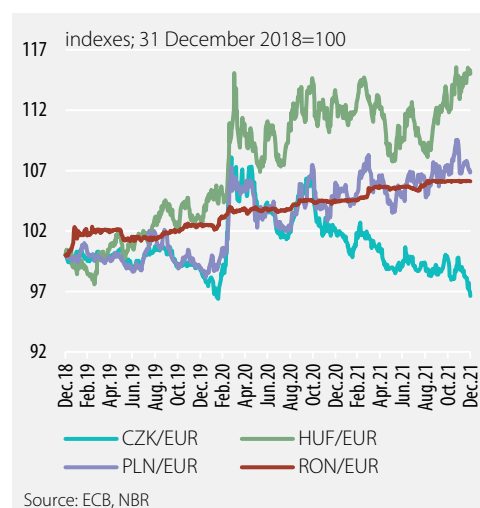


Chart 3.1

Exchange rate developments on emerging markets in the region

mid-August¹¹⁴, followed by a moderate uptrend as well. This owed *inter alia* to the narrowing short-term interest rate differential – amid the fast-paced increase in policy rates initiated and then continued by two central banks in the region – and

¹¹³ GDP advanced 1.8 percent in Q2, after the 2.5 percent rise in Q1. Amid the base effect associated with the severe economic contraction in the same year-earlier period, annual GDP dynamics stepped up to 13.0 percent in Q2 from -0.2 percent in Q1.

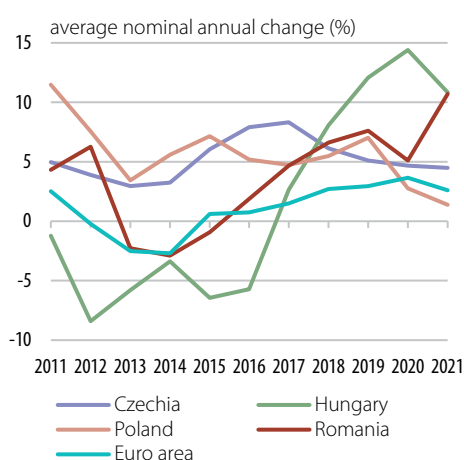
¹¹⁴ After the decline recorded in the first part of Q3 under the influence of seasonal factors.

afterwards to stronger tensions on the domestic political scene, conducive to heightened uncertainties about budget consolidation. Additional influences also came from the renewed increase in global risk aversion, amid signals on the earlier start of monetary policy normalisation by major central banks, but also investor concerns about global economic growth, in the context of pandemic developments and the energy crisis (Chart 3.1).

At the same time, the annual growth rate of credit to the private sector reached and then continued to advance in double-digit territory during 2021 Q2 and Q3, climbing to 12.8 percent in August. This was due to the unprecedented step-up of lending in local currency, including with the support of government programmes, but also to the moderate pick-up in the dynamics of foreign currency credit (Box 5).

Box 5. Credit to the private sector and liquidity in the economy¹¹⁵

In 2021, the dynamics and composition of private sector credit – relevant from the perspective of monetary policy design and transmission, as well as of convergence with monetary developments in the euro area and in the region – saw a steepening of the major trends they had embarked on in the second half of the previous year. Specifically:



Source: national central banks

Chart A
Credit to the private sector

1. The annual growth rate of credit to the private sector followed a considerably sharper upward path, especially in H1, climbing in mid-year into the two-digit range and peaking in December at a 12½-year high.

The average dynamics of credit to the private sector thus stepped up to 10.7 percent – a 12-year peak and the second highest reading in the region¹¹⁶ (Chart A) –, more than twice higher than the slightly moderating growth rate in 2020, i.e. 5.1 percent¹¹⁷. Behind these developments stood the strong acceleration in domestic currency lending to both households and non-financial corporations, which materialised in record annual values of the flows of major types of loans. This reflected the stimulative effects exerted on credit demand and supply by: (i) the particularly solid economic growth, albeit amid uneven developments, and the improvement of firms' confidence in all major sectors; (ii) the extension of government programmes to support the

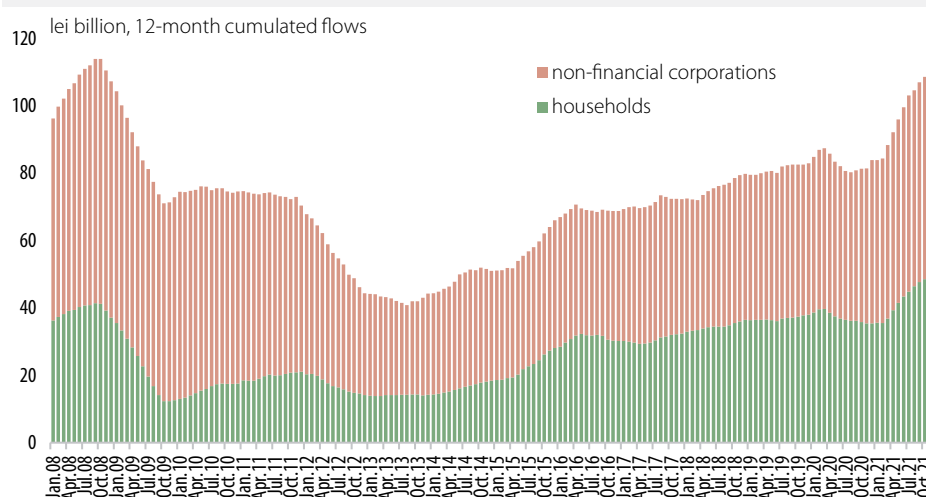
¹¹⁵ For a clearer picture, changes in dynamics were analysed, as a rule, in the form of indicators calculated as an average of annual growth rates expressed in nominal terms. The analysis in this section was prepared based on data available before the submission of audited financial statements.

¹¹⁶ For the fourth consecutive year. In the euro area and countries in the region, the annual dynamics of private sector credit decelerated during the reported year overall versus 2020.

¹¹⁷ In real terms as well, the average annual dynamics of private sector credit doubled, but remained significantly lower amid the pick-up in the annual inflation rate (to a 12-year peak of 5.4 percent against 2.4 percent in 2020).

activity/liquidity of firms and households (mainly “IMM Invest Romania”¹¹⁸, but also the Lending Programme with state guarantees for large corporations and the “New Home” programme); (iii) the further decreasing / still relatively low interest rates on new leu-denominated loans (Chart C); (iv) the generally favourable labour market developments, implying also a slight reacceleration of average wage earnings growth¹¹⁹, *inter alia* amid the government’s job retention schemes; (v) the consolidation of bank asset quality¹²⁰; (vi) the further moderate rise of residential real estate market prices¹²¹; (vii) the relative easing of banks’ credit standards on loans to households – both housing and consumer loans –, alongside a relative status-quo of standards on corporate loans (Chart E). Positive, albeit small influences on the credit stock dynamics also stemmed from the slower pace of credit institutions’ loan sales.

Chart B
New loans to households and
non-financial corporations



The share of private sector credit in GDP continued to widen slightly in 2021, to 27.4 percent from 26.7 percent in the previous year¹²². This share increased in Czechia as well, whereas in the euro area and the other economies in the region it narrowed, but from significantly higher levels, i.e. 105.5 percent in the euro area, 52.5 percent in Poland and 39.6 percent in Hungary.

2. The share of the leu-denominated component in credit to the private sector rose at a faster pace, reaching 72.4 percent in December 2021¹²³ from 69.5 percent at end-2020.

¹¹⁸ Government support scheme approved in the context of the pandemic crisis through GEO No. 42/2020 and supplemented by GEO No. 89/2020, whereby the state guarantees up to 90 percent of the amount of some leu-denominated loans to SMEs and micro-enterprises and subsidises the interest for a period of up to eight months after the loan origination date and other financing costs (management and risk fees) over the entire period of the guaranteed loan under the programme. The ceiling of state guarantees was lei 15 billion in 2021 and lei 20 billion in the previous year.

¹¹⁹ The average annual growth rate of average net wage earnings economy-wide stepped up to 7.2 percent in 2021, from 6.7 percent a year earlier, but remained visibly below its pre-pandemic level (15.0 percent in 2019, a post-2008 high).

¹²⁰ The NPL ratio fell further during 2021, reaching 3.35 percent at year-end from 3.83 percent in December 2020.

¹²¹ The average annual growth of house prices stood at 4.4 percent in 2021 versus 4.7 percent in the prior year.

¹²² In 2020, the share of private sector credit in GDP had increased for the first time after having narrowed for eight consecutive years.

¹²³ A post-1995 high.

This share widened at a quicker tempo amid the larger positive spread between the fast-rising dynamics of domestic currency credit (to a post-April 2016 high of 19.6 percent in December 2021 from 8.5 percent at end-2020) and the rate of change of the foreign currency component. The latter became slightly positive during the reported year, i.e. 2.2 percent in December 2021 against -2.5 percent at end-2020, based on stocks expressed in euro. Both major sectors witnessed faster increases in the relative weight of leu-denominated credit, which reached a 20-year high for households (83.3 percent in December 2021 versus 79.2 percent in the same year-ago period)¹²⁴ and a 25-year peak in the case of non-financial corporations (62.8 percent at end-2021 from 59.7 percent in December 2020).

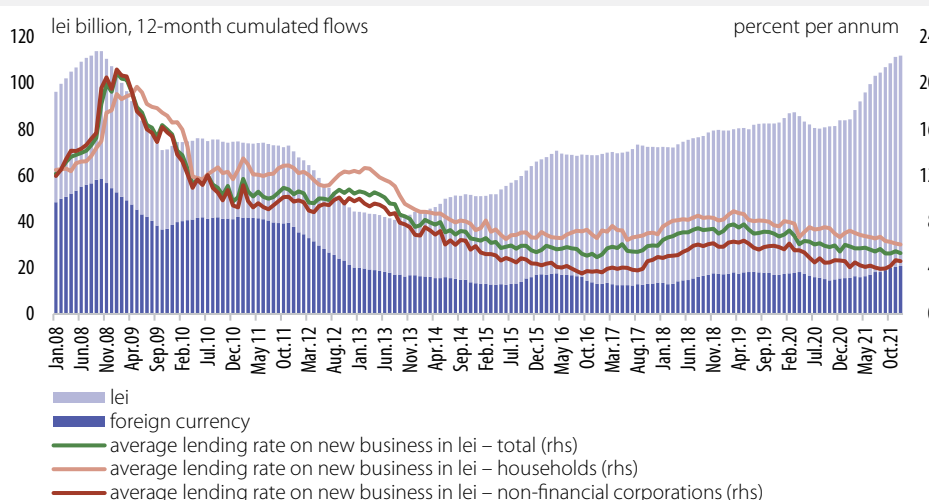


Chart C

New loans to the private sector
and the average lending rate
on new business in lei

In terms of flow, the strongly majority share of the domestic currency component in total new loans to the private sector (Chart C) narrowed, however, marginally (to 81.9 percent in the year as a whole against 82.8 percent in 2020), as the advance in new forex loans exceeded slightly that of leu-denominated credit¹²⁵, entirely due to developments in the non-financial corporations sector.

3. The share of household loans in total credit saw its uptrend¹²⁶ come to a halt and even posted a marked decline (to 50.7 percent at year-end¹²⁷); thus, it recorded a larger negative spread vis-à-vis the values in Poland and Czechia, which were on the rise in 2021, and reverted to a relatively similar level to that in the euro area.

The average annual dynamics of household credit regained slight momentum in 2021, nearing the pre-pandemic level (7.5 percent in the year under review, from 6.1 percent in 2020), on account of both major types of loans. However, the step-up was exceeded by far, for the first time in nine years, by the faster growth

¹²⁴ As new business to households further consisted almost entirely of domestic currency loans.

¹²⁵ The 12-month cumulated flow of leu-denominated credit, unadjusted by the volume of renegotiated loans, peaked at a new historical high in 2021, while that of forex loans recorded the highest reading in nine years.

¹²⁶ It had resumed in 2013, after a four-year pause.

¹²⁷ From 53.1 percent in December 2020.

Chart D
Demand for loans

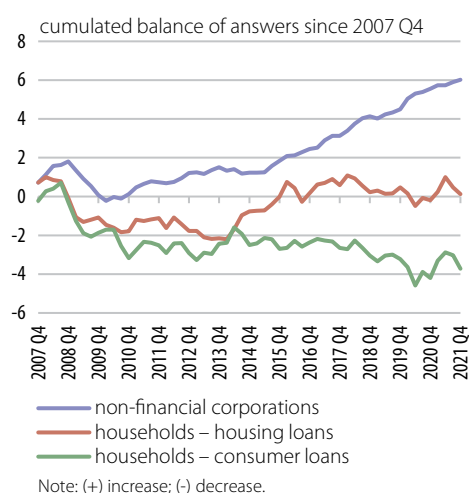
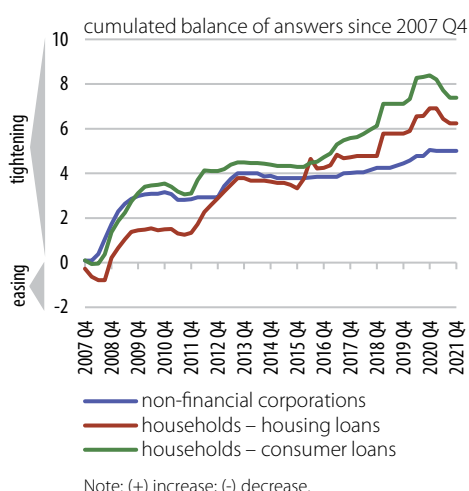


Chart E
Credit standards

rate of loans to non-financial corporations, which peaked at a post-2008 high of 14.1 percent during 2021 overall (3.6 percent a year earlier). This was due to the much swifter dynamics of the leu-denominated component (20.0 percent versus 3.1 percent in 2020)¹²⁸, *inter alia* with increased support from the “IMM Invest Romania” programme. The slight step-up in the dynamics of forex loans to these non-bank customers (to 4.2 percent from 2.3 percent in 2020, based on stocks expressed in euro) also had a positive, albeit much more modest contribution.

The added momentum of new loans was broad-based across sectors, although it was more visible in the case of industry, after the year-earlier contraction in volume, and of agriculture. At the same time, the breakdown by destination remained broadly the same as in the prior years, with industry and services further accounting for around 80 percent of total credit flow.

Looking at the maturity breakdown, the sizeable pick-up in the dynamics of the stock of loans to non-financial corporations was mainly ascribable to the quasi-doubling of the average pace of increase of medium- and long-term loans¹²⁹. A noteworthy contribution also had the growth rate of short-term credit, which returned to positive territory in the second part of 2021, for the first time in about two years, *inter alia* amid the faster dynamics of revolving loans and overdraft loans, reflecting the rise in firms' working capital requirements, given the expansion of economic activity.

Developments were broadly correlated with the findings of the successive issues of the NBR's *Bank Lending Survey*, which pointed to a further uptrend of non-financial corporations' demand for loans during the year under review (Chart D). This occurred amid relatively constant credit standards (Chart E), associated with an easing of credit terms, primarily via a lower premium demanded on riskier loans and diminished collateral requirements. As for households, survey results indicated only a fluctuating and mild rekindling of demand for housing and consumer loans, the considerable decline in credit standards notwithstanding. The latter reflected mainly the reduction in the maximum loan-to-value ratio, as well as the narrower spread of the average lending rate vis-à-vis the IRCC in the case of housing loans, while in that of consumer credit it reflected the rise in the maximum loan amount.

¹²⁸ New corporate loans in domestic currency, unadjusted by the volume of renegotiated loans, saw their average annual pace of increase pick up further (to 28.7 percent against 20.2 percent in 2020), while their 12-month cumulated flow hit a new historical high.

¹²⁹ To 18.1 percent in 2021 from 9.4 percent in the previous year.

4. The majority share of housing loans in total credit to households continued to widen, albeit at a slower pace, reaching 61.3 percent at end-2021¹³⁰.

Both major types of household credit saw a renewed slight step-up in their annual dynamics during 2021, although the evolution was somewhat more visible for housing loans, which also exhibited a much higher stock. Specifically, the annual growth rate of housing loans gained traction during the year overall to 11.5 percent, from 10.3 percent in 2020, following the reacceleration of the particularly high dynamics of the leu-denominated component (to 18.9 percent against 18.2 percent in 2020), amid the swifter rate of change of new business without state guarantees^{131,132}. Leu-denominated housing loans thus saw their share in total credit for this purpose continue to widen markedly (to 81.1 percent from 76.1 percent in December 2020), coming at the same time to account for 49.7 percent of total household credit¹³³.

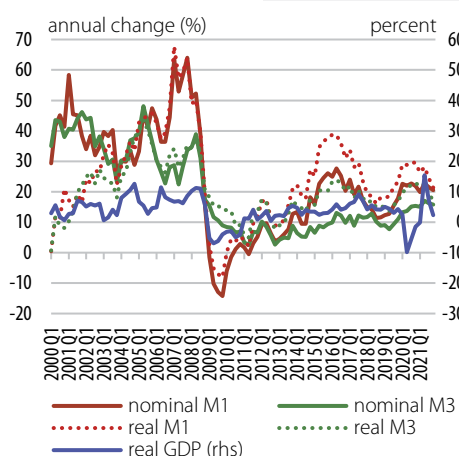
At the same time, the average annual growth rate of consumer credit and other loans advanced to 2.0 percent, from 0.9 percent in 2020, amid the considerable renewed step-up in the dynamics of new loans for this purpose¹³⁴, in correlation with the overall revival of consumer demand, as well as with the decline in related interest rates.

Looking at other countries in the region and at the euro area, the share of housing loans in total credit to households in Romania remained close to that in Poland and exceeded more visibly that in Hungary, while remaining well below those in Czechia and the euro area.

In terms of the dynamics and composition of liquidity in the economy, the most important developments in 2021 were:

1. The further increase in the degree of monetisation of the economy, yet visibly slower than in the previous year, to a new historical high of 47.8 percent from 46.0 percent at end-2020; the level was, however, markedly lower than those in the region and in the euro area, even amid their primarily downward adjustments during 2021.

The particularly swift dynamics of broad money (M3) gained further momentum in 2021, albeit more moderately, reaching 16.0 percent during the reported year



Source: NIS, NBR

Chart F
Broad money and GDP

¹³⁰ Versus 59.5 percent in December 2020.

¹³¹ The 12-month cumulated flow of leu-denominated housing loans without state guarantees, unadjusted by the volume of renegotiated loans, reached a new historical high in 2021.

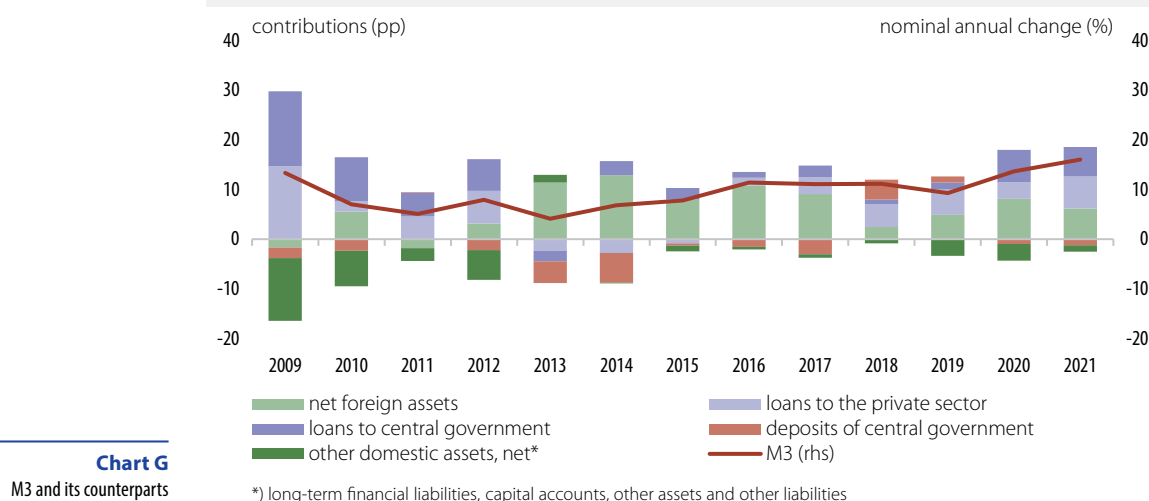
¹³² The state guarantee ceiling earmarked for the "New Home" programme was lowered to lei 1.5 billion in 2021 from lei 2 billion in the previous year. The assessments are based on CCR data referring to government-guaranteed loans granted associated with "First Home"/"New Home" programmes.

¹³³ Against 45.3 percent at end-2020.

¹³⁴ The 12-month cumulated volume of new consumer credit and other loans, unadjusted by the volume of renegotiated loans, peaked at a 12-year high.

overall¹³⁵ (a 13-year high – Chart F), from 13.7 percent in 2020. This occurred in the context of the faster growth of private sector credit and the higher disbursements to recipients of EU funds, as well as amid a statistical effect¹³⁶. Their influences were only partly counterbalanced by those stemming from the reduction in the budget deficit and from the larger stock of alternative financial instruments (households' holdings of government securities¹³⁷, investment fund shares) held by non-bank clients.

From the perspective of M3 counterparts (Chart G), credit to the private sector¹³⁸ became the main driver of monetary expansion. Significant positive contributions, albeit on the wane versus 2020, came from net foreign assets of the banking system – whose dynamics moderated visibly¹³⁹ after the year-earlier leap – and from net credit to central government. The latter reflected the slacker increase in monetary financial institutions' holdings of government securities, along with the step-up, in 2021 as well, of the dynamics of central government deposits. At the same time, the contractionary impact exerted by long-term financial liabilities diminished markedly, primarily on the back of the aforementioned statistical effect.



2. The only slight moderation in the growth of the majority share held by narrow money (M1) in M3, which widened to 72.1 percent¹⁴⁰ in December 2021 from 69.3 percent at end-2020 (Chart H).

¹³⁵ In real terms, the average annual M3 dynamics contracted slightly, against the background of the pick-up in the annual inflation rate (10.5 percent in 2021 versus 10.8 percent in the prior year, as annual averages).

¹³⁶ Associated with the reclassification of some household deposits by a credit institution in June 2021. They had previously been included in the long-term financial liabilities of the net consolidated balance sheet of monetary financial institutions, thus being a counterpart of M3, not a component.

¹³⁷ During 2021, the MF conducted net issues of government securities for households totalling lei 7.0 billion, compared to lei 5.0 billion a year earlier.

¹³⁸ Its contribution to annual M3 dynamics peaked at a nine-year high as annual average.

¹³⁹ To 11.3 percent, as annual average, from 15.7 percent in 2020 (based on readings expressed in euro), *inter alia* amid the decline in the volume of Eurobond issues by the MF on external markets (to around EUR 7 billion during the period overall versus the year-earlier record high value of approximately EUR 12 billion).

¹⁴⁰ A more than 27-year peak.

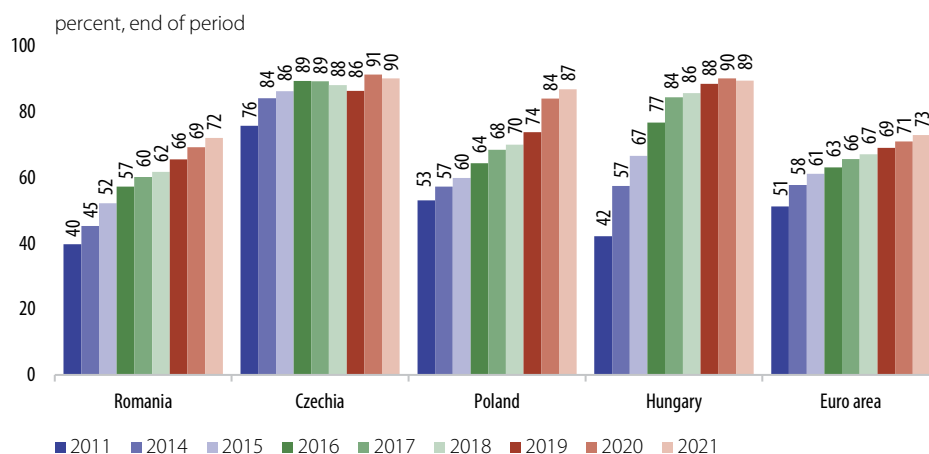


Chart H
Share of M1 in M3,
international comparison

The rise was marginally lower, in terms of magnitude, than in Poland, but exceeded for the third consecutive year that seen in the euro area, while Czechia and Hungary recorded declines. Hence, the M3 structural gap was practically bridged vis-à-vis the euro area and continued to narrow slightly versus two economies in the region.

The higher share in M3 of the most liquid component was due to the particularly swift M1 dynamics remaining at the four-year high reached in 2020 (21.7 percent)¹⁴¹ and significantly above the rate of change of time deposits with a maturity of up to two years, although the spread between them narrowed. The steady pace of the M1 monetary aggregate was the result of the small divergent influences stemming, on one hand, from the mild deceleration in the high dynamics of currency in circulation and non-financial corporations' ON deposits and, on the other hand, from the protracted step-up in the growth rate of similar household deposits. Aside from the already mentioned statistical effect, the evolutions reflected the keener demand for money for current transactions – in correlation with the solid growth of the economy and of private consumption, as well as with the renewed faster increase in households' disposable income – and the ongoing decrease in/further low opportunity cost of holding liquid monetary assets. The signification reduction in the budget deficit compared to 2020 exerted opposite influences.

The annual rate of increase of time deposits with a maturity of up to two years regained traction in 2021, peaking at a three-year high of 4.5 percent, amid the sharp pick-up in the dynamics of non-financial corporations' deposits, underpinned by the domestic currency component. Conversely, the pace of increase of similar household deposits continued to decelerate visibly, this time on account of developments in both domestic and foreign currency components.

Consequently, the share of ON deposits in M3 climbed to the highest reading in over 28 years (55.0 percent at end-2021), whereas the relative weight of currency in circulation witnessed a mild downward correction (17.0 percent, as at December).

¹⁴¹ Assessment based on annual averages.

3. Downward adjustment of the share of household deposits in total non-banking sector deposits, after three years of consecutive rises (59.2 percent in December 2021 versus 61.0 percent at end-2020).

The evolution was attributable to the divergent behaviours in terms of annual dynamics exhibited during the reported year by deposits from the main sectors. Specifically, the growth rate of household deposits moderated slightly compared to the high value reached a year earlier, i.e. 12.7 percent against 14.3 percent in 2020¹⁴². This was due to the reacceleration in the dynamics of disposable income, whose impact was however outweighed by the solid growth of consumption and by the larger stock of alternative financial instruments held by this sector (government securities, placements in investment funds). By contrast, the pace of increase of non-financial corporations' deposits gained further momentum and hit a new post-2008 peak of 18.9 percent (14.6 percent in 2020). This occurred amid the rapid recovery of economic activity, *inter alia* with a contribution from government measures aimed at supporting firms' liquidity¹⁴³, as well as in the context of larger disbursements from EU funds and of the swift pick-up in the dynamics of loans to this sector.

Moreover, the new assessments pointed to a significant worsening of the short-term inflation outlook, showing that the annual inflation rate would rise in the near run to much higher values than those anticipated in the August forecast. Behind the deterioration stood the new large hikes anticipated for energy prices, especially of natural gas – amid the surge in domestic and European wholesale prices – and, to a smaller extent, for fuel prices, mainly on the back of the non-petrol-diesel component.

The inflationary pressures from the aggregate demand surplus were, however, envisaged to remain subdued and softer in the short run than anticipated previously, given their lagged pass-through, as well as the likely more visible slowdown in the dynamics of GDP excluding agriculture in 2021 H2 compared to August forecasts – considering, *inter alia*, the erosion of households' and firms' income by costlier utilities and food. These developments implied a quasi-standstill of excess aggregate demand during this period, as compared to the slight increase forecasted previously. Besides, the fourth pandemic wave and the associated containment measures posed increased uncertainties and risks to the forecast, alongside those induced by the fiscal policy stance, as well as by the outlook for the absorption of EU funds, mainly of those allocated to Romania via the Recovery and Resilience Facility.

The inflationary impact of supply-side shocks could, however, be even stronger and lengthier than in the new assessments, given the steady/abrupt rise in the prices of some energy and non-energy commodities, as well as the persistence of bottlenecks in production and supply chains. To these added the potential pass-through of

¹⁴² An 11-year peak as annual average.

¹⁴³ Some of these measures were extended from 2020 (the possibility to delay the payment of some fiscal obligations without penalties, discounts for payment in due time of the corporate income tax and the income tax for micro-enterprises, the settlement of furlough benefits from the government budget), while others were introduced in 2021 (state aids for tourism and food service companies whose activity was affected by the COVID-19 pandemic, capping energy prices for non-household consumers November through December).

higher costs of materials to consumer prices, amid the still robust, albeit moderating demand. Hence, through its magnitude, the inflation bout generated by these shocks – implying the considerable and relatively persistent climb of the annual inflation rate above the variation band of the target – ran the risk of disanchoring medium-term inflation expectations and thus triggering significant second-round effects, possibly via a wage-price spiral.

Such a context called for the start of the policy rate increase, amid the gradual normalisation of the monetary policy stance, so as to bring back and maintain over the medium term the annual inflation rate in line with the 2.5 percent ± 1 percentage point flat target, *inter alia* via the anchoring of inflation expectations over the medium to long term, in a manner conducive to achieving sustainable economic growth.

Thus, the NBR Board decided in its meeting of 5 October 2021 to increase the monetary policy rate by 0.25 percentage points, to 1.50 percent, as well as to raise the lending facility rate to 2.00 percent, from 1.75 percent, and the deposit facility rate to 1.00 percent, from 0.75 percent. Moreover, it decided to maintain firm control over money market liquidity and keep the minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions at the existing levels of 8 percent and 5 percent respectively.

The NBR Board decided to gradually raise the monetary policy rate in the November 2021 and January 2022 meetings as well, amid the increase in inflation triggered by supply-side shocks in Q4 accelerating significantly above expectations, especially over the period ahead. At the same time, there were heightened risks to economic activity and the labour market stemming from the pandemic waves, global supply chain bottlenecks, as well as from the energy crisis.

Specifically, the annual inflation rate picked up further at a quick pace and above expectations in the closing three months of 2021, under the impact of supply-side shocks¹⁴⁴, climbing to 8.19 percent in December¹⁴⁵. In addition, the anticipated path of the annual CPI rate saw another marked upward revision in the November 2021 forecasting round, particularly steep over the short term, even amid the start of capping and compensation of

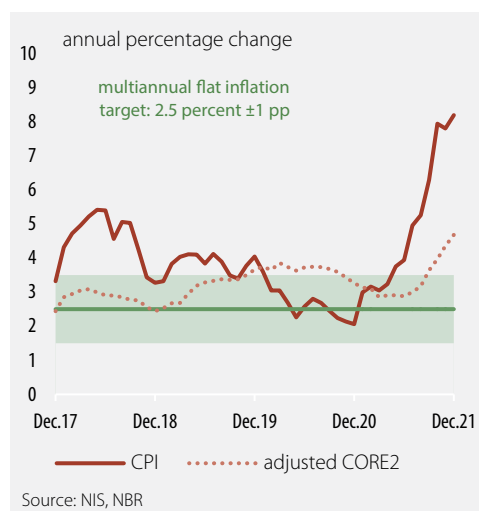


Chart 3.2
Inflation rate

¹⁴⁴ Particularly as a result of the hikes in natural gas and electricity prices, as well as in fuel prices, mainly on account of the non-petrol-diesel subgroup, but also following the increases in the processed food segment.

¹⁴⁵ The annual adjusted CORE2 inflation rate followed a slightly higher upward path in 2021 Q4, also compared with the forecasts, reaching 4.7 percent in December from 3.6 percent in September. This further reflected the effects of the surge in agri-food commodity prices and energy and transport costs, as well as the influences of persistent bottlenecks in production and supply chains, alongside those arising from measures to protect against COVID-19, all compounded by increasingly high short-term inflation expectations.

energy prices for households¹⁴⁶. Thus, the annual inflation rate was projected to remain on a steep uptrend until towards mid-2022, climbing to 8.6 percent in June 2022¹⁴⁷, mainly as a result of further hikes in energy prices. Nevertheless, it was then anticipated to witness a relatively swift downward adjustment, under the impact of sizeable base effects, falling to 5.9 percent in December 2022 and returning in 2023 Q3 inside the variation band of the target, at 3.3 percent, marginally below the August projection (Chart 3.2).

Moreover, the assessments updated at the onset of 2022 highlighted a renewed worsening of the near-term inflation outlook, ascribable to the direct and indirect effects – both recent and future – of adverse supply-side shocks affecting in the period ahead both the evolution of exogenous CPI components and core inflation dynamics. Specifically, the annual inflation rate was expected to rise gradually over the following months, thus exceeding the values previously forecasted over this time horizon. Determining factors were the anticipated higher increases in electricity and natural gas prices, as well as in processed food prices, mainly due to the advance in energy and agri-food commodity prices.

All of the above were likely to amplify and further prolong the positive deviation of the annual inflation rate from the upper bound of the variation band of the target, especially after the measures to compensate and cap energy price increases ceased¹⁴⁸. This called for new monetary policy responses meant to anchor medium-term inflation expectations and thus prevent second-round effects potentially generated by such an inflation bout.

However, underlying inflationary pressures were expected to be considerably more moderate than previously foreseen, although strengthening slightly across the horizon of the November 2021 forecast, given the outlook for a much slower rise in excess aggregate demand and to markedly lower values than in the prior projection, amid the likely more obvious deceleration of economic growth¹⁴⁹. Moreover, consumer demand was envisaged to weaken, amid the exhaustion of the surplus that occurred after the easing of mobility restrictions, but also under the impact exerted by the worsening of the epidemiological situation and by the hefty rise in utility and food prices.

Furthermore, subsequent data and the assessments in January 2022 pointed to a considerable slowdown of economic growth in Q3¹⁵⁰, contrary to expectations, as well as to a probable standstill in economic activity in 2021 Q4, *inter alia* in the context of the successive pandemic waves, the energy crisis and bottlenecks in production and supply chains. The developments made it likely for excess aggregate demand

¹⁴⁶ Support schemes presumed to be applied November 2021 through March 2022.

¹⁴⁷ Way above the values forecasted in August.

¹⁴⁸ However, elevated uncertainties lingered over the effects of temporary schemes to compensate and cap the hikes in energy prices, as well as over how they would be assessed and included in the CPI calculation.

¹⁴⁹ Even assuming higher disbursements of EU funds under the Next Generation EU programme, which would largely offset the contractionary impact of budget consolidation and fuel potential GDP dynamics in the future.

¹⁵⁰ Quarterly GDP dynamics slowed to 0.4 percent from 1.5 percent in Q2. The annual economic growth rate thus saw a visibly stronger-than-anticipated decline, i.e. to 7.4 percent from 13.9 percent in Q2, remaining however high from a historical perspective.

to shrink significantly in 2021 H2 and decline to much lower values than in previous forecasts¹⁵¹, implying subdued inflationary pressures on this side, at least in the short run, and much softer than previously anticipated.

In turn, labour market developments reflected over the autumn months the influences exerted by supply-side constraints and shocks. In particular, the number of employees economy-wide almost ceased to rise in the closing months of 2021, very slightly exceeding the pre-pandemic level. Moreover, the ILO unemployment rate went up in Q4, climbing to 5.7 percent in December – after having dropped to 5.3 percent –, slightly above the pre-pandemic reading, yet still significantly higher than the historical low reached in the summer of 2019, according to the revised historical data series.

At the same time, the energy crisis and supply bottlenecks further posed significant uncertainties and risks to the forecasts, through their potential impact on Europe's economies, but also domestically. High uncertainties and risks also stemmed from the evolution of the pandemic and the ensuing containment measures, given the successive pandemic waves entailed in this period by the Delta coronavirus strain¹⁵², and then by the more contagious Omicron variant, amid the insufficient progress of vaccination domestically. High uncertainties were also associated with the future absorption of EU funds allocated to Romania, especially those under the Next Generation EU programme. The fiscal policy stance remained, in turn, a source of notable uncertainties and risks, given – on one hand – the 2021 government deficit potentially smaller than the target and – on the other hand – the requirement for further fiscal consolidation in line with the commitments under the excessive deficit procedure, yet in a challenging economic and social environment domestically and globally.

Against this background, the NBR Board decided to raise the monetary policy rate by 0.25 percentage points in each of the meetings in November 2021 and January 2022,

thus bringing it up to 2.00 percent. In favour of the 0.25 percentage point step also pleaded the importance of the dosage of policy rate adjustment, in the context of the fast pace of raising the key rate, manifest in the region as well, meant to anchor inflation expectations over the medium term amid the swift, sizeable and relatively protracted pick-up in the annual inflation rate, including in the near run.

Additionally, in November 2021 and January 2022, the NBR Board decided on the two-step widening of the corridor of interest rates on standing facilities around the policy rate to the

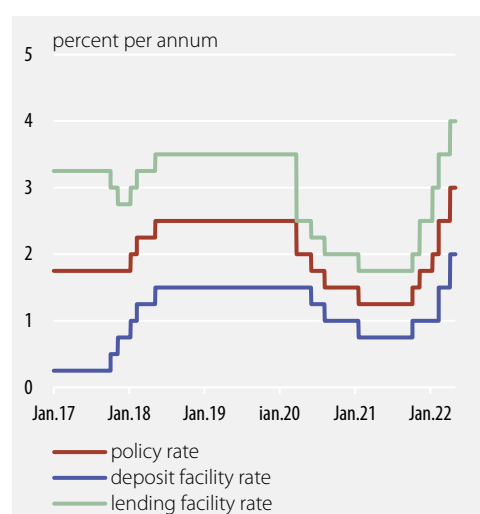


Chart 3.3
NBR rates

¹⁵¹ Also due to the recent considerable downward revision of statistical data on the dynamics of economic activity in 2021 H1.

¹⁵² Which worsened markedly the public health crisis on the domestic front in the autumn of 2021.

standard width of ± 1.00 percentage points¹⁵³, as well as on maintaining firm control over money market liquidity, so as to consolidate the rising values of interbank money market rates. At the same time, minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions were kept at the existing levels, i.e. 8 percent and 5 percent respectively (Chart 3.3).

3. Use of monetary policy instruments

During 2021, the NBR continued to use the components of the monetary policy operational framework actively and in a flexible manner for tailoring the monetary policy stance, so as to bring back and maintain over the medium term the annual inflation rate in line with the 2.5 percent ± 1 percentage point flat target. The central bank's approach was warranted by:

- (i) the progressive deterioration of both current developments and prospects of inflation, especially in the short run, under the impact of global supply-side shocks;
- (ii) the sizeable heightening of international financial market volatility in mid-Q1 – entailing a broad-based sell-off on bond markets –, followed by episodes of worsening global risk appetite, amid investor concerns about the evolution of the pandemic, as well as about the pick-up in inflation and the outlook for the Fed's monetary policy stance;
- (iii) the widening external imbalance and the rising uncertainties about budget consolidation in the context of the energy crisis and the pandemic developments, but also of stronger tensions on the political stage in autumn, with a potential impact on the leu's exchange rate, *inter alia* amid the higher increases in key rates by central banks in the region;
- (iv) the stronger fluctuations of money market liquidity, materialising in relatively frequent and quick changes of the sign of credit institutions' net liquidity position, but also in the persistence of a net liquidity surplus in Q2 and Q3;
- (v) the significant step-up in the dynamics of leu-denominated credit to the private sector, *inter alia* with the support of government programmes ("IMM Invest Romania", "New Home").

In this context, the NBR kept unchanged both the policy rate and the interest rates on standing facilities¹⁵⁴ in the first three quarters of the year, amid the discontinuation in May of the purchases of leu-denominated government securities on the secondary market¹⁵⁵ and the subsequent tightening of control over money market liquidity. Then, it complemented the gradual rise in the key rate October 2021 through January 2022,

¹⁵³ Consequently, in January 2022, the lending facility rate was raised to 3.00 percent and the deposit facility rate was kept at 1.00 percent.

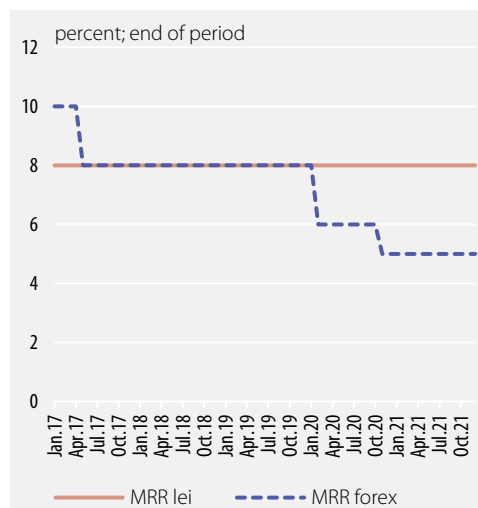
¹⁵⁴ The lending facility rate and the deposit facility rate were kept at 1.75 percent and 0.75 percent respectively.

¹⁵⁵ Initiated for the first time (from the perspective of the regulatory framework in place governing monetary policy operations) when the pandemic broke out.

up to 2.00 percent, by the two-step widening¹⁵⁶ of the corridor of interest rates on standing facilities around the policy rate to the standard width of ± 1.00 percentage

points¹⁵⁷. Additionally, and in correlation with current and prospective developments in the structural liquidity surplus in the banking system, the NBR kept unchanged the minimum reserve requirement ratio on leu-denominated liabilities of credit institutions at 8 percent throughout the year under review. At the same time, the minimum reserve requirement ratio on forex-denominated liabilities of credit institutions was kept at 5 percent, given *inter alia* the specific evolution of reserve adequacy indicators (Chart 3.4).

Chart 3.4
MRR ratios



A particularly prominent role was assigned in 2021 as well to liquidity management on the money market, amid the frequent changes in the sign of credit institutions' net liquidity position, only temporarily interrupted during Q2 and Q3 by a relatively more persistent reserve surplus. The changes were brought about by the sizeable divergent effects exerted by key autonomous factors, owing primarily to the broad-based sell-off on bond markets and to the subsequent episodes of increasing global risk aversion, as well as to stronger tensions on the political stage in autumn, entailing risks to the leu's exchange rate, especially amid the widening external imbalance and the high uncertainties about budget consolidation. In such a context, the central bank used extensively and in a flexible manner both the instruments for mopping up excess reserves in the banking system, by increasing the role of money market operations once with the tightening of money market liquidity control towards end-Q2, and those aimed at providing liquidity to banks, the lending facility included.

Specifically, in the first part of Q1, the NBR mopped up the reserve surplus in the banking system initially via the deposit facility and then by resorting to 1W deposit-taking operations. The re-emergence of a liquidity shortfall on the money market – amid the heightening of international financial market volatility in mid-Q1¹⁵⁸ –, prompted the NBR to start providing liquidity to banks by conducting repo transactions and, to a lower extent, by purchasing leu-denominated government securities on

¹⁵⁶ In November 2021 and January 2022. Thus, the lending facility rate and the deposit facility rate were raised to 3.00 percent and 1.00 percent respectively.

¹⁵⁷ The corridor defined by interest rates on standing facilities around the monetary policy rate had been narrowed to ± 0.50 percentage points in March 2020, in the context of the package of measures adopted for mitigating the economic impact of the pandemic.

¹⁵⁸ Following the upward revision of investors' inflation expectations and their concerns about the outlook for the Fed's monetary policy stance, which entailed a broad-based increase in government bond yields, as well as depreciation pressures on national currencies, in particular on emerging markets. Investors' sentiment towards financial markets in the region was additionally affected in this period by concerns about the third pandemic wave, generated by the steep increase in newly-reported coronavirus cases.

the secondary market¹⁵⁹, in a prudent manner however, associated with banks' hefty recourse to the lending facility.

Given the relatively quick return of a net liquidity surplus on the money market and its consolidation in Q2 and Q3, under the expansionary impact of Treasury operations, the central bank resumed time deposit-taking operations and gradually increased their role in mopping up excess reserves. As of August, the NBR organised, on a weekly basis, 1W deposit-taking operations via auctions conducted at a fixed rate (equal to the monetary policy rate) with full allotment¹⁶⁰. However, the contractionary impact of autonomous factors came to prevail again towards end-Q3, *inter alia* amid temporarily stronger tensions on the domestic political stage¹⁶¹. This led to the emergence of frequent daily reserve shortfalls, covered in October via the lending facility and in December via repos carried out by the central bank.

Against this background, ON rates on the interbank money market fell at the onset of the year and then tended to remain for three quarters below the monetary policy rate, amid heightened fluctuations March through April. Afterwards, they stayed in the upper half of the interest rate corridor in the closing quarter and even in the vicinity of its upper bound towards year-end. Hence, in the context of preserving the status-quo of the monetary policy rate after its cut to 1.25 percent in January, to which added its two-step increase starting October, the average value of ON rates extended its decline in the first part of the year, on a fluctuating path however, reaching a 0.96 percent low in June. Nevertheless, it recorded steep rises in Q4, climbing in December to 2.10 percent – above the 2020 H2 readings.

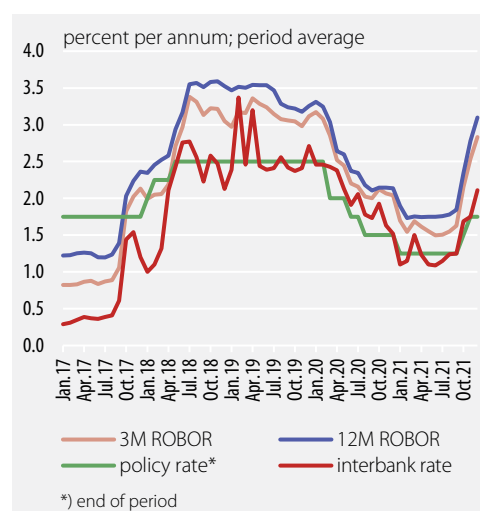


Chart 3.5
Policy rate and ROBOR rates

In turn, longer-term (3M-12M) ROBOR rates continued to decline gradually in the first part of the year and, after a few months of relative stability, they embarked on an upward path, which steepened abruptly in October. Thus, they climbed above the lending facility rate¹⁶², *inter alia* amid expectations on a further increase in the key rate, strengthened also by developments in the region. Consequently, average ROBOR rates went up significantly in December 2021 compared with the readings in the same year-earlier period,

¹⁵⁹ The NBR conducted such operations only in March and April, with a cumulated volume of merely lei 247.4 million, markedly below that of the year-earlier purchases.

¹⁶⁰ The average daily stock of deposits taken thus rose to lei 3.4 billion in 2021 Q3 from lei 2.3 billion in Q2 and lei 0.4 billion in Q1.

¹⁶¹ On 5 October, the government was dismissed following a no-confidence vote, while on 20 October the prime minister-designate failed to win Parliament confidence.

¹⁶² Therefore, in December, they reached the highest readings for the past almost two years.

i.e. by 0.79 percentage points for the 3M maturity, to 2.83 percent, by 0.91 percentage points (to 3.01 percent) for the 6M rate and by 0.96 percentage points (to 3.10 percent) for the 12M maturity (Chart 3.5).

At the same time, the benchmark index for loans to consumers (IRCC) remained on a steady downward path in 2021, although at a diminished pace in Q4, coming in at 1.08 percent, from 2.17 percent in the same year-earlier period. Nevertheless, it saw a trend reversal at the onset of 2022, thus advancing slightly, to 1.17 percent.

The government securities market witnessed, however, pronounced two-way shifts during 2021. In the first half of the year, they reflected primarily the mixed influences stemming from (i) the improvement in investor sentiment following the December 2020 elections, (ii) the decisions to maintain Romania's sovereign rating taken by S&P and Fitch in April¹⁶³, but also from (iii) the temporary weakening of the global risk appetite¹⁶⁴ in February, conducive to a broad-based sell-off and an increase in yields on government bond markets worldwide, as well as from (iv) the higher-than-anticipated pick-up of the inflation rate and especially of economic growth in the previous quarters, as revealed by newly-released data.

Against this backdrop, reference rates on the secondary market for government securities saw their downward path steepen in January – hitting, in terms of daily readings, the lowest values for the past approximately five years across the median segment of the maturity spectrum and an all-time low in the case of the 10-year maturity. Subsequently, in mid-Q1, they witnessed a relatively abrupt upward adjustment, *inter alia* amid the deterioration of market liquidity, which was however partially reversed in the following months.

Nevertheless, towards end-H1, reference rates embarked on an uptrend, which steepened sharply in the closing quarter of the year, across the entire maturity spectrum. Determining factors from this perspective were the NBR's decisions and actions and credit institutions' expectations on the monetary policy stance, as well as the fast step-up in the inflation rate and the successive upward revision of forecasts regarding its short-term developments, but also the temporary mounting of domestic political tensions in autumn. To these added the influences exerted by the generally upward path of long-term government bond yields in developed economies and regionally, due to the pick-up in inflation and the revival of economic activity, as well as to expectations on the future monetary policy stance in those countries¹⁶⁵.

Under the circumstances, the December 2021 averages of reference rates on the secondary market for government securities¹⁶⁶ increased against the readings in the same year-earlier period by 1.22 percentage points and 1.65 percentage

¹⁶³ With S&P also revising its outlook from negative to stable.

¹⁶⁴ Owing to the revision of investors' inflation expectations and to their concerns over the Fed's monetary policy stance.

¹⁶⁵ Also relevant were the October assessments by Moody's, S&P and Fitch, which decided to affirm Romania's sovereign rating, while Moody's also revised its outlook to stable from negative.

¹⁶⁶ Bid-ask averages.

points for the 6-month and 12-month maturities, to 3.46 percent and 3.94 percent respectively, and by up to 2.22 percentage points for the 3-, 5- and 10-year maturities, to 4.49 percent, 4.90 percent and 5.32 percent¹⁶⁷ respectively.

Developments in relevant interbank money market rates and in the IRCC reflected in lending rates on new business to non-bank customers, whose behaviour also mirrored the effects of other factors, such as keener competition on certain market segments or changes in the composition of the credit flow. Specifically, the average lending rate on new business to non-financial corporations stuck to the generally downward path until the beginning of H2, hitting a four-year low of 3.92 percent in August, but then saw a trend reversal and rose in December to 4.58 percent, without

exceeding however the end-2020 level (Chart 3.6). The behaviour was relatively similar across the two major credit types, the difference being that – in the case of low-value loans (below EUR 1 million equivalent) – the interest rate level at end-2021 (4.91 percent) exceeded slightly, by 0.17 percentage points, the December 2020 value. The interest rate on loans above this threshold stood 0.44 percentage points lower than the end-2020 level (4.13 percent in December 2021), the somewhat heftier advance in the latter part of the year notwithstanding.

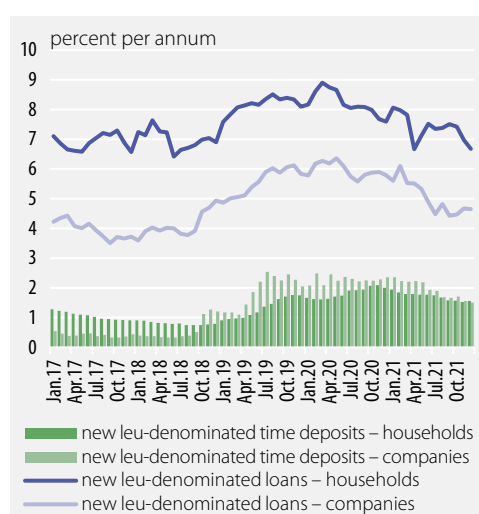


Chart 3.6
Bank rates

The average lending rate on new business to households stuck to a downward path throughout the year under review, also as a result of changes in the composition of the credit flow. Thus, it reached a historical low of 6.02 percent in December 2021, i.e. 0.65 percentage points below the year-earlier reading, as both the average interest rate on new consumer credit and that on new housing loans recorded 6½- and 4-year lows respectively towards the end of the period. However, the former followed a more fluctuating path during the year. Their December readings (8.66 percent and 3.69 percent respectively) stood 0.50 percentage points and 1.12 percentage points lower than at end-2020.

Conversely, the average remuneration of new time deposits from households reversed its downtrend at the onset of 2021 H2, climbing initially more slowly, but then somewhat more visibly, to 1.41 percent in December 2021 – however, 0.14 percentage points below the end-2020 reading. Hence, the spread between the average interest rate on new loans and that on new time deposits of this sector stuck to the generally downward trend, nearing 11-year lows at end-2021. At the same time, the average remuneration of new time deposits from non-financial corporations followed a steeper upward path and ended the year at 2.01 percent, 0.50 percentage points above the December 2020 level.

¹⁶⁷ Near 8-year highs.

4. Policy outlook

The monetary policy pursued by the NBR will remain consistently geared towards ensuring and preserving price stability over the medium term, in line with the flat inflation target of 2.5 percent ± 1 percentage point. By fulfilling this objective, monetary policy can serve best to achieve sustainable economic growth. Over the medium to long horizon, monetary policy will aim to bring down and consolidate the annual inflation rate at a level compatible with the ECB's quantitative definition of price stability.

From this perspective, the macroeconomic and financial framework of 2022 H1 called for a prudent acceleration, in two stages, of the policy rate hiking cycle, amid the substantial strengthening of divergent effects from global supply-side shocks. This owed especially to the Russian invasion of Ukraine and to the imposition of international sanctions, which worsened the energy crisis and the bottlenecks in production and supply chains, compounding at the same time the increases in other commodity prices, particularly of agri-food.

Thus, in the first three months of 2022, the annual inflation rate continued to rise relatively quickly and above expectations, even amid the capping of energy prices for households¹⁶⁸, climbing to 10.15 percent in March¹⁶⁹, mainly following a stronger pick-up in processed food and fuel prices, under the impact of the sharp rise in agri-food commodity and crude oil prices¹⁷⁰. They also contributed decisively to the notably steeper upward path, including compared to forecasts, of the annual adjusted CORE2 inflation rate, which reached 7.1 percent in March 2022 from 4.7 percent in December 2021¹⁷¹.

At the same time, the inflation outlook deteriorated further, with the anticipated path of the annual inflation dynamics witnessing a renewed substantial upward revision in the February 2022 projection round¹⁷², as well as another one, of a similar magnitude, yet across the entire forecast horizon, in the May exercise. This owed to the strong impact of global supply-side shocks, compounded and protracted by the war in Ukraine and by the sanctions imposed on Russia. Thus, according to the May projections, the annual inflation rate was expected to climb to 14.2 percent in June versus 11.2 percent in the earlier projection and decline only mildly in the next four quarters, to stand at 12.5 percent in December 2022 and 12.4 percent in June 2023, well above the previously-forecasted 9.6 percent and 5.0 percent respectively. At the same

¹⁶⁸ Against this background, the annual dynamics of electricity and natural gas prices posted declines in this period; in the absence of capping schemes, the annual inflation rate would have climbed to almost 17 percent in March.

¹⁶⁹ From 8.19 percent in December 2021, 6.29 percent in September 2021 and 3.94 percent in June.

¹⁷⁰ Additional, albeit smaller, influences came from VFE prices, administered prices and tobacco product prices.

¹⁷¹ As the direct and indirect effects of the rise in international prices and of bottlenecks in production chains continued to be compounded domestically by the high short-term inflation expectations, the resilience of demand in certain segments, as well as by the significant share of food items and imported goods in the CPI basket.

¹⁷² Yet almost exclusively over the short term. According to the new forecast, the annual inflation rate was expected to accelerate its growth in 2022 Q2 – to 11.2 percent in June versus 8.6 percent in the previous projection – and decrease only gradually over the following three quarters, on a much higher-than-previously-anticipated path, remaining in December 2022 at 9.6 percent against 5.9 percent in the prior forecast. However, it was foreseen to witness a relatively steep downward adjustment in the first part of 2023, due to sizeable base effects, and return inside the variation band of the target in 2023 Q4, only slightly later than previously expected, dropping in December to 3.2 percent, marginally below the November 2021 projection.

time, after a relatively steep downward adjustment probably witnessed subsequently due to sizeable base effects, it was anticipated to decrease progressively and remain at 6.2 percent at the end of the projection horizon¹⁷³, significantly above the variation band of the target.

The main determinants of the deterioration were the much higher increases expected for processed food and fuel prices, as well as for natural gas and electricity prices, primarily under the influence of the sharper rise in agri-food and energy commodity prices. Amid the extension of capping schemes for households' energy bills¹⁷⁴, the likely effects of the more sizeable increase in energy prices were to be considerably cushioned until March 2023. However, they would become strongly manifest afterwards, counterbalancing in part and temporarily the opposite influences stemming over the longer horizon from base effects and from probable downward corrections in energy commodity prices. Against this backdrop, the downward path of the annual inflation rate was expected to come to a halt and reverse abruptly in April 2023, before resuming thereafter and steepening in mid-2023; nevertheless, the annual inflation rate would not return inside the variation band of the target at the end of the forecast horizon.

Furthermore, the impact presumed to be exerted by support schemes on CPI dynamics was marked by uncertainty, while notable risks continued to come from developments in prices of commodities, particularly of agri-food and energy, as well as from the worsening/persistence of bottlenecks in production and supply chains, amid the war in Ukraine and the associated sanctions.

Through the more pronounced increase in its likely magnitude and duration, the inflationary process triggered by supply-side shocks heightened the risk of disanchoring medium-term inflation expectations and of its second-round effects becoming manifest, possibly via a wage-price spiral.

Underlying inflationary pressures were, nevertheless, anticipated to be subdued and gradually fading, implicitly softer than those in the earlier projection, given that economic activity continued to weaken more than expected in 2021 Q4¹⁷⁵, while the latest assessments pointed to a re-acceleration in 2022 Q1, followed however by a possible quasi-standstill in Q2. In turn, the labour market witnessed mixed developments during the early months of 2022, as the number of employees in the economy stayed on a slightly upward trend, yet amid uneven developments across sectors, while the ILO unemployment rate remained flat at 5.7 percent in Q1, visibly above pre-pandemic values and significantly above the historical low recorded in August 2019, the higher labour shortage reported by companies notwithstanding.

At the same time, economic growth was expected to witness a considerable deceleration in 2022-2023 and significantly more pronounced than in previous

¹⁷³ The end of 2024 Q1.

¹⁷⁴ The support schemes were extended by one year, until March 2023, for both electricity and natural gas.

¹⁷⁵ GDP contracted 0.1 percent versus 2021 Q3, while its annual dynamics saw a markedly stronger-than-anticipated decline, i.e. to 2.4 percent from 6.9 percent in Q3. Thus, during 2021 overall, economic activity picked up a hefty 5.9 percent, yet below expectations.

forecasts. This owed to the impact of the war in Ukraine and the sanctions imposed, which would probably peak in 2022 and would be only partly counterbalanced by the effects from the absorption of EU funds under the Next Generation EU instrument. The outlook implied much lower-than-previously-estimated values of excess aggregate demand, which was seen gradually shrinking and nearing zero at the end of the projection horizon. The current account deficit was, however, expected to widen as a share of GDP in 2022 as well, owing mainly to the further deterioration of the terms of trade¹⁷⁶, before shrinking slightly the following year.

Moreover, the war in Ukraine and the imposed sanctions considerably compounded the uncertainties and risks to the economic outlook and to medium-term inflation developments, through the effects potentially exerted, via multiple channels, on consumer and investment demand, as well as on the dynamics of the European/global economy and the risk perception towards economies in the region, with an impact on financing costs. A major source of uncertainties and risks also remained the absorption of EU funds, especially those under the Next Generation EU programme, conditional on fulfilling strict milestones and targets for implementing the approved projects.

However, uncertainties and risks were also associated with the fiscal policy stance, given the requirement for further budget consolidation amid the excessive deficit procedure and the overall tightening trend of financing conditions, yet in a challenging economic and social environment domestically and globally, strongly marked by the war in Ukraine and the sanctions imposed, with potential adverse implications for budget parameters.

Such a context called for the prudent acceleration, in two stages, of the policy rate hiking cycle in 2022 H1, in order to anchor inflation expectations over the medium term and prevent the second-round effects of the sizeable step-up in inflation rate under the impact of adverse supply-side shocks, as well as to foster saving.

Hence, in its February 2022 meeting, the NBR Board increased the key rate by a larger increment, i.e. 0.50 percentage points, and another 0.50 percentage points were added in April. The May meeting saw again a larger size of the policy rate hike, namely 0.75 percentage points, which brought the monetary policy rate to 3.75 percent. The lending facility rate and the deposit facility rate were raised accordingly, to 4.75 percent and 2.75 percent respectively. Furthermore, the NBR Board decided to maintain firm control over money market liquidity and preserve the existing levels of minimum reserve requirement ratios on both leu- and foreign currency-denominated liabilities of credit institutions (8 percent and 5 percent respectively).

Under these circumstances, also conducive to fuelling expectations on a further key rate increase, the main interbank money market rates saw their uptrend steepen markedly, climbing considerably above the lending facility rate. Moreover, after a slight upward adjustment in the closing 10-day period of February¹⁷⁷, the EUR/RON exchange rate quasi-stabilised, *inter alia* amid the NBR's liquidity management actions.

¹⁷⁶ The current account deficit rose to 7.0 percent of GDP in 2021, from 5.0 percent in 2020.

¹⁷⁷ Given the abrupt increase in global risk aversion and the considerable deterioration of financial investor sentiment vis-à-vis markets in Central and Eastern Europe, following the outbreak of the war in Ukraine and the imposition of international sanctions.

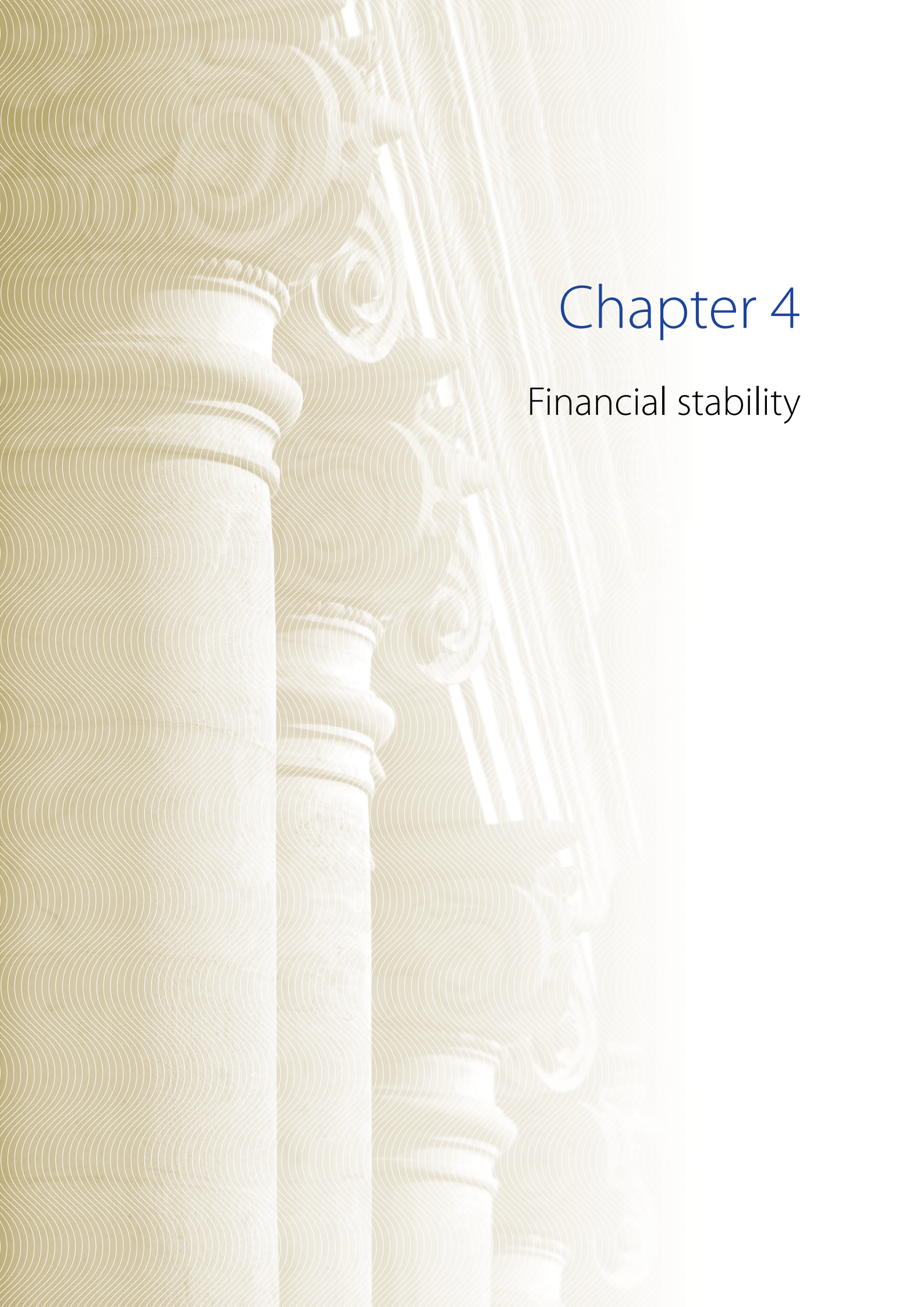
Looking ahead, monetary policy will be further geared towards bringing the annual inflation rate back in line with the 2.5 percent ± 1 percentage point flat target on a lasting basis, by anchoring inflation expectations over the medium term and fostering saving, in a manner conducive to achieving sustainable economic growth.

The dosage and pace of potential adjustments in the monetary policy parameters, the key rate in particular, in the context of ensuring adequate real monetary conditions, will further be correlated mainly with the behaviour of medium-term inflation expectations and with the risks thereto, as well as with the nature/intensity of pressures stemming from the cyclical position of the economy. Specifically, the slightly positive output gap is anticipated to shrink and nearly close at end-2023.

A major role in substantiating the decisions will continue to play the uncertainties and risks associated with the inflation outlook, stemming primarily – at least in the short run – from the war in Ukraine and the imposed sanctions. They are likely to exert divergent effects on inflation over different time horizons, mainly by compounding the energy crisis and the bottlenecks in production chains, and by an increase in agri-food commodity prices, but also by affecting the economy and inflation at a European/global level, as well as consumer and investor confidence and the risk perception towards the region. The ECB's and the Fed's prospective monetary policy stances, as well as the dynamics of key rate increases by central banks in the region will also remain relevant.

Moreover, the characteristics of the monetary policy transmission mechanism, especially of lending to the private sector and of the saving behaviour, will continue to be very important landmarks. They are anticipated to reflect influences stemming from the recent acceleration of the increase in key NBR rates, but also from the likely prospective weakening of economic activity and from the heightening of associated risks and uncertainties, amid the war in Ukraine. Also relevant will remain the specifics of the functioning of different financial market segments domestically, in the context of which, in correlation *inter alia* with prevailing macroeconomic developments, the NBR will continue to use the components of the monetary policy operational framework in a flexible manner, with a view to ensuring adequate monetary conditions.

Particularly important in terms of monetary policy design will further be the dynamics of budget consolidation – with implications *inter alia* for the sovereign risk premium and financing costs –, as well as the absorption of European funds, especially those under the Next Generation EU programme, presumed to speed up and expand structural reforms. Ensuring a balanced macroeconomic policy mix and enhancing the economic growth potential, concurrently with strengthening the Romanian economy's resilience, are pivotal to safeguarding medium-term price stability, as a prerequisite for sustainable economic growth.



Chapter 4

Financial stability

1. The NBR's role in implementing macroprudential framework

The objective of macroprudential policy is to contribute to safeguarding financial stability, reducing the magnitude of systemic risks by enhancing financial system resilience. In Romania, the macroprudential authority is the National Committee for Macroprudential Oversight, which comprises representatives of the National Bank of Romania, the Financial Supervisory Authority and the Government (via the Ministry of Finance). It acts as an interinstitutional cooperation structure without legal personality, according to Law No. 12/2017. In 2021, the NCMO General Board convened in four ordinary meetings, all held by written procedure, due to the epidemiological situation.

The beginning of 2021 was marked by the ongoing pandemic crisis and the restrictions imposed to stop the spread of the SARS-CoV-2 virus. Although the roll-out of vaccination campaigns at national and international level brought about an improvement in the economic outlook, the post-pandemic recovery remained riddled with uncertainty. Therefore, the NCMO maintained its prudent approach taken on during 2020 and decided to extend the period of implementation of the recommendation whereby financial institutions are requested to refrain from making dividend distributions (NCMO Recommendation No. R/2/2021), thereby aligning with the actions of the ECB¹⁷⁸, ESRB¹⁷⁹ and EBA¹⁸⁰. Both the NBR and the FSA were recommended to request financial institutions under their regulatory remit to refrain from the distribution of dividends until 30 September 2021. In addition to NCMO Recommendation No. R/5/2020, this recommendation allows the distribution of dividends up to a conservative threshold set by competent authorities.

The wait-and-see approach in the first part of 2021 was also maintained for the countercyclical capital buffer (CCyB), an instrument designed to mitigate procyclicality in the financial system by imposing capital surcharges in the expansion phase of the financial cycle and removing them should strong negative shocks occur. In the first two meetings held by the General Board in 2021, the NCMO recommended the NBR to maintain the countercyclical buffer rate at 0 (zero) percent (NCMO Recommendation No. R/1/2021) and to closely monitor developments in the economy and lending at aggregate and sectoral levels.

While expectations in the early pandemic stages pointed to a transitory shock, followed by the return to a state of normality after the drop in the number of infections, the subsequent adaptation to the situation imposed by the pandemic

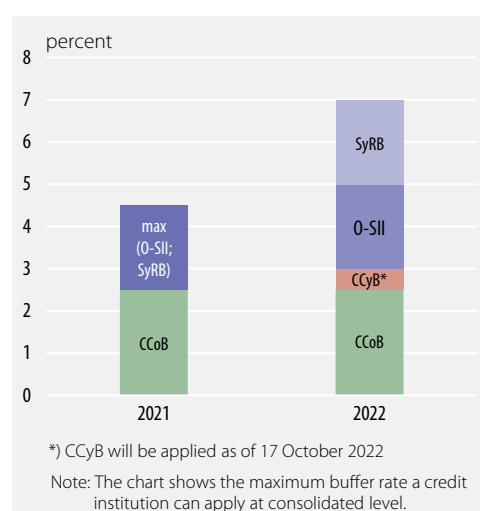
¹⁷⁸ Recommendation ECB/2020/62 on dividend distributions during the COVID-19 pandemic and repealing Recommendation ECB/2020/35.

¹⁷⁹ Recommendation ESRB/2020/15 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic.

¹⁸⁰ EBA press release of 15 December 2020.

generated a series of structural implications for the economy. Specifically, some of the vulnerabilities in the real sector increased, while the emergence of new SARS-CoV-2 strains raises uncertainty about the entry into a stage in which the virus spread is eradicated. The government's efforts to combat the effects of the pandemic led to a deterioration of the budget deficit, together with a widening of the current account deficit. Banks' retaining their earnings had a strong beneficial effect on the prudential position of the Romanian banking sector, enabling debtors' relatively easy access to financing. In 2021, lending to households and particularly to non-financial corporations gained momentum, being also supported by the government loan guarantee schemes. The increase in lending and the negative GDP fluctuations led to a widening of the positive deviation of the financial cycle from its long-term trend¹⁸¹. For these reasons, in its meeting of 14 October 2021, the NCMO General Board recommended the NBR to raise the countercyclical buffer rate to 0.5 percent as of 17 October 2022, having the possibility to revise this decision, depending on the macroeconomic conditions and lending developments until it becomes effective (Recommendation NCMO No. R/7/2021). As the tendencies underlying this recommendation were subsequently confirmed, the NCMO General Board decided, in the last meeting held in 2021, to keep in place the measure on raising the countercyclical buffer rate (NCMO Recommendation No. R/9/2021).

Chart 4.1
Maximum capital requirements
for macroprudential policy
instruments
applicable in Romania



The efforts the NBR has made since 2019 to complete the implementation into national law of Directive (EU) 2019/878¹⁸² (CRD V) materialised in the publication of NBR Regulation No. 2/2022¹⁸³. From a macroprudential perspective, the main amendment stipulated by the new legislative framework is that the systemic risk buffer (SyRB) shall be cumulative with the O-SII buffer. This change entails the increase in the capital requirements for systemically important banks when they are subject to both buffers, as

the previous framework set forth that only the higher of the two structural buffers should be applied¹⁸⁴ (Chart 4.1). Moreover, some of the constraints for setting the O-SII buffer applicable to the subsidiaries of the European banking groups operating in host countries were lowered, while the maximum O-SII buffer rate was raised by one percentage point to 3 percent¹⁸⁵.

- ¹⁸¹ When applying the alternative methodology envisaging a short financial cycle with a length similar to that of the business cycle.
- ¹⁸² 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
- ¹⁸³ Regulation No. 2/2022 amending and supplementing NBR Regulation No. 5/2013 on prudential requirements for credit institutions
- ¹⁸⁴ The provision on using the higher of the O-SII and SyRB buffer was applied only when the SyRB was defined for total risk exposures, as is the case with Romania.
- ¹⁸⁵ The maximum buffer rate the national authorities can impose without the European Commission's approval.

Under the circumstances, the NBR deemed it appropriate to establish a new calibration methodology for the O-SII buffer, an instrument used to mitigate the moral hazard risk posed by systemically important institutions. According to the new methodology approved by the NCMO, the O-SII buffer rate is set depending on the credit institution's score, calculated based on the EBA Guidelines (EBA/GL/2014/10¹⁸⁶). Specifically, a bank can fall within one of the six equal 500-basis point buckets, whereas the buffer applicable in each bucket is raised in steps of 0.5 percentage points each (Table 4.1).

Bucket	Thresholds (min. – max.) basis points	O-SII buffer rate % of total risk-weighted exposures
1	275 – 500	0.5
2	501 – 1,000	1.0
3	1,001 – 1,500	1.5
4	1,501 – 2,000	2.0
5	2,001 – 2,500	2.5
6	over 2,500	3.0

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

Table 4.1
O-SII buffer calibration
methodology

In view of the above-mentioned reasons, the NCMO decided¹⁸⁷ the O-SII buffer applicable in 2022 should be as follows: (i) 2 percent for Banca Transilvania S.A. (consolidated level), (ii) 1.5 percent for Banca Comercială Română S.A. (consolidated level), UniCredit Bank S.A. (consolidated level), BRD – Groupe Société Générale S.A. (consolidated level), (iii) 1 percent for Raiffeisen Bank S.A. (consolidated level) and (iv) 0.5 percent for CEC Bank S.A. (individual level), Alpha Bank România S.A. (individual level), OTP Bank România S.A. (consolidated level) and Banca de Export-Import a României EXIMBANK S.A. (consolidated level). As compared to the previous year, the EXIMBANK group was added to the list of systemically important institutions, after purchasing Banca Românească.

The new CRD V framework broadens the scope of application of the systemic risk buffer, by creating the possibility to implement a sectoral buffer and thus improving the flexibility of the instrument designed to address a wide range of structural risks. In Romania, a systemic risk buffer calibrated in a range between 0 and 2 percent, based on the annual averages over the past 12 months of non-performing loan ratio and coverage ratio, has been applied as of 2018 (NCMO Recommendation No. 9/2017). The buffer rate is set twice a year. In the first six months of 2022, three banks applied a SyRB rate of 2 percent, seven banks a SyRB rate of 1 percent, whereas 11 banks fell within the optimal ranges of indicators (below 5 percent for non-performing loan

¹⁸⁶ 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) and calibration of the O-SII buffer requirement

¹⁸⁷ According to NCMO Recommendation No. R/8/2021 on the capital buffer for other systemically important institutions in Romania, implemented based on NBR Order No. 7/2021 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs).

ratio and above 55 percent for the coverage ratio) and are not subject to additional capital requirements.

Starting in 2019, all credit institutions in Romania are subject to a capital conservation buffer (CCoB) of 2.5 percent of total risk exposure amount. The CCoB is aimed at ensuring a robust loss-absorption capacity and an ongoing financing activity during periods of stress, being applied uniformly EU-wide.

In 2021, the NBR also made an analysis to assess the effectiveness of the capital buffers applied since the NCMO was established. As for the countercyclical capital buffer, its rate was set at 0 (zero) percent since it was implemented in 2017 and until the end of 2021, the financial cycle showing no signs of overheating in this period. Since the O-SII buffer started to be implemented, the group of systemically important banks¹⁸⁸ has permanently had solvency, profitability and liquidity indicators above the average for the banking sector. As regards the effectiveness of the systemic risk buffer, it is worth noting that the number of banks applying a positive buffer rate has been constantly declining over the past four years since the SyRB was activated, showing an improvement in banks' capacity to manage non-performing loans. Moreover, evidence on the buffer effectiveness is also shown by the negative correlation between the average applicable buffer rate and the non-performing loan ratio trend, as well as by the positive correlation between the average buffer requirement and the coverage ratio trend.

In the scenario assuming a global systemically important institution (G-SII) in the jurisdiction of the designated national macroprudential authority, the NCMO recommended the NBR and the FSA to comply with the provisions of EBA Guidelines¹⁸⁹ on the specification of the indicators used for the identification of global systemically important institutions (G-SIIs), as well as on the reporting of the underlying data and the annual disclosure of the resulting indicator values (NCMO Recommendation No. R/3/2021). The NBR complied with this proposal by adopting a decision thereof. Furthermore, the NCMO approved the implementation of EBA Guidelines on the appropriate subsets of sectoral exposures¹⁹⁰, in the sense of using them to set and regularly reassess the systemic risk buffer at national level.

Global economy is characterised by complex financial transactions that ensure an ever-stronger interconnectedness of economic agents. In order to mitigate the negative contagion effects, the NCMO joined the ESRB effort in this area¹⁹¹, recommending the NBR and the FSA to extend the use of a legal entity identifier (LEI) (NCMO Recommendation No. R/5/2021), an international code allowing the sectoral supervisory authority to adequately monitor the transactions between legal

¹⁸⁸ The annual number of systemically important institutions ranged from eight to nine, of which seven were identified during all the years of analysis.

¹⁸⁹ EBA Guidelines on the specification and disclosure of systemic importance indicators

¹⁹⁰ EBA Guidelines on the appropriate subsets of sectoral exposures to which competent or designated authorities may apply a systemic risk buffer in accordance with Article 133(5)(f) of Directive 2013/36/EU – EBA/GL/2020/13.

¹⁹¹ Recommendation ESRB/2020/12 on identifying legal entities

entities. The NBR took action to implement the recommendation by publishing a press release and making all the necessary arrangements to include the LEI code in the managed reports.

In 2020, the NCMO General Board decided to set up a working group tasked with identifying possible solutions to support green finance and mitigate the potential negative effects of climate risk on the real sector and the financial system. The proposals of the working group were at the basis of NCMO Recommendation No. R/6/2021 that includes several lines of action for NCMO member authorities. The proposals addressed to the NBR included: to take a prudent approach to climate risk; to conduct an analysis on the appropriateness of easing the prudential requirements for green finance; to create a dashboard to monitor climate change risks to the banking sector; and to introduce information on green loans in the NBR's Central Credit Register.

Moreover, the NCMO General Board decided not to voluntarily reciprocate the macroprudential measures adopted by Luxembourg and Norway and did not identify any material third country for the Romanian banking sector in relation to the recognition and setting of countercyclical capital buffer rates at national level.

The NBR's participation in the activity of the national macroprudential authority also materialised in specific papers that were submitted to the NCMO General Board. These papers referred to: (1) the systemic risks identified across the domestic financial system, (2) the manner of implementation of ESRB recommendations¹⁹², (3) the impact of credit institutions' funding plans on the flow of credit to the real economy, and (4) the impact of interest rate risk on the banking sector's government securities portfolio and interest rate-sensitive assets and liabilities.

The outbreak of Ukraine war heightened uncertainty and systemic risks in an already challenged economic environment, marked by accelerating inflation and other post-pandemic vulnerabilities. In view of the above, the NCMO General Board recommended the NBR, in its meeting of 31 March 2022, to keep in place the measure to set the countercyclical buffer rate at 0.5 percent (NCMO Recommendation No. R/1/2022). Moreover, starting 1 April 2022, the NBR decided to raise by 10 percentage points the loan-to-value ratio of debtors already holding real estate properties. Under these uncertain financial conditions, the macroprudential instruments have proved they can be an important option for the policy mix necessary to achieve financial stability objectives.

2. Main assessments on financial stability

Risks to financial stability remained manageable throughout 2021. The risk of tensions surrounding domestic macroeconomic equilibria, also as a result of the COVID-19 pandemic and the energy crisis, was further severe, with a stable outlook. The worsening pandemic, particularly in the last part of the year, following the emergence

¹⁹² Recommendation ESRB/2020/8 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic; Recommendation ESRB/2019/3 amending Recommendation ESRB/2016/14 on closing real estate data gaps

of a new coronavirus variant, the disruptions in supply chains, as well as the strong increase in energy prices were behind the persistently challenging macroeconomic conditions. In this context, the systemic risk associated with a delay in implementing reforms and absorbing EU funds, especially via the National Recovery and Resilience Plan (NRRP), was high and rising. The risk of global uncertainty amid the energy crisis and the COVID-19 pandemic and the default risk for loans to the private sector were high, with a stable outlook.

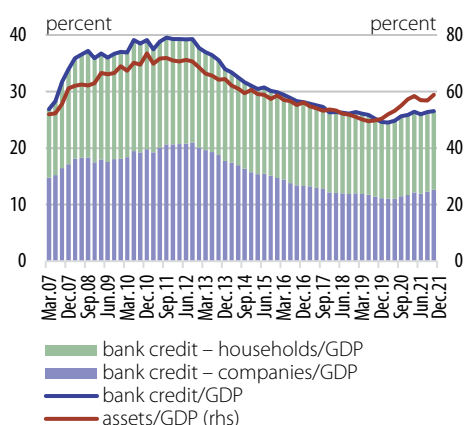
Box 6. Sustainable increase in financial intermediation in Romania

The development of financial intermediation in Romania can make a significant contribution to economic growth, by ensuring easier access to financial resources and improving corporate governance and payment discipline in the economy. It can also entail an improvement in the capacity to monitor the funded projects¹⁹³. Nevertheless, excessive credit growth can lead to the build-up of vulnerabilities in the financial system and, subsequently, to financial crises¹⁹⁴. In addition, the benefits of financial development decrease when a financial system becomes oversized¹⁹⁵. Given the importance of financial development to the economy and that it needs to be achieved by complying with prudential requirements, the sustainable increase in financial intermediation was included among the intermediate objectives of macroprudential policy¹⁹⁶.

Romania has one of the lowest levels of financial intermediation across the EU. Specifically, the shares in GDP of bank assets and bank credit stood at 58.9 percent and 27.4 percent respectively in December 2021 (Chart A). They are well below the EU average and the levels reported by countries in the region, such as Poland, Czechia and Hungary. The analysis on the developments in the level of intermediation shows that the key structural factors that contributed to this evolution are specific to Romania's economy. In order to identify the best measures to tackle these issues, the NCMO decided to set up, in December 2021, an interinstitutional working group on the sustainable increase in financial intermediation. The working group will submit to the NCMO General Board the preliminary conclusions in June 2022 and the final report in the NCMO meeting of December 2022.

Chart A

Financial intermediation
in Romania



Note: Calculations made based on annualised GDP.

Source: NIS, NBR calculations

¹⁹³ Levine, R. – “Finance and growth: theory and evidence”, *NBER Working Paper*, No. 10766, 2004; Demircuc-Kunt, A., & Levine, R. – “Finance, financial sector policies, and long-run growth”, *World Bank Policy Research Working Paper*, (4469), 2008.

¹⁹⁴ Laeven, L. and Valencia, F. – “Systemic banking crises database”, *IMF Economic Review*, 61(2), pp. 225-270, 2013; Lo Duca, M., Koban, A., Basten, M., Bengtsson, E., Klaus, B., Kusmierczyk, P. and Peltonen, T. A. – “A new database for financial crises in European countries: ECB/ESRB EU crises database”, *ECB Occasional Paper*, (194), 2017.

¹⁹⁵ Pagano, M., Langfield, S., Acharya, V. V., Boot, A., Brunnermeier, M. K., Buch, C., Hellwig, M. F., Sapir, A. and van den Burg, I. – “Is Europe overbanked?”, *Reports of the Advisory Scientific Committee*, No. 4, 2014.

¹⁹⁶ The Overall Macroprudential Strategy Framework of the National Committee for Macroprudential Oversight (<https://www.cnsmro.ro/en/politica-macroprudentiala/cadrul-de-ansamblu-privind-strategia-politicii-macroprudentiale/>).

The NCMO working group will assess the following main areas considered to play a major role in the development of financial intermediation in Romania:

- A. Participation of the financial sector in co-financing the contribution of beneficiaries to the projects deemed eligible for EU funding, in general, and for funds under the National Recovery and Resilience Plan, in particular;
- B. Digitalisation of financial services and the role of the FinTech sector in enhancing financial intermediation;
- C. Action of public institutions to improve the legislation on the capitalisation of companies and insolvency, and to reduce payment indiscipline in the economy, which would allow the increase in financial system's contribution to corporate lending;
- D. Financial education of entrepreneurs and professional training of financial system employees;
- E. Financial system contribution to the structural shift of the economy towards a higher value-added one: support the financing of innovative sectors, of green projects, etc.

The borrowing potential of non-financial corporations is significant, while high-tech and knowledge-intensive sectors, as well as those supporting the economy's transition to an environmentally-friendly growth pattern are under-represented in the loan portfolios of banks. Specifically, loans to high-tech companies account for only 1 percent of total corporate loans, whereas the financing extended to knowledge-intensive services firms holds 8 percent of total loans.

2.1. Indebtedness of non-financial corporations and households

The total debt of the private sector (including foreign direct investment loans) continued the upward trend seen over the last years, amounting to lei 614 billion at end-2021 (+10.3 percent compared to the previous year). This owed to the financing provided by local financial institutions (+12 percent) as well as by non-financial corporations that are in the same group (+10 percent), while the financing from non-resident financial institutions recorded a moderate decline (-2.5 percent). The advance in the debt volume was not reflected in an increase in total debt-to-GDP ratio, the latter posting a slight correction to 52.1 percent (-0.5 percentage points from December 2020, Chart 4.2).

The pick-up in domestic lending was bolstered by both favourable financial conditions in the first three quarters of 2021¹⁹⁷ and the extended government programmes designed to support lending to SMEs (IMM Invest, Agro IMM Invest). The non-financial corporations sector showed a high degree of resilience during the first year of the pandemic, despite significant structural vulnerabilities and severe restrictions put

¹⁹⁷ The strong increase in natural gas and electricity prices during 2021 led to a rapid advance in the inflation rate. This brought about a reconfiguration of the monetary policy conduct, with the NBR Board deciding to raise the monetary policy rate by 25 basis points on 5 October and 9 November 2021 respectively.

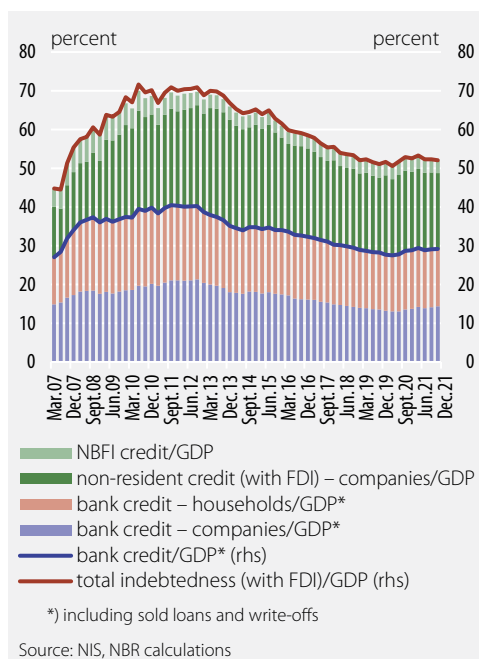


Chart 4.2
Private sector debt

in place to contain the spread of COVID-19. Thus, at aggregate level, the net result recorded by the corporate sector was positive and on the rise in 2020, albeit it grew at a moderately slower pace than in the previous year (to lei 99.9 billion, +9.7 percent). At a sectoral level, the developments were much more heterogeneous, owing, apart from the health crisis fallout, to the adverse weather conditions on agricultural production too. Companies that reported positive results consolidated their balance sheets, increasing their equity by 9.8 percent, while the pace of debt accumulation was lower than in the previous year (+3.8 percent). The high degree of uncertainty about the future evolution

of the economy and the business sector they operate in prompted companies to adopt a prudent behaviour. Liquidity indicators increased at aggregate level in 2020: (i) the current ratio went up by 4.5 percentage points to 111.6 percent; (ii) the quick ratio rose by 4.4 percentage points to 80.6 percent.

The structural vulnerabilities also identified by the previous analyses of the non-financial corporations sector became more pronounced during the first year of the pandemic. Thus, a third of active companies in 2020 saw losses, but their negative result was slightly lower than that reported in 2019 (lei 35 billion compared to lei 36.7 billion). Under the circumstances, the share of significantly undercapitalised companies remained high. In 2020, 248.7 thousand companies (accounting for 34 percent of the total number of non-financial corporations in Romania) reported net assets below the regulatory requirement. Moreover, the capitalisation needs of these companies continue to be significant (lei 146.7 billion), although on the decrease (-5.1 percent

from 2019). These companies make a modest contribution to economic growth, generating only 6.5 percent of the gross value added of the sector, and take a small share of credit institutions' loan portfolio (11 percent). However, undercapitalised firms account for a significant part of non-performing loans (29 percent).

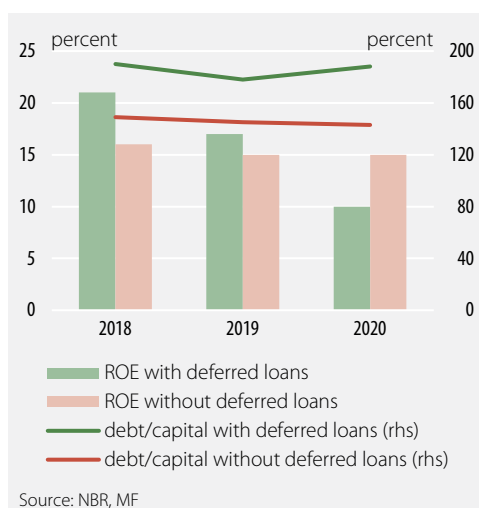


Chart 4.3
Financial standing of companies
after resorting to the loan
repayment suspension facility
(2020)

Companies affected by the pandemic that applied for a deferral of loan repayments saw a significant deterioration of their financial standing, reflected especially in a smaller

gross profit margin and a lower asset use efficiency, as well as in a higher level of indebtedness (Chart 4.3). The analysis of the quality of loans granted to these firms also shows a rapid increase in the NPL ratio to 14.3 percent (December 2021). Most of the 12.6 thousand companies that resorted to the public moratorium are SMEs, with 51 percent of them operating in the services sector and about 25 percent in the trade sector. These companies make a 4 percent contribution to the value added of the sector and account for approximately 5 percent of total employees in the non-financial corporations sector.

The analysis of the performance of the corporate loan portfolio overall shows that the improvement trend seen over the last years carried on. The non-performing loan ratio contracted to 5.7 percent in December 2021 (-0.9 percentage points from end-2020). The probability of default estimates also indicate a downward movement in the credit risk, yet amid further high uncertainty surrounding projections. At sectoral level, the highest probabilities of default are estimated for construction, agriculture and utilities.

Households continued to consolidate their assets throughout 2021 (+8 percent), mainly following the pick-up in non-financial assets amid the faster pick-up in residential property prices in the second half of the year. Households' deposits expanded, albeit at a slightly slower pace than in the previous year (11 percent in 2021 compared to

15 percent in 2020). Households were more inclined to make demand deposits (61 percent, up from 52 percent), which is indicative of stronger precautionary measures. However, the rise in financial assets was also accompanied by a sustained increase in household loans (9.7 percent), in particular loans for house purchase (12.9 percent).

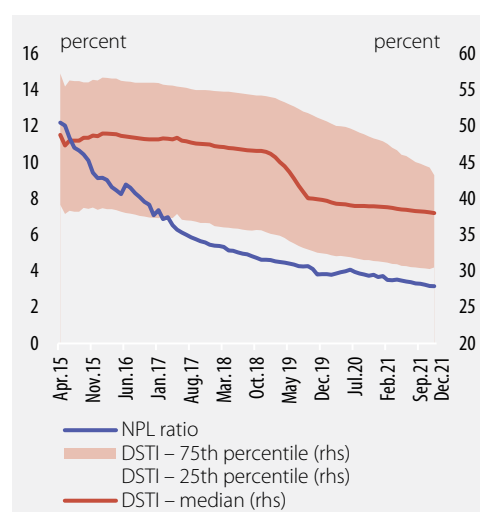


Chart 4.4

The debt service-to-income (DSTI) and non-performing loan ratio for loans to households

The non-performing loan ratio for households continued the downward trend seen over the last years, despite the less favourable macroeconomic developments at the end of 2021, following the resurgence in the

health crisis and the inflationary pressures driven by the strong hikes in electricity and natural gas prices. Thus, the non-performing loan ratio fell to 3.2 percent in December 2021 (-0.5 percentage points from end-2020, Chart 4.4), with similar developments being reported for both subcomponents – housing loans and consumer loans.

The macroprudential measures implemented before the outbreak of the COVID-19 pandemic contributed to a large extent to these positive developments in the loan portfolio to households. The debt service-to-income (DSTI) remained on the downward trend it had entered in 2019, the median DSTI reaching 38 percent in December 2021 (-1 percentage point from December 2020).

The moratoria for loan repayment suspension led to a contraction in the recorded NPL ratios, as borrowers using this facility were those with a higher credit risk. Approximately 45 percent of the borrowers who applied for a loan repayment deferral, accounting for half of the loans subject to moratoria, reported an indebtedness level of over 50 percent (calculated as a ratio of monthly debt service to borrower's monthly income) compared to 30 percent of the borrowers who did not apply for a loan repayment suspension. For these borrowers, the NPL ratios went up both for consumer loans (+6 percentage points in 2021) and housing loans (+1.2 percentage points). A larger share of consumer loans were already overdue for more than 90 days (5.9 percentage points in terms of the non-performing loan ratio, i.e. approximately 40 percent) than housing loans (0.9 percentage points in terms of the NPL ratio, i.e. 18 percent).

Real estate market saw a step-up in activity in the residential segment, especially in the first part of 2021, while the turnover in the commercial property market declined. The construction index grew by more than 20 percent for residential buildings and contracted by 10 percent for non-residential ones in 2021.

The developments in the residential real estate market were not reflected in the price dynamics, Romania recording lower growth rates compared to EU countries. Thus, the annual nominal growth rate came in at 5.9 percent in Romania compared to 10 percent the average of the countries in the region (Bulgaria, Poland, Hungary in 2021 Q3), with prices in real terms remaining flat in Romania.

Credit institutions' exposures to the residential real estate market remain significant (69 percent of loans to households in December 2021), with housing loans taking 49 percent of new business in December 2021, similarly to 2020 (50 percent), but above 2019 (44 percent). A new risk associated with the housing loan portfolio refers to the purchase of dwellings for investment purposes, these loans featuring a higher NPL ratio compared to loans for residential purposes. In view of the rapid developments posted recently by this type of loans, the NBR decided to implement a specific measure. For these loans, the LTV (loan-to-value) ratio should be 10 percentage points lower than that for similar loans granted for residential purposes.

In the commercial real estate market, the volume of transactions returned to the pre-pandemic level (EUR 0.92 billion), after the significant decrease in 2020 (EUR 0.58 billion). The most important increases were reported by industrial spaces (the volume of transactions in this case nearing the peak seen in 2015) and retail buildings. The office building segment is further the most affected, the volume of transactions running below that recorded in 2020, while the office vacancy rate in Bucharest saw a slight increase to 13 percent. Non-resident investors continue to dominate the commercial real estate market in Romania, with only 12 percent of the value of transactions being accounted for by companies with Romanian capital.

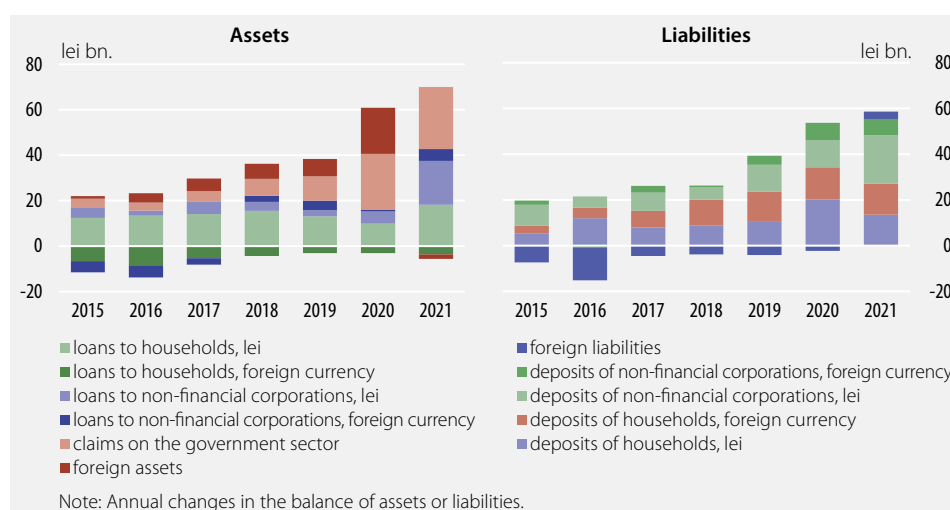
Credit institutions report a significant volume of real estate-secured loans to non-financial corporations (49 percent in December 2021). About 30 percent of these loans are granted to the construction and real estate sectors. The other loans are granted for both real estate purchase and other purposes. The quality of these loans

continues to be a major concern, although the NPL ratio saw a continued decrease over the last years (7.8 percent in December 2021, down 0.4 percentage points from end-2020).

2.2. Banking sector

Since the onset of the pandemic, deposits of the real sector have strengthened at a faster pace, due to the involuntary savings recorded by end-2021. Demand deposits continued to surpass time deposits, with the gap between them increasing during the health crisis, amid the change in the preference of customers, households in particular, to shorter maturities. Low interest rates discouraged longer-term savings, whereas EUR-denominated deposits stuck to an uptrend across the entire maturity spectrum. The new foreign currency savings were invested to a great extent in the foreign market, the appetite for foreign currency loans being reduced.

The share of claims on the government sector in total assets reached 24.2 percent in December 2021 (mainly on account of the government securities issued by the central government, which held 20.6 percent of total assets), moving ahead considerably during the pandemic. 2021 saw the resumption of lending to the real sector, especially to non-financial corporations, the dynamics of which exceeded the pre-pandemic levels. The evolution of housing loans was not hindered by the economic effects during the pandemic crisis, whereas the growth rate of consumer credit to households returned to an upward trend, the same as in the pre-pandemic period. The share of foreign currency credit in total loans continued to decrease marginally at aggregate level.



In 2021, the main balance sheet developments were generated by the dynamics of government securities and loans to non-financial corporations, two items that posted the largest increases in nominal terms (Chart 4.5). Moreover, the balance of loans to the private sector rose by 14.8 percent in December 2021 (5.5 percent in 2020), with both leu- and foreign currency-denominated components making positive contributions. Deposits from the private sector are the main financing source, accounting for approximately 69 percent of aggregate bank assets at end-2021.

Although the government securities portfolio contributes to the improvement in the liquidity and solvency positions (according to the prudential treatment), the high and rising share of this class of exposures in total bank assets heightens the interest rate risk, amid the resumption of the interest rate hike cycle. The impact of interest rate risk is steadily monitored by the NBR and assessed based on stress scenarios on the shift in the leu- or EUR-denominated yield curve and the calculation of losses arising from the marking to market of government securities. The estimates show that these losses would be the equivalent of a reduction in total own funds of the banking sector by up to 9.3 percent, according to the most severe scenario (which envisages an upward parallel shift in the yield curves of leu- and EUR-denominated instruments by 250 basis points and 200 basis points, respectively). This risk could be mitigated by lowering the preference for government securities, but the growth of government financing needs in order to combat the pandemic effects and the excess financing sources across the banking sector resulted in the continued upward trend in the share of government securities in total assets.

The COVID-19 pandemic acted as a catalyst for the step-up in the digital transformation of bank services and products. The main improvements were related to digital payments, the refinement of online banking applications to accommodate new products, as well as the change in the employees' work routine, the transformations envisaging the improvement in customers' banking experience and the lowering of costs (Box 7). These developments also raise a series of concerns about the risks associated with digital transformation, the operational risk, especially from the perspective of cyber risk, evolving continuously. In this vein, cyber vulnerabilities are closely monitored at national and European level (ESRB).

Box 7. New trends in banking activity in a pandemic context – outlook and risk implications

The COVID-19 pandemic affected people's day-to-day activities fundamentally and, in some cases, irreversibly. The banking sector had to adapt and quickly respond to new challenges through (i) the fast implementation of remote working for the employees who could perform their tasks without being physically present at the bank branches; (ii) the limitation of contact with the customers at the bank branches, the reorganisation of activity in order to comply with the public health rules in force; (iii) the notable digital transformation of bank products and services, which was also accelerated amid the competition from the FinTech/BigTech sector. Despite the temporary nature of some of these measures, a series of changes became permanent, and banks thus had to change their business strategy or make faster adjustments in the working environment, in order to adapt to the new customer needs and to the market conditions altered by the COVID-19 pandemic. The progress in digitalisation may be spurred further, *inter alia* through the EU parent banks' efforts to improve efficiency, the subsidiaries of which are the main banking players in Romania. However, digital transformation in Romania will most likely be less visible than in other European countries, as Romania features a large disparity between urban and rural areas, a low level of financial literacy, a trend

of population ageing, and the lowest degree of digital society development¹⁹⁸ in the EU. Specifically, banks in Romania are expected to maintain, in the near future, an adequate mix of digital services and the face-to-face advisory services in the territorial units, in order to best accommodate customer demand and expectations.

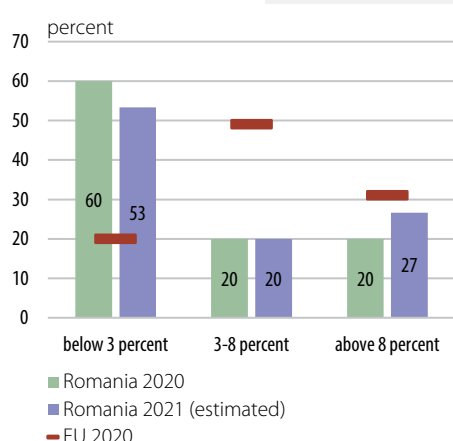
Digital payments, digital fingerprint authentication and online banking services for granting new products (loans included) are only some of the changes that have gained ground in the recent period, aiming to improve the banking

experience of customers and better meet their needs, as well as to increase the efficiency of banking activity based on careful cost management. Significant investments were necessary to run these adaptation and improvement processes from a digital perspective. According to an NBR survey¹⁹⁹, digitalisation expenses in 2017-2020 amounted to approximately lei 2.44 billion at the aggregate level of respondent banks, being particularly related to technological innovation projects, almost three quarters of which focused on customer relations. The budgeted digitalisation expenses accounted for around 50 percent of total such expenses recorded in the previous four years, confirming the significant pick-up in digital transformation, *inter alia* in terms of internal reorganisation of work and staff retraining. The NBR also took these developments into consideration, via the recent amendments to the legislative framework²⁰⁰, which

focus on the need to ensure the use of technological innovation and the adequate management of risks inherent to the lending activity.

The gap between Romania and the EU as regards the digital potential and investment is confirmed by the differences in the ratio of IT costs to total operating income (Chart A). Most respondent banks in Romania (60 percent of total in 2020 and 53 percent in 2021) invested in digitalisation less than 3 percent of their operating income. Conversely, at European level, only 20 percent of banks reported IT costs below 3 percent. In Europe, the stronger propensity for digitalisation translates into a higher share of EU banks that allocate over 3 percent of their operating income to cover digitalisation expenses.

As regards the anticipated effects of digitalisation expenses, the respondent banks in Romania expect increases in assets and the number of customers (individuals, in particular), as well as an improvement in operational efficiency, with small externalities related to operational risk losses. Specifically: (i) three quarters of



Source: NBR Survey, ESRB (Reports of the Advisory Scientific Committee, No. 12, 2022)

Chart A

Bank distribution by ratio of IT costs to total operating income – Romania versus EU

¹⁹⁸ According to the *Digital Economy and Society Index (DESI)* 2021, published on the European Commission's website, Romania comes in last of all EU countries as regards the level of digitalisation.

¹⁹⁹ The survey was conducted in September 2020 among the top 15 credit institutions in Romania (cumulative market share of 93 percent in terms of asset value).

²⁰⁰ Amendments to NBR Regulation No. 5/2013 on prudential requirements for credit institutions, based on EBA Guidelines on loan origination and monitoring (EBA/GL/2020/06).

respondent banks estimated an annual growth of up to 10 percent in the number of customers (both individuals and legal entities) in the year after investments in digitalisation were made; (ii) all banks expect asset increases; (iii) around 70 percent of respondents consider the volume of operational risk losses will decline by up to 10 percent.

In the EU, the large-scale digital transition is a key priority for economic recovery, the European Commission establishing the Union's digital targets for 2030 in several areas. From an economic perspective, the objective is to foster EU innovation and competitiveness in the financial sector, while also ensuring consumer protection and financial stability, similar aspects being presented in the digital finance package²⁰¹, adopted by the European Commission in September 2020. Moreover, in July 2021, the ECB decided to launch a digital euro investigation project and carry out further analysis in 2022 to establish the implications of this initiative and take a decision.

All European initiatives can produce significant digital changes in the financial markets. The fact that banking sectors need to adapt to the new realities (*inter alia* by acknowledging the increased competition) shows their digital transformation will continue in the period ahead as well, also at the level of local markets.

There are also concerns about the way in which digitalisation can change future bank services, the risks associated with this transformation (operational risk, especially in terms of cyber risk) evolving continuously. These concerns are manifest at national and European level. Specifically, since the outbreak of the war in Ukraine, cyber risk has been assessed as very high, while at European level, there are concerns over how to increase the cyber resilience of the financial system and to develop related stress tests. In this context, the banking sector needs to make efforts to achieve resilient digital development with regard to the operational risk, in order to prevent the rise in risks to financial stability.

Liquidity

The Romanian banking sector ensured an adequate management of liquidity in the second year of the pandemic, amid the high share of liquid assets and the traditional funding model. Recent developments show however an increased asset-liability maturity mismatch, which may negatively affect banks if the current funding sources, mostly with short maturities, are no longer renewed. Nevertheless, the funding risk is further low, with funding sources remaining stable in uncertain times as well, while also displaying a relative lack of elasticity in relation to the corresponding interest rate.

Looking at liabilities, the share of demand deposits in total liabilities moved ahead from 42 percent in December 2019 to approximately 50 percent in December 2021. The negative real interest rates acted as a deterrent to longer-term saving, with time deposits posting a sharp decline, especially those maturing in more than two years, whose share in total liabilities shrank from 8 percent to 5.6 percent.

²⁰¹ Source: <https://www.consilium.europa.eu/en/policies/digital-finance/>

With regard to assets, recent developments show that the share of lei-denominated loans increased for short maturities (up to one year) and decreased for long maturities (over five years). Conversely, for EUR-denominated loans, the balance tilted toward short maturities (up to one year). These dynamics are explained mainly by the fact that long-term housing loans are granted in lei, whereas the EUR-denominated credit is extended chiefly for the working capital of non-financial corporations.

Liquidity indicators remained adequate in 2021, with levels significantly higher than those deemed prudent. The liquidity coverage ratio (LCR) at aggregate level reached 238.8 percent in December 2021, standing above the EU average (174.7 percent²⁰², December 2021) and close to the 75th centile recorded in the EU (271 percent). The NSFR (Net Stable Funding Indicator) at aggregate level (174.9 percent, December 2021) is indicative of good structural liquidity, as the available stable funding is provided mainly by retail customers (about 66 percent), while the necessary stable funding is mostly ensured through lending (around 84 percent).

The results of the latest liquidity stress testing exercise (June 2021) show that credit institutions maintain a good capacity to withstand adverse liquidity developments, such as the significant withdrawal of funding sources or the decline in asset liquidity. Where present, the identified vulnerabilities continue to affect a low number of banks (mainly small-sized), while the volume of liquidity deficits is manageable.

Capital adequacy

The solvency of the banking sector in Romania remained adequate, i.e. 23.3 percent (December 2021), slightly on the wane from end-2020, but above the EU average of 19.6 percent. In the first three quarters, the decline was driven by the growth of risk-weighted assets, while the relative stagnation seen in the fourth quarter

was due to the partial retention of the profit for the 2021 financial year and credit institutions' decisions to distribute dividends from the retained earnings recorded in previous years (2019 and 2020), as a result of the NCMO's decision not to extend beyond 30 September 2021 the period of implementation of NCMO Recommendation No. R/2/2021 for the implementation of Recommendation ESRB/2020/15 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic.



Chart 4.6

Evolution of risk-weighted assets

²⁰² According to EBA Risk Dashboard, data available at 2021 Q4.

The risk-weighted assets of the Romanian banking sector (Chart 4.6) increased by approximately 7 percent as against 2020, mainly on account of the 10.5 percent advance in credit risk-weighted assets, holding 84 percent of total assets (December 2021), on a slight rise as compared to previous years. This shows the resumption of an upward trend, after the marginal decrease reported in 2020, especially as a result of the regulatory changes adopted in response to the COVID-19 pandemic.

The solvency ratio was positively influenced by the diversification of capital position, the share of Tier 2 capital in total own funds expanding to 11 percent, due to the pick-up in subordinated bond issues or the subordinated loans from shareholders, aimed to also cover conditions such as those related to the minimum requirements for own funds and eligible liabilities (MREL). However, the prevalence of Tier 1 capital remains one of the advantages of the Romanian banking sector, strengthening its good capacity to manage potentially adverse developments in the macroeconomic environment, marked by the Russo-Ukrainian conflict. To this end, although the recently manifest geopolitical tensions have an immaterial direct impact on the Romanian banking sector, there are second-round effects that can propagate via different channels and can affect the capital position of banks.

Asset quality and credit risk

The relevant indicators measuring asset quality continued to improve throughout 2021; consequently, the non-performing loan ratio was 3.4 percent in December 2021, i.e. 0.4 percentage point lower than in December 2020, mainly due to the base effect associated with the faster lending dynamics. The higher NPL ratio in Romania as compared to the EU average (2 percent, December 2021) is visible for most portfolios of loans and advances.

Since the onset of the pandemic, the volume of restructured loans as a result of financial difficulties rose by approximately 32 percent, especially after the unwinding of measures to suspend loan payments. The growth was visible for performing loans, in which case the restructured loans ratio climbed from 0.5 percent in December 2019 to 0.9 percent in December 2020 and 1.4 percent in December 2021. The contribution came entirely from the non-financial corporations sector.

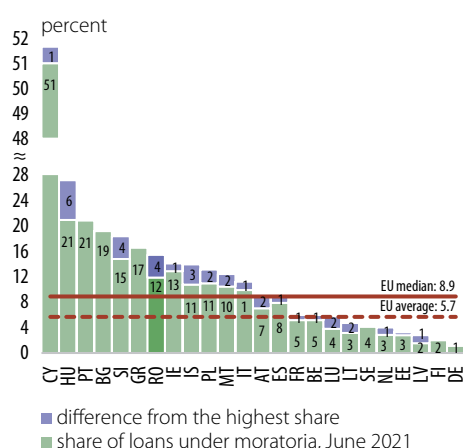
The non-performing loan coverage by provisions in Romania (66.1 percent, December 2021) is above the EU average (44.5 percent, December 2021). This is also the case with Slovakia, Croatia, Poland and Hungary. In the post-pandemic period, the coverage ratio increased for all categories of non-performing loans, amid lower expectations on debt collection, owing to the deterioration of the macroeconomic environment and the prudent approach to credit risk management. A prudent behaviour was also recommended by the NBR, in the discharge of its micro and macroprudential supervisory tasks.

The share of loans classified in Stage 2 according to IFRS 9 saw an improvement, down to 15 percent in December 2021, from the 17 percent high recorded in December 2020. However, this is due to a base effect, as the balance on these loans remained broadly unchanged. The share of loans classified in Stage 1 improved once

with the step-up in lending, standing at approximately 81 percent in December 2021. As for the creditworthiness of debtors that resorted to moratoria suspending their loan payment obligations, mention should be made of the lower quality of assets in this class, the share of loans classified in Stage 3 of impairment according to IFRS 9 moving ahead from 5.7 percent in June 2020 to almost 11 percent (December 2021).

Box 8. Recourse to moratoria during the COVID-19 pandemic – developments and comparisons across Europe

The COVID-19 pandemic prompted regulatory authorities to take exceptional measures in order to manage the effects of the macroeconomic and social shock. One of these measures, adopted on a large-scale at European level, was the suspension of loan repayments. The measure was backed by implementation guidelines issued by the European Banking Authority (EBA)²⁰³, specifying the prudential treatment and clarifying the application of the definition of default and classification of forbearance associated with financial difficulties.



Source: NBR, EBA's Autumn 2021 EU-wide transparency exercise

Chart A

Share of loans under moratoria in total loans and advances (highest share, i.e. June 2021)

At European level, the share of loans under moratoria falling under the EBA Guidelines was 5.7 percent²⁰⁴ in June 2021 (Chart A). France, Spain and Italy reported the highest volumes of loans subject to moratoria, jointly accounting for approximately 70 percent of the stock of such loans. The asymmetric distribution is also shown by the difference between the average and median shares of these loans.

Cypriot, Hungarian and Portuguese banks reported the highest share of loans subject to moratoria, i.e. 52 percent, 27 percent and 21 percent, respectively. In Romania, loans under moratoria accounted for approximately 15 percent of the loan portfolio, the highest stock of loans with active or expired moratoria (lei 43 billion) being recorded in September 2020. Nevertheless, according to data as at

June 2021, the share of loans subject to moratoria had dropped to 12 percent (Chart A). At end-2021, the stock of loans under moratoria was lei 28.6 billion (the equivalent of about 9 percent of total loans and advances), declining at one of the strongest paces in Romania as compared to other European countries (similar adjustments were seen in Hungary and Slovenia). The breakdown of loans with moratoria by institutional sector shows a relatively fair distribution between households and non-financial corporations, but the stock of loans decreased twice as fast in the corporate sector (nearly 40 percent) than in the households sector (21 percent) as compared to the year before. This is mainly due to the slower repayment of household loans that were subject to moratoria, given that

²⁰³ Guidelines EBA/GL/2020/02 on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis, as subsequently amended.

²⁰⁴ According to EBA's 2021 EU-wide transparency exercise.

almost two thirds of them were loans secured by residential real estate, with longer maturities, in general.

In Romania, the non-performing loan ratio for loans subject to moratoria was 10.8 percent in December 2021, whereas loans classified in Stage 2 of impairment according to IFRS 9 held a large share (approximately 36 percent), entailing a significant increase in credit risk. As compared to developments across Europe (5.5 percent²⁰⁵ NPL ratio for loans subject to moratoria and 25 percent share of loans classified in Stage 2 of impairment), the loan quality is lower in terms of credit risk.

A prudent approach to credit risk management in Romania is shown by the NPL coverage by provisions, which was 60.4 percent in December 2021, close to the aggregate level of 66.1 percent (December 2021) and twice as high as that recorded across Europe. Moreover, this is the highest level EU-wide, the indicator standing above 50 percent only in Slovakia's banking sector.

Considering the significant recourse to loan moratoria in Romania and the higher uncertainty about these borrowers maintaining their repayment capacity amid the persistence of the pandemic or other shocks, the close monitoring of the loans and advances that were subject to moratoria, even after their expiry (according to end-2021 data), is a good credit risk management practice for credit institutions.

Profitability

The significant net financial result at end-2021 (lei 8.2 billion) rose from the year before, on account of the increase in operating income and the decrease in net expected credit losses, after the latter had recorded a higher volume at the onset of the pandemic. The key profitability indicators performed favourably, the return on assets (ROA) and the return on equity (ROE) adding 0.4 and 4.6 percentage points to 1.4 percent and 13.3 percent, respectively.

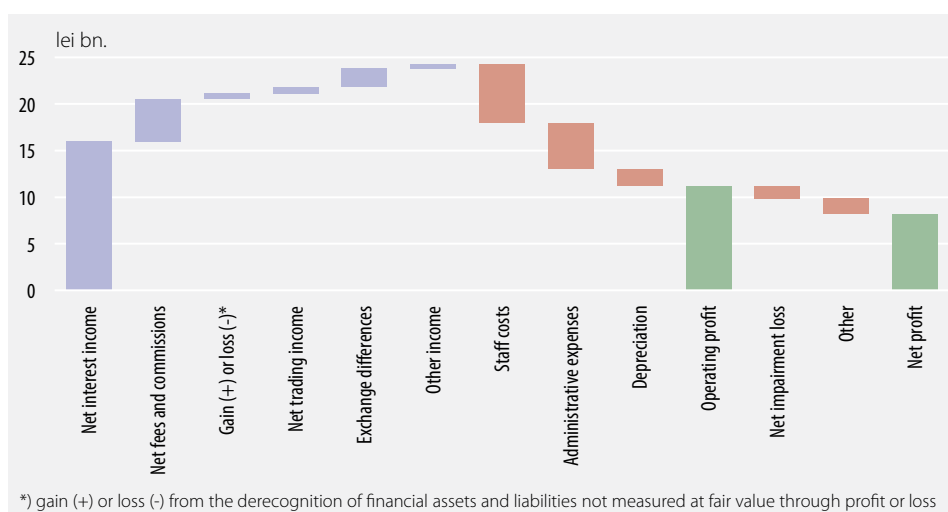


Chart 4.7

Breakdown of the banking sector profit as at December 2021

²⁰⁵ According to EBA data, December 2021.

Net interest income, the main component of operating income (65.9 percent, December 2021), posted upward dynamics in 2021 H2, whereas net fees and commissions consolidated their position as the second item in terms of size in total operating income (18.9 percent, December 2021), resuming growth in 2021 Q1, on the back of stronger customer activity (Chart 4.7).

Net exchange rate differences continued to rank third as a share in total operating income (8.1 percent, December 2021), their volume going up.

The annual growth of operating expenses generally reflects the stepped-up investment in digital transformation, being partly offset by the ongoing reduction in the number of employees and bank units.

The operational efficiency measured by the cost-to-income ratio stood further in the medium-risk bucket, according to the EBA's prudential limits (50-60 percent), yet below the EU median. Net expected credit losses (lei 1.3 billion) fell by 65.5 percent in 2021 compared to the previous year, being positively influenced by the economic recovery.

Over a longer horizon (2014-2020), the domestic banking sector fares better in terms of specific income, as compared with the median across the EU. Specifically, the share of net interest income in average assets amounts to around 3 percent in Romania (versus 1.7 percent in the EU²⁰⁶), the difference being lower for net fees and commissions (Romania: 0.9 percent, EU: 0.7 percent). By contrast, staff costs (Romania: 1.2 percent, EU: 0.8 percent) and other administrative expenses (Romania: 1.4 percent, EU: 0.6 percent) show there is room for improvement from this perspective.

2.3. Non-bank financial sector

The non-bank financial sector grew at a faster pace in 2021, on the back of positive developments on financial markets, with short episodes of corrections and volatility bouts. The sector's assets stood 14.8 percent higher in 2021, after increasing by merely 5 percent in 2020.

Private pension funds continued to follow the upward path seen over the past years, being the most active component of the non-bank financial sector, after investment funds. The total assets of private pension funds amounted to lei 92.5 billion at end-2021 (+18.5 percent as compared to December 2020), while the numbers of participants in the Pillar II and Pillar III private pension systems added 2 percent to 7.8 million persons and 7 percent to 563 thousand persons, respectively. The average rate of return of Pillar II private pension funds was 5.8 percent in 2021 (slightly up, i.e. 0.4 percentage points, from 2020), as the weight of shares climbed to 25 percent in December 2021, from 21.6 percent at end-2020.

Investment funds are the second component of the non-bank financial sector in terms of asset value (23 percent share, December 2021). In 2021, all categories of

²⁰⁶ Source: ECB, consolidated banking data

funds reported increases; the largest rises were posted by mixed funds (59.6 percent) and equity funds (30.7 percent), the latter being also the most important item in the sector's composition (54.8 percent of total investment funds). The portfolio breakdown shows the repositioning of investment funds towards more liquid assets with shorter maturities, with maturity transformation (ratio of long-term assets to total assets) and liquidity transformation (ratio of less liquid assets to total assets) declining in 2021, whereas the share of debt in total liabilities grew higher.

In 2021, non-bank financial institutions continued their lending activity at a sustained pace, the exposures rising to lei 38 billion (+8.1 percent, up from 2.3 percent in 2020), particularly in the segment of foreign currency loans to non-financial corporations (+12 percent) and leu-denominated loans to households (+13 percent). The non-performing loan ratio remained on a downward trend, dropping 0.6 percentage points to 3.6 percent. The NPL ratio for households posted the sharpest decline, i.e. -1 percentage point. Nevertheless, it is further higher than that reported by the banking sector (7.4 percent versus 3.6 percent for bank loans) and well above that for NBFIs loans to companies (2.2 percent).

Insurance corporations saw a moderate growth in 2021, i.e. 5.8 percent, even though gross premiums written were considerably higher for both types of insurance (25 percent for non-life insurance and 18 percent for life insurance). Concentration is one of the most significant risks in this sector, given the small number of companies, the first ten companies making up approximately 90 percent of premium value. This risk is more pronounced in certain segments. As concerns the compulsory motor third-party liability insurance policies, two companies held approximately two thirds of this market in September 2021, one of them being City Insurance. At end-2021, the FSA withdrew the operating licence of the Societatea de Asigurare-Reasigurare City Insurance S.A.²⁰⁷ and, in February 2022, opened the bankruptcy proceedings for this company.

2.4. Financial markets

Financial markets in Romania witnessed favourable developments January through September 2021, with short periods of increased volatility and small price corrections. By contrast, in the last quarter, the performance of these markets was marked by uncertainties associated with the pandemic crisis, amid the swift rise in new infections, and with inflation, following the hikes in electricity and natural gas prices. The annual inflation rate climbed to 8.19 percent in December 2021 (up 6.13 percentage points from December 2020), being fuelled to a large extent by supply-side shocks and, domestically, by the liberalisation of the electricity market for household consumers. Under the circumstances, at end-2021, the NBR Board decided to start the process of gradual normalisation of the monetary policy conduct by increasing the policy rate in steps of 0.25 percentage points each (on 5 October

²⁰⁷ City Insurance S.A. had reported currency holdings that proved fictitious and, thus, had not the necessary eligible funds to meet the prudential requirements (the solvency capital requirement and the minimum capital requirement). Moreover, in the absence of transfers to the share capital and in the context of worsening solvency, the company was faced with default.

and 9 November) and extending the corridor of interest rates on standing facilities around the policy rate by 0.25 percentage points (to ± 0.75 percentage points) on 9 November 2021.

Interest rates on the interbank money market followed the trend imposed by the monetary policy. After the declines reported by 3M-12M ROBOR rates and the interest rate on interbank transactions over the first three quarters, the trend was reversed in Q4, given that the average volume of daily transactions increased as well, i.e. by 3 percent versus January-September and by 15 percent as compared to the same year-ago period. The benchmark index for loans to consumers evolved similarly, growing by 0.19 percentage points in December 2021 as against the end of 2020.

The market for government securities saw an increase in yields during 2021, which was brisker in the fourth quarter, on the back of the worsening outlook for economic activity, given the slowdown in economic growth and the resumed inflationary pressures. To these added the political tensions and the heightened global uncertainties. Another significant factor was that the main agencies reaffirmed Romania's rating, with Moody's changing Romania's outlook to stable from negative.

The foreign exchange market recorded no significant developments, the EUR/RON exchange rate remaining relatively stable. The domestic currency witnessed a small depreciation at end-2021 as compared to December 2020 (1.6 percent), while the transaction volume increased (up 9 percent, average daily transactions).

As regards the capital market, the level of capitalisation grew markedly in 2021, i.e. by 48 percent, whereas the number of issuers rose marginally (+3 percent). The capital market in Romania evolved in line with global and regional developments. The BET index went up by 33 percent at end-2021 as against the year before, whereas the stock indices of countries in the region posted increases between 20 percent and 42 percent over the same period.

The worsening inflation outlook – amid the deepening energy crisis as a result of the war in Ukraine –, the tensions surrounding macroeconomic equilibria and the higher risks associated with the non-fulfilment of targets set in the reform programmes the government committed to, *inter alia* in the context of EU-funded programmes, call for the close monitoring of developments in domestic financial markets.

3. Instruments supportive of prudential supervision and financial stability

3.1. Central Credit Register (CCR)

The Central Credit Register (CCR) conducts its activity in compliance with NBR Regulation No. 2/2012 on the organisation and functioning of the Central Credit Register operated by the National Bank of Romania, as subsequently amended.

Pursuant to the provisions of this regulatory act, the reporting institutions to the CCR are credit institutions, non-bank financial institutions enlisted in the Special Register opened at the NBR, electronic money institutions and payment institutions with significant lending activity.

The information about a borrower, natural entity or non-bank legal entity, is reported to the CCR when the value of loans granted and commitments assumed by the reporting institution on behalf of the borrower is of at least lei 20,000.

At end-2021, 103 reporting institutions, of which 35 credit institutions and 68 NBFIs (as compared with 35 credit institutions and 67 NBFIs at end-2020) reported credit risk information to the CCR.

The indicators relevant for assessing the lending activity of the reporting institutions to the CCR posted positive dynamics in 2021. Specifically, the number of borrowers, the number of loans and commitments, and the amounts due rose by 7.2 percent, 8.51 percent and 13.8 percent, respectively. Looking at the indicators taken into account, the activity of credit institutions is prevalent in total lending activity, the amounts of information reported by the NBFIs in the total information reported to the CCR being small, i.e. 11.2 percent of total borrowers, 11.2 percent of the number of loans and commitments, 7.6 percent of total amounts due and 6.0 percent of total overdue amounts.

With regard to the indicators on overdue payments, in annual terms, despite the larger number of borrowers with overdue loans (5.98 percent) and of overdue loans (9.20 percent), a positive aspect is the 7.13 percent drop in overdue amounts. This was also due to the amendment of GEO No. 37/2020²⁰⁸, so as to extend until the end of 2021 Q1 the possibility of suspending the obligation to pay the instalments of loans (principal, interest and commission fees) granted to borrowers by creditors, thus making a significant contribution to limiting the deterioration of the debt servicing capacity of these borrowers.

Table 4.2
Main indicators used by the CCR –
credit institutions

	31 December 2020	31 December 2021	percentage change Dec. 2021/Dec. 2020
Number of borrowers (thou.)	1,463	1,567	7.1
Individuals	1,351	1,451	7.4
Legal entities	111	116	4.5
Number of borrowers with overdue loans (thou.)	161	172	6.8
Number of loans and commitments (thou.)	2,574	2,803	8.9
Number of overdue loans (thou.)	220	243	10.5
Total amounts due (lei mill.)	377,061	430,598	14.2
Individuals	142,889	157,775	10.4
Legal entities	234,173	272,823	16.5
Overdue amounts (lei mill.)	17,694	16,376	-7.4
Source: CCR			

²⁰⁸ Government Emergency Ordinance No. 227/2020 amending and supplementing Government Emergency Ordinance No. 37/2020 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions became effective on 1 January 2021.

Table 4.3
Main indicators used by the CCR –
non-bank financial institutions
and payment institutions

	31 December 2020	31 December 2021	percentage change Dec. 2021/Dec. 2020
Number of borrowers (thou.)	178	190	6.7
Individuals	84	92	9.5
Legal entities	94	98	4.3
Number of borrowers with overdue loans (thou.)	20	20	0.0
Number of loans and commitments (thou.)	335	354	5.7
Number of overdue loans (thou.)	34	36	5.9
Total amounts due (lei mill.)	32,133	35,192	9.5
Individuals	3,573	4,104	14.9
Legal entities	28,560	31,087	8.9
Overdue amounts (lei mill.)	1,055	1,036	-1.8
Source: CCR			

The dynamics of the main indicators calculated and monitored by the CCR based on the information reported by credit institutions and NBFIs are presented in Tables 4.2 and 4.3, respectively.

Looking at credit institutions, in 2021 the number of borrowers and the amounts due were on the rise (up 7.1 percent and 14.2 percent, respectively, from the previous year). Conversely, overdue amounts were 7.4 percent lower, which resulted in their narrower share in total amount due (down to 3.8 percent). At the same time, the numbers of overdue loans and borrowers with overdue amounts were higher, i.e. by 10.5 percent and 6.8 percent, respectively.

As at 31 December 2021, individuals accounted for 92.6 percent of total borrowers in the CCR database, while the share of amounts due by individuals in total amount due to credit institutions was 36.64 percent, on a slight decrease from the level posted in the year before (37.9 percent). The currency breakdown of loans to individuals was as follows: leu-denominated loans (2021: 81.7 percent, 2020: 76.8 percent), EUR-denominated loans (2021: 16.6 percent, 2020: 20.8 percent), loans in Swiss francs (2021: 1.6 percent, 2020: 2.3 percent) and USD-denominated loans (0.1 percent).

With regard to NBFIs, lending indicators posted increases at end-2021 as compared to the previous year: number of borrowers (+6.7 percent), number of loans and commitments (+5.7 percent), amounts due (+9.5 percent). As for the indicators on overdue payments, the number of borrowers with overdue loans remained unchanged in annual terms (at around 20 thousand), the number of overdue loans grew by 5.9 percent, whereas the overdue amounts decreased by 1.8 percent, their share in total amount due standing at 2.9 percent, on a decline as against 2020.

Unlike credit institutions, the composition of borrowers in the case of NBFIs shows that legal entities held the larger share, i.e. 51.4 percent at end-2021, while the share of amounts due by legal entities in total amount due to the NBFIs ran at 88.3 percent, a figure similar to that seen in the year before.

Moreover, as at 31 December 2021, the CCR database comprised 1,143,070 groups of clients, the number of groups reported by reporting institutions being on a rise year on year.

In 2021, information about 136 borrowers who committed card frauds was reported to the CCR, the value of the fraud totalling about lei 357 thousand. The number of fraudulent borrowers is on the rise from the year before, when 92 borrowers who committed card frauds were reported to the CCR.

During 2021, 2.1 million CCR database queries were submitted. The queries concerned and returned data on overall risk, loans and overdue amounts of borrowers. The number of queries is on an increase from the year before (when 2 million queries were submitted), more than half of them, i.e. 53.6 percent, being made by the reporting institutions with regard to potential borrowers.

At the same time, in 2021, 595 petitioners requested information on the data reported about themselves to the CCR, compared to 445 petitioners in 2020.

3.2. Payment Incidents Register (PIR)

The Payment Incidents Register (PIR) conducts its activity in compliance with NBR Regulation No. 1/2012 on the organisation and functioning of the Payment Incidents Register operated by the National Bank of Romania and manages the information specific to payment incidents related to cheques, bills of exchange and promissory notes. Credit institutions are the reporting institutions to the PIR.

In 2021, the values of the main indicators calculated and monitored by the PIR for credit institutions are on a decline from the year before.

The number of fraudulent account holders reported with payment incidents was 8,272, down by 14.3 percent from 2020, while the number of payment incidents fell by 29.4 percent to 29,440.

Moreover, the average number of incidents perpetrated by one account holder was lower and the number of account holders with suspended cheque-writing privileges went down by 36.5 percent (from 304 in 2020 to 193 in 2021).

In the year under review, 64 individuals who caused payment incidents (related mostly to promissory notes) were reported to the PIR, as compared with 72 in 2020.

The value of rejected amounts diminished by 45.6 percent to lei 1,237 million in 2021, versus lei 2,274 million in 2020 (Chart 4.8).

Moreover, the average rejected amount decreased to lei 42 thousand as compared to lei 55 thousand in 2020.

The distribution of payment incidents reported to the PIR reveals that, in the year under review, 18 credit institutions (64.3 percent of the reporting institutions) reported

99.5 percent of the total number of payment incidents, accounting for 99.6 percent of the total rejected amounts. The most frequent reason for refusal was the complete or

partial lack of funds (61.4 percent of total reasons for rejection in 2021 versus 70.6 percent in 2020).

Over the reported period, credit institutions showed an increased interest in the PIR database information, sending 9.2 million queries (up 10.4 percent from 2020), in their own name or in their customers' name.

In 2021, 49 petitioners requested information on the data about themselves reported to the PIR, compared to 23 petitioners in 2020.

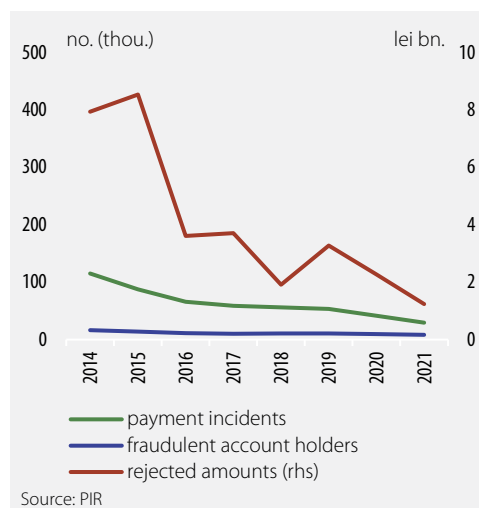
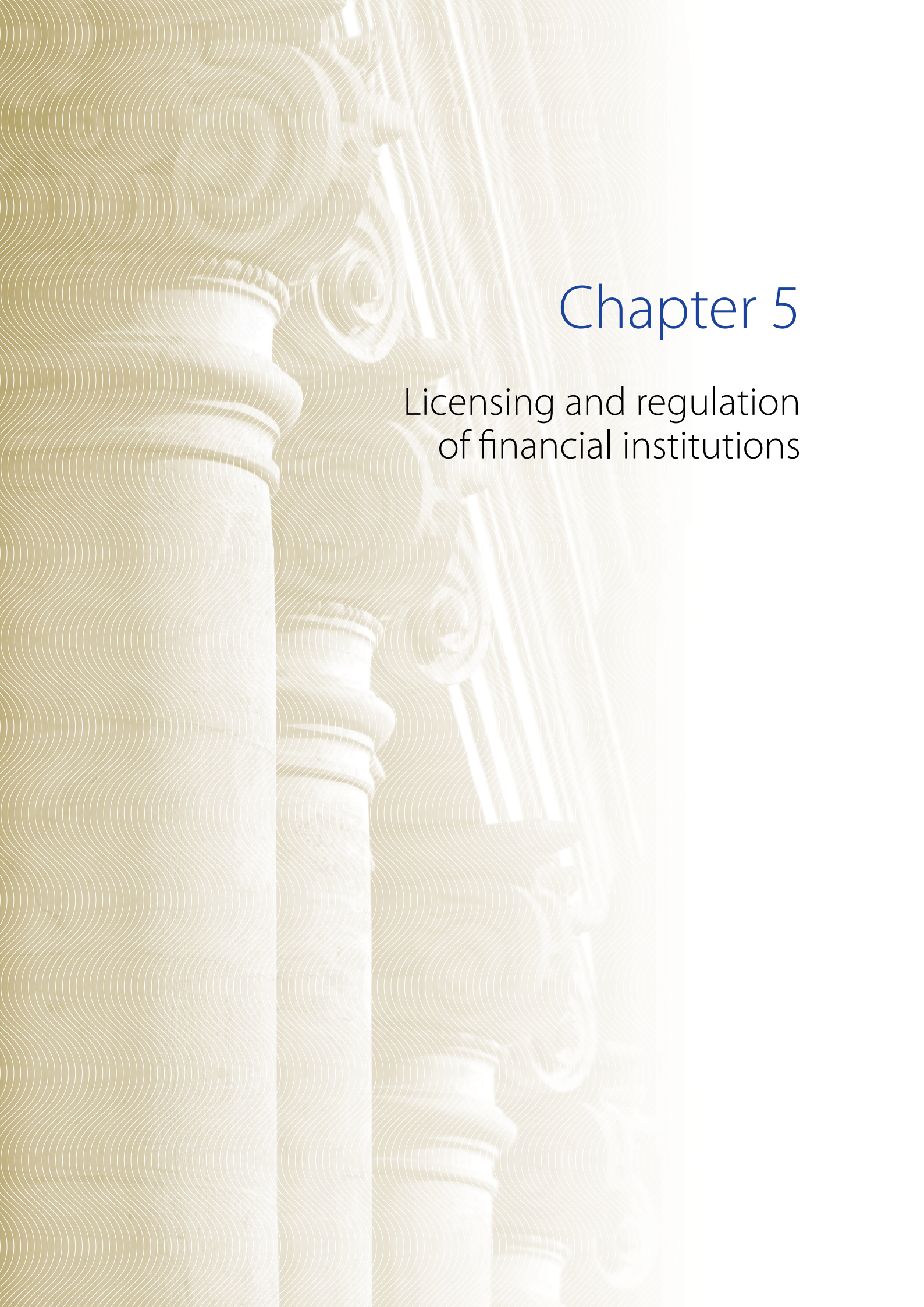


Chart 4.8
Main indicators of payment incidents, 2014-2021

The background of the slide features a photograph of classical columns, likely from a government or institutional building, with a warm, golden-brown color palette. Overlaid on the left side of the image is a decorative pattern of thin, concentric, wavy lines in a light beige color.

Chapter 5

Licensing and regulation of financial institutions

1. Licensing and notification of financial institutions

Authorisation of credit institutions

The National Bank of Romania's prerogative powers in relation to the authorisation of credit institutions are set out in Government Emergency Ordinance No. 99/2006 on credit institutions and capital adequacy, as amended and supplemented by Law No. 227/2007, as subsequently amended and supplemented. In 2021, the NBR granted no authorisation to any credit institution.

In the course of 2021, the branch in Romania of a credit institution based in another EU Member State was registered with the Credit Institutions Register: PKO Bank Polski S.A. Warsaw – Bucharest Branch.

Concurrently, the following entities were erased from the Credit Institutions Register: Banca Cooperatistă Creditec Tecuci and Banca Cooperatistă Dumbrava Scrioaștea as a result of the merger through absorption with Banca Cooperatistă Putna Focșani and Banca Cooperatistă Albina Slatina respectively.

Authorisation of payment institutions

By virtue of its powers in the area of regulation, authorisation and prudential supervision of payment institutions under Law No. 209/2019 on payment services and amending some legal acts, and under NBR Regulation No. 4/2019 on payment institutions and account information service providers, in 2021, the National Bank of Romania entered the payment institutions Smart Fintech S.R.L. in the Register of payment institutions and account information service providers – Section 1 – Payment institutions, and six payment services exempt under the provisions of Article 4(1)(k) and (m) of Law No. 209/2019 in the same register – Section 3 – Exempt payment services.

In addition, in the course of 2021, five applications for authorisation as a payment institution were submitted to the NBR, one of which was also as an electronic money institution. All applications were withdrawn during the year, given the requests to remedy the deficiencies identified regarding the documentation submitted, with one entity resubmitting the application in the same year, which was still under examination at end-2021.

Moreover, in 2021, consultations were held prior to the submission of authorisation documents with four entities that expressed their intention to become payment institutions.

Authorisation of electronic money institutions

The NBR's prerogatives in the area of authorisation of electronic money institutions are set out in Law No. 210/2019 on the issue of electronic money and NBR Regulation No. 5/2019 on electronic money institutions. In 2021, the NBR granted no authorisation to any electronic money institution.

Nevertheless, two applications for authorisation as an electronic money institution were submitted to the NBR in 2021, one of which being both as electronic money institution and as payment institution. Both applications were withdrawn during the authorisation process, given the requests to remedy the deficiencies identified regarding the documentation submitted. In addition, one application for authorisation submitted in 2020 was rejected in 2021.

At the same time, during 2021, consultations were held prior to the submission of authorisation documents with an entity that expressed its intention to become an electronic money institution.

Notification of non-bank financial institutions

In 2021, the notification and registration of the newly-established non-bank financial institutions carried on. In compliance with Law No. 93/2009 on non-bank financial institutions, as subsequently amended and supplemented, the notification and registration procedure was carried out to enter 13 NBFIs in the General Register, 8 such institutions in the Special Register and 78 entities in the Entry Register. Moreover, an application for registration in the General Register was rejected in 2021.

In addition, 9 NBFIs were erased from the General Register, 3 NBFIs from the Special Register and 31 NBFIs from the Entry Register.

2. Legal framework for institutions within the regulatory scope of the National Bank of Romania²⁰⁹

2.1. Prudential regulation and bank recovery and resolution regulation

The following steps forward were taken in 2021 with regard to prudential regulation and bank recovery and resolution regulation:

- Transposing into domestic law Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards

²⁰⁹ Credit institutions, NBFIs, payment institutions and electronic money institutions granting payment services-related loans and whose activity is limited to the provision of such services, namely issuance of e-money and provision of payment services, as well as the Bank Deposit Guarantee Fund. These entities are listed under Article 4(3)(a) of Law No. 82/1991 – the Accounting Law (recast), as subsequently amended and supplemented.

exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures.

- Transposing into domestic law Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC.

This was achieved by amending the legal framework applicable to credit institutions.

Specifically, the following were adopted in primary legislation:

- Law No. 319/2021 amending and supplementing Government Emergency Ordinance No. 99/2006 on credit institutions and capital adequacy transposing a series of provisions of Directive (EU) 2019/878 with regard to additional own funds requirements, the approval procedure by the National Bank of Romania as consolidating supervisor for financial holding companies and mixed financial holding companies, issues concerning credit institutions' business management framework, the NBR's supervisory measures and powers, as well as the central bank's collaboration with other competent authorities and national and international institutions/bodies.
- Law No. 320/2021 amending and supplementing Law No. 312/2015 on the recovery and resolution of credit institutions and investment firms, as well as on amending and supplementing some legal acts in the financial field, which transposes a series of provisions of Directive (EU) 2019/879 with regard to, *inter alia*: introducing new concepts such as "resolution entity" and "resolution group" based on which a series of provisions regulating resolution planning are restructured, as well as determining the minimum requirement of own funds and eligible liabilities; rules on selling MREL eligible debt instruments to retail clients, in order to avoid their excessive selling; introducing provisions on the contractual recognition of the powers to suspend obligations in case of resolution for financial contracts governed by third-country law; new powers for the resolution authority in relation to issues such as resolution of breaches of the MREL requirement, suspension of payment obligations of a credit institution prior to resolution, including those in respect of eligible deposits, under certain conditions provided by law (known as a "moratorium tool").

In secondary legislation, in order to transpose certain technical provisions of Directive (EU) 2019/878, the NBR issued the following regulations:

- NBR Regulation No. 1/2022 amending and supplementing NBR Regulation No. 12/2020 on the authorisation of credit institutions and changes in their situation.

The regulation contains provisions referring to the procedure, documentation and conditions under which the National Bank of Romania, as consolidating supervisor, approves parent financial holding companies or parent mixed financial holding companies, as well as the conditions under which changes in the monitoring process of these entities can be made by setting up a mechanism to notify the NBR.

- NBR Regulation No. 2/2022 amending and supplementing NBR Regulation No. 5/2013 on prudential requirements for credit institutions.

The regulation contains provisions that focus on the compensation policy, additional own funds requirements and guidelines on additional own funds, the level of implementation of the requirements for the internal capital adequacy assessment process, the obligation to determine the own funds requirements at consolidated level and the entities subject to consolidated supervision by the NBR, requirements on identifying, assessing and managing interest risk from non-trading activities, as well as provisions amending capital buffer requirements applicable to credit institutions.

Other regulations issued by the National Bank of Romania:

- NBR Regulation No. 5/2022 amending and supplementing NBR Regulation No. 5/2013 on prudential requirements for credit institutions and repealing certain legal acts, which ensures:
 - the transposition in the national regulatory framework of the main provisions of EBA Guidelines on loan origination and monitoring – EBA/GL/2020/06. The Guidelines specify the internal governance arrangements for granting and monitoring of credit facilities throughout their life cycle;
 - the exercise of the national liquidity option set out in 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 possibility for credit institutions to no longer take into consideration the impact of derivatives contracts in terms of the net stable funding ratio (NSFR) if the counterparty is the ECB or the central bank of a Member State, inter alia the repeal of the national liquidity regulations following the entry into force of the European provisions in this field. In this context, the NBR issued the Instructions of 5 April 2022 on terminating the applicability of the Instructions of 26 July 2013 on the treatment of the amounts recorded in the accounts of group 90 – “Loan commitments” for calculating and reporting the liquidity ratio and the high liquidity risk;
- the issue of NBR Order No. 6/2021 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer, prepared so as to implement NCMO Recommendation No. R/7/2021 on the countercyclical capital buffer. According to this, as of 17 October 2022, the countercyclical buffer rate applicable to exposures from loans in Romania, held by credit institutions as defined in Article 4(1)(1) of Regulation (EU) No 575/2013 is 0.5 percent of the total risk exposure amount calculated in accordance with Article 92(3) of Regulation (EU) No 575/2013.
- the issue of NBR Order No. 7/2021 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs), prepared so as to implement the Recommendation of the National Committee for Macroprudential Oversight No. R/8/2021 on the capital buffer for other systemically important institutions in Romania. Pursuant to this Order, as of 01 January 2022, Romanian O-SIIs shall maintain an O-SII buffer, whose level is provided in the order and is based on the total risk exposure amount, calculated in compliance with Article 92(3) of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

2.2. Regulation of non-bank financial institutions

In September 2021, the NBR issued Regulation No. 3/2021 amending NBR Regulation No. 20/2009 on non-bank financial institutions, which aimed at:

- (i) amending the registration criteria with the Special Register of non-bank financial institutions (NBFIs) by removing the connection with the Lombard rate in the case of consumer credit with an initial duration exceeding 90 days and replacing the related indicators with a fixed threshold of the annual percentage rate of charge (APRC) of 50 percent for consumer loans in lei, and 33.3 percent respectively for consumer loans in foreign currency or indexed to the exchange rate of a foreign currency;
- (ii) introducing a new registration criterion with the Special Register consisting in recording, at the end of the quarterly reporting period, a value above one for the ratio of the balance of guarantees issued and guarantee commitments made by NBFIs to the equity of NBFIs, in order to strengthen the regime applicable to NBFIs that issue guarantees/make guarantee commitments;
- (iii) specifying explicit criteria for assessing if the management of NBFIs entered into the General Register/Special Register meets the requirements for professional experience.

2.3. Regulation of payment institutions

With respect to prudential regulation, the regulatory framework was supplemented via the issue, in December 2021, of NBR Regulation No. 5/2021 amending NBR Regulation No. 4/2019 on payment institutions and account information service providers.

NBR Regulation No. 5/2021 aimed to adapt the secondary regulatory framework related to payment institutions and account information service providers in order to ensure a high level of precision and elasticity in the processing of authorisation/registration requests, by increasing flexibility and clarifying certain aspects of the authorisation/registration documentation and by enhancing the transparency of the way in which the principle of proportionality is applied so as to facilitate access to activity for these categories of payment service providers.

The major novelties brought by NBR Regulation No. 5/2021 referred to:

- (i) clarifying the expectations of the National Bank of Romania on the level of detail of the documentation for the authorisation/registration process and establishing some procedural aspects for the situations when the NBR rejected the request for authorisation/registration or when the applicant withdrew the request;
- (ii) revising and simplifying certain aspects of the requirements for internal and external audit mechanisms, increasing the flexibility of requirements for the activity and business plans, as well as adapting the requirements for the internal framework for complying with the legal obligations related to preventing and combating money laundering and terrorist financing to the particulars of the activity;
- (iii) providing details on the manner of complying with the requirement provided in Art. 37 of Law No. 209/2019 on payment services and amending some legal acts

related to the prohibition of the multiple use of eligible elements to calculate own funds that are available to a payment institution that carries out other commercial activities other than payment service provision (hybrid payment institutions).

2.4. Accounting regulations

In 2021, the reporting regulations so as to meet the information requirements of the Ministry of Finance were updated by issuing NBR Order No. 3/2021 amending and supplementing NBR Order No. 2/2020 approving the Methodological norms on preparing the annual accounting reports designed to meet the information requirements of the Ministry of Finance, applicable to credit institutions, and by issuing NBR Order No. 4/2021 amending and supplementing NBR Order No. 10/2012 approving the half-yearly accounting reporting system applicable to the entities within the NBR's accounting regulatory scope, with a view to ensuring a uniform reporting system economy-wide.

Given the provisions of NBR Order No. 8/2019 on the application of International Financial Reporting Standards by non-bank financial institutions, as subsequently amended and supplemented, according to which non-bank financial institutions shall keep accounting records in compliance with the treatments provided by IFRS and shall prepare and publish, in accordance with the law, individual annual financial statements compliant with IFRS as of 1 January 2023, the National Bank of Romania prepared the draft of the Order on amending and supplementing NBR Order No. 27/2010 approving the Accounting Rules consistent with the International Financial Reporting Standards applicable to credit institutions, republished in order to include non-bank financial institutions in the scope of accounting rules compliant with IFRS that have been so far applied by credit institutions. This draft is near completion.

2.5. Other legal acts applicable to institutions within the scope of the NBR

In order to implement the NCMO Recommendation No. R/5/2021 on implementing Recommendation ESRB/2020/12 on identifying legal entities, the NBR took the following measures:

- (i) On 30 August 2021, the NBR published on its website a Press release on NCMO Recommendation No. R/5/2021, which showed that, considering the benefits related to ensuring financial stability, monitoring systemic risks and contagion phenomena, preventing and combating money laundering, which can help strengthen the prerequisites for maintaining a healthy and robust financial-banking system, the National Bank of Romania recommends institutions under its supervisory remit (credit institutions, electronic money institutions, payment institutions and non-bank financial institutions) to have an LEI code.
- (ii) Two regulatory drafts are currently being prepared to amend some legal acts issued by the NBR in the field of accounting and prudential regulation, applicable to the entities within the NBR's regulatory scope, in order to include in their provisions/ in the reporting templates provided by them the LEI code of the reporting entity, if such exists, and, respectively, the LEI code of any other legal entity about which

information must be reported and which has a LEI code. These drafts were submitted to public consultation at end-2021.

In 2021, the NBR analysed the needs to amend Regulation No. 17/2012 on certain lending conditions, as subsequently amended and supplemented: (1) following the proposals received from the banking community or the analyses conducted by the National Bank of Romania both in terms of risk and the practical application of the Regulation, as well as (2) to ensure compliance with the recommendations relevant for avoiding the over-indebtedness of individuals in Section 5 of EBA Guidelines on loan origination and monitoring – EBA/GL/2020/06.

Specifically, in early 2022, the NBR issued Regulation No. 3/2022 amending NBR Regulation No. 17/2012 on certain lending conditions, which aimed at:

- (i) amending the calculation basis for the quarterly threshold (15 percent) that limits the volume of loans that can be granted with a higher level of indebtedness than regulated, by reference to the arithmetic mean of the quarterly volumes of consumer loans/real estate investment loans granted by the creditor in the previous four quarters;
- (ii) establishing differential treatment for loans granted for purchasing a second dwelling, by setting levels for the LTV (loan-to-value) ratio that are 10 percentage points below the levels in effect on the publication date of the Regulation (and which will remain applicable for the purchase of a first dwelling);
- (iii) ensuring compliance with the recommendations relevant for avoiding the over-indebtedness of individuals in Section 5 of EBA Guidelines on loan origination and monitoring – EBA/GL/2020/06²¹⁰.

On 8 March 2022, Law No. 42/2022 amending and supplementing Law No. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund was published in Monitorul Oficial al României No. 226/2022. The amendments to Law No. 311/2015 primarily referred to establishing the possibility that, in exceptional cases, the National Bank of Romania, based on its assessment, may grant short-term loans to the Bank Deposit Guarantee Fund via repo operations to provide liquidity. These loans cannot exceed 90 calendar days and must be guaranteed with financial instruments accepted as eligible assets for participation in open market operations of the National Bank of Romania.

In order to ensure convergence of prudential supervision tools and practices used nationwide with the best European practices, the national regulatory framework continued to incorporate the guidelines released by the European Banking Authority (EBA) in the area of prudential banking and bank recovery and resolution. To this end, instructions were issued to inform credit institutions that the specifications and details laid down in these guidelines have to be taken into account when applying the regulatory framework. Furthermore, for those provisions in the guidelines including compliance requirements for competent authorities, the National Bank of Romania,

²¹⁰ Full compliance with EBA/GL/2020/06 is also ensured by amending NBR Regulation No. 5/2013 on prudential requirements for credit institutions, as subsequently amended and supplemented, and by issuing the Instructions of 25 March 2022 on loan origination and monitoring.

in its capacity as competent authority, disclosed its decision to apply these provisions via releases published on its official website, thereby informing about considering the provisions of the said guidelines during its activities in its capacity as competent authority.

Since 2021, the National Bank of Romania has analysed and incorporated in its regulatory framework the following guidelines:

- EBA Guidelines on the treatment of structural FX positions in accordance with Article 352(2) of Regulation (EU) No 575/2013 (CRR) – EBA/GL/2020/09, incorporated in NBR Instructions of 28 December 2021 on the treatment of structural FX positions in accordance with Article 352(2) of Regulation (EU) No 575/2013 (CRR);
- EBA Guidelines specifying the criteria to assess the exceptional cases when institutions exceed the large exposure limits of Article 395(1) of Regulation (EU) No 575/2013 and the time and measures to return to compliance pursuant to Article 396(3) of Regulation (EU) No 575/2013 – EBA/GL/2021/09 of 15 September 2021, incorporated in NBR Instructions of 28 December 2021 specifying the criteria to assess the exceptional cases when institutions exceed the large exposure limits of Article 395(1) of Regulation (EU) No 575/2013 and the time and measures to return to compliance pursuant to Article 396(3) of Regulation (EU) No 575/2013;
- EBA Guidelines on criteria for the use of data inputs in the risk-measurement model referred to in Article 325bc of Regulation (EU) No 575/2013 – EBA/GL/2021/07, incorporated in NBR Instructions of 28 December 2021 on criteria for the use of data inputs in the risk-measurement model referred to in Article 325bc of Regulation (EU) No 575/2013;
- EBA Guidelines on legislative and non- legislative moratoria on loan repayments applied in the light of the COVID-19 crisis (EBA/GL/2020/02), incorporated in NBR Instructions of 15 January 2021 amending and supplementing the Instructions of 22 June 2020 on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis, as subsequently amended;
- EBA Guidelines on sound remuneration policies under Directive 2013/36/EU – EBA/GL/2021/04 of 2 July 2021, incorporated in NBR Instructions of 11 February 2022 on sound remuneration policies;
- Guidelines specifying the conditions for the application of the alternative treatment of institutions' exposures related to 'tri-party repurchase agreements' set out in Article 403(3) of Regulation (EU) 575/2013 for large exposures purposes (EBA/GL/2021/01), incorporated in NBR Instructions of 31 May 2021 specifying the conditions for the application of the alternative treatment of institutions' exposures related to 'tri-party repurchase agreements' set out in Article 403(3) of Regulation (EU) 575/2013 for large exposures purposes;
- EBA Guidelines on the applicable notional discount rate for variable remuneration – EBA/GL/2014/01 of 27 March 2014, incorporated in NBR Instructions of 17 May 2021 on the applicable notional discount rate for variable remuneration;
- EBA Guidelines on recovery plan indicators under Article 9 of Directive 2014/59/EU (EBA/GL/2021/11) of 09 November 2021, incorporated in the Instructions of 14 February 2022 on recovery plan indicators;

- EBA Guidelines on loan origination and monitoring (EBA/GL/2020/06) of 29 May 2020, incorporated in NBR Instructions of 25 March 2022 on loan origination and monitoring;
- EBA Guidelines on the monitoring of the threshold and other procedural aspects on the establishment of intermediate EU parent undertakings under Article 21b of Directive 2013/36/EU – EBA/GL/2021/08 of 28 July 2021, incorporated in NBR Instructions of 01 February 2022 on the calculation and monitoring method of the EUR 40 billion threshold of the total value of assets in the Union of a third-country group;
- EBA Guidelines on the management of interest rate risk arising from non-trading book activities (EBA/GL/2018/02) of 19 July 2018, incorporated in NBR Instructions of 11 February 2022 on the management of interest rate risk arising from non-trading book activities.

The National Bank of Romania, through its representatives in the EU institutions and bodies, has played an active part, by formulating positions, in the preparation of EU strategies in the fields of prudential regulation, bank deposit guarantee, cryptocurrency market regulation, anti-money laundering and countering the financing of terrorism regulatory framework, as well as in completing the drafts of directives, regulations, regulatory technical standards, implementing technical standards or guidelines within its scope of activity, as well as in revising their translation.

3. Regulatory guidelines in 2022

- to amend and supplement the regulatory framework applicable to credit institutions in areas such as risk management, outsourcing and internal governance;
- to participate in the negotiations held within the EU Council's working group with regard to the legislative proposal for transposing into EU legislation the final Basel III Accord (Basel III package), comprising the following legislative proposals:
 - (i) proposal for a directive amending Directive 2013/36/EU (CRD 6) and Directive 2014/59/EU;
 - (ii) proposal for a regulation amending Regulation (EU) No 575/2013 (CRR 3);
 - (iii) proposal for a regulation amending Regulation (EU) No 575/2013 in the field of resolution and Directive 2014/59/EU – the so-called "Daisy Chain" proposal;
- to provide technical support to the legislator to complete the draft legal act with a view to ensuring the transposition of Regulation (EU) 2020/1503 of the European Parliament and of the Council on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937;
- to provide technical support to the legislator to complete the draft legal act amending and supplementing GEO No. 99/2006 on credit institutions and capital adequacy amid the changes brought about by the new IFD-IFR European legislative package (Article 62 of Directive (EU) 2019/2034 of the European Parliament and of the Council of 27 November 2019 on the prudential supervision of investment

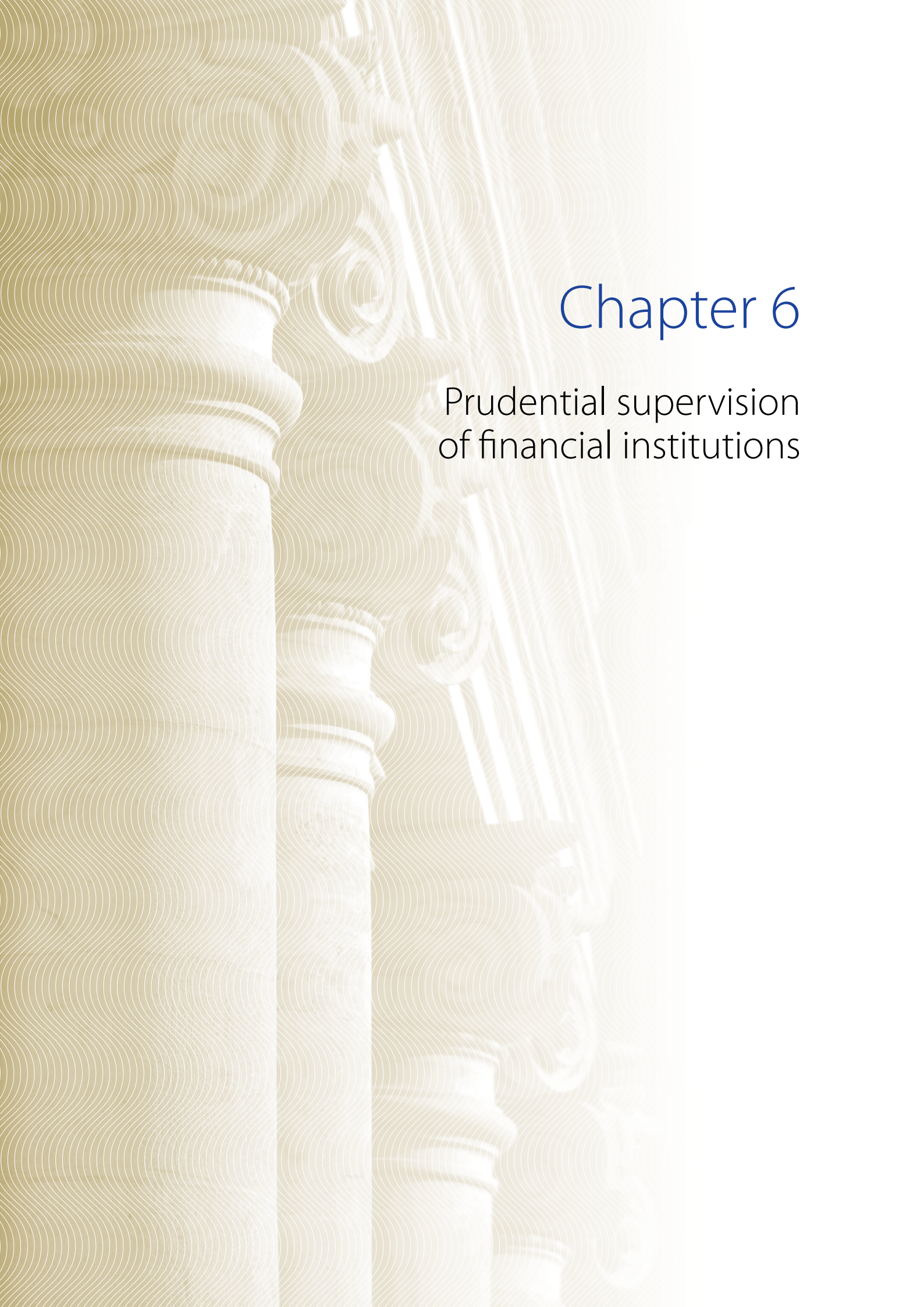
firms and amending Directives 2002/87/EC, 2009/65/EC, 2011/61/EU, 2013/36/EU, 2014/59/EU and 2014/65/EU – IFD and to modify the definition of credit institution based on Regulation (EU) 2019/2033 of the European Parliament and of the Council of 27 November 2019 on the prudential requirements of investment firms and amending Regulations (EU) No 1093/2010, (EU) No 575/2013, (EU) No 600/2014 and (EU) No 806/2014 – IFR);

- to provide technical support to the legislator to complete the draft legal act (primary legislation) with a view to ensuring the transposition of Directive (EU) 2019/2162 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU. After the adoption and entry into force of the draft legal act ensuring the transposition of Directive (EU) 2019/2162 at the level of primary legislation, the NBR will promote and approve the draft legal act (secondary legislation) ensuring the transposition of some technical provisions set forth in the European directive;
- to address the market needs, the central bank aims to take steps to enhance the transparency of expectations on the preparation of documents for the licensing/ registration of payment institutions and account information service providers, in line with the requirements provided for in NBR Regulation No. 4/2019 and for the licensing of electronic money institutions, in line with the requirements laid down in NBR Regulation No. 5/2019, by compiling non-regulatory guidelines and samples of templates enabling a different approach in terms of the nature, complexity or expansion of activity and publishing them in a dedicated section on the NBR's website;
- to adapt the secondary regulatory framework for electronic money institutions with a view to coming into line with the secondary regulatory framework for payment institutions and account information service providers, by enhancing the transparency of implementing the principle of proportionality in order to facilitate the market access of these undertakings;
- to participate in the working groups of the EU Council, the European Commission and the European Banking Authority when the said groups address issues related to regulation and licensing;
- to participate further in the negotiations held within the European institutions with regard to the draft EU Regulation on markets in crypto-assets (Markets in crypto-assets regulation – MiCA);
- to analyse and include in the regulatory framework the EBA guidelines/recommendations applicable to the competent authority and/or the institutions within the National Bank of Romania's regulatory scope via the issue of press releases, instructions or regulations, as applicable, in the fields of prudential banking, payment services, anti-money laundering and countering the financing of terrorism, deposit guarantee and bank resolution, as well as to update the accounting and financial reporting regulations via the issue of orders, etc.;
- to analyse EU (delegated and implementing) regulations and prepare the regulatory framework for the appropriate implementation of their provisions into national law;
- to formulate proposals concerning the review of the legal and regulatory framework for non-bank financial institutions.

The main objectives in the field of accounting relate to updating the accounting regulations applicable to the entities within the NBR's regulatory scope, from the perspective of IFRS implementation as a basis of accounting and for preparing individual annual financial statements by non-bank financial institutions entered in the General Register, and the regulatory framework for preparing periodic financial statements by non-bank financial institutions.

The other objectives in the field of accounting and the foreign exchange regime are to update:

- the reporting regulations so as to meet the information requirements of the Ministry of Finance, with a view to ensuring a uniform reporting system economy-wide;
- the accounting regulations applicable to the entities within the NBR's regulatory scope so as to include the changes in the IFRS provisions adopted across the EU, as well as the possible proposals generated by the actual application of the IFRS, as received from credit institutions and audit firms, and implement the amendments made to the national and EU accounting regulatory framework;
- the FINREP reporting framework at solo level, with a view to including the amendments that the EBA can make to the consolidated FINREP reporting framework and/or incorporating the proposals following the actual implementation of the FINREP reporting framework and the regular reporting framework for branches in Romania of credit institutions having their head offices in other Member States;
- the regulation governing the foreign exchange regime in line with the developments in the relevant EU and national regulatory framework and with the objectives of the National Bank of Romania.

The background of the slide features a photograph of classical columns, likely from a government or institutional building, rendered in a light, faded tone. Overlaid on the left side of the image is a decorative pattern of thin, concentric, wavy lines in a golden-brown color, creating a textured, ripple-like effect.

Chapter 6

Prudential supervision of financial institutions

1. Supervision of credit institutions

In accordance with Government Emergency Ordinance No. 99/2006 on credit institutions and capital adequacy, approved and amended by Law No. 227/2007, as subsequently amended and supplemented, the National Bank of Romania shall carry out the prudential supervision of credit institutions, Romanian legal persons, and of their branches established in other Member States or in third countries, both on an individual basis and on a consolidated or sub-consolidated basis, as appropriate.

In 2021, the scope of microprudential supervision covered 26 credit institutions, Romanian legal entities, whose aggregate net assets totalled lei 562,002,9 million at 31 December²¹¹. These included 4 credit institutions with majority domestic private capital, 3 credit institutions with fully or majority state-owned capital, and 19 credit institutions with majority foreign capital. Moreover, 8 branches²¹² of credit institutions having their head offices in other EU Member States, with total assets amounting to lei 77,751.6 million, performed banking activity on the territory of Romania, their supervision falling within the remit of the competent authority in the home country of the parent credit institution and/or the European Central Bank, as applicable.

In addition, a number of 314 institutions intend to provide banking services directly on the territory of Romania, according to the notifications received by the National Bank of Romania from competent supervisory authorities in other EU Member States up to 11 May 2022.

1.1. Size and structure of the banking system

At 31 December 2021, net assets in the balance sheet of the Romanian banking sector totalled lei 639,754.5 million, up 14.2 percent year on year. The number of credit institutions functioning in Romania remained the same throughout 2021 (Table 6.1), and changes occurred only in terms of size or shareholding structure.

Table 6.1
Credit institutions by ownership

	number of credit institutions, end of period	
	2020	2021
Credit institutions, Romanian legal entities, of which:	26	26
Fully or majority state-owned capital	3	3
Majority private capital, of which:	23	23
– with majority domestic capital	3	4
– with majority foreign capital	20	19
Branches of foreign credit institutions	8	8
Total credit institutions	34	34

²¹¹ According to financial information reported on an individual basis pursuant to the provisions of NBR Order No. 9/2017 approving the Methodological Norms on the FINREP reporting framework at solo level, in compliance with the International Financial Reporting Standards, applicable to credit institutions for prudential purposes.

²¹² Not including Hoist Finance AB (publ) Stockholm – Bucharest Branch, which does not yet perform banking activity.

Amid the ongoing process of acquisitions and mergers on the local banking market, the following changes in the shareholding structure are worth noting:

- in September 2021, Vista Bank S.A. acquired Crédit Agricole România S.A.;
- in November 2021, Banca Transilvania S.A. acquired all the shares (100 percent) held by Getin Holding Group in the share capital of Idea Bank S.A.. In this transaction, Banca Transilvania S.A. also acquired 100 percent of the share capital of the companies in the Idea Bank Group in Romania, i.e. Idea Leasing IFN S.A. and Idea Broker de Asigurare S.R.L.

Moreover, in August 2021, Blom Bank France S.A. PARIS – Romania branch changed its name to Banque Banorient France S.A. – Romania branch.

Specifically, the market share in terms of net assets owned by credit institutions with majority domestic private capital widened from 18.9 percent at 31 December 2020 to 20.4 percent at 31 December 2021, and that owned by credit institutions with majority state capital increased from 10.6 percent at 31 December 2020 to 11.4 percent at 31 December 2021 (Table 6.2). At the same time, the share of credit institutions with majority foreign capital (excluding branches of foreign credit institutions) narrowed almost to the same extent, from 57.9 percent to 56.0 percent.

	end of period			
	Net assets			
	2020		2021	
	lei mill.	%	lei mill.	%
Credit institutions with domestic capital, of which:	165,040.7	29.5	203,683.4	31.8
– with majority state-owned capital	59,560.0	10.6	73,325.0	11.4
– with majority private capital	105,480.7	18.9	130,358.4	20.4
Credit institutions with majority foreign capital	324,603.7	57.9	358,319.5	56.0
I. Credit institutions, Romanian legal entities	489,644.4	87.4	562,002.9	87.8
II. Branches of foreign credit institutions	70,389.8	12.6	77,751.6	12.2
Total credit institutions with majority private capital, including branches of foreign credit institutions	500,474.2	89.4	566,429.5	88.6
Total credit institutions with majority foreign capital, including branches of foreign credit institutions	394,993.5	70.5	436,071.1	68.2
Total credit institutions (I+II)	560,034.2	100.0	639,754.5	100.0

Table 6.2

Market share of credit institutions

The changes in the shareholding structure of credit institutions also reflected in their market share in terms of capital, which adjusted accordingly (Table 6.3). The share of credit institutions with majority foreign capital in aggregate capital of the banking sector (excluding branches of foreign credit institutions) dropped from 59.9 percent at 31 December 2020 to 58.4 percent at 31 December 2021.

The territorial network of credit institutions continued to shrink in 2021 as well, with 181 branches and agencies ceasing operations, while the number of banking sector employees declined by 1,011 persons.

	end of period			
	Share/endowment capital			
	2020		2021	
	lei mill.	%	lei mill.	%
Credit institutions with domestic capital, of which:	11,102.9	38.1	11,994.9	39.6
– with majority state-owned capital	5,036.6	17.3	5,036.6	16.6
– with majority private capital	6,066.3	20.8	6,958.3	23.0
Credit institutions with majority foreign capital	17,428.7	59.9	17,706.4	58.4
I. Credit institutions, Romanian legal entities	28,531.6	98.0	29,701.3	98.0
II. Branches of foreign credit institutions	576.4	2.0	602.4	2.0
Total credit institutions with majority private capital, including branches of foreign credit institutions	24,071.4	82.7	25,267.1	83.4
Total credit institutions with majority foreign capital, including branches of foreign credit institutions	18,005.1	61.9	18,308.8	60.4
Total credit institutions (I+II)	29,108.0	100.0	30,303.7	100.0

Table 6.3
Credit institutions as a share
in aggregate capital

1.2. Performance of the banking sector

The banking system was in good condition in 2021 and the levels of prudential indicators were deemed adequate in terms of regulatory requirements. Since the very beginning of the pandemic, measures have been taken regarding the non-distribution of profit dividends by credit institutions, the non-performance of buy-back operations of their own shares and the postponement for a longer period of variable remuneration. These measures have ceased to apply as of October 2021, in line with similar decisions taken at EU level, based on recommendations from the European Systemic Risk Board and the European Banking Authority. Liquidity of the banking sector, determined according to the liquidity coverage requirement (LCR), further stood above the double of regulatory requirement, whereas the non-performing loan ratio continued to decrease throughout the entire year, reaching an all-time low at end-2021 (3.35 percent). The banking system remained profitable, as the financial result was better than in the year before, 76 percent of credit institutions having reported positive financial results at 31 December 2021 against 59 percent at end-2020.

The National Bank of Romania has taken the necessary measures to ensure the proper management of non-performing and forborne exposures. Credit institutions have been recommended to ensure that impairment adjustments are made at an appropriate level to cover expected losses and, where necessary, to develop a strategy to reduce NPL ratio and ensure the efficient management of the non-performing exposures stock.

Recording positive performances, fulfilling prudential requirements and preserving the adequate levels of indicators contributed to the proper functioning of the banking system during the pandemic, as well as to the strengthening of the capacity to cope with the current geopolitical context.

Monitoring of own fund requirements. Capital adequacy

In line with the prudential framework in effect at EU level, directly applicable at national level, credit institutions shall at all times meet the following minimum own

funds requirements²¹³: 8 percent for total capital ratio, 6 percent for Tier 1 capital ratio and 4.5 percent for Common Equity Tier 1 capital ratio.

These general prudential requirements are supplemented by individual measures that the National Bank of Romania, as competent authority, may establish under the supervisory review and evaluation process (SREP), as well as by requirements for capital buffers. The capital conservation buffer, consisting of Common Equity Tier 1 capital, represents 2.5 percent of the total risk exposure amount of credit institutions, Romanian legal entities. With regard to the countercyclical capital buffer, it is further set at 0 (zero) percent, and as of October 2022²¹⁴ it will be raised to 0.5 percent of the total risk exposure amount.

Furthermore, credit institutions, Romanian legal entities, shall maintain the systemic risk buffer at 0 (zero) percent, 1 percent or 2 percent, depending on the averages of NPL ratio and NPL coverage by provisions. As of February 2022, according to NBR Regulation no. 2/2022, when a credit institution is subject to a systemic risk buffer, the latter will be cumulated with the O-SII buffer. While the above-mentioned buffers apply to all credit institutions authorised by the National Bank of Romania, the O-SII buffer requirement is applicable only to those institutions identified at national level as "other systemically important institutions" (O-SIIs), pursuant to Article 269 of NBR Regulation No. 5/2013 on prudential requirements for credit institutions, as subsequently amended and supplemented.

For 2021, based on the assessment of the data reported at 31 December 2019²¹⁵, 8 credit institutions were identified as O-SIIs (Banca Comercială Română S.A., Raiffeisen Bank S.A., Banca Transilvania S.A., CEC Bank S.A., UniCredit Bank S.A., BRD – Groupe Société Générale S.A., Alpha Bank România S.A., OTP Bank România S.A.).

Starting 1 January 2022, based on the assessment of the data reported at 30 June 2021, Banca de Export-Import a României EXIMBANK S.A.²¹⁶ was also added to this group.

Throughout 2021, credit institutions posted adequate values for capital ratios, namely the total capital ratio, Tier 1 capital ratio and Common Equity Tier 1 capital ratio.

Across the banking system, total capital ratio decreased, from 25.1 percent in December 2020 to 23.3 percent at end-2021 (Table 6.4). Thus, in December 2021, total own funds of credit institutions, Romanian legal entities, amounted to lei 57,895.2 million, down 1.0 percent from the year before, whereas the total risk exposure amount increased by 6.7 percent, totalling lei 248,280.0 million.

The breakdown shows that Tier 1 capital and implicitly Common Equity Tier 1 capital further hold the prevailing share in total own funds, the former accounting for 89.4 percent and the latter for 89.0 percent, respectively.

²¹³ In line with Article 92 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

²¹⁴ Pursuant to NBR Order No. 6/2021 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer.

²¹⁵ NBR Order No. 5/2020 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs).

²¹⁶ NBR Order No. 7/2021 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs).

At 31 December 2021, Tier 1 capital ratio and Common Equity Tier 1 capital ratio exceeded the required thresholds (of 6 percent and 4.5 percent, respectively): 20.9 percent and 20.8 percent, respectively.

At end-2021, Tier 1 capital and Common Equity Tier 1 capital both posted year-on-year drops of approximately 4.1 percent and 4.2 percent, respectively, from lei 54,017.8 million at 31 December 2020 to lei 51,779.6 million at end-2021 for the former, and from lei 53,779.3 million at 31 December 2020 to lei 51,541.0 million at 31 December 2021 for the latter.

This solvency level and the prevalence of Common Equity Tier 1 capital in total own funds pave the way for a good resilience of the Romanian banking sector, at least in the short and medium term. The central bank required credit institutions to adopt the necessary measures in order to preserve adequate levels for capital ratios, for the coverage ratio of non-performing loans and advances, and for the non-performing loan (NPL) ratio, and to closely monitor their developments as well.

Indicators	percent	
	2020	2021
Capital adequacy		
Total capital ratio (previously, solvency ratio)	25.1	23.3
Tier 1 capital ratio	23.2	20.9
Common Equity Tier 1 capital ratio	23.1	20.8
Leverage ratio	10.3	8.6
Asset quality		
Loans to customers (gross) / Total assets (gross)	51.6	53.6
Interbank loans and investments (gross) / Total assets (gross)	18.4	16.3
Impaired loans to non-bank customers (net) / Total loans to customers (net)	1.3	1.1
Impaired loans to non-bank customers (net) / Total assets (net)	0.7	0.6
Impaired loans to non-bank customers (net) / Total liabilities	0.7	0.7
Non-performing loan ratio (EBA definition) ¹	3.8	3.4
Profitability		
ROA (Net income / Total assets, average)	1.0	1.4
ROE (Net income / Total equity, average)	8.7	13.3
Liquidity		
Immediate liquidity	48.2	47.2
Liquidity ratio ² (effective liquidity/required liquidity):		
– MB ≤ 1 month	1.7	1.5
– 1 month < MB ≤ 3 months	7.8	7.0
– 3 months < MB ≤ 6 months	14.1	11.2
– 6 months < MB ≤ 12 months	12.7	14.1
– 12 months < MB	12.8	11.2
(1) Following the implementation of the new IFRS 9 standard on 1 January 2018 and pursuant to the provisions of NBR Order No. 9/2017, the "non-performing loan ratio (EBA definition)" is calculated as a ratio of the gross carrying amount of non-performing loans and advances to the total gross carrying amount of loans and advances.		
(2) The liquidity ratio is expressed in units.		
MB = maturity bucket		

Table 6.4
Key indicators of the
banking system

As of 28 June 2021, the requirement regarding the calibration of the leverage ratio at minimum 3 percent entered into force, pursuant to the provisions of Regulation (EU) 2019/876 amending Regulation (EU) No 575/2013.

At 31 December 2021, the leverage ratio for credit institutions in Romania was 8.6 percent according to the transitional definition, and 8.1 percent according to the fully phased-in one, standing below the level reported in December 2020, which was around 10.3 percent according to the transitional definition and 10.0 percent according to the fully phased-in one.

Monitoring of asset quality

Bank asset quality remained adequate throughout 2021, the non-performing loan ratio followed a downward trend, and NPL coverage by provisions (coverage ratio) rose by approximately 3 percentage points, which indicated an exit from the moratoria provisions without a significant impact. The main asset quality indicators posted values outside the high-risk ranges, according to the EBA-defined thresholds. These trends highlighted the NBR's prudent stance via the adopted measures, in line with those established at EU level, which aimed, among other things, to ease the lending terms in case of requests for the deferred payment of loan instalments by individuals and companies whose revenues had been impacted by the pandemic.

The non-performing loan ratio fell by 0.4 percentage points compared to end-2020, reaching 3.4 percent at end-2021. The indicator's pace of decline slowed down in the context of the COVID-19 pandemic, being favoured by the hefty lending dynamics and the balance-sheet clean-up. The indicator falls into the EBA's intermediate risk bucket²¹⁷, yet remains higher than the EU average (2.0 percent, December 2021).

Behind the lower NPL ratio (as an average across the banking system) stood, to a large extent, the increase in exposures from loans and advances by 13.5 percent (from lei 349,541.7 million in December 2020 to lei 396,664.3 million in December 2021), and also the slight drop by 0.8 percent in non-performing exposures from loans and advances (from lei 13,398.8 million in December 2020 to lei 13,293.6 million in December 2021).

The same improvement trend was also noted in the case of indicators on impaired loans to non-bank customers (net value) which, in 2021, reduced their shares in the total loan portfolio by 0.2 percentage points (from 1.3 percent to 1.1 percent) and in net assets by 0.1 percentage points (from 0.7 percent to 0.6 percent).

Moreover, NPL coverage by provisions (coverage ratio) for the banking sector, calculated based on the EBA definition, continued to improve throughout 2021, the average standing at 66.1 percent, a 2.8 percentage point rise compared to end-2020 (63.3 percent). At the same time, the coverage ratio is in the least risky category as

²¹⁷ The prudential range for intermediate risk according to the EBA for the assessment of the NPL ratio is between 3 percent and 8 percent.

defined by the EBA²¹⁸ and stands above the EU average (44.5 percent in December 2021).

Furthermore, provisions also rose proactively for those exposures for which credit institutions must set up allowances to cover expected credit losses²¹⁹ throughout the life of the loan. Loans in Stage 2 of impairment came in at lei 50.2 billion in December 2021 (increases of 2.5 percent versus December 2020 and of 56.7 percent against December 2019), while the adjustments related to this credit category totalled lei 4.4 billion at end-2021 (rises of 7.7 percent versus December 2020 and of 109.7 percent against December 2019).

The restructured loans ratio went up slightly (by 0.2 percentage points compared to end-2020), reaching 2.6 percent in December 2021 and thus reversing the downtrend of the past years, but stayed in the EBA's medium-risk bucket²²⁰, amid the faster increase, i.e. by 22.7 percent, in the volume of exposures from restructured loans and advances versus the 13.5 percent rise in the exposures from loans and advances.

Monitoring of liquidity requirements

Since the onset of the pandemic, the Romanian banking sector has maintained a prudent stance regarding its balance sheet structure, which fostered an adequate management of the liquidity risk. The liquidity reserves of the banking sector stood, throughout 2021, above the minimum requirement and the European averages, providing an increased capacity to absorb potential shocks.

In order to closely monitor liquidity, in addition to the indicators regulated by EU legislation (the liquidity coverage ratio – LCR and the net stable funding ratio – NSFR) and also by national legal acts (the liquidity ratio), a series of indicators²²¹ reported on a daily or weekly basis were used, such as immediate liquidity and the deposits taken from individuals and legal entities.

Liquidity indicators remained well above the specific requirements in place throughout the entire period since the beginning of the pandemic. The liquidity coverage ratio (LCR) further stood well above the regulatory requirement at aggregate level, i.e. 238.8 percent at 31 December 2021 versus the minimum requirement of 100 percent, pointing to a sizeable stock of high-quality liquid assets in a 30-day stress scenario; it also remained significantly above the level of the EU banking system, which came in at 174.7 percent on the same date.

²¹⁸ The minimum level of the EBA-defined prudential range for the coverage ratio is 55 percent.

²¹⁹ Expected credit losses fall under three different stages of impairment: Stage 1 – 12-month expected losses, when the financial instrument is initially recognised or when its quality is not significantly deteriorated or when its credit risk is low; Stage 2 – lifetime expected losses for the financial instrument whose risk has significantly increased, but does not have objective evidence of impairment; Stage 3 – lifetime expected losses for the financial instrument which has objective evidence of impairment.

²²⁰ The EBA-defined prudential range for intermediate risk for assessing the ratio of restructured loans and advances is between 1.5 percent and 4 percent.

²²¹ Given the introduction of the NSFR, NBR Regulation No. 25/2011 on the liquidity of credit institutions and NBR Order No. 22/2011 on reporting the liquidity indicator and the high liquidity risk were both repealed starting 30 March 2022.

As of 28 June 2021, the provisions of (EU) Regulation 2019/876 amending Regulation (EU) No 575/2013 entered into force at European level, setting a required minimum level of at least 100 percent for the NSFR (Net Stable Funding Ratio). This requirement for the net stable funding ratio shows that the institution has enough stable funding to fulfil its financing needs over a one-year horizon, both under normal circumstances and during crisis situations. The level of the NSFR (174.9 percent) in December 2021 shows that banks in Romania are in a favourable position regarding the adoption of Basel III requirements on stable funding.

At end-2021, immediate liquidity came in at 47.2 percent, whereas the liquidity ratio, determined at national level according to NBR Regulation No. 2/2018 amending and supplementing NBR Regulation No. 25/2011 on the liquidity of credit institutions, reported a level above the minimum requirement for each maturity bucket.

Funds raised from the local market remain the main financing source of the Romanian banking sector, by means of strengthening household deposits, which ensure a proper stability of the banking sector in terms of financing sources.

Specifically, deposits taken from non-bank clients expanded by 13.4 percent compared to end-2020 (from lei 451,633.8 million in December 2020 to lei 512,298.2 million in December 2021). Funding from parent banks increased throughout 2021 by approximately 16.9 percent, totalling lei 15,538.3 million.

Profitability²²²

Banking sector profitability remained high throughout 2021 as well, posting a record net profit of lei 8,167.5 million at year-end, with 26 out of the 34 credit institutions recording positive net financial results. Credit institutions generating a profit had positive results amounting to lei 8,317.6 million, while loss-making banks recorded negative results of lei 150.1 million.

System-wide financial performance was better than in the previous year (by lei 3,142.7 million), mainly due to the reduction in impairment losses by lei 2,512.6 million and to the increase in operating profit by lei 578.2 million.

In 2021 the operating profit went slightly up, posting a 5.5 percent rise compared to 2020, on the back of a relatively equal increase in both operating income and operating expenses (+5.7 percent).

The composition of operating income shows the ongoing prevalence of net interest income, which at end-2021 reached a 65.9 percent share, falling from 67.2 percent a year earlier. Net fee and commission income further took a significant part of operating income, i.e. 18.9 percent, an increase from 16.7 percent in the previous year.

²²² This section covers credit institutions, Romanian legal entities, and branches of foreign credit institutions.

	Net assets		Own funds*	
	lei mill.	%	lei mill.	%
1. Credit institutions with majority domestic capital, of which:	203,683.4	31.84	19,829.6	34.25
1.1. State-owned credit institutions, of which:	73,325.0	11.46	7,489.8	12.94
1. CEC Bank	50,661.1	7.92	5,235.0	9.04
2. Banca de Export-Import a României – Eximbank	14,704.7	2.30	1,284.8	2.22
3. Banca Românească	7,959.2	1.24	970.0	1.68
1.2. Credit institutions with majority private capital, of which:	130,358.4	20.38	12,339.8	21.31
1. Banca Transilvania	125,071.3	19.55	11,684.8	20.18
2. Idea Bank	2,850.7	0.45	252.8	0.44
3. Banca Centrală Cooperatistă Creditcoop	1,699.0	0.27	343.2	0.59
4. Techventures Bank	737.4	0.11	59.0	0.10
2. Credit institutions with majority foreign capital, of which:	358,319.5	56.01	38,065.6	65.75
1. Banca Comercială Română	89,090.5	13.92	8,248.2	14.25
2. BRD – Groupe Société Générale	67,015.3	10.47	7,140.7	12.33
3. Raiffeisen Bank	59,157.4	9.25	5,720.4	9.88
4. UniCredit Bank	50,175.5	7.84	6,036.3	10.43
5. Alpha Bank	18,820.9	2.94	2,209.5	3.82
6. OTP Bank	18,464.2	2.89	2,203.4	3.81
7. Garanti Bank	11,359.4	1.77	1,510.1	2.61
8. Libra Internet Bank	9,590.8	1.50	929.6	1.61
9. Banca Comercială Intesa SanPaolo	6,986.1	1.09	857.0	1.48
10. First Bank	6,941.5	1.08	798.0	1.38
11. Vista Bank	4,455.1	0.70	334.7	0.58
12. Credit Europe Bank	4,332.1	0.68	879.8	1.52
13. Patria Bank	3,826.1	0.60	370.1	0.64
14. Crédit Agricole Bank	2,781.3	0.43	228.8	0.39
15. ProCredit Bank	2,420.6	0.38	199.5	0.34
16. BCR Banca pentru Locuințe	1,306.6	0.20	89.6	0.15
17. Porsche Bank	945.2	0.15	187.4	0.32
18. Banca Română de Credite și Investiții	385.7	0.06	63.4	0.11
19. Aedificium Banca pentru Locuințe	265.2	0.04	59.1	0.10
I. Total credit institutions, Romanian legal entities (1+2)	562,002.9	87.85	57,895.2	100.00
II. Branches of foreign credit institutions, of which:	77,751.6	12.15	...	...
1. ING Bank N.V., Amsterdam	59,306.1	9.27	...	...
2. Citibank Europe plc, Dublin	12,195.5	1.91	...	...
3. BNP Paribas S.A. Paris	2,552.5	0.40	...	...
4. BNP Paribas Personal Finance S.A. Paris	1,734.0	0.27	...	...
5. TBI Bank EAD Sofia	794.3	0.12	...	...
6. Banque Banoriet France S.A. Paris	658.5	0.10	...	...
7. Alior Bank S.A. Varșovia	482.6	0.08	...	...
8. Bank of China (CEE) Ltd	28.1	0.00	...	...
Total credit institutions (I+II)	639,754.5	100.00	...	...

*) branches of foreign credit institutions do not report own funds

Table 6.5.
Net assets and own funds as
at 31 December 2021

Return on assets (ROA) reached 1.4 percent at end-2021, up by 0.4 percentage points versus 2020, given the rise in net profit (by 62.5 percent), along with the increase in average total assets (by 13.8 percent, from lei 526,969.2 million to lei 599,894.3 million).

Return on equity (ROE) also posted a higher level, coming in at 13.3 percent at end-2021, up 4.6 percentage points from end-2020.

In terms of determinants, the higher ROE was ascribable, on the one hand, to the greater net profit, and on the other hand, to the rise in average total equity (+6.2 percent).

1.3. Assessment of banking risks

In the exercise of the tasks conferred on it by the regulatory framework on credit institution supervision, the National Bank of Romania, by pursuing supervisory activities and the supervisory review and evaluation process (SREP), continuously assesses risks and viability of credit institutions and takes, where required, the necessary measures to prevent and contain banking risks.

According to the revised SREP methodology, the supervisory authority assigns to each credit institution an overall score reflecting the overall viability of the institution, which is based on a scale of 1 to 4, where 1 means a low level of risk, 2 – a medium-low level of risk, 3 – a medium-high level of risk and 4 – a high level of risk. When the institution is considered to be “failing” or “likely to fail”, it is assigned a score of 5 and the interaction procedure with the resolution authority is activated.

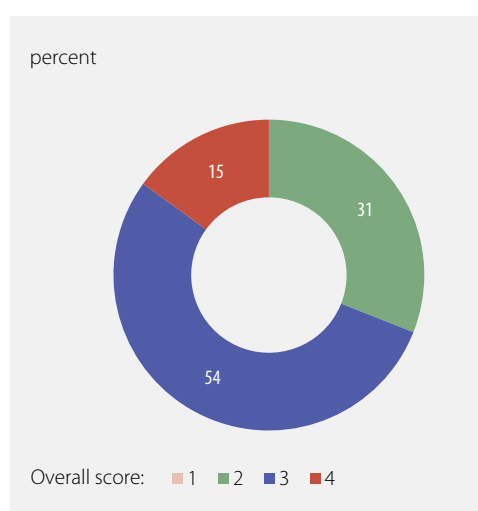


Chart 6.1

Distribution of credit institutions subject to SREP by overall score

Following the SREP assessment conducted in 2021, the assigned scores were as follows: 31 percent of the 26 credit institutions were assigned an overall score of 2 (medium-low level of risk), 54 percent an overall score of 3 (medium-high level of risk), 15 percent an overall score of 4 (high level of risk), and none received an overall score of 5 (Chart 6.1). In addition, the average and median of total SREP capital requirements (TSCR) across the banking system were of 12.2 percent and 12.3 percent.

The distribution of credit institutions by including SREP elements in risk categories shows that a score of 2 was assigned in most cases to capital adequacy, liquidity adequacy and risks to liquidity (69 percent, 50 percent and 54 percent, respectively, of the assessed institutions). A score of 3 was mostly applied to the assessment of risks to capital adequacy, the business model and internal governance (65 percent, 46 percent and 50 percent, respectively, of the assessed institutions) (Chart 6.2).

As far as the establishment of the supervisory programme is concerned, starting in 2021, the National Bank of Romania aims to correlate the national supervisory objectives with the Union strategic supervisory priorities. These priorities may add to those established depending on the specifics and the particulars of the domestic banking system. In this vein, the European Banking Authority (EBA) shall identify,

with the contribution of the national competent authorities, up to two priorities of Union-wide relevance, which the latter shall take into account when drawing up their work programmes.

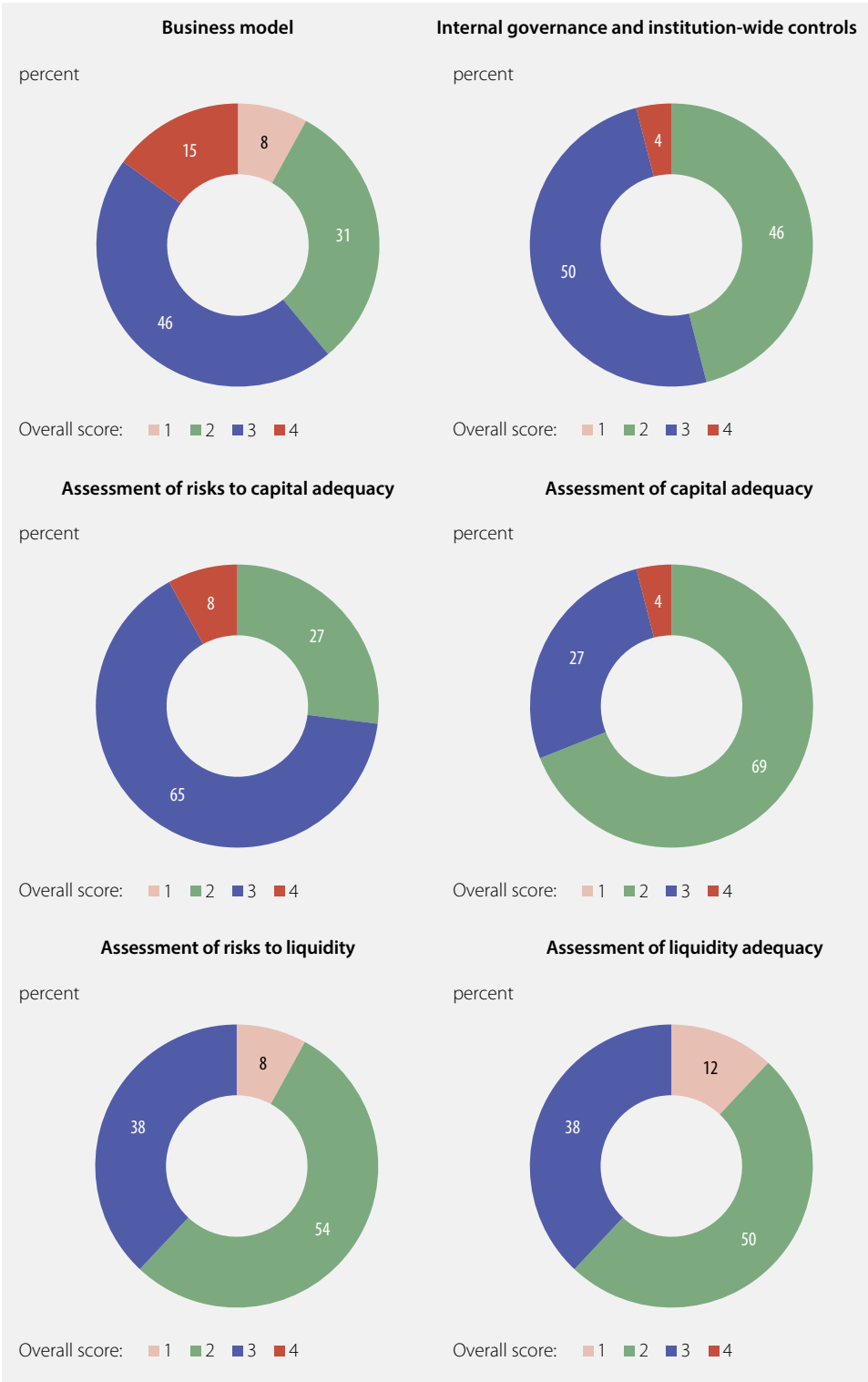


Chart 6.2
SREP elements by score assigned

The process of identification and implementation of Union strategic supervisory priorities covers a period of three years, during which the progress made with respect to the mitigation or the elimination of the vulnerabilities identified and to the improvement in supervisory practices following the implementation of the priorities selected is monitored. In this context, in 2020, the Union strategic supervisory priorities identified by the EBA for a three-year period were business model sustainability and adequate governance structures, these priorities being also integrated into the supervisory programme of the National Bank of Romania.

The supervisory programme consists of: (i) on-site inspections conducted by the Supervision Department staff empowered in this sense, at the offices of credit institutions and (ii) off-site ongoing supervision, which entails constant interaction with the supervised institutions and continuous assessment of risks, based on the correspondence with them and the reports submitted to the supervisory authority, regular meetings with the representatives of the institutions, the regular analysis of the financial situation, the quarterly monitoring of the key indicators defined, as well as off-site supervisory actions, based on the reports submitted by the institutions under the supervisory remit of the NBR, the correspondence with them and other information that may be required in order to carry out the assessments.

In line with the annual inspection programme, during 2021, 26 supervisory actions were conducted at the 26 credit institutions, Romanian legal entities. In the context of the COVID-19 pandemic and the related restrictions, the on-site supervisory actions that were scheduled at the head offices of banks (on-site inspections) were carried out as remote supervisory actions.

The on-site supervisory programme comprised asset quality and credit risk management reviews, as well as the assessment of ICT and security risks management, and operational resilience.

The continuous risk assessment referred to the assessment of the viability and sustainability of the credit institution (business model assessment), the assessment of internal governance and institution-wide controls, the assessment of risks to capital adequacy, the assessment of risks to liquidity, the assessment of systemic risk and the internal capital adequacy assessment process (ICAAP).

In addition to the scheduled activities, 9 thematic reviews with specific supervisory objectives were also conducted at credit institutions (Table 6.6).

No.	Topics of thematic reviews	No. of reviews
1	Reporting large exposures – exceeding exposure limits	2
2	Combined buffer requirement	1
3	Reporting large exposures, reporting exposures to related parties and operations on preferential terms deducted from Additional Tier 1 capital	1
4	Checking the NPL coverage ratio	1
5	Checking notifications sent to customers of the approval of loan deferral and how they were informed about the amounts to be paid after the expiry of the deferral period	1

Table 6.6
Topics of thematic reviews

– continued –

No.	Topics of thematic reviews	No. of reviews
6	Managing prudential risks, money laundering and terrorist financing risks in the business relationship with non-resident payment/electronic money institutions	1
7	Assessing executives with regard to meeting reputation and moral integrity criteria	1
8	Implementing the measure imposed by the NBR on initiating foreclosures	1

With a view to improving the management framework, the implemented strategies, processes and mechanisms and to ensuring an adequate organisation of the activity of credit institutions, based on the reports prepared following supervisory activities, the NBR imposed supervisory measures (Table 6.7) and sanctions, i.e. written warnings (Table 6.8).

Table 6.7

Supervisory measures imposed pursuant to GEO No. 99/2006 on credit institutions, as subsequently amended and supplemented

No.	Measure	No. of cases
1	Strengthening the provisions on governance and internal capital management	30
2	Maintaining own funds at a level higher than the minimum capital requirements	14
3	Reducing the risk inherent to activities, products and systems	1
4	Limiting operations of credit institutions	1
5	Imposing specific liquidity requirements	4
Total		50

Table 6.8

Sanctions imposed in 2021

Type of sanction	No. of cases	Banks	Board members	Executives	Managers
Written warning	10	10	-	-	-
Fine	-	-	-	-	-
Total	10	10	-	-	-

Detailed information about the sanctions imposed on credit institutions are available on the NBR's website, under the "Supervision" section, published in accordance with the legal transparency requirements related to the supervisory authority provided in Article 234(4) of Government Emergency Ordinance No. 99/2006 on credit institutions and capital adequacy, as subsequently amended and supplemented. Pursuant to the above-mentioned article, the National Bank of Romania shall publish the sanctions imposed in accordance with Article 229(1) that were not challenged under Article 275 and those for which objections were definitively rejected, as well as information regarding the type and nature of the breach and the identity of the sanctioned natural or legal person, after their notification of the imposed sanction.

In 2021, in the process of prior approval conducted by the National Bank of Romania, pursuant to the legal framework in force (Article 108 of Government Emergency Ordinance No. 99/2006), 108 requests for prior approval were processed related to credit institutions' board members, executives and key function holders, including individuals who were assigned new responsibilities (Table 6.9).

Table 6.9
Number of persons in the category
of those referred to in Article 108
of GEO No. 99/2006, subject to the
NBR's approval in 2021

	TOTAL, of which:	Approved by the NBR	Rejected for non- compliance with the conditions stipulated by the special law*	Rejected following the NBR's assessment made pursuant to Article 109 of GEO No. 99/2006	Request for approval withdrawn by the credit institution
Executives	34	31	-	2	1
Board members	26	25	-	-	1
Key function holders	48	43	-	2	3
Total	108	99	-	4	5
*) Government Emergency Ordinance No. 75/1999 on financial audit, recast					

2. Supervision of guarantee schemes

For the purpose of deposit guaranteeing, the Bank Deposit Guarantee Fund operates in Romania as the statutory deposit guarantee scheme, set up by Government Ordinance No. 39/1996 on the establishment and operation of the Bank Deposit Guarantee Fund, recast, as subsequently amended and supplemented.

At present, the activity carried out by the Fund is regulated by Law No. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund, as subsequently amended and supplemented.

At end-2021, credit institutions' deposits covered by the Bank Deposit Guarantee Fund amounted to lei 263,468.82 million, up by 9.05 percent versus the end of the previous year, the upward trend over the last four years thus persisting.

3. Supervision of non-bank financial institutions, payment institutions and electronic money institutions

Pursuant to its mandate under the provisions of Law No. 93/2009 on non-bank financial institutions, as subsequently amended and supplemented, the National Bank of Romania conducts the prudential supervision of non-bank financial institutions listed in the Special Register, both based on the information provided via the reports submitted and by performing on-site inspections at their head offices and territorial units. Moreover, the NBR ensures the oversight of non-bank financial institutions entered in the General Register, mainly based on the information provided by these entities via the reports submitted.

Furthermore, according to the provisions of Law No. 209/2019 on payment services and amending certain legal acts, and of Law No. 210/2019 on the issue of electronic money, the National Bank of Romania conducts the prudential supervision of authorised payment institutions, Romanian legal persons, including of the payment

activity carried out through their branches and agents, as well as the prudential supervision of authorised electronic money institutions, including of the electronic money issue and payment services provision carried out through their branches and agents.

In the course of 2021, the NBFIs sector showed a tendency to stabilise (in terms of both number and key aggregate financial indicators), just as in 2020. Moreover, payment institutions and electronic money institutions remained on the stabilising trend seen in the previous years.

3.1. Non-bank financial institutions

The number of NBFIs in the General Register increased from 174 at end-2020 to 178 at end-2021.

By type of lending activity, according to sections in the General Register, 162 institutions (91.01 percent) were recorded under "Multiple lending activities", a slightly higher share than that reported at end-2020 (89.7 percent).

Moreover, compared to the end of the preceding year, the number of NBFIs entered in the Special Register as at 31 December 2021 rose from 69 to 74, whereas the number of NBFIs listed solely in the General Register dropped from 105 to 104.

Table 6.10
Breakdown of NBFIs by activity
as at 31 December 2021

Activity	Special Register (1)		General Register* (2)		General Register (1+2)	
	No.	%	No.	%	No.	%
Multiple lending activities	71	95.95	91	87.50	162	91.01
Financial leases	1	1.35	10	9.62	11	6.18
Issuing guarantees and assuming commitments, including credit guarantee	1	1.35	1	0.96	2	1.12
Consumer loans	1	1.35	1	0.96	2	1.12
Micro loans	0	0	1	0.96	1	0.56
Factoring	0	0	0	0	0	0
Financing of commercial transactions	0	0	0	0	0	0
Housing and/or mortgage loans	0	0	0	0	0	0
Discounting	0	0	0	0	0	0
Total	74	100	104	100	178	100
*) excluding NBFIs entered in the Special Register						

The share capital of NBFIs dropped by 0.11 percent against end-2020, amounting to lei 3,527.2 million at 31 December 2021, whereas their aggregate assets (net) posted an upward trend, totalling lei 43,310.1 million, up by 8.63 percent versus end-2020.

The aggregate level of loans (net) equalled lei 35,745.4 million, up by 10.18 percent from end-2020.

Compared with end-2020, other loans increased by 11.94 percent, from lei 15,287.5 million to lei 17,112.1 million, while financial leases rose by 8.61 percent, from lei 17,156.6 million to lei 18,633.4 million.

As far as overdue and doubtful claims (net) are concerned, they decreased from lei 655.2 million to lei 600.0 million (down by 8.42 percent), their share in total net assets falling from 1.64 percent to 1.39 percent.

Overdue and doubtful loans also followed a downward path in 2021 (-16.13 percent), from lei 471.7 million to lei 395.6 million.

Total provisions for overdue and doubtful loans increased slightly by 0.83 percent, from lei 2,388.7 million to lei 2,408.7 million.

lei mill.**			
Indicator	Special Register (1)	General Register*** (2)	General Register (1+2)
Share/endowment capital	3,093.33	433.90	3,527.24
Total assets (net)	41,592.01	1,718.06	43,310.07
Total loans, of which:	34,683.17	1,062.26	35,745.43
– financial leases	18,398.33	235.05	18,633.38
– other loans	16,284.83	827.23	17,112.07
Overdue and doubtful claims (net), of which:	541.00	59.02	600.01
– overdue and doubtful loans	364.62	31.02	395.64
Provisions for overdue and doubtful claims, of which:	2,983.67	144.23	3,127.91
– provisions for overdue and doubtful loans	2,299.05	109.61	2,408.65
Non-performing loans and commitments (gross)****	2,758.60	163.29	2,921.89
Retained earnings/Loss carried forward	2,695.42	-14.42	2,681.00
Profit for the year 2021	1,187.93	61.78	1,249.71
ROA (Net income/Total assets; %)	2.86	3.60	2.89
ROE (Net income/Total equity; %)	12.70	10.01	12.54
Number of contracts	1,671,834	74,296	1,746,130
Number of customers, of which:	1,479,710	62,623	1,542,333
– individuals	1,327,215	48,018	1,375,233
– legal entities	152,495	14,605	167,100
*) including data reported by NBFIs that are also payment institutions			
**) excluding "ROA", "ROE", "Number of contracts" and "Number of customers"			
***) excluding NBFIs entered in the Special Register			
****) overdue for more than 90 days and/or in which case legal proceedings have been initiated to recover the assets (with debtor contagion)			

Table 6.11
Key indicators of the NBFi sector
as at 31 December 2021*

At the same time, in 2021, the return on assets (ROA) and the return on equity (ROE) reported by the non-bank financial institutions entered solely in the General Register improved against end-2020, recording positive values, whereas the rates of return for the non-bank financial institutions listed in the Special Register rose marginally.

The aggregate profit of the NBFIs registered in the Special Register equalled lei 1,187.9 million and the NBFIs entered only in the General Register recorded a

profit of lei 61.8 million, the total profit of the non-bank financial sector amounting to lei 1,249.7 million.

Table 6.12 sets out the breakdown of the share/endowment capital by country of origin for the NBFIs entered in the Special Register as at end-2021.

The share of domestic capital inched up compared with end-2020, from 67.63 percent to 68.06 percent.

As for the other 23 countries holding stakes in the share/endowment capital of the NBFIs listed in the Special Register, at end-2021, Germany came in first (21.03 percent of total foreign capital), ahead of the United Kingdom (17.38 percent), Cyprus (10.66 percent), France (10.26 percent) and Sweden (9.75 percent). These five countries jointly accounted for 69.08 percent of foreign capital, down by 1.53 percentage points from end-2020.

Table 6.12
Share/endowment capital
by country of origin
as at 31 December 2021

Country of origin	Share/Endowment capital		percent
	in total capital	in total foreign capital	
Romania	68.06		
Germany	6.72	21.03	
United Kingdom	5.55	17.38	
Cyprus	3.41	10.66	
France	3.28	10.26	
Sweden	3.11	9.75	
Netherlands	2.08	6.52	
Italy	2.08	6.50	
Luxembourg	1.13	3.54	
Austria	0.74	2.31	
Bulgaria	0.73	2.30	
Other countries	3.12	9.75	

Thus, the breakdown of the share/endowment capital by country of origin highlights the notable influence of the European financial industry on the Romanian NBFI sector, as well as a possible sensitivity of this sector to the economic developments in the other European countries.

Total foreign capital of the non-bank financial institutions registered in the Special Register amounted to lei 1,019.1 million at end-2021, up by lei 87.2 million against 2020.

Prudential supervision and oversight of NBFIs

In view of the economic and social developments during 2021, a year further marked by the COVID-19 pandemic, the impact on the NBFI sector was mitigated by measures designed to offset the negative effects. Consequently, the average rates of return performed favourably.

Prudential supervision and oversight of NBFIs consisted in monitoring the drafting and submission of regular reports and the changes in the institutions' standing, as well as in

the conduct of inspections from the head office of the National Bank of Romania by the dedicated NBR staff, the same as in the previous year, via e-mail and secure data transfer applications. The actions resulted in supervisory reports and sanctions enforced or measures imposed, as appropriate, in accordance with the legal provisions in force.

The inspections, carried out in the context of the COVID-19 pandemic, focused on checking the operating activity of 18 NBFIs listed in the Special Register and of 5 NBFIs entered solely in the General Register.

Based on the reports compiled by the supervisory teams, 17 institutions were ordered to assess their internal governance arrangements, sanctions in the form of written warnings being imposed on 6 institutions and 5 institutions being fined. Furthermore, 1 institution was sanctioned with the suspension of its lending activity and 1 institution was subject to a sanction of erasure from the registers of non-bank financial institutions kept by the National Bank of Romania and to a ban on lending. Inspections carried out in 2021 have yet to be completed for 4 NBFIs.

In addition, as a result of off-site monitoring of the drafting and submission of regular reports and of the changes in the institutions' standing, 5 supervisory reports were prepared. Based on the findings in these reports, the NBR imposed remedial measures to correct deficiencies in 2 instances, the institutions being also fined, 1 institution was subject to a sanction of erasure from the registers of non-bank financial institutions kept by the National Bank of Romania and to a ban on lending, 1 institution requested erasure from the General Register following monitoring and 1 supervisory action has yet to be completed.

3.2. Payment institutions

At end-2021, 9 payment institutions and 22 agents through which they performed payment services in Romania and abroad were listed in the Payment Institutions Register. Moreover, 4 of the authorised payment institutions are also non-bank financial institutions, being listed in the General Register. In the course of 2021, the prudential supervision of payment institutions was conducted based on the analysis of the reports and of the changes in the institutions' standing, submitted by payment institutions in compliance with the applicable legal provisions.

During 2021, four requests for prior approval were processed related to persons responsible for the conduct and management of payment services provision within payment institutions and agents through which they performed payment services in Romania and abroad.

3.3. Electronic money institutions

At end-2021, the Register of Electronic Money Institutions included 2 such institutions, one of which is also a non-bank financial institution. In the course of the year under review, the prudential supervision of electronic money institutions was conducted based on the analysis of the reports submitted and of the changes in the institutions' standing, in compliance with the applicable legal provisions.

Following the supervisory activity, a supervisory report was prepared for an electronic money institution and, based on its findings, the institution was ordered to correct deficiencies and was fined.

During 2021, two requests for prior approval were processed related to persons responsible for the conduct and management of the issue of electronic money.

4. Overseeing the prevention of money laundering and terrorist financing and applying international sanctions

The National Bank of Romania oversees the implementation of the legal framework governing the prevention of money laundering and terrorist financing and the application of international sanctions across: (i) credit institutions, Romanian legal entities, including their branches abroad, their agents, distributors and majority foreign-owned subsidiaries abroad, as well as their activity carried out directly on the territory of another EU Member State and the branches of credit institutions, foreign legal entities, carrying out their activity on the territory of Romania; (ii) payment institutions, Romanian legal entities, including their activity conducted directly in another EU Member State, and the branches of payment institutions located in other EU Member States, as well as their agents and distributors; (iii) electronic money institutions, Romanian legal entities, including their activity conducted directly in another EU Member State, and the branches of electronic money institutions located in other EU Member States, as well as their agents and distributors; (iv) non-bank financial institutions listed in the Special Register and non-bank financial institutions registered only with the General Register, which are also licensed to operate as payment institutions or electronic money institutions.

In 2021, the National Bank of Romania continued to strengthen its operational capacity to oversee credit institutions and financial institutions that fall under its supervisory remit in terms of the risks of not applying international sanctions, and of money laundering and terrorist financing they are exposed to. In order to meet the objectives, special focus was put on both ensuring the proper conditions for carrying out the activity amid the epidemic which marked the reference period and continuously improving the methodologies and tools used by the central bank in its oversight activity; to this contributed, *inter alia*, the central bank's update of the sectoral risk assessment due for approval after the completion of the *National Risk Assessment Report* and the *National Risk Mitigation Measures* as well as the participation in specific activities and the provision of input within the project on national risk assessment.

Thus, through a project financed by the European Commission under the 2017-2020 Structural Reform Support Programme and implemented under the guidance of the Economic Crime and Cooperation Division²²³ within the Council of Europe, based on the assessment methodology developed by the mentioned division, the National

²²³ According to the release by the Economic Crime and Cooperation Division (the Council of Europe) available at: <https://www.coe.int/en/web/corruption/projects/srsp/romania>

Bank of Romania participated, alongside other authorities and institutions within the national mechanism for preventing and combating money laundering and terrorist financing (National Office for Prevention and Control of Money Laundering, Financial Supervisory Authority, Prosecutor's Office attached to the High Court of Cassation and Justice, Ministry of Justice, Ministry of Internal Affairs and the Romanian Intelligence Service), in conducting the national risk assessment in the field and identifying the necessary actions conducive to their mitigation. The objectives of this national project will be measurable once with the high-level approval in 2022 of the *National Risk Assessment Report* and the *National Risk Mitigation Measures*.

The first part of 2021 saw especially the joint assessment by the Council of Europe and the European Banking Authority whose main objectives were the concrete assessment of the implementation of Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, into the national legislation and the practice of competent national authorities, and the assessment of the risk-based approach to supervision across credit institutions.

In 2021, in compliance with the programme and subjects for the assessment and verification of the entities supervised by the central bank, as approved by the Supervisory Committee of the National Bank of Romania, 24 on-site inspections were conducted, of which 12 across credit institutions and Romanian branches of foreign credit institutions and 12 across non-bank financial institutions, payment institutions, electronic money institutions and Romanian branches of foreign institutions alongside 14 off-site monitoring actions.

Having identified instances of non-compliance with the legal provisions governing the prevention of money laundering and terrorist financing, as well as the implementation of international sanctions, the supervised entities made their own plans and took measures to remedy the deficiencies. Thus, following the checks carried out, the NBR imposed 27 orders to remedy the deficiencies and issued 25 letters of recommendations for the adoption of appropriate measures to improve the management framework, policies, procedures and controls implemented to effectively mitigate and manage the risks of money laundering and terrorist financing, of which 20 orders and 22 letters of recommendation addressed to credit institutions and 7 orders and 3 letters of recommendation for the other categories of supervised entities.

At the same time, 8 administrative sanctions were found and applied to supervised institutions, of which 7 warnings and 1 fine totalling lei 30,000. Moreover, a non-banking financial institution had its authorisation withdrawn owing to non-compliance, mainly with the prudential legal requirements, and certain risks associated with the prevention of money laundering were also identified. In addition, in applying the provisions of Art. 26 para. (2) of Law No. 129/2019, during 2021, 54 notifications were submitted to the National Office for Prevention and Control of Money Laundering of infringement of the provisions of Law No. 129/2019, found in compliance with the specific oversight tasks.

It should be further emphasised that, concurrently with the supervisory actions, efforts were stepped up to inform the supervised entities, with a focus on the dissemination

of notifications of certain typologies of operations which can be circumscribed to suspicious money laundering and terrorist financing operations, identified in the activity carried out by some of the supervised entities.

In addition, in order to adequately manage the money laundering/terrorist financing risks, recommendations were sent to the supervised system for the adoption of concrete measures. The analysis of the manner in which the recommendations were implemented at individual level revealed that the measures taken by each entity had led to a reduction in risks, while also triggering, in some cases, requests for additional measures to achieve the proposed goal.

The supervised institutions were constantly informed of the application of legislation on international sanctions, with a focus on: (i) the adoption, amendment or supplementation of some legal acts setting forth international sanctions; (ii) the updating of guidelines and good practice in the field; (iii) the clarification on some international sanctions regimes in the banking and financial area; (iv) current and emerging risks.

Thus, in overseeing how entities apply international sanctions, the National Bank of Romania continued to consider:

- a) setting clear objectives, under the annual inspection programme, which focused on checking the implementation by the entities, subject to supervision by the central bank, of international sanctions for the freezing of funds and restrictions on certain funds transfers, as well as paying particular attention to the issuance of documents setting forth measures to remedy the deficiencies found during the thematic reviews aimed at supervising the implementation of international sanctions for freezing funds included in Council Regulation (EU) No 269/2014 of 17 March 2014 concerning restrictive measures in respect of actions undermining or threatening the territorial integrity, sovereignty and independence of Ukraine;
- b) informing supervised entities of specific international sanctions, the adoption/drafting by competent bodies of guidelines and guidance, views/opinions, significant clarifications, such as:
 - European Commission Opinion on the application of the provisions of Article 2(2) of Council Regulation (EU) No 269/2014 of 17 March 2014 concerning restrictive measures in respect of actions undermining or threatening the territorial integrity, sovereignty and independence of Ukraine, as subsequently amended and supplemented, compiled following the questions submitted to it consistent with the provisions of Article 215 of the Treaty on the Functioning of the European Union (TFEU) in light of the circumvention of international sanctions against the Russian Federation. The clarifications made by the European Commission envisaged also the assumption of banning any funds or economic resources from being made indirectly available to or for the benefit of natural or legal persons, entities or bodies or of natural or legal persons, entities or bodies associated with them, listed in Annex I to the legal act referred to, which posed difficulties in interpreting and applying the provisions of Article 2(2) of the Regulation;

- reporting on the risks of circumventing international sanctions, associated with economic activities performed by some entities in the Russian Federation and Ukraine;
 - The views of the European Commission on the funds and economic resources subject to freezing sanctions, based on the international sanctions regimes established by:
 - (i) Council Regulation (EU) No 36/2012 of 18 January 2012 concerning restrictive measures in view of the situation in Syria and repealing Regulation (EU) No 442/2011,
 - (ii) Council Regulation (EU) 44/2016 of 18 January 2016 concerning restrictive measures in view of the situation in Libya and repealing Regulation (EU) No 204/2011 and
 - (iii) Council Regulation (EU) No 224/2014 of 10 March 2014 concerning restrictive measures in view of the situation in the Central African Republic;
 - Guidance Note on the interpretation of financial sanctions under the Myanmar sanctions regime, issued by the European Commission and published on 11 May 2021. The document was prepared to provide substantive information and practical issues, including on the prohibitions on freezing/making available funds and economic resources, which fall within the provisions of Council Regulation (EU) No 401/2013 concerning restrictive measures in respect of Myanmar/Burma and repealing Regulation (EC) No 194/2008;
 - Guidance Note on the provision of humanitarian aid to fight the COVID-19 pandemic in certain environments subject to EU restrictive measures, supplemented on 13 August 2021 by the European Commission with a new chapter on counter-terrorism sanctions. The Guidance Note provides practical guidance on how to comply with EU sanctions when providing humanitarian aid, especially medical assistance, to fight the COVID-19 pandemic. The new chapter adds to those previously published on Syria, Iran, Venezuela and Nicaragua;
 - Note Verbale SCA/2/21 (12), whereby the Chairman of the UN Security Council Sanctions Committee pursuant to resolutions 1267 (1999), 1989 (2011) and 2253 (2015) concerning ISIL (Da'esh), Al-Qaida, and associated individuals, groups, undertakings and entities submits recommendations to UN Member States to strengthen the implementation of the relevant restrictive measures;
- c) preparing analyses and making clarifications for credit institutions, regarding the legislation applicable to the sanctions regime in relation to the Democratic People's Republic of Korea, including organising working meetings, following the notifications of the difficulties in opening current accounts, as well as analyses on certain risks of circumvention of international sanctions;
- d) the active participation of central bank representatives in the meetings of the Interinstitutional Council to ensure the general cooperation framework for the enforcement of international sanctions (CIISI) in Romania and the presentation of analyses, viewpoints, in accordance with the mandates approved by the management of the institution, on matters within its legal scope;
- e) the appointment of central bank representatives to participate actively in the meetings of the European Commission's Group of Experts on sanctions and extraterritoriality;
- f) the National Bank of Romania's contribution to drafting the country report on the measures taken by the reporting entities for the implementation of the provisions of paragraph 8 of United Nations Security Council Resolution 2571 (2021) on Libya;

- g) requiring credit institutions and other supervised entities to take the necessary measures in order to implement the recommendations made by the experts of the UN Security Council Sanctions Committees, based on: (i) the *Report* of the Panel of Experts established pursuant to United Nations Security Council Resolution 1874(2009) on measures against the Democratic People's Republic of Korea (DPRK), published in October 2020; (ii) the *Report* of the Analytical Support and Sanctions Monitoring Team established pursuant to Security Council Resolutions 1526 (2004) and 2253 (2015) on ISIL (Da'esh), Al-Qaeda, and the Taliban and associated individuals and entities assisting the 1988 Afghanistan Sanctions Committee; (iii) the final *Report* of the Panel of Experts on Libya established pursuant to United Nations Security Council Resolution 1970 (2011); (iv) the *Annual Report* on Somalia submitted in accordance with paragraph 33 of United Nations Security Council Resolution 2498 (2019); and (v) the *Annual Report* of the Panel of Experts established in accordance with United Nations Security Council Resolution 2374 (2017) on Mali;
- h) organising working meetings with representatives of the supervised entities, as a result of the findings during the supervisory actions, in order to ensure the proper application of sanctions measures specific to the banking sector;
- i) the publication on the National Bank of Romania's website, in the Supervision section, Implementation of international sanctions sub-section, of legal acts setting forth international sanctions that fall within the bank's tasks, of lists of consolidated international sanctions of competent international organisations, as well as of relevant guidelines and notes.

Special attention was further paid to the NBR's participation, in its capacity as member with voting rights, in the meetings of the Standing Committee on anti-money laundering and countering terrorist financing – AMLSC, set up within the European Banking Authority; the central bank contributed to the permanent exchange of relevant information on current and emerging risks arising from the supervisory activity. The Committee ensures the coordination of measures to prevent and counter the use of the financial system for the purposes of money laundering or terrorist financing and the approval of draft opinions, guidelines, regulatory and implementing technical standards, recommendations, decisions and other publications adopted by the European Banking Authority. In this respect, the National Bank of Romania also made its contribution by designating technical experts within working groups established at the level of the Committee for preparing the following draft documents: "Opinion on risks of money laundering and terrorist financing (ML/TF) affecting the European Union's financial sector", "Guidelines on risk-based supervision", "Guidelines on the role of AML/CFT compliance officers", "Regulatory Technical Standards on a central database on AML/CFT".

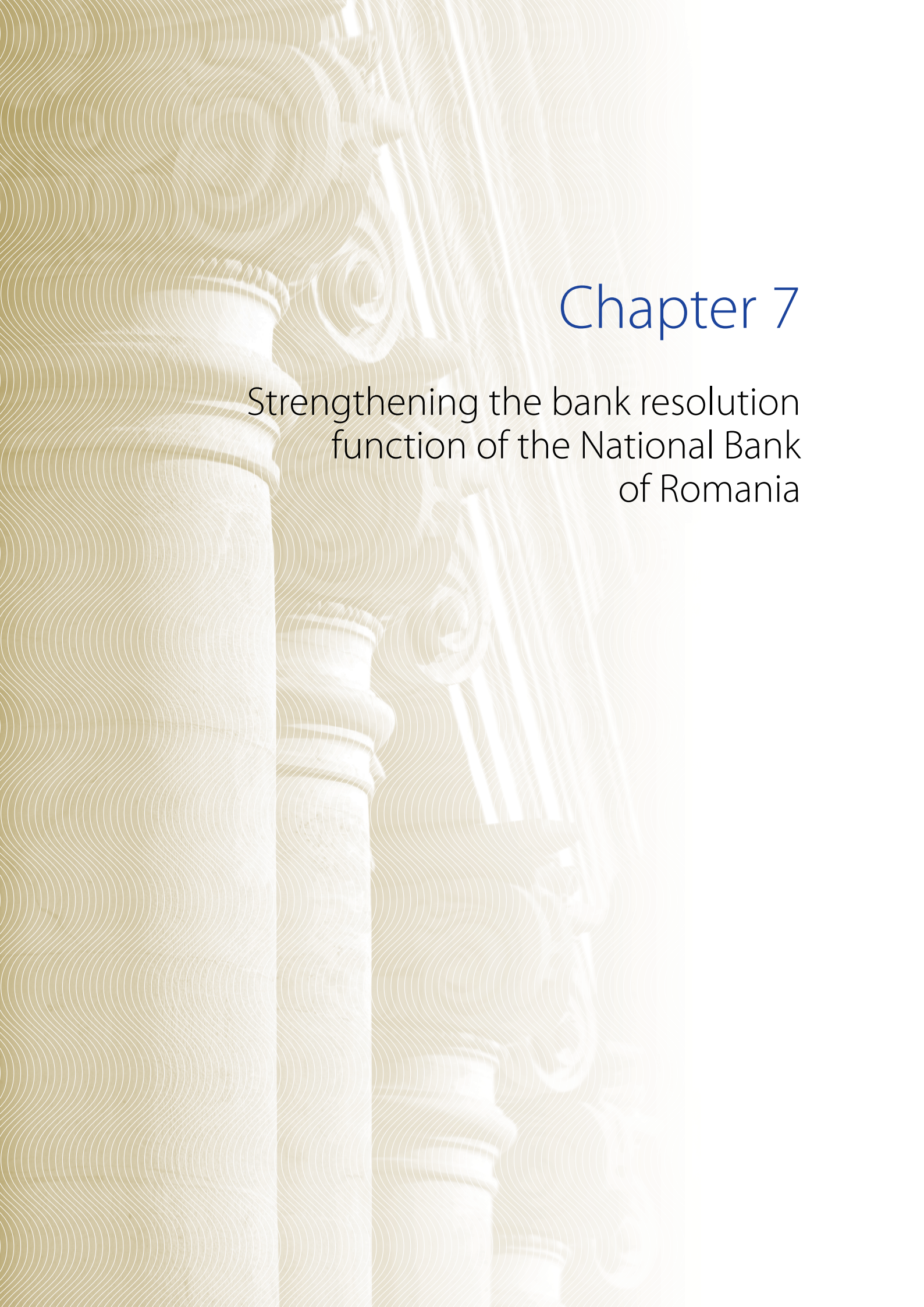
In addition, the National Bank of Romania participated, in its capacity as member, in the meetings of the European Commission's Expert Group on Money Laundering and Terrorist Financing (EGMLTF). The Group addressed various aspects on the implementation by Member States of the requirements under directives, regulations, European delegated acts in the field, as well on the legislative initiatives aimed at updating the European prevention system, such as the ambitious package of legislative proposals to strengthen the EU's anti-money laundering and countering

the financing of terrorism (AML/CFT) rules, which was presented by the European Commission²²⁴ in July 2021 and which is currently being discussed at the level of the Council of the European Union and the European Parliament.

Moreover, the National Bank of Romania ensured the participation in the meetings of the Council of Europe's Moneyval Committee (Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism) with a view to discussing the good practices in the field, in the context of the 5th round of mutual evaluation of the states. Looking ahead, in 2022, Romania will be subject to an assessment of its system of prevention and combating money laundering and terrorist financing both in terms of technical compliance with the FATF (Financial Action Task Force) Recommendations and the effectiveness of national risk management and mitigation systems in the field within the 5th round of mutual evaluation of Romania, organised by the Moneyval Committee.

²²⁴ https://ec.europa.eu/info/publications/210720-anti-money-laundering-counteracting-financing-terrorism_en



The background of the page features a faded, high-angle photograph of several classical columns, likely from a grand building. Overlaid on this image is a pattern of thin, concentric, wavy lines in a light beige or gold color, creating a textured, ripple-like effect across the left and central portions of the page.

Chapter 7

Strengthening the bank resolution function of the National Bank of Romania

1. Planning and preparing the resolution

1.1. Current activity of resolution planning

Resolution planning continued to be a defining feature of the NBR's activity in its capacity as resolution authority (NBR/RA), given that, in 2021 as well, no credit institution in the Romanian banking system was determined as 'failing or likely to fail'.

As in previous years, the NBR/AR updated the resolution plans for local credit institutions and further participated in the meetings of the resolution colleges established in order to adopt the joint decisions on the resolution plans at group level, in the case of significant subsidiaries and branches of cross-border banking groups in Romania.

For credit institutions that would be resolved via a resolution action, the tools specified in the approved resolution plans cover the entire range provided for by the legal framework, i.e. both bail-in and transfer strategies – the sale of business, the bridge institution and, possibly, the separation of assets, but only used together with another resolution tool. The subsidiaries of cross-border groups operating in Romania would be resolved via bail-in (for MPE resolution strategies) or by applying the power to write down or convert the eligible debt instruments (for SPE resolution strategies), or even via liquidation. It should be noted that the actual resolution strategies could be different from those described in the plans, given that the latter are prepared based on a series of scenarios and assumptions.

During the 2021 resolution planning cycle, particular attention was paid to identifying and addressing potential impediments to the successful implementation of a possible resolution action, amid the publication, in a first instance²²⁵ for public consultation, of the draft EBA guidelines on improving resolvability²²⁶, which was subsequently adopted²²⁷. To this end, beside assessing the implementation status of the measures already initiated by credit institutions in the previous iterations of resolution planning, the NBR/AR structured the set of additional actions to be conducted in order to improve resolvability, given the coordinates indicated by the EBA guidelines aimed primarily at ensuring operational continuity in resolution, including access to financial market infrastructure, along with the measures already initiated, such as a) integrating resolution planning into the overall governance framework; b) developing playbooks for putting into operation the preferred resolution strategy; c) self-assessing the capacities of the information management system. Hence, resolution planning also

²²⁵ In March 2021.

²²⁶ The European Banking Authority adopted the document in early 2022 (Guidelines on improving resolvability for institutions and resolution authorities under articles 15 and 16 BRRD – EBA/GL/2022/01).

²²⁷ For further details, see the section entitled Regulatory framework for bank resolution.

included additional analyses related to the playbooks drafted by credit institutions upon the request of the NBR/RA, contributing to the development of the component for the operationalisation of the preferred resolution strategy.

At the same time, in order to observe the proportionality principle, and to prevent the imposition of any disproportionate burden in terms of the potential systemic impact of each credit institution, the operational arrangement on applying simplified obligations and waivers for resolution planning was updated and supplemented in the period under review, in line with Commission Delegated Regulation (EU) 2019/348. However, in light of the COVID-19 pandemic, to maintain a prudent approach in 2021 as well with regard to simplified obligations in the context of resolution planning, similarly to the previous planning cycle, the NBR/RA decided that credit institutions that would have been eligible should fully implement the requirements for preparing resolution plans, namely the annual update and complete structure of those plans.

1.2. Decision-making on the minimum requirement for own funds and eligible liabilities (MREL)

Setting up and maintaining adequate loss-absorbing and recapitalisation capacity by credit institutions continued to be a major concern of the NBR's activity as resolution authority. Building up an adequate MREL capacity is, in fact, an essential element of resolvability, likely to increase the credibility of resolution strategies.

Setting the new minimum requirement for own funds and eligible liabilities (MREL) involved updating the approach, amid substantial revisions in terms of both quantity and quality, following the adoption of the legal act transposing into national law the provisions of Directive (EU) 2019/879 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms (BRRD2).

Because the transposition of BRRD2 into Romanian legislation was delayed, the deadline for meeting the intermediate MREL target was postponed by half a year, to 1 July 2022²²⁸. Thus, the groundwork was laid for mitigating the risk of non-compliance or invoking of a lack of proportionality to the set requirement, while also facilitating equal treatment with other credit institutions in the EU²²⁹.

Moreover, monitoring banks' progress in building up the resources to meet these requirements has shown that credit institutions continued with the initiatives to issue MREL eligible instruments on the local market. These instruments rank adequately in the hierarchy of creditors, have long enough maturities (with no early redemption clauses) and legal certainty. The six issues of MREL eligible liabilities in 2021 amounted to around lei 3.9 billion, i.e. approximately 0.6 percent of the total balance sheet of the Romanian banking system.

²²⁸ Compared to 1 January 2022, according to BRRD2 provisions.

²²⁹ Which transposed the directive in time, namely by end-2020.

2. National and international communication and cooperation

The initiatives of cooperation with other European institutions on bank resolution topics continued in 2021, and the NBR/RA actively participated in the meetings of the EBA's Resolution Committee (ResCo), as illustrated by the formulation of technical positions concerning the various topics addressed, which are within the scope of bank resolution activities, such as: (i) EBA's regulatory documents (regulatory technical standards, implementing technical standards, guidelines, etc.); (ii) convergence of resolution implementing practices, including the preparation of EBA's first exercise on monitoring resolution practices; (iii) assessing the independence of competent authorities while also implementing the provisions of the Directive on the recovery and resolution of credit institutions and investment firms (BRRD); (iv) impact study on some regulatory options considered for the revision of EU legislation on crisis management and deposit insurance.

In 2021, representatives of the Bank Resolution Department participated as lecturers in three missions under the regional technical assistance programme for central banks in Western Balkan countries. The NBR, as a member of the European System of Central Banks (ESCB), takes part in this programme through institutional partnerships. The topics discussed focused on resolution planning, improving resolvability, assessment in resolution, and stress tests.

In addition, representatives of the Bank Resolution Department took part in 2021 in a dry-run exercise of a resolution action organised by the Single Resolution Board (SRB), the participants including representatives of several resolution authorities in the EU. The aim of the exercise was to assess the preparedness in managing a bank crisis.

3. Bank Resolution Fund

At end-2021, the resources of the Bank Resolution Fund (BRF) amounted to approximately 80 percent of the target level, almost similarly to that of the Single Resolution Fund²³⁰. According to the applicable regulations, the bank resolution fund must reach at least 1 percent of the amount of covered deposits of all credit institutions authorised on the territory of Romania by end-2024 at the latest.

The amount totalled approximately lei 2.1 billion, up by lei 0.4 billion against end-2020. The contributions of all credit institutions set for 2021 were paid in full.

For 2022, the NBR/RA set and communicated to credit institutions, Romanian legal entities, the level of contributions to be paid to the BRF, their value being determined based on the need to reach the target level within the deadline set forth by the legislation in force.

²³⁰ <https://srb.europa.eu/en/content/single-resolution-fund>

4. Regulatory framework for bank resolution

The main development in the regulatory framework for bank resolution was the adoption of the legal act transposing into national primary legislation the provisions of BRRD2. The NBR/RA contributed to this project by providing technical support. Law No. 320 amending and supplementing Law No. 312/2015 on the recovery and resolution of credit institutions and investment firms, as well as on amending and supplementing some legal acts in the financial field, also reflects the clarifications made by the European Commission on the interpretation of some legal provisions of the revised European framework for bank resolution, in response to the questions asked by Member States' authorities. The main changes to the resolution framework refer to: (1) revising the MREL in terms of quantity and quality, as well as in what concerns the level of subordination; (2) the powers to suspend certain obligations; (3) the sequence of write-down and conversion; (4) the contractual recognition of bail-in and of resolution stay powers.

Following the amendments brought about by the BRRD2, several implementing and delegated regulations were adopted.

Commission Implementing Regulation (EU) 2021/763 establishes the frequency, the set of templates and associated instructions for the reporting and public disclosure of the minimum requirement for own funds and eligible liabilities (MREL), generally applicable to resolvable institutions, namely resolution and non-resolution entities. The quarterly reporting requirements have been effective since 28 June 2021, the first reports according to this Regulation being submitted by credit institutions on 30 September 2021 for the reference date of 30 June 2021. Specifically, the regulation in question facilitates the monitoring by resolution authorities of the progress made by credit institution in building up the MREL capacity. As for the disclosure requirements, the implementation is made gradually, namely as of 1 June 2021 for those set in the prudential framework²³¹ and 1 January 2024 for those set in the bank resolution framework. For the purpose of implementing Article 8 of the said regulation, a document entitled "Standardised presentation of insolvency rankings"²³² in line with national provisions as at 31 July 2021 was published on the NBR's website (in the Banking resolution section).

In order to reflect the amendments to the bank resolution framework, particularly in what concerns the MREL subordination levels, Commission Implementing Regulation (EU) 2021/622 sets the updated formats and templates for the transmission by resolution authorities to the EBA of the information regarding the MREL set for each institution under their jurisdiction. It replaces Commission Implementing Regulation (EU) 2018/308.

Commission Delegated Regulation (EU) 2021/1118 specifying the methodology to estimate the additional own funds requirement and the combined buffer requirement

²³¹ Capital Requirements Regulation

²³² <https://www.bnr.ro/Banking-resolution-13780.aspx>

used to determine the MREL for the resolution entities whose resolution group is different from the prudential consolidation group was adopted as piece of secondary legislation.

Another relevant legal act is Commission Delegated Regulation (EU) 2021/1340. This sets standard requirements for the terms of relevant financial contracts under third-country law, which recognise the stay powers of resolution authorities. The aim is to include the parties' acceptance that the contract may be subject to the exercise of powers by a resolution authority to suspend or restrict rights and obligations arising from such a contract.

Due to the fact that, since the BRRD transposition into national law, banks should include contractual terms whereby the counterparty to an agreement or instrument creating a liability acknowledges that the liability may be subject to write-down and conversion powers, Commission Delegated Regulation (EU) 2021/1527 lays down conditions in which it would be impracticable to include the contractual recognition of bail-in, the circumstances in which the resolution authority requires the inclusion of the contractual term (the amount and type of the agreement or instrument, the maturity of the liability, etc.) and the timeframe in which the resolution authority requires the inclusion of the contractual term. In addition, Commission Delegated Regulation (EU) 2021/1751 sets the uniform formats and templates to be used by credit institutions to notify the determination of impracticability of including the contractual recognition of bail-in.

As a result of the amendments made by BRRD2 to the minimum requirement for own funds and eligible liabilities, Commission Implementing Regulation (EU) 2022/365 amending Commission Implementing Regulation (EU) 2018/1624 laying down implementing technical standards with regard to procedures and standard forms and templates for the provision of information for the purposes of resolution plans for credit institutions and investment firms was also adopted. Specifically, the templates for the liability structure and own funds requirements were updated.

The adoption of EBA Guidelines on improving resolvability²³³ is representative for the tertiary legislation. The Guidelines aim to ensure the coherence of resolvability practices of resolution authorities and to clarify the necessary steps to remove impediments to resolution, taking stock of the best practices so far developed by EU resolution authorities on resolvability topics. Thus, the guidelines are a point of reference for both authorities and institutions on resolvability-related topics in the EU, ensuring consistent progress on resolvability and its monitoring in resolution colleges. In particular, this document sets out guidelines to improve resolvability in the following areas: (i) operational continuity in resolution, (ii) access to financial market infrastructures, (iii) funding and liquidity in resolution, (iv) bail-in execution, (v) business reorganisation, and (vi) communication. The deadline for observing the Guidelines is 1 January 2024, so that there is sufficient time for compliance.

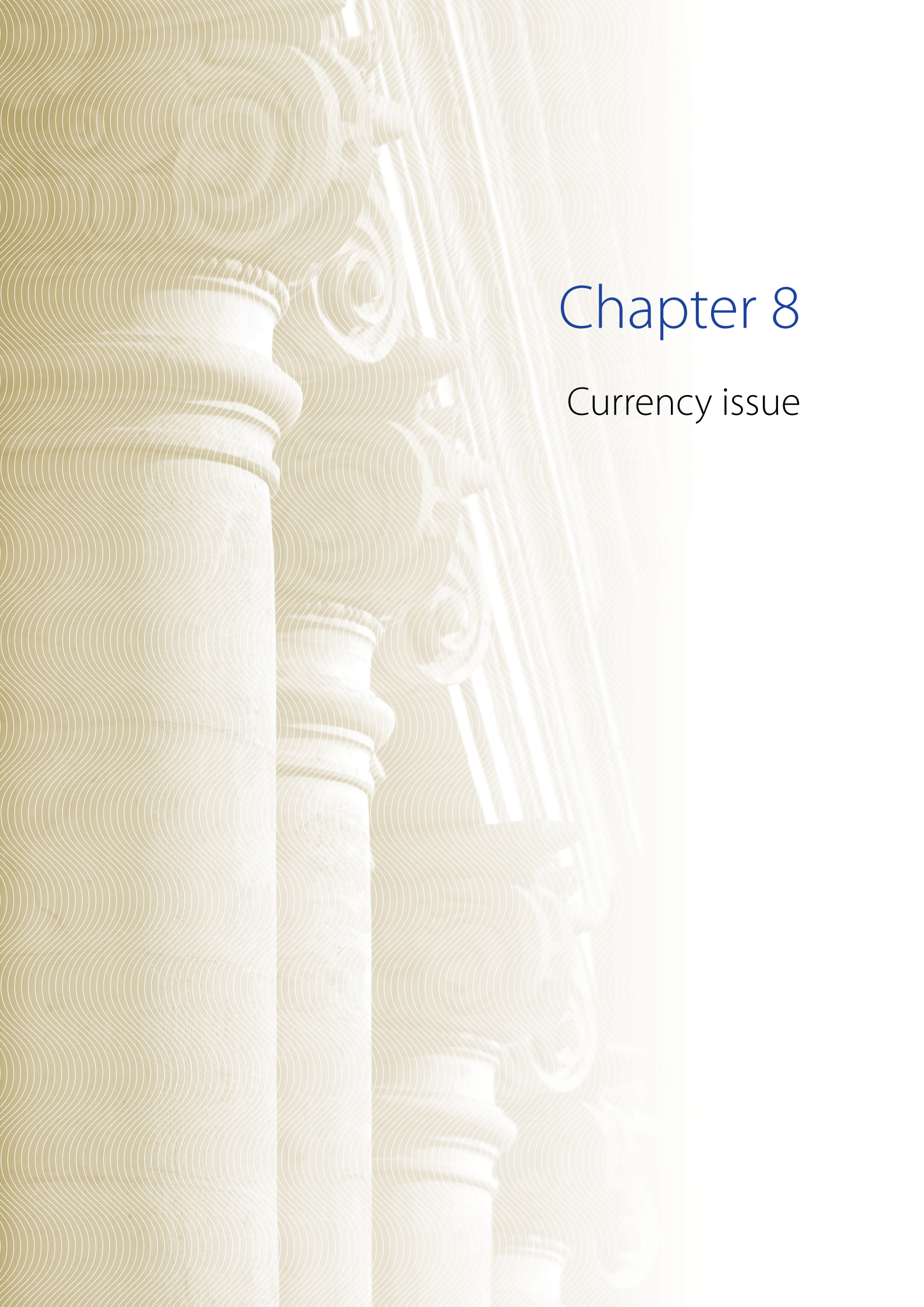
²³³ <https://www.eba.europa.eu/regulation-and-policy/recovery-and-resolution/guidelines-institutions-and-resolution-authorities-improving-resolvability>

The European regulatory framework for resolution is to be amended and supplemented by implementing into EU legislation the final Basel III agreement, one of the banking package proposals targeting the treatment of indirect subscriptions of eligible liabilities for calculating the internal MREL (daisy chains). In line with the mandate under BRRD, this proposal aims to ensure the conditions for an adequate transfer of losses from subsidiaries to the resolution entity and redistribute buffers from the resolution entity to its subsidiaries in a cross-border group with a Single Point of Entry resolution strategy. This treatment had been initially included in the draft regulatory technical standards (RTS) issued by the EBA pursuant to the mandate under Directive 2019/879/EU (BRRD2). Subsequently, the need for further amendments was however visible, including changes to some provisions of the Capital Requirements Regulation (CRR), and it was decided to scrap the RTS and include all the revisions in the draft issued by the Commission, suggesting it should follow a fast-track procedure to the European Parliament.

Last but not least, as a result of the mandate under CRR, the EBA also prepared draft regulatory technical standards (RTS) to amend Commission Delegated Regulation (EU) No 241/2014 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for own funds requirements for institutions. In terms of bank resolution, these RTS include provisions on the permission regime for reducing eligible liabilities instruments. The draft in question provides details on the elements that should be introduced by a credit institution in an application for prior permission to reduce eligible liabilities or for a renewal of a general prior permission to reduce eligible liabilities, the deadlines that credit institutions should observe when sending applications for prior permission to reduce eligible liabilities, the deadlines for authorities to analyse such applications, and other procedural requirements. At the cut-off date of this *Report*, the draft RTS are under review by the European Commission, following an exchange of opinions between the EBA and the Commission regarding the draft submitted by the EBA.

In accordance with the EBA's mandate from the European Commission to conduct a quantitative impact study on some regulatory options considered to revise the EU legislation on crisis management and deposit insurance (CMDI – Crisis Management and Deposit Insurance Framework), the EBA assessed credit institutions' capacity to access resolution financing arrangements. The results of EBA's analysis suggest that banks, Romanian legal entities, have sufficient internal funds. The calculations presented in the above-mentioned document show, for a representative sample of credit institutions in Romania (including the top 3 credit institutions in the local banking sector) that hold a 55 percent share of the asset market, the build-up of sufficient internal funds to reach the minimum threshold necessary to access financing from the Bank Resolution Fund, *inter alia* under extreme conditions which would erode the capital base of selected banks down to the Common Equity Tier 1 capital ratio.





Chapter 8

Currency issue

In 2021, the NBR supplied the necessary currency in terms of quantity, value and denomination composition to ensure smooth money circulation, and it took the appropriate measures to raise the quality of Romanian banknotes and coins in circulation.

1. Developments in currency in circulation outside banks

In 2021, the value of currency outside banks expanded by 8.3 percent (up to lei 101,056.6 million²³⁴), the pace of increase being 10.3 percentage points slower than that recorded in 2020.

In 2021, the currency in circulation outside banks largely preserved its seasonal patterns, yet at the same time the impact of the successive pandemic waves led to wide monthly changes in this indicator. Specifically, annual seasonal factors played a significant part in the developments of this indicator, high monthly growth rates being recorded in the following periods: (i) April (2.6 percent), under the impact of Easter; (ii) July (1.7 percent), under the impact of paid holidays. By contrast, compared to the previous years when November through December there was a higher demand for currency specific to the winter holidays, in 2021 the currency in circulation outside banks increased by a smaller percentage (1.0 percent in November) or even stood still (in December). Moreover, due to the successive waves of the COVID-19 pandemic, the currency in circulation outside banks saw a sizeable increase in September (2.0 percent) and January (1.2 percent). Over the remaining months, the value of currency outside banks either fell (by 1.5 percent in August and by 0.8 percent in March) or reported more modest rises.

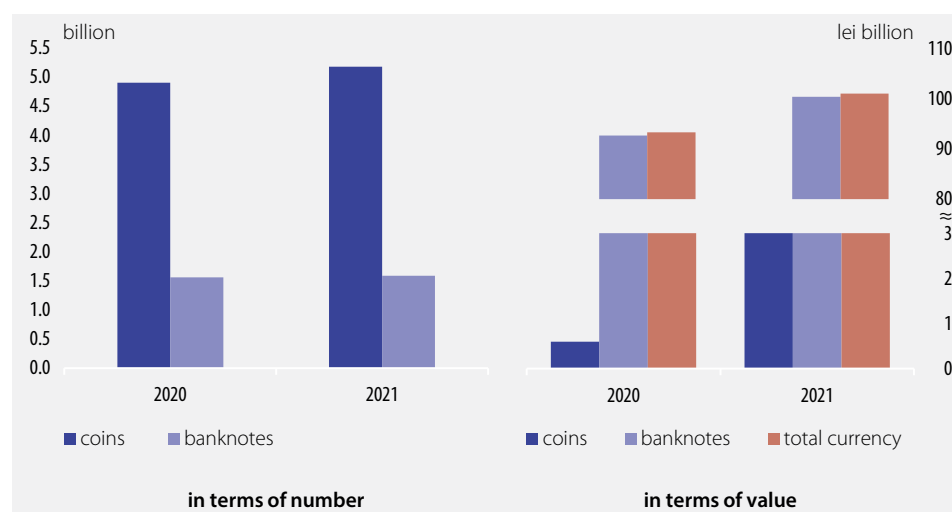


Chart 8.1
Composition of currency outside
banks in 2020 and 2021

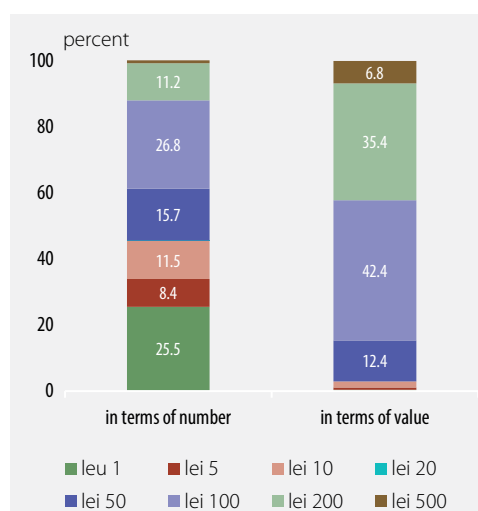
²³⁴ Lei 97,693.4 million, excluding the cash in automated teller machines and automated exchange teller machines.

Currency outside banks reached a record high of lei 103,680.1 million for the year under review (+8.7 percent versus the 2020 peak) on 17 December 2021, due to the increased demand for currency specific to the winter holidays.

At end-2021, the number of banknotes outside banks was 1,589.7 million, up 1.9 percent year on year, and the number of coins amounted to 5,179.3 million, up 5.5 percent from end-2020 (Chart 8.1).

Banknotes outside banks reported rises in terms of number across several denominations: lei 1 (+4.0 percent), lei 100 (+6.0 percent), lei 200 (+22.6 percent) and lei 500 (+5.4 percent). Conversely, decreases were recorded for the lei 5 (-4.7 percent), lei 10 (-3.7 percent) and lei 50 (-11.0 percent) notes.

Chart 8.2
Denomination composition of
banknotes in circulation in 2021



Moreover, mention should be made that on 1 December 2021, the National Bank of Romania put into circulation a note with face value of lei 20. The number of banknotes outside banks for this denomination was 0.8 million at end-2021.

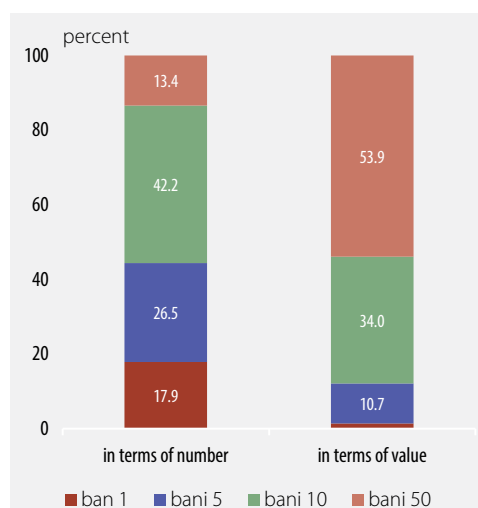
The lei 100 banknote was the most frequently used, its share in the total number of banknotes outside banks standing at 26.8 percent, followed by the lei 1 banknote (25.5 percent) and the lei 50 banknote (15.7 percent). The lei 500 banknote held the lowest

share of the total number of banknotes outside banks, i.e. 0.9 percent. Given the date when the new note with face value of lei 20 was put into circulation, its share in the total number of banknotes outside banks came in at 0.05 percent at end-2021.

The banknotes most frequently used for loading ATMs, namely the lei 100, lei 200

and lei 50 denominations, continued to take the highest shares of the total value of currency outside banks, i.e. 42.4 percent, 35.4 percent and 12.4 percent, respectively (Chart 8.2).

Chart 8.3
Denomination composition of
coins in circulation in 2021



At end-2021, the number of coins outside banks was 5,179.3 million, (a +5.5 percent increase year on year), their value standing 7.2 percent higher than at end-2020.

As a result of the large demand for coins, the number of all denominations increased in comparison to 2020,

percentages varying between 2.9 percent (for the bani 1 coin) and 8.4 percent (for the bani 50 coin). The bani 10 and the bani 5 coins accounted for the largest shares of the total number of coins outside banks in 2021 as well, i.e. 42.2 percent and 26.5 percent, respectively.

In terms of value, the bani 50 and the bani 10 denominations covered 87.9 percent of the total value of coins outside banks, the largest share being held by the bani 50 coin (53.9 percent; Chart 8.3).

At end-2021, the number of notes and coins outside banks per capita amounted to 83 and 270, respectively, i.e. 2 notes and 16 coins more than at end-2020.

2. NBR's cash payments and collections in its relation with credit institutions/the State Treasury

Payments

In 2021, the total value of currency used for the NBR's payments to credit institutions/ the State Treasury stood at lei 19,161.0 million, down 16.6 percent compared to 2020.

The number of banknotes put into circulation via payments was 225.8 million, down 27.5 percent year on year, and their value, i.e. lei 19,117.9 million dropped by 16.6 percent.

Decreases in terms of number were seen across several denominations: lei 5 (-54.8 percent), lei 10 (-37.4 percent), lei 50 (-70.1 percent), lei 100 (-25.0 percent) and lei 500 (-5.0 percent). In turn, the number of banknotes put into circulation via payments grew for the lei 1 (+2.4 percent) and lei 200 (+15.6 percent) notes. Such developments led to declining shares of the lei 5, lei 10 and lei 50 banknotes put into circulation via payments by up to 11 percentage points against the previous year,

whereas the shares of lei 1, lei 100, lei 200 and lei 500 notes increased by up to 7.4 percentage points versus 2020. In terms of number, the new banknote with face value of lei 20 held a 1.1 percent share in the total number of notes put into circulation via payments.

In terms of value, the shares of lei 5, lei 10, lei 50 and also lei 100 notes receded by up to 8.1 percentage points, whereas the lei 1, lei 200 and lei 500 banknotes consolidated their shares in the total value of banknotes put into circulation via payments (up by

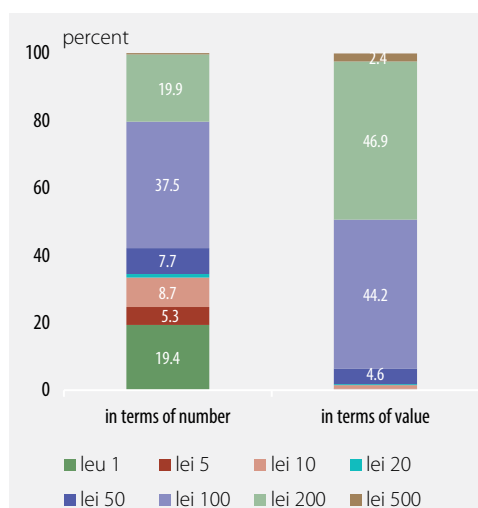


Chart 8.4

Denomination composition of banknotes used for payments in 2021

0.04 percentage points for the leu 1 note, 13.1 percentage points for the lei 200 note and 0.3 percentage points for the lei 500 note). In terms of value, the new banknote with face value of lei 20 held a 0.3 percent share in the total number of notes put into circulation via payments (Chart 8.4).

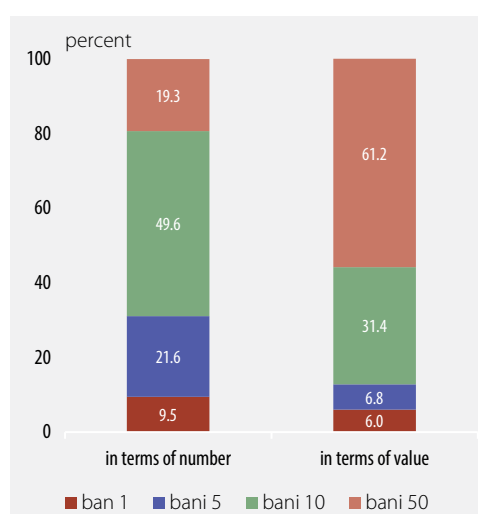
In 2021, 272.6 million coins were withdrawn by credit institutions/the State Treasury from the central bank, down 7.7 percent from the year before.

The number of coins withdrawn from the central bank declined for the bani 1 (-31.1 percent), bani 5 (-14.0 percent) and bani 50 (-5.6 percent) denominations, whereas the number for bani 10 climbed by 1.2 percent. The bani 10 coin further held

the highest share in the total number of coins used for payments, namely 49.6 percent, ahead of the bani 5 coin (with a 21.6 percent share).

In terms of value, the composition of denominations used for payments to credit institutions/the State Treasury changed compared to 2020, more obviously in the case of the bani 10 and bani 5 coins, with a 1.8 percentage point increase (up to 31.4 percent) for the former and a 0.8 percentage point decrease for the latter (down to 6.8 percent; Chart 8.5).

Chart 8.5
Denomination composition of
coins used for payments in 2021



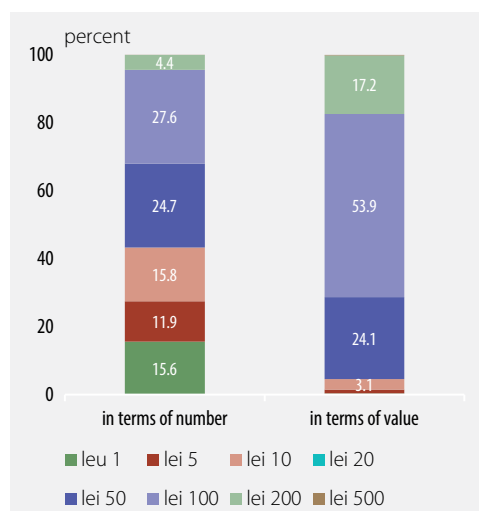
Collections

In 2021, the NBR's cash collections amounted to lei 10,349.0 million, up 17.6 percent against 2020. The deposits of credit institutions/the State Treasury returned to the NBR 202.1 million banknotes, which is 17.9 percent less than the previous year. The notes collected reported rises in terms of number versus 2020 for the lei 100 (+32.9 percent) and lei 200 (+83.7 percent) denominations. At the same time, the NBR collected a smaller number of banknotes year on year for the following denominations: leu 1 (-26.1 percent), lei 5 (-47.6 percent), lei 10 (-42.3 percent), lei 50 (-10.2 percent) and lei 500 (-24.0 percent).

Given the date when the new note with face value of lei 20 was put into circulation, this denomination was absent from the deposits of credit institutions/the State Treasury to the central bank.

The largest share in the total number of notes collected from credit institutions/the State Treasury was held by the lei 100 denomination (27.6 percent), ahead of the lei 50 note (24.7 percent).

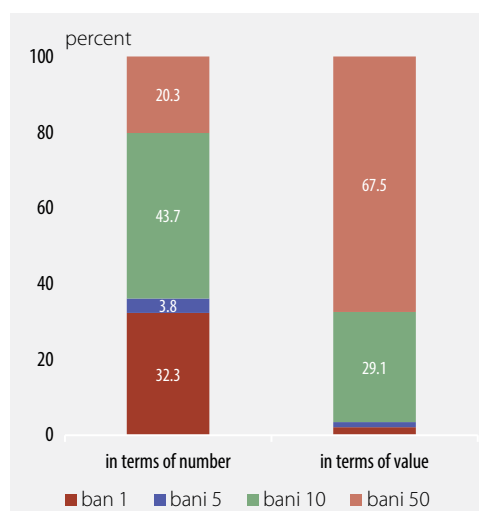
Chart 8.6
Denomination composition of
banknotes collected in 2021



As regards the share taken in the total value of banknotes collected, the lei 100 denomination accounted for 53.9 percent, followed by the lei 50 note, with 24.1 percent (Chart 8.6).

In 2021, 2.8 million coins were returned to the central bank, up 34.8 percent from the year before. The NBR collected a larger number of coins for the bani 1 coin (+259.0 percent) and the bani 10 coin (+67.5 percent), whereas the other denominations reported declines, specifically -22.1 percent for the bani 5 coin and -40.9 percent for the bani 50 coin.

Chart 8.7
Denomination composition of
coins collected in 2021



The bani 10 coin took the highest share of the total number of coins collected (43.7 percent), the bani 1 coin ranking second (32.3 percent).

In 2021 the value of coins deposited by credit institutions/the State Treasury with the NBR's regional branches amounted to lei 0.4 million (down 25.2 percent from 2020), the bani 10 and bani 50 coins jointly accounting for 96.6 percent (Chart 8.7).

3. Currency processing and withdrawal from circulation of unfit currency

Throughout 2021, 304.2 million banknotes were processed in the processing centres of the National Bank of Romania (i.e. 48.9 million banknotes more than the previous year), out of which 68.1 million were sorted as unfit for money circulation. This corresponded to an average unfit banknote rate of approximately 22 percent, which is 3 percentage points lower than that recorded in 2020.

The unfit rate changed for all denominations compared to the prior year, yet unevenly, as the changes went both ways and had different sizes. Increases of 3 percentage points for the lei 10 note, 1 percentage point for the lei 50 banknote, 16 percentage points for the lei 500 note, and drops of 7 percentage points for the lei 1 banknote, 14 percentage points for the lei 5 note, 2 percentage points for the lei 100 banknote and 5 percentage points for the lei 200 note.

Moreover, some 4.6 million coins were processed in 2021 (0.1 million coins less than the year before), with 333.8 thousand coins being sorted as unfit for money circulation.

4. Numismatic issues

In 2021, the National Bank of Romania launched 14 numismatic issues, including 18 coins, out of which 4 were of gold, 9 of silver, 2 of copper-plated tombac and 3 of brass, and also a replica of a gold coin. The maximum mintage differed depending on the metal the coins were made of, as follows: 18,000 gold coins, 28,500 silver coins, 10,000 copper-plated tombac coins and 45,000 brass coins.

The National Bank of Romania put into circulation, for numismatic purposes, a polymer replica of the first lei 20 banknote issued by the NBR in 1881. This numismatic issue included 30,000 banknotes.

Table 8.1 contains the data regarding the 2021 numismatic issues:

Numismatic issue	Metal and face value
50 years since the establishment of the Organisation internationale de la Francophonie	a silver coin with face value of lei 10 a brass collector coin with face value of bani 50
100 years since the birth of Metropolitan Bishop Bartolomeu Anania	a silver coin with face value of lei 10
100 years since the accomplishment of monetary unification	a silver coin with face value of lei 10
200 years since the Revolution of 1821 led by Tudor Vladimirescu	a gold coin with face value of lei 500 a silver coin with face value of lei 10 a copper-plated tombac coin with face value of leu 1 a brass collector coin with face value of bani 50
150 years since the birth of Theodor Pallady	a silver coin with face value of lei 10
2020 European Football Championship	a brass collector coin with face value of bani 50
100 years of diplomatic relations between Romania and Japan	a silver coin with face value of lei 10
200 years since the birth of Ion C. Brătianu	a gold coin with face value of lei 500
500 years since the letter of Neacșu of Câmpulung, the oldest extant document in Romanian	a silver coin with face value of lei 10
100 years since the foundation of the Cantacuzino Institute	a silver coin with face value of lei 10 a copper-plated tombac coin with face value of leu 1
100 years since the birth of King Michael I of Romania	a gold coin with face value of lei 500
a proof replica of the commemorative medal Ardealul Nostru	a proof replica of a gold coin
100 years since the foundation of the National Opera in Bucharest	a silver coin with face value of lei 10
200 years since the birth of Vasile Alecsandri	a gold coin with face value of lei 100

Table 8.1
The 2021 numismatic issues

5. Detected lei counterfeits

In 2021, counterfeit Romanian banknotes checked by the National Bank of Romania totalled 2,871, down 27.48 percent from the previous year. The monthly distribution of counterfeits was as follows:

Table 8.2
Monthly distribution
of counterfeits

2021											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
50	20	40	92	76	299	356	685	606	200	283	164

The number of counterfeits by denomination was as follows:

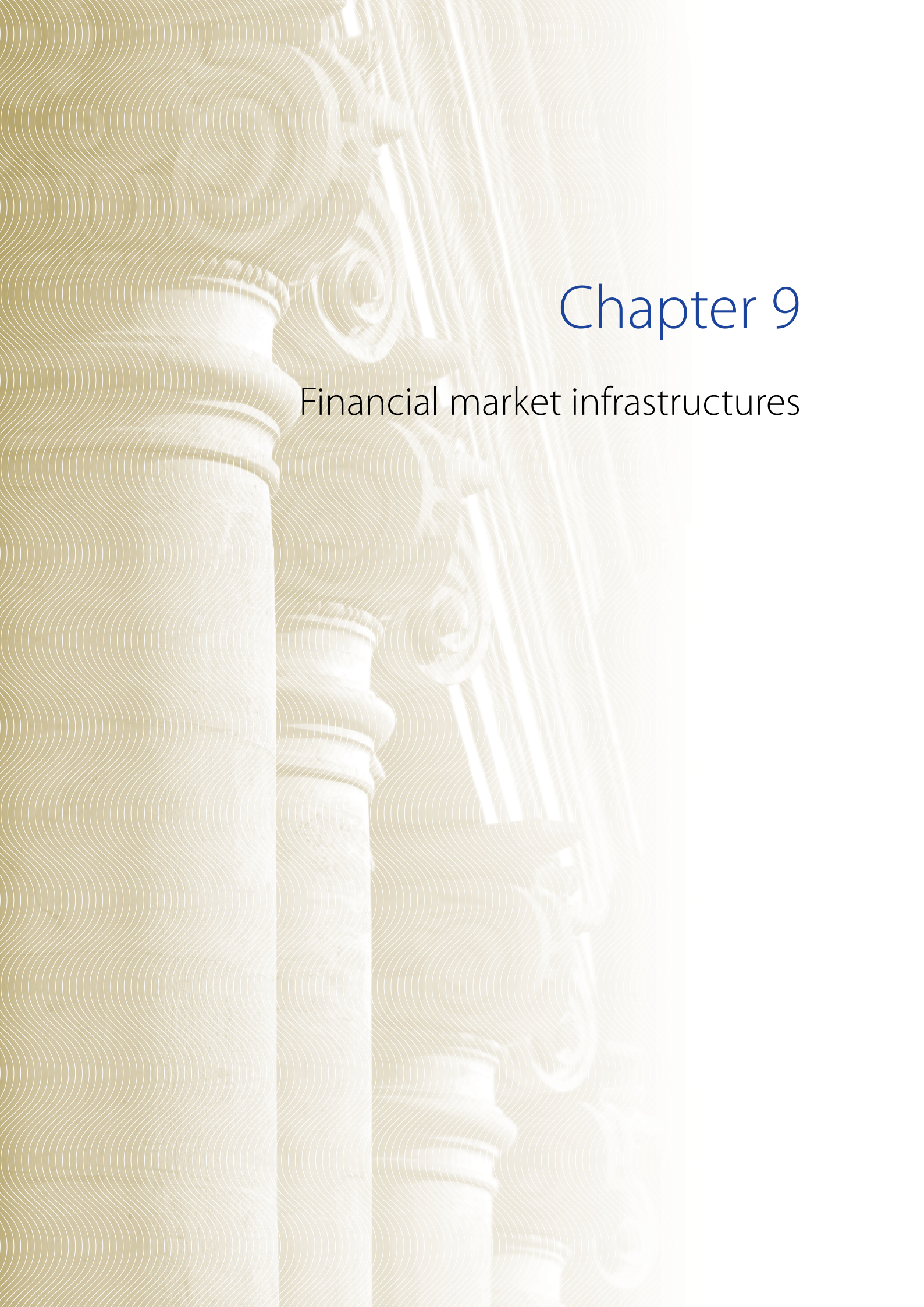
Table 8.3
Counterfeits by denomination

Denomination	Number of counterfeits
leu 1	0
lei 5	0
lei 10	8
lei 50	23
lei 100	2,697
lei 200	143
lei 500	0

Out of the total number of counterfeit banknotes, 2 were seized by specific police operations before entering circulation, whereas 2,869 were found in circulation, down 13 percent from 2020.

The lei 100 denomination recorded the highest number of counterfeits, i.e. 2,697 banknotes (out of which one was seized by the police), ahead of the lei 200 banknote (143 counterfeits) and the lei 50 banknote (23 counterfeits).

Some 1.7 counterfeits were found per 1 million authentic banknotes in circulation versus 2.3 counterfeits in 2020.



Chapter 9

Financial market infrastructures

According to its statutory tasks, the National Bank of Romania promotes the smooth functioning of payment systems with a view to ensuring financial stability and maintaining public confidence in the national currency. The main tool whereby this objective is achieved, beside the regulation, authorisation and oversight of the payment systems, consists in the facilities that the National Bank of Romania provides for ensuring the efficient operation of payment and settlement systems.

To this end, the National Bank of Romania operates ReGIS, a real-time gross settlement payment system in lei, and SaFIR, a securities depository and settlement system, while equally managing TARGET2-România, the national component of the real-time gross settlement system for payments in euro (TARGET2), on behalf of the Eurosystem.

In addition, the National Bank of Romania provides nationwide, on behalf on the Eurosystem, an integrated settlement service for both domestic and cross-border securities transactions and for the respective funds transfers, via the TARGET2-Securities platform, as well as the pan-European instant payment settlement service in euro via TARGET2, called TARGET instant payment settlement (TIPS).

1. ReGIS

General aspects

ReGIS is the national real-time gross settlement system²³⁵ (RTGS – Real Time Gross Settlement) for payments in lei provided by the National Bank of Romania. It ensures the settlement of central bank's monetary policy operations, interbank transfers, payments made on customers' account (irrespective of their value), as well as of payments related to net settlement systems and other financial market infrastructures at national level.

In 2021, ReGIS further contributed to the smooth operation of money market and forex market, as well as to the successful implementation of the National Bank of Romania's monetary policy, considering that central bank's monetary policy operations are processed solely through this system.

Participation in the system

At end-2021, the system counted 41 participants, out of which: 33 credit institutions, the National Bank of Romania, the State Treasury and 6 ancillary systems (SENT, SENT-PI, SaFIR, RoClear, VISA Europe and MasterCard International).

²³⁵ The system provides the ongoing real-time processing of instructions on an individual basis and the settlement in central bank money, namely in the accounts opened with the central bank, with immediate finality.

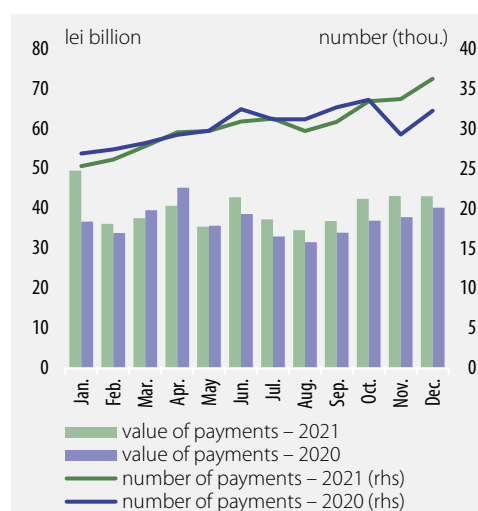
Payments in ReGIS

The volume and value of payments settled in ReGIS went up by 1.31 percent and 9.51 percent respectively in 2021 against the previous year, while the average value per transaction increased by approximately 8.1 percent (Table 9.1).

Table 9.1
Payments traffic in ReGIS

	Volume (no. of transactions; thou.)		Value (lei bill.)		Average value per transaction (lei mill.)
	Total	Daily average	Total	Daily average	
2020	7,623	30.37	9,248	36.85	1.21
2021	7,723	30.40	10,128	39.87	1.31
Change (%)	1.31	0.10	9.51	8.21	8.10

Chart 9.1
Large-value or urgent payments in 2021 versus 2020 (daily average)



The maximum volume of payments daily settled through ReGIS was recorded in October 2021 (51,430 transactions/day), while the maximum value of payments daily settled in this system was posted in January 2021 (lei 74.9 billion/day).

The composition of payments in ReGIS in 2021 (Table 9.2) shows that payments made by participants on customers' account (SWIFT MT103 messages) prevailed (93.20 percent of the volume of payments settled in the system), their total value remaining,

however, relatively low (only 24.61 percent of the value of payments settled). By contrast, the volume of payments made by participants on their own behalf and account (SWIFT MT202 messages) was relatively subdued (6 percent of the number of payments settled), their value running, however, high (53.70 percent of the value of payments settled via the system).

Table 9.2
Composition of payments in ReGIS in 2021

Payments	percent		
	MT103	MT202	Direct transfer
Total volume	93.2	6.0	0.8
Total value	24.6	53.7	21.7

At the same time, payment transactions involving direct debit/credit of participants' settlement accounts (direct transfer) posted a low volume (0.8 percent of the volume of payments settled via the system), while reporting a relatively high value (21.69 percent).

Market concentration remained comparable to that in the previous year in terms of both the volume and value of payments settled through ReGIS (the top five credit institutions accounting for 60.46 percent and 67.01 percent, respectively, of the market).

In 2021, the average availability of ReGIS, i.e. the extent to which participants could use the system without any incidents during the operating days, was 100 percent.

During 2021, the participants pursued an adequate and efficient liquidity management, with the value of the repo intraday liquidity provided by the National Bank of Romania accounting for 2.60 percent of the total value of transactions settled in the system.

2. SaFIR

General aspects

SaFIR (a securities depository and settlement system) is operated by the National Bank of Romania pursuant to Art. 23 para. (1) and Art. 29 para. (2) letter (b) of Law No. 312/2004 on the Statute of the National Bank of Romania, as well as to the conventions concluded with the Ministry of Finance, with the central bank acting in its capacity as central securities depository for government securities issued on the interbank market, the certificates of deposit issued by the National Bank of Romania and other fixed-income instruments set forth by the NBR executives.

The National Bank of Romania, via SaFIR, provides participants with services such as those referred to in Section A of the Annex to Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012:

a) core services:

- notary service (initial recording of securities in a book-entry system);
- central maintenance service (providing and maintaining securities accounts);
- securities settlement service;

b) ancillary services:

- services related to the settlement service:
 - collateral management services;
 - reverse transaction management services;
- services related to the notary and central maintenance services:
 - information services;
 - processing of corporate events;
 - processing of foreclosure operations through garnishment.

SaFIR is pivotal to the national financial market, due to its interactions with all the other payment and settlement systems, as well as due to its essential role in the central bank's monetary policy operations and standing facilities aimed at ensuring smooth settlement in ReGIS.

Participation in the system

At end-2021, SaFIR counted 34 participants, out of which: 29 credit institutions, the National Bank of Romania, the Ministry of Finance and 3 securities depository and settlement systems – the Central Depository, Clearstream Banking and Euroclear Bank.

Face value of government security issues deposited with SaFIR

At end-2021, the overall face value of outstanding issues of leu-denominated government securities came in at lei 228.92 billion, up 8.48 percent versus end-2020, while the overall face value of the issues of euro-denominated government securities amounted to EUR 4.9 billion, down 8.58 percent versus end-2020.

Operations settled in SaFIR

SaFIR processes operations performed by participants in relation to the issuer (settlement of the primary market's results, interest and/or coupon payments, partial/optional/total redemption) and operations carried out by participants on the secondary market (sale/purchase transactions, financial collateral arrangements, repo transactions, portfolio transfers).

Chart 9.2
Volume and value of operations in government securities settled in SaFIR in 2021, the value of intraday repo transactions

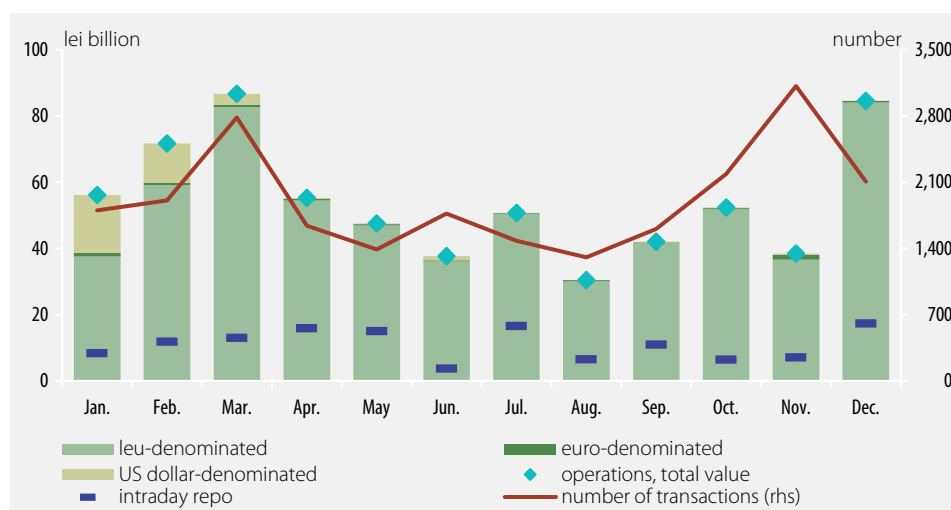


Chart 9.2 shows the volume and value of sale/purchase operations (including reverse transactions), while Table 9.3 provides a comparative picture of them in 2021 versus 2020.

Table 9.3
Operations in government securities settled in SaFIR

	Volume (no. of transactions)		Value of transactions (EUR mill.)	
	Total	Daily average	Total	Daily average
2021	23,034	91	138	0.5
2020	29,702	118	265	1.0

During 2021, the participants continued to resort often to reverse transactions for getting their necessary daily liquidity. The National Bank of Romania maintained an adequate and efficient liquidity management across participants, ensuring on a

permanent basis the liquidity they needed to settle payments and securities transactions through intraday repo transactions. In 2021, the total value of the intraday repo liquidity provided by the National Bank of Romania accounted for 19.61 percent of the total value of transactions settled in the system. Based on participants' daily individual needs to ensure liquidity flows and on the liquidity deficit in the banking system, the value and volume of intraday repo transactions fluctuated, with the highest levels being reported in March and December 2021.

3. TARGET2-România

General aspects

TARGET2 is a payment system made available by the Eurosystem for the real-time gross settlement of monetary policy operations, interbank transfers, payments on customers' account, as well as of payments related to net settlement systems and other financial market infrastructures in euro.

Central banks outside the euro area (connected central banks) participate in TARGET2 on a voluntary basis by signing specific agreements with the central banks in the Eurosystem. The same as other central banks (i.e. in Bulgaria, Denmark, Poland and Croatia), as of 2011, the National Bank of Romania has been connected to TARGET2, operating TARGET2-România, the national component.

The settlement through TARGET2 counts among TARGET services, alongside T2S services (securities settlement services via the TARGET2-Securities platform²³⁶) and TIPS²³⁷ (TARGET Instant Payment Settlement) services. TARGET services are developed and provided by the Eurosystem in order to allow for the free movement of funds, securities and collateral in the European Union.

Considering that the National Bank of Romania operates the national component TARGET2-România, the same as the other central banks participating in/connected to TARGET2, it opens and manages settlement accounts in euro on the TARGET2 platform, as well as dedicated cash accounts (DCA) in euro, namely:

- T2S dedicated cash accounts (T2S DCA) on the TARGET2-Securities platform for credit institutions operating in Romania that want to act as settlement banks for central depositories connected to this platform;
- TIPS dedicated cash accounts (TIPS DCA) for institutions operating in Romania that want to take part in this service.

²³⁶ TARGET2-Securities is the European platform for the settlement of national and cross-border securities transactions, operated by the Eurosystem.

²³⁷ TIPS is a pan-European instant payment settlement service in euro via TARGET2, which enables payment service providers to offer their customers, natural and legal entities, the possibility to transfer euro funds in real time and around the clock, every day of the year.

Participation in the system

The participation in TARGET2-România is governed by the system rules set forth by National Bank of Romania Order No. 4/2015 on the operation of TARGET2-România, as subsequently amended and supplemented.

At end-2021, the participants in TARGET2-România were as follows: 19 account holders in the payment module (namely 18 credit institutions and the National Bank of Romania), 8 T2S DCA holders for TARGET2-Securities (more exactly 6 credit institutions, the National Bank of Romania and the Central Depository) and 2 ancillary systems: SENT, run by TRANSFOND, and SaFIR, operated by the NBR.

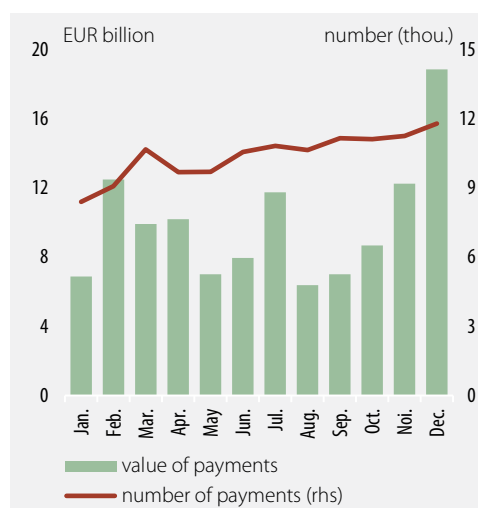
TARGET2-România operations

In 2021, the volume of payments settled in TARGET2-România rose by 13.6 percent from 2020, while their value fell by 15.8 percent from the previous year (Table 9.4).

Table 9.4
Payments traffic in
TARGET2-România

	Volume (no. of transactions)		Value of transactions (EUR mill.)	
	Total	Daily average	Total	Daily average
2020	109,878	428	141,740	552
2021	124,790	484	119,311	462
Change (%)	13.6	13.1	-15.8	-16.2

Chart 9.3
Payments traffic in
TARGET2-România in 2021



The monthly volume of payments settled in 2021 fluctuated, the monthly average coming in at 10,399 payments. In 2021, the volume of payments reached a high of 11,784 in December and posted a low of 8,394 payments in January (Chart 9.3).

Moreover, the monthly value of payments fluctuated in the course of 2021, recording a EUR 6,384.37 million low in August and a EUR 18,843.38 million high in December (Chart 9.3).

The composition by category of payments settled through TARGET2 – România in 2021 shows the prevalence of cross-border payments over national payments (accounting for 76.81 percent of the total volume of payments settled through TARGET2 – România and for 80.43 percent of their value). Yet this behaviour is normal, considering that this system settles euro-denominated payments only, with most domestic payments being denominated in lei. Most transactions in TARGET2-România were made with Germany, Italy, France and the Netherlands (Table 9.5).

Table 9.5
Geographical distribution of
payments/receipts related to
TARGET2-România in 2021

Payments		Receipts	
Volume	Value	Volume	Value
Germany	Germany	Germany	Germany
Netherlands	Austria	Italy	Austria
France	Italy	France	Italy
Italy	France	Belgium	France
Austria	Belgium	Netherlands	Belgium

In 2021, participants pursued an adequate and efficient liquidity management and no gridlock situations occurred due to the lack of funds in the participants' settlement accounts.

TARGET2 – TARGET2-Securities (T2-T2S) consolidation project

In 2017, the Eurosystem launched the TARGET2 – TARGET2-Securities (T2-T2S) consolidation project for the services currently provided on TARGET2, TARGET2-Securities and TIPS to migrate to a single, enhanced platform that should meet all the recent requirements and recommendations applicable to financial market infrastructures, offer the possibility to optimise the liquidity used by TARGET services and ensure cyber resilience for all these services; the project is due for completion in November 2022.

The project has an impact on all participants in TARGET2 and, implicitly, on the participants in TARGET2-România. At national level, the Eurosystem's project is run by the National Bank of Romania, which monitors to what extent the participants in Romania complete the stages of the project and informs the European Central Bank thereof. In parallel, the National Bank of Romania has been adapting its own internal infrastructure in order to connect to the Eurosystem's new infrastructure.

In 2021, members of the banking community in Romania were successfully prepared for commencing testing activities together with TARGET users; thus, the conditions were put in place for their successful migration to the new TARGET services.

4. Oversight of financial market infrastructures and payments

Authorisation of payment systems and securities settlement systems

The National Bank of Romania performs its legal tasks concerning the regulation, authorisation, supervision and oversight of the payment systems and securities settlement systems in Romania, as well as of their operators, with a view to promoting the safe and efficient functioning and preventing the systemic risk from materialising.

In 2021, the operating rules of ReGIS and SaFIR, run and operated by the NBR, were amended and supplemented in order to reflect the updated provisions of NBR Regulation No. 9/2020 on the management of the settlement risk and the lending facilities granted by the National Bank of Romania to ensure smooth settlement

in REGIS. Other changes were also implemented, among which: (i) the elimination of the possibility of mandating a third party to carry out any activities/operating tasks in the name and for the account of the NBR, considering the successful completion of the Programme for insourcing ReGIS and SaFIR (PIRS); (ii) the inclusion of provisions on the measures applicable in the event of the recovery or resolution of the distressed participants in the two systems (ReGIS and SaFIR); (iii) the supplementation of a provision in the ReGIS system rules in order to clearly specify the obligation of the participants to check the balances on the settlement accounts at the end of the operating day, as required following the assessment of ReGIS based on the PFMI standard; as well as (iv) the implementation of form changes for a better understanding and clarity of the ReGIS and SaFIR specific operations.

In 2021, the NBR, in its capacity as licensing authority, endorsed the 23rd and the 24th versions of the system rules governing SENT for the implementation of lower fees for participants in SENT-Instant payments. Thus, at first, the processing fee for instant credit transfers was diminished from lei 0.9 per transaction to lei 0.51 per transaction so as to bring it into line with the processing fee for credit transfers in lei or in euro settled via SENT. In the second half of the year, in order to spur the use of instant payment system, the operator proposed for approval a new cut in the processing fee for instant payment orders in domestic currency, from lei 0.51 per transaction to lei 0.45 per transaction, payable solely by the payer.

The NBR, in its capacity as relevant licensing and supervisory authority, also endorsed a series of amendments to the system rules governing the Central Depository, the operator of RoClear. The amendments were aimed at: (i) bringing the provisions of the Code into line with the definitions set forth in Regulation (EU) No 909/2014, (ii) verifying compliance with the settlement limits for a custodian agent at the time of matching the orders for a more efficient management of custodians' exposures in light of potential risks these can pose to the Central Depository, (iii) including new situations when a transfer order can be cancelled by the Central Depository, specifically following the opening of insolvency proceedings against a participant where transfer orders entered the system of the Central Depository after the opening of the insolvency proceedings, the matching process was carried out prior to the Central Depository learning about the opening of insolvency proceedings, and the intended settlement date for transfer orders is subsequent to the opening date of insolvency proceedings, (iv) excluding transactions between two accounts of the same participant or within the same omnibus account from the verification procedure of compliance with settlement limits, taking into account that the settlement limit is a measure designed to protect the other participants against a participant's default on its settlement obligations, (v) adding new provisions on the conditions for recognising the securities for which the Central Depository is the investor CSD, (vi) introducing provisions on the regulation of digital services that the Central Depository intends to develop, and (vii) updating the calculation methodology of the maximum volatility seen by the price of securities settled through the Central Depository system in order to align it with the changes to the rules applicable to the trading venues relative to the maximum price variations per category of securities per trading session – rules administered by the Bucharest Stock Exchange (BSE).

All these amendments, implemented by the Central Depository, provide a better legal certainty for the RoClear participants and were put in place for harmonisation reasons

with the regulations applicable to the activity carried out by the Central Depository, as well as in order to adapt the system rules to market needs, in compliance with the applicable legislation.

Measures adopted by the central bank for containing the risks to the functioning of payment and settlement systems and for boosting their efficiency

During 2021, payment and settlement systems continued to run normally and safely. Operational incidents were minor.

According to its statutory tasks, the NBR monitored on a continuous basis the functioning of payment systems and securities settlement systems. This central bank-specific activity envisages meeting objectives such as: safeguarding financial stability, providing an adequate channel for monetary policy transmission, ensuring the systems' efficiency and effectiveness, system operators complying with the legal framework, as well as maintaining public confidence in payment systems, payment instruments and the domestic currency.

During the health crisis, the NBR took all the efforts lest the functioning of financial market infrastructures operating on the territory of Romania should be affected by the pandemic or the new health protection measures on restricting the movement of persons and ensuring safe working conditions for both the operational personnel and the participants' users. Remote access modalities for the participants' users were resorted to in specific cases at the level of participants by ensuring the necessary measures for maintaining cyber resilience, without posing additional risks to financial market infrastructures. The operational personnel of the administrators continued to work in shifts in order to secure the smooth functioning of financial market infrastructures in Romania.

The year 2021 saw the start of a comprehensive assessment of ReGIS and SENT payment systems and their compliance with the requirements set forth in NBR Regulation No. 3/2018 on the oversight of financial market infrastructures and payment instruments and the best international practices in monitoring financial market infrastructures and ensuring their cyber resilience.

In 2021, the Central Depository saw an annual review and assessment of its compliance with the requirements of Regulation (EU) 909/2014 on improving securities settlement in the European Union and on central securities depositories (CSDR). The assessment was conducted by licensing authorities (Financial Supervisory Authority, in its capacity as competent authority, and the NBR and the ECB, in their capacity as relevant authorities), in line with the requirements of CSDR. The conclusions of the assessment indicated that there were no major risks to the smooth functioning of RoClear, the securities settlement system, and its participants.

In 2021, the NBR participated in and coordinated, for financial market infrastructures (FMIs) in Romania, the cyber resilience assessment of FMIs in Europe conducted by the ECB – *Eurosystem Cyber Resilience Survey 2021*, assessing their compliance with CROE (Cyber Resilience Oversight Expectations for Financial Market Infrastructures)

requirements. The results of this assessment highlighted an improvement in cyber resilience across financial market infrastructures in Romania, while also showing some issues that need increased attention given the current geopolitical context. The conclusions of this survey were also taken into account for the comprehensive assessment of ReGIS and SENT systems.

During 2021, the NBR participated in amending and supplementing Law No. 126/2018 on markets in financial instruments. The amendments envisaged both wording clarifications and legislative technique issues, and the transposition into national law of certain directives such as Directive (EU) 2020/1504 of the European Parliament and of the Council of 7 October 2020 amending Directive 2014/65/EU on markets in financial instruments, Directive (EU) 2019/2177 of the European Parliament and of the Council of 18 December 2019 amending Directive 2009/138/EC on the taking-up and pursuit of the business of insurance and reinsurance (Solvency II), Directive 2014/65/EU on markets in financial instruments and Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, as well as the implementation of a national sanctioning regime for the application of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

The Financial Market Infrastructures and Payments Oversight Department operated smoothly, without incidents, under a hybrid regime combining remote work and on-site work by complying with all health protection measures. The communication with system administrators was carried out through electronic means, except for the on-site participation in working meetings for assessing FMIs.

Participation in the regulatory process at EU level

The NBR was involved, in 2021, in the negotiation of the legislative files at European level concerning crypto-assets and the operational resilience of financial entities.

The NBR representatives were actively involved in the technical negotiations on the following (EU) Regulation proposals:

- the draft regulation on crypto-asset markets (Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937), and
- the draft regulation on the operational resilience of the financial sector (Proposal for a Regulation of the European Parliament and of the Council on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014 and (EU) No 909/2014).

Security, oversight and innovation in the field of payments

The NBR continued to regulate payments with a view to maintaining their safety and efficiency. Thus, the NBR issued: (1) Regulation No. 2/2021 amending NBR Regulation No. 2/2020 on the security measures for operational and security risks and the

reporting requirements related to payment services, (2) Regulation No. 4/2021 on reporting statistical data and information to the National Bank of Romania and (3) Regulation No. 6/2021 on the conditions to benefit from the exemption from setting up the contingency mechanism under Article 33(6) of Commission Delegated Regulation (EU) 2018/389 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication.

During 2021, the NBR continued and extended the analysis of the issues related to open banking implementation, especially in terms of identifying and removing obstacles blocking the access of payment service providers to payment service users' payment accounts, by means of dedicated interfaces developed by account servicing payment service providers (ASPSP) offering payment accounts that are accessible online. Some aspects were analysed together with the representatives of the European Banking Authority and, subsequently, specific measures were taken to remove the obstacles identified and deadlines were set for their implementation in bilateral discussions with the ASPSP representatives. At the same time, the NBR was involved in finding specific solutions relative to the replies provided by ASPSP and the requests for technical and operational support, following notifications from some payment service providers (providing payment account information and payment initiation services) from Romania and from abroad.

Pursuant to the provisions of Art. 32(2) of Commission Delegated Regulation (EU) 2018/389 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication, the National Bank of Romania monitored the functioning of the dedicated interfaces provided (application programming interfaces – APIs) in order to both ensure high availability and performance and comply with the provisions of Art. 32(1)-(2) and Art. 33(3) of this Regulation. The NBR identified certain flaws in the functioning of the dedicated interfaces and assessed them together with the relevant payment service providers in order to quickly correct them.

With a view to monitoring the availability and performance of dedicated interfaces, the NBR purchased an automated real-time monitoring service for the interfaces provided by ASPSP, whose combined market share exceeds 90 percent.

In 2021, the National Bank of Romania continued to receive notifications from payment service users or other interested parties of the possible non-compliance by payment service providers with some provisions of Law No. 209/2019 on payment services and amending certain legal acts. A significant number of these notifications referred to payment transactions initiated after fraudulently getting personalised security features from the payer which allowed transactions to be carried out on their account. In the case of these frauds, no security issues were identified at the level of payment service providers, as cyber attackers exploit primarily the vulnerabilities of the users who are manipulated by social engineering into providing the security features that allow them to safely use the payment services provided by payment service providers. In this context, given the numerous cases of fraudulent practices in the market, on 22 December 2021

the NBR published on its website a press release warning payment service users to protect their personalised security credentials of payment instruments (for further information, see <https://www.bnr.ro/page.aspx?prid=20376>). In addition, a number of discussions were initiated with payment service providers to implement security mechanisms designed to reduce payment service users' exposure to these risks.

In line with the provisions of Art. 219 of Law No. 209/2019 on payment services and amending some legal acts, payment service providers are bound to report to the National Bank of Romania about the emergence of any major operational and security incident classified by the former to be major, affecting the payment services they provide to their customers. Thus, in 2021, the central bank was notified of about 30 major operational and security incidents that affected payment services provided by financial institutions authorised by the NBR. The assessment of major incidents showed that these affected mainly the adequate functioning of: (1) services allowing cash deposit into/withdrawal

from a payment account, as well as all the necessary operations for the functioning of a payment account; (2) services specific to direct debit payment transactions, payment transactions by a payment card or a similar device, credit transfer transactions; (3) services allowing the issuance of payment instruments and/ or acceptance of payment transactions (e.g. the impossibility of using cards at payment terminals); and (4) payment initiation services. Payment service outages had a more or less severe impact. Thus, the most serious incident affected approximately 164,000 payment service users and 306,000 payment transactions respectively, while at the opposite end was an incident affecting 36 users and 46 payment transactions respectively.

The causes behind the major incidents were various: failures of information technology equipment, overloaded information systems, process failures, software errors, human errors, including by non-compliance with internal procedures, inappropriate changes and configurations, internal fraud, cyber attacks. Of the total number of reported major incidents, 15 were caused by events facing third-party service providers engaged in providing payment services on the territory of Romania.

Chart 9.4
Fraud rate by payment instrument

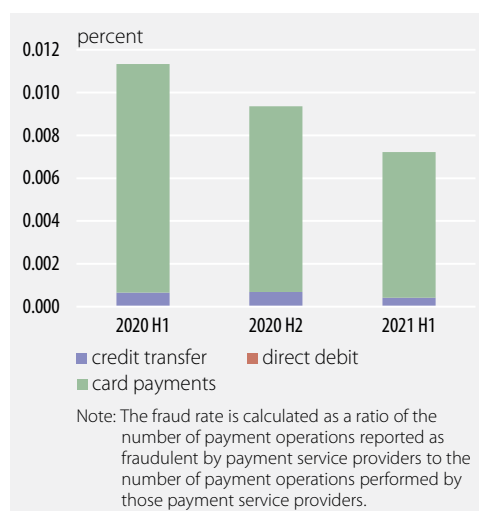
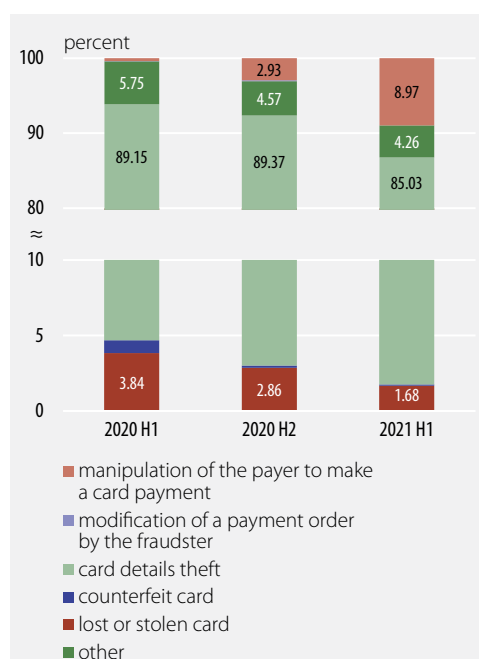


Chart 9.5
The share of fraudulent remote card-based payment transactions



The further low number of major payment incidents in 2021 (down from 2020) and their very low impact confirm that the security measures applied by payment service providers licensed in Romania were effective and helped to adequately keep under control the risks associated with payment service provision, considering the threats, vulnerabilities and risks to all categories of resources involved in the provision of these services.

The National Bank of Romania monitored the frauds across payment service providers based on the half-yearly data reported by them. The reported frauds relate to credit transfer payment transactions, direct debit, payment transactions by payment card,

cash withdrawals, money remittance, electronic money payment transactions and payment transactions through payment initiation services. For a proper analysis of the fraud dimension, more than 1,200 indicators were used based on a uniform methodology across all EEA countries.

The analysis of fraud statistics for 2021 H1 did not show any significant or large-scale frauds, which indicates a sound management of operational and security risks by payment service providers.

By payment instrument, card payment transactions post the highest fraud rate, which is nonetheless lower for each six-month period reported, reaching 0.007 percent in 2021 H1. The fraud rate related to credit transfer payment transactions in the first half of 2021 came in at 0.00042 percent (Chart 9.4).

Of the total number of fraudulent remote card-based payment transactions in 2021 H1, 85.03 percent involved card details theft by attackers (Chart 9.5).

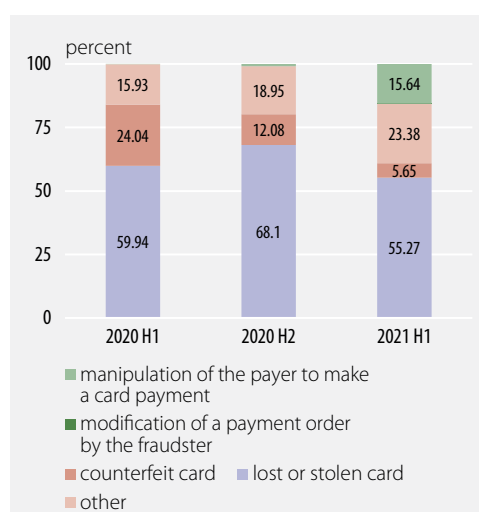


Chart 9.6

The share of fraudulent non-remote card-based transactions

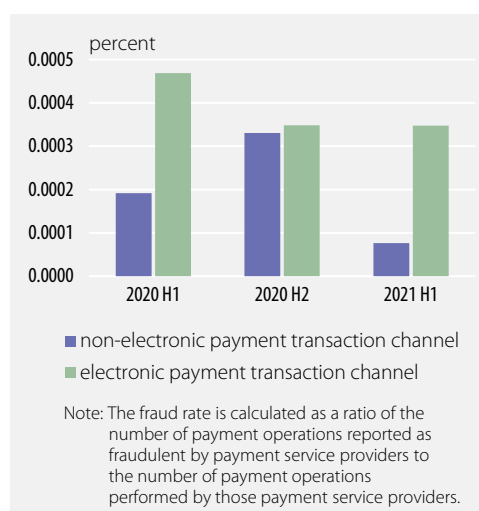


Chart 9.7

The fraud rate for credit transfers payment transactions, by channel

55.27 percent of card-based payments at ATM and POS terminals involved the theft/loss of card (Chart 9.6).

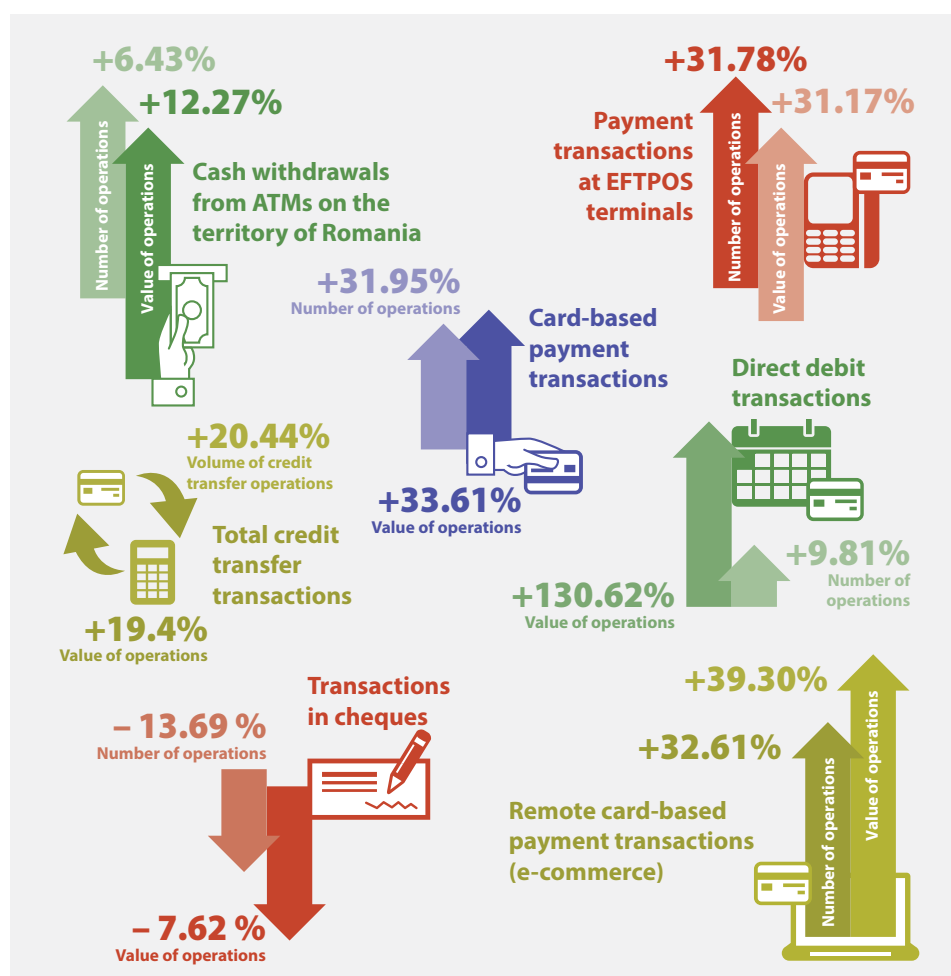
Moreover, credit transfer payment transactions through electronic channels report a higher fraud rate than those through non-electronic payment channels. In 2021 H1, the fraud rate for credit transfer payment transactions through non-electronic payment channels decreased significantly compared to the previous period, reaching a minimum threshold of 0.00008 percent of total credit transfer payment transactions (Chart 9.7).

During 2021, the National Bank of Romania continued work to monitor innovative solutions developed by Fintech companies in the field of payment services and payment instruments. In addition, the NBR participated in a series of meetings with entities that develop or intend to carry out activities in order to provide innovative technological payment solutions.

Information was gathered via FinTech Innovation Hub on the business models envisaged by the entities having sent information via this channel, especially as concerns innovative payment solutions falling under the following two main business model typologies:

- entities that wish to be authorised as payment institutions, with a view to delivering mainly payment account information services (AIS) and/or payment initiation services (PIS) or electronic money institutions or non-bank financial institutions (approximately 86 percent);
- entities that provide or wish to provide technical services in order to improve the current services to customers by coming up with innovative services/solutions for payment service providers, without ruling out the possibility to expand their business scope in the future, which requires an authorisation (approximately 14 percent).

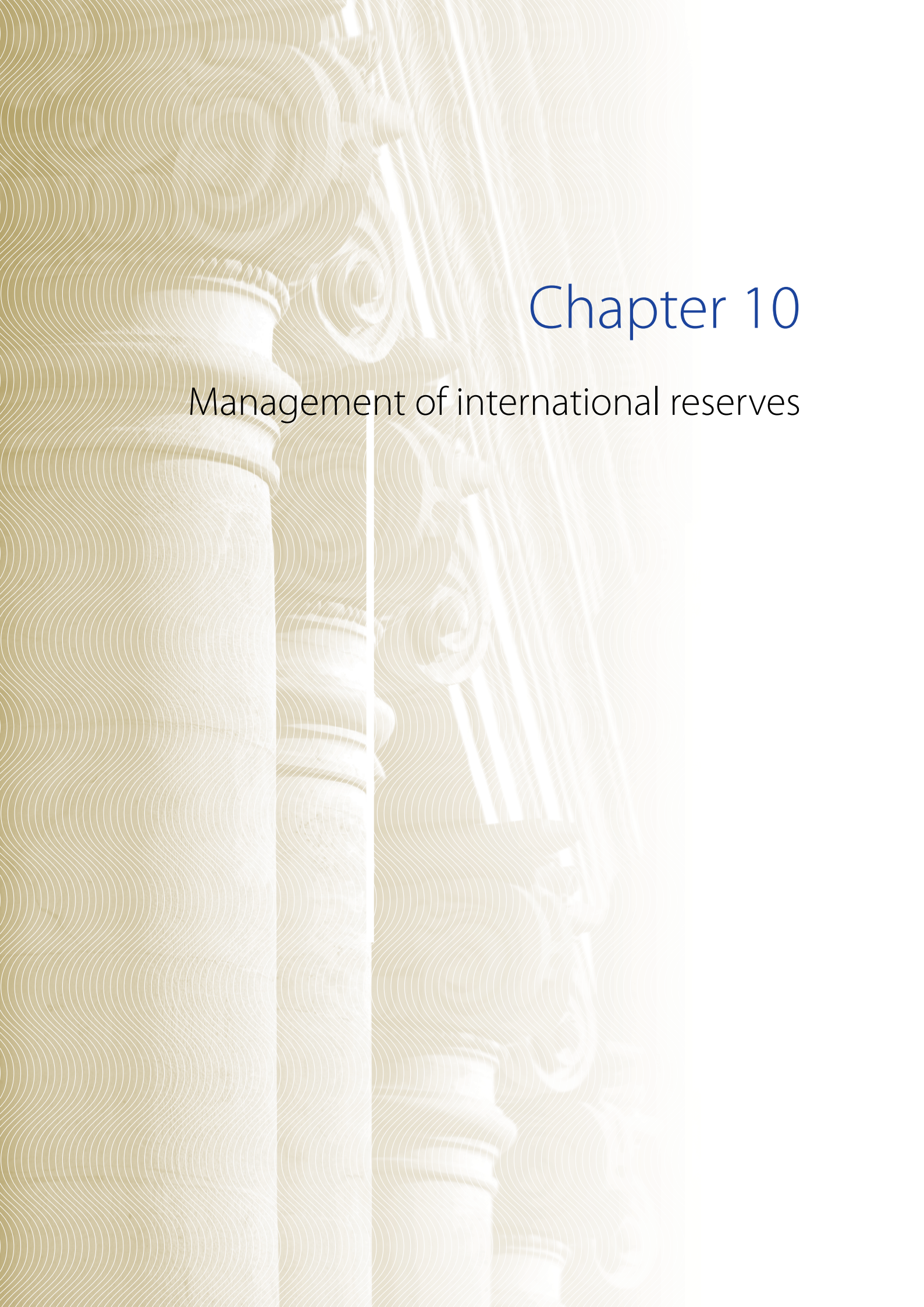
Developments in the payments market



Infographic

Statistical information on the main payment market developments in 2021





Chapter 10

Management of international reserves

Romania's international reserves play a key role in reducing foreign exchange market volatility, thereby contributing to ensuring the conditions for the central bank to achieve, through its specific policies, the objectives of price stability and financial stability. International reserves consist of liquid assets that can be traded on international markets; thus, their adequate volume increases investor confidence in the authorities' capacity to manage crises and, given the quality of economic policies, contributes to improving the costs of the country's external loans.

Emerging economies with access to capital markets at reasonable costs, like Romania, usually make recourse to foreign currency reserves – part of international reserves – for precautionary purposes, in order to tackle the risks stemming from a possible deterioration of the current account deficit. In countries with a managed float exchange rate regime, a factor playing a major role in setting the optimal level of foreign currency reserves is the volatility of the domestic currency, especially in times of financial market turmoil.

As part of its international reserve management activity, the NBR seeks to ensure an adequate level of reserves, so that several objectives are cumulatively fulfilled. Liquidity and safety come first, ahead of profit-making, and the NBR has a low risk propensity when carrying out reserve management activities. Thus, the value of international reserves is maximised while complying with prudent risk limits, so that they are always available when needed.

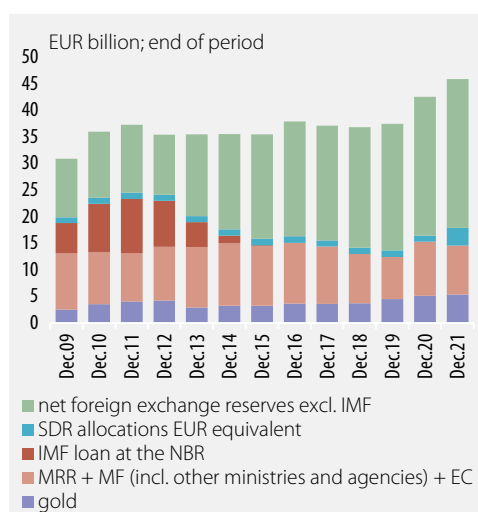
The latest global trends envisage an active part played by central banks in promoting sustainable investment. As regards the management of international reserves, this role can be played by adding investment sustainability as an objective, next to the other three classic ones. This approach is all the more appropriate as not taking into account the considerations about sustainability would mean disregarding a factor that enhances the long-term value of investment.

1. Developments in Romania's international reserves in 2021

At end-2021, Romania's international reserves amounted to EUR 45,831 million (Chart 10.1) – of which foreign currency reserves made up 88.3 percent and monetary gold accounted for 11.7 percent – after increasing by EUR 3,313 million versus end-2020. The gold reserve remained unchanged at 103.64 tonnes, out of which 61.24 tonnes stored with the Bank of England. In terms of value, Romania's gold reserves went up EUR 217 million from end-2020 (to EUR 5,356 million), as a result of the rise in the gold price on international markets.

The gold price per ounce dropped by 3.6 percent in 2021, the closing price on 31 December 2021 being USD 1,829.20 per ounce. Expressed in EUR, the gold price

Chart 10.1
International reserves



increased by 3.5 percent in the year under review. Gold has retained its role as a safe-haven asset and as a hedge against inflation, being an asset that does not incorporate the credit risk of any country. It contributes to the diversification and mitigation of risk also due to its negative correlation with the US dollar and to the low correlation with the prices of shares and long-term fixed-income instruments.

The main reasons given by central banks for their decisions to maintain a gold stock as part of international

reserves remain, according to data published in 2021 as well, the safety provided by these reserves during times of crisis, the historical legacy, the long-term value preservation and the lack of credit risk.

The role of gold was also reflected by the latest survey published in 2021 by the World Gold Council. The survey covered 56 central banks, with 21 percent of them planning to increase their reserve stock over the next year, the main reason behind that being the ongoing uncertainty generated by the COVID-19 pandemic.

As of 2010, the profile of the central banks in the ranking of gold buyers has changed. The list of buyers, usually dominated by emerging economies such as Russia, Turkey and Kazakhstan, has been supplemented since 2019 by other central banks which have returned to the gold market after a long period of absence and have bought more than one tonne of gold. During 2021, among the main buyers are: Thailand (ranking first on the list of gold buyers with purchases of 90.2 tonnes), India (77.5 tonnes), Hungary (63 tonnes), Brazil (62.3 tonnes), Uzbekistan (29.5 tonnes).

In the period under review, foreign currency reserves expanded by EUR 3,096 million, coming in at EUR 40,475 million at 31 December 2021. The key factors that led to a change in reserves were the following: the amounts collected in relation to the Ministry of Finance's bond issues on domestic and external markets, inflows into the European Commission's account, repayments related to foreign loans and guarantees, interest payments and capital repayments on the foreign currency-denominated public debt, changes in credit institutions' required reserves.

The movements in the currencies included in the reserves managed by the NBR had an overall positive effect throughout 2021 on the market value of international reserves expressed in euro equivalent. The average yield on foreign currency-denominated assets invested in 2021 increased, given that returns in the global financial markets were also on an upward trend, especially in the latter half of the year. Against this backdrop, the differential between the returns on investments in foreign currency assets and the interest rates on the central bank's foreign liabilities widened and remained positive. The investment policy pursued by the NBR in accordance with the foreign reserve management strategy for 2020-2021 remained prudent.

2. Management of international reserves in a highly uncertain economic and financial environment

2.1. External economic and financial developments

In 2021, the international financial climate was governed by a general trend of recovery in economic activity worldwide, mostly due to an improvement in the management of the pandemic and to an increase in the access to vaccination, to which added the fiscal policy stances being kept unchanged or further eased, especially in the United States.

The economic rebound displayed asymmetric growth rates worldwide, given the differences among economic sectors, the mobility restriction measures, the intensity of the pandemic, as well as economic policy responses.

These developments traced the coordinates of a challenging economic framework for economic policies in general and monetary policies in particular, marked by supply constraints associated with supply chain bottlenecks, simultaneous/successive cost shocks and, last but not least, with uncertainties surrounding the persistence of inflationary pressures.

Therefore, in the first part of 2021, the extensive fiscal stimulus programmes enacted by the United States Congress, as well as the progress in terms of vaccination access and the prospect of a complete lifting of mobility restrictions at global level, prompted the resumption of economic activity, especially in the major developed economies. The gradual acceleration of consumer price inflation and the upward revision of expectations at the relevant monetary policy horizon were attributed to a short-term imbalance between the swift increase in domestic absorption and the reduced capacity of supply to accommodate it, both seen as transitional also due to the pandemic.

In the second part of 2021, the balance of risks to inflation worsened significantly in most of the advanced countries amid successive supply-side shocks, which overlapped a declining aggregate demand deficit and a tightening labour market. Despite the previous rhetoric of monetary policymakers on its transitory nature, the inflation rate has successively exceeded initial forecasts throughout the year. Against this backdrop, the view of central banks with regard to the persistence of high inflation rates changed in 2021 H2, with the risk of de-anchoring inflation expectations being brought to the fore.

The shift which occurred towards end-2021 in the central banks' perspective on inflation developments led to a race of financial market expectations regarding the withdrawal of monetary stimulus and the normalisation of the monetary policy conduct. Thus, the Bank of England decided to reduce the balance sheet size and initiate the interest rate hiking cycle in December 2021. In a similar manner, in November 2021 the Federal Open Market Committee (FOMC) announced a decrease in the pace of its net asset purchases and, at the same time, it gradually started to

signal the prospect of an increase in the monetary policy rate which, in fact, took place in March 2022. Moreover, despite a much less advanced position within the business cycle, the European Central Bank resorted to a significant change in its rhetoric on forward guidance and, at the same time, it communicated the new schedule for concluding the quantitative easing programmes.

Fixed-income markets recorded noticeable rises throughout 2021 as the economic outlook improved and the current and forecasted inflation rates increased. Although yields have increased at global level, the dynamics profile and the magnitude of changes have differed on a case-by-case basis, mainly depending on the position of each economy in the business cycle, on the strength of shocks that impacted the economic variables relevant to monetary policy and, last but not least, on the intensity and sequencing of the normalisation of monetary policy tools. In other words, while expectations of an increase in the policy rate operate mainly in the short-term segment and then dissipate towards the medium-term segment, the faster pace of passive reduction in the balance sheet by partially reinvesting the maturing bonds held by the central bank mechanically contributes to higher long-term yields – which are highly sensitive to duration risk.

In this context, US Treasury security yields rose between 60 basis points and 90 basis points, while the term structure flattened given the high yield sensitivity in the medium-term segment. Similar developments, but different by maturity segment, were also recorded in the UK government bond market, which led to an upward parallel shift in the yield curve. In the euro area, sovereign bond yields were also on an upswing that ranged between 20 basis points and 60 basis points, yet mainly located in the long-term segment, which led to a steepening yield curve. In Australia and Canada, government bond yields rose sharply by 120 basis points and 200 basis points, respectively. By contrast, yields on securities issued by the Japanese government recorded marginal increases, as they were largely decoupled from international developments due to the further accommodative monetary policy stance and to the capping of 10-year yields at 0.25 percent.

The overall risk sentiment became extremely weak and subject to sudden changes following the outbreak of the war in Ukraine, which largely overlapped the impending normalisation of monetary policy stances by major central banks. The start of the conflict in Ukraine in early 2022 led to a significant escalation of the above-mentioned challenges, as the US, together with NATO allies and the other partners, imposed unprecedented pecuniary and non-pecuniary sanctions. The geopolitical crisis and the disruption of financial and trade relations had a major impact on commodity prices, which were already at historical highs, leading to increased concerns over stagflation in most developed economies, and particularly in those lacking energy independence. These strong supply-side shocks worsened the balance of risks to price stability and economic growth, especially in Europe, given its high reliance on energy imports.

International financial markets reacted accordingly, and the markets for fixed-income instruments have already incorporated, given their strong forward-looking behaviour, the stagflation risk, i.e. the decoupling and the opposite evolution of inflation and

production. Thus, except for some transitory episodes caused by the increased demand for safe-haven assets, in the first months of 2022, bond markets worldwide were hurt by investors, as they faced one of the most acute sell-off episodes in recent history, which was characterised by a significant drop in liquidity, increased volatility and an upswing in the open interest in short positions.

On international foreign exchange markets, the US dollar appreciated against most reserve currencies, mainly due to the divergence in economic cycles and, implicitly, to the expected differential in monetary policy rates. The pound sterling recorded similar developments, but of a lower magnitude. As for the European single currency, the nominal effective exchange rate of the euro has been subject to constant depreciation pressures due both to the aforementioned fundamental factors of the exchange rate and to episodes of worsening in the overall risk sentiment, especially after the outbreak of the war in Ukraine. By contrast to the above-mentioned currencies, the Japanese yen recorded opposite developments, as it has constantly underperformed against all other reserve currencies, except for the occasional episodes of higher risk aversion at global level, amid very large divergences in the monetary policy cycle compared to the other developed economies.

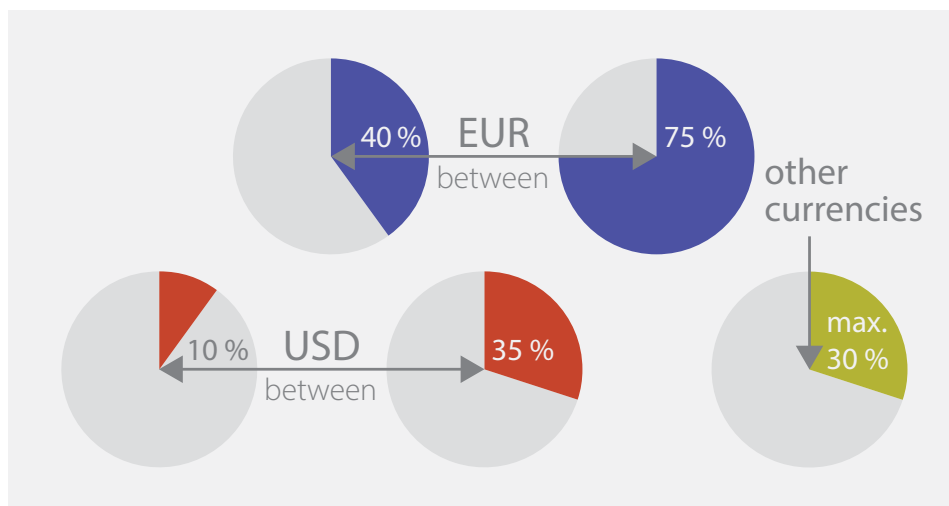
2.2. The manner to achieve strategic goals

The year 2021 saw the pursuit of key strategic parameters for international reserve management, set by the NBR Board at the end of 2019 for 2020-2021. They were further aimed at a framework that focuses on the diversification of the NBR's balance sheet risks and on investment safety and liquidity, which would allow for the highest possible investment performance during the period of strategy implementation via a prudent and effective management of reserves.

The key strategic parameters monitored by the NBR in terms of managing international reserves throughout 2021 were:

- the composition of foreign currency reserves: euro – 40 to 75 percent of total; US dollar – 10 to 35 percent of total; other currencies – at most 30 percent of total;
- an average duration of up to 1 year and 3 months for the foreign currency reserve as a whole;
- an investment tranche with the aim of improving the results of international reserve management;
- categories of eligible issuers: (i) the US government; (ii) government agencies or agencies sponsored by the US government; (iii) the governments of EU Member States; (iv) government agencies or agencies sponsored by the governments of EU Member States; (v) the Government of Japan; (vi) the Government of China; (vii) other governments rated A- and above; (viii) supranational institutions; (ix) private entities, issuers of covered bonds;
- the maximum exposure to private entities that are issuers of covered bonds: 10 percent of international reserves;
- the maximum exposure to private entities other than covered bond issuers: 10 percent of international reserves.

In 2021, the NBR continued to invest in sustainable bonds issued by the already approved issuers, which have the same credit risk as the conventional bonds issued by these same issuers.



The Foreign Reserve Management Committee and the NBR Board deemed it appropriate to leave unchanged the benchmark portfolios defined by the strategy for the management of Romania's international reserves for 2020-2021. Foreign currency reserves were further managed in a dynamic and flexible manner, with a focus on identifying and capitalising on new opportunities in the global financial markets, yet without prejudice to the NBR's investment safety and liquidity objectives. In order to obtain additional income, the NBR made adjustments to the currency composition of reserves, as well as portfolio shifts by class of fixed-income issuers. Moreover, the NBR continued to favour a relatively dynamic management in terms of portfolio duration and exposures along the yield curves. Additional risks were taken in a cautious and effective manner, in accordance with the objectives and risk parameters defined by the multiannual strategy for international reserve management, as well as with other relevant provisions and considerations.

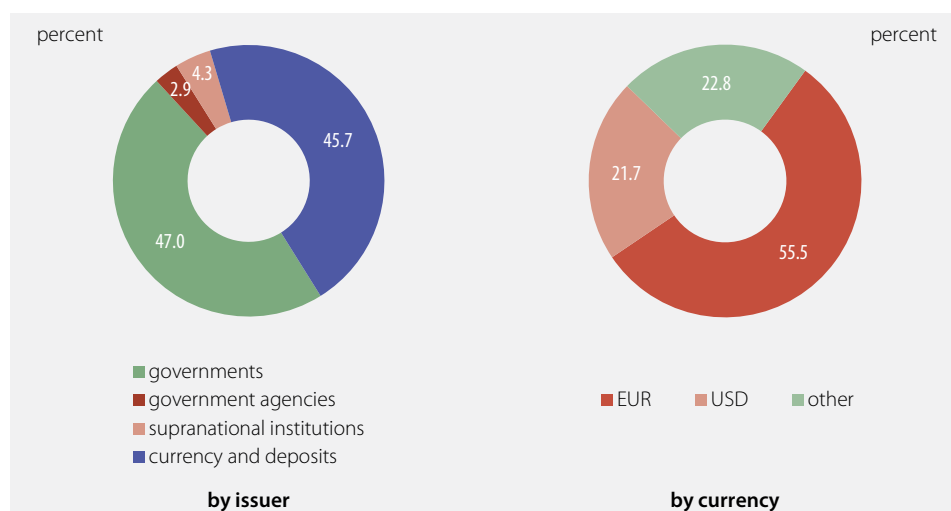
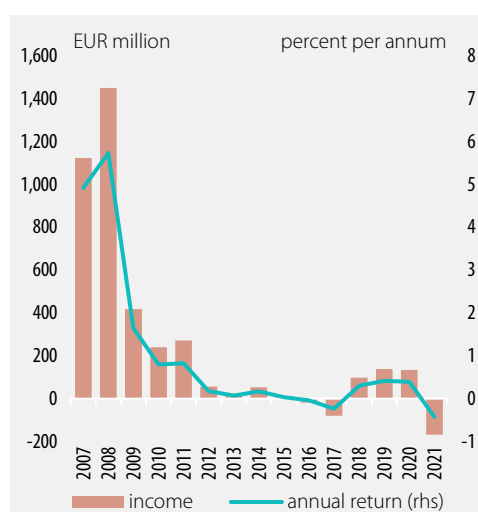


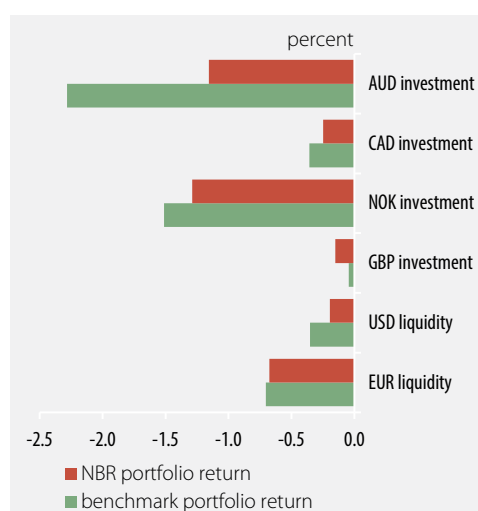
Chart 10.3
Returns on portfolio management



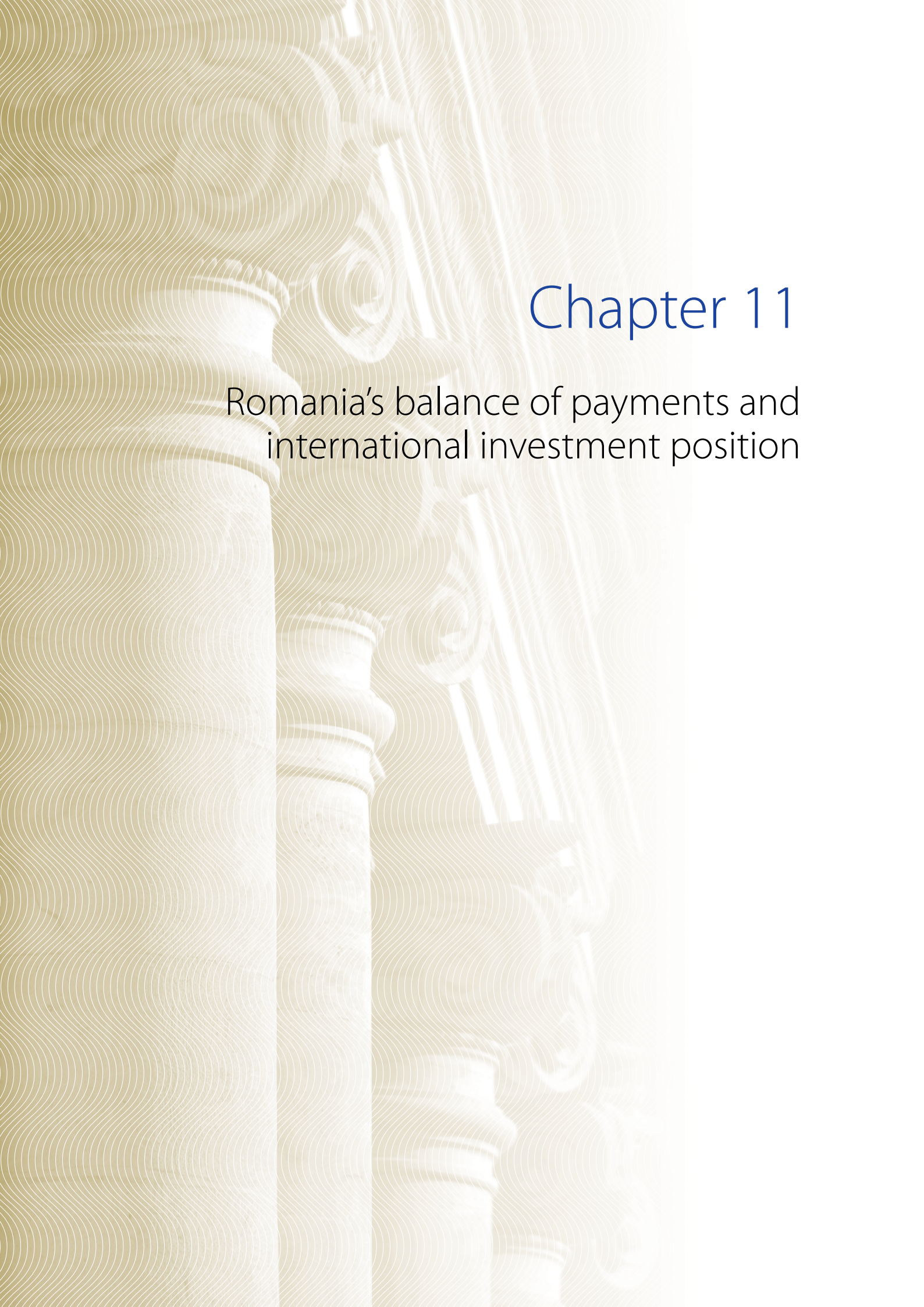
Similarly to the currency composition of the NBR's foreign liabilities, of Romania's public and publicly guaranteed debt service and of the country's international trade, the euro further held the largest share of foreign exchange reserves (55.5 percent) at end-2021 as well, ahead of the US dollar (21.7 percent; Chart 10.2).

Although the returns on investments made under international reserve management have been on a positive trend in 2021 as compared to 2020, the negative effect of capital depreciation caused by the strong increase in yields on fixed-income securities, mainly toward year-end, led to lower investment income and to a drop in annual returns on portfolio management from 0.39 percent in 2020 to -0.43 percent in 2021 (Chart 10.3). At the same time, income from portfolio management fell from EUR 134 million (euro equivalent) to EUR -168 million (euro equivalent).

Chart 10.4
Comparative returns – NBR vs benchmark portfolio



The annual returns on the NBR's EUR- and USD-denominated liquidity portfolios stood at -0.67 percent and -0.19 percent, respectively. Investment portfolios – denominated in pound sterling, Norwegian krone, Canadian and Australian dollars – posted negative annual returns of -0.15 percent, -1.29 percent, -0.25 percent and -1.16 percent, respectively (Chart 10.4), whereas the CNY-denominated holdings recorded an average return of 2.61 percent.



Chapter 11

Romania's balance of payments and
international investment position

1. Current account and capital account

Current account

In 2021, the balance-of-payments current account deficit stood at EUR 16,754 million, accounting for 7 percent of GDP, compared to 5 percent of GDP a year earlier (Table 11.1).

	EUR million	
	2020	2021
Goods, net	-18,949	-23,159
Exports (FOB)	57,560	70,196
Imports (FOB)	76,509	93,355
Services, net	9,438	9,542
Primary income, net	-3,326	-4,187
Secondary income, net	1,935	1,050
Current account balance	-10,902	-16,754

Table 11.1
Current account

Developments in the current account deficit were ascribed to larger shortfalls on trade in goods and primary income, together with the compression of the surplus on secondary income, whereas the positive balance on trade in services stood slightly higher.

The deficit on trade in goods widened by 22.2 percent against the previous year, to EUR 23,159 million, accounting for 9.6 percent of GDP, up from 8.7 percent of GDP a year before. Exports shot up 22 percent (after having shed 8.7 percent in 2020) amid the 5.3 percent expansion of the EU economy as a whole, whereas Romania's major partners in trade in goods, namely Germany, Italy and France, reported economic growth rates ranging between 2.9 percent and 7 percent. Given the high import content of exports, imports saw, in turn, a pick-up of 22 percent compared to a decline of 5.4 percent in 2020. Almost two thirds of the trade in goods deficit is attributed to two groups of goods: chemical and plastic products (EUR -10,119 million) and mineral products (EUR -4,788 million) and 76.4 percent of the shortfall came from intra-EU trade (EUR -17,701 million).

The coverage of imports by exports stood at 75.2 percent, similarly to a year earlier, while the openness of the Romanian economy²³⁸ added 6.8 percentage points to 68.1 percent.

Exports of goods totalled EUR 70,196 million, up EUR 12,636 million year on year. Accordingly, the share of exports of goods in GDP widened to 29.2 percent

²³⁸ Openness of the economy was calculated as follows: (exports of goods + imports of goods)/GDP*100.

from 26.3 percent in the prior year. The breakdown of exports by group of goods shows year-on-year rises in value for all merchandise groups, yet some groups posted lower shares in total exports against 2020, as follows: machinery, apparatus, equipment and transport means (down 4.1 percentage points to 45 percent, amid the semiconductor crisis) and textiles, wearing apparel and footwear (down 0.2 percentage points to 3.8 percent).

Imports of goods came in at EUR 93,355 million, up by EUR 16,846 million versus 2020. The share of imports of goods in GDP widened by 3.9 percentage points to 38.9 percent. The recovery of economic activity was reflected not only in a higher value of imports, but also in structural changes, pointing to larger imports of mineral products (up 2.4 percentage points to 8.1 percent of total imports), base metals (up 1.1 percentage points to 10.8 percent) and chemical and plastic products (up 0.3 percentage points to 18.4 percent).

The services balance exhibited a surplus of EUR 9,542 million, as against EUR 9,438 million in 2020. The rise was ascribable to higher receipts from telecommunications, computer and information services as well as road freight transport. The share of services surplus in GDP narrowed by 0.3 percentage points to 4 percent.

The deficit on the primary income balance widened, amounting to EUR 4,187 million, compared to EUR 3,326 million in 2020. This owed mainly to an increase in profit reinvested in direct investment companies in Romania, whose financial results improved, but was limited by the positive influence of the receipts from gross wages of persons working abroad with contracts for less than one year. The primary income deficit-to-GDP climbed to 1.7 percent from 1.5 percent in the year before.

The surplus on secondary income equalled EUR 1,050 million, down 45.7 percent from a year earlier, amid higher contributions paid to the EU budget and weaker inflows of EU funds in the form of current transfers (the European Social Fund – ESF and the European Agricultural Fund for Rural Development – EAFRD). The share of secondary income surplus in GDP narrowed accordingly, to 0.4 percent from 0.9 percent in the previous year.

Current account deficit financing was covered up to approximately two thirds from autonomous sources, i.e. direct investment (equity and reinvested earnings), capital transfers and other net inflows to the capital account, with issues of government securities and other debt instruments topping up the rest.

Capital account

In 2021, the positive balance of the capital account stood at EUR 5,243 million, 25.5 percent above the year-earlier reading, on the back of inflows of EU funds in the form of capital transfers under the Recovery and Resilience Facility²³⁹. The

²³⁹ The Recovery and Resilience Facility (RRF) aims to mitigate the economic and social impact of the COVID-19 pandemic and to raise the sustainability and resilience of EU economies and societies, as well as to better prepare them for the challenges and opportunities arising from the green and digital transitions.

capital account surplus expanded against 2020 as a share in GDP (to 2.2 percent from 1.9 percent), yet having a smaller contribution to the current account deficit financing (down to 31.3 percent from 38.3 percent).

2. Financial account

In 2021, the negative financial account balance came in at EUR 12,976 million, reflecting net financial inflows for the fifth successive year and rising by approximately two thirds from the preceding year (EUR 7,808 million – Table 11.2). This trend was driven by an increase in net direct investment inflows, but also by the evolution of other investment, which recorded net inflows for the first time in 10 years. At the same time, portfolio investment continued to post net inflows, consisting mainly of government securities issues, the value of which, however, lagged behind that of 2020, whereas reserve assets were on the rise.

	EUR million	
	2020	2021
Financial account	-7,808	-12,976
Net acquisition of assets	11,773	4,533
Net incurrence of liabilities	19,581	17,509
Direct investment	-2,958	-7,306
Net acquisition of assets	115	1,508
Net incurrence of liabilities	3,073	8,814
Portfolio investment	-13,423	-3,115
Net acquisition of assets	38	1,947
Net incurrence of liabilities	13,461	5,062
Financial derivatives	-16	153
Net acquisition of assets	-16	153
Other investment	2,988	-4,959
Net acquisition of assets	6,035	-1,326
Net incurrence of liabilities	3,047	3,633
Reserve assets	5,601	2,251
Net acquisition of assets	5,601	2,251

Table 11.2
Financial account

Direct investment saw net inflows in amount of EUR 7,306 million in 2021, up by 2.5 times from the previous year's reading of EUR 2,958 million. Investment by non-residents in Romania reached EUR 7,280 million, with equity²⁴⁰ amounting to EUR 5,828 million, the remainder being the net value of debt instruments²⁴¹ (EUR 1,452 million). The top-five investor countries²⁴² were: the Netherlands, Germany, Luxembourg, France and China, accounting for more than 70 percent of non-residents' net direct investment inflows in Romania in 2021.

²⁴⁰ Including the estimated net reinvestment of earnings.

²⁴¹ Includes loans in any form between the non-resident investor and the resident company, as well as other debt instruments.

²⁴² In terms of the share in net inflows of direct investment by non-residents in Romania in 2020 (preliminary data).

Portfolio investment recorded net inflows of EUR 3,115 million in 2021, well below the 2020 level (EUR 13,423 million), given a significant decrease in liabilities (mainly under the influence of a lower volume of government debt issuance) and an increase in assets acquired by deposit-taking and other financial corporations (debt securities issued by non-residents).

Other investment reported net inflows of EUR 4,959 million, compared with net outflows of EUR 2,988 million in 2020. This owes to a drop in assets (deposits made abroad by residents – banks and companies as well as borrowings granted to non-residents by resident banks), along with an increase in liabilities (SDR allocations, trade credits and advances).

3. Net international investment position

The international investment position saw its net debit balance worsen to EUR 109.2 billion at end-2021 versus EUR 104.2 billion at end-2020.

Composition of foreign assets and liabilities

At end-2021, foreign assets amounted to EUR 96.6 billion, up 8.6 percent over end-2020. The composition of foreign assets by main component of the investment position was similar to that of the prior year. Specifically, reserve assets further prevailed (47.4 percent, or EUR 45.8 billion), ahead of other investment (29.5 percent, or EUR 28.5 billion), direct investment (14 percent, or EUR 13.5 billion) and portfolio investment (9.1 percent, or EUR 8.8 billion).

At end-2021, foreign liabilities ran at EUR 205.8 billion, up 6.5 percent against the end of the previous year. The composition of foreign liabilities recorded, during 2021 as well, a prevalent share of direct investment, the evolution of which was similar to that of a year earlier, being further impacted by the pandemic-ridden economic environment. Specifically, in 2021, the share of direct investment (amounting to EUR 107.2 billion) in total foreign liabilities was 52.1 percent. Portfolio investment (EUR 52 billion) took a share of 25.2 percent of foreign liabilities, higher than that of other investment (EUR 46.7 billion), which went up 0.6 percentage points from 2020 to 22.7 percent.

Gross external debt

At 31 December 2021, gross external debt came in at EUR 134.6 billion.

Long-term external debt increased by 3.9 percent from end-2020, standing at EUR 97.2 billion, as a result of net transactions (EUR +7 billion) and exchange rate changes and other changes (EUR +0.8 billion). Changes in debt security prices ran at EUR -4.1 billion.

Long-term external debt service equalled EUR 16.1 billion, shedding 7 percent over a year before. Principal repayments totalled EUR 13.9 billion (versus EUR 15.4 billion in 2020) and payments of interest and commissions stood at EUR 2.1 billion (against EUR 1.8 billion in 2020).

Long-term external debt by institutional sector shows that, at end-2021, the general government sector further held the largest share of 59.9 percent (EUR 58.2 billion), down somewhat from a year earlier, ahead of the non-bank sector on 32.2 percent (EUR 31.3 billion). The breakdown of general government debt by instrument points to a net contribution worth EUR 4.5 billion from portfolio instruments in the form of government securities and a net decrease of EUR 0.1 billion under external borrowings. Compared to 2020, deposit-taking corporations except the central bank (4.5 percent of long-term external debt) recorded after a long time an uptrend in long-term external debt, owing to the upswing in non-residents' deposits and the doubling of portfolio investment, whereas the monetary authority (3.5 percent of long-term external debt) reported a higher balance following the rise in SDR allocations by the IMF (equivalent to EUR 2.1 billion).

The analysis of long-term external debt by creditor shows a wider share held by international institutions (16.8 percent at end-2021 from 15.6 percent at end-2020), following the net transactions related to external debt performed by multilateral creditors such as the EU, IBRD, EBRD, EIB, IFC, EDF, OECF, Nordic Investment Bank, Euroatom (EUR 1.7 billion). The share of private financing sources was significant in 2021 as well. Romania tapped international private capital markets in April and July via government securities issues adding up to EUR 7 billion, with coupons ranging between 1.75 percent and 2.875 percent, and maturing over 10, 14 and 21 years.

Looking at the composition by maturity at the end of 2021, external debt with a maturity of over five years continued to hold a majority share in long-term external debt (91.4 percent), down slightly from the previous year (91.8 percent), exerting further a favourable impact on average maturity.

The breakdown of long-term external debt by currency at end-2021 shows that the euro was in the lead (73 percent, up 0.4 percentage points versus 31 December 2020). It was followed by the leu (12.9 percent, down 2.2 percentage points), the US dollar (9.1 percent, down 0.4 percentage points), the SDR (3.5 percent), the Swiss franc (0.9 percent) and other currencies (0.6 percent).

At end-2021, long-term external debt held 40.5 percent of GDP, down 2.2 percentage points from end-2020. Long-term external debt service ratio²⁴³ fell by 4.9 percentage points to 16.4 percent at end-2021 from 21.3 percent at end-2020 (Table 11.3).

Table 11.3
Key external indebtedness
indicators

	percent	
	2020	2021
Gross external debt/GDP	57.9	56.0
Net external debt/GDP	21.9	20.8
Long-term gross external debt/GDP	42.7	40.5
Long-term gross external debt/Exports of goods and services	114.9	99.1
Long-term gross external debt service ratio	21.3	16.4

²⁴³ Long-term external debt service ratio is calculated as a ratio of long-term external debt service to exports of goods and services.

Short-term external debt ran at EUR 37.5 billion at end-2021, with its balance standing 12.6 percent higher against the previous year, on the back of net capital inflows and exchange rate changes amounting to EUR 5 billion. Changes in debt security prices and other changes were equivalent to EUR -0.8 billion. Short-term external debt service came in at EUR 69.8 billion, with the corresponding debt service ratio²⁴⁴ reaching 71.2 percent at end-2021, 2.9 percentage points higher than at end-2020.

Net external debt

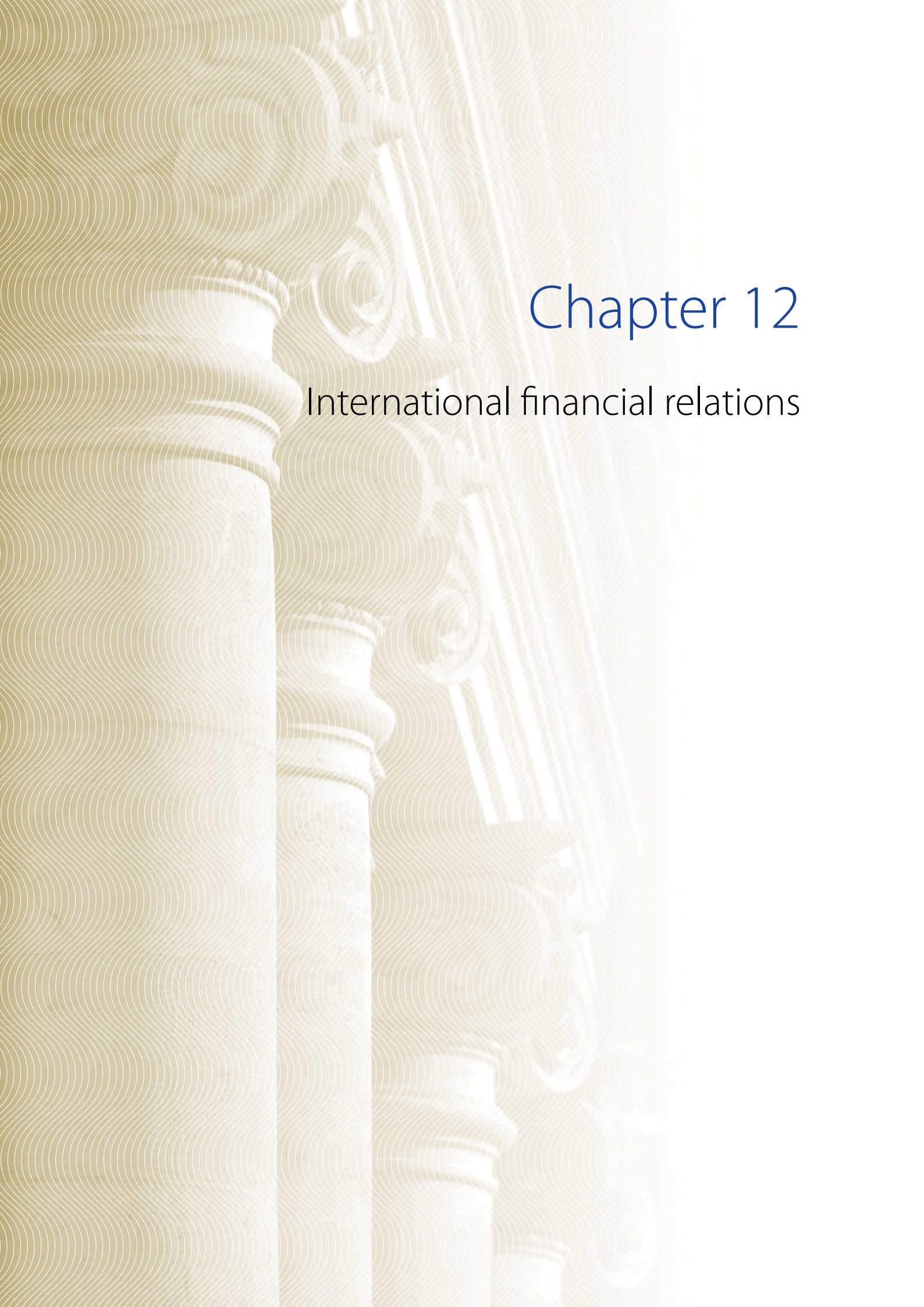
At end-2021, net external debt moved ahead to EUR 49.9 billion versus EUR 47.9 billion in 2020, largely amid the rise in the net external debt of other sectors, the general government sector and direct investment in the form of debt. Deposit-taking corporations except the central bank saw their net creditor position contract, due to the renewal of non-residents' long-term deposits. The central bank's net creditor position recorded an upward trend compared to 2020, following the increase in the balance of deposits placed abroad (Table 11.4).

	EUR million					
	2020			2021		
	Gross external debt	External assets in the form of debt instruments	Net external debt	Gross external debt	External assets in the form of debt instruments	Net external debt
	(1)	(2)	(3) =(1)-(2)	(1)	(2)	(3) =(1)-(2)
General government	57,712	4,874	52,838	58,802	5,462	53,340
Central bank	1,162	38,819	-37,657	3,365	41,966	-38,600
Deposit-taking corporations except the central bank	7,227	13,055	-5,829	7,798	12,405	-4,607
Other sectors	24,102	11,849	12,252	25,708	13,173	12,535
Debt instruments under direct investment	36,547	10,289	26,259	38,943	11,673	27,270
Total	126,750	78,886	47,863	134,617	84,679	49,938

Table 11.4
Romania's external debt

²⁴⁴ Short-term external debt service ratio is calculated as a ratio of short-term external debt service to exports of goods and services.





Chapter 12

International financial relations

According to its Statute, the NBR may participate, under the mandate given by the Parliament, to international financial, banking, and monetary or payment organisations/institutions and may become a member thereof.

Hence, the NBR has, over time, paid special attention to international financial relations in its capacity as a member institution or as a representative of Romania, and also as a depositary of the Romanian state's holdings in international financial institutions. The benefits of collaborating with these organisations include accessing financial resources, receiving technical assistance and exchanging experience on central banks' best practices, as well as actively participating in debates concerning the global financial and monetary system, via representatives in the management of these fora, and in the various meetings organised by them.

Moreover, the NBR has strengthened cooperative relations with central banks in other countries, including non-members of the European System of Central Banks, both bilaterally and multilaterally, through working meetings between the NBR representatives and their counterparts, or participations to regional meetings.

1. International Monetary Fund

Romania has been a member of the International Monetary Fund (IMF) since 1972, its quota subscription (subscribed and paid-up capital) currently amounting to SDR 1,811.4 million, i.e. 0.38 percent of the IMF's share capital.

In 2021, Romania received SDR 0.005 million from the IMF as net interest.

The IMF conducted a virtual mission to Romania during 10-28 May 2021, to assess the macroeconomic situation under Article IV Consultations. At the end of the mission, the IMF team published a statement²⁴⁵ presenting the findings of the consultations with the Romanian authorities.

Against the background of the global economic downturn caused by the COVID-19 pandemic, one of the measures taken by the IMF to support its member countries was to supplement their international reserves via a new general allocation of SDRs, amounting to USD 650 billion, approved by the IMF Board of Governors on 2 August 2021. The new SDR general allocation benefited all IMF member countries in proportion to their quota share. The amount allotted to Romania, i.e. SDR 1.7 billion, was transferred on 23 August 2021 to the country's SDR account held with the IMF, administered by the NBR as part of the international reserve.

²⁴⁵ <https://www.imf.org/en/News/Articles/2021/05/28/romania-2021-article-iv-concluding-statement>

2. World Bank Group

Romania is a member of all institutions that are part of the World Bank Group, namely the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA) – which together make up the World Bank, the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA) and the International Centre for the Settlement of Investment Disputes (ICSID).

International Bank for Reconstruction and Development

Romania joined the International Bank for Reconstruction and Development (IBRD) in 1972, an institution in which it currently holds 8,317 shares (0.30 percent of the bank's capital) and a voting power accounting for 0.31 percent of total.

The Country Partnership Framework with Romania (for the period 2018-2023) targets three priority lines of action: (i) investing in people and equal opportunities; (ii) supporting a dynamic development of the private sector; (iii) improving the capacity to respond to natural disasters and climate change. The World Bank adapted the country programme to the pandemic-induced changes and restructured a number of operations, expanding the portfolio to incorporate health funding, support long-term investment in education infrastructure, and improve institutions' capacity to manage natural disaster and climate risks.

International Development Association

Romania joined the International Development Association (IDA) on 12 April 2014, its current voting power accounting for 0.33 percent of total.

Financial institutions affiliated to the World Bank

Romania joined the International Finance Corporation (IFC) in 1990 and it currently holds a 0.19 percent voting power within the organisation. The activity of this organisation is complementary to that of the IBRD and IDA, focusing exclusively on the private sector.

Romania has been a member of the Multilateral Investment Guarantee Agency (MIGA) since 1992 and it currently holds a voting power of 0.55 percent.

3. Bank for International Settlements

The NBR has been a member of the Bank for International Settlements (BIS) ever since the latter's establishment in 1930 and holds 8,564 shares in the BIS total capital, on which it receives dividends.

Financial Stability Board's Regional Consultative Group for Europe

The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial system. The Bank for International Settlements ensures the funding of the FSB by voluntary contributions from Members and hosts its Secretariat. In 2011, for the purpose of expanding the scope of FSB activity beyond the G20 countries and reflecting the global nature of the financial system, six Regional Consultative Groups (RCGs) were set up within the FSB. The NBR has been a member of the FSB RCG Europe since 25 June 2018.

4. European Bank for Reconstruction and Development

Romania is a founding member of the European Bank for Reconstruction and Development (EBRD) and it currently holds 14,407 shares worth EUR 144.07 million, a contribution that accounts for 0.484 percent of the bank's total subscribed capital.

The EBRD invests in the countries of operations based on a country strategy; Romania Country Strategy 2020-2025 pursues three strategic priorities, namely to: (i) promote investment in sustainable infrastructure and regional development; (ii) support productivity through corporate expansion, innovation and skills upgrade; (iii) expand financial intermediation and capital markets.

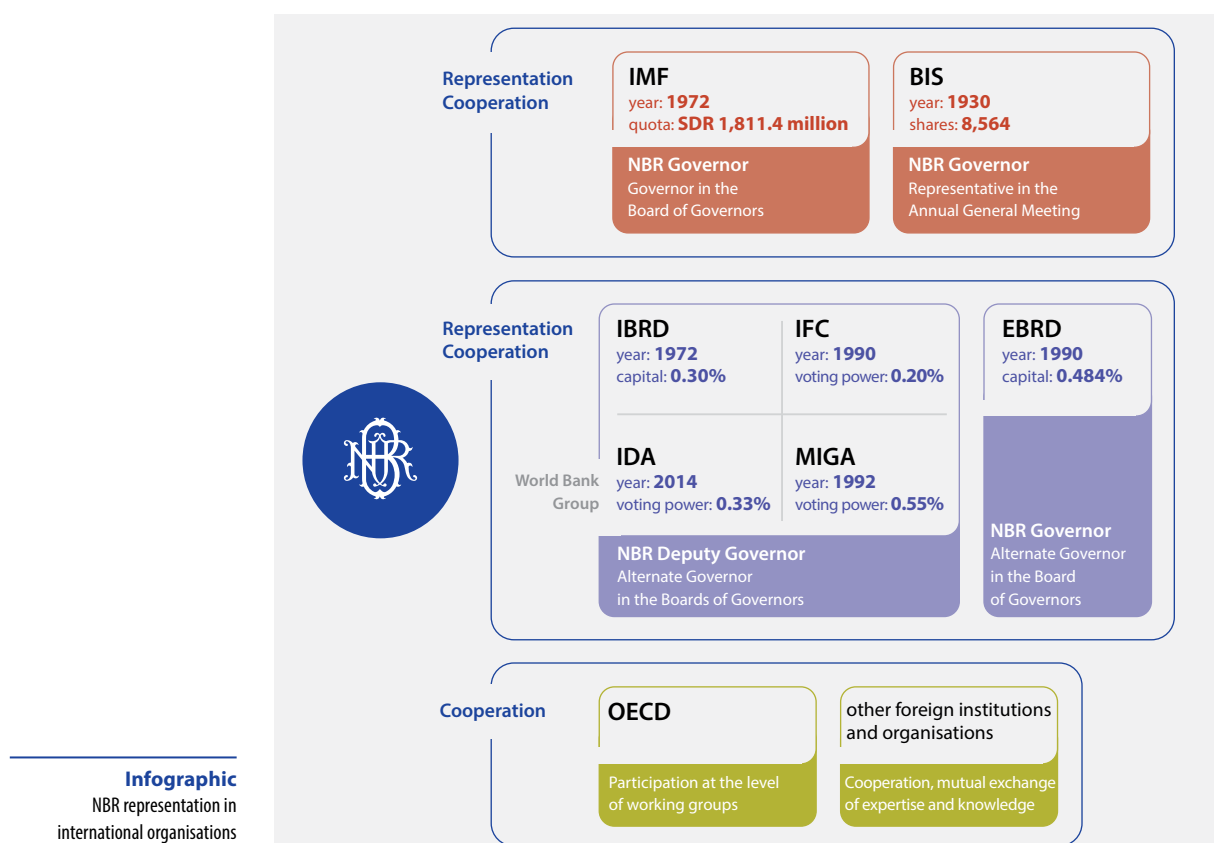
By 31 January 2022, the EBRD provided Romania with financial assistance totalling roughly EUR 9.522 billion by way of 485 projects, 69 percent of which were channelled to the private sector.

In the light of the COVID-19 pandemic, the EBRD's Annual Meeting was held in virtual format in 2020 and 2021.

5. Organisation for Economic Cooperation and Development

In 2021, Romania stepped up its efforts to join the Organisation for Economic Cooperation and Development (OECD) and, on 25 January 2022, the OECD Council decided to open formal accession discussions with Romania (as well as Argentina, Brazil, Bulgaria, Croatia and Peru). The NBR will further support the steps of accession talks, within the limits of the powers conferred upon it under the Statute, by participating in the relevant OECD working structures. The NBR attended as a guest the meetings of the Committee on Financial Markets, held in June and October 2021, the meeting of Advisory Task Force on the OECD Codes of Liberalisation in October 2021, as well as the meetings of two working groups within the Committee on Statistics and Statistical Policy, which took place in October-November 2021. Moreover, the NBR has been a member of the OECD International Network on Financial Education since 2018 and has participated in the meetings of some of its working structures.

At the same time, the NBR participates as a permanent guest in the work of the Inter-ministerial Committee for Coordination of Romania's relations with the OECD. The Committee operates under the General Secretariat of the Government and has the task to develop the strategy for promoting Romania's OECD membership application, establishing a roadmap of actions, events and budget, as well as to organise the steps taken by the institutions involved in this process.



6. Participation of the National Bank of Romania in foreign institutions and organisations

The National Bank of Romania aims to promote international cooperation with entities that carry out activities generally in the field of economic and financial research and specifically in the banking field, in order to ensure a mutual exchange of expertise and knowledge. In 2021, the National Bank of Romania continued to cooperate with various relevant bodies, think tanks and international institutions in the area of scientific research and helped disseminate scientific research findings worldwide and the knowledge gained from international events and meetings on economic, monetary and financial topics, held online in the context of the COVID-19 pandemic. Through the cooperation with these entities, central bank representatives participated in these events, liaising a mutually beneficial exchange of expertise and knowledge.

Specifically, given its capacity as a full member of the Network for Greening the Financial System (NGFS)²⁴⁶, the National Bank of Romania²⁴⁷ contributed to the activity of all five workstreams set up at NGFS level²⁴⁸, via its designated representatives, and the NGFS disseminated research results in the area of greening the international financial system.

The 26th session of the United Nations Framework Convention on Climate Change – *Conference of the Parties* (UNFCCC COP 26) was hosted in Glasgow, Scotland, from 31 October to 12 November 2021, under the aegis of the United Nations, by the UK presidency in partnership with Italy, which held the G20 presidency at the time. The UNFCCC draws on an international treaty aimed at protecting the environment by reducing greenhouse gas emissions. It was signed in 1992 by Romania²⁴⁹, *inter alia*, and has been in force since 1994. Moreover, the Paris Agreement was signed at the UNFCCC COP21 Conference in 2015²⁵⁰ and came into effect in 2016, its goal being to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

As part of the COP26 event, the *NGFS Glasgow Declaration*²⁵¹ was a defining moment for contribution of the NGFS and its members to support the fight against climate change affecting the international financial system. In the same context, the National Bank of Romania published its *Declaration of engagement as a member of Network for Greening the Financial System*²⁵². The National Bank of Romania's individual declaration of engagement followed the elements included in the Recommendation No. R/6/2021 of the National Committee for Macroprudential Oversight on supporting green finance²⁵³ in Romania, namely the recommendations issued with a view to: (i) sustainably enhancing access to finance for projects on the climate change agenda, (ii) supporting the structural change of the economy towards one with a higher value added, and (iii) enhancing transparency, improving reporting and the availability of climate change-related information and raising awareness on the impact of climate change in society and the financial system.

²⁴⁶ The National Bank of Romania became an institutional member of the NGFS on 16 September 2020. The NGFS is an international body of central banks and supervisory authorities willing, on a voluntary basis, to exchange experiences, share best practices, contribute to the development of environmental and climate risk management in the financial sector, and to mobilise/channel funding to support the transition to a sustainable economy.

²⁴⁷ <https://www.bnr.ro/Network-for-Greening-the-Financial-System--21813.aspx>

²⁴⁸ <https://www.ngfs.net/en/about-us/governance/general-information>
The five workstreams are: (i) Workstream on microprudential and supervision – “Microprudential/Supervision”, chaired by Zeng Yi Wong (Monetary Authority of Singapore), (ii) Workstream on macrofinancial – “Macrofinancial”, chaired by Sarah Breeden (Bank of England), (iii) Workstream on scaling up green finance – “Scaling up green finance”, chaired by Sabine Maederer (Deutsche Bundesbank); (iv) Workstream on bridging the data gaps – “Bridging the data gaps”, chaired by Patrick Amis (European Central Bank) and Fabio Natalucci (International Monetary Fund), co-chairs, and (v) Workstream on research – “Research”, chaired by Ma Jun (People's Bank of China).

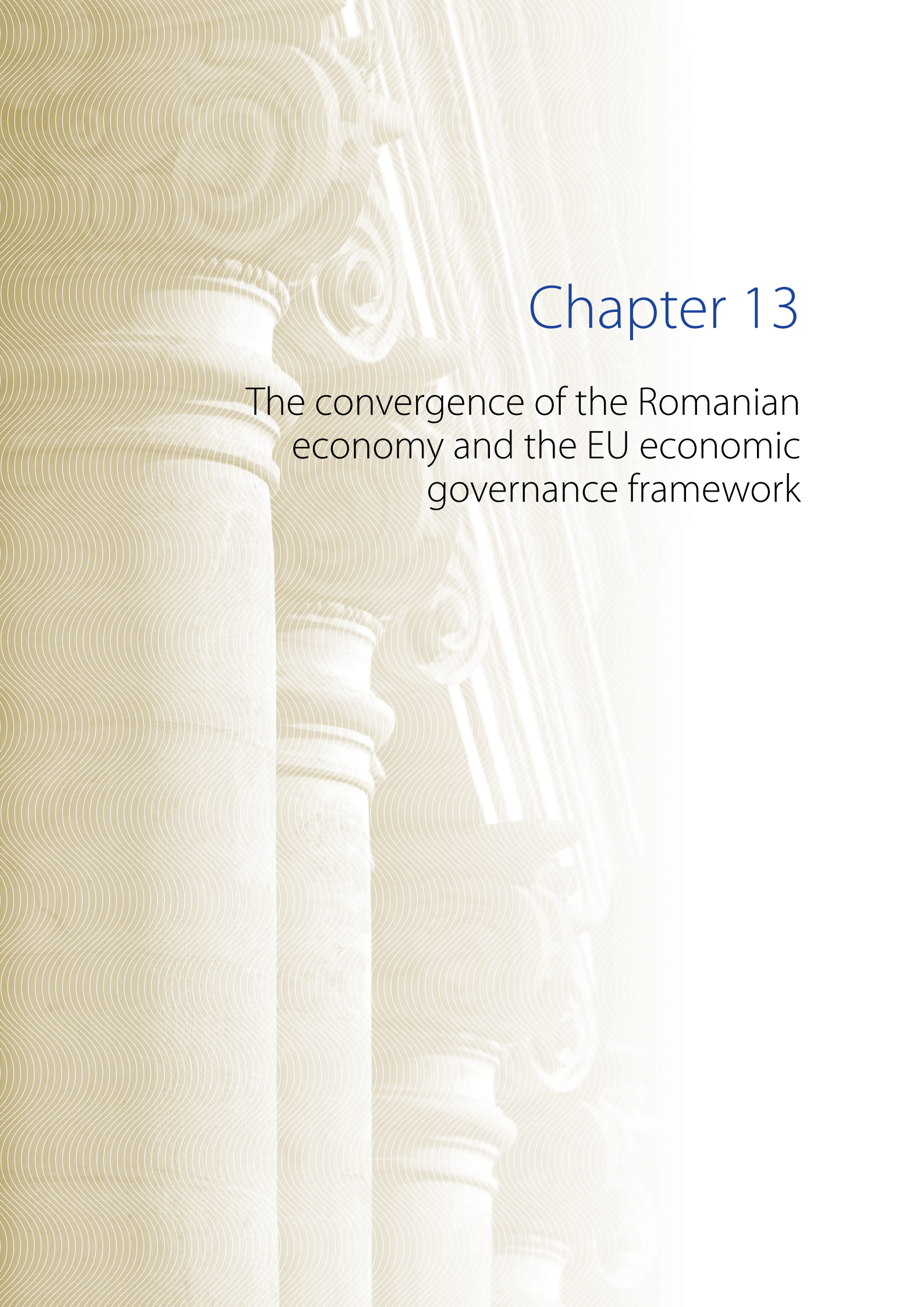
²⁴⁹ <http://legislatie.just.ro/Public/DetaliuDocumentAfis/3993>

²⁵⁰ <https://treaties.un.org/doc/Publication/CN/2016/CN.735.2016-Eng.pdf>

²⁵¹ <https://www.ngfs.net/sites/default/files/ngfsglasgowdeclaration.pdf>

²⁵² <https://www.bnr.ro/page.aspx?prid=20097>

²⁵³ <http://www.cnsmro.ro/en/politica-macroprudentiala/lista-recomandarilor-2021/>



Chapter 13

The convergence of the Romanian economy and the EU economic governance framework

1. The convergence of the Romanian economy

The adoption of the European single currency is part of Romania's integration with the European Union and implies the sustainable fulfilment of the nominal convergence criteria. The assessment of Romania's progress in convergence takes also into account the effects of the pandemic crisis on the monitored indicators, which as of 2020 have had a higher volatility. The emergence of other risk factors (for instance, geopolitical factors) is likely to enhance the impact and hence the persistence of adverse effects on the economy, affecting the indicators' trajectory for more years to come.

Table 13.1 shows the progress made in meeting the convergence criteria stipulated in the Maastricht Treaty (based on which nominal convergence progress is assessed) in 2021 as a whole.

	Maastricht criteria	Romania 2021
Inflation rate (HICP) (percent, annual average)	≤1.5 pp above the average of the three best-performing EU Member States ¹	4.1 (2.2: reference value)
General government deficit* (percent of GDP)	below 3 percent	7.1
Government debt* (percent of GDP)	below 60 percent	48.8
Exchange rate vs the euro (2-year maximum percentage change)	±15 percent	+0.3/-3.5 ²
Long-term interest rates (percent p.a., annual average)	≤2 pp above the average of the three best-performing EU Member States ¹ in terms of price stability	3.6 (2.6: reference value)
<p>*) ESA 2010</p> <p>1) The reference value for end-2021 was calculated by taking into account Greece, Malta and Portugal.</p> <p>2) Maximum percentage changes in the exchange rate versus the euro during January 2020 – December 2021. Calculations are based on daily data series, by reference to the average for December 2019.</p> <p>Source: Eurostat, ECB, MF, NBR calculations</p>		

Table 13.1
Maastricht criteria
(nominal convergence indicators)

After simultaneously complying with the nominal convergence criteria in July 2015 – November 2017, Romania saw inflation rates, long-term interest rates and the general government deficit-to-GDP ratio overshooting the reference values over the last years. In the context of the pandemic outbreak, the suspension in March 2020 of the provisions of the Stability and Growth Pact allowed Member States to implement relatively broad packages of fiscal measures with a view to containing its adverse effects.

The year 2021 witnessed large hikes worldwide in consumer price indices, the average annual inflation rates running thus above several central banks' inflation targets. The phenomenon was fuelled by significant increases in energy, food and other non-energy commodity prices, triggered, inter alia, by the bottlenecks in global value chains. In Romania too, the average annual inflation rate calculated based on the

Harmonised Index of Consumer Prices (HICP) posted a rise, going up to 4.1 percent in December 2021^{254,255}, the gap between this indicator and the reference value for the Maastricht criterion on price stability remaining at approximately 2 percentage points.

Chart 13.1
Inflation rate (HICP)

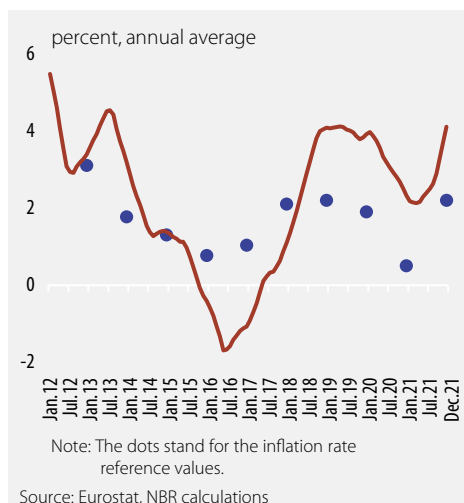
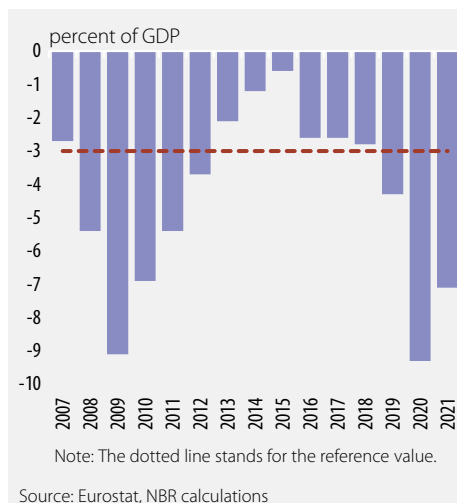


Chart 13.2
General government deficit
(ESA 2010 methodology)

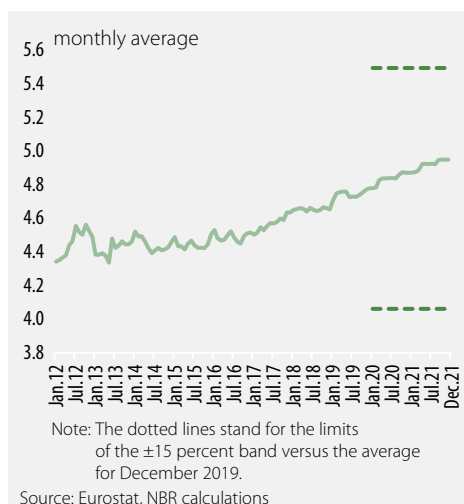


Chart 13.3
EUR/RON exchange rate

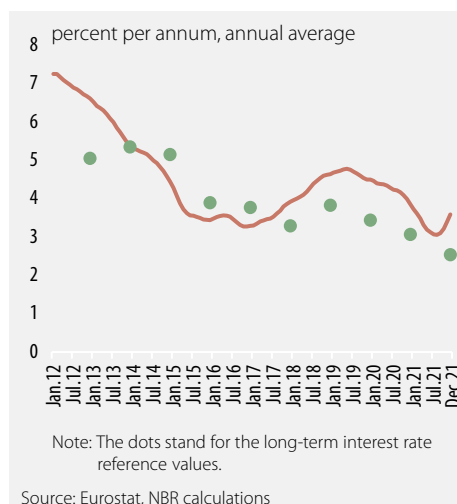


Chart 13.4
Long-term interest rates

The general government deficit-to-GDP ratio (according to ESA 2010 methodology) exceeded in 2019 the reference value (Chart 13.2), leading to the initiation of the excessive deficit procedure against Romania²⁵⁶. A year later, amid the expenditures on measures to mitigate the effects of the health crisis, the budget deficit-to-GDP ratio continued to expand. In 2021, the indicator decreased to 7.1 percent, remaining however significantly above the ceiling set by the Maastricht Treaty, as was the case with most European countries. Although the economic recovery bolstered government revenues, a larger correction of the budget deficit was not possible,

²⁵⁴ In the case of natural gas and electricity, the pass-through of the change in international commodity prices into domestic final prices was also influenced by the full liberalisation of these markets in the households segment, in July 2020 and January 2021, respectively.

²⁵⁵ Non-energy commodity prices recorded also notable hikes in the last part of 2021, the effects of the adverse shocks being compounded by short-term inflation expectations and the significant share of imported goods in the CPI basket.

²⁵⁶ The European Commission adjusted the fiscal consolidation path, setting the new horizon for 2024.

given the further significant expenditures, *inter alia* in view of the payments made to manage the pandemic and of the measures to mitigate the increase in energy prices for household consumers. Under the circumstances, the government debt-to-GDP ratio saw a rise. Thus, after the pick-up in 2020, the indicator continued its increase into 2021, reaching 48.8 percent, i.e. 1.5 percentage points above the previous year's reading.

Subsequent to the international financial crisis of 2007-2009, the exchange rate of the leu against the euro recorded a relatively stable evolution²⁵⁷ (Chart 13.3). The fluctuation in the leu exchange rate – which, given Romania's non-participation in the ERM II, is not measured against a central parity, but against the average for the month preceding the period under review – ranged within the ± 15 percent standard band in 2020-2021 too. This occurred even amid uncertainties surrounding the macroeconomic equilibria and the economic effects of the pandemic crisis.

Long-term interest rates exceeded the reference value in 2018-2021 (Chart 13.4), in spite of Romania's investment grade rating and its being included in the emerging market category. The deviation occurred in the context of the inflation and general government deficit indicators overshooting (as of 2019 in the case of the deficit) the reference values, as well as of the concerns about the structural problems²⁵⁸ of the economy. During 2021, rating agencies focused on the need for measures to support economic recovery and fiscal consolidation, and the outlook was broadly upgraded²⁵⁹. Both the EU fund absorption and the continued fiscal adjustment would help support these developments.

The sustainable compliance with nominal convergence criteria depends on a high structural alignment, mainly assessable by monitoring GDP per capita, the sectoral structure of the economy, its openness and its share of trade with the EU in total foreign trade.

The uptrend in GDP per capita seen over the last decade came to a halt during 2020, following the pandemic crisis (Chart 13.5). Even under these exceptional circumstances, the gap with the euro area continued to decline amid a smaller contraction of the indicator in Romania. Over 2021, owing to the notable economic recovery seen by both economies, the indicators bounced back after the fall, exceeding slightly the readings prevailing prior to the pandemic outbreak. In relative terms, GDP per capita in Romania²⁶⁰ accounted for approximately 70 percent of the euro area GDP (up by approximately 1.2 percentage points from 2020 and by 22 percentage points from 2010).

The sectoral structure of the economy (measured based on the sectors' contribution to GDP formation) tended to converge, over the last years, to that in the euro area, as

²⁵⁷ In 2012-2021, the leu saw a roughly 1 percent average annual depreciation against the euro.

²⁵⁸ During the last years, the risks associated with the Romanian economy (as measured by CDS spreads) were generally perceived to be higher than those posed by other countries in the region.

²⁵⁹ In 2021, S&P and Moody's revised the outlook for Romania's sovereign rating from negative to stable. On the other hand, Fitch held Romania's rating with a negative outlook amid the uncertainties surrounding fiscal imbalances.

²⁶⁰ The pick-up in the indicator shows also a further downward demographic trend.

highlighted especially by the larger share of services (Chart 13.6) and their increased relevance in foreign trade²⁶¹, although the pandemic-specific developments implied a relative limitation in 2022 and 2021 of this sector's contribution to GDP. By contrast, the advance in the share of construction came to a standstill in 2021, with the increase in the value flows across this sector (on account of greater operating costs, input costs included) being similar to that in nominal GDP.

Chart 13.5
GDP per capita in Romania

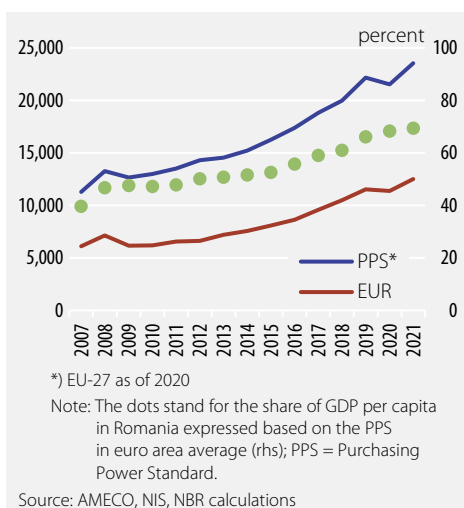
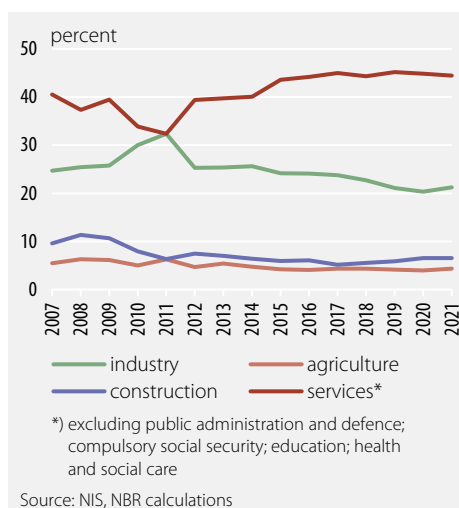


Chart 13.6
Share of economic sectors in GDP

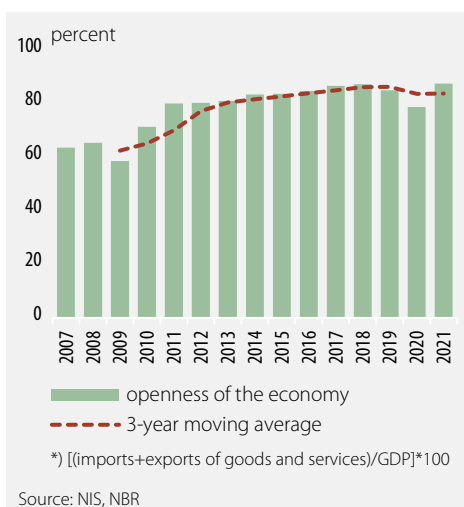


Chart 13.7
Openness of the economy*

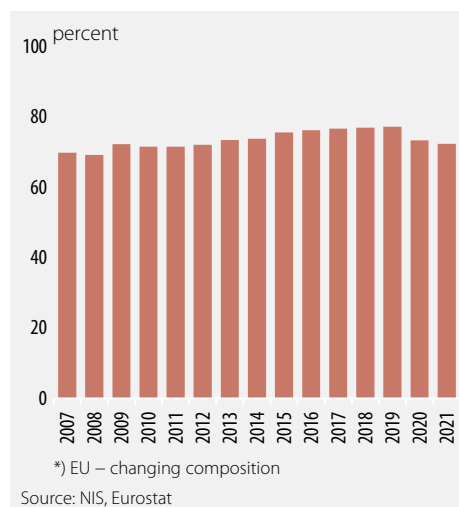


Chart 13.8
Share of trade with the EU* in total foreign trade

In 2020, amid the drop in global trade, the openness of the economy fell (temporarily) below 80 percent. In 2021, amid the trade recovery, the indicator added about 8 percentage points (Chart 13.7), on account of the simultaneous advance in exports and imports of goods and services (by 21 percent and 23 percent respectively). Trade integration with the EU is assessed to be high, averaging out at approximately 75 percent over the last 10 years (Chart 13.8). In 2020, the indicator decreased by almost 4 percentage points in terms of value, which can be, however, attributed to the change in the composition of the European Union after Brexit. During 2021,

²⁶¹ In 2012-2021, Romania's foreign trade in services went up by 165 percent in terms of value. Its share in Romania's total foreign trade peaked at 24 percent in 2019. It is also worth mentioning that the gap with the euro area average remained relatively unchanged (slightly below 5 percentage points).

the further reduction by around 1 percentage point (reflecting the higher trade exposure to non-EU partners) was due to the increase in H2 in the deficit reported by some categories of products such as commodities, following energy-related shocks.

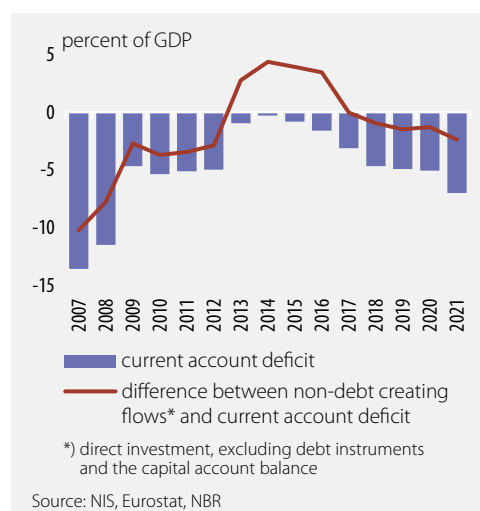


Chart 13.9
Current account deficit and financing through stable flows

Given the complexity of the real convergence process, the analysis framework can be extended by monitoring several dimensions such as the sustainability of the external position or the development of the banking and financial system and its integration in the European one.

The upward trend in the current account deficit-to-GDP ratio (mainly amid the uptrend in the deficits on trade in goods and primary income) steepened in 2021, the indicator reaching 7 percent of GDP (Chart 13.9).

Thus, the average for the last three years stood above the 4 percent-of-GDP indicative threshold²⁶² stipulated by the European Commission. It should also be noted that over the last years, amid the upward trend in the current account deficit, its coverage by non-debt-creating flows remained below one, standing at around 66 percent in 2021. The decrease from 2020 was nevertheless mitigated by the marked pick-up in all stable financing sources²⁶³ – Chart 13.9 (Box 9).

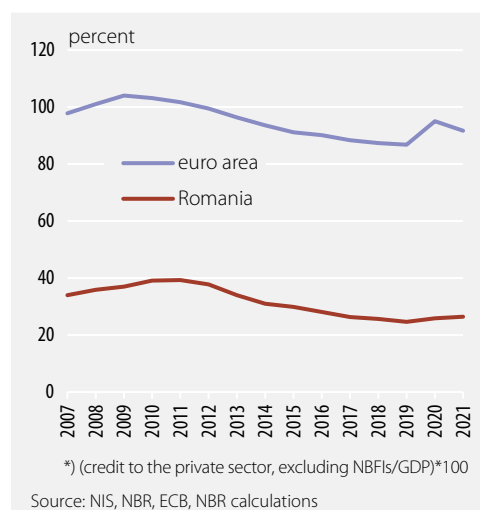


Chart 13.10
Indirect financial intermediation*

The integration of the banking and financial sector in Romania with that in the euro area is high, as shown by the prevalence of the capital originating in euro area countries in the shareholding structure of Romanian credit institutions. Although this sector has witnessed a notable development after Romania's joining the EU, the gap with the euro area is further sizeable. Thus, in 2021, indirect financial intermediation in the national economy accounted for about 30 percent of that in the euro area, on a slight increase from 2020

(Chart 13.10). The evolution reflected a mild advance in the indicator in Romania (to around 27 percent on account of the step-up in the volume of loans to the private

²⁶² For further details, see the European Commission's website, the section on the "Macroeconomic Imbalance Procedure Scoreboard".

²⁶³ On the one hand, during 2021, the inflows of European funds (including funds in the form of capital transfers) remained elevated, once the 2014-2020 MFF progressed; to these funds also added the European funds under the Next Generation EU programme. On the other hand, both equity and reinvestment of earnings saw significantly larger inflows compared to 2020, which led to a step-up in net direct investment.

sector) overlapping with a decline in that in the euro area (given the more modest developments in lending compared to those in nominal GDP). Direct financial intermediation (calculated as stock market capitalisation-to-GDP ratio) stood way below that in the euro area after the EU accession.

According to the 2022-2025 Convergence Programme, the Government of Romania remains committed to joining the euro area. However, it is highlighted that, at present, the government focuses on post-pandemic economic and social recovery and on minimising the negative effects generated by the military conflict in Ukraine.

Box 9. Next Generation EU: driving economic recovery and supporting fiscal consolidation

The Next Generation EU (NGEU) programme is one of the solutions put forth by European authorities to facilitate a swift and sustainable economic recovery following the adverse socio-economic effects induced by the COVID-19 pandemic and, at the same time, to increase the EU economies' resilience to external shocks. The first formal steps to access recovery funds had already been taken by end-2021. However, this process is expected to speed up amid further relatively high uncertainty caused by the persistence of the public health crisis and, more recently, by Russia's invasion of Ukraine.

This box aims to contextualise the role of the new NGEU programme in fiscal consolidation. This process is necessary given the ongoing excessive deficit procedure initiated against Romania, which is due for completion in 2024, and it could be spurred by a favourable impact on the macroeconomic framework and/ or by the access to cost-effective financing via the absorption of European funds allocated under the Next Generation EU programme.

Romania and the economic recovery package

Shortly after the outbreak of the public health crisis, both national and supranational authorities reacted promptly to contain the adverse effects of the pandemic. In 2020, the European Commission (EC) proposed, for the first time ever, to activate the general escape clause in the Stability and Growth Pact (SGP), allowing EU Member States to manage the pandemic through uncapped spending, even amid a temporary overshooting of the budget deficit targets set out in the SGP. Furthermore, in order to boost economic activity, especially given the unexpectedly strong negative effects of the health crisis, European officials agreed to establish the NGEU recovery package.

Its aim is to increase the resilience of EU countries, with a particular focus on fair climate and digital transitions. Under the Recovery and Resilience Facility (RRF), i.e. the NGEU instrument with the largest allocations²⁶⁴, the approval of the National

²⁶⁴ In the case of Romania, the RRF allocation accounts for around 90 percent of total NGEU funds. Similar developments have been recorded in the other countries benefitting from NGEU funds.

Recovery and Resilience Plans (NRRPs) whereby projects were proposed for financing was contingent on assigning at least 37 percent and 20 percent of allocated funds to climate objectives and digitalisation, respectively. All EU countries with already approved national plans have complied with these requirements. The highest shares of funds earmarked for meeting the climate target were seen in Austria, Bulgaria, Denmark, Luxembourg and Malta, whose NRRPs provide that more than 50 percent of the RRF funds should be assigned to the transition to a green economy. As regards digitalisation, Austria and Germany are well ahead of the rest of the countries (Chart A).

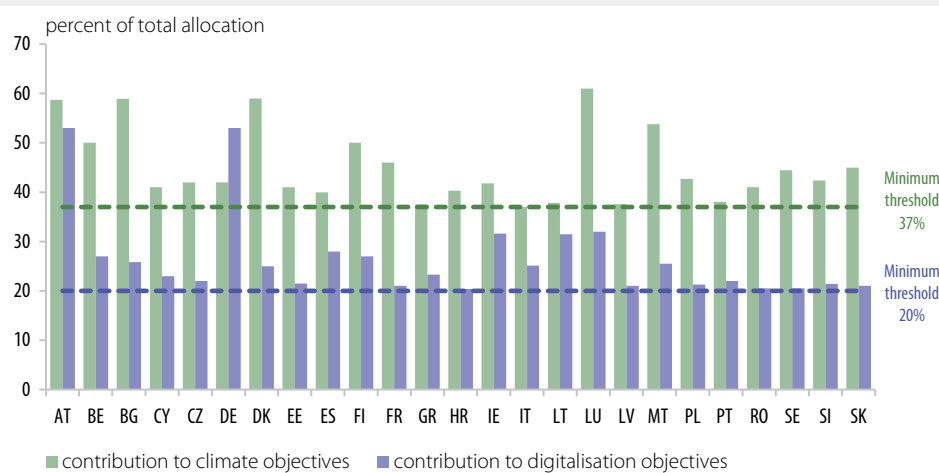


Chart A

Share of RRF spending on climate and digitalisation objectives

Romania's NRRP provides for the allocation of 41 percent of the EUR 29.2 billion²⁶⁵ to climate objectives. In the spotlight are sustainable transport and energy efficiency. Moreover, Romania contributes 20.5 percent to digitalisation objectives, largely focusing on e-governance, digital public services and digital technology projects.

The EU Council approved Romania's NRRP in October 2021 and pre-financing for RRF grants had been disbursed by end-2021, shortly ahead of pre-financing for loans²⁶⁶. Disbursement requests to the EC are to be submitted twice a year and will be met based on the status of fulfilment of targets and milestones set by the authorities under the NRRP. According to EC data, Romania's NRRP has 215 targets and 292 milestones for reforms and investment, respectively.

Despite being the recipient of nearly all financial allocations, the RRF is not the only instrument targeting climate and digital objectives. REACT-EU is another programme under the NGEU. Out of Romania's total allocation of around EUR 1.5 billion, about 16 percent are earmarked for the green transition and approximately 6 percent for digitalisation, close to the European average.

²⁶⁵ This amount is to be reassessed in accordance with Article 11(2) of Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility. In calculating the maximum financial contribution, the data from the European Commission Autumn 2020 forecast are to be replaced by the actual outturns.

²⁶⁶ Pre-financing for grants was disbursed in early December 2021 and that for loans in January 2022.

Overall, the NGEU is expected to contribute to robust economic growth, along with improved economic resilience. However, the magnitude and persistence of the positive effects generated by this programme depend on the type of investment being financed (Valenta *et al.*, 2021). Moreover, the literature points to possible spillover effects and significant second-round effects. Pfeiffer *et al.* (2021) emphasise that these could increase the overall impact of NGEU funds by up to one third. Picek (2020) stresses the importance of coordination between Member States in the implementation of NGEU-funded projects. In order to maximise potential spillover effects, it is essential that Member States also adopt stimulus measures to boost the economy.

The NBR's in-house assessments of the impact on Romania's macroeconomic parameters rely on its Model for Analysis and Medium-Term Forecasting (MAMTF), complemented by a number of expert judgments and assumptions²⁶⁷. Against the backdrop of the ongoing fiscal consolidation, attracting a relatively larger volume of substitutive loans is assessed as more likely to materialise. Their impact on the budget deficit will be favourable, whereas that on the macroeconomic framework relative to a baseline scenario excluding financing from NGEU resources would be limited, given the substitution of investment projects that were already due for funding (mainly from domestic budgetary sources). Another influence on the magnitude of the NGEU's effects comes from the phasing of investment projects. Specifically, early implementation of eligible projects would lead to gradually larger spillovers over time and thus to a greater economic impact throughout the whole period (2022-2026). By contrast, in the event of a disorderly transition, the authorities could become overly eager to spend the allocated budget, while the implemented projects would not necessarily make a significant contribution to economic growth owing to their low efficiency.

The latest assessments carried out by the NBR based on the information available at the time of the simulations show a more than 4-percentage point cumulative impact of NGEU funds on economic growth 2021 through 2026, including spillover effects. In 2022-2023, the impact is estimated at around 1.4 percentage points, but wider-ranging effects cannot be excluded, especially in the event of implementing highly complex projects and ensuring their smooth financing²⁶⁸.

Against this backdrop, a revival of economic activity is, *ceteris paribus*, expected. On the one hand, gross capital formation would experience the most significant changes. Both green and digital transition projects are assessed to improve the growth potential of the economy. On the other hand, the recovery of economic activity will also be supported by a swifter increase in consumption amid households' real disposable income picking up as a result of the boost in economic activity.

²⁶⁷ Both direct and spillover effects were considered. For further details on multipliers of EU funds, see Box 1 "Assessment of the impact of the EU structural and cohesion funds on economic growth" in the 2018 *Annual Report*.

²⁶⁸ For alternative scenarios on the impact of EU funds, see Box 3 "Next Generation EU: prospects for a swift economic recovery" in the 2020 *Annual Report*. It also depicts the main effects on the broader macroeconomic framework.

Romania in the context of the excessive deficit procedure

Hence, Romania has a unique opportunity to increase the volume and share of investment in the economy. Moreover, according to the stated purpose of the NGEU programme, support is facilitated for the sectors most affected by the COVID-19 pandemic. At the same time, however, further fiscal consolidation is needed. Following the 2019 fiscal slippage, which occurred before the onset of the public health crisis, in March 2020 European officials took the first formal steps in the excessive deficit procedure initiated against Romania²⁶⁹. Although 2022 was the initial deadline set by the EU Council for reducing the ESA budget deficit below the 3 percent-of-GDP threshold, the extraordinary macroeconomic context, marked by the adverse economic effects of the COVID-19 pandemic, led to an extension of this deadline to 2024²⁷⁰.

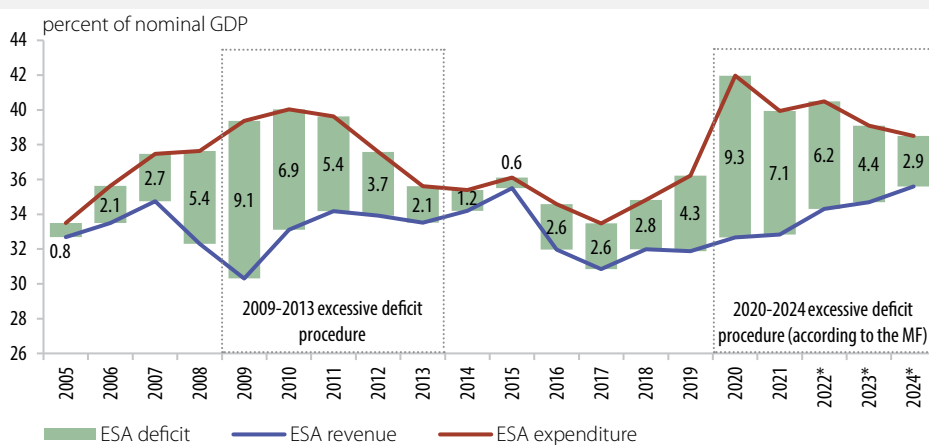


Chart B

Developments in the budget deficit – historical data and outlook

*) MF projections according to the 2022-2025 Convergence Programme

Source: Eurostat, 2022-2025 Convergence Programme, NBR calculations

The Convergence Programme for the 2022-2025 period outlines the budget deficit adjustment path, in line with the European Commission's recommendations (Chart B). The deficit figures are also confirmed by the Fiscal and Budget Strategy for the period of 2022-2024. Fiscal consolidation is expected to be achieved largely by reducing the government expenditure-to-GDP ratio. In this regard, significant savings are projected for staff costs and intermediate consumption expenditure. As for revenues, following a rise foreseen for 2022, they are anticipated to witness marginal increases. Nevertheless, the budget deficit adjustment path could be hampered by a number of factors such as the management of the energy crisis or the escalation of military conflicts.

This is not the first time Romania has been subject to the excessive deficit procedure. Due to the drastic revenue shortfall amid the 2008 financial crisis, the budget deficit surged from 2.7 percent of GDP in 2007 to 5.4 percent of GDP in 2008, leading to the opening of this procedure against Romania in 2009. The return to values below

²⁶⁹ In 2020, the activation of the general escape clause in the Stability and Growth Pact had no impact on this process, given that the ESA budget deficit had exceeded the 3 percent-of-GDP threshold as early as 2019.

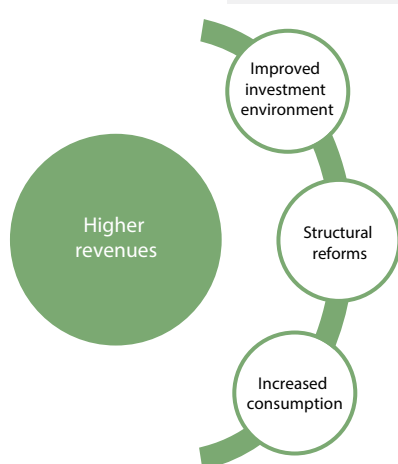
²⁷⁰ For more details on the European Commission's recommendations, see: https://ec.europa.eu/info/sites/default/files/economy-finance/com-2021-530-1_en_act_part1_v3.pdf

the 3 percent-of-GDP threshold materialised in 2013. This owed to both a rebound in revenues and a lower expenditure-to-GDP ratio.

Interaction between the NGEU and the excessive deficit procedure – to what extent can the fiscal consolidation process be supported?

Compliance with the proposed budget deficit targets becomes all the more necessary as access to financing on international markets is expected to turn more difficult for countries with larger and persistent imbalances. Given the rapid normalisation of monetary policy, amid a significant rise in the annual inflation rate, emerging economies in need of large external funds may face increasingly high financing costs. In addition, any deviation from the adjustment path Romania has committed itself to in the context of the excessive deficit procedure appears to be vital from the perspective of the regular assessments of the sovereign credit rating.

Chart C
Potential revenue-boosting channels



Source: NBR assessments

As illustrated above, the implementation of NGEU-funded projects is likely to contribute to a swift economic recovery. The absorption of these funds would brighten the macroeconomic picture, which would also imply more budget revenues via several channels (Chart C).

On the one hand, the rise in investment, fostered by accessing NGEU funds, could generate new jobs, causing both revenues from payroll taxes and social contributions collected to the general government budget to go up. Such developments could also be driven by wage increases, amid a possible re-emergence of labour shortages, particularly in certain sectors, such as those involving the transition to a green economy or a high level of digitalisation. Moreover, an improved investment

environment would also have a favourable impact on firms in the market, enhancing their performance and profitability and implicitly the resources transferred to the government budget.

Furthermore, the implementation of NGEU funds is assessed to exert a positive impact on consumption. In this context, higher indirect taxes could contribute to narrowing the budget deficit as non-government consumption picks up.

Structural reforms are anticipated to have beneficial effects on the economy as a whole. They are designed to improve the economy's output potential, inter alia by alleviating external and domestic vulnerabilities in a lasting manner. With regard to the budget deficit, the fast-paced implementation of reforms could help increase taxpayers' compliance. Implementation of structural reforms, particularly in the fiscal area, could boost revenue collection, contributing also to improved voluntary tax compliance.

On the other hand, the government deficit is also subject to opposite influences, but these are smaller in quantitative terms as compared with the direct positive effects and the spillover effects associated with NGEU funds. Insofar as loans, i.e. the repayable

component of the RRF, are additive, they will put more pressure on the budget balance, which will be partly offset by the more favourable macroeconomic prospects. There is, however, an opportunity for low-cost financing, a particular feature of the RRF, in line with the need to boost economic activity. Therefore, accessing loans is desirable as well, especially if they have a substitutive nature²⁷¹.

In conclusion, the investment projects and reforms financed by the NGEU programme underpin a swift economic recovery. At the current juncture, given the increase in risks and, in particular, uncertainties surrounding future economic developments, early access to NGEU funds should be a priority. From this perspective, strict compliance with the RRF targets and milestones takes on a new dimension, given the high stakes of both economic recovery and the possible beneficial influence on fiscal consolidation.

References

- Bańkowski, K. *et al.*, "The Macroeconomic Impact of the Next Generation EU Instrument on the Euro Area", *Occasional Paper Series*, No. 255, ECB, 2021
- Box 1 "Assessment of the Impact of the EU Structural and Cohesion Funds on Economic Growth", *Annual Report*, NBR, 2018
- Box 3 "Next Generation EU: Prospects for a Swift Economic Recovery", *Annual Report*, NBR, 2020
- "Analysis of the NCMO Working Group on Supporting Green Finance", NCMO, 2021
- Picek, O., "Spillover Effects from Next Generation EU", *Intereconomics*, Vol. 55, No. 5, 2020, pp. 325-331
- Pfeiffer, P., Varga, J., Veld, J., "Quantifying Spillovers of Next Generation EU Investment", *Discussion Paper No. 144*, European Commission, 2021
- Report from the Commission to the European Parliament and the Council on the implementation of the Recovery and Resilience Facility, Brussels, March 2022
- Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility
- https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en
- <https://cohesiondata.ec.europa.eu/stories/s/REACT-EU-Fostering-crisis-repair-and-resilience/26d9-dqzy/>

2. Developments in the European Union's economic governance

The European Commission continued to monitor and assess the macroeconomic imbalances across the European Union, recently focusing on the risks and atypical developments associated with the COVID-19 pandemic. The *Alert Mechanism Report (AMR)* published in November 2021 has launched the second cycle of the Macroeconomic Imbalance Procedure (MIP) since the onset of the pandemic,

²⁷¹ They finance investment projects that should have been supported from other sources in the absence of the NGEU. In this context, the budgetary impact relative to a baseline scenario excluding NGEU financing is rather small in terms of government deficit (possible influences coming from the volume of interest expenditure).

providing comprehensive 2020 data for a clearer picture of the latter's effects. In addition, the *Report* refers to forecasts for 2021 and the following years, which facilitate the assessment of the possible longer-term implications of the COVID-19 pandemic crisis.

The COVID-19 crisis reversed the correction trend of the high level of indebtedness seen in many Member States, leading to higher private and public debt ratios in 2020. Thus, the public debt-to-GDP ratio went up in all EU countries in 2020 (exceeding the threshold in the scoreboard in 13 of them), whereas the private sector debt-to-GDP ratio rose in 24 states out of the 27 Member States (exceeding the threshold in the scoreboard in 12 of them). This owed indirectly to the decline in GDP in 2020 amid restrictions to contain the spread of the COVID-19 virus, which affected economic activity, and directly to the pandemic-triggered spending. Thus, while helping to manage and combat the health and economic crisis, the measures taken by governments soon led to a spike in the public debt stock. However, the *Report* sees the public debt-to-GDP ratio enter a downward path as of 2022 in EU countries, except for a few countries (including Romania), where, should the current policies be kept in place, it will continue to go up.

Moreover, the level of corporate indebtedness increased in 2020, owing to the contribution of new loans taken by companies to cover liquidity shortages, but also to loan repayment moratoria. Households showed a saving trend in 2020, both amid less consumption opportunities and as a precautionary measure, the advance in household debt-to-GDP ratio being ascribable in most cases to the fall in GDP. However, many countries faced rising housing loans, *inter alia*, as a result of a structural change in the housing demand driven by the switch to remote working, which changed some geographical preferences. This, alongside the ensuing supply issues in the real estate market, against the backdrop of increasing prices of commodities and building materials, contributed to a faster growth rate of housing prices in 2020 and 2021 (in 2020, 10 Member States saw housing price increases in real terms, i.e. above the 6 percent threshold in the scoreboard). Thus, households face a risk of over-indebtedness owing to housing loans, especially in the current context marked by significant interest hikes, with knock-on effects on the banking sector. The latter was well capitalised at the onset of the pandemic and the impact of the COVID-19 crisis on it was limited, due to the consolidation achieved following the previous financial crisis. However, the banking sector in the EU continued to be plagued by low profitability and some Member States faced a significant volume of non-performing loans; in fact, the *Report* envisaged a rise in the latter.

Turning to the external balance, the effects of the COVID-19 pandemic led to a deterioration of the current account balance in the countries that rely heavily on exports of services (such as Croatia, Cyprus, Greece, Malta), but, according to the *Report*, the phenomenon is temporary and will be gradually corrected, with no fundamental changes being recorded. In 2020, three Member States reported current account balances (the three-year average) below the lower MIP scoreboard threshold – Romania and Cyprus (the same as in 2019) plus Ireland –, while four states had current account surpluses exceeding 6 percent – Denmark, Germany and the Netherlands (the same as in 2019) plus Slovenia. The large current account deficits,

together with the fall in nominal GDP, were the main drivers of the deteriorating net international investment position (NIIP) in the countries that reported the largest declines in this indicator in 2020 (Cyprus and Greece). Overall, in 10 Member States the indicator stood below the scoreboard threshold (-35 percent of GDP), with Romania counting among them. In the medium term, the *Report* foresees that the countries with large negative NIIPs will see improvements.

The contraction in exports caused by the pandemic reflects also in the evolution of the export market share: while in 2019 no Member State reported a decline in the export market share beyond the indicative threshold in the scoreboard, in 2020 three Member States recorded losses exceeding this threshold. However, for some countries, the *Report* expects only a partial recovery of export market share losses in the near future. This will also be influenced by the evolution of competitiveness at European level, with Member States facing a broad-based increase in nominal unit labour costs (ULCs) in 2020 due to the temporary contraction in labour productivity during the pandemic: while in 2019 the cumulative increase (over the last three years) of ULC exceeded the threshold in the scoreboard in 8 Member States, in 2020, the same situation was reported by 18 countries, Romania included. Government support measures favoured a decrease in the number of hours worked rather than a cut in the number of personnel; consequently, the unemployment rate went up to a limited extent compared to the magnitude of the economic shock caused by the COVID-19 pandemic. However, it is difficult to predict the evolution of ULC in the coming period, as expectations for 2021-2022 indicate both a rebound in productivity and a wage increase. At the same time, in 2020 the real effective exchange rate (REER) appreciated in most Member States; the strengthening was more moderate for some countries with large negative NIIPs (such as Cyprus, Greece, Portugal, Spain), which could support external rebalancing in the near term.

The Alert Mechanism Report (AMR) published in 2021 recommends in-depth reviews of 12 Member States for which imbalances were already identified in the previous assessment cycle: Croatia, Cyprus, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Romania, Spain and Sweden. In addition, the *Report* underlines the need to monitor certain developments in other EU countries too, in most cases the risks being associated with housing markets.

The data for 2020, available upon the release of the AMR published in 2021, show that Romania reported indicators beyond three indicative thresholds, namely for the current account balance, the net international investment position and the nominal unit labour cost index. In fact, according to the AMR, Romania continues to deal with vulnerabilities associated with the external position, its current account deficit being anticipated to widen in the future mainly on the back of a negative trade balance and its NIIP being seen to remain unchanged in the coming years around the value reported in 2020. In addition, the *Report* highlights the deterioration of cost competitiveness in 2020, but expects the rebound in productivity to pre-pandemic levels to contain the increase in ULC in 2021-2022. Furthermore, the AMR points to the emergence of some risks associated with the faster rise in housing prices and public debt embarking on an upward path.

Table 13.2. Macroeconomic imbalance procedure scoreboard

		Current account balance	Net international investment position	HICP-based real effective exchange rate	Market share of exports of goods and services	Nominal unit labour cost	House price index	Private sector credit flow
		% of GDP, 3-year average	% of GDP	3-year change, %	5-year change, %	3-year change, %	annual change, %	% of GDP
		-4%/+6% of GDP	-35% of GDP	±5% (EA) ±11% (non-EA)	-6%	+9% (EA) +12% (non-EA)	6%	+14% of GDP
Austria	2020	1.6	9.3	3.2	4.6	12.2	6.2	4.7
	2021	1.2	14.7	1.2	-2.3	10.7	9.7	...
Belgium	2020	0.1	44.4	2.5	10.2	7.5	3.6	0.1
	2021	0.2	57.0	0.6	2.1	5.8	4.8	7.1
Bulgaria	2020	0.9	-27.1	7.1	15.5	20.4	5.2	4.2
	2021	0.5	-19.8	3.8	12.2	18.9	4.9	...
Croatia	2020	1.6	-47.8	0.5	-0.5	13.7	7.3	1.3
	2021	2.0	-33.9	-1.5	7.8	6.4	4.5	...
Cyprus	2020	-6.6	-136.2	0.1	27.7	5.6	0.7	-2.5
	2021	-7.7	-123.3	-2.4	14.1	4.8	-5.5	...
Czechia	2020	0.9	-16.3	5.6	8.1	19.3	5.5	2.3
	2021	0.5	-15.6	5.0	-1.0	15.0	16.1	...
Denmark	2020	8.1	68.8	0.9	10.8	6.2	4.6	4.8
	2021	8.4	75.9	-1.1	6.1	6.2	8.8	8.8
Estonia	2020	1.0	-21.5	5.3	16.9	17.1	6.9	3.6
	2021	0.4	-12.2	1.9	18.4	10.7	10.2	...
Finland	2020	-0.5	-4.4	2.3	11.1	5.4	1.3	6.4
	2021	0.4	-4.7	-0.7	4.4	5.8	2.4	...
France	2020	-1.0	-30.2	2.7	-7.4	4.6	4.4	12.8
	2021	-0.9	-34.5	-0.4	-11.2	4.1	4.6	6.4
Germany	2020	7.5	63.4	2.4	8.9	11.1	7.1	6.0
	2021	7.4	68.4	0.5	-5.8	8.3	7.6	...
Greece	2020	-3.7	-175.0	0.4	-10.6	6.4	5.6	5.5
	2021	-4.7	-175.2	-3.1	9.2	1.1	6.0	0.5
Hungary	2020	-0.5	-49.2	-4.9	7.5	13.9	1.6	7.7
	2021	-1.6	-45.0	-4.1	0.1	14.7	8.6	11.6
Ireland	2020	-5.8	-174.0	-1.2	49.1	-6.3	-0.2	-1.8
	2021	-2.9	-138.9	-2.6	38.9	-8.4	4.3	...
Italy	2020	3.2	2.0	0.6	-2.8	5.5	2.1	4.1
	2021	3.2	7.4	-1.8	-6.3	3.4	0.9	...
Latvia	2020	0.7	-34.7	5.9	17.5	18.6	2.7	-1.8
	2021	-0.2	-28.1	2.3	11.8	16.4	7.3	...
Lithuania	2020	3.7	-15.8	6.9	38.5	18.3	6.4	0.3
	2021	4.1	-7.2	4.4	35.9	20.7	11.0	...
Luxembourg	2020	4.5	53.4	1.5	19.8	11.1	13.8	44.1
	2021	4.5	52.8	0.6	...	7.8	11.2	...
Malta	2020	2.8	51.0	2.1	12.6	19.6	2.2	9.0
	2021	-1.3	44.4	-1.2	-3.1	12.7	3.8	...
Netherlands	2020	9.1	113.9	3.8	6.8	14.0	6.0	-1.3
	2021	8.6	93.8	2.2	2.5	10.3	11.6	10.7
Poland	2020	0.7	-44.5	1.1	36.1	14.0	7.1	1.6
	2021	0.9	-40.2	-0.4	26.3	11.2	3.7	3.8
Portugal	2020	0.0	-104.8	0.0	-1.5	16.2	8.0	4.4
	2021	-0.6	-95.9	-2.8	-5.5	13.5	8.1	4.9
Romania	2020	-4.8	-47.6	3.4	19.9	20.7	2.2	1.3
	2021	-5.6	-45.4	1.0	10.8	1.5	-1.1	3.7
Slovakia	2020	-1.7	-65.7	5.3	7.5	16.4	7.2	3.7
	2021	-1.7	-61.9	3.1	-2.8	14.3	3.0	...
Slovenia	2020	6.4	-15.2	1.9	19.5	14.9	5.2	-0.9
	2021	5.6	-7.1	-0.4	11.4	10.6	7.4	...
Spain	2020	1.6	-84.9	1.1	-7.3	11.0	2.2	4.4
	2021	1.3	-70.0	-0.5	-10.5	9.5	1.7	2.4
Sweden	2020	4.8	14.1	-4.8	3.9	8.6	3.0	12.5
	2021	5.7	17.8	2.1	-0.5	5.4	8.1	16.6

■ the indicators do not fall within the indicative thresholds

"..." not available

Source: Eurostat, NBR

13. The convergence of the Romanian economy and the EU economic governance framework

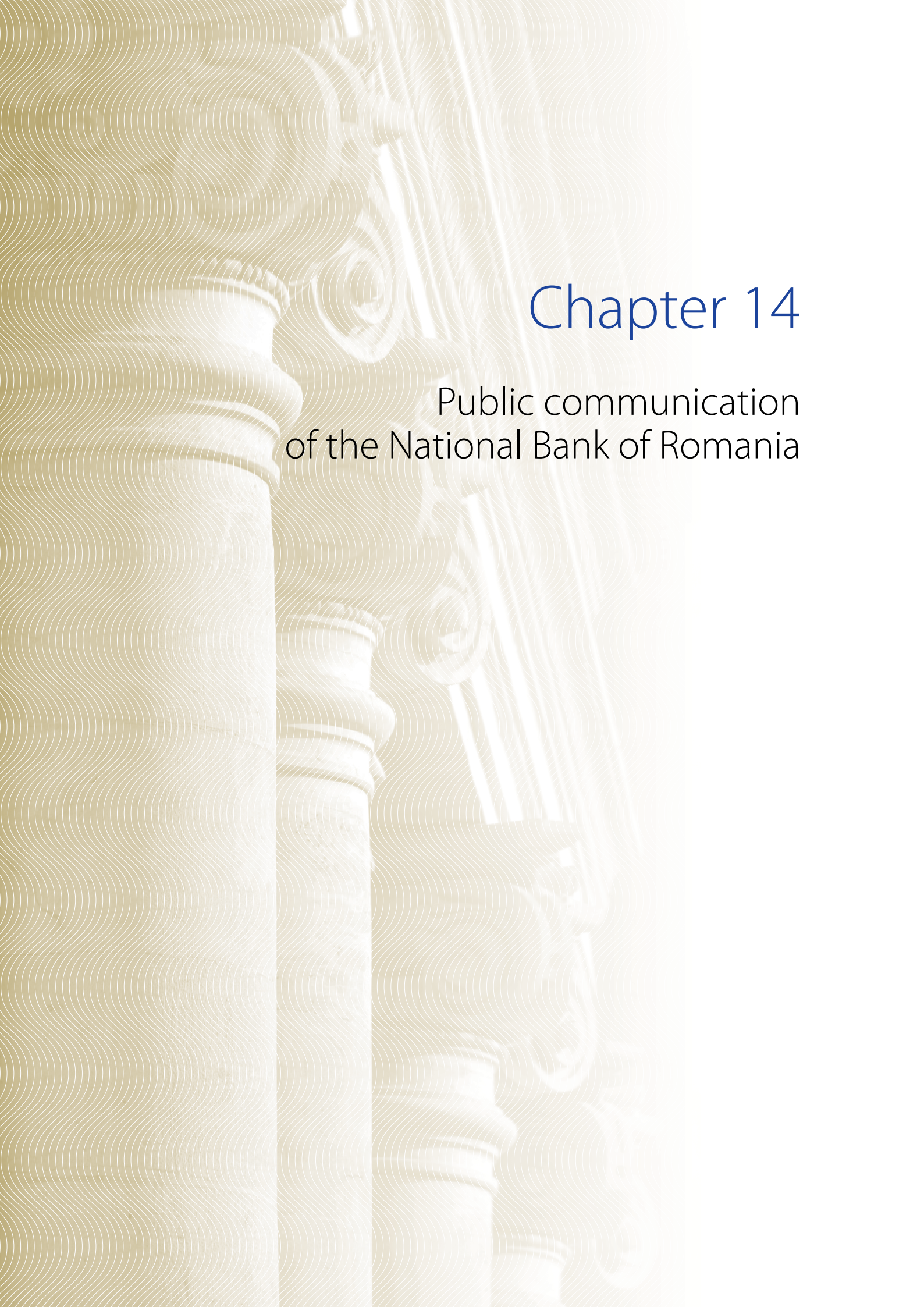
Private sector debt	General government sector debt	Unemployment rate	Financial sector liabilities	Activity rate – % of population aged 15-64	Long-term unemployment rate – % of active population aged 15-74	Youth unemployment rate – % of active population aged 15-24		
% of GDP	% of GDP	3-year average, %	annual change, %	pp, 3-year change	pp, 3-year change	pp, 3-year change		
133% of GDP	60% of GDP	10%	16.5%	-0.2 pp	0.5 pp	2 pp		
131.2	83.3	5.3	10.6	-0.4	-0.6	1.2	2020	Austria
...	82.8	5.7	...	0.1	0.3	1.0	2021	
184.3	112.8	5.8	8.6	0.4	-1.0	-3.5	2020	Belgium
174.6	108.2	5.9	7.5	1.1	0.0	2.2	2021	
94.3	24.7	5.8	11.1	0.9	-1.2	1.3	2020	Bulgaria
...	25.1	5.5	...	0.6	-1.1	-0.1	2021	
98.0	87.3	7.5	7.3	0.7	-2.5	-6.3	2020	Croatia
...	79.8	7.2	...	2.4	-0.6	-1.8	2021	
259.7	115.0	7.7	-2.5	1.9	-2.4	-6.5	2020	Cyprus
...	103.6	7.4	...	1.7	-0.1	-3.1	2021	
81.9	37.7	2.3	3.3	0.5	-0.4	0.1	2020	Czechia
...	41.9	2.5	...	0.0	0.1	1.5	2021	
220.9	42.1	5.2	5.7	1.1	-0.3	-0.8	2020	Denmark
212.0	36.7	5.2	9.3	1.4	0.0	0.3	2021	
104.4	19.0	5.6	17.5	0.4	-0.8	6.2	2020	Estonia
...	18.1	5.9	...	-0.2	0.3	4.7	2021	
153.3	69.0	7.3	7.8	1.5	-1.1	1.0	2020	Finland
...	65.8	7.4	...	1.8	-0.2	-0.2	2021	
173.1	114.6	8.5	11.8	-0.4	-1.0	-2.0	2020	France
166.8	112.9	8.1	7.2	0.2	-0.2	-3.1	2021	
120.1	68.7	3.3	11.3	0.3	-0.4	0.8	2020	Germany
...	69.3	3.4	...	1.2	-0.2	0.3	2021	
125.4	206.3	18.4	27.5	-2.9	-3.8	-6.5	2020	Greece
121.0	193.3	16.7	14.3	-0.8	-3.3	-5.7	2021	
76.1	79.6	3.7	55.7	2.0	-0.5	2.0	2020	Hungary
78.4	76.8	3.8	14.1	2.1	-0.1	3.6	2021	
188.9	58.4	5.6	7.2	-1.8	-1.6	1.4	2020	Ireland
...	56.0	5.7	...	1.8	-0.3	0.7	2021	
118.7	155.3	9.9	6.8	-1.8	-1.8	-4.8	2020	Italy
...	150.8	9.6	...	-1.1	-1.1	-2.5	2021	
66.7	43.3	7.3	10.8	1.1	-1.2	-2.1	2020	Latvia
...	44.8	7.3	...	-1.8	-1.1	2.6	2021	
54.7	46.6	7.0	28.5	2.6	-0.2	6.3	2020	Lithuania
...	44.3	7.3	...	0.9	0.6	3.2	2021	
316.8	24.8	6.0	-3.6	2.0	-0.4	7.8	2020	Luxembourg
...	24.4	5.9	...	2.1	0.4	2.7	2021	
139.0	53.4	3.9	1.9	4.9	-0.9	0.3	2020	Malta
...	57.0	3.8	...	3.1	-0.8	0.5	2021	
233.7	54.3	4.7	3.3	1.2	-1.0	0.2	2020	Netherlands
229.0	52.1	4.5	-0.4	1.0	-0.4	0.4	2021	
75.6	57.1	3.5	11.5	1.4	-1.1	-4.0	2020	Poland
71.1	53.8	3.3	13.0	3.4	-0.4	0.1	2021	
164.1	135.2	7.0	6.7	0.0	-2.3	-1.4	2020	Portugal
160.0	127.4	6.8	7.1	0.7	-0.3	3.1	2021	
48.4	47.2	5.4	13.4	2.3	-0.6	-1.4	2020	Romania
47.2	48.8	5.5	13.3	3.2	-0.2	0.5	2021	
95.3	59.7	6.3	9.9	0.4	-2.2	0.4	2020	Slovakia
...	63.1	6.4	...	0.2	-0.8	4.8	2021	
69.7	79.8	4.8	14.0	0.2	-1.2	3.0	2020	Slovenia
...	74.7	4.7	...	0.6	-0.2	3.9	2021	
146.5	120.0	15.0	9.5	-1.7	-2.7	-0.3	2020	Spain
138.3	118.4	14.8	6.6	0.0	-0.2	0.5	2021	
210.4	39.6	7.3	10.8	0.0	-0.2	6.3	2020	Sweden
215.0	36.7	8.1	11.1	0.6	0.2	7.9	2021	

Apart from monitoring macroeconomic imbalances, the European governance framework also focuses on supporting an integrated and resilient financial sector. To this end, in 2021 new steps were taken to finalise the creation of the Banking Union; debates were carried out on the action items due to be completed in order to fulfil this goal. Specifically, during both euro area summits held in 2021, EU leaders invited the members of the Eurogroup to prepare a stepwise work plan covering all outstanding issues for the completion of the Banking Union (mainly the implementation of the European Deposit Insurance Scheme, which is the third pillar of the Banking Union). In addition, the December 2021 Summit brought again to the fore the agreement amending the Treaty on the European Stability Mechanism (signed in early 2021), which establishes a common backstop to the Single Resolution Fund (SRF); the intention was reiterated to introduce this common backstop as quickly as possible.

At the same time, at the end of 2021, the EU Council received (from Member States' ambassadors) a negotiating mandate to amend the EU's bank resolution framework. The so-called 'Daisy Chain' proposal introduces targeted technical adjustments to the internal minimum requirement for own funds and eligible liabilities (MREL) and the total loss-absorbing capacity (TLAC) that are designed to correct some problematic issues identified ever since 2019. The revised resolution framework aims to ensure that loss absorption and bank recapitalisation are carried out through private means when these institutions become financially unviable and enter into resolution. In April 2022, the EU Council and the European Parliament reached a provisional agreement on this proposal.

On the domestic front, in 2021, cross-border banking groups continued to be supervised through JSTs (Joint Supervisory Teams), albeit through electronic means of communication imposed by the pandemic. The National Bank of Romania worked further with the other supervisory authorities through supervisory colleges, which are structures that ensure optimum dissemination of information and the making of joint decisions on capital and liquidity adequacy and on supervised credit institutions' recovery plans. Furthermore, during 2021, the National Bank of Romania continued to co-operate with and participate in the meetings of resolution colleges – governed by the Single Resolution Board or by group-level resolution authorities from other Member States in which the consolidating supervisor is also located – set up with a view to making common decisions on group-level resolution plans.





Chapter 14

Public communication
of the National Bank of Romania

1. Public relations

In 2021, the National Bank of Romania's activities in the area of communication and public relations were aimed at correctly, promptly and adequately informing the general public, experts, public institutions and the media of the decisions and policies adopted by the central bank in pursuit of its tasks, in compliance with Law No. 312/2004 on the Statute of the National Bank of Romania.

The internal context in which the NBR carried out its activity, as reflected by the public messages of central bank officials throughout 2021, was defined by the hike in energy prices, which weighed heavily on the inflation rate. The year 2021 was also marked by the uncertainties stemming from the containment measures related to the lingering COVID-19 pandemic and from the low vaccination rate, with a potential negative impact also on labour market developments, which had been improving markedly until then.

At international level, the uncertainties related to commodity prices, particularly of energy and agri-food items, as well as to bottlenecks in production and supply chains, likely to send global inflation higher, defined the broader economic picture.

The communication and public relations strategy was to ensure transparency, celerity and a high level of accessibility of information on monetary policy decisions and the measures intended to safeguard financial stability adopted amid the lingering COVID-19 pandemic and the hike in energy prices, which weighed heavily on the inflation rate, as well as on the role and functions of the central bank. Moreover, NBR officials and experts offered substantiated explanations – via press statements and numerous articles on the *OpiniiBNR.ro* blog or in the media – in order to improve the public's knowledge about the main topics: economic developments, monetary policy, lending, the banking system and exchange rate movements.

In keeping with its mandate and with the principles of transparency and institutional accountability, the NBR publishes information resulting from statistical data and reports that the central bank produces in compliance with the legal framework in force. These data are supplemented by in-house analyses and assessments based on solid research that results from the knowledge of central bank-specific issues. The NBR shares all these data, assessments and rationale so as to correctly inform the general public.

Due to the restrictions imposed by the COVID-19 pandemic, events that had become instrumental in the NBR's institutional communication over the past years – such as presenting the *Financial Stability Report* and the *Annual Report*, and the series of conferences presenting the *Inflation Report* – were replaced by providing to the

general public all the documents on the central bank's website. Exceptionally, on 9 August 2021, the press conference presenting the *Inflation Report* took place at the NBR's headquarters.

Despite an environment marked by restrictions, the National Bank of Romania has always provided the public with accurate information and explanations on the impact of energy prices, inflation developments and monetary policy decisions. The in-person press briefing held on 7 July 2021 offered clarifications on the outlook for the annual inflation rate to rise over the short time horizon to higher values than those in the previous medium-term forecast published in the May 2021 *Inflation Report*.

Explanations on monetary policy decisions and economic developments were communicated to the public also via interviews and statements to the media given by NBR representatives. Throughout 2021, 726 materials broadcast on TV included interviews with bank officials, including the spokesperson.

The NBR's official communication was supplemented by the OpiniileBNR.ro blog, where 40 articles authored by central bank representatives were published throughout the year. These provided information on monetary policy decisions (implications for and impact on the inflation rate), green economy and cryptocurrencies/cryptoassets. The opinion articles generated 1,521 appearances in print and online, compared to 1,560 appearances in 2020.

In addition, NBR representatives participated in 18 events, in-person or online conferences, providing the public with assessments, presentations and interviews on important topics under public debate. Thus, the NBR organised events, such as the NBR-EIB webinar "Towards a green and smart economy in Romania: Investment and investment finance" (25 February 2021 – online), the signing of the Cooperation Agreement between the National Bank of Romania and the National Bank of Moldova (11 June 2021 – in person), the discussion on the paper titled *Destinul tezaurului României. Argumente din arhivele ruse*, authored by Dr Ilie Schipor (16 June 2021 – in person), the seminar entitled "Objective: Increasing financial intermediation" (23 June 2021 – in person), the annual "Cristian Popișteanu" Banking History and Civilisation Symposium, the 29th edition (30 June – 1 July 2021 – in person), press conference – Putting into circulation the lei 20 banknote (26 November 2021 – in person).

The NBR ensured ongoing communication with the public and the media also by publishing over 200 press releases on monetary policy decisions, macroprudential supervision, and developments in statistical indicators relevant to the banking sector and the economy in general, including government security issues. The NBR also responded to 111 requests for information and clarifications received from journalists, up from a year earlier (90 requests in 2020), of which 18 were formulated under Law No. 544/2001.

The NBR's coverage in the relevant central and local media (written media, radio-TV and online) consisted of 8,700 articles published and broadcast that mentioned the central bank, up from 7,800 in 2020.

Looking at the tone shows that most articles (93.8 percent) used a balanced tone, similarly to that seen a year earlier (93.6 percent), 0.4 percent used a positive tone, up slightly from the previous year (0.3 percent), and 5.8 percent used a negative tone, down from 6.1 percent in 2020, 6.5 percent in 2019, and 7.2 percent in 2018, trending downwards from 12.6 percent in 2017.

In terms of number, most of the materials assessed were published online – 3,421 articles, accounting for 39 percent of the total compared to 50 percent in 2020. Out of these, 6.2 percent (211 articles) used a negative tone. Moreover, it was also here that most balanced materials appeared (93.8 percent). The largest share of negative materials was broadcast on TV and radio, i.e. 7 percent, down from 8.6 percent in 2020.

The most widely-covered subjects were:

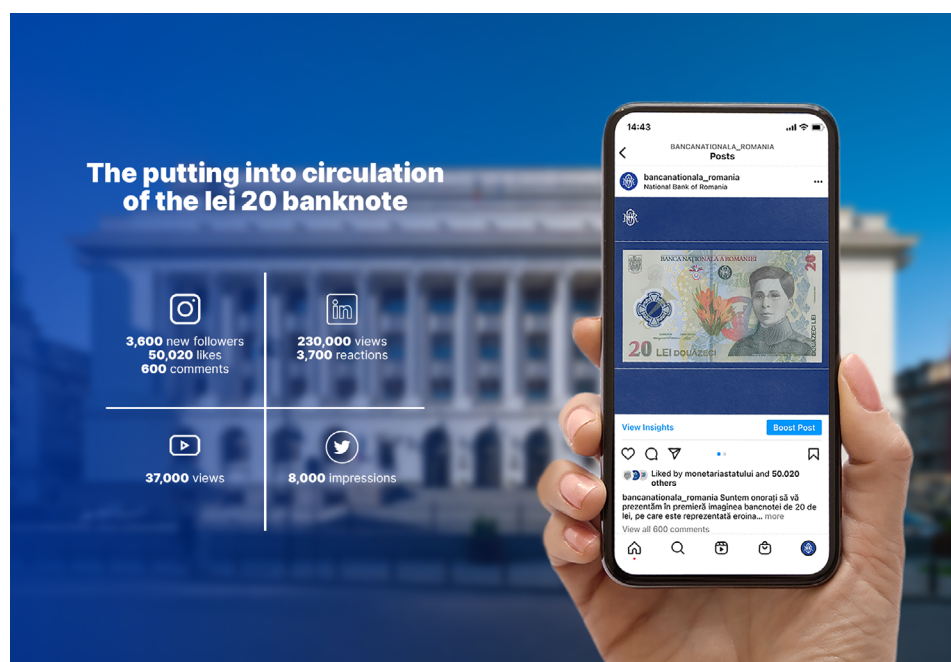
- (i) monetary policy, which held a significantly larger share than in the previous year (35 percent versus 21 percent in 2020), with a mostly balanced tone. The topics covered were: monetary policy decisions, inflation developments, open market operations and forex market interventions, as well as the inflation outlook, in step with the public's major concerns;
- (ii) economic developments (15 percent), with 98.9 percent of articles using a balanced tone. Most news articles focused on developments in economic indicators and economic growth estimates/prospects, as well as on warnings and comments on signs of a possible crisis, amid a worsening economic situation primarily as a result of the COVID-19 pandemic;
- (iii) lending ranks third among the topics covered by the media in 2021 (12 percent), with 99 percent of articles using a balanced tone, the same as in 2020. Concerns were centred around lending, developments in the ROBOR/IRCC and how they influence households' loan instalments, as well as NBR regulations on the level of indebtedness and higher down payments for real estate investment loans.

The central bank's online communication activity focused on integrating new digital instruments and capitalising on the existing ones in order to increase institutional transparency and efficiency in conveying messages to the general public. The central bank's main communication channel remained the official website, where, alongside the real-time dissemination of statistical data (exchange rate, interest rates, financial market news) and of other types of information such as press releases, publications, conferences or speeches, several visual materials (infographics, animations, banners) were promoted alternatively with a view to highlighting certain website sections or the videos featuring the lei 20 banknote. Moreover, special attention was also devoted to financial education, which benefited from higher visibility as the range of educational resources for pupils was expanded with the launch of the animated video series entitled *Financial Education with Ana and Radu*.

Given that the lei 20 banknote was put into circulation at end-2021, the bank's targeted communication efforts intensified, ensuring better visibility of information on the central bank's currency issue function. Specifically, an awareness-raising campaign for the general public was conducted online and mainly focused on

presenting the specific security features, as well as the historical figure printed on the banknote: Ecaterina Teodorescu. By using various public relations techniques (press releases and conferences, informative videos, articles published on social media platforms, etc.), the central bank aimed, on the one hand, at increasing the attractiveness of content specific to promoting the new banknote (security features, graphic composition, details about the depicted historical figure), and, on the other hand, at raising awareness on the role and functions of a monetary authority among new categories of users.

A press conference was organised on this occasion, where the graphics and security features of the new denomination were presented for the first time. The lei 20 banknote was promoted via social media platforms concurrently with the NBR governor's speech, receiving thousands of likes and hundreds of comments from users as early as the first few minutes. Among the social media accounts managed by the central bank, what stood out in this context was Instagram, where the post presenting the banknote led to a fast rise in the number of subscribers, recording approximately 3,600 new followers on 26 November alone (when the press conference took place). Moreover, the post appeared in the feeds of over 200,000 Instagram users and brought approximately 50,100 likes and 600 comments, a record high for the NBR's communication via this social media platform.



Infographic
The putting into circulation
of the lei 20 banknote

Digital audiences also took a great interest in the new banknote put into circulation, as reflected by the NBR's other social media accounts: the feature article recorded more than 230,000 views and 3,700 reactions on LinkedIn, while the video showing the specific design and security features reached approximately 37,000 views on YouTube. As for Twitter, statistics show that engagement increased by 56 percent in November 2021, the tweets on the putting into circulation of the lei 20 banknote bringing over 8,000 possible impressions.

Another online communication initiative of the central bank in 2021 was the photo contest entitled “Money in day-to-day life”. This took place on Instagram and focused not only on encouraging users to explore their creativity by taking snapshots or artistic images featuring the proposed theme, but also on providing financial education to the public, challenging participants to find out more on money and its role in society, so they could afterwards present it in the most innovative ways. Looking at the overall statistics, the “Money in day-to-day life” campaign recorded over 700 likes for the 10 posts of the contest and approximately 2,400 unique visitors. The most liked posts described what shapes currency had taken over time and the prize at stake (a silver numismatic coin commemorating 200 years since the birth of Romanian photographer Carol Popp de Szathmári).

The NBR’s presence on social media platforms continued to increase in 2021, and the information published was adapted to the specifics of each communication channel and its relevance to the public. With regard to LinkedIn, the promoted topics fell under the following categories: economics (overviews of technical materials such as regular reports and publications, accompanied by explanatory visual elements such as infographics or banners), research (presentation of scientific papers written by economic and financial experts), and career opportunities (a category of information holding the highest share on LinkedIn, i.e. approximately a fourth of total topics posted thereon). In addition, the events organised by the NBR (BEARS seminars, the discussion on “Polish Gold in Romania (1939)”, the “Cristian Popișteanu” Banking History and Civilisation Symposium, the event of the signing of the Cooperation Agreement between the National Bank of Romania and the National Bank of Moldova, etc.) or in which NBR officials participated (for example, the second edition of National E-commerce Day) were announced, and significant figures, anniversaries and moments in Romania’s history were evoked.

As for the central bank’s activity on Twitter, this focuses on promptly informing the public about its decisions, activities and initiatives, the content being adapted so as to be easily picked up by news agencies. Among the topics promoted on this network, the articles dedicated to presenting research seminars and those marking various significant moments in the central bank’s history (140 years since the NBR’s first banknote issue) or certain important national or international holidays (e.g. Brâncuși Day, International Women’s Day or Romanian Language Day) had a high visibility.

In 2021 as well, the NBR’s LinkedIn account saw a significant increase in the number of followers, recording over 50,000 members at the end of the year. Some 142 new articles were published, totalling approximately 19,500 likes, more than 1,600 shares and around 57,000 clicks per post (accessing the links in the articles). The institution also intensified its activity on Twitter, where more than 640 new followers were recorded, reaching nearly 5,100 followers, 47,000 unique profile visits, a record high for the platform’s statistics over the past three years (of which 11,300 were recorded in November 2021 alone, when the lei 20 banknote was launched), around 1,100 new tweets and approximately 338,000 possible impressions generated by the posts. Since the NBR’s Twitter account is followed particularly by foreign journalists and experts, as well as government institutions, diplomats or professionals in the economic and financial areas, its content is mainly bilingual or even exclusively in English.

The statistics related to the NBR's activity on Instagram indicate a spectacular rise in the number of followers (up 238 percent versus 2020), topping 7,200 followers. The posts on Instagram focused chiefly on presenting historical subjects, referring to several events or iconic figures in Romania's history.

In addition, the NBR uploads to its YouTube channel videos of press briefings/conferences, seminars and symposiums organised at the bank's head office. In the context of the COVID-19 pandemic, most events took place online and were streamed live via YouTube and on Twitter. Among these events were: press conferences that followed the monetary policy meetings, cultural events such as the "Cristian Popișteanu" Banking History and Civilisation Symposium, seminars on financial topics, etc. In 2021, the NBR uploaded to its YouTube channel four episodes in the series entitled *Financial Education with Ana and Radu*, as well as the promotional video on the design and security features specific to the lei 20 banknote, which received the most views (over 37,000) in the period under review. Another means of communication of the central bank is the OpiniiBNR blog, where articles on economic and financial subjects are published, some of them being shared subsequently also on social media (LinkedIn and Twitter).

NBR publications

Via its portfolio of publications, the NBR continues to provide a wide range of information to financial and banking experts and the general public, accessible in several formats (print, pdf and epub).

The NBR's portfolio of publications includes a series of reports issued at different time intervals: (i) the *Annual Report*, providing a detailed presentation of the domestic macroeconomic developments and the international context, as well as of the activities carried out by the central bank in the period under review; (ii) the *Inflation Report*, quarterly detailing the analysis framework and, implicitly, the rationales behind the monetary policy decisions; (iii) annual publications focusing on the external sector, namely *Romania's Balance of Payments and International Investment Position* and *Foreign Direct Investment in Romania*; (iv) *Financial Accounts*, detailing the financial developments in the institutional sectors of the economy; (v) the *Financial Stability Report*, reflecting the domestic challenges to financial stability, as well as the developments at EU level in prudential regulations; (vi) the *Monthly Bulletin*, containing a synthetic analysis of the main economic and monetary policy developments in the reviewed period and a detailed statistical section.

In 2021, two editions of the *Systemic Risk Survey* were published, quarterly summarising the opinions of the top 10 banks in the system (by asset value) on systemic risks, possible consequences on the financial system and banks' capacity to manage them if they materialise. Moreover, the NBR continued to conduct the surveys dedicated to the relationships between the real sector and the banking sector – *Survey on the Access to Finance of the Non-financial Corporations in Romania* and the *Bank Lending Survey*.

During 2021 and the first part of 2022, 11 analysis papers reflecting part of the results of the NBR's research activity were published in the *Caiete de studii/Occasional Paper Series*.

Public information activity

External communication focusing on direct public information is centred on adequately managing the provision of public interest information upon request and the settlement of petitions to the NBR, and is carried out by observing the limitations established by the related primary legislation, i.e. Law No. 544/2001 on free access to public interest information and Government Ordinance No. 27/2002 on the regulation of petition settlement activity, as approved, and amended and supplemented by Law No. 233/2002.

From this perspective, in order to fulfil the priority objective of the communication and public relations activity – to correctly and promptly inform the general public –, the available tools and resources were used to: (i) handle the written correspondence addressed to the NBR; (ii) handle telephone calls, as well as (iii) provide information demanded verbally at the Information-Documentation Point.

In terms of number, the statistics of petitions addressed to the central bank throughout 2021 highlight the registration and handling of a little less than 1,850 written notifications/requests, slightly fewer than in 2020, received by post, fax and e-mail at both the NBR's head office (1,550 requests) and its 19 territorial units (almost 300 requests). Adding to these are 84 enquiries (slightly up from the previous year) grounded on the right to free access to public interest information governed by Law No. 544/2001, which were solved in compliance with the provisions of this regulatory act as follows: information was provided for 55 of them, 4 requests were handled as petitions, relevant clarifications being made from this perspective, given that the information sought by applicants was not subject to the expressly stated law, and 24 enquiries were declined, in line with the law. The rejections were justified by the fact that 16 of the requests pertained to the exceptions from the free access of the public, as provided by law, while the information requested via 8 of them was not available in the NBR's records. One request was redirected to another institution.

Around 1,800 written requests/notifications were assessed as petitions and settled according to the provisions of Government Ordinance No. 27/2002, approximately 1,650 of them being answered by post or e-mail, as some petitions were dismissed, given that they lacked the petitioners' identification data, or they were, in essence, follow-ups to previously solved correspondence.

At the same time, in 2021, an estimate of 1,250 verbal requests made by telephone (about 1,100 enquiries) or directly addressed to the NBR's representatives at the Information-Documentation Point (slightly over 150 enquiries), up by more than 25 percent from the previous year, was handled and settled.

Although the SARS-CoV-2 pandemic continued throughout 2021, there was an increase in the number of people who chose to show up to the Information-Documentation Point to formulate various enquiries and notifications or to obtain certain information; this number, however, is nowhere close to pre-pandemic levels. By contrast, relative to the total volume of written enquiries addressed to the central bank, the share of requests submitted to the institution's check-in desk and of

those sent by post or courier service remained low, whereas those submitted by fax accounted for less than 1 percent.

The main subjects of the petitions/requests for public interest information recorded in 2021 at the NBR's head office remained the same, with few exceptions, as in the previous years, being mainly associated with the fulfilment of the central bank's institutional mandate. The assessment of the activity in terms of interest areas revealed the following:

- notifications, complaints or requests for information and documents regarding the activity and authorisation of certain credit institutions, non-bank financial institutions or payment institutions and the relationship with their customers. Among these, a significant share concerned notifications on transactions or operations believed to be fraudulent, the level of interest rates and bank fees and commissions, issues related to updating and processing of personal data and "know-your-customer" rules, as well as notifications on payment services (Payment Services Directive 2);
- the NBR's numismatic issues;
- interpretations of the legal framework developed and/or managed by the NBR;
- clarifications on central bank-specific tasks and activities, including: requests for public interest information on certain employee categories, the institution's sustainability and green energy strategy or its publications;
- requests for the exchange of worn-out/deteriorated banknotes or banknotes which are no longer legal tender, a significant number of which were received from foreign citizens, as well as information on the withdrawal from circulation of foreign notes and coins;
- developments in the leu's exchange rate against other quoted or unquoted currencies;
- provision of certain statistical data collected and compiled by the NBR;
- settlement of certain payment instruments issued abroad;
- control actions carried out by the NBR, irregularities detected and sanctions applied;
- public procurement contracts concluded by the NBR with utility suppliers and other service providers.

The implementation at institutional level of the transparency principles established by the legal framework is assessed by summarising this specific public information activity, namely the volume of works, the complexity of the petition handling process and the petitioners' main topics of interest, in the *Report on the access to public interest information and the handling of petitions in 2021*. The Report is drawn up each year by taking into account the provisions of the applicable legal framework and is published on the NBR's website, in the dedicated section.

The NBR Archives and Library

In 2021 as well, the NBR Archives further conducted its specific activities, namely taking over and archiving documents created by and received by the institution's

structures, as well as preserving, processing and turning to account the central bank's historical archive, while adapting to the health context generated by the COVID-19 pandemic.

As the state of alert persisted on the territory of Romania, the research activity conducted by external researchers in the reading parlour was stopped for all of 2021. The NBR Archives staff made sure to provide information from documents or electronic copies of documents in order to complete the research under way, using for this purpose the software for consulting the scanned archives.

The turning to account of the documents in the NBR Archives consisted in: (i) preparing presentations and studies to mark 141 years since the establishment of the National Bank of Romania and the over 100 years of activity of the Timiș Branch and the Sibiu Agency; (ii) drafting presentation articles of the NBR Archives and Library for the institution's website, as well as drawing up the NBR's timeline (1880-2020); (iii) preparing articles and interviews for online publications and a local television station; (iv) solving petitions regarding the release of information/archive documents related to petitioners' rights; (v) preparing the brochures for the numismatic issues of the National Bank of Romania; (vi) initiating the creation of a database of statistical and historical data based on the NBR's balance sheets in 1880-1947 under the "South Eastern European Monetary History Network (SEEMHN)" programme.

Observing the health measures imposed by the pandemic situation, the continuity of the "Cristian Popișteanu" Banking History and Civilisation Symposium was ensured by organising its 29th edition focusing on The National Bank of Romania 140 years ago. Events in 1881. Moreover, discussions were organised at the launch of the papers: *Destinul tezaurului României*. "Argumente din arhivele ruse" by Ilie Schipor and "Odiseea tezaurului Republicii. Soarta aurului Băncii Poloneze 1939-1950" by Wojciech Rojek.

In 2021, the "NBR Library" collection was further expanded by including two new books, namely Romanian translations of seminal works in the field of economics: "The Economics of Time and Ignorance" by Gerald P. O'Driscoll and Mario J. Rizzo and "History of Economic Analysis – Volume 1" by Joseph A. Schumpeter. Given the pandemic context, these books were to be launched in 2022.

The activity of the NBR Library was also influenced by the health context generated by the COVID-19 pandemic, which led to restricting the access to the reading parlour for outside visitors. The NBR Library's book stock was added 520 new titles of Romanian and foreign academic literature on economic, financial and banking matters. At the end of the year, the library's collection totalled 22,364 bibliographic units. Managing the collections implied, besides taking stock of the new items, writing descriptions in the online catalogue, thus cataloguing 7,527 new resources, so that at end-2021 there were 41,844 bibliographic records.

Due to the continued updating of the online catalogue, external users had easy access to the library's resources, which translated into 3,602 searches of the catalogue.

In order to inform the public, a leaflet with the most relevant new entries in the NBR Library was drafted and posted on the central bank's website on a monthly basis.

Date	Event
12 February 2021	Conference: <i>IMF's Regional Economic Outlook for Europe: Corporate Liquidity and Solvency in the Covid-19 Pandemic: The Role of Policies</i>
25 February 2021	Presentation of the European Investment Bank's report entitled "Building a Smart and Green Europe in the COVID-19 Era" and of the latest "EIB Investment Survey – Romania Overview"
24 March 2021	Discussions on the paper entitled <i>Defensive Expectations. Reinventing the Phillips Curve as a Policy Mix</i>
25 March 2021 6 May 2021 27 May 2021 24 June 2021 27 July 2021 26 August 2021 30 September 2021	<i>Bucharest Economic Analysis and Research Seminar (BEARS)</i>
8 June 2021	Press conference presenting the <i>Report of the NCMO Working Group on supporting green finance</i>
11 June 2021	Signing Ceremony for the Cooperation Agreement between the National Bank of Romania and the National Bank of Moldova
23 June 2021	Seminar: <i>Objective: Increasing financial intermediation</i>
30 June – 1 July 2021	The annual "Cristian Popișteanu" Banking History and Civilisation Symposium, the 29th edition – "The National Bank of Romania 140 years ago. Events in 1881"
19-23 July 2021 26-30 July 2021	Financial education urban camp, the 3rd edition
9 August 2021	Press conference presenting the <i>Inflation Report</i>
23-27 August 2021	Financial education urban camp, the 4th edition
22 October 2021	Legal Colloquia of the NBR: <i>How appropriate common law is for the specifics of banking activity. Case law perspective</i>
26 November 2021	Press conference to launch the lei 20 banknote featuring the portrait of Ecaterina Teodoroiu

Table 14.1

Events focusing on monetary, banking and financial issues organised by the National Bank of Romania in 2021

2. Financial education

Amid the inherent difficulties posed by the countrywide restrictions, the financial education activity took on new dimensions in the pandemic context.

On the one hand, measures were taken to adapt interaction with the public to the new conditions, primarily by developing digital solutions, and, on the other hand, the contents were adapted to the new context.

Although cancelled or postponed, the events involving direct interaction with the public were offset by expanding online interactions, which allowed for the simultaneous connection to several groups in schools, high schools and universities at the level of both the NBR's head office and the territorial network.

The migration of financial education activities to this new environment was facilitated by the adaptation of presentations in terms of both content and methodology. Specifically, new episodes in the animation series entitled *Financial Education with Ana and Radu*, the digital adventure game, and online quizzes were added, which allowed for the development of virtual interaction in terms of both quality and quantity.

Thus, under the educational projects, approximately 80,000 pupils and students met in person or online with NBR experts in 2021, significantly more than a year earlier. The online presentations, in which 1,970 students participated, aimed at fostering discussions on topics such as: monetary policy, inflation, the central bank's role and tasks, etc. At pre-university level, presentations were delivered to 78,000 pupils in 600 educational institutions – primary, secondary and high schools in Bucharest and across the country, in both urban and rural areas. The topics included means of payment, saving, history of the leu, inflation.

The National Bank of Romania, together with partner institutions in the National Cooperation Protocol in the field of financial education, obtained accreditation for the only full course “Financial and economic education for teachers”, whose target audience were eighth-grade teachers of Social Education. The course for the teaching staff is offered by the agency of the Romanian Banking Institute.

During the summer holidays, three new rounds of the Financial Education Urban Camp took place at the NBR's Professional Training and Social Activity Centre in Bucharest. The same as in the previous editions, the event targeted sixth- and seventh-grade pupils in Bucharest/Ilfov county schools. Approximately 30 pupils participated in each of the three events, with lecturers being staff members of the National Bank of Romania, the Ministry of Finance, the Financial Supervisory Authority and the Romanian Association of Banks. Over five days, each of the three groups of pupils received useful information to develop healthy habits around money management and to be able to take responsible financial decisions over the long term. The teaching method used in the Financial Education Urban Camp is non-formal, i.e. edutainment (education through entertainment), which combines play and learning.

In October 2021, the ninth edition of the “Strategica” international conference took place online. The subject of the event, organised by the National University of Political Studies and Public Administration in collaboration with the National Bank of Romania, was “Shaping the Future of Business and Economy”. The multidisciplinary discussions sought to answer several questions that had arisen amid current changes, such as: What dynamics now redefine the economic and business landscape? What is the impact of the fast technological adoption, and of changes in work habits and consumer trends on management practices?

The FinClub programme aimed at high school students (10th to 12th grades) that are passionate about the financial market continued with a second series, in which 100 children from all over the country participated. The programme is jointly organised by the Financial Supervisory Authority, the National Bank of Romania, the Ministry of Finance and the Romanian Association of Banks. The topics of the meetings in the second edition of FinClub covered concepts and mechanisms in areas such as cryptocurrencies, capital market, cash management, bank cards, etc.

The Global Money Week 2021 international project brought together, in a week-long marathon, 15,800 pupils from 650 classes in primary, secondary and tertiary

education. A record 194 educational institutions took part in presentations that fit the GMW theme: “Take care of yourself, take care of your money”.

Beside the existing projects, the National Bank of Romania was also involved in new educational projects in order to explore innovative methods of financial education. One such attempt are pilot schools, an initiative undertaken by the Ministry of Education in 2020, meant to encourage the development of teachers’ skills and the introduction of new subjects in the school curriculum, amid the overall reform of pre-university education.

Following discussions with representatives of the NBR and the Ministry of Education, it was found that financial education is an area of interest for pilot schools, which is why an informal framework for gauging the appetite of educational institutions for such partnerships was set up.

In this context, the NBR signed a partnership with the “Gheorghe Lazăr” National College in Bucharest that allowed certain financial education activities to be tested by ninth-grade students, given that there is no economic subject at this level in the school curriculum. These activities were well received by students and teachers, but no firm conclusions have been drawn yet on the viability of introducing new content into the relevant curriculum.

As mentioned above, given the overall digitalisation trends in teaching methods, the NBR decided to develop an educational game that would allow pupils aged 12-15 to acquire knowledge and skills in the financial field through playful methods (gamification). This is an adventure game, in which the main character goes on an urban journey peppered with tasks to be solved by answering questions and choosing the appropriate solutions to financial education issues on various topics, such as: correctly identifying currency denominations, knowing payment methods, protecting against fraud attempts, etc.

The game’s graphics are gamer-friendly and eye-catching and the characters are correlated with those already featured in the NBR’s animated videos, so as to ensure graphic and conceptual coherence for building the NBR’s educational brand. The game will be available to the public on the NBR’s new website.

International activity

OECD/INFE

In its capacity as a full member of the OECD/INFE (International Network on Financial Education), the National Bank of Romania participated in the organisation’s activities, particularly in the two annual meetings held online. Cooperation with the OECD based on the project for technical assistance offered by the Ministry of Finance of the Netherlands declined, given that this programme is nearing completion.

The francophone group

The francophone group continued to carry out online activities throughout 2021, holding regular meetings coordinated by the representatives of Banque de France.

Discussions within the group focused on pooling digital resources on financial education and, generally, ensuring an ongoing cooperation between francophone banks.

Commission Expert Group – GEGRFS

The European Commission and OECD/INFE started working together to develop a common EU/OECD financial competence framework for the financial education of adults.

A dedicated sub-group on financial literacy was created within the Government Expert Group on Retail Financial Services (GEGRFS). The sub-group is made up of experts from national authorities responsible for financial education policies, including NBR representatives from the Financial Education and Museum Department, who participated in five sub-group meetings.

The NBR Museum

As of 16 March 2020, when the state of emergency was declared in Romania, visits to the NBR Museum were suspended, and this situation continued over the first 11 months of 2021, in the context of successive pandemic waves.

The NBR Museum was reopened for the public on 6 December 2021, and by 31 December 2021 it had been visited by 622 people, in guided tours, Monday through Friday, between 10:00 a.m. and 04:00 p.m. The weekly average of 155 visitors shows increased public interest in visiting the NBR Museum, compared to 108 visitors in the 1 January – 16 March 2020 period.

Under the new conditions imposed by the pandemic context, the activity of the NBR Museum January through November 2021 was reconsidered, being primarily focused on keeping a scientific record of the collections managed by this unit. To this end, the electronic record of the collections continued by drawing up worksheets and conservation sheets for the exhibits. By the end of 2021, 33,270 documents had been introduced in the new recording programme. At the same time, the photographic archiving of the cultural goods under management continued.

Moreover, at end-2021, the Museum started a wide storage optimisation of collections by reordering and replacing storage boxes, according to museum conservation criteria.

To continue the steps taken by the NBR to familiarise the public with the central bank functions, the NBR Museum organised jointly with the Communication and Public Relations Department the photo contest entitled “Money in day-to-day life” between 17 April and 1 May 2021. Using photography, the competitors were invited to present their own vision of people’s relationship with money and its role in society. The event was promoted on the NBR’s social media accounts.

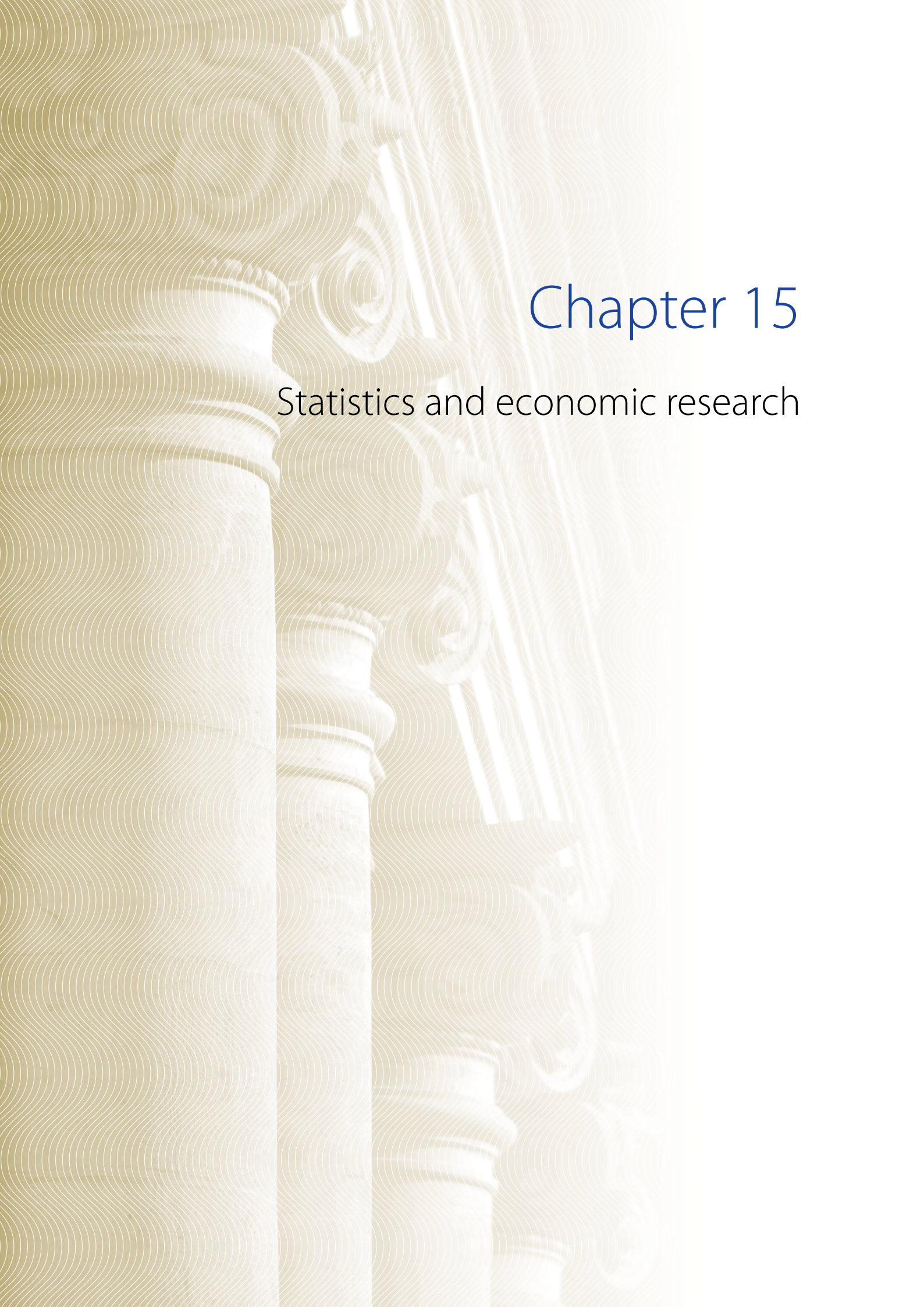
On 25 October 2021, the opening of the temporary exhibition “King Michael I of Romania – 100 years since his birth (1921-2021)” occasioned by the issue of the commemorative coin marking 100 years since the birth of King Michael I of Romania

and of a proof replica of the commemorative medal “Ardealul Nostru” took place at the NBR Museum. The exhibition was organised jointly with Asociația Casa Majestății Sale, with the participation of the National Military Museum, the National Archives of Romania, the “Dimitrie Gusti” National Village Museum, and the Daniel Obreja Collection. The exhibition was open to the public until 20 May 2022.

To mark the putting into circulation of the new lei 20 banknote, the NBR Museum opened, on 26 November 2021, a temporary exhibition dedicated to the history of the NBR’s lei 20 banknote issues. On this occasion, exhibits from the museum and from the NBR Printing Works were showcased chronologically, starting with the first lei 20 banknote issue of 1881.

On the same date, the Museum opened the temporary exhibition dedicated to Ecaterina Teodorescu, the first woman officer of the Romanian army, whose portrait is featured on the obverse of the new lei 20 banknote. This exhibition was organised jointly with the “King Ferdinand I” National Military Museum and the National History Museum of Romania, and was open to the public until 20 May 2022.





Chapter 15

Statistics and economic research

1. Statistical activity

The key statistical activities of the National Bank of Romania include the collection, production and dissemination of a broad range of statistical data, such as monetary and financial statistics, external sector statistics, national financial accounts, securities statistics and credit and payment risk statistics, necessary as inputs substantiating the decisions supportive of the national economy and the central bank's research work.

In 2021, the National Bank of Romania maintained its statistical activity at a high-quality standard, despite multiple difficulties caused by the COVID-19 pandemic, with data sent to international bodies by the deadlines set out in the dissemination calendars.

Some additional reporting requirements for credit institutions were implemented in 2021 in order to raise the quality of data collected on monetary balance sheets of monetary financial institutions. Moreover, given the ECB's medium-term strategy in the area of quarterly financial accounts, more than 3,200 new quarterly data sets were submitted to the ECB, from 2007 Q1 onwards, including granular data for "Other monetary financial institutions" for the three sub-sectors (central bank, deposit-taking corporations except the central bank, money market funds) and "Other financial intermediaries" (financial intermediaries, financial auxiliaries and captive financial institutions). At the same time, the disseminated array of indicators was enlarged by introducing the indicator "Net Financial Wealth" (B90F) into the annual series of the financial accounts published on the NBR website and in the annual publication *National Financial Accounts 2016-2020*.

In the area of securities statistics, the ECB's Centralised Securities Database (CSDB) included additional information, in line with its new requirements, and the IT procedures for the automated data retrieval from the ECB's Securities Holdings Statistics by Sector (SHSS) and their use in compiling securities statistics by the NBR were implemented.

In the context of the European Central Bank updating legislation in the field of monetary and payment systems, as well as supplementing the existing reports, in line with statistics trends at European and global level, the Statistics Department coordinated the work on developing a new regulation²⁷². The NBR Board approved the regulation on 24 November 2021, thus replacing Regulation No. 4/2014 on the reporting of statistical data and information to the National Bank of Romania, as subsequently amended and supplemented.

²⁷² NBR Regulation No. 4/2021 on reporting statistical data and information to the National Bank of Romania.

Representatives of the Statistics Department participated in consultations initiated by the International Monetary Fund (IMF) and the United Nations (UN) in the process that started in 2021 to update international statistical standards applicable to the System of National Accounts, 2008 and in the sixth edition of the *Balance of Payments and International Investment Position Manual*.

With a view to improving data sources for compiling the financial accounts, a Cooperation Agreement between the National Bank of Romania and the Credit Union Association – the West Region regarding the provision of statistical information was signed in 2021. Additionally, in order to improve the data series, quarterly estimates for shares issued by non-financial corporations and held in the same sector were introduced, based on the linear interpolation method.

In the field of government finance statistics, the NBR participated, together with NIS and MF experts, in the EDP standard dialogue visit organised online by Eurostat during 10-11 May 2021, as well as in the performance of the ensuing tasks.

In the field of external sector statistics, Balance of Payments data for the period 2010-2019 were revised by including data on imports of individuals' used cars, in accordance with the corresponding data in the Non-Financial Accounts, calculated and published by the National Institute of Statistics.

In light of the entry into force of Guideline (EU) 2018/1151 of the European Central Bank amending Guideline ECB/2011/23 on the statistical reporting requirements of the European Central Bank in the field of external statistics, effective 1 March 2021, the Statistics Department submitted to the ECB in June and September 2021, as scheduled, the quarterly data series on balance of payments and international investment position in the new required breakdown, starting with 2019 Q1. The ECB's new requirement implied more detailed information of institutional sectors, financial instruments in the form of direct investment and partner countries.

In March and September 2021, the NBR sent to Eurostat on a voluntary basis, for the first time under the exercise initiated by the latter institution in 2021, the FDI datasets for 2019 and 2020 by country of the ultimate investor²⁷³.

The provisions on International Trade in Services under Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics, namely of Commission Implementing Regulation (EU) 2020/1197 (the EBS Regulation), continued to be implemented both at NBR level and in the NBR-NIS interinstitutional working group.

Following the legislative amendments with an impact on the reporting of information to the Central Credit Register, namely: (i) the Law on the discharge of debt obligations²⁷⁴

²⁷³ It is the entity at the top of the ownership chain of a group of companies, i.e. not controlled by any other entity.

²⁷⁴ Law No. 52/2020 amending and supplementing Law No. 77/2016 on the discharge of mortgage-backed debts through transfer of title over immovable property.

which provides for the prohibition of entering into the Credit Bureau or other negative databases of information on debtors who sent notices of debt discharge to the creditor and (ii) the Government Emergency Ordinance on suspending the payment of instalments in the context of the COVID-19 pandemic²⁷⁵, the Statistics Department coordinated the activity of amending Regulation No. 2/2012 on the organisation and functioning of the Central Credit Register operated by the National Bank of Romania, as well as the activity to implement the provisions of this regulation.

Furthermore, an analysis was also carried out for amending NBR Regulation No. 2/2012 in order to report to the Central Credit Register, as of 1 June 2022, the real estate market indicators set out in the Recommendations of the European Systemic Risk Board ESRB/2016/14 and ESRB/2019/3, as well as the NCMO's recommendations regarding the indicator on green finance²⁷⁶ and the Legal Entity Identifier (LEI)²⁷⁷.

Year 2021 saw the completion of activity of the Interinstitutional Working Committee²⁷⁸ charged with identifying solutions to enhance the quality of credit reporting and extend its scope, hereinafter referred to as "the Committee". It was established in January 2020 with a view to implementing the recommendation set out in the *Financial Sector Assessment Programme*, which was prepared by the International Monetary Fund and the World Bank in 2018. The recommendation referred to the establishment of a committee comprising all stakeholders and tasked with enhancing the quality of credit reporting and extending its scope to improve access to finance. The Committee operated until November 2021 and drafted a final report putting forward the amendment of the primary legislation so as to include debt collection agencies among the reporting agents to the Central Credit Register.

In 2021, the Statistics Department helped, as a business manager, in the smooth running of the following reporting systems:

- SIRBNR, the IT system for reporting to the National Bank of Romania whereby credit institutions submit 36 statistical, financial and prudential reports;
- RAPDIR, the direct reporting system whereby entities from all institutional sectors submit 16 reports, also within the four NBR-conducted surveys;
- the Data Warehouse – Business Intelligence (DW-BI), the NBR's sole data repository that integrates aggregated data and information from internal and external sources, thus providing the NBR users with a powerful tool for making analyses, complex studies, reports and charts for monetary policy and financial stability purposes, as well as for drafting publications and reporting statistical data produced by the NBR in compliance with the requirements of the ECB, Eurostat and other international organisations;

²⁷⁵ Government Emergency Ordinance No. 227/2020 amending and supplementing Government Emergency Ordinance No. 37/2020 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions.

²⁷⁶ NCMO Recommendation No. R/6/2021.

²⁷⁷ NCMO Recommendation No. R/5/2021.

²⁷⁸ Encompassing representatives of the NBR, the National Authority for Consumer Protection and the Romanian Association of Banks.

- Central Credit Register (CCR), whereby information on credit risk and card frauds is managed; and
- Payment Incidents Register (PIR), whereby information on payment incidents related to cheques, bills of exchange, promissory notes is managed.

The activities of CCR and PIR are set out in more detail in Chapter 4, Section 3 – Instruments supportive of prudential supervision and financial stability in this *Report*.

In 2021, the same as in prior years, the National Bank of Romania conducted four surveys among resident companies; the samples, representative for the local economy, included in each case more than 6,000 entities, largely non-financial corporations. Three of the surveys, with quarterly frequency, were aimed at obtaining information necessary to compile *Romania's balance of payments and international investment position*, whereas the fourth, with half-yearly frequency, gathered necessary information for financial stability purposes.

The four surveys are as follows:

- survey on foreign direct investment;
- survey on international trade in services;
- survey on financial information in relation to non-residents other than foreign direct investment; and
- survey on the access to finance of non-financial corporations in Romania.

Last but not least, in order to improve statistical activity, the NBR participated alongside representatives of the National Statistical System (NSS) in a series of consultations on updating the Law on the organisation and functioning of official statistics in Romania, as well as on updating the Annual National Statistical Programme, which includes the four surveys conducted by the NBR.

2. Economic research

Economic research activity within the National Bank of Romania focused, in 2021 as well, similarly to previous years, on applied topics, its main purpose being to substantiate the decision-making process. The results of the research projects were also reflected in a significant number of papers published in the *Caiete de studii/ Occasional Papers Series*. Specifically, in 2021, the two series featured 9 new papers: 5 in Romanian and 4 in English.

2.1. Macroeconomic modelling

Throughout 2021, the Macroeconomic Modelling and Forecasting Department continued to expand its analytical toolkit in the context of the persistence of the adverse impact of the COVID-19 pandemic on economic activity.

The sudden changes in economic environment amid the pandemic crisis increased the need to develop of high-frequency indicators capable of timely reflecting the evolution of economic activity. In this context, an Economic Conditions Index for Romania (ECIR) was estimated based on the principal component analysis, which involves compressing the information set to a single indicator meant to provide an overview of the economic environment. The procedure followed the approach of many central banks that aimed to provide relatively unconventional measures on the economic climate during the pandemic. Primary data on ECIR are reported at various frequencies (quarterly, monthly, daily) and describe economic activity, financial activity, external demand and economic agents' confidence. Specifically, the ECIR captured the sharp worsening of the economic climate when the pandemic set in and subsequently the swift recovery of activity once mobility restrictions eased. In 2021 H2, the indicator reflected a deterioration of the economic environment due to the spreading of new strains of the virus, accompanied by renewed tightening of mobility restrictions.

The link between the business cycle and the current number of employees was also analysed, focusing on the role of the cyclical stage when companies started operating on their future evolution. Drawing on firms' balance sheet data, the study highlights the importance of the business cycle phase at their start-up in terms of the outlook for job creation. The phenomenon is important also in the context of the analysis of pandemic-driven effects.

The pandemic crisis was an extremely strong global economic shock. In particular, in the first pandemic wave at the beginning of 2020 there were concerns about a possible sharp regionalisation of trade flows, amid the restrictions imposed by authorities, with an impact also on the configuration of global value chains. In this context, the effects of the pandemic shock on trade dynamics in 2020 were investigated via a classical gravitational model. The analysis focused on possible increases in the elasticity of trade at the impact of distance, which would be valid evidence for confirming the assumption of trade flows' regionalisation. The estimated outcome in terms of trade links between EU Member States and the rest of the world, for all categories of goods and for various sub-categories of perishable goods, captures only an insignificant rise in the importance of distance in the first pandemic year, mainly due to the mobility restrictions, which implicitly pushed up trade-related costs and thus affected global trade links.

Throughout 2021 work continued to develop the procedure for near-term forecasting of the GDP and its components' growth. The approach consisted in adapting the econometric toolkit to the economic recovery context following the broad-based shocks related to the onset of the pandemic. More precisely, the approach reintroduced some classes of econometric models whose performance declined during 2020 due to excessive volatility of datasets in the pandemic context. At the same time, the usual set of determinants was also improved so as to provide a clearer picture of the economic climate.

In the period 2020-2021, adding to the uncertainties inherent in the assessment of the output gap, associated with the unobservable nature of the variable, were those

induced by wide swings in the contribution of the agricultural sector to economic activity dynamics²⁷⁹ (negative in 2020, but positive in 2021). Under the circumstances, the possibility of improving the robustness of assessments of demand surplus/deficit was analysed by estimating the output gap on the basis of data series for GDP, excluding the contribution of GVA in agriculture. However, the investigation showed weaker empirical features of this series compared to that for GDP, i.e. higher volatility and broader statistical revisions. The greater stability of the GDP series confirmed the validity of the current approach to the issue, namely the removal from the GDP cyclical component of the effect of agriculture in years with exceptional crops.

Against the backdrop of recent hikes in energy and commodity prices, the impact of higher energy and utility costs on the number of employees of non-financial corporations in Romania was estimated. The results confirm the relatively moderate negative impact identified in the literature as well. Furthermore, the estimated effect is heterogeneous at sectoral level. The outcomes are presented in Box 3 of the February 2022 *Inflation Report*.

With the full liberalisation of natural gas and electricity markets (July 2020 and January 2021 respectively), the price of active energy in the household consumers' bill for these utilities is market-based²⁸⁰, with the remaining components (reaching approximately 30 percent of the final price for natural gas and about 50 percent of the final price for electricity) staying under the control of the relevant authority. In this context, the equations for the dynamics of natural gas and electricity prices were re-specified in the Model for Analysis and Medium-Term Forecasting (MAMTF)²⁸¹. The new equations capitalise on the common long-term trend of oil prices and natural gas purchase prices, and that between the latter and electricity purchase prices, with the market running based on the *pay as clear* mechanism²⁸².

Inflation in Romania followed in 2021 the sharp upward trend that consumer price dynamics were recording globally. The path was mainly driven by the brisk energy price hikes overlapping with additional supply-side shocks (substantial increases in agri-food commodity prices, bottlenecks in global production and supply chains) that were manifest amid favourable demand conditions associated with the reopening of the economy. These developments, difficult to predict, were gradually incorporated into the NBR's forecasts, as information became available. At the same time, the analysis of inflationary pressures in the economy was augmented by developing a

²⁷⁹ In the years with exceptional crops (significantly higher/lower than the multi-annual average), the assessment of the output gap excludes the impact of GVA in agriculture on the GDP. The approach is motivated by the fact that such crops are the result of supply-side shocks (weather conditions) and not of fundamental demand-side factors, having no influence on underlying inflationary pressures quantified through the output gap. Moreover, the exceptional nature of favourable/unfavourable weather conditions for harvests is not seen as influencing the path of potential GDP. The latter is the sustainable productive capacity of the economy, driven by medium- and long-term trends of the stock of capital, labour and total factor productivity.

²⁸⁰ It is noteworthy that the developments on energy markets in 2021 H2 and early this year led to the adoption of measures to compensate and cap price increases for electricity and natural gas for households in order to support vulnerable social groups.

²⁸¹ By the time of the full opening of natural gas and electricity markets, prices of these categories of goods were set by the Romanian Energy Regulatory Authority. In this context, the path of price dynamics over the eight-quarter forecast interval was based on the information provided by the Romanian Energy Regulatory Authority, then modelled as autoregressive processes that ensured long-term convergence towards the inflation target.

²⁸² For details, see Box 2 entitled "The design of energy markets in Europe" in this *Annual Report*.

heat map. This allows the visualisation, in a synthetic manner, of the multiple sources that can determine price changes over a certain period and can also provide early signals of possible turning points in inflation performance, in particular core inflation. Details are set out in Box 3 of this *Annual Report*.

During 2021, the steps to operationalise the Next Generation EU (NGEU) recovery instrument made headway. Romania's National Recovery and Resilience Plan, after several rounds of consultations with the European Commission, was submitted to EU officials at end-May and approved by the EU Council in autumn 2021, so that a pre-financing payment related to the grant component of the Recovery and Resilience Facility was received in December. Against this background, the National Bank of Romania undertook successive analyses of the macroeconomic impact of the NGEU. They also included possible implications for the fiscal deficit. Influences on the wider macroeconomic environment were highlighted, also implying larger fiscal revenues. Further details on accessing EU funds in the context of the excessive deficit procedure are shown in Box 9 of this *Annual Report*.

Furthermore, at the request of the ECB's Working Group on Forecasting, the NBR updated, in 2021 too, the set of elasticities employed in substantiating adverse scenarios for the regular EU-wide stress tests to assess the stability of the EU banking sector under extreme conditions.

Climate change and global warming are issues that have become a priority of late, also in the context of anticipating the recovery from the pandemic crisis and starting the projects under the National Recovery and Resilience Plan. Climate change is a major source of structural shifts and their economic modelling requires an interdisciplinary process over an extended time horizon. A literature review was therefore initiated with a view to identifying opportunities to adapt models that study the impact of climate change to Romania's economy and implement them so as to improve the current analysis and forecasting framework. In this vein, concerted efforts for implementing some of the implications of climate change in the current modelling framework are to be undertaken in close cooperation with the European Central Bank and the other entities making up the European System of Central Banks, within the ECB-led working groups.

In 2021, the Bucharest Economic Analysis and Research Seminar (BEARS) was resumed in an online format. The physical event was suspended in 2020 because of the COVID-19 pandemic. The new set-up allowed for inviting prominent figures of the international academic community, whose busy agendas would have otherwise prevented them from travelling to Bucharest to deliver a presentation in physical format, as well as for access to more attendees. Researchers affiliated with the European Central Bank, the Bank for International Settlements, the European Commission, the Belgian National Bank and the University of Glasgow were invited. The papers they presented focused on relevant issues, many of which of immediate concern, special mention deserving those related to the economic effects and implications of the pandemic, but also analyses of the impact of energy prices on the labour market or studies on digitalisation trends.

2.2. Financial stability

In 2021, the main research papers in the field of financial stability were as follows:

- a) “Macroprudential policy effects on the access to finance, default and inequality: evidence from Romania”. In order to have a broader perspective on the issues under review, the paper consists of an empirical approach, using debtor-level data, and a structural approach, using a specific DSGE model for the interactions between the financial cycle and the business cycle. The paper results show that the elimination of debt service-to-income (DSTI) and loan-to-value (LTV) limits in 2007 encouraged riskier foreign currency lending, while also favouring an increase in inequality in terms of the access to housing loans. Conversely, applying a loan-to-value cap in 2011 supported lending in domestic currency, while also reducing the inequalities related to middle- and low-income borrowers’ access to housing loan market. The measure was also successful in improving payment discipline for all types of loans, except for secured consumer loans, with low-income borrowers reporting the largest improvements in terms of payment discipline. Moreover, the structural approach proves that, in the event of very adverse scenarios, a stricter LTV ratio leads to lower default rates. As for inequality, there is a trade-off between inequality in consumption and wealth: a tighter LTV policy entails a decrease in inequality in consumption at the cost of an increase in wealth. Counterfactual experiments reveal that an easing of the collateral policy is desirable in a low volatility regime. Last but not least, the analysis raises the issue of taking into account the effects on non-performance or inequality when the LTV policy is calibrated.

- b) “Determinants of net interest margins in the banking sectors of Romania and Central and Eastern European countries”. The analysis seeks to identify the main determinants of net interest margins in Romania, also including an insight on the profitability breakdown of the domestic banking sector, as well as in the Central and Eastern European region. The results of the analysis in the pre-pandemic and pandemic periods underline the fact that, across the Romanian banking sector as a whole, the profit margins were positive in terms of price of credit risk quantified both as point in time and through the cycle approaches, including the impact of the economic recession following the 2008-2009 financial crisis. Furthermore, in Romania, the main contributors to the larger change in the dynamics of net interest margin include the quality of bank portfolios, the NPL ratio, the inflation rate and interbank rates. By contrast, a high level of profitability, the economic growth, the step-up in credit demand, as well as the improvement in economic sentiment have as a result a decline in the change in net interest margin in Romania. In Central and Eastern European countries, net interest margins have primarily microeconomic, structural (banking market-specific) and monetary determinants. The persistence of net interest margins is important, while other key factors for the level of net interest margins in the CEE region were identified to be: (i) short-term interbank rates (3 months) and the NPL ratio, with upward effects and (ii) the size of the bank, the yield on medium-term government securities (5 years) and the unemployment rate, with opposite effects. Equally relevant are other factors such as digitalisation, operational efficiency, financial intermediation (with downward effects), as well as the concentration of the banking sector, with upward effects.

- c) “Are green loans less risky? Micro-data-based evidence from an emerging European economy”. The study aims to investigate whether the green loans granted by banks in Romania have a lower credit risk than non-green loans and follows three main lines of research. First, it analyses the companies with green loans to see if they generate a lower credit risk, building on the premise that green investments have a positive effect on firms’ financial situation. An explanation would be that these loans are means to decarbonise firms’ activity, while also implying lower energy and other utility costs. The results show that the probability of default is 10 percent smaller for companies with green loans as compared to the remaining companies financed by banks. Second, the study analyses the assumption according to which companies with sounder financial profile are more likely to have access to green loans. The results indicate that a sound financial situation is relevant for the company’s access to green loans. Third, the study refers to the possible policy implications of such findings, considering that these policies span over decades. One finding is that, in order to be able to support green finance, without having major negative consequences on credit risk, it is necessary to have greater predictability of government decisions on the climate change agenda. In this vein, the paper mentions the unfavourable consequences from past regulatory changes on credit risk for renewable energy companies.
- d) “Evaluating the macroprudential policy stance in emerging economies – the case of Romania”. The paper puts forward a holistic approach for monitoring the macroprudential policy stance in an empirical framework based on the Growth-at-Risk (GaR) methodology, as well as on a structural model describing the dynamics of business and financial cycles. The first part focuses on estimating the conditional distribution of economic growth, taking account of financial conditions and systemic risks, in an econometric framework using quantile regressions. The authors propose an innovative approach to limit the potential problems arising from parameter uncertainty, running an iterative estimation of all possible model combinations and aggregating results based on the quantile loss function. The results of implementing the methodological framework in Romania highlight the need for using a flexible specification over multiple time horizons and with a wide range of explanatory factors in order to capture the different characteristics of systemic risks. The structural analysis framework allows the in-depth investigation of the transmission mechanisms of macroprudential instruments, using the loan-to-value (LTV) requirements and the countercyclical capital buffer (CCyB). The optimal levels for calibrating the two instruments can be determined on the basis of a second-order approximation of the welfare-based policy adopted by the macroprudential authority. To this end, this analysis is innovative due to the simultaneous inclusion of instruments addressing both credit demand and supply into the structural model.
- e) “Revisiting limits and pitfalls of QE in emerging markets” (study coordinated by academician Daniel Dăianu). The paper is based on an analysis made by Daniel Dăianu in 2020 and highlights the forceful and coordinated policy response in advanced economies to withstand the multiple shocks generated by the COVID-19 pandemic. Its main focus is on the measures implemented in emerging economies, which attempted, to a certain extent, to replicate the measures adopted in advanced economies. The study underlines the differences that need to be considered when

emerging economies implement quantitative easing (QE) programmes. The main conclusion is that there are limits and pitfalls for emerging economies when using the instruments available to developed economies.

2.3. Economic papers and analyses

In 2021, a new paper entitled “Real-time forecasts of economic growth”²⁸³ was published in the *Occasional Papers* Series. It puts forward a wide array of econometric methodologies, showing that their simultaneous use improves forecast performance (via density combination). The proposed framework proved its usefulness at the apex of the economic effects associated with the pandemic crisis (2020 Q2), leading to an update of projections close to the subsequently-published official figures.

The box entitled “The change in households’ consumption structure in the pandemic context and its impact on the inflation rate” in the March 2021 *Inflation Report* includes an experimental exercise assessing the extent to which the broad-based changes in the typical consumption behaviour associated with the first pandemic wave and the authorities’ containment measures imply notable differences between the official inflation rate and that actually perceived by households. The results of the assessment revealed that the inflation perceived by households is higher than the official rate, primarily on the back of hefty increases in food prices and the negative dynamics of fuel prices, with the former group of goods having a larger weight in the CPI basket and the latter posting a smaller share in 2020 Q2. However, the difference between the two inflation rates was assessed as marginal.

An analysis that also addressed inflation developments referred to the degree of price rigidity in the local economy and was included in the box entitled “Price rigidity in Romania: evidence based on microeconomic data” in the May 2021 *Inflation Report*. It provides several insights on the frequency of price changes domestically, based on an extensive set of observations at the disaggregated level. The results indicate that price cuts are quite widespread both at aggregate level and in the case of the main categories of goods and services, signalling the prevalence of a competitive environment in Romania’s economy. At the same time, the comparison with the results of the literature reveals a number of similarities between the price-setting process that prevails in Romania’s economy and that of the euro area. This has implications in terms of the welfare costs associated with relinquishing the monetary policy with a view to adopting the euro.

In the course of 2021, research papers focused to a significant extent on inflation and its causes. Specifically, the upsurge in energy prices was the central theme of an analysis that presented the main features of the energy market at local and global level, the manner in which wholesale electricity prices are set, as well as the mechanisms whereby changes in energy commodity prices feed through to CPI inflation. The empirical study first focused on the production sectors, analysing input-output table data to assess the exposure of each sector based on the role that energy plays, directly or indirectly, in its cost breakdown. The effect of the energy

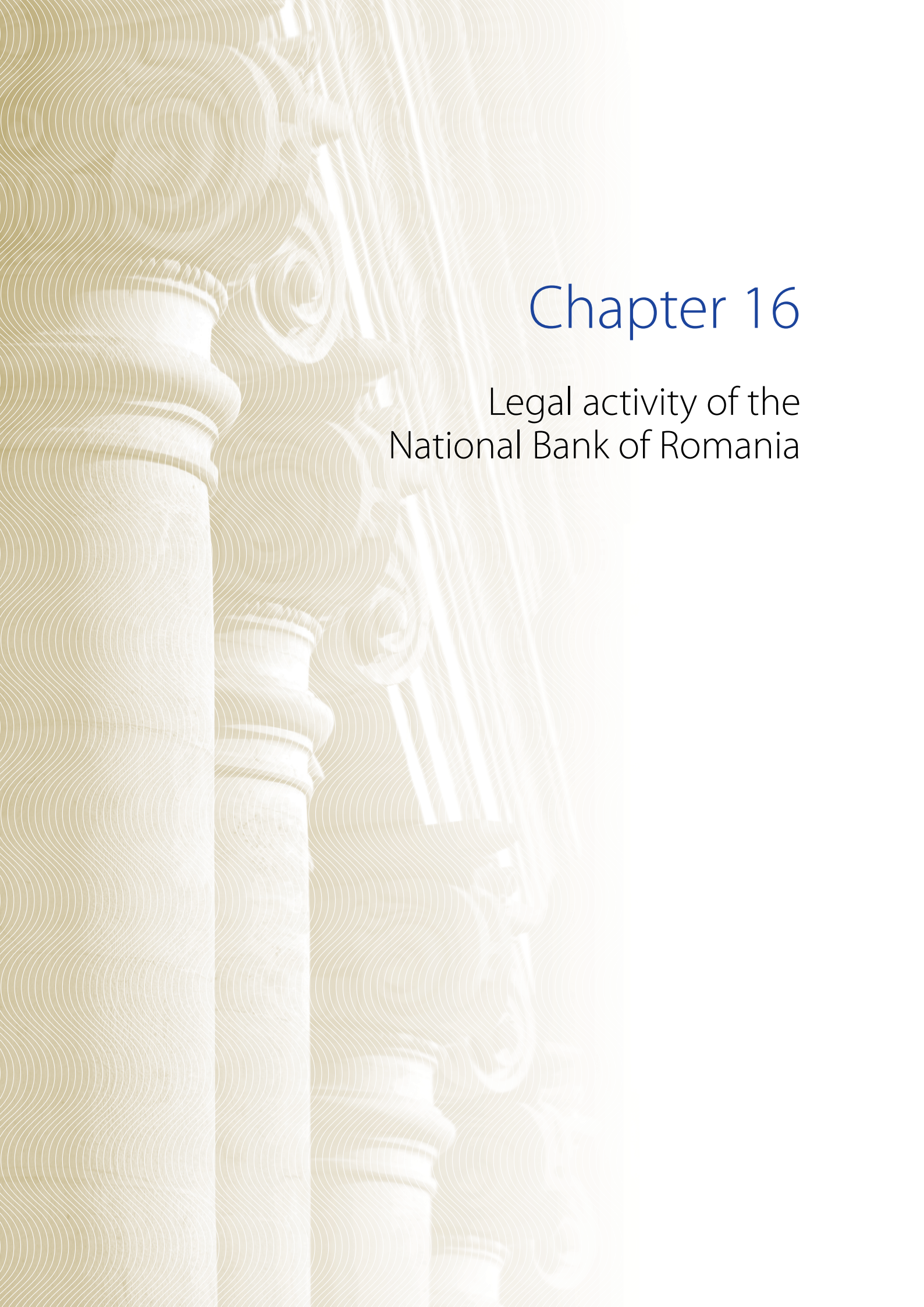
²⁸³ Sandu, M. A., Viziniuc, M., *Occasional Paper* No. 35, 2022, available at: <https://www.bnr.ro/Occasional-papers-3217.aspx>.

shock on consumer prices, estimated on the basis of error correction vectors, featured a two-step calculation: it first referred to the connection between energy prices and producer prices for consumer goods and then to the final link in the transmission chain, namely that between producer prices and consumer prices. Finally, the effects of the energy shock on economic activity were assessed. The analysis was included in the box entitled “The rise in energy prices: its impact on inflation rate and economic activity” in the November 2021 *Inflation Report*.

2.4. Guidelines and objectives of the research activity in 2022

Over the period ahead, inflation will further be high on the agenda of research work. Thus, steps are envisaged to enlarge the macroeconomic analysis and forecasting toolkit based on data regarding prices available online, with significant information content in terms of very short-term forecasts. At the same time, an investigation into the price-setting behaviour of economic agents based on estimating hazard functions is under consideration as well.

Labour market conditions will also be the subject of research work aimed at assessing the extent to which the matching process between job vacancies and persons previously in the unemployed group has become more efficient in recent years. Furthermore, the reconfiguration of the structure of global value chains is also contemplated, under the impact of multiple shocks that have hit the global economy since the first pandemic wave.

The background of the slide features a faint, low-angle photograph of several classical columns, likely from a grand building. Overlaid on this image is a pattern of thin, concentric, wavy lines in a light beige or gold color, creating a textured, ripple-like effect across the left and central portions of the slide.

Chapter 16

Legal activity of the
National Bank of Romania

The main objective of the NBR's legal function is to ensure that the provisions of primary and secondary legislation are correctly interpreted and applied at institutional level, with regard to the exercise of all the powers conferred upon the central bank by law, and that the technical approaches and solutions employed are legally substantiated and pose minimal legal risks.

The persistence of the pandemic throughout 2021 led the central bank to tailor previously started projects targeting its internal activity to specific situations so as to make it more efficient, and to ensure timely interventions in the performance of the tasks falling within the NBR's scope of competence.

In the course of 2021, the Legal Department responded to the requests made by the NBR Board, the executive management and the other organisational structures, while abiding by the high standards of quality and timeliness, by:

- approving or preparing opinions on draft legal acts regarding financial and banking matters, initiated by ministries and other government authorities in Romania, or under debate in the Parliament of Romania, as well as on draft legal acts and regulations related to the secondary legislation;
- providing legal assistance, in all the NBR's areas of activity, either on request or on its own initiative in case of identification of legal risks;
- representing the NBR's interests in relation to judicial bodies, court enforcement officers and notaries public.

During the period under review, the Legal Department examined, with a view to approving or formulating opinions:

- draft legal acts submitted for review to the National Bank of Romania, which were adopted and published in *Monitorul Oficial al României*, Part I, specifically:
 - Law No. 187/2021 approving Government Emergency Ordinance No. 227/2020 amending and supplementing Government Emergency Ordinance No. 37/2020 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions and amending Article 79(1) of Government Emergency Ordinance No. 50/2010 on credit agreements for consumers (*Monitorul Oficial al României*, Part I, No. 667/6 July 2021);
 - Law No. 207/2021 amending and supplementing Law No. 286/2009 on the Criminal Code and issuing measures for the transposition of Directive (EU) 2019/713 of the European Parliament and of the Council of 17 April 2019 on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA (*Monitorul Oficial al României*, Part I, No. 720/22 July 2021);

- Law No. 300/2021 ratifying the Agreement, signed in Brussels on 27 January 2021 and 8 February 2021, between the Kingdom of Belgium, the Republic of Bulgaria, the Czech Republic, the Kingdom of Denmark, the Federal Republic of Germany, the Republic of Estonia, Ireland, the Hellenic Republic, the Kingdom of Spain, the French Republic, the Republic of Croatia, the Italian Republic, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, The Grand Duchy of Luxembourg, Hungary, the Republic of Malta, the Kingdom of the Netherlands, the Republic of Austria, the Republic of Poland, the Portuguese Republic, Romania, The Republic of Slovenia, the Slovak Republic and the Republic of Finland amending the Agreement on the transfer and mutualisation of contributions to the Single Resolution Fund, signed in Brussels on 21 May 2014 (*Monitorul Oficial al României*, Part I, No. 1188/15 December 2021);
- Law No. 319/2021 amending and supplementing Government Emergency Ordinance No. 99/2006 on credit institutions and capital adequacy (*Monitorul Oficial al României*, Part I, No. 1247/30 December 2021);
- Law No. 320/2021 amending and supplementing Law No. 312/2015 on the recovery and resolution of credit institutions and investment firms, as well as on amending and supplementing some legal acts in the financial field (*Monitorul Oficial al României*, Part I, No. 1256/31 December 2021);
- Law No. 42/2022 amending and supplementing Law No. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund (*Monitorul Oficial al României*, Part I, No. 226/8 March 2022);
- Law No. 83/2022 declaring 11 April as “National Financial Education Day” (*Monitorul Oficial al României*, Part I, No. 362/12 April 2022);
- Law No. 117/2022 amending Article 5(8)-(92) of Government Ordinance No. 80/2001 laying down expenditure norms for public administration authorities and public institutions (*Monitorul Oficial al României*, Part I, No. 408/28 April 2022);
- Law No. 180/2022 amending and supplementing Law No. 58/1934 on bills of exchange and promissory notes (*Monitorul Oficial al României*, Part I, No. 582/15 June 2022);
- Law No. 182/2022 amending and supplementing Law No. 59/1934 on cheques (*Monitorul Oficial al României*, Part I, No. 599/20 June 2022);
- Government Ordinance No. 9/2021 laying down measures facilitating the use of financial information and financial analysis for the prevention, detection, investigation or prosecution of certain criminal offences (*Monitorul Oficial al României*, Part I, No. 831/31 August 2021);
- Government Emergency Ordinance No. 13/2021 amending and supplementing Law No. 227/2015 on the Tax Code and Law No. 82/1991 – the Accounting Law (*Monitorul Oficial al României*, Part I, No. 197/26 February 2021);
- Government Emergency Ordinance No. 122/2021 on the 2021 government budget revision and the establishment of the legal framework for a subordinated loan granted by the Romanian State, through the Ministry of Finance, as shareholder, to CEC BANK S.A. (*Monitorul Oficial al României*, Part I, No. 1141/26 November 2021);

- Government Emergency Ordinance No. 133/2021 on the financial management of European funds for the 2021-2027 programming period allocated to Romania from the European Regional Development Fund, the Cohesion Fund, the European Social Fund Plus, the Just Transition Fund (*Monitorul Oficial al României*, Part I, No. 1207/20 December 2021);
- Government Decision No. 19/2021 amending and supplementing the rules for implementing Government Emergency Ordinance No. 37/2020 setting forth relief measures for certain categories of debtors as concerns the loans granted by credit institutions and non-bank financial institutions, approved by Government Decision No. 270/2020 (*Monitorul Oficial al României*, Part I, No. 123/5 February 2021);
- Government Decision No. 276/2022 on the transfer of a state-owned property from under the administration of the National Bank of Romania to that of the “State Protocol Heritage Administration” Autonomous Company (Regia Autonomă “Administrația Patrimoniului Protocolului de Stat”) (*Monitorul Oficial al României*, Part I, No. 208/2 March 2022);
- Government Decision No. 503/2022 approving the distribution in the form of payments to the state budget of the share of the accounting profit remaining after corporate income tax deduction of the “NBR Printing Works” Autonomous Company (Regia Autonomă “Imprimeria Băncii Naționale a României”) for the 2021 financial year (*Monitorul Oficial al României*, Part I, No. 379/18 April 2022);
- Government Decision No. 656/2021 amending the Annex to Government Decision No. 35/2019 on designating the public authorities responsible for the protection of national and European critical infrastructures (*Monitorul Oficial al României*, Part I, No. 620/24 June 2021);
- draft laws and legislative proposals at different stages of the legislative procedure in the Parliament of Romania, namely:
 - Draft law on the protection of whistleblowers in the public interest (Senate L182/2022, the legislative procedure ended with the Romanian Senate decisively rejecting the draft law);
 - Draft Law amending and supplementing Law No. 85/2014 on insolvency prevention and insolvency proceedings and other legal acts (Chamber of Deputies PL-x 194/2022);
 - Draft law on some measures for the continuation of employment of workers who fulfil the conditions for retirement (Chamber of Deputies PL-x 421/2021);
 - Draft law on strengthening the domestic currency as the sole legal tender on the territory of Romania (Chamber of Deputies PL-x 246/2020);
 - Draft law amending Law No. 173/2020 on some measures to protect national interests in economic activities (Chamber of Deputies PL-x 139/2021);
 - Legislative proposal regulating some measures on the general framework applicable to the national development banks in Romania (Chamber of Deputies PL-x 114/2020);
 - Legislative proposal on consumer protection with regard to the total cost of credit and the sale of loans (Chamber of Deputies PL-x 18/2022);

- Legislative proposal on online digital consent, as well as on amending and supplementing some legal acts in this field (Senate L90/2022, Chamber of Deputies PL-x 210/2022);
- Legislative proposal supplementing Article 11(3) of Government Emergency Ordinance No. 97/2005 on the records, domicile, residence and identity documents of the Romanian citizens (Senate L91/2022, Chamber of Deputies PL-x 176/2022);
- Legislative proposal “Sovereignty Law – Law for the protection of the superior and sovereign interest of the Romanian people and citizens” (Chamber of Deputies PL-x 79/2022, Senate L315/2022);
- Draft Law amending and supplementing Law No. 126/2018 on markets in financial instruments (Senate L153/2022, Chamber of Deputies PL-x 196/2022);
- Draft law on the prudential supervision of financial investment companies, as well as on amending and supplementing some legal acts (Senate L282/2022);
- Draft law on covered bonds, as well as on amending and supplementing some legal acts in the financial field (Senate L323/2022);
- other draft laws:
 - Draft law establishing some measures for implementing Regulation (EU) 2020/1503 on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937;
 - Draft law implementing Regulation (EU) 2019/1238 on a pan-European Personal Pension Product;
 - Draft law supplementing GEO No. 98/2010 on the identification, designation and protection of critical infrastructures;
 - Draft Law amending and supplementing Law No. 158/2020 amending, supplementing, and repealing some legal acts, as well as setting forth certain measures for implementing Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012;
 - Draft Government Ordinance regulating some measures on the general framework applicable to the national development banks in Romania;
 - Draft Government Emergency Ordinance on the measures implementing Regulation (EU) No 452/2019 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union, as well as amending and supplementing Competition Law No. 21/1996;
- draft legal acts and regulations related to the secondary legislation, as follows:
 - Draft Government Decision amending and supplementing Government Decision No. 1110/2010 on the composition, tasks and organisation of the Interinstitutional Working Group for the protection of national critical infrastructures;
 - Draft Government Decision approving the draft Methodological Norms for identifying national strategic objectives;

- Draft Government Decision amending and supplementing Government Decision No. 1259/2010 establishing certain measures for the implementation of Regulation (EC) No 924/2009 of the European Parliament and of the Council of 16 September 2009 on cross-border payments in the Community and repealing Regulation (EC) No 2560/2001;
- Regulation No. 1/2021 amending NBR Regulation No. 2/2012 on the organisation and functioning of the Central Credit Register operated by the National Bank of Romania (*Monitorul Oficial al României*, Part I, No. 204/2 March 2021);
- Regulation No. 2/2021 amending NBR Regulation No. 2/2020 on the security measures for operational and security risks and the reporting requirements for payment services (*Monitorul Oficial al României*, Part I, No. 599/16 June 2021);
- Regulation No. 3/2021 amending and supplementing NBR Regulation No. 20/2009 on non-bank financial institutions (*Monitorul Oficial al României*, Part I, No. 907/22 September 2021);
- Regulation No. 4/2021 on reporting statistical data and information to the National Bank of Romania (*Monitorul Oficial al României*, Part I, No. 1163 bis/8 December 2021);
- Regulation No. 5/2021 amending and supplementing NBR Regulation No. 4/2019 on payment institutions and account information service providers (*Monitorul Oficial al României*, Part I, No. 1181/14 December 2021);
- Regulation No. 6/2021 on the conditions to benefit from the exemption from setting up the contingency mechanism under Article 33(6) of Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication (*Monitorul Oficial al României*, Part I, No. 60/19 January 2022);
- Regulation No. 1/2022 amending and supplementing NBR Regulation No. 12/2020 on the authorisation of credit institutions and the changes in their standing (*Monitorul Oficial al României*, Part I, No. 136/10 February 2022);
- Regulation No. 2/2022 amending and supplementing NBR Regulation No. 5/2013 on prudential requirements for credit institutions (*Monitorul Oficial al României*, Part I, No. 121/7 February 2022);
- Regulation No. 3/2022 amending and supplementing NBR Regulation No. 17/2012 on certain lending conditions (*Monitorul Oficial al României*, Part I, No. 166/18 February 2022);
- Regulation No. 7/2022 amending and supplementing NBR Regulation No. 2/2012 on the organisation and functioning of the Central Credit Register operated by the National Bank of Romania (*Monitorul Oficial al României*, Part I, No. 390/21 April 2022);
- Order No. 2/2021 amending NBR Order No. 6/2019 setting requirements for the recognition of professional development bodies for the purpose of Law No. 126/2018 on markets in financial instruments (*Monitorul Oficial al României*, Part I, No. 351/6 April 2021);
- Order No. 3/2021 amending and supplementing NBR Order No. 2/2020 approving the Methodological norms on preparing the annual accounting reports designed to meet

the information requirements of the Ministry of Public Finance, applicable to credit institutions (*Monitorul Oficial al României*, Part I, No. 452/28 April 2021);

- Order No. 4/2021 amending and supplementing NBR Order No. 10/2012 approving the half-yearly accounting reporting system applicable to the entities within the National Bank of Romania's accounting regulatory scope (*Monitorul Oficial al României*, Part I, No. 787/16 August 2021);
- Order No. 5/2021 amending and supplementing NBR Order No. 4/2015 on the functioning of TARGET2-România payment system (*Monitorul Oficial al României*, Part I, No. 1094/17 November 2021);
- Order No. 6/2021 amending NBR Order No. 12/2015 on the capital conservation buffer and the countercyclical capital buffer (*Monitorul Oficial al României*, Part I, No. 1130/26 November 2021);
- Order No. 7/2021 on the buffer for credit institutions authorised in Romania and identified as other systemically important institutions (O-SIIs) (*Monitorul Oficial al României*, Part I, No. 1174/13 December 2021);
- Draft Order amending and supplementing NBR Order No. 27/2010 approving the Accounting Rules consistent with the International Financial Reporting Standards, applicable to credit institutions, recast;
- Draft Regulation amending NBR Regulation No. 4/2005 on the foreign exchange regime;
- Draft Regulation amending and supplementing NBR Regulation No. 2/2019 on anti-money laundering and countering the financing of terrorism.

The Legal Department is constantly consulted and provides expert assistance in all the NBR's areas of activity.

During the period under review, the Legal Department's work consisted in issuing 231 legal assistance projects and legal opinions on internal regulations, 330 opinions on draft laws and legislative proposals of the Parliament and/or the Government of Romania, 105 opinions on NBR regulations related to the secondary legislation, 239 opinions on various requests submitted by individuals/legal entities, 569 opinions on public procurement contracts, 246 opinions on various requests from courts of law, 361 papers to substantiate the NBR's procedural position, 217 court case files, 641 opinions on requests related to the personal data managed by the central bank, 819 notices of garnishment, 2,857 opinions on the central bank's current activity and fields of competence.

Specifically, in 2021, the Legal Department provided legal opinions on:

- the drafting and conclusion of contracts with the NBR's international and national counterparties;
- the activity of the NBR in its capacity as a prudential supervisory authority, the competent authority in authorising financial institutions, other than credit institutions, or in its capacity as a resolution authority;
- various requests from individuals/legal entities, public institutions, namely the Ministry of Internal Affairs and the Public Ministry, requests related to the personal

data managed by the central bank, with an aim also to provide clarifications on the interpretation and application of the provisions of secondary legislation and regulations within the NBR's scope;

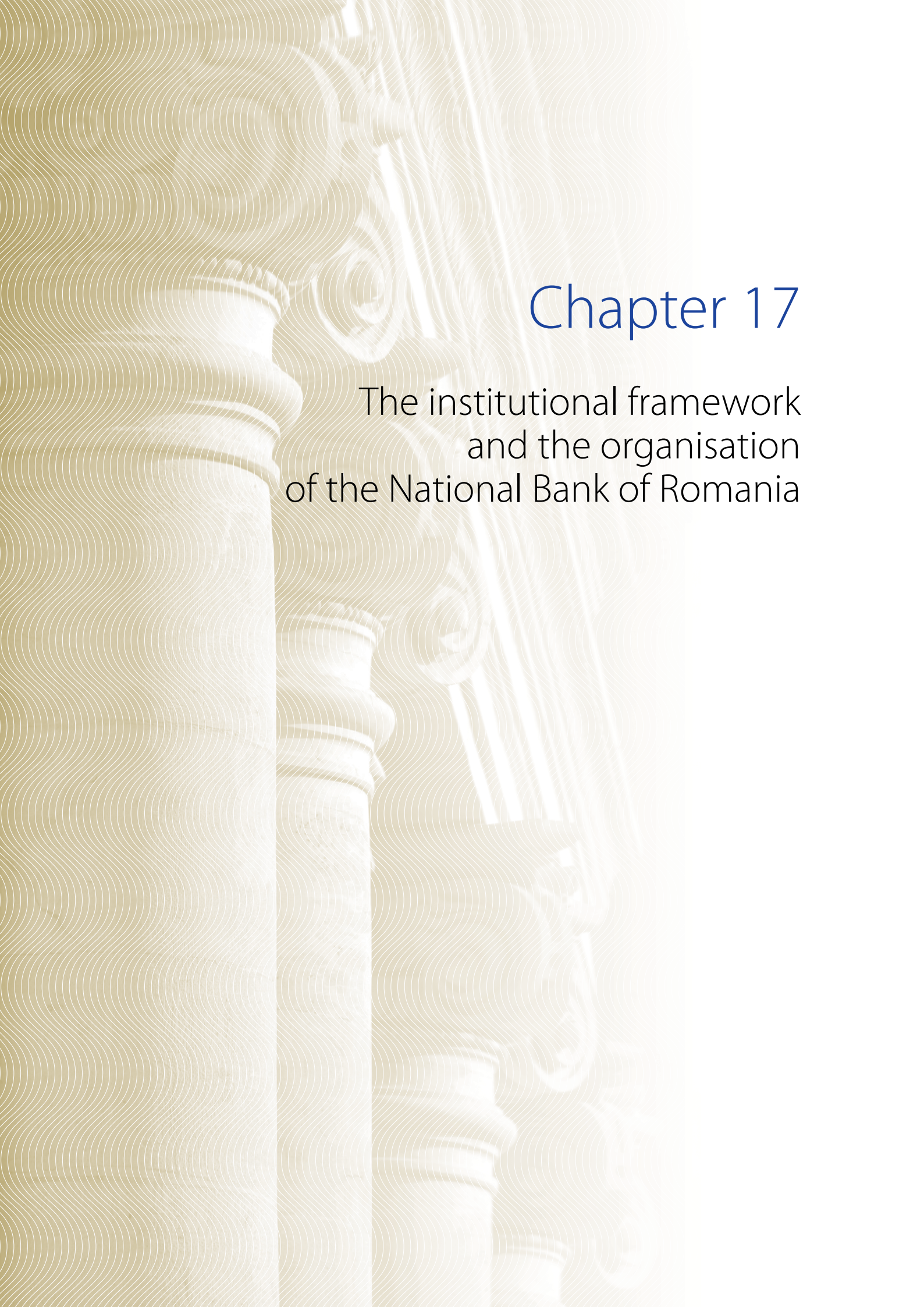
- the application of legislation governing employment relations, public procurement, public and private property, companies, the Administrative Code, copyright and related rights, as well as other relevant areas for conducting the NBR's current activity under optimal conditions. Moreover, mention can be made also of providing legal opinions on documents related to the NBR's internal activity, public procurement contracts and of providing legal opinions/recommendations, respectively;
- the completion of legal procedures concerning foreclosure, examining and responding to the documentation related to foreclosure requests through garnishment of bank accounts of credit institutions/wages of NBR employees by court enforcement officers in accordance with the relevant legal regulations.

Legal assistance was provided also via NBR representatives taking part in the meetings of the standing committees of the Chamber of Deputies and of the Senate, as well as in the interinstitutional working groups, even though these meetings were, in most cases, held online.

As part of the NBR's activity in the legal field within the European System of Central Banks, the legal experts within the NBR participated, *inter alia*, in the meetings of the Legal Committee, cooperated with the representatives of the ECB's Directorate General Legal Services and its peers in the national central banks of EU Member States, and examined the relevant documents sent by the ECB via written procedure. Furthermore, opinions were prepared with respect to the legislative issues in the questionnaires submitted to the NBR by international institutions and positions were expressed on the enactment in the national law of the regulatory documents drawn up by European authorities (the European Banking Authority, the European Systemic Risk Board).

In addition, comments and proposals were formulated with regard to the draft legislation under debate at EU level that falls within the National Bank of Romania's scope, in particular that concerning the draft regulations on: crypto-asset markets and digital operational resilience, anti-money laundering and countering the financing of terrorism, the European deposit insurance framework, crisis management in the banking sector, and the revision of the European framework for consumer credit.

The Legal Department defended the NBR's interests in relation to judicial bodies, court enforcement officers and notaries public through the preparation of papers for representing the NBR before the courts of law, the syndic judge, the prosecution authorities, notaries public, pursuing, when necessary, all remedies at law under the legislation in force with a view to defending and enforcing the bank's rights on its own behalf or in a different capacity deriving from the law or the agreements concluded by the National Bank of Romania.

The background of the page features a faded, high-angle photograph of several classical columns, likely from a grand building. Overlaid on this image is a pattern of thin, concentric, wavy lines in a light beige or gold color, creating a textured, ripple-like effect across the left and central portions of the page.

Chapter 17

The institutional framework
and the organisation
of the National Bank of Romania

The National Bank of Romania is the central bank of Romania and an independent public institution. Its activity is governed by Law No. 312/2004 on the Statute of the National Bank of Romania (hereinafter referred to as the “NBR Statute”).

The primary objective of the National Bank of Romania is to ensure and maintain price stability. The main tasks of the National Bank of Romania are:

- to design and implement the monetary policy and the exchange rate policy;
- to conduct the authorisation, regulation and prudential supervision of credit institutions, and to promote and oversee the smooth functioning of the payment systems with a view to ensuring financial stability;
- to issue banknotes and coins as legal tender to be used on the territory of Romania;
- to set the exchange rate regime and to oversee its observance;
- to manage the international reserves of Romania.

1. Decision-making bodies and corporate governance

The National Bank of Romania is run by the Board of Directors, which is made up of nine members appointed by Parliament – based on a proposal of the standing committees of the two Chambers –, with the nomination of the executive management of the NBR. The Board members are appointed for a five-year mandate which may subsequently be renewed. According to the law, the members of the Board may not be members of Parliament or of a political party, and they may not be Court officials or public servants. The National Bank of Romania Board is made up by: (i) a Chairman who is also the Governor of the National Bank of Romania; (ii) a Vice Chairman who is also the First Deputy Governor; (iii) seven members, two of them deputy governors and the other five not on the payroll of the NBR.

The National Bank of Romania Board is the decision-making body of the institution in accordance to the law and with respect to: (i) setting the monetary and exchange rate policies and supervising their accomplishment; (ii) the authorisation, regulation and prudential supervision or, as applicable, oversight of credit institutions, payment institutions and non-bank financial institutions, as well as oversight of the payment systems authorised by the central bank; (iii) the bank’s internal organisation. Moreover, the Board establishes the main courses of action concerning the operational management and assigns the tasks to the NBR staff.



Mugur Constantin Isărescu
Governor,
Chairman of the Board

Members of the National Bank of Romania Board

appointed by the Parliament of Romania via Decision No. 19 of 3 July 2019



Florin Georgescu
First Deputy Governor,
Vice Chairman of the Board



Leonardo Badea
Deputy Governor,
Member of the Board



Eugen Nicolăescu
Deputy Governor,
Member of the Board



Csaba Bálint
Member of the Board



Gheorghe Gherghina
Member of the Board



Cristian Popa
Member of the Board



Dan Radu Rușanu
Member of the Board



Virgiliu Stoenescu
Member of the Board

On behalf of the Board, the Governor shall submit to Parliament the Annual Report of the National Bank of Romania by 30 June of the following year. The document presents the NBR activities, the annual financial statements and the audit report, discussed without being put to the vote, during the joint session of the two Chambers of Parliament.

In order to ensure the effectiveness of the decision-making process, the following three operational bodies are responsible for the performance of the main tasks of a central bank: the Monetary Policy Committee, the Supervisory Committee, and the Foreign Reserve Management Committee. Moreover, given the important role played by the central bank in the process of adopting the single currency, as of February 2010 the Committee for Preparing the Changeover to the Euro is also operating within the Bank. Adding to these is the Risk Committee, which monitors the adequate performance of the risk management process within the NBR so that the Board might benefit from an accurate and comprehensive view of the risks the central bank is exposed to, as well as the Audit Committee, which analyses and proposes the NBR's strategies and policy as regards internal control, internal and external audit. These committees have their own rules of procedure, which define in detail their composition and specific tasks and responsibilities.

The Monetary Policy Committee (MPC) is a standing advisory and decision-making body. It is made up of 12 members and is chaired by the NBR Governor. The committee's tasks focus on the central bank's primary objective and relate mainly to the specifics of the monetary policy strategy and operational framework, monetary policy configuration and implementation, as well as the adjacent economic research. In particular, the MPC discusses and defines the content, structure and configuration of monetary policy analysis reports/papers, of the macroeconomic projections over various time horizons, as well as of proposals on the monetary policy stance, which are subsequently submitted to the NBR Board for review and approval. Moreover, the MPC supports the monetary policy decision-making process by discussing, approving and making available to the NBR Board, on a regular basis, certain analyses/research papers prepared by the specialised departments on relevant research areas/topics in terms of monetary policy conduct. At the same time, the MPC members discuss, analyse and propose to the NBR Board, whenever needed, revisions to certain features of the monetary policy strategy and of its tool kit, with a view to calibrating them in order to achieve the central bank's primary objective and bringing them into line with the ECB's standards in the field. The year 2021 saw 16 MPC meetings²⁸⁴, with nine other meetings being held January through May 2022.

The Supervisory Committee is a standing decision-making body composed of 10 members and chaired by the NBR Governor. Its tasks and responsibilities relate to the assessment and oversight of credit institutions' asset quality, financial performance and observance of the required levels of prudential indicators, as well as ensuring the regulatory framework according to the specific legislation and international practices

²⁸⁴ During the meeting of 20 March 2020, the NBR Board decided to suspend the previously announced calendar of monetary policy meetings and hold monetary policy meetings whenever necessary for an indefinite period; at the meeting of 15 March 2021, the new yearly calendar of monetary policy meetings was approved.

in the field. Also, within the scope of the Committee is the monitoring of non-bank financial institutions, payment institutions and electronic money institutions.

In 2021, the Supervisory Committee passed decisions in 24 meetings, while eight other meetings were held January through May 2022, the analysed materials relating primarily to: (i) the notification of the intention to acquire a qualifying holding in the share capital of a credit institution and/or to increase such participations; (ii) applications submitted by credit institutions, Romanian legal entities, pursuant to prudential regulations, for approval of changes in their standing as concerns the Board members and/or executives, expansion of their scope of business, the financial auditor, operations on preferential terms set forth in the employee benefits and incentive packages, exemption from the assignment of risk weights to subsidiaries, mergers, etc.; (iii) proposals to erase some non-bank financial institutions and, implicitly, to impose a ban on lending; (iv) draft regulatory acts to be issued by the central bank or other authorities concerning the activity of credit institutions, of payment institutions, of electronic money institutions and of non-bank financial institutions, as well as in the fields of anti-money laundering and countering the financing of terrorism and of deposit guarantee schemes; (v) the implementation of EBA Guidelines in the national legal framework and/or in supervisory practices, from the perspective of the central bank's powers; (vi) legislative proposals for transposing EU regulations in the field of credit institutions; (vii) proposals for positions, to the national authorities, in the other areas of competence of the central bank; (viii) proposals for positions, to European bodies, in the negotiations regarding draft laws at EU level in the fields of competence of the respective department; (ix) proposals for applications for authorisation as a payment institution and electronic money institution; (x) the monitoring of developments in terms of financial stability, identification of systemically-important credit institutions, monitoring and assessment of systemic risks, analyses regarding the recalibration of macroprudential instruments – capital buffers, the reciprocity of macroprudential policy measures, the steps taken by the NBR in the context of the COVID-19 pandemic and specific analyses such as monitoring the lending terms and conditions or the periodical stress tests of the banking sector's solvency and liquidity; (xi) analyses on the activity of the Central Credit Register and of the Payment Incidents Register; (xii) other matters in connection to the banking system functioning, to payment institutions and to electronic money institutions.

The Foreign Reserve Management Committee (FRMC) is a standing body whose tasks consist in achieving, via tactical decisions, the strategic objectives set by the NBR Board in the area of foreign reserve management. The Committee is made up of 11 members and is headed by the NBR Governor. In line with the tasks defined by the NBR Board, it analyses global developments in economic and financial environment and formulates proposals for the reserve management strategy, examines compliance of portfolios with strategic and tactical guidelines and assesses their monthly performance, makes recommendations on implementing new financial instruments and draws up the list comprising eligible entities for transactions, securities issuers and assets eligible for investment. The FRMC convenes and takes decisions whenever required by financial market developments, when summoned by the chairman or the vice chairman, acting as a substitute for the former.

In an economic and geopolitical climate both complicated and difficult such as the one in 2021 and at the beginning of 2022, there was a further prudent management of international reserves with a focus on the NBR's investment safety and liquidity objectives.

The Committee for Preparing the Changeover to the Euro set up at the NBR is an advisory body analysing the preparatory activities ahead of euro adoption. It is a formal discussion forum providing support for central bank decisions on the path to joining the Economic and Monetary Union.

The Payments Committee, established in 2022, is an advisory body that supports the NBR Board in achieving its tasks with regard to promoting and monitoring the smooth functioning of payment systems and instruments in Romania, as well as of those related to the authorisation and supervision of payment services and instruments. The objectives of this Committee include: to identify the necessary measures to consolidate the retail payments market and develop an integrated payments market, to propose measures to support the development of the payments market, including to enhance the security of payments and preserve users' confidence in payment instruments and services, or to identify the barriers limiting the increase in financial inclusion from the perspective of payment services, the instruments used and the related costs. Depending on the topics discussed, representatives of payment service providers in Romania, including of FinTech companies and the business environment, central government authorities, as well as other entities with relevant payment duties may be invited to the Committee's meetings.

The Financial Market Infrastructure Management Committee (FMIMC), set up in 2017, is a standing advisory body for the NBR Board and also plays a part in the decision-making process, within the limits imposed by the Board. FMIMC is in charge of the general management of financial market infrastructures operated by the central bank (generically referred to as IPF-BNR). The FMIMC is made up of five members and is chaired by a senior executive member, acting as a collective governing body (college). It is tasked with submitting proposals to the NBR Board regarding strategically important issues related to the IPF-BNR development and functioning; moreover, it carries out the tasks set by the Board, *inter alia* those concerning the development and implementation of new infrastructures and the operation of the IPF-BNR information security management system.

The Risk Committee is a standing advisory body subordinated to the NBR Board, with the aim of supporting the latter in supervising the risk management process within the central bank.

The Committee has 10 members, with the NBR Governor acting as chairman and the First Deputy Governor as vice chairman.

The main tasks of the Risk Committee comprise: (i) analysing and approving the regulation framework for the risk management process within the NBR and monitoring its compliance with and enforcement within the institution; (ii) analysing and approving the on-topic materials addressed to the Board; (iii) supervising the updated

overall risk landscape and endorsing the risk exposure limits and the suggested plans for their treatment; (iv) formulating recommendations with a view to improving the performance of the NBR's organisational structures with regard to the management of risks associated with their activities.

The Audit Committee is an independent body consisting of the five non-executive Board members, with a five-year mandate that began in the autumn of 2019. The Committee's composition did not change in the year under review.

According to the internal regulation in force, this Committee convenes at least once every three months and whenever necessary.

Throughout 2021, the Audit Committee convened in five meetings, and five consultations took place, during which documents related to its competence according to the internal regulations in force were analysed, approved or endorsed, as appropriate: presentations by the external auditor, quarterly reports concerning the stage of implementation for the recommendations resulting from audit, the Audit Plan for 2022 and the amendments to the Audit Plan for 2021, draft annual activity reports of the Committee and of the Internal Audit Department, also in the form submitted to Romania's Court of Accounts, the summary of internal audit activity as at 30 June 2021, as well as other matters pertaining to the Committee remit.

The Audit Committee members received all audit/advisory reports compiled by the internal auditors and analysed the findings and the recommendations, as well as the monthly reports on the activity carried out in teleworking and other briefings addressed to Committee members.

The decisions of the Audit Committee were adopted in compliance with Regulation No. 8 of 8 October 2018 on the organisation and functioning of the Audit Committee, Article 7 points (8) and (9). The decisions taken were recorded in the conclusions of the meetings signed by the attending Committee members.

External control layers

The NBR Statute provides for two external control layers, namely: (i) the external auditor, which is appointed to audit the annual financial statements of the NBR (including the confirmation of the gold stock by attending the annual inventory), and (ii) the Court of Accounts, which conducts the subsequent audit of commercial operations carried out by the central bank, which are reflected in the income and expenditure budget and in the annual financial statements.

Internal control layers

The National Bank of Romania takes a functional approach to risk management. Specifically, each organisational structure within the bank has primary responsibility for dealing with (identifying, assessing, managing and monitoring) the risks associated with its own activities and operations. The risk management process is an integral part of the NBR's internal control system and represents the bank's first line of

defence against any factors that might jeopardise the fulfilment of the objectives and established action plans. To this end, each organisational structure implements a set of internal control measures, in accordance with the regulations of risk management within the NBR.

The second line (of defence) is ensured by: monitoring of operational and IT&C risks; protection of personal data; monitoring of foreign reserve risk management; compliance. Specifically, these advisory/decision-making committees within the bank also play a major role: the Risk Committee, the Financial Market Infrastructure Management Committee, the Foreign Reserve Management Committee, the Monetary Policy Committee and the Supervisory Committee.

In a context marked by the uncertainty surrounding the COVID-19 pandemic, the bank paid more attention to operational risk management, which supports the institution in identifying and countering threats and mitigating vulnerabilities with a view to achieving its objectives and increasing organisational resilience.

The NBR's Internal Audit Department functions as a third line (of defence), which assesses the overall controls in place and acknowledges whether they are properly designed and functional so as to ensure the reliability and integrity of financial and operational information, the effectiveness of the activities pursued, asset protection, as well as compliance with applicable legal and contractual provisions.

The purpose of internal audit is to provide the central bank with independent and objective assurance and advisory services concerning the design and efficacy of the internal control system, with the aim of contributing to the improvement of its activity and of adding value. In this respect, internal audit supports the bank in meeting its objectives, by systematically and methodically assessing the processes of risk management, control and governance.

The pandemic caused by the new coronavirus, which broke out in February 2020, had a significant bearing on the entire activity of the Internal Audit Department, and also on the implementation of the Audit Plan for 2021, owing to the limitations imposed by sanitary measures.

Therefore, 28 audit engagements were completed in 2021, similarly to the previous year that was also marked by the pandemic. These audit reports included recommendations for improving and strengthening internal control, risk management and governance, thus helping optimise the audited processes and increase the efficacy of their internal control.

In 2021, the assistance provided to the external audit team of the NBR's financial statements continued by facilitating the exchange of information and documents with the audited departments.

Moreover, the continuing professional development, although transferred exclusively online, remained a constant feature with the purpose of obtaining national and international certifications in the field.

The Internal Audit Department applies the standards set forth in the International Professional Practices Framework, issued by the Institute of Internal Auditors (IIA), and the working methodology provided in the NBR's Internal Auditing Handbook and the ESCB's Internal Auditors Committee (IAC) Manual, and implements on a regular basis the best practices in the field, including those related to IT&C audit, cybersecurity and cyber resilience.

The compliance function

In the course of 2021, the NBR's compliance function that was established in the prior year at the level of the Compliance Division was further strengthened.

In view of the efforts to form the team and familiarise the institution with a new control function, amid the COVID-19 pandemic, the Compliance Division focused on improving the internal regulatory framework.

In this respect, the aim was to increase the clarity and predictability of the internal regulatory framework, to monitor the legal obligations of the National Bank of Romania and to constantly provide information on ethical requirements, to incorporate compliance risk into operational risk analysis, to optimise the tools for issuing integrity warnings, and also to take part in the European network of compliance functions. Thus, in accordance with the code of ethics, opinions and endorsements were issued as regards the draft internal regulations subject to Board approval; advisory opinions on conflicts of interest, incompatibilities and other ethical concerns of the employees were offered, and ongoing relationships with the Ethics Consultant and the Ethics Council were maintained.

The Compliance Division ensured the application of legal provisions on transparency and integrity in holding public positions of authority by the persons who are bound to fill in and submit wealth and interests statements.

In line with the independence principle, the Compliance Division shall submit the Annual Compliance Report to the NBR Board and the Audit Committee, summarising the activities carried out and the relevant issues.

Corporate governance of some public enterprises

The National Bank of Romania exerts – pursuant to the provisions of Government Emergency Ordinance No. 109/2011 on the corporate governance of public enterprises, amended and supplemented by Law No. 111/2016 – its powers as supervisory public authority for the *régies autonomes* which operate based on economic management and financial autonomy in subordination to the central bank: the NBR Printing Works and the State Mint.

These are public enterprises that carry out activities of national interest and contribute to the NBR's task of issuing banknotes and coins as legal tender on the territory of Romania, in order to meet the cash requirements in accordance with the real needs for currency in circulation. Relevant information regarding the two *régies autonomes*

from a corporate governance point of view is available on the NBR official website, in Romanian, under the “BNR – Autoritate publică tutelară” section.

2. The relationship of the NBR with the Parliament of Romania and other state institutions

As regards institutional communication, the National Bank of Romania maintains an ongoing dialogue with the Parliament of Romania. The cooperation consists mainly of:

- (i) formulating opinions on draft legal acts at the direct request of parliamentary committees, or indirectly, at the request of some initiators, i.e. the Ministry of Finance, the National Authority for Consumer Protection, other public authorities, of the Presidential Administration or of the Ministry for Liaison with Parliament with a view to finalising the position regarding those draft laws. Pursuant to Article 3 of Law No. 312/2004 on the NBR Statute, central public authorities ask for the central bank's opinion on any draft legal act concerning the fields related to the NBR's tasks;
- (ii) formulating opinions, preparing supporting documents or participating in the discussions/meetings of the standing committees of the two Chambers of Parliament on topics such as monetary policy, financial stability, bank resolution, European affairs, payment systems;
- (iii) preparing and submitting supporting documents during the parliamentary procedure to exert control in relation to the compliance of EU legislative proposals with the principles of subsidiarity and proportionality;
- (iv) delivering opinions and participating in the meetings of the standing committees of the two Chambers of Parliament during the parliamentary procedure to review the draft documents prepared by EU institutions;
- (v) submitting to the presidents of the two Chambers of Parliament and to the economic committees not only the *Annual Report* (a statutory duty), but also the *Inflation Report* and the *Financial Stability Report* – two of the central bank's key communication tools explaining its actions meant to ensure price stability and financial stability;
- (vi) drawing up materials for the preparation of events organised by Parliament or in which its representatives take part;
- (vii) preparing replies to specific interpellations that members of Parliament submitted to the central bank.

Throughout 2021, the NBR was actively involved in formulating substantiated opinions concerning a series of legislative initiatives and participated, together with other public authorities such as the Ministry of Finance, the National Authority for the Rights of Persons with Disabilities, Children and Adoptions within the Ministry of Labour and Social Protection, the Ministry of Justice, the Ministry of Internal Affairs and the Competition Council in preparing draft laws, as follows: (i) the Draft Law amending and supplementing Law No. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund; (ii) the Draft Government Decision amending and

supplementing Government Decision No. 282/2020 approving the Methodological Norms on the enforcement of Government Emergency Ordinance No. 110/2017 on the “IMM Invest Romania” programme; (iii) the appropriateness of further regulating at national level the authorisation and/or registration of providers of exchange services between virtual currencies and fiat currencies, and digital wallet providers, in the context of the European Commission’s proposal for a Regulation of the European Parliament and of the Council on markets in crypto-assets, and amending Directive (EU) 2019/1937; (iv) the regulation of some measures on the general framework applicable to national development banks in Romania; (v) proposal supplementing Article 235(2) of Law No. 207/2015 on the Tax Procedure Code; (vi) the Draft Law on setting measures for the enforcement of Regulation (EU) 2020/1503 on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937; (vii) the Draft Law on the prudential supervision of firms for financial investment services, also amending and supplementing some legal acts; (viii) the Draft Law on the protection of whistleblowers in the public interest; (ix) the Draft Law amending and supplementing Law No. 85/2014 on insolvency prevention and insolvency proceedings; (x) the Draft Law supplementing Government Emergency Ordinance No. 98/2010 on the identification, designation and protection of critical infrastructures; (xi) the Draft Government Ordinance establishing some measures to facilitate the use of financial and other information for the purpose of preventing, detecting, investigating or prosecuting certain criminal offences; (xii) the Draft Law transposing Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services; (xiii) the Draft Law enforcing Regulation (EU) 2019/1238 on a pan-European Personal Pension Product (PEPP).

In the course of 2021, the NBR’s specialised departments formulated replies and opinions to interpellations received from members of the Chamber of Deputies or the Senate of Romania, on topics concerning the regulatory framework and the taking over by the NBR of legal tasks regarding the protection of financial services consumers, the use of the authentic mandate in the client-credit institution relationship, the legality and opportunity of accepting payments in crypto-assets in the private sector and by public authorities and institutions, as well as the conditions under which such payments could be accepted, the abusive enforcement of Law No. 129/2019 by credit institutions, quantitative elements regarding the level of bank transfers made by Romanian citizens, natural entities, to centralised exchanges of crypto-assets from abroad 2019 through 2021, the speculative attack on the leu in 2008, the coverage of banking services in Romania as at 1 January 2022, as well as the analysis of the impact of Article 5 of Government Emergency Ordinance No. 99/2006 on credit institutions and capital adequacy regarding credit unions.

In addition to these official replies, the NBR representatives took part in the meetings of the parliamentary committees in the Chamber of Deputies or the Senate in order to express the central bank’s opinions on a number of legislative proposals.

Specifically, in the Chamber of Deputies, the NBR was represented at meetings of the Committee for Economic Policy, Reform and Privatisation, the Committee for Labour and Social Protection and the Committee for Budget, Finance and Banking, with the purpose of presenting opinions on legislative proposals with regard to:

(i) the approval of Government Emergency Ordinance No. 19/2019 amending and supplementing some legal acts (PL-x 239/2019), namely amending Article 79(1) of Government Emergency Ordinance No. 50/2010 on credit contracts for consumers; (ii) the memo filed by the Credit Union Association – West Region asking for the right of credit unions of employees to grant residential real estate loans to be regulated; (iii) the Draft Law amending and supplementing Law No. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund (PL-x 540/2021); (iv) the Draft Law for regulating some measures on the general framework applicable to the national development banks in Romania (PL-x 114/2020).

Among the Senate committees whose meetings were attended by the NBR representatives were the Committee on Budget, Finance, Banking and Capital Market and the Committee on Economic Affairs, Industries and Services. During these meetings, discussions focused on the following matters: (i) two legislative proposals amending and supplementing Law No. 58/1934 on the bill of exchange and promissory note and, respectively, Law No. 59/1934 on the cheque; (ii) the Draft Law amending and supplementing Law No. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund; (iii) the legislative proposal on consumer protection regarding the total credit cost and against loan sales; (iv) the Draft Law for regulating some measures on the general framework applicable to the establishment and functioning of national development banks in Romania.

Furthermore, the Department for Parliament Liaison within the Secretariat-General of the Government requested opinions on a number of legislative proposals in various stages of parliamentary procedure and which fall within the NBR's scope.

Joint discussions were held with the Ministry of Foreign Affairs (the Government Agent for the Court of Justice of the European Union) about transposing into national law 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 and Directive (EU) 2019/879 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC, and also Directive (EU) 2019/2162 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU.

3. Organisational developments

3.1. Human resources management

Developments in the NBR's organisation chart

In the course of 2021, the following changes occurred in the organisational structures of the National Bank of Romania:

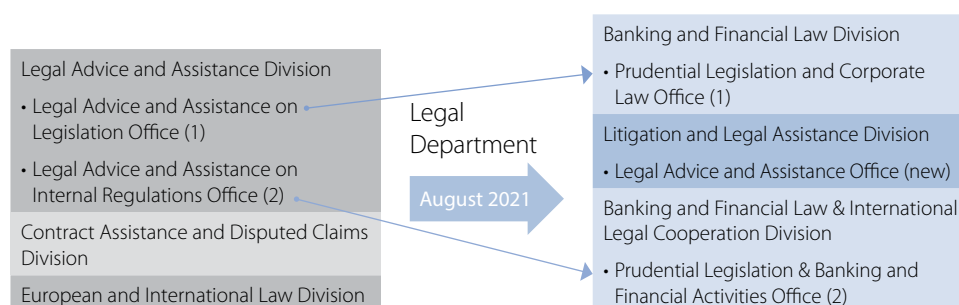
- Establishment of the Cryptocurrency and Digital Currency Office and of the Sustainability and Green Economy Office within the NBR Chancellery, as a continuation of the process

initiated in 2020 at bank level to set up flexible, multidisciplinary structures meant to address issues that lie at the interface of several departments, and to support the decision-making process specific to a central bank, in line with the recommendations of the Bank for International Settlements (April 2021).

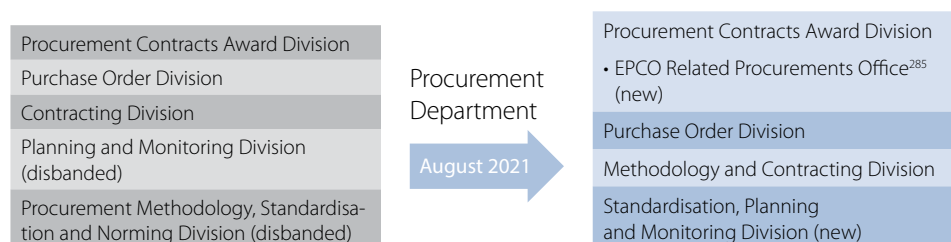
- The name change of the organisational structures within the Supervision Department in order for their names to better match their activity



- Reorganisation of the Legal Department and renaming its organisational structures



- Reorganisation of the Procurement Department



- Transfer of the Territorial Network Coordination Division from the NBR Chancellery to the Security Department.

²⁸⁵ Procurement activities via the Eurosystem Procurement Coordination Office (EPCO) offer a range of benefits such as: (i) maximum efficiency conditions; (ii) reduced access time to the necessary goods and services; (iii) a good quality/price ratio, with favourable contractual terms and low administrative effort.

Statistical data on the NBR staff

The year 2021 saw a staff turnover rate of 5.11 percent, the National Bank of Romania reporting 2,018 employees as at end-December 2021, compared to 2,016 employees at end-2020.

As of 20 March 2021, based on Law No. 33/2021 approving Government Emergency Ordinance No. 183/2020 on the organisation during the state of alert of recruitment processes for filling vacancies in some institutions in the justice system, as well as within the Court of Auditors, the recruitment processes for filling vacant and temporarily vacant positions in institutions and public authorities have been resumed.

Thus, in the course of 2021, the National Bank of Romania organised 148 external recruitment processes for 206 vacancies, with 130 successful candidates out of the total of 1,537 who applied. Also, 87 internal recruitment processes were launched to fill 97 vacancies, for which 136 employees applied and 79 were successful.

At the same time, 85 employees were promoted to higher non-managerial positions and another 16 advanced to managerial ranks.

Chart 17.1
Vacancies in the NBR's head office
as at 31 December 2021

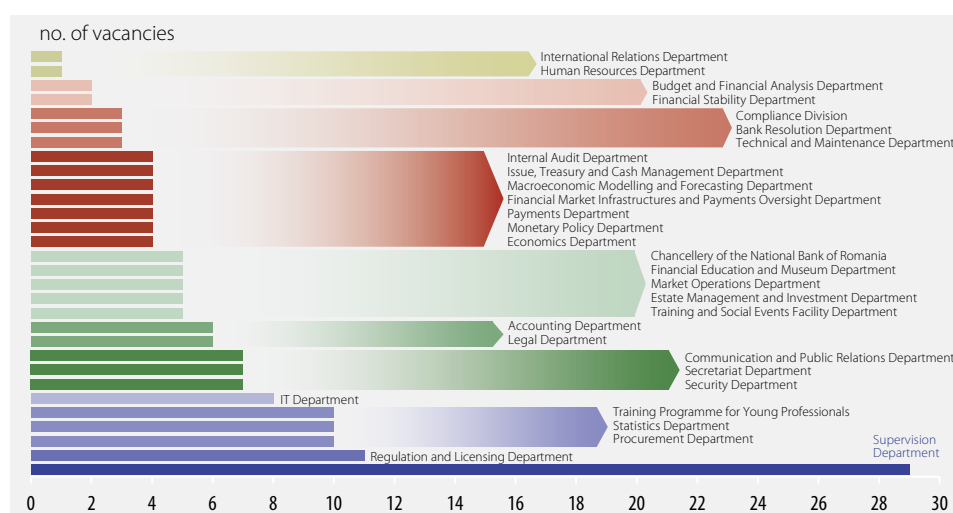
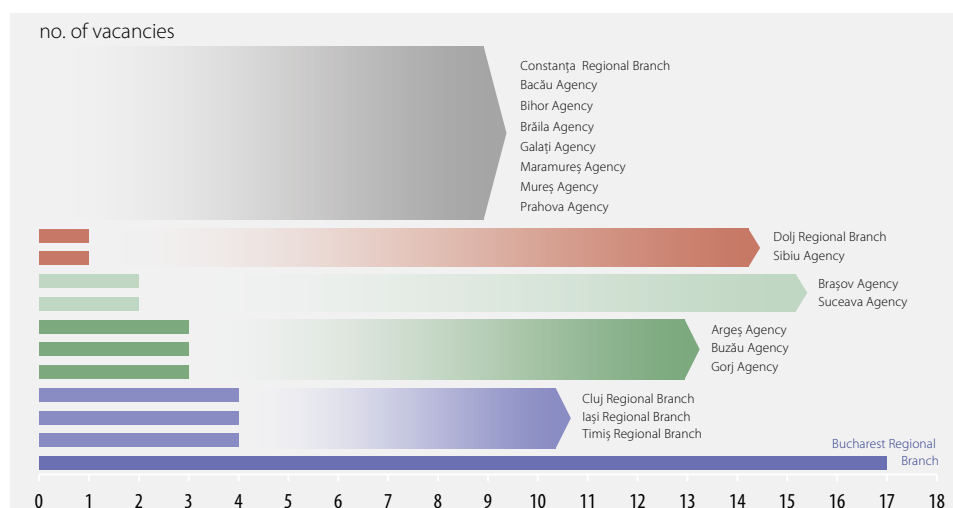


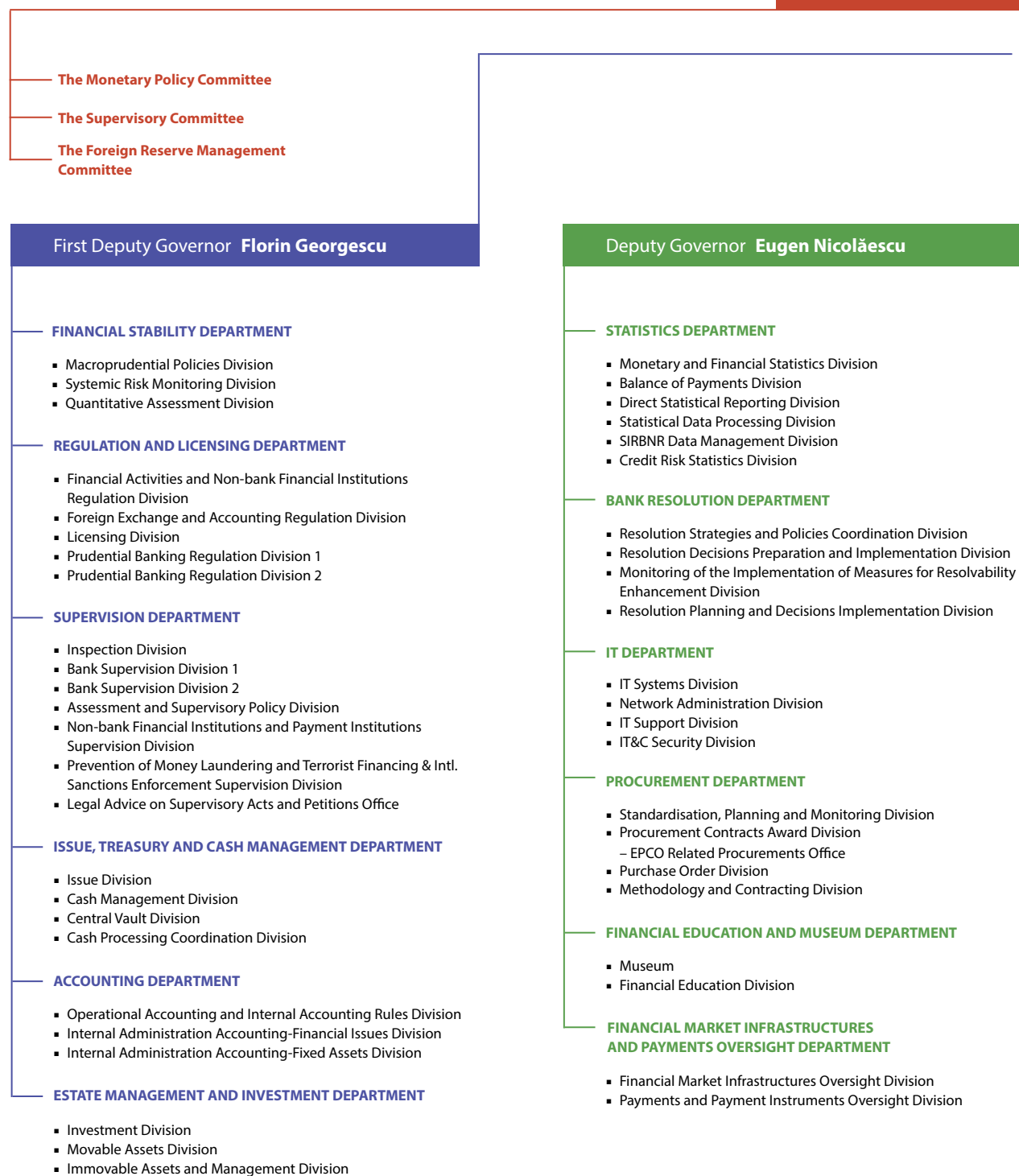
Chart 17.2
Vacancies in the NBR's territorial
units as at 31 December 2021



Organisation Chart of the National Bank of Romania as at 31 December 2021

BOARD OF

Governor



Note:
Colour patterns show the departments' coordination.

*) The Internal Audit Department reports functionally to the Audit Committee and administratively to the Governor of the National Bank of Romania.

DIRECTORS

Mugur Isărescu

Deputy Governor **Leonardo Badea****MACROECONOMIC MODELLING AND FORECASTING DEPARTMENT**

- Macroeconomic Forecasting Models Division
- Macroeconomic Assessment Models Division

PAYMENTS DEPARTMENT

- ReGIS Division
- Financial Instruments Depository and Settlement Division
- Financial Messages Processing Division
- TARGET2 Division
- Business Continuity Division

INTERNATIONAL RELATIONS DEPARTMENT

- European Banking System Division
- International Financial System Division
- International Financial Conditions Analysis Division

SECRETARIAT DEPARTMENT

- Documents Registration, Dispatching and Check-in Desk Division
- Archives, Library and Publications Dissemination Division
- Events Organisation and Protocol Division

TECHNICAL AND MAINTENANCE DEPARTMENT

- Buildings Maintenance Division
- Equipment and Installations Maintenance Division
- Administrative Maintenance and Utilities Division

LEGAL DEPARTMENT

- Banking and Financial Law Division
 - Prudential Legislation and Corporate Law Office
- Banking and Financial Law & International Legal Cooperation Division
 - Prudential Legislation & Banking and Financial Activities Office
- Litigation and Legal Assistance Division
 - Legal Advice and Assistance Office

TRAINING AND SOCIAL EVENTS FACILITY DEPARTMENT

- Training Support Division
- Social Events Division
- Auxiliary Activities Division
- Cafeteria Division
- Training and Social Events Units

COMPLIANCE DIVISION**REGIONAL BRANCHES AND AGENCIES**

The Audit Committee

INTERNAL AUDIT DEPARTMENT*

- General Audit Division 1
- General Audit Division 2

CHANCELLERY

- The Euro Office
- Financial Economy – Real Economy Office
- Role, Developments and Prospects of Central Banks Office
- Cryptocurrency and Digital Currency Office
- Sustainability and Green Economy Office
- The Executives' Offices and Document Management
- Governor's Control Office
- Board Secretariat Division
- Information Management and Protection Division
- Administration of Special Computer Systems and Personal Data Protection Division

MONETARY POLICY DEPARTMENT

- Monetary Policy Analysis and Strategy Division
- Liquidity Management Division

MARKET OPERATIONS DEPARTMENT

- Monetary Policy Operations Division
- State Treasury Operations Division
- Foreign Reserves Management Division
- Back Office Division
- Foreign Reserves Risk Management Division

ECONOMICS DEPARTMENT

- Economic Analysis and Short-Term Forecasting Division
- Publications Division
- Translation and Editing Division

COMMUNICATION AND PUBLIC RELATIONS DEPARTMENT

- Media Relations Division
- Intranet and Internal Communication Division
- Online Communication Division
- Multimedia Support Division
- Public Relations and Documentation Division

HUMAN RESOURCES DEPARTMENT

- Organisation and Planning Division
 - Payroll Office
- Human Resources Management Division
- Training and Career Development Division

BUDGET AND FINANCIAL ANALYSIS DEPARTMENT

- Budget and Financial Analysis Division
- Preventive Financial Control Division
- Risk Monitoring Division

SECURITY DEPARTMENT

- Crisis Management & Business Continuity Division
- Internal Protection Division
- Special Transport Division
- Security Systems Division
 - Emergency Intervention Office
- Transport and Maintenance Division
- Territorial Network Coordination Division

Professional training of the NBR staff

In a manner similar to the previous year, during 2021 the professional training activity took place mostly online, with bank employees attending courses, seminars and workshops organised by old-established partners (the European Central Bank, the International Monetary Fund, Joint Vienna Institute, the Bank for International Settlements, Banque de France, Deutsche Bundesbank, the European Banking Authority, the Romanian Banking Institute, etc.). They were carried out on platforms dedicated to collaboration and to facilitating remote communication such as Zoom, Microsoft Teams, Cisco Webex.

Alongside the development of technical skills, in order to develop managerial, leadership and behavioural skills, the National Bank of Romania organised in-house training courses dedicated to: improving the staff's emotional resilience, acquiring the digital skills necessary for organising online meetings and presentations, increasing the capacity to adapt, the agility and resilience in the pandemic environment (transformational leadership programme), as well as developing management skills for a team in the specific context of teleworking.

Throughout 2021, 619 members of the NBR staff cumulated 1,326 attendances at professional training programmes. Of these, 845 took place in Romania within specialised institutions' programmes and 481 were attendances at courses organised by foreign providers of professional training courses.

3.2. Information technology

In 2021, several IT projects were run with a view to implementing legal requirements, complying with reporting requirements made by domestic and international bodies, increasing the efficiency of the activity conducted within the central bank and optimising performance in operating IT systems, as follows:

- upgrade of the IT system for ITS on supervisory reporting and bank resolution to the 3.0 reporting frameworks and the subsequent ones released by the European Banking Authority;
- enlargement of the SIRBNR IT system with new reporting modules and the redesign of the existing modules for the purpose of implementing the new methodological requirements introduced internally or demanded by the European Central Bank;
- extension and upgrade of the RAPDIR IT system in order to implement the new methodological requirements introduced internally or demanded by the ECB;
- completion of some activities set out in the NBR's plan with a view to implementing a project to consolidate the Eurosystem's TARGET2 – TARGET2-Securities (T2-T2S) as regards the change in the application for calculating interest rates on accounts opened with TARGET2-Romania and developing the automated interface linking the ECB TARGET2 system to the Financial and Accounting, Procurement, Human Resources and Remuneration Management System, and to Oracle e-Business Suite;

- the CCR's IT system upgrade for the purpose of implementing the provisions of Regulation No. 1/2021 with regard to Law No. 52/2020 amending the law on debt discharge; the CCR's IT system upgrade for the purpose of implementing the conclusion of the deferral of loan instalments payment according to GEO No. 37/2020 and No. 227/2020; the analysis and development of the reporting specifications for ESRB/2016/14 indicators on green loans and the Legal Entity Identifier (LEI);
- further integration of IT applications with Oracle e-Business Suite (eBS) modules, the Financial and Accounting Management System, and optimisation of existing interfaces; integration of the developed solution for guarantee monitoring with the eBS integrated system modules; design of interfaces among the Micros and Fidelio applications with the eBS integrated system modules;
- update of the accounting reports on Monetary Balance Sheet and the Accounting Balance Sheet within the General Accounting module, part of Oracle e-Business Suite, the Financial and Accounting, Procurement, Human Resources and Remuneration Management System; update of the modules Human Resources and Remuneration within Oracle e-Business Suite the Financial and Accounting Management System;
- implementation of Recommendation ESRB/2020/12 on identifying legal entities in the Credit Institutions Register application, i.e. the analysis and elaboration of specifications with a view to redesigning and modernising the NBR Registers application (Payment Institutions, Exempt Services Providers, Electronic Money Institutions, Exempt Services);
- migration of the RMORON application to the Oracle platform within the consolidated cluster application infrastructure;
- update of the Balance of Payments-Foreign Investment IT System as a result of changes in international reporting methodologies;
- update of the SHDB application so as to retrieve and incorporate the SHSDB – ECB Securities Holdings Statistics by Sector (SHSS) data;
- update of the CSDB application so as to implement the changes required by the ECB;
- modernisation of SIIA-BNR Procurement Integrated IT System by implementing several solutions with the aim of extending its functionalities and improving its performance.

Furthermore, during this period measures were taken to increase the security of IT systems and to upgrade software platforms in order to mitigate security risks in the current context.

Moreover, the hardware infrastructure of the NBR data centres was further modernised and adapted to the hybrid working format (on-site and teleworking), with a focus on increasing mobility and using collaboration platforms.

Taking into consideration the higher IT and cybersecurity risks associated in particular with the expansion of remote access to IT system resources via Internet connections, the monitoring of security alerts collected by all firewalls within the NBR IT system was increased.

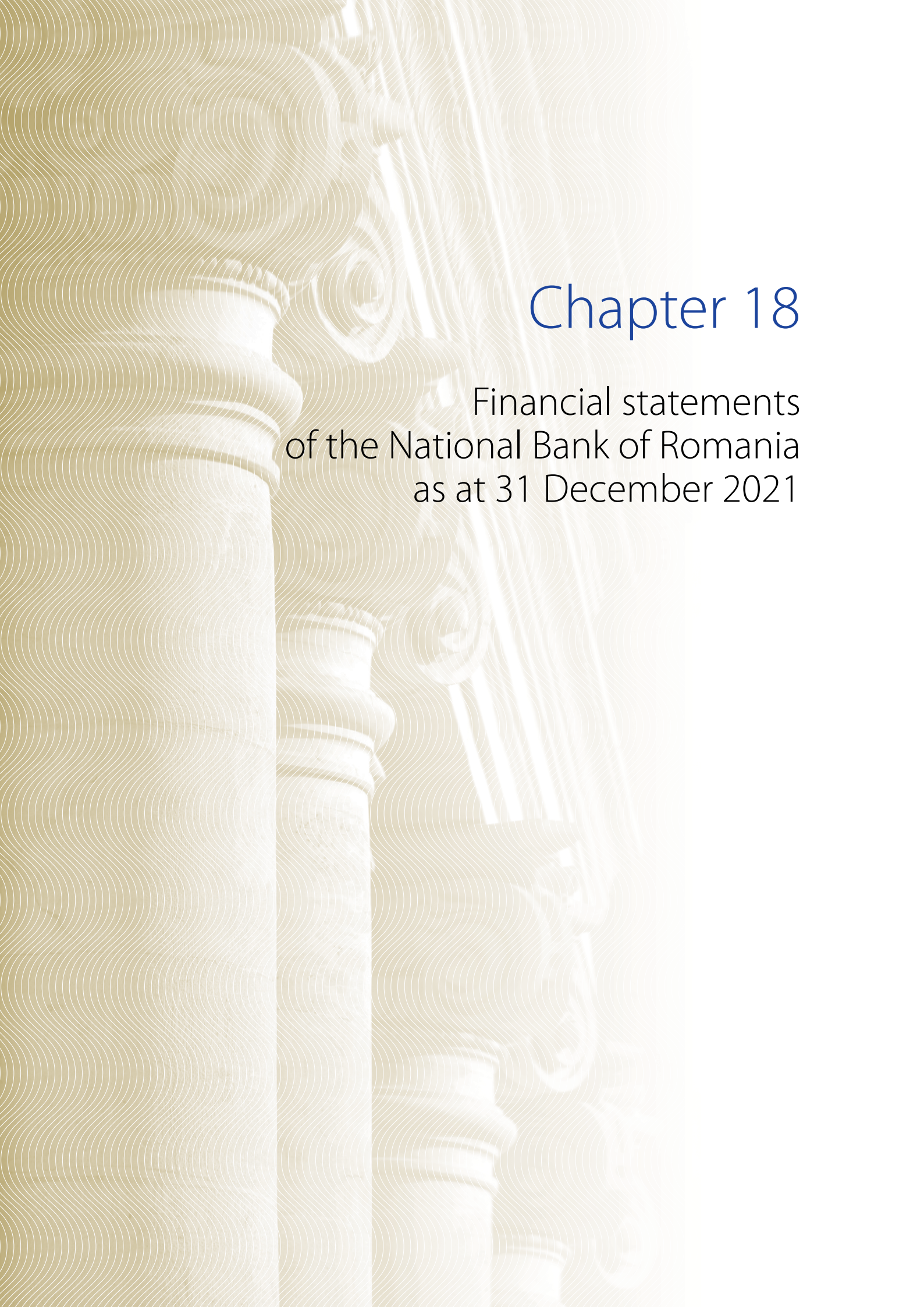
At the same time, the following additional protection measures were implemented:

- a hybrid protection system against DDoS (Distributed Denial of Service) attacks with its specific hardware equipment, as well as a cloud component for traffic filtering in case of volumetric attacks;
- a software solution for the secure transfer of large files over the Internet;
- a control system for the network equipment access in accordance with the Zero Trust principles.

Furthermore, the staff specialised in cybersecurity took part in the following joint programmes with external partners:

- preparation of the technical documentation for the procurement by the ESBC institutions of cybersecurity assessment services pursuant to the standard methodology on penetration tests and to the TIBER-EU Services Procurement Guidelines;
- revision of the security guidelines for Oracle and Microsoft SQL Server databases used by the ESCB institutions;
- participation in the Cyber Resilience Assessment pilot project launched by the Bank for International Settlements according to the methodology developed by Carnegie Mellon University's Software Engineering Institute;
- participation in the project carried out by the Romanian Intelligence Service's National Cyberint Centre referred to as the "National protection system of ITC infrastructures against cyber threats".



The background of the page features a photograph of classical columns, likely from a historical building, rendered in a light, faded tone. Overlaid on this is a pattern of thin, wavy, concentric lines in a golden-brown color, creating a textured, organic effect.

Chapter 18

Financial statements
of the National Bank of Romania
as at 31 December 2021

1. Overview

Pursuant to Law No. 312/2004 on the Statute of the National Bank of Romania, starting with the financial year 2005, the NBR has been applying the International Accounting Standards used by the national central banks, which are acknowledged by the European Central Bank and for which it issued its own rules based on EU regulations²⁸⁶.

By the actions taken, the National Bank of Romania implements the appropriate monetary policy so as to achieve its primary objective and fulfils the other tasks mentioned in the law, without focusing on business-related objectives such as profit maximisation. Nonetheless, in its activity, the NBR has shown a steady concern for the efficient use of the available resources, also by capping its administrative and staff costs. In 2021, the operating result of the National Bank of Romania (net of unrealised losses arising from the mark-to-market of foreign currency securities and of unrealised losses arising from the fair value revaluation of buildings and land) was positive and increased by 5 percent from the previous year. In 2021, the total administrative and staff costs stood 4 percent lower in real terms than in 2020 and 11 percent lower than the budgeted figure.

As at 31 December 2021, the National Bank of Romania reported a profit amounting to lei 2,015,195 thousand, 1 percent or lei 19,581 thousand lower than that in the prior year (lei 2,034,776 thousand), primarily as a result of:

- operating profit worth lei 2,482,117 thousand, up 5 percent or lei 122,538 thousand from the previous year's figure (lei 2,359,579 thousand);
- unrealised losses arising from the revaluation of foreign currency securities in the amount of lei 461,124 thousand, 42 percent or lei 136,321 thousand higher than those reported at 31 December 2020 (lei 324,803 thousand);
- net unrealised losses arising from the fair value revaluation of buildings and land as at 31 December 2021, amounting to lei 5,798 thousand.

2. Recognition of monetary policy operations

In January-September 2021, the NBR mopped up the net liquidity surplus in the banking system first via the deposit facility and afterwards mainly via deposit-taking operations. However, amid the temporary reserve deficits that emerged, the central bank provided liquidity to credit institutions via repo transactions (in March and June)

²⁸⁶ Guideline ECB/2016/34, as subsequently amended and supplemented.

and, additionally, purchases of leu-denominated government securities on the secondary market (in March and April). In 2021 Q4, banks' demand for reserves was accommodated through the lending facility in October and repo transactions carried out by the NBR in December.

In 2021, monetary policy operations resulted in a net profit of lei 135,858 thousand. The profit was chiefly generated by coupon income from leu-denominated government securities purchased by the NBR (mostly in 2020) with a view to consolidating structural liquidity in the banking system in order to contribute to the smooth financing of the real economy and the public sector and by income from repo transactions. The said income exceeded the interest expenses associated with monetary policy operations (for leu-denominated required reserves, the deposits taken and the deposit facility), which represent the cost of pursuing the primary objective of the central bank set by law, i.e. to ensure and maintain price stability.

The summary balance sheet as at 31 December 2021 (Table 18.1) shows the following:

- foreign assets accounted for 94.9 percent of total assets;
- monetary policy assets (chiefly securities held for monetary policy purposes and repo transactions) made up 4.3 percent of total assets;
- currency in circulation accounted for 42.3 percent of total liabilities;
- deposits the NBR took from credit institutions as minimum required reserves (in lei, euro and US dollars) held 18.5 percent of total liabilities;
- deposits of the State Treasury with the NBR (in lei and foreign currency) made up 12.5 percent of total liabilities;
- foreign liabilities represented 10.7 percent of total liabilities.

ASSETS	Average annual return – % –	LIABILITIES	Average annual interest rate – % –
Foreign assets 94.9%	1.5	Minimum required reserves 18.5% (13.2% in lei and 5.3% in foreign currency: 5.3% in euro and 0.01% in US dollars)	lei: 0.09 EUR: – USD: 0.01
Monetary policy assets 4.3%	3.2	Currency in circulation 42.3%	–
Other assets 0.8%	–	Foreign liabilities 10.7%	0.03
		Deposits of the State Treasury 12.5% (0.2% in lei and 12.3% in foreign currency: 11.9% in euro, 0.3% in US dollars and 0.1% in other foreign currency)	lei: 0.09 EUR: -0.48 USD: 0.08
		Capital, reserves a.s.o. 12.7%	–
		Other liabilities 3.3%	–

Table 18.1
NBR balance sheet structure
as at 31 December 2021

The NBR recorded a positive operating result while pursuing the primary objective of the central bank set by law, i.e. to ensure and maintain price stability, and the mentioned balance sheet structure resulted as at 31 December 2021.

In 2021, foreign asset management resulted in an annual return of 1.5 percent. Looking at liabilities (sources of foreign assets), the corresponding average annual interest rates (paid by the NBR) were lower than the annual return on assets (received by the NBR) or even negative interest rates were recorded (amounts collected by the central bank). In addition, in 2021 monetary policy assets yielded an annual return of 3.2 percent, higher than the average annual interest rates paid by the NBR on monetary policy liabilities. Thus, the NBR made an operating profit.

Consequently, the positive financial result reported by the National Bank of Romania was mainly determined by the net income from the management of foreign currency assets and liabilities and the net income related to the use of monetary policy tools on the domestic market. In 2021, the net income from the management of foreign currency assets and liabilities totalled lei 2,918,398 thousand, while the net income from monetary policy operations amounted to lei 135,858 thousand.

3. Recognition of foreign currency asset/liability management operations

At end-2021, foreign assets expressed in lei increased by lei 20,974,812 thousand or 9.3 percent in nominal terms and by lei 2,621,002 thousand or 1.1 percent in real terms from 31 December 2020.

An adequate level of international reserves is one of the most important factors supporting a country's external creditworthiness; as far as the National Bank of

Romania is concerned, foreign assets accounted for around 94.9 percent of total balance sheet assets as at 31 December 2021.

According to the external auditor's report, the financial statements give a true and fair view of the bank's financial position as at 31 December 2021, as well as of its financial performance for the said financial year.

In 2021, the management of foreign currency assets and liabilities generated income equalling lei 4,322,845 thousand and expenses totalling lei 1,404,447

thousand, which entailed a profit amounting to lei 2,918,398 thousand (Table 18.2). The positive result owed to the high-quality management of foreign assets (accounting for the largest share of the central bank's total assets).

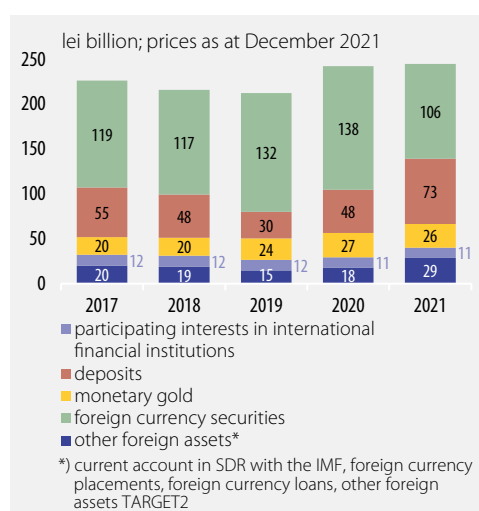


Chart 18.1
Foreign assets of the NBR
at year-end

Table 18.2
Result of transactions
conducted in 2021

	lei thousand		
	Income	Expenses	Profit/Loss
Foreign currency securities	1,164,199	1,227,616	-63,417
Other foreign currency holdings and operations	3,158,646	176,469	2,982,177
Gold	-	362	-362
Total	4,322,845	1,404,447	2,918,398

4. Effects of changes in the exchange rates and in the market prices of international reserve assets

Given the objective need to preserve relatively high foreign exchange reserves and a diversified currency composition of reserves with a view to securing external creditworthiness, the exchange rate movements in international markets generate differences arising from the revaluation of foreign currency positions.

At the end of the financial year, the effects of changes in the exchange rate of the leu versus the euro and of the currencies making up foreign currency reserves versus the euro are measured based on the difference between the revaluation rate²⁸⁷ and the average cost of the foreign currency positions held by the central bank.

Moreover, the effects of the changes in the market prices of international reserve assets are measured based on the difference between the market price of assets (gold and foreign currency securities) and their average cost or net average cost.

Thus, as at 31 December 2021, significant unrealised gains arising from the revaluation of holdings of gold, other precious metals and foreign currency (totalling lei 29,057,242 thousand, i.e. 27 percent higher than as at 31 December 2020) were recorded in the special revaluation account, consolidating the NBR's equity. Unrealised losses (in the amount of lei 461,124 thousand), recorded in the profit and loss account as expenses as at 31 December 2021, arose from the mark-to-market of foreign currency securities holdings (Table 18.3).

Table 18.3
Revaluation differences
as at 31 December 2021

	lei thousand	
	Unrealised gains (recognised in the special revaluation account under liabilities)	Unrealised losses (recognised in the profit and loss account)
Foreign currency securities	25,352	461,124
Other foreign currency holdings	6,525,602	-
Gold and other precious metals	22,506,288	-
Total	29,057,242	461,124

²⁸⁷ The revaluation rate is the exchange rate calculated and published by the National Bank of Romania on the last business day of the month. It is used for the revaluation of foreign currency positions.

5. The NBR's budgeted income statement for 2021

The budgeted income statement defines the annual financial framework that ensures the adequate funding sources for the central bank's activity in order to fulfil its primary objective and legal tasks, in accordance with the provisions of Law No. 312/2004 on the Statute of the National Bank of Romania and in compliance with the principle of financial independence applicable to central banks that are ESCB members.

The National Bank of Romania is fully funded from own income generated as a result of the operations specific to central banks, and ensuring budget balance and capping the bank's administrative and staff costs are among the steady concerns for the good financial management of resources.

Drawing up the 2021 budgeted income statement took into account a further prudent approach in sizing income and expenses, which are planned so as to ensure the realistic financial reflection of the specific parameters with a significant budget impact. Given the global economic and financial environment marked by elevated uncertainty, particularly amid the persistent pandemic crisis, the possible subsequent materialisation of some changes in exogenous components was also taken into account. This would have an impact on the increase in the average costs of the currency positions of the National Bank of Romania, as well as on the potential unrealised losses arising from the revaluation of fixed-income securities and currency positions at the end of the year.

The financial result at 31 December 2021 was a profit totalling lei 2,015,195 thousand, more than three times higher (lei +1,367,255 thousand) than the budgeted figure amounting to lei 647,940 thousand, as a result of larger total income than the projected level, as well as of total expenses incurred standing below the budgetary provisions (Table 18.4).

Table 18.4
Budgeted income statement
for 2021

Indicators	2021		Execution rate
	Budgeted	Actual	
	lei thousand	lei thousand	%
	(1)	(2)	(3)=(2)/(1)
Total income,	2,573,602	3,692,489	143.5
<i>of which:</i>			
Interest income	445,355	507,865	114.0
Fees and commissions income	218,584	213,756	97.8
Income from foreign currency operations	1,649,169	2,771,067	168.0
Income from securities operations	229,918	164,322	71.5
Income from operations with precious metals	-	-	-
Income from provisions	-	2,486	-
Other income from specific operations	9,130	11,187	122.5
Income from fixed assets revaluation	-	181	-
Other income	21,446	21,625	100.8

– continued –

Indicators	2021		Execution rate
	Budgeted	Actual	
	lei thousand	lei thousand	%
	(1)	(2)	(3)=(2)/(1)
Total expenses,	(1,925,662)	(1,677,294)	87.1
<i>of which:</i>			
Interest expenses	(427,957)	(450,022)	105.2
Fees and commissions expenses	(13,677)	(14,369)	105.1
Expenses from foreign currency operations	(13,519)	(5,874)	43.5
Expenses from securities operations	(2,319)	(608)	26.2
Expenses from operations with precious metals	(700)	(362)	51.8
Expenses (unrealised losses) from revaluation differences	(650,000)	(461,124)	70.9
Currency issue expenses	(169,481)	(159,010)	93.8
Expenses from provisions	-	(8,826)	-
Losses arising from unrecoverable receivables not covered by provisions	-	(135)	-
Other expenses from specific operations	(18,008)	(9,239)	51.3
Staff costs	(391,987)	(374,392)	95.5
Administrative expenses	(92,524)	(61,718)	66.7
Depreciation of tangible and intangible fixed assets	(80,169)	(81,398)	101.5
Expenses from fixed assets revaluation	-	(5,979)	-
Other operating expenses	(65,321)	(44,238)	67.7
Profit for the year	647,940	2,015,195	311.0

The total income earned in 2021 amounted to lei 3,692,489 thousand, which shows a budget execution rate of 143.5 percent compared to the budgetary provisions, owing mainly to the increase in income from foreign currency operations and interest income. This development was partially offset by the smaller income from securities operations than the budget estimates, as a result of the market price effect stemming from sales of foreign currency securities.

In 2021, total expenses amounted to lei 1,677,294 thousand, their execution rate standing at 87.1 percent versus the budgetary provisions. By reference to the budget plan, most categories of expenses incurred were below the estimated level, following the impact of some exogenous factors mostly on unrealised losses arising from revaluation and the savings from lower administrative expenses and staff costs.

For details on the contents of income and expenses categories for 2021, see the notes to the income statement in the financial statements section.

6. Conclusions

The financial position of the National Bank of Romania was further solid, the institution's equity being markedly positive at 31 December 2021 (lei 32,743,185 thousand, up by 25 percent from 31 December 2020; Table 18.5). This includes the following items:

- *statutory capital*, fully provided by the state, amounting to lei 30,000 thousand;

- *own reserves created by the bank's activity*, totalling lei 3,493,939 thousand, reflecting an efficient management of the resources available to the bank; these include: reserves built up by yearly distributions, over time, of the bank's profit (under statutory reserves and own sources for investment financing), reserves from the revaluation of the bank's fixed assets, and other reserves;
- *special revaluation account*, recording a significant amount of lei 29,057,242 thousand (up by 27 percent from 31 December 2020), due mainly to the higher unrealised gains related to net foreign currency assets and to the favourable evolution of the market price of monetary gold holdings;
- *profit for the year*, totalling lei 2,015,195 thousand;
- *profit distribution at 31 December* for the annual distributions set by law (paying to the state budget an amount of lei 1,610,186 thousand representing its share of 80 percent of the bank's net income and increasing the statutory reserves by an amount of lei 243,005 thousand).

Table 18.5
Equity

	31 December 2021 (lei thousand)	31 December 2020 (lei thousand)	Percentage change (%)
Capital	30,000	30,000	-
Reserves	3,493,939	3,058,835	14
Special revaluation account	29,057,242	22,937,060	27
Profit for the year	2,015,195	2,034,776	-1
Profit distribution	-1,853,191	-1,871,994	-1
Total	32,743,185	26,188,677	25

Mention should be made of the increase by 14 percent in reserves (especially following the rise in statutory reserves due to the 2021 profit distribution, the advance in own sources for investment financing due to the 2020 profit distribution and the larger reserves arising from the revaluation of land and buildings owing to the latter's revaluation at fair value as at 31 December 2021) and the 27 percent higher unrealised gains arising from the revaluation of holdings of monetary gold and foreign currency as at 31 December 2021 (recorded in the special revaluation account).

Table 18.6
Operating result

Activity	Operating result (lei thousand)		Annual change %
	2021	2020	
Monetary policy	135,858	149,371	-9
Management of foreign currency assets and liabilities	2,918,398	2,744,295	6
Currency issue and payment settlement	-25,543	-1,931	1,223
Other operations	-546,596	-532,156	3
Total operating result	2,482,117	2,359,579	5

In addition, **the operating financial result** for 2021 (net of unrealised losses arising from the mark-to-market of foreign currency securities and of unrealised losses arising from the fair value revaluation of buildings and land) was substantial, consisting of a profit worth lei 2,482,117 thousand, up 5 percent from that recorded in 2020, mainly following the higher profit from the management of foreign currency assets and liabilities (Table 18.6). After the recording of unrealised losses arising from the

mark-to-market of foreign currency securities and of unrealised losses arising from the fair value revaluation of buildings and land as at 31 December 2021, the final financial result as at end-2021 was a profit amounting to lei 2,015,195 thousand, 1 percent or lei 19,581 thousand lower than that in the prior year (lei 2,034,776 thousand).

Profit distribution for the financial year 2021. Pursuant to Article 43 of Law No. 312/2004 on the Statute of the National Bank of Romania, the largest part of the profit, i.e. lei 1,610,186 thousand, representing a share of 80 percent of the bank's net income, was transferred to the state budget. In addition, an amount of lei 243,005 thousand was allocated to increase the statutory reserves (accounting for 60 percent of the profit that remained after deducting the share of 80 percent of the bank's net income owed to the state). The remaining profit, amounting to lei 162,004 thousand, is to be distributed in 2022 in line with the legal provisions.

To sum up, in 2021, amid a difficult environment induced by the COVID-19 pandemic, the National Bank of Romania further strengthened its financial position.

Financial statements
of the National Bank of Romania
as at 31 December 2021

(audited by KPMG)

TRANSLATOR'S EXPLANATORY NOTE: The above translation of the Financial Statements is provided as a free translation from Romanian which is the official and binding version



KPMG Audit SRL
DN1, Bucharest - Ploiești Road no. 89A
Sector 1, Bucharest
013685, P.O.Box 18 - 191
Tel: +40 372 377 800
Fax: +40 372 377 700
www.kpmg.ro

Independent Auditors' Report

(free translation¹)

To the Board of Directors of the National Bank of Romania

25 Lipscani street, district 3, Bucharest
Unique Registration Code: 361684

Opinion

1. We have audited the financial statements of the National Bank of Romania ("the Bank"), which comprise the balance sheet as at 31 December 2021, the income statement for the year then ended, and notes, comprising significant accounting policies and other explanatory information.
2. The financial statements as at and for the year ended 31 December 2021 are identified as follows:
 - Capital and reserves: Lei thousands 32,743,185
 - Profit for the year: Lei thousands 2,015,195
3. In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Bank as at 31 December 2021, and of its financial performance for the year then ended in accordance with the Norm for organizing and conducting the accounting of the National Bank of Romania no. 1/2007 ("Norm no. 1/2007") with subsequent amendments.

Basis for Opinion

4. We conducted our audit in accordance with International Standards on Auditing ("ISAs") and Law no. 162/2017 ("the Law"). Our responsibilities under those standards and regulations are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Bank in accordance with *International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards)* ("IESBA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Romania, including the Law and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

¹ TRANSLATOR'S EXPLANATORY NOTE: The above translation of the auditors' report is provided as a free translation from Romanian which is the official and binding version.



Responsibilities of Management and Those Charged with Governance for the Financial Statements

5. Management is responsible for the preparation of financial statements that give a true and fair view in accordance with Norm 1/2007 with subsequent amendments and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.
6. In preparing the financial statements, management is responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.
7. Those charged with governance are responsible for overseeing the Bank's financial reporting process.

Auditors' Responsibility for the Audit of the Financial Statements

8. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.
9. As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:
 - Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
 - Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.
 - Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
 - Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
 - Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



10. We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

For and on behalf of KPMG Audit S.R.L.:

Refer to the original signed Romanian version

FURTUNA CEZAR-GABRIEL

KPMG Audit SRL

registered in the electronic public register of financial auditors and audit firms under no AF1526

registered in the electronic public register of financial auditors and audit firms under no FA9

Bucharest, 25 May 2022

BALANCE SHEET AS AT 31 DECEMBER 2021

		lei thousand	
	Note	31 December 2021	31 December 2020
Cash and other cash equivalents		42,864	39,588
Precious metals and stones,		317,181	303,778
<i>out of which:</i>			
Non-monetary gold		260,995	246,528
Other precious metals and stones		56,186	57,250
Foreign assets,		245,075,051	224,100,239
<i>out of which:</i>			
Current account in SDR with the IMF	4	16,750,285	5,676,325
Monetary gold	5	26,475,540	24,996,964
Demand deposits placed	6	54,882,441	33,794,352
Term deposits placed	7	17,858,314	10,603,986
Placements in foreign currencies	8	2,619,321	2,381,448
Securities in foreign currencies	9	105,809,330	127,501,833
Loans in foreign currencies	10	2,066,904	1,548,722
Participating interests in international financial institutions,	11	11,238,160	10,585,394
<i>out of which:</i> quota at the IMF		11,073,075	10,428,025
Other foreign assets TARGET2		7,374,756	7,011,215
Securities held for monetary policy purposes,		4,540,586	4,863,539
<i>out of which:</i>			
Securities in RON	12	4,540,586	4,863,539
Securities in foreign currencies		-	-
Loans to domestic credit institutions,	13	6,501,000	480,000
<i>out of which:</i>			
Loans granted to domestic credit institutions		6,501,000	480,000
Loans under litigation		23,587	23,587
Provisions for credit risk – principal		(23,587)	(23,587)
Other assets		1,328,221	1,358,733
<i>out of which:</i>			
Loans to employees		3	4
Tangible and intangible fixed assets	14	1,230,440	1,198,813
Inventories		4,887	3,838
Participating interests	15	2,711	2,329
Settlement account with the State Budget	16	-	85,614
Accruals and prepaid expenses		61,657	43,561
Revaluation differences for off-balance sheet items		712	1,035
Other assets		98,300	90,101
<i>out of which:</i>			
Goods of numismatic, philatelic, historical, cultural, artistic importance		24,943	22,741
Provisions for doubtful assets	17	(70,489)	(66,562)
Accrued interest receivables		414,552	648,204
Accrued interest receivable	18	420,620	654,272
Provisions for credit risk – interest	19	(6,068)	(6,068)
Total assets		258,219,455	231,794,081

Notes from page 317 to 351 are an integral part of these financial statements.

BALANCE SHEET AS AT 31 DECEMBER 2021

		lei thousand	
	Note	31 December 2021	31 December 2020
Currency in circulation	20	109,212,240	100,402,602
Foreign liabilities,		27,709,231	16,108,664
<i>out of which:</i>			
To international financial institutions	21	11,073,753	10,428,641
Demand deposits taken		2,556	10,827
Counterpart of special drawing rights allocated by the IMF	22	16,632,922	5,669,196
Due to domestic credit institutions and other financial institutions,	23	56,090,074	48,693,048
<i>out of which:</i>			
Current accounts of the domestic credit institutions (including minimum reserves in RON)		34,061,193	32,230,804
Amounts withheld under special arrangements		4,681	4,713
Deposits of the domestic credit institutions		998,000	419,000
Deposits of the financial institutions at NBR		-	-
Foreign currency minimum reserves		13,650,992	9,022,770
Accounts of bankrupt credit institutions		451	4,546
Other liabilities Target2		7,374,757	7,011,215
Current account of the State Treasury	24	32,193,501	40,318,645
Other liabilities		241,392	58,263
<i>out of which:</i>			
Sundry creditors		32,244	27,262
Salaries and other personnel related liabilities		83	74
Settlement account with the State Budget		196,308	11,870
Accruals and income collected in advance		682	585
Revaluation differences for off-balance sheet items		-	-
Other liabilities		12,075	18,472
Accrued interest payables	25	29,832	24,182
Capital and reserves,		32,743,185	26,188,677
<i>out of which:</i>			
Capital		30,000	30,000
Reserves	27	3,493,939	3,058,835
Special revaluation account	28	29,057,242	22,937,060
Profit for the year		2,015,195	2,034,776
Profit distribution for the year	40	(1,853,191)	(1,871,994)
Total liabilities and equity		258,219,455	231,794,081

The financial statements were approved by the Board of Directors on 23 May 2022 and were signed on its behalf by:

Governor
Mr. Mugur Isărescu

Notes from page 317 to 351 are an integral part of these financial statements.

INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2021

		lei thousand	
	Note	31 December 2021	31 December 2020
Interest income	29	507,865	581,933
Interest expense	30	(450,022)	(232,717)
Net result from interest		57,843	349,216
Fees and commissions income	31	213,756	177,180
Fees and commissions expense	32	(14,369)	(15,044)
Net result from fees and commissions		199,387	162,136
Net realized gains arising from foreign currencies operations	33	2,765,193	2,159,144
Net realized gains arising from securities operations	34	163,714	373,675
Realized losses arising from precious metals operations	35	(362)	(334)
Unrealized losses from revaluation differences	36	(461,124)	(324,803)
Net result of financial operations		2,467,421	2,207,682
Currency issue expenses	37	(159,010)	(153,318)
Expenses / incomes from provisions		(6,340)	5,302
Losses arising from unrecoverable receivables uncovered by provisions		(135)	-
Other expenses from specific operations		(9,239)	(3,620)
Other income from specific operations		11,187	4,836
Net result of specific operations		(163,537)	(146,800)
Other income		21,625	18,895
Staff costs		(374,392)	(367,798)
Administrative expenses		(61,718)	(59,815)
Depreciation of tangible and intangible fixed assets		(81,398)	(83,220)
Expenses / incomes from fixed assets revaluation		(5,798)	-
Other operating expenses		(44,238)	(45,520)
Net profit for the year		2,015,195	2,034,776
Quota for the state budget		1,610,186	1,627,821

The financial statements were approved by the Board of Directors on 23 May 2022 and were signed on its behalf by:

Governor
Mr. Mugur Isărescu

Notes from page 317 to 351 are an integral part of these financial statements.

Notes to the financial statements for the year ended at 31 December 2021

1. General information

The National Bank of Romania (the “Bank” or “NBR”) was set up in 1880 as the Central Bank of Romania. The current registered headquarters are located in 25 Lipscani Street, Bucharest, Romania. In accordance with the legislation, the Bank is managed by nine members of the Board of Directors. The executive management of the Bank is exercised by the Governor (Mr. Mugur Isărescu), the First Deputy Governor (Mr. Florin Georgescu) and two Deputy Governors (Mr. Eugen Nicolaescu and Mr. Leonardo Badea). The other 5 members of the Board of Directors are: Mr. Cristian Popa, Mr. Gheorghe Gherghina, Mr. Csaba Bálint, Mr. Dan Radu Ruşanu and Mr. Virgiliu Stoenescu. The Parliament appoints the members of the Board of Directors for a period of five years. The Bank is fully owned by the Romanian State. The actual number of employees as at 31 December 2021 is of 2,018 (31 December 2020: 2,016 employees).

In 2021, the Bank’s operations were governed by the “Law on the Statute of the National Bank of Romania” (Law no. 312/2004), effective since 31 July 2004, except for a number of provisions related to statutory financial reporting that became effective commencing on 1 January 2005. The purpose of the Law no. 312/2004 is to ensure the compliance of the NBR statute with the European Union legislation and, particularly, with the provisions of the European Community Treaty regarding the independence of the Central Bank.

In accordance with the legislation in force, the primary objective of the Bank is to ensure and maintain price stability. Furthermore, the Bank has the exclusive right to issue banknotes and coins and the responsibility to regulate and supervise the Romanian banking system.

2. Significant accounting policies

a) Statement of compliance

The financial statements of the NBR are prepared in accordance with the Norm for organizing and conducting the accounting of the National Bank of Romania no. 1/2007, as subsequently amended and supplemented (no. 1/2008, no. 3/2008, no. 1/2010, no. 2/2010, no. 4/2011, no. 1/2014, no. 1/2017, no. 1/2019 and no. 2/2021) and include the balance sheet, the income statement and the explanatory notes. The NBR Norm no. 1/2007 as subsequently amended and supplemented lays down the basic accounting principles and rules, the structure and the content of the annual financial statements having as a general purpose the compliance with the provisions

of the accounting standards applicable to central banks and recognized by the European Central Bank (i.e.: Guideline ECB/34/2016), except the formats which are mandatory only in case of reporting data to the ECB for Eurosystem financial reporting purposes.

b) Basis of preparation

The financial statements are prepared on a going concern basis and are presented in Romanian lei (RON), rounded to the nearest thousand. They are prepared under the historical cost convention, except for the gold and foreign currency securities booked at market value, respectively buildings and land at fair value. Income and expenses are recognized in the accounting period in which they are earned or incurred, according to the accruals principle.

c) The transfer of the Bank's net revenues to the State Budget

The Bank is exempt from paying income tax, but in accordance with the Law no. 312/2004, it distributes a share of 80% of the net revenues to the State Budget on a monthly basis after deducting the expenses related to the financial year (except for other than credit risk provision expenses) and the loss related to previous financial years that remained uncovered from other sources.

The final adjustments related to the financial statements are performed until the deadline for submitting the annual financial statements, according to the law, based on a special rectifying statement.

d) Significant accounting principles

Substance over form: transactions are accounted for and presented in accordance with their substance and economic reality and not merely with their legal form.

Prudence: the valuation of assets and liabilities, as well as the revenues and expenses recognition, are carried out prudently. However, prudence does not allow for a deliberate understatement of assets and income or overstatement of liabilities and expenses.

Going concern principle: The NBR as the central bank of Romania will function for the foreseeable future.

Comparability: the criteria for evaluation of the balance sheet items and for results recognition must be consistently applied in order to ensure the comparability of data in the financial statements.

Events subsequent to the balance sheet date: assets and liabilities are adjusted for events that occur between the annual balance sheet date and the date on which the financial statements are approved by the Board of Directors, if these events affect the condition of assets or liabilities existing at the balance sheet date. No adjustment is made, but disclosure is required, for those events occurring after the balance sheet date that do

not affect the condition of assets and liabilities at the balance sheet date, but which are of such importance that non-disclosure would affect the ability of the users of the financial statements to make proper evaluations and decisions.

Materiality: deviations from the accounting rules, including those affecting the income statement, are allowed only if they can reasonably be judged to be immaterial for the overall context and for the presentation of the Bank's financial statements.

The accruals principle: income and expenses are recognized in the accounting period in which they are earned or incurred and not in the period in which they are collected or paid.

Faithful representation: to be credible, the information must accurately present the transactions and other events that it aims to present.

Neutrality: the information contained in the financial statements must be neutral, i.e. free from influence and without the aim of achieving a predetermined result or objective.

Financial year cut-off: all revenues and expenses of the corresponding financial exercise will be booked, without considering the date of the amounts' receipt or payment.

Intangibility of the opening balance sheet: the opening balance sheet of a financial year must correspond to the closing balance sheet of the previous year, except for the corrections imposed by the legislation in force.

Principle of non-compensation: the values of the assets cannot be compensated with the values of the liabilities, nor the income with the expenses, except for the compensations allowed by the legislation in force.

Deviations from accounting principles: deviations from these general principles will be allowed only in exceptional cases. The explanatory notes will present the deviations, their reasons and an evaluation of the effect of the deviations on the Bank's debts, the financial position and the financial result.

e) Estimates

In preparing the financial statements in accordance with the provisions of the Norm no. 1/2007, as subsequently amended and supplemented, the management is required to make estimates and assumptions that affect the reported amounts for assets, liabilities, revenues and expenses for the reporting period. Actual results could differ from these estimates. The estimates are periodically revised and, if necessary, adjustments are recorded in the income statement of the period when they occur. Although these individual estimates carry a degree of uncertainty, their cumulative effect on the financial statements is deemed immaterial.

f) Recognition of assets and liabilities

Financial and other assets/liabilities are recognized in the balance sheet only when:

- it is probable that future economic benefits associated with the asset/ liability will flow in or out of the Bank's patrimony;
- all the risks and benefits associated with the asset/liability have been effectively transferred to / from the Bank; and
- assets and liabilities values can be reliably measured.

Financial assets and liabilities are initially recognized at acquisition value, as presented hereinafter.

g) Foreign currency position

The currency position represents the net balance in a certain currency, determined as the difference between total receivables (balance sheet assets and off balance sheet accounts similar to assets) and total payables (balance sheet liabilities and off balance sheet accounts similar to liabilities) denominated in the respective currency, with some exceptions. Monetary gold is considered as a foreign currency, representing the gold position. The SDR currency is considered as a distinct currency; transactions that affect the SDR net position are either denominated in SDR or transactions that follow the structure of the SDR basket.

Items that are not included in the foreign currency position are: cash in foreign currencies, foreign currencies in transit, sundry creditors, sundry debtors, settlement accounts and prepayments.

h) Average cost method

The average cost method applies to the following:

- the foreign currency position, including SDR;
- the monetary gold position;
- the foreign currency securities portfolio – for each ISIN/CUSIP (security series);
- the securities held for monetary policy purposes.

The long/short foreign currency position represents the net balance in a certain currency, determined as the difference between total receivables (balance sheet assets and off balance sheet accounts similar to assets) and total payables (balance sheet liabilities and off balance sheet accounts similar to liabilities) denominated in the respective currency – when total receivables are above/ below total liabilities.

The average cost of the foreign currency holdings is calculated daily as an indirect foreign exchange quotation (RON/1 foreign currency unit). For the long foreign currency position, net purchases of currencies made during the day, considered at the

average cost of the purchases made during the day, are added to the previous day's closing balance, in order to determine the new average cost of the position. In case of net sales, the average cost of the foreign currency position remains unchanged. The same principles apply to the gold holdings.

The average cost of the foreign currency securities holdings is determined for each ISIN/CUSIP (security series) by dividing the transaction value of the entire holding to the nominal value of the holding. For each security series, all purchases made during the day are added to the previous day's holding to determine a new weighted average cost.

The net average cost of the foreign currency securities is determined for each security series by dividing the holding at average cost - adjusted with the cumulated premium or discount amortization - to the corresponding nominal value of the holding. Premiums or discounts resulting from the securities purchase are amortized over the remaining life of the securities using the internal rate of return method.

The gains or losses resulting from transactions in foreign currencies or monetary gold and from transactions with foreign currencies securities are determined based on the average cost of the respective holding (Note 2i and Note 2j).

In accordance with the revaluation procedure (Note 2p), at the end of the financial year, the revaluation rate and the revaluation price of the securities become the new average cost of the foreign currency holding and the new net average cost of the foreign currency securities, provided that unrealized losses for the respective foreign currency position or holding of ISIN/CUSIP have been recorded as expenses as at 31 December.

i) Foreign currency transactions

The operations denominated in foreign currencies are converted into RON at the official exchange rate valid on the trade date. The monetary assets and liabilities denominated in foreign currencies at the balance sheet date are converted into RON at the exchange rate valid at that date.

The deposits denominated in foreign currency (sight and term) – in accounts held with international institutions, central banks, foreign banks, etc. – are booked at their nominal value. Interest receivable is recorded according to the accruals principle.

Forward and spot foreign currencies purchases and sales performed as part of foreign currency/RON swaps are recognized in off-balance-sheet accounts from the trade date until the settlement date at the spot rate of the transactions and recognized in balance-sheet accounts on settlement date. The difference between spot and forward rates is treated as payable or receivable interest. The foreign currency position is affected by the accrued interest payables or receivables denominated in foreign currency.

In accordance with the average cost method for long foreign currency position, any sale of foreign currency (outflow from the foreign currency position) generates realized gain/loss calculated as follows:

- if the daily acquisitions exceed the daily sales, then the gain/loss arising from the daily sales is computed as the total sales multiplied by the difference between the average price of the daily sales and the average cost of the daily acquisitions;
- if the daily sales exceed the daily acquisitions, then the gain/loss arising from the daily sales is computed as the sum of the following:
 - the gain/loss arising from the sales covered by the daily acquisitions, computed as the total daily acquisitions multiplied by the difference between the average price of the daily sales and the average cost of the daily acquisitions;
 - the gain/loss arising from the sales covered by the previous day's foreign currency holdings, computed as the daily net sales multiplied by the difference between the average price of the daily sales and the average cost of the respective foreign currency position on the preceding day.

In case of a short position for a foreign currency or gold, the reverse treatment to the above-mentioned approach is applied. Thus, the average cost of the liability position is affected by net outflows, while net inflows reduce the position at the existing average cost and generate realized gains or losses.

j) Foreign currency securities

Premiums/discounts arising from the securities acquisitions are amortized over the remaining life of the securities using the internal rate of return method.

The amortization of the discount/premium is booked daily based on the accruals principle and is disclosed as part of the interest income/expense. The accrued interest receivables for securities in foreign currencies are calculated and recorded on a daily basis, based on the accruals principle, being converted into RON at the Bank's exchange rate of the day.

The gain/loss arising on sale of securities is determined as the nominal value of the securities sold multiplied with the difference between the sale price and the average cost of the respective security. The components of the aforementioned gain/loss are the following:

- the market price effect, representing the nominal value of the securities sold multiplied with the difference between the sale price and the net average cost of the respective security – booked in the profit and loss account on the settlement date – the line "Net realized gains/ losses arising from securities operations";
- the interest rate effect, representing the nominal value of the securities sold multiplied with the difference between the net average cost and the average cost of the respective security – booked in the profit and loss account through the daily amortization of the related premiums/discounts on foreign currency securities – the line "Interest expense/income".

The gain/loss from the mark-to-market revaluation is determined as the difference between the market price and the net average cost.

The Bank performs securities lending under a program conducted by an European bank. The Bank records the income from commissions and books in the off-balance sheet accounts the securities lent and the securities received as collateral. The transactions are recorded on the balance sheet, at least at the end of the reporting period, if the collateral is provided in the form of cash, placed on an NBR's account, and if this cash is still not invested.

k) Securities held for monetary policy purposes

Securities held for monetary policy purposes in local and foreign currency are booked using the average cost method (see Note 2h). As at the end of month, these can be booked at market value based on the monetary policy considerations. Securities booked at cost are subject to an impairment test as at the end of the year. All premiums and discounts are amortized. The receivables related to securities (coupons) are calculated and booked daily according to the accruals principle.

l) Loans to domestic credit institutions and other entities

Loans are disclosed in the balance sheet at the value of the outstanding principal, adjusted with the provision for credit risk, in order to reflect the recoverable amount. Likewise, this balance sheet item includes the loans granted to credit institutions based on securities transfers accompanied by a repurchase arrangement.

m) Participating interests

In accordance with the Norm no. 1/2007 as subsequently amended and supplemented, the participating interests, including those reflecting a significant influence, are booked at acquisition cost.

n) Tangible and intangible fixed assets

The tangible and intangible fixed assets are presented in the financial statements at cost or revalued cost, less any accumulated amortization.

At least once in 3 years, the fixed assets in the categories "Constructions" and "Land" are revaluated. The resulting favorable differences are booked as "Reserves" if no previous decrease was recognized as an expense; favorable differences are booked as income to compensate the previous expense representing a decrease of the asset value. The resulting unfavorable differences are compensated with the previous favorable revaluation differences for each asset; the remaining unfavorable differences are booked as expenses.

All maintenance and current repair operations (which do not upgrade the initial characteristics of fixed assets), the periodical and occasional revisions, the service operations are recognized in the income statement, irrespective of their value; their value is not included in the value of the fixed assets.

Other repair costs are booked in the income statement if their individual value is less than the threshold laid down in the NBR's Norm no. 1/2014; if the individual value of these operations is equal to or higher than the aforementioned threshold and the operations improve the technical parameters of the fixed assets, or if the operations are mandatory for securing a normal functioning of the assets, the costs increase the value of the fixed assets.

Any expense related to the replacement at various times of components / parts are booked in the income statement if their individual value is less than the threshold laid down in the NBR's Norm no. 1/2014; if their individual value is higher than the aforementioned threshold, the costs increase the value of the fixed assets.

Expenses related to construction of property are capitalized and amortized once the assets are put in use.

The amortization is calculated on a straight-line basis over the estimated useful life of each class of tangible assets. The amortization is accounted for as a write – down of the value of the assets. Land is not depreciated. The legal useful life for each category is as follows:

Buildings	20-60 years
Equipment	5-20 years
Motor vehicles	5 years
Computer equipment (hardware and software)	3-5 years

o) Currency in circulation

The Bank elaborates the program for banknotes and coins issuance, it provides the related printing, distribution and administration services for the currency reserve, in order to meet the cash requirements in accordance with the real needs for currency in circulation.

The currency in circulation is booked at the nominal value of the banknotes and coins which are actually put into circulation.

The costs of printing and minting coins are booked as expenses on the accounting period when they occur, not when they are paid.

p) Revaluation

The revaluation of currency positions is performed on a monthly basis and booked in the special revaluation account, as the difference between the revaluation exchange

rate (the official rate calculated and published on the last working day of the month) and the average cost of the foreign currency position. The assets (participation with the IMF) and liabilities (allocations and deposit from the IMF) denominated in SDR are also revalued on 30 April and 31 December, based on the exchange rates communicated by the International Monetary Fund.

The mark-to-market is performed on a monthly basis both for the holdings of monetary gold/silver and for the foreign currency securities, with the exceptions listed below; the revaluation differences are recorded in balance-sheet adjustments accounts. The revaluation of gold is performed based on the price in RON per defined weight unit of gold, derived from the RON/USD exchange rate and the fixing quotation on the London Bullion Market. The revaluation of securities denominated in foreign currencies is performed by comparing the market price at the end of the last working day of the month with the net average cost of the respective foreign currency security holding. Short-term securities commercial paper types are booked at cost plus accumulated discount (these instruments are not traded on a secondary market). The securities held for monetary policy purposes are booked at cost or market value based on the monetary policy considerations.

Offsetting unrealized losses for securities, currencies or gold against unrealized gains in other securities, currencies or gold is not allowed.

At the end of the financial year, the unrealized losses resulting from the revaluation of assets and liabilities are charged to the income statement without the possibility of subsequent cancellation against new unrealized gains obtained in future financial periods. Subsequently, the average cost of the foreign currency position, i.e. the net average cost of the foreign currency securities, for which revaluation differences were recognized as expenses, becomes equal with the revaluation rate, i.e. the market price of the securities. At the end of the financial year, the unrealized gains resulting from the revaluation of assets and liabilities are booked in the special revaluation account.

q) Pension obligations and employee benefits

The Bank makes payments to the Romanian State funds for its Romanian employees for pension, healthcare and unemployment benefits. During 2021, as well as during the previous years, all the employees of the Bank were included in the State pension system. Also, starting with the year 2007, according to the legal framework, all eligible employees of the Bank have been included in the private pension system.

In compliance with the collective labor agreement currently in force, at the retirement of its employees, the Bank pays benefits based on the salary as at the date of retirement and on the number of years of working with NBR. The collective labor agreement is subject to the annual approval of the Board of Directors. The Bank recognizes the retirement benefits on the date when the employee's individual employment contract expires.

r) Income and expense recognition

Income and expenses are recognized in accordance with the accruals principle. The losses or gains arising from the sale of foreign currencies, gold or securities

holdings are accounted for in the income statement. These realized gains/losses are determined as the difference between the sale price and the average cost of the respective asset.

The unrealized revaluation gains are not recognized as income, but they are booked in the special revaluation account.

There is no netting of unrealized losses for securities, currencies or gold against unrealized gains in other securities, currencies or gold. At the end of the year, the unrealized losses for other assets are charged to the income statement if they exceed the revaluation gains previously recorded in the corresponding revaluation account.

s) Capital and statutory reserves

The capital is fully owned by the Romanian State and it is not divided into shares. As at 31 December 2021 and 31 December 2020 the Bank's capital amounted to RON 30,000 thousand.

The statutory reserves have been set up on 1 January 2005 in accordance with the Law no. 312/2004, incorporating the remaining balance of the reserve fund.

As at both 31 December 2021 and 2020, the statutory reserves were increased by distributing 60% of the annual profit that remained after paying to the State its share of 80% of the Bank's net revenues.

t) Profit distribution

The 2021 remaining profit (after distribution to the State Budget of its share of 80% of the Bank's net revenues) is distributed in accordance with the Law no. 312/2004 regarding the Statute of the National Bank of Romania (Note 40).

3. Risk management policies

The main risks associated with the activities of the Bank are financial and operational risks, arising from the responsibility of the Bank to ensure and maintain price stability. The main types of financial risks to which the Bank is exposed are credit risk, liquidity risk, market risk and operational risk. Market risk includes currency risk, interest rate risk and price risk.

a) Credit risk

The Bank is exposed to credit risk as a result of its trading, lending and investment activities.

The credit risk associated with trading and investing activities is managed through the Bank's managing international reserves procedures. The risk is mitigated by selecting counterparties with the highest credit ratings, by monitoring their activities and ratings, as well as by using the exposure limits method.

The eligible issuers approved by the Board of Directors as part of the multi-annual foreign reserves administration strategy for 2020-2021 are: (i) the USA government; (ii) governmental agencies or agencies sponsored by the USA government; (iii) governments of the European Union member states; (iv) governmental agencies or agencies sponsored by the European Union member states governments; (v) the Japanese government; (vi) Chinese government; (vii) other governments rated at least A-; (viii) supranational institutions; (ix) private entities issuing assets-collateralized bonds. As at 31 December 2021, the international reserves portfolio has an A minimum rating (S&P), as well as at 31 December 2020.

The structure of the foreign assets and related interest accruals by geographical areas of the counterparties is presented in the following table:

	lei thousand	
	31 December 2021	31 December 2020
Euro zone	129,178,043	131,113,963
USA	54,721,451	45,167,813
Others	61,484,715	48,354,801
Total	245,384,209	224,636,577

As part of its monetary and exchange rate policies, the Bank is entitled to grant loans to domestic credit institutions. The Bank's credit risk arising from granting short-term loans in RON to domestic credit institutions, including the lending facility, is managed based on specific instruments. The amount of credit exposure in this regard is represented by the carrying amounts of the loans on the balance sheet. Short-term loans in RON, repo operations, lending facility and other credits extended to banks are normally secured with eligible assets (by example: treasury securities issued by the Romanian Government). However, the Bank may, in special circumstances, grant unsecured loans to banks and other credit institutions in order to prevent systemic crises. The Bank also monitors the depreciation indicators for securities held for monetary policy purposes in RON in order to manage the related credit risk. As at 31 December 2021 and 31 December 2020, no depreciation was determined for RON securities held for monetary policy purposes.

The Bank books credit risk provisions for the impairment of such loans, in accordance with its own accounting norms, drawn up under the approval of the Board of Directors and the advisory approval of the Ministry of Public Finance. Adjustments for the impairment of loans are charged to the income statement as specific expenses and are offset against the carrying value of the loans and accrued interest receivables. Loans are written off and charged to the income statement as they become unrecoverable and all the legal procedures have been carried out for their recovery.

The financial assets are reviewed to determine whether there is any indication of impairment. If any such indication occurs, the asset's recoverable amount is estimated. An impairment loss is recognized whenever the carrying amount of an asset exceeds its recoverable amount.

The adjustments for the impairment of the assets are fully/partially reversed if there has been a change in the estimates previously used to determine the recoverable amount of the respective assets. A provision for impairment is fully/partially reversed only to the extent that the asset's carrying amount does not exceed the net carrying amount that would have been determined if no impairment provision had been recognized in previous years.

b) Liquidity risk

The Bank is the last resort lender to credit institutions in Romania. The main objective of its daily operations is to ensure adequate liquidity on the domestic market.

The Bank also manages the foreign currency reserves, through planning and diversification, in order to ensure that foreign exchange obligations are timely met.

The breakdown of the Bank's liabilities (RON thousand) by maturities as at 31 December 2021 is the following:

	Maturity				lei thousand
	Up to 1 month, inclusively	Over 1 month to 3 months inclusively	Over 3 months	No maturity	Total
Currency in circulation				109,212,240	109,212,240
Due to international financial institutions				11,073,753	11,073,753
Demand deposits taken	2,556				2,556
Counterpart of special drawing rights allocated by the IMF				16,632,922	16,632,922
Current accounts of the domestic credit institutions	34,061,193				34,061,193
Amounts withheld under special arrangements	4,681				4,681
Deposits of the domestic credit institutions	998,000				998,000
Foreign currency minimum reserves	13,650,992				13,650,992
Accounts of bankrupt credit institutions	451				451
Other liabilities of credit institutions – TARGET2	7,374,757				7,374,757
Current account of the State Treasury	32,193,501				32,193,501
Other liabilities	271,224				271,224
Total*	88,557,355	-	-	136,918,915	225,476,270

*) it does not include the Bank's capital, funds and reserves

As at 31 December 2020:

	Maturity				lei thousand
	Up to 1 month, inclusively	Over 1 month to 3 months inclusively	Over 3 months	No maturity	Total
Currency in circulation				100,402,602	100,402,602
Due to international financial institutions				10,428,641	10,428,641
Demand deposits taken	10,827				10,827

– continued –

	Maturity				Total
	Up to 1 month, inclusively	Over 1 month to 3 months inclusively	Over 3 months	No maturity	
Counterpart of special drawing rights allocated by the IMF				5,669,196	5,669,196
Current accounts of the domestic credit institutions	32,230,804				32,230,804
Amounts withheld under special arrangements	4,713				4,713
Deposits of the domestic credit institutions	419,000				419,000
Foreign currency minimum reserves	9,022,770				9,022,770
Accounts of bankrupt credit institutions	4,546				4,546
Other liabilities of credit institutions – TARGET2	7,011,215				7,011,215
Current account of the State Treasury	40,318,645				40,318,645
Other liabilities	82,445				82,445
Total*	89,104,965	-	-	116,500,439	205,605,404

*) it does not include the Bank's capital, funds and reserves

c) Market risk – generated by changes in the value of assets and liabilities held, as presented below:

(i) Interest rate risk

The Bank faces interest rate risk, mainly due to exposure to unfavorable market interest rate fluctuations, which affects the market value of interest-bearing assets/liabilities. For the financial assets and liabilities denominated in RON, the Bank endeavors to match the current interest rates available in the market. Obtaining a positive margin is not always possible given that the levels of these assets and liabilities are dictated by the objectives of the monetary policy. However, the Bank constantly monitors the costs of implementing this policy against the estimated benefits. As part of Romania's international reserve management, the interest rate risk is managed both by setting target average duration for portfolios, deviation limits of these exposures and by diversifying maturities and issuers.

For identifying the optimum strategic risk parameters, the following items are taken into consideration: the role of the international reserves, the NBR's objectives and risk tolerance, the NBR's assets and liabilities profile, interest rate perspectives and other relevant considerations. As part of the strategy of Romania's international reserves, approved by the Board of Directors of the Bank for 2020-2021, an average duration up to one year and three months (1.25 years) was established for the entire foreign currency reserve. The Board approved two additional duration limits as follows: aggregated for MMKT (Money Market) and liquidity tranches – one year; investment tranche – two years and four months (2.33 years).

(ii) Currency risk

The Bank is exposed to currency risk through its foreign currency transactions and its holdings of foreign currency assets and liabilities. As at 31 December 2021 and

31 December 2020, the main net assets held by the Bank were denominated in EUR and USD. Due to the volatility of the exchange rate on the financial markets, there is a consequent risk of decrease/increase in the RON value of the monetary assets/liabilities denominated in foreign currencies. Open foreign exchange positions represent a source of currency risk.

Within the framework of its objectives for managing foreign currency reserves, in order to avoid losses arising from adverse changes in exchange rates, the Bank is currently pursuing a policy of portfolio diversification, so as to ensure a balanced foreign currency distribution. The assets and liabilities denominated in EUR, USD and other foreign currencies as at the balance sheet date are presented in Note 38.

The revaluation exchange rates of the main foreign currencies and monetary gold as at the end of the year were:

Currency	31 December 2021	31 December 2020	% variation
Euro: RON/1 EUR	4.9481	4.8694	1.62
US Dollar: RON/1 USD	4.3707	3.966	10.2
Special Drawing Rights: RON/1 SDR	255.6927	241.4052	5.92

(iii) Price risk

The Bank is exposed to this risk due to fluctuations in market price for assets held as a result of variations in interest rates, exchange rates and other factors. Monetary gold and foreign exchange denominated securities are booked at market value (Notes 5 and 9). The market value of the securities held for monetary policy purposes is disclosed in Note 12.

d) Operational risk and other risks

As at 11 March 2020, the World Health Organization, in the context of the increasing number of cases of COVID-19 disease and due to the increased risk of further global spread of the infection, declared the infection COVID-19 a pandemic. As at 16 March 2020, the Romanian Presidency declared a state of emergency and enforced a series of measures to stop the spread of the virus in Romania. On 15 May 2020, the state of emergency ended and a state of alert was enforced, remaining in force until 8 March 2022.

According to its statute (Law no. 312/2004 on the Statute of the National Bank of Romania), the Bank's primary objective is to ensure and maintain price stability. Also, the National Bank of Romania supports the general economic policy of the Government without prejudice to its primary objective.

Given the context of the increasing annual inflation rate and the worsening of its short term perspective under the impact of supply side shocks, the NBR adopted in 2021 several measures aimed to smoothly normalize the monetary policy conduct. Therefore, the Bank ceased in May the purchases of RON denominated government securities on the secondary market, then tightened the control over money market liquidity, while in October and November NBR raised the monetary policy rate by

0.25 percentage points (up to 1.75 percent), and kept firm control over money market liquidity. Moreover, in November, the NBR extended the corridor of interest rates on standing facilities to ± 0.75 percentage points, from ± 0.50 percentage points, raising the interest rate for the lending facility to 2.50 percent and keeping the interest rate for the deposit facility at 1.00 percent. The measures aimed to bring back on a lasting basis the annual inflation rate in line with the flat target of 2.5 percent ± 1 percentage point, including anchoring the inflation expectations over a longer time horizon, so that to ensure the achievement of sustainable economic growth in the context of the fiscal consolidation process.

Given the market disfunctions due to the ongoing COVID-19 pandemic and in order to prevent a possible need of euro liquidity, in 2020, ECB and NBR agreed over an arrangement to provide euro liquidity under a repo line. It was initially agreed that the repo line would remain in force until 31 December 2020, then the financial arrangement was extended first until the end of June 2021 and then until March 2022. Under a repo line, the ECB can provide euro liquidity to a foreign central bank in exchange for adequate collateral; under this repo line NBR could have borrowed up to EUR 4.5 billions from the ECB. The NBR did not actually make any loan.

Regarding the continuity of the activity of the National Bank of Romania, a series of measures were taken to ensure the optimal environment for the operations of its own staff (meetings of the Emergencies Committee, informing employees about COVID-19 and related protection measures, organizing the telework regime and using also the secondary headquarters, periodically disinfecting the Bank's offices, purchasing and distributing to employees basic materials for protection against COVID-19, etc.).

There was no negative impact of the COVID-19 pandemic on the Bank's profit and loss account.

4. Current account in SDR with the IMF

Each IMF member state has an SDR current account with the International Monetary Fund (IMF) used for loan agreements and other related operations between member states and the IMF. This account bears the same interest rate as the IMF SDR allocations. As at 31 December 2021, the SDR current account of the Bank held with IMF amounted to RON 16,750,285 thousand representing the equivalent of SDR 2,737,422 thousand (31 December 2020: RON 5,676,325 thousand representing the equivalent of SDR 989,942 thousand). In 2021, the IMF Governors Board approved a general allocation in amount of USD 650 billions (SDR 456 billions) and the SDR accounts of the member states were credited with their correspondent amounts; therefore, the SDR current account of the Bank held with IMF increased with the amount of SDR 1,747,480 thousand (the equivalent of RON 11,073,960 thousand).

5. Monetary gold

	lei thousand	
	31 December 2021	31 December 2020
Gold bullions in standard form	7,135,377	6,736,669
Coins	3,680,252	3,475,422
Deposits abroad	15,659,911	14,784,873
Total	26,475,540	24,996,964

As at 31 December 2021, the Bank has gold at international standards in custody abroad amounting to RON 15,659,911 thousand (31 December 2020: RON 14,784,873 thousand). As at 31 December 2021, the gold revaluation price was of 255.6927 RON per gram for the Bank's total gold holdings – amounting to 103,544.37 kg (31 December 2020: the revaluation price was of 241.4052 RON per gram and the Bank's gold holdings amounted to 103,547.75 kg). Gold in custody abroad is not pledged and there are no restrictions on its repatriation.

6. Demand deposits placed

	lei thousand	
	31 December 2021	31 December 2020
Demand deposits placed:		
– with international financial institutions	2,153,839	1,505,066
– with central banks	52,728,482	32,289,247
– with foreign banks	120	39
Total	54,882,441	33,794,352

As at 31 December 2021, the item "Demand deposits with international financial institutions" contains the demand deposit held with BIS amounting to RON 2,153,839 thousand (31 December 2020: RON 1,505,066 thousand), representing the equivalent of USD 6,840 thousand (31 December 2020: USD 495 thousand), EUR 0.35 thousand (31 December 2020: EUR 0.35 thousand), NOK 523,718 thousand (31 December 2020: NOK 500,327 thousand), AUD 316,053 thousand (31 December 2020: AUD 73,318 thousand), CAD 70,080 thousand (31 December 2020: CAD 31,301 thousand), CHF 2 thousand (31 December 2020: CHF 2 thousand), GBP 103,026 thousand (31 December 2020: GBP 152,108 thousand) and CNY 18,620 thousand. (31 December 2020: CNY 203,531 thousand).

As at 31 December 2021, the item "Demand deposits placed with central banks" contains mainly three demand deposits held with financial institutions outside the European Union, amounting to RON 6,063,361 thousand representing JPY 159,700,821 thousand (31 December 2020: RON 2,967,182 thousand representing JPY 77,101,707 thousand), RON 2,199 thousand representing USD 503 thousand (31 December 2020: RON 2,294 thousand representing USD 578 thousand) and RON 86,529 thousand representing CHF 18,071 thousand (31 December 2020: RON 81,589 thousand representing CHF 18,132 thousand), one demand deposit held with a central bank from the European Union amounting to RON 46,567,326 thousand

representing EUR 9,411,153 thousand (31 December 2020: RON 29,230,829 thousand representing EUR 6,002,963 thousand), the Bank's balance as a direct participant in TARGET2¹ amounting to RON 5,964 thousand – representing EUR 1,205 thousand (31 December 2020: RON 5,543 thousand – representing EUR 1,138 thousand) and other deposits. On 4 July 2011, the Bank implemented in Romania the system TARGET2. This system represents a secure and rapid channel for processing the interbank payments in euro performed by the banks on their own behalf and on behalf of their customers.

As at 31 December 2021, the item "Demand deposits with foreign banks" contains the demand deposit held with an institution from the European Union amounting to RON 120 thousand (31 December 2020: RON 39 thousand).

The breakdown by currency of the demand deposits is presented in Note 38.

7. Term deposits placed

	lei thousand	
	31 December 2021	31 December 2020
Term deposits		
– with international institutions	17,789,626	10,442,126
– with foreign banks	68,688	161,860
Total	17,858,314	10,603,986

As at 31 December 2021, the term deposits include the deposits held with an international institution amounting to RON 17,789,626 thousand (representing CNY 2,611,000 thousand, NOK 1,400,000 thousand and USD 3,500,000 thousand) and the deposits held with foreign banks in amount of RON 68,688 thousand representing CAD 20,000 thousand. All deposits have a maturity of less than one year.

As at 31 December 2020, the term deposits include the deposits held with an international institution amounting to RON 10,442,126 thousand (representing CNY 6,919,000 thousand, NOK 1,066,000 thousand and USD 1,450,000 thousand) and the term deposits held with foreign banks in amount of RON 161,860 thousand representing CAD 52,000 thousand. All deposits have a maturity of less than one year.

8. Placements in foreign currencies

	lei thousand	
	31 December 2021	31 December 2020
Placements at World Bank, out of which:		
– deposits	51,734	53,553
– securities	2,567,587	2,327,895
Total	2,619,321	2,381,448

¹ TARGET2 is the Trans-European Automated Real-Time Settlement Express Transfer System.

According to the technical assistance and assets administration contract, signed with the World Bank in 2017, the latter continued to grant NBR technical assistance and to manage in 2021 the asset investment portfolio denominated in USD – allocated by NBR through the program Reserves Advisory and Management Program (RAMP).

As at 31 December 2021, the placements administrated by the World Bank are as follows:

- placements amounting to RON 51,734 thousand – the equivalent of USD 11,837 thousand (31 December 2020: RON 53,553 thousand – the equivalent of USD 13,503 thousand);
- securities amounting to RON 2,567,587 thousand, the equivalent of USD 587,454 thousand (31 December 2020: RON 2,327,895 thousand, the equivalent of USD 586,963 thousand).

These are in compliance with the policies for the international reserve management as described in Note 3.

9. Securities in foreign currencies

	lei thousand	
	31 December 2021	31 December 2020
<i>Discount treasury bills, out of which:</i>		
– European Treasuries	19,900,324	29,445,335
– Non-European Treasuries	3,132,617	7,324,159
– Foreign banks and international institutions	-	4,757,886
– International financial institutions (EIB, IBRD, NIB, EBRD, BIS)	-	277,438
<i>Coupon treasury bills, out of which:</i>		
– European Treasuries	44,882,114	48,824,352
– Non-European Treasuries	27,181,825	25,084,187
– Foreign banks and international institutions	4,419,055	8,206,731
– International financial institutions (EIB, IBRD, NIB, EBRD, BIS)	6,293,395	3,093,012
– Non-European Governmental agencies	-	488,733
Total	105,809,330	127,501,833

As at 31 December 2021, the foreign currency securities portfolio amounts to RON 105,809,330 thousand (31 December 2020: RON 127,501,833 thousand), out of which securities borrowed under the “GC Access” – a program conducted by an European bank – a total amount of RON 17,129,525 thousand including RON 15,602,476 thousand (EUR 3,153,226 thousand), RON 187,231 thousand (GBP 31,737 thousand), RON 214,716 thousand (USD 49,126 thousand), RON 116,671 thousand (NOK 235,367 thousand), RON 86,723 thousand (CAD 25,251 thousand) and RON 921,708 thousand (AUD 290,430 thousand).

As at 31 December 2020, securities borrowed under the aforementioned “GC Access” program conducted by an European bank, amounted to RON 18,025,097 thousand

including RON 17,426,417 thousand (EUR 3,578,760 thousand), RON 411,152 thousand (GBP 75,856 thousand), RON 101,581 thousand (USD 25,613 thousand), RON 5,281 thousand (NOK 11,340 thousand) and RON 80,666 thousand (CAD 25,915 thousand). Coupon securities issued by the European Treasuries, the treasuries outside the European Union, the foreign banks and other financial organizations bear fixed or variable interest rates.

As at 31 December 2021, commercial paper types (zero coupon bond securities and short-term discount securities with maturity of less than one year) are included within both categories of securities amounting to RON 49,217,847 thousand – the equivalent of EUR 9,721,564 thousand, USD 124,656 thousand and NOK 1,149,366 thousand (31 December 2020: RON 48,984,888 thousand – the equivalent of EUR 7,438,229 thousand, GBP 25,579 thousand, USD 2,979,360 thousand, NOK 699,960 thousand and AUD 157,980 thousand).

10. Loans in foreign currencies

As at 31 December 2021, the Bank has overnight placements at Federal Reserve System amounting to RON 2,066,904 thousand – the equivalent of USD 472,900 thousand (31 December 2020: RON 1,548,722 thousand – the equivalent of USD 390,500 thousand). The interest is booked as income for the Bank.

11. Participating interests in international financial institutions

	lei thousand	
	31 December 2021	31 December 2020
Romania's quota at the IMF	11,073,075	10,428,025
Participating interest in the Bank for International Settlements	108,263	101,451
Participating interest in the European Central Bank	56,822	55,918
Total	11,238,160	10,585,394

This item comprises the participating interests in international financial institutions. No impairment adjustment is required. In accordance with Law no. 97/1997 and Law no. 312/2004, the Bank exercises all the rights and obligations arising from Romania's membership at the IMF.

As at 31 December 2021, the total Romania's participation quota in the IMF amounts to SDR 1,811 million, the same level as at 31 December 2020 (SDR 1,811 million). The Bank acts as a depository for the deposits of the IMF related to the participation quota.

12. RON securities held for monetary policy purposes

Starting 2020, NBR adopted measures to mitigate the impact of the coronavirus pandemic on the Romanian households and companies, to ensure macroeconomic

stability and the proper functioning of the banking system, financial markets for the benefit of households and companies. One of these measures was the purchase by the NBR of government securities in RON on the secondary market in order to consolidate the structural liquidity of the banking system that contributes to the financing of the economy and the public sector.

As at 31 December 2021, the Bank securities portfolio held for monetary policy purposes amounts to RON 4,540,586 thousand (31 December 2020: RON 4,863,539 thousand). These securities are held at cost. As at 31 December 2021 and 31 December 2020, no impairment was identified for the securities held for monetary policy purposes. The market value of these securities is RON 4,463,727 thousand (31 December 2020: RON 5,273,563 thousand).

13. Loans to domestic credit institutions

	lei thousand	
	31 December 2021	31 December 2020
Loans granted to domestic credit institutions	6,501,000	480,000
Loans under litigation	23,587	23,587
Provisions for credit risk – principal	(23,587)	(23,587)
Total	6,501,000	480,000

As at 31 December 2021, the Bank has a short term loan granted to a domestic credit institution amounting to RON 500,000 thousand and a securities based loan granted to another credit institution as a repurchase agreement (bilateral repo) amounting to RON 6,001,000 thousand (as at 31 December 2020, the Bank has a short term loan granted to a domestic credit institution amounting to RON 480,000 thousand).

As at 31 December 2021, the loans under litigation include the loan amounting to RON 10,378 thousand granted to Credit Bank S.A according to the Emergency Ordinance no. 26/2000 regarding the authorization of the National Bank of Romania to grant a loan to cover public demands for the withdrawal of deposits with the Bank “Renașterea Creditului Românesc” – Credit Bank S.A. (31 December 2020: RON 10,378 thousand) and the loan amounting of RON 13,209 thousand (31 December 2020: RON 13,209 thousand) granted by the Bank to Credit Bank S.A. prior to its bankruptcy, both loans being granted prior to the year 2000.

As at both 31 December 2021 and 31 December 2020, the provision for credit risk includes the provision booked by the Bank for the remaining loan in amount of RON 10,378 thousand granted to Credit Bank S.A. and for the remaining loan in amount of RON 13,209 thousand granted to the aforementioned bank.

14. Tangible and intangible fixed assets

	lei thousand				
	Land and buildings	Equipment	Work in progress	Intangible assets	Total
<i>Cost or revalued amount</i>					
As at 31 December 2020	1,207,496	200,504	11,472	159,652	1,579,124
Additions	7,769	19,315	18,992	12,984	59,060
Disposals	(30)	(4,479)	(9,388)	(315)	(14,212)
Adjustments with the accumulated depreciation (for revaluation)	(129,108)	-	-	-	(129,108)
Net revaluation differences	64,555	-	-	-	64,555
As at 31 December 2021	1,150,682	215,340	21,076	172,321	1,559,419
<i>Accumulated depreciation</i>					
As at 31 December 2020	90,780	162,493	-	127,038	380,311
Depreciation for the year	43,788	17,235	-	20,375	81,398
Disposals	(19)	(3,288)	-	(315)	(3,622)
Adjustments with the accumulated depreciation (for revaluation)	(129,108)	-	-	-	(129,108)
As at 31 December 2021	5,441	176,440	-	147,098	328,979
Net book value:					
As at 31 December 2020	1,116,716	38,011	11,472	32,614	1,198,813
As at 31 December 2021	1,145,241	38,900	21,076	25,223	1,230,440

As at 31 December 2021 and 2020, the category *Equipment* does not contain fixed assets acquired through a finance lease.

As at 31 December 2021, the land and buildings have been revalued by an ANEVAR accredited evaluator, in accordance with the recommendations of the International Valuation Standards (IVS 300 – Valuations for financial reporting). As at 31 December 2021, the accumulated depreciation has been removed from the gross carrying amount and the net carrying value was set at the revaluation value.

15. Participating interests

The participating interests are accounted for at cost, in accordance with the provisions of the Norm no. 1/2007, as subsequently amended and supplemented; thus, these financial statements are not consolidated.

The participating interests amounting to RON 2,711 thousand (31 December 2020: RON 2,329 thousand) include shares held by the Bank in TRANSFOND S.A. (a 33% participating interest, representing RON 2,240 thousand both as at 31 December 2021 and as at 31 December 2020) – an entity in charge with the settlement activities of certain domestic interbank operations and 21 shares held by the Bank in the share capital of SWIFT among with 8 shares, as a result of the reallocation performed in 2006 (not modified by the reallocation procedure performed in 2008), and 13 SWIFT shares as a result of the reallocation performed in 2021, amounting a total of

EUR 95 thousand – RON 471 thousand (31 December 2020: EUR 18 thousand – RON 89 thousand). No impairment adjustments were necessary.

A summary of the financial statements of TRANSFOND S.A. is disclosed in the following table:

	lei thousand	
	31 December 2021	31 December 2020
Equity	73,443	61,842
Total assets	83,723	71,560
Net profit for the year	37,408	26,088

16. Settlement account with the state budget

The balance as at 31 December 2021 comprises mainly the State's share of 80% of the net revenues of the Bank (RON 188,735 thousand) – settled with the state budget according to the legal provisions (31 December 2020: RON 80,908 thousand).

17. Provisions for doubtful assets

	lei thousand	
	31 December 2021	31 December 2020
Provisions for:		
Guarantees paid by the NBR for Credit Bank S.A. (a)	68,620	62,231
Other provisions related to assets (b)	1,869	4,331
Total	70,489	66,562

a) As at 31 December 2021, the RON equivalent of the guarantees paid by the Bank, as guarantor for Credit Bank S.A., amounted to RON 68,620 thousand (31 December 2020: RON 62,231 thousand). These foreign currency guarantees were revaluated as at 31 December 2021 and 31 December 2020.

b) This item includes the provisions against sundry debtors in litigation.

The provisions a) and b) represent adjustment figures for the balance sheet items included in "Other assets".

18. Accrued interest receivable

	lei thousand	
	31 December 2021	31 December 2020
Accrued interest receivable from:		
Foreign currency securities	290,923	508,346
Foreign currency deposits and placements	18,234	27,993
Securities in RON held for monetary policy purposes	105,077	111,813
Loans granted to domestic credit institutions	6,360	6,068
Other assets	26	52
Total	420,620	654,272

19. Provisions for credit risk-interest

As at 31 December 2021 and 31 December 2020, the provision for credit risk – interest, amounting to RON 6,068 thousand, was maintained for the interest receivable for the loan granted to Credit Bank S.A., in accordance with the Emergency Ordinance no. 26/2000 regarding the authorization of the National Bank of Romania to grant a loan to cover public demands for the withdrawal of deposits with the Bank “Renașterea Creditului Românesc” – Credit Bank S.A.

20. Currency in circulation

	lei thousand	
	31 December 2021	31 December 2020
Banknotes	108,516,584	99,749,404
Coins	695,656	653,198
Total	109,212,240	100,402,602

21. Due to international financial institutions

	lei thousand	
	31 December 2021	31 December 2020
IMF deposits	11,073,097	10,428,045
Other	656	596
Total	11,073,753	10,428,641

As at 31 December 2021, the IMF deposits amounted to RON 11,073,097 thousand – the equivalent of SDR 1,811,404 thousand (31 December 2020: RON 10,428,045 thousand – SDR 1,811,404 thousand). The Bank acts as a depository for the deposits of the IMF related to the Romania's participation quota.

22. Counterpart of special drawing rights allocated by the IMF

This item includes SDR allocations bearing the same interest rate as the SDR current account with the IMF. As at 31 December 2021, the SDR allocations from the IMF amounted to RON 16,632,922 thousand – the equivalent of SDR 2,720,913 thousand (31 December 2020: RON 5,669,196 thousand – the equivalent of SDR 984,768 thousand) with an annual interest rate of 0.077% as at end of 2021 and respectively 0.08% as at end of 2020.

23. Due to domestic credit institutions and other financial institutions at NBR

As at 31 December 2021, the current accounts of credit institutions and other financial institutions held at the NBR amounted to RON 56,090,074 thousand (31 December 2020: RON 48,693,048 thousand). The main components are presented below.

As at 31 December 2021, the Bank has in its records RON current accounts of credit institutions (including RON minimum reserves) amounting to RON 34,061,193 thousand (31 December 2020: RON 32,230,804 thousand) – accounts through which it performs the irrevocable and unconditional final settlement of funds' transfers. The Bank establishes the regime of the minimum reserves that credit institutions shall maintain in these accounts.

As at 31 December 2021, the foreign currency minimum reserves of credit institutions amounted to RON 13,650,992 thousand representing EUR 2,753,047 thousand and USD 6,552 thousand (31 December 2020: RON 9,022,770 thousand representing EUR 1,848,068 thousand and USD 5,998 thousand).

On 4 July 2011, the Bank implemented in Romania the system TARGET2 representing a channel for processing the euro interbank payments performed by the banks on their own behalf or on behalf of their customers. As at 31 December 2021, the Bank has in its records TARGET2 current accounts of credit institutions amounting to RON 7,374,757 thousand, representing EUR 1,490,422 thousand (31 December 2020: RON 7,011,215 thousand representing EUR 1,439,852 thousand).

24. Current account of the State Treasury

	lei thousand	
	31 December 2021	31 December 2020
Current account of the State Treasury:		
– in RON	436,876	11,186
– in foreign currencies	31,756,625	40,307,459
Total	32,193,501	40,318,645

In 2021 and 2020, the current account of the State Treasury denominated in RON has borne the same interest rates as the RON minimum required reserves of the credit institutions. The current accounts of the State Treasury denominated in EUR have borne the daily EONIA² interest rate and the current account of the State Treasury denominated in USD have borne an interest rate equal with the FED funds rate³.

25. Accrued interest payable

	lei thousand	
	31 December 2021	31 December 2020
Accrued interest payable for:		
Deposits taken, SDR allocations and other items	28,847	23,503
Current accounts of credit institutions	939	675
Current account of the State Treasury	46	4
Total	29,832	24,182

² EONIA is Euro OverNight Index Average (a volume-weighted rate of ECB).

³ The Federal Funds OverNight Average rate (a volume-weighted average of FED).

26. Transactions with related parties

The Romanian Government, through the State Treasury, maintains current accounts with the Bank, the operations being subject to commission fees starting 31 December 2005. Furthermore, the Bank acts as a registry agent on behalf of the State Treasury for the government bonds and treasury certificates, manages the foreign currency reserves and facilitates the payments and receipts for Romania's foreign public debt.

Through the members appointed to the Boards of Directors, the Bank exercises significant influence over two other State institutions: the NBR Printing Works (its Board consisting of 5 members of which 2 appointed by NBR) and the State Mint (its Board consisting of 3 members of which 1 appointed by NBR).

In 2021, the total purchases of banknotes, coins and other specific purchases from the aforementioned two entities amounted to RON 174,132 thousand (2020: RON 152,906 thousand). As at 31 December 2021, the Bank had receivables with the NBR Printing Works amounting to RON 42,877 thousand and with the State Mint amounting to RON 2,164 thousand, as well as a debt with the NBR Printing Works amounting to RON 1,164 thousand, which were subsequently settled according to the contract. As at 31 December 2020, the Bank had no debts or receivables with the State Mint; the Bank had receivables amounting to RON 32,125 thousand with the NBR Printing Works, which were subsequently settled according to the contract. All transactions with these two entities were carried out under normal commercial terms and conditions.

The Bank has a significant influence over TRANSFOND S.A., an entity in charge with the settlement activities of some domestic interbank operations, created in 2000. Until 19th March 2018, TRANSFOND S.A. administrated REGIS⁴ and SaFIR⁵ systems – taken over by the Bank from this date. Currently, TRANSFOND S.A. continues to administrate the SENT⁶ system.

27. Reserves

	lei thousand	
	31 December 2021	31 December 2020
Statutory reserves	1,019,050	776,044
Other reserves	1,234,770	1,111,883
Revaluation gains – fixed assets and other assets	1,240,119	1,170,908
Total	3,493,939	3,058,835

⁴ REGIS is the gross real-time settlement system.

⁵ SaFIR is the module for treasury bills and certificates of deposit issued by the National Bank of Romania.

⁶ SENT is the system for low value payments.

As at both 31 December 2021 and 31 December 2020, the statutory reserves were increased by 60% distribution of the remaining profit, after paying the quota to the State. Other reserves are non-distributable and comprise:

- (i) Reserves set up from the fund designated for tangible assets (both 31 December 2021 and 31 December 2020: RON 14,450 thousand);
- (ii) Reserves set up from the fund designated for the sources financing the Bank's investments (both 31 December 2021 and 31 December 2020: RON 57,629 thousand);
- (iii) Reserves set up from the fund designated for IMF participations (31 December 2021 and 31 December 2020: RON 318,532 thousand);
- (iv) Reserves set up from the previous BIS participations fund (both 31 December 2021 and 31 December 2020: RON 44,550 thousand);
- (v) Reserves set up according to the law, representing the Bank's own financing sources for investments – amounting to RON 639,445 thousand as at 31 December 2021 (31 December 2020: RON 517,358 thousand);
- (vi) Other reserves amounting to RON 160,164 thousand as at 31 December 2021 (31 December 2020: RON 159,364 thousand).

The revaluation gains represent the difference between the fair value and the net book value of tangible fixed assets, except for those booked in the profit and loss account.

28. Special revaluation account

	lei thousand	
	31 December 2021	31 December 2020
Unrealized gains from revaluation of gold holdings, precious metals and stones	22,506,288	21,014,029
Unrealized gains from revaluation of assets and liabilities denominated in foreign currency	6,525,602	1,589,767
Securities denominated in foreign currency (market value revaluation)	25,352	333,264
Total	29,057,242	22,937,060

As at 31 December 2021 and 31 December 2020, the amounts recorded in the special revaluation account represent favorable revaluation differences.

During 2021 and 2020, the Bank, recorded long positions for all currencies in portfolio as well as for gold (total claims exceeding total debts in a given currency).

29. Interest income

	lei thousand	
	2021	2020
Foreign currency operations		
Interest and similar income from:		
Foreign currency securities	-	97,165
Foreign currency placements,	300,165	262,483
out of which:		
negative interest for the Treasury current account	175,435	137,328
Current account in SDR	5,176	11,786
Total interest income from foreign currency operations	305,341	371,434
RON operations		
Interest and similar income from:		
Securities in RON held for monetary policy purposes	176,341	111,970
Loans to domestic credit institutions	19,049	79,292
Other income	7,134	19,237
Total interest income from RON operations	202,524	210,499
Total interest income	507,865	581,933

In 2021, the interest income from foreign currency operations comprises, mainly, interest from foreign currency placements in amount of RON 300,165 thousand and interest from the current account in SDR in amount of RON 5,176 thousand.

In 2020, the interest income from foreign currency operations comprises, mainly, the net income from foreign currency securities in amount of RON 97,165 thousand – representing the sum of coupon income in amount of RON 1,392,136 thousand and discount amortization income in amount of RON 119,063 thousand minus premium amortization expenses in amount of RON 1,414,034 thousand, the interest on foreign currency placements in amount of RON 262,483 thousand and the interest for the SDR current account in amount of RON 11,786 thousand.

In 2021, the interest income from transactions denominated in RON comprises mainly the net income resulting from RON securities held for monetary policy purposes in amount of RON 176,341 thousand (2020: RON 111,970 thousand) – representing the sum of coupon income in amount of RON 201,414 thousand (2020: RON 124,939 thousand) and discount amortization income in amount of RON 4,109 thousand (2020: RON 3,623 thousand) minus premium amortization expenses in amount of RON 29,182 thousand (2020: RON 16,592 thousand), the income from repo/loans operations with credit institutions in amount of RON 19,049 thousand (2020: RON 79,292 thousand), as well as other income in amount of RON 7,134 thousand (2020: RON 19,237 thousand).

30. Interest expense

	lei thousand	
	2021	2020
Foreign currency operations		
Interest and similar expenses from:		
Foreign currency securities, minimum reserves, deposits taken and other interest	378,214	159,849
Operations with International Monetary Fund	5,142	11,740
Total interest expense from foreign currency operations	383,356	171,589
RON operations		
Interest and similar expenses from:		
Deposits of credit institutions	39,765	27,925
Minimum reserves of credit institutions	23,545	29,592
Current account of the State Treasury	3,356	3,611
Total interest expense from RON operations	66,666	61,128
Total interest expense	450,022	232,717

In 2021, the interest expense from foreign currency operations comprises mainly the net interest expense resulting from foreign currency securities in amount of RON 227,132 thousand (2020: see Note 29) – representing the difference between premium amortization expense in amount of RON 1,227,008 thousand (2020: RON 1,414,034 thousand) minus coupon income in amount of RON 945,688 thousand (2020: RON 1,392,136 thousand) and discount amortization in amount of RON: 54,188 (2020: RON 119,063 thousand), the negative interest applied to deposits placed amounting to RON 129,268 thousand (2020: RON 92,797 thousand), the interest paid on foreign currency minimum reserves and the deposits taken in amount of RON 21,814 thousand (2020: RON 67,052 thousand) and the interest expense for the IMF SDR allocations in amount of RON 5,142 thousand (2020: RON 11,740 thousand).

31. Fees and commissions income

	lei thousand	
	2021	2020
Fees and commissions income:		
– in RON	131,518	150,170
– in foreign currencies	82,238	27,010
Total fees and commissions income	213,756	177,180

Fees and commissions income in RON in amount of RON 131,518 thousand (2020: RON 150,170 thousand) comprises the commission income from the settlement of operations of credit institutions and of the State Treasury.

The income from fees and commissions in foreign currencies amounting to RON 82,238 thousand (2020: RON 27,010 thousand) arises from the redistribution of the commissions for the Trans-European Automated Real-Time Gross Settlement Express Transfer System (TARGET2) in EUR, securities lending (through an agent) and from IMF operations.

32. Fees and commissions expense

	lei thousand	
	2021	2020
Fees and commissions expenses:		
– in RON	-	-
– in foreign currencies	14,369	15,044
Total fees and commissions expense	14,369	15,044

The expenses with fees and commissions denominated in foreign currencies, in amount of RON 14,369 thousand (2020: RON 15,044 thousand), represent mainly the fees paid for the EUR operations performed through TARGET2 and the commissions paid for securities lending (through an agent).

33. Net realized gains arising from foreign currencies operations

	lei thousand	
	2021	2020
Income from foreign currency operations		
Income from exchange rate differences	2,744,334	2,171,395
Dividends on BIS shares	26,733	165
Total income from foreign currency operations	2,771,067	2,171,560
Expenses from foreign currency operations		
Expenses from exchange rate differences	(3,583)	(10,151)
Other expenses from foreign currency operations	(2,291)	(2,265)
Total expenses from foreign currency operations	(5,874)	(12,416)
Net realized gains from foreign currency operations	2,765,193	2,159,144

In 2021 and 2020, the income and expenses from exchange rate differences were mainly generated by the outflows from foreign currencies long positions, calculated using the average cost method (see Note 2i).

34. Net realized gains arising from securities operations

	lei thousand	
	2021	2020
Income from securities operations	164,322	373,934
Expenses from securities operations	(608)	(259)
Net realized gains arising from securities operations	163,714	373,675

The income/expenses represent the market price effect resulting from the sales of securities denominated in foreign currencies, based on the average cost method (see Note 2j).

35. Realized losses arising from precious metals operations

	lei thousand	
	2021	2020
Expenses from operations with precious metals	(362)	(334)
Realized losses arising from precious metals operations	(362)	(334)

Expenses from operations with precious metals represent the fees paid for depositing the gold with the foreign depository.

36. Unrealized losses from revaluation differences

	lei thousand	
	2021	2020
Expenses with unfavorable revaluation differences		
Market value revaluation of foreign currency securities	461,124	34,615
Exchange rate revaluation of foreign currency holdings	-	290,188
Unrealized losses from revaluation differences	461,124	324,803

Unrealized losses represent the unfavorable differences between the market value of foreign currency securities as at 31 December and their net average cost, as well as the unfavorable differences from foreign currency holdings revaluation using the revaluation exchange rate (Note 2p).

37. Currency issue expenses

Currency issue expenses include the expenses arising on printing banknotes and minting coins. As at 31 December 2021, these amounted to RON 159,010 thousand (2020: RON 153,318 thousand).

38. Foreign currency risk

The breakdown of the Bank's assets (RON thousand) by currencies as at 31 December 2021 is the following:

	lei thousand						
	RON	EUR	USD	SDR	Gold	Other	Total
Cash and other cash equivalents	42,675	104	85	-	-	-	42,864
Non-monetary gold	-	-	-	-	260,995	-	260,995
Other precious metals and stones	56,186	-	-	-	-	-	56,186
Current account in SDR with the IMF	-	-	-	16,750,285	-	-	16,750,285
Monetary gold	-	-	-	-	26,475,540	-	26,475,540
Demand deposits placed	-	46,573,947	32,191	-	-	8,276,303	54,882,441
Term deposits placed	-	-	15,297,450	-	-	2,560,864	17,858,314
Placements in foreign currencies	-	-	2,619,321	-	-	-	2,619,321
Securities in foreign currencies	-	64,541,198	26,025,487	-	-	15,242,645	105,809,330
Loans in foreign currencies	-	-	2,066,904	-	-	-	2,066,904
Participating interests in international financial institutions	-	56,822	-	11,181,338	-	-	11,238,160
Other foreign assets TARGET2	-	7,374,756	-	-	-	-	7,374,756
RON securities held for monetary policy purposes	4,540,586	-	-	-	-	-	4,540,586
Loans to domestic credit institutions	6,501,000	-	-	-	-	-	6,501,000
Loans under litigation	23,587	-	-	-	-	-	23,587
Provisions for credit risk – principal	(23,587)	-	-	-	-	-	(23,587)
Loans to employees	3	-	-	-	-	-	3
Tangible and intangible fixed assets	1,230,440	-	-	-	-	-	1,230,440
Inventories	4,887	-	-	-	-	-	4,887
Participating interests	2,240	471	-	-	-	-	2,711
Accruals and prepaid expenses	61,657	-	-	-	-	-	61,657
Revaluation differences for off-B/S sheet accounts	712	-	-	-	-	-	712
Other assets,	98,300	-	-	-	-	-	98,300
of which:							
<i>Goods of numismatic, philatelic, historical, cultural and artistic importance</i>	24,943	-	-	-	-	-	24,943
Provisions for doubtful assets	(70,489)	-	-	-	-	-	(70,489)
Accrued interest receivables	116,794	139,696	41,414	1,532	-	121,184	420,620
Provisions for credit risk – interest	(6,068)	-	-	-	-	-	(6,068)
Total assets	12,578,923	118,686,994	46,082,852	27,933,155	26,736,535	26,200,996	258,219,455

38. Foreign currency risk (continued)

The breakdown of the Bank's liabilities and equity (RON thousand) by currency as at 31 December 2021 is the following:

	lei thousand						
	RON	EUR	USD	SDR	Gold	Other	Total
Currency in circulation	109,212,240	-	-	-	-	-	109,212,240
Due to international financial institutions	-	-	656	11,073,097	-	-	11,073,753
Demand deposits taken	-	2,556	-	-	-	-	2,556
Counterpart of special drawing rights allocated by the IMF	-	-	-	16,632,922	-	-	16,632,922
Current accounts of the domestic credit institutions	34,061,193	-	-	-	-	-	34,061,193
Amounts withheld under special arrangements	4,517	164	-	-	-	-	4,681
Deposits of the domestic credit institutions	998,000	-	-	-	-	-	998,000
Foreign currency minimum reserves	-	13,622,354	28,638	-	-	-	13,650,992
Accounts of bankrupt credit institutions	451	-	-	-	-	-	451
Other liabilities of credit institutions TARGET2	-	7,374,757	-	-	-	-	7,374,757
Current account of the State Treasury	436,876	30,889,925	822,510	-	-	44,190	32,193,501
Sundry creditors	32,244	-	-	-	-	-	32,244
Salaries and other employees related liabilities	83	-	-	-	-	-	83
Settlement account with the State Budget	196,308	-	-	-	-	-	196,308
Accruals and income collected in advance	682	-	-	-	-	-	682
Revaluation differences for off-BS accounts	-	-	-	-	-	-	-
Other liabilities	12,075	-	-	-	-	-	12,075
Accrued interest payables	800	27,495	14	1,523	-	-	29,832
Total liabilities, excluding capital and reserves	144,955,469	51,917,251	851,818	27,707,542	-	44,190	225,476,270
Net assets / (net liabilities)*	(132,376,546)	66,769,743	45,231,034	225,613	26,736,535	26,156,806	32,743,185

*) represent the Bank's capital and reserves

38. Foreign currency risk (continued)

The breakdown of the Bank's assets (RON thousand) by currencies as at 31 December 2020 is the following:

	lei thousand						
	RON	EUR	USD	SDR	Gold	Other	Total
Cash and other cash equivalents	39,335	176	77	-	-	-	39,588
Non-monetary gold	-	-	-	-	246,528	-	246,528
Other precious metals and stones	57,250	-	-	-	-	-	57,250
Current account in SDR with the IMF	-	-	-	5,676,325	-	-	5,676,325
Monetary gold	-	-	-	-	24,996,964	-	24,996,964
Demand deposits placed	-	29,236,399	4,259	-	-	4,553,694	33,794,352
Term deposits placed	-	-	5,750,700	-	-	4,853,286	10,603,986
Placements in foreign currencies	-	-	2,381,448	-	-	-	2,381,448
Securities in foreign currencies	-	74,303,204	37,934,708	-	-	15,263,921	127,501,833
Loans in foreign currencies	-	-	1,548,722	-	-	-	1,548,722
Participating interests in international financial institutions	-	55,918	-	10,529,476	-	-	10,585,394
Other foreign assets TARGET2	-	7,011,215	-	-	-	-	7,011,215
RON securities held for monetary policy purposes	4,863,539	-	-	-	-	-	4,863,539
Loans to domestic credit institutions	480,000	-	-	-	-	-	480,000
Loans under litigation	23,587	-	-	-	-	-	23,587
Provisions for credit risk – principal	(23,587)	-	-	-	-	-	(23,587)
Loans to employees	4	-	-	-	-	-	4
Tangible and intangible fixed assets	1,198,813	-	-	-	-	-	1,198,813
Inventories	3,838	-	-	-	-	-	3,838
Participating interests	2,240	89	-	-	-	-	2,329
Settlement accounts with the State Budget	85,614	-	-	-	-	-	85,614
Accruals and prepaid expenses	43,561	-	-	-	-	-	43,561
Revaluation differences for off-BS sheet accounts	1,035	-	-	-	-	-	1,035
Other assets,	90,101	-	-	-	-	-	90,101
of which:							
Goods of numismatic, philatelic, historical, cultural and artistic importance	22,741	-	-	-	-	-	22,741
Provisions for doubtful assets	(66,562)	-	-	-	-	-	(66,562)
Accrued interest receivables	117,936	360,634	62,317	983	-	112,402	654,272
Provisions for credit risk – interest	(6,068)	-	-	-	-	-	(6,068)
Total assets	6,910,636	110,967,635	47,682,231	16,206,784	25,243,492	24,783,303	231,794,081

38. Foreign currency risk (continued)

The breakdown of the Bank's liabilities and equity (RON thousand) by currencies as at 31 December 2020 is the following:

	lei thousand						
	RON	EUR	USD	SDR	Gold	Other	Total
Currency in circulation	100,402,602	-	-	-	-	-	100,402,602
Due to international financial institutions	-	-	596	10,428,045	-	-	10,428,641
Demand deposits taken	-	10,827	-	-	-	-	10,827
Counterpart of special drawing rights allocated by the IMF	-	-	-	5,669,196	-	-	5,669,196
Current accounts of the domestic credit institutions	32,230,804	-	-	-	-	-	32,230,804
Amounts withheld under special arrangements	4,552	161	-	-	-	-	4,713
Deposits of the domestic credit institutions	419,000	-	-	-	-	-	419,000
Foreign currency minimum reserves	-	8,998,984	23,786	-	-	-	9,022,770
Accounts of bankrupt credit institutions	4,546	-	-	-	-	-	4,546
Other liabilities of credit institutions – TARGET2	-	7,011,215	-	-	-	-	7,011,215
Current account of the State Treasury	11,186	39,518,817	744,925	-	-	43,717	40,318,645
Sundry creditors	27,262	-	-	-	-	-	27,262
Salaries and other employees related liabilities	74	-	-	-	-	-	74
Settlement account with the State Budget	11,870	-	-	-	-	-	11,870
Accruals and income collected in advance	585	-	-	-	-	-	585
Revaluation differences for off-BS accounts	-	-	-	-	-	-	-
Other liabilities	18,472	-	-	-	-	-	18,472
Accrued interest payables	512	22,595	96	979	-	-	24,182
Total liabilities, excluding capital and reserves	133,131,465	55,562,599	769,403	16,098,220	-	43,717	205,605,404
Net assets / (net liabilities)*)	(126,220,829)	55,405,036	46,912,828	108,564	25,243,492	24,739,586	26,188,677

*) represent the Bank's capital and reserves

39. Commitments

As at 31 December 2021 the Bank has in custody the following promissory notes:

- a promissory note issued by the Ministry of Public Finances in favor of the Multilateral Investment Guarantee Agency amounting to USD 601 thousand – the equivalent of RON 2,625 thousand (31 December 2020: USD 601 thousand – the equivalent of RON 2,384 thousand);
- three promissory notes issued by the Ministry of Public Finances in favor of the International Development Association (IDA) amounting to RON 16,174 thousand (31 December 2020: RON 16,174 thousand).

40. Profit distribution

In 2021, the Bank recorded a profit amounting to RON 2,015,195 thousand. According to the law, the 80% share of the Bank's net revenue amounting to RON 1,610,186 thousand was settled with the state budget. Of the remaining profit (RON 405,009 thousand), 60% (RON 243,005 thousand) was allocated for increasing the statutory reserves. The remaining amount of RON 162,004 thousand will be distributed in 2022, according to the law, in the following order for:

- a) the Bank's financing sources for its own investments;
- b) the employees profit-sharing scheme;
- c) the reserves at the Board's disposal.

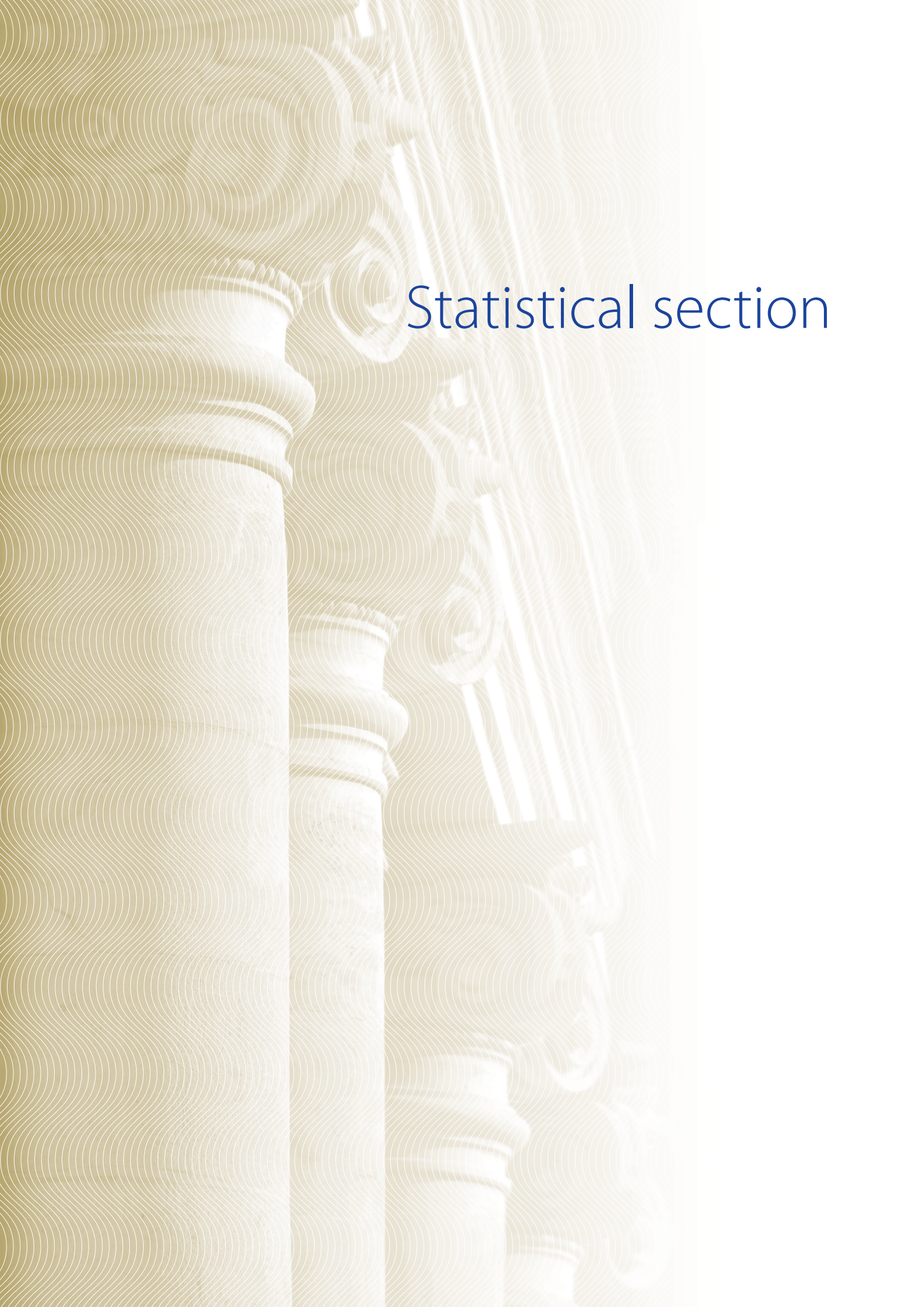
In 2020, the Bank recorded a profit amounting to RON 2,034,776 thousand. According to the law, the 80% share of the Bank's net revenue amounting to RON 1,627,821 thousand was settled with the state budget. Of the remaining profit (RON 406,955 thousand), 60% (RON 244,173 thousand) was allocated for increasing the statutory reserves. The remaining amount of RON 162,782 thousand was distributed in 2021 according to the law.

41. Subsequent events to the balance sheet date

The war between the Russian Federation and Ukraine, started on 24th February 2022, led to the enforcement on the international level of several international sanctions on the Russian Federation (and in some cases on the Republic of Belarus), targeting Russian owned companies as well as Russian individuals. These sanctions' effects are supposed to spread to several economic sectors.

The Bank has no exposure to the countries directly involved in the war; however, an indirect impact on the Bank's activities cannot be estimated accurately at this moment. The Bank will closely monitor the related developments and decide, if necessary, the application of additional measures.

Governor
Mr. Mugur Isărescu



Statistical section

		2017	2018	2019	2020	2021
Economic activity						
Gross domestic product ¹	lei million ²	857,896	951,729	1,058,973	1,058,926	1,181,918
	annual change (%) ³	7.3	4.5	4.2	-3.7	5.9
Final consumption, total ¹	annual change (%) ³	9.5	6.8	4.6	-3.6	6.1
Actual final consumption of households ¹	annual change (%) ³	10.8	6.8	4.2	-4.9	6.0
Actual final consumption of general government ¹	annual change (%) ³	-1.6	6.8	7.9	5.9	6.8
Gross capital formation ¹	annual change (%) ³	6.8	3.0	9.1	2.6	9.8
Exports of goods and services ¹	annual change (%) ³	7.8	5.3	5.4	-9.4	12.5
Imports of goods and services ¹	annual change (%) ³	11.5	8.6	8.6	-5.2	14.6
Agriculture ¹	annual change (%) ³	14.5	9.4	-5.0	-14.9	13.5
Industry ¹	annual change (%) ³	8.4	4.3	-1.3	-4.5	5.0
Construction ¹	annual change (%) ³	-8.0	-10.6	6.3	9.3	-1.7
Services ¹	annual change (%) ³	8.2	4.7	6.6	-3.6	-3.3
GDP/capita (PPS)		18,634	19,897	21,674	21,501	23,532
GDP/capita (PPS, EU-28=100)	percent	63.5	65.7	69.2	71.9	72.9
Industrial output	annual change (%) ³	7.8	3.5	-2.3	-9.2	7.1
Industrial output in manufacturing	annual change (%) ³	8.4	4.3	-1.9	-10.2	7.0
Employed persons	thousand	7,540	7,581	7,638	7,547	7,625
Number of unemployed	thousand	351	289	258	296	235
Unemployment rate	percent	4.0	3.3	2.9	3.4	2.7
Industrial producer prices and consumer prices						
Industrial producer prices (domestic and foreign markets)	annual change (%)	3.5	5.0	4.0	0.0	14.9
Industrial producer prices (domestic market)	annual change (%)	3.1	5.2	5.1	0.2	17.4
Industrial producer prices (foreign market)	annual change (%)	4.1	4.7	2.1	-0.3	10.7
GDP deflator ¹	annual change (%)	4.7	6.2	6.8	3.9	5.4
CPI	annual change (%)	1.34	4.63	3.83	2.63	5.05
Adjusted CORE2	annual change (%)	1.49	2.77	3.17	3.66	3.38
HICP	annual change (%)	1.1	4.1	3.9	2.3	4.1
General government						
General government revenues ⁴	percent of GDP	30.8	32.0	31.9	32.7	32.8
General government expenditures ⁴	percent of GDP	33.5	34.8	36.2	42.0	39.9
General government balance ⁴	percent of GDP	-2.6	-2.8	-4.3	-9.3	-7.1
General government primary balance ⁴	percent of GDP	-1.4	-1.8	-3.2	-8.0	-5.7
General government balance ⁵	percent of GDP	-2.8	-2.8	-4.6	-9.6	-6.8
Public debt ⁴	percent of GDP	35.1	34.7	35.3	47.2	48.8
Exchange rate calculated and released by the NBR						
EUR/RON	end of period	4.6597	4.6639	4.7793	4.8694	4.9481
	average ⁶	4.5681	4.6535	4.7452	4.8371	4.9204
USD/RON	enf of period	3.8915	4.0736	4.2608	3.9660	4.3707
	average ⁶	4.0525	3.9416	4.2379	4.2440	4.1604
International reserves						
International reserves, total	EUR million	37,106.7	36,800.2	37,450.4	42,517.6	45,830.7
gold	EUR million	3,612.2	3,735.5	4,523.8	5,138.3	5,355.4
foreign currency	EUR million	33,494.5	33,064.7	32,926.7	37,379.3	40,475.3

2021											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
x	x	228,053	x	x	275,105	x	x	321,425	x	x	357,335
x	x	-0.1	x	x	15.4	x	x	6.9	x	x	2.4
x	x	-0.4	x	x	9.2	x	x	6.6	x	x	8.3
x	x	0.4	x	x	10.8	x	x	8.3	x	x	4.6
x	x	-5.1	x	x	-0.5	x	x	-5.3	x	x	32.7
x	x	12.1	x	x	46.3	x	x	12.0	x	x	-12.9
x	x	-0.2	x	x	41.2	x	x	8.6	x	x	8.3
x	x	3.9	x	x	42.2	x	x	11.3	x	x	8.5
x	x	2.0	x	x	-3.1	x	x	24.3	x	x	-10.6
x	x	1.9	x	x	19.1	x	x	2.2	x	x	-2.2
x	x	1.1	x	x	7.6	x	x	-6.3	x	x	-3.1
x	x	-0.4	x	x	14.1	x	x	7.1	x	x	4.7
x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x
-1.5	-3.0	13.6	67.9	29.1	12.2	3.0	3.3	-4.0	-8.5	1.0	2.0
-2.1	-4.2	14.8	85.7	33.1	11.7	1.8	2.7	-5.2	-12.0	0.2	1.1
x	x	7,589	x	x	7,637	x	x	7,622	x	x	7,660
292	293	291	277	267	262	259	256	249	242	238	235
3.3	3.4	3.3	3.2	3.1	3.0	3.0	2.9	2.9	2.8	2.7	2.7
0.1	2.1	4.9	7.9	10.4	11.9	14.0	15.7	19.6	26.8	32.3	33.3
0.5	2.4	5.2	8.2	10.4	12.5	15.3	17.1	21.9	32.4	40.4	42.3
-0.6	1.6	4.3	7.4	10.3	10.8	11.6	13.4	15.8	17.5	18.3	17.8
x	x	4.4	x	x	5.2	x	x	5.3	x	x	6.3
2.99	3.16	3.05	3.24	3.75	3.94	4.95	5.25	6.29	7.94	7.80	8.19
3.13	3.10	2.85	2.91	2.91	2.88	3.00	3.17	3.64	3.97	4.35	4.68
2.0	2.5	2.5	2.7	3.2	3.5	3.8	4.0	5.2	6.5	6.7	6.7
x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x
4.8743	4.8745	4.9251	4.9247	4.9198	4.9267	4.9198	4.9348	4.9471	4.9489	4.9490	4.9481
4.8728	4.8741	4.8878	4.9221	4.9247	4.9236	4.9250	4.9229	4.9465	4.9481	4.9488	4.9489
4.0209	4.0209	4.1969	4.0621	4.0361	4.1425	4.1348	4.1741	4.2653	4.2471	4.3853	4.3707
4.0029	4.0289	4.1064	4.1188	4.0526	4.0864	4.1652	4.1823	4.2019	4.2662	4.3345	4.3789
42,558.9	39,992.6	40,496.7	43,185.7	42,780.9	41,757.2	44,129.8	46,730.3	46,187.0	44,984.1	44,587.5	45,830.7
5,105.1	4,852.9	4,787.6	4,881.4	5,210.6	4,926.4	5,121.5	5,113.6	4,971.1	5,140.7	5,304.5	5,355.4
37,453.8	35,139.7	35,709.2	38,304.3	37,570.3	36,830.7	39,008.3	41,616.8	41,215.9	39,843.4	39,283.0	40,475.3

		2017	2018	2019	2020	2021
NBR rates						
Monetary policy rate	percent per annum	1.75	2.50	2.50	1.50	1.75
Lending facility rate	percent per annum	2.75	3.50	3.50	2.00	2.50
Deposit facility rate	percent per annum	0.75	1.50	1.50	1.00	1.00
Interest rates applicable by credit institutions⁷						
Lei						
Interest rates on new loans	percent per annum	5.66	7.08	7.23	6.19	5.56
households	percent per annum	6.97	8.19	8.21	7.41	6.61
non-financial corporations	percent per annum	4.10	5.61	5.95	4.94	4.26
Interest rates on new time deposits	percent per annum	0.68	1.76	2.15	1.87	1.27
households	percent per annum	0.80	1.33	1.82	1.70	1.22
non-financial corporations	percent per annum	0.62	1.93	2.27	1.93	1.29
Euro						
Interest rates on new loans	percent per annum	2.84	2.60	2.71	2.79	2.44
households	percent per annum	4.20	3.82	4.10	4.17	3.38
non-financial corporations	percent per annum	2.80	2.52	2.67	2.73	2.42
Interest rates on new time deposits	percent per annum	0.29	0.24	0.18	0.10	0.06
households	percent per annum	0.30	0.27	0.19	0.08	0.05
non-financial corporations	percent per annum	0.25	0.14	0.13	0.17	0.12
Broad money (M3)⁷						
M3 (broad money)	lei million	325,766	362,046	395,629	449,934	522,041
	annual change (%)	11.1	11.2	9.3	13.7	16.0
	annual change (%) ³	9.6	6.3	5.2	10.8	10.5
	percent of GDP	40.8	40.0	39.9	46.0	47.8
M2 (intermediate money)	lei million	325,646	361,913	395,629	449,934	522,041
	annual change (%)	11.1	11.2	9.3	13.7	16.0
	annual change (%) ³	9.6	6.3	5.3	10.8	10.5
M1 (narrow money)	lei million	192,570	218,160	248,388	302,561	368,055
	annual change (%)	20.7	13.4	13.8	21.7	21.7
	annual change (%) ³	19.1	8.4	9.6	18.6	15.9
Cash in circulation	lei million	58,872	65,053	71,402	82,262	93,536
	annual change (%)	17.1	10.6	9.8	15.1	13.9
	annual change (%) ³	15.5	5.7	5.7	12.2	8.4
ON deposits	lei million	133,698	153,107	176,986	220,299	274,519
	annual change (%)	22.4	14.6	15.5	24.4	24.6
	annual change (%) ³	20.7	9.5	11.2	21.3	18.6

2021											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.75	1.75
1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.00	2.50	2.50
0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00	1.00
5.99	6.20	5.70	5.68	5.74	5.59	5.43	5.64	5.25	5.24	5.42	5.25
7.01	7.38	7.03	6.85	6.73	6.67	6.54	6.68	6.34	6.23	6.10	6.02
4.59	4.36	4.46	4.22	4.09	4.18	4.01	3.92	3.95	4.15	4.67	4.58
1.16	1.11	1.24	1.11	1.08	1.00	1.08	1.14	1.18	1.55	1.73	1.86
1.43	1.24	1.19	1.09	1.11	1.10	1.16	1.17	1.14	1.19	1.30	1.41
1.08	1.06	1.25	1.11	1.07	0.98	1.06	1.13	1.19	1.67	1.86	2.01
2.60	2.40	1.91	2.59	2.62	2.16	2.47	2.51	2.41	2.33	2.72	2.70
3.93	3.98	4.07	3.55	3.38	3.16	3.28	3.22	2.90	2.69	3.33	3.18
2.58	2.37	1.87	2.55	2.60	2.14	2.46	2.49	2.40	2.32	2.72	2.69
0.08	0.08	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.05	0.05
0.28	0.27	0.14	0.12	0.12	0.07	0.12	0.11	0.10	0.11	0.10	0.07
490,302	496,963	499,200	503,532	505,771	519,457	525,187	533,282	535,908	542,911	547,557	564,423
16.9	17.3	15.0	14.7	13.5	17.1	17.7	17.8	16.2	15.7	14.7	15.8
13.5	13.7	11.6	11.1	9.4	12.6	12.2	11.9	9.4	7.2	6.4	7.0
x	x	x	x	x	x	x	x	x	x	x	x
490,302	496,963	499,200	503,532	505,771	519,457	525,187	533,282	535,908	542,911	547,557	564,423
16.9	17.3	15.0	14.7	13.5	17.1	17.7	17.8	16.2	15.7	14.7	15.8
13.5	13.7	11.6	11.1	9.4	12.6	12.2	11.9	9.4	7.2	6.4	7.0
339,033	343,265	343,532	348,797	350,871	366,722	373,857	379,722	382,997	388,794	392,302	406,773
24.6	25.4	19.9	19.7	18.0	22.7	24.1	23.7	21.5	21.1	19.4	20.5
20.9	21.5	16.3	15.9	13.8	18.1	18.2	17.5	14.3	12.2	10.7	11.4
90,240	91,350	90,494	92,644	92,506	92,854	94,495	95,004	94,906	95,722	96,121	96,100
21.4	21.1	16.6	14.9	12.0	12.7	13.7	13.2	11.9	11.1	9.2	9.0
17.9	17.3	13.2	11.3	7.9	8.4	8.3	7.6	5.3	2.9	1.3	0.7
248,793	251,915	253,038	256,153	258,365	273,868	279,362	284,718	288,092	293,071	296,181	310,673
25.7	27.0	21.1	21.5	20.4	26.5	28.1	27.7	25.0	24.8	23.0	24.6
22.1	23.1	17.5	17.7	16.0	21.7	22.0	21.3	17.6	15.6	14.1	15.1

		2017	2018	2019	2020	2021
Breakdown of monetary financial institutions' deposits and loans⁷						
Deposits, total	lei million	282,190	312,607	342,216	388,120	444,384
	annual change (%)	9.7	10.8	9.5	13.4	14.5
	annual change (%) ³	8.2	5.9	5.4	10.5	9.0
Lei-denominated deposits	lei million	191,762	209,548	224,372	250,098	288,035
	annual change (%)	10.8	9.3	7.1	11.4	15.2
	annual change (%) ³	9.3	4.5	3.1	8.6	9.7
Foreign currency-denominated deposits	lei million	90,427	103,059	117,844	138,023	156,349
	annual change (%)	7.5	14.0	14.4	17.1	13.3
	annual change (%) ³	6.1	8.9	10.2	14.1	7.9
Household deposits, total	lei million	169,659	188,130	209,924	239,933	270,210
	annual change (%)	10.5	10.9	11.6	14.3	12.7
	annual change (%) ³	9.1	6.0	7.5	11.3	7.3
Household deposits, lei	lei million	107,068	115,069	124,454	140,275	158,131
	annual change (%)	10.8	7.5	8.2	12.7	12.8
	annual change (%) ³	9.4	2.7	4.2	9.8	7.4
	% of household deposits	63.1	61.2	59.3	58.5	58.5
Household deposits, fx	lei million	62,590	73,061	85,470	99,658	112,080
	annual change (%)	10.0	16.7	17.1	16.6	12.5
	annual change (%) ³	8.6	11.5	12.8	13.6	7.1
	% of household deposits	36.9	38.8	40.7	41.5	41.5
Deposits from non-financial corporations, total	lei million	96,767	106,355	114,146	130,807	155,419
	annual change (%)	10.5	10.0	7.3	14.6	18.9
	annual change (%) ³	9.1	5.1	3.3	11.6	13.1
Deposits from non-financial corporations, lei	lei million	72,871	81,350	87,285	97,270	116,149
	annual change (%)	13.3	11.8	7.2	11.4	19.5
	annual change (%) ³	11.8	6.8	3.3	8.6	13.8
	% of total	75.3	76.5	76.5	74.4	74.7
Deposits from non-financial corporations, fx	lei million	23,896	25,005	26,861	33,537	39,270
	annual change (%)	3.3	4.8	7.4	24.8	17.2
	annual change (%) ³	1.9	0.1	3.4	21.6	11.6
	% of total	24.7	23.5	23.5	25.6	25.3
Domestic credit, of which:	lei million	324,857	343,209	366,721	406,547	462,920
	annual change (%)	5.5	5.6	6.9	10.9	13.8
	annual change (%) ³	4.1	1.0	2.9	8.0	8.4
	percent of GDP	38.5	37.5	36.2	40.4	42.0
Loans to the private sector – total, of which:	lei million	227,445	242,499	260,941	274,196	303,653
	annual change (%)	4.7	6.6	7.6	5.1	10.7
	annual change (%) ³	3.3	1.9	3.6	2.4	5.4
	percent of GDP	27.1	26.4	25.3	26.7	27.4
Loans to the private sector, lei	lei million	136,742	156,943	173,401	186,642	215,642
	annual change (%)	15.2	14.8	10.5	7.7	15.5
	annual change (%) ³	13.7	9.8	6.5	4.9	9.9
	% of total ⁸	60.1	64.7	66.5	68.1	71.0
Loans to the private sector, fx	lei million	90,703	85,557	87,540	87,553	88,010
	annual change (%)	-7.9	-5.6	2.3	0.0	0.6
	annual change (%) ³	-9.2	-9.8	-1.4	-2.5	-4.3
	% of total ⁸	39.9	35.3	33.5	31.9	29.0
Loans to households, total	lei million	117,289	128,273	138,194	146,640	157,674
	annual change (%)	6.4	9.4	7.8	6.1	7.5
	annual change (%) ³	5.0	4.5	3.8	3.4	2.3
	% of total ⁸	51.6	52.9	53.0	53.5	51.9
Loans to non-financial corporations, total	lei million	104,132	107,587	115,109	119,200	136,115
	annual change (%)	2.2	3.3	7.0	3.6	14.1
	annual change (%) ³	0.8	-1.3	3.1	0.9	8.6
	% of total ⁸	45.8	44.4	44.1	43.5	44.8

2021											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
421,976	427,649	430,901	433,340	435,904	438,084	442,334	449,907	452,453	458,291	462,463	479,303
15.8	16.4	14.7	14.5	13.7	14.7	15.3	15.5	13.9	13.4	12.7	13.9
12.4	12.8	11.3	10.9	9.5	10.3	9.9	9.7	7.2	5.1	4.6	5.3
274,864	277,941	280,106	282,466	283,768	284,807	286,137	291,693	291,279	294,303	297,614	311,440
15.4	16.2	17.1	17.1	15.4	16.4	16.4	16.1	13.8	12.6	12.6	13.5
12.1	12.6	13.6	13.5	11.3	12.0	10.9	10.3	7.1	4.3	4.4	4.9
147,112	149,709	150,795	150,873	152,136	153,277	156,197	158,214	161,175	163,988	164,849	167,863
16.3	16.7	10.5	9.9	10.5	11.5	13.3	14.2	14.1	14.8	13.0	14.7
13.0	13.2	7.2	6.4	6.5	7.2	8.0	8.5	7.4	6.4	4.8	6.0
259,959	262,463	264,570	266,518	266,568	268,501	270,553	271,489	273,089	277,157	277,788	283,869
16.4	15.7	14.6	12.5	11.8	12.1	12.7	12.7	11.9	11.0	10.2	10.6
13.0	12.2	11.2	9.0	7.7	7.9	7.4	7.1	5.3	2.8	2.2	2.2
153,294	154,811	155,295	157,099	156,879	157,751	158,738	158,345	158,187	161,119	161,026	165,024
16.5	15.9	16.4	13.9	12.8	12.9	13.1	12.6	11.4	10.3	9.2	9.0
13.1	12.3	13.0	10.3	8.7	8.7	7.8	7.0	4.8	2.2	1.3	0.7
59.0	59.0	58.7	58.9	58.9	58.8	58.7	58.3	57.9	58.1	58.0	58.1
106,666	107,652	109,275	109,418	109,688	110,750	111,816	113,144	114,901	116,037	116,762	118,845
16.2	15.5	12.1	10.6	10.3	11.0	12.2	12.9	12.7	11.9	11.7	12.9
12.8	12.0	8.8	7.2	6.3	6.8	6.9	7.3	6.0	3.7	3.6	4.4
41.0	41.0	41.3	41.1	41.1	41.2	41.3	41.7	42.1	41.9	42.0	41.9
145,214	146,967	148,807	149,081	152,122	150,795	153,181	159,080	159,265	160,728	164,449	175,336
17.0	20.5	16.7	20.6	19.6	20.1	21.2	20.6	16.9	16.7	17.3	19.0
13.7	16.8	13.3	16.9	15.2	15.6	15.5	14.6	10.0	8.1	8.8	10.0
109,372	110,105	111,912	112,243	114,450	113,046	113,559	119,094	118,248	118,407	121,760	131,590
15.4	19.2	20.0	24.5	22.1	22.7	22.2	21.2	16.3	14.9	16.6	19.0
12.0	15.5	16.5	20.6	17.7	18.0	16.5	15.2	9.4	6.5	8.1	10.0
75.3	74.9	75.2	75.3	75.2	75.0	74.1	74.9	74.2	73.7	74.0	75.1
35,841	36,863	36,896	36,837	37,672	37,749	39,623	39,987	41,017	42,321	42,689	43,746
22.5	24.6	7.7	10.2	12.4	13.2	18.5	18.6	18.8	21.8	19.3	18.8
18.9	20.7	4.5	6.8	8.3	8.9	12.9	12.7	11.8	12.8	10.7	9.8
24.7	25.1	24.8	24.7	24.8	25.0	25.9	25.1	25.8	26.3	26.0	24.9
434,436	440,992	444,967	451,735	457,149	459,744	466,248	470,125	477,245	475,078	480,420	496,902
11.7	14.3	11.6	12.6	12.8	14.5	14.9	14.5	15.9	13.6	13.6	16.1
8.4	10.8	8.3	9.1	8.7	10.2	9.5	8.8	9.0	5.3	5.4	7.3
x	x	x	x	x	x	x	x	x	x	x	x
283,530	285,543	290,569	293,559	296,269	300,322	306,590	309,691	314,570	316,945	321,981	324,265
5.1	5.3	6.6	8.3	10.1	11.2	12.6	12.8	13.4	13.5	14.6	14.8
2.1	2.1	3.5	4.9	6.1	7.0	7.3	7.2	6.7	5.2	6.3	6.1
x	x	x	x	x	x	x	x	x	x	x	x
197,338	199,636	203,740	206,429	209,139	213,604	217,871	220,725	225,289	227,343	231,718	234,877
8.8	9.9	11.3	13.5	15.4	16.6	17.4	17.5	18.4	18.0	19.0	19.6
5.6	6.5	8.0	9.9	11.3	12.2	11.9	11.6	11.4	9.4	10.4	10.6
69.6	69.9	70.1	70.3	70.6	71.1	71.1	71.3	71.6	71.7	72.0	72.4
86,192	85,907	86,829	87,130	87,130	86,718	88,719	88,966	89,281	89,601	90,263	89,388
-2.3	-3.9	-3.0	-2.3	-1.0	-0.3	2.5	2.7	2.3	3.5	4.7	3.9
-5.2	-6.9	-5.9	-5.4	-4.6	-4.0	-2.3	-2.5	-3.7	-4.1	-2.9	-4.0
30.4	30.1	29.9	29.7	29.4	28.9	28.9	28.7	28.4	28.3	28.0	27.6
150,083	150,607	152,287	153,571	155,099	156,902	159,020	160,853	162,306	163,093	163,897	164,373
4.7	4.3	4.9	6.0	7.1	7.8	8.4	9.0	9.2	9.4	9.5	9.7
1.7	1.1	1.8	2.7	3.2	3.8	3.3	3.6	2.8	1.3	1.6	1.4
52.9	52.7	52.4	52.3	52.4	52.2	51.9	51.9	51.6	51.5	50.9	50.7
124,826	126,216	129,521	130,795	131,803	133,458	137,313	138,592	141,735	143,293	147,303	148,528
6.0	6.7	9.5	11.7	13.3	14.7	17.0	16.7	17.5	17.3	19.4	19.8
2.9	3.5	6.2	8.2	9.2	10.3	11.5	10.9	10.6	8.6	10.8	10.7
44.0	44.2	44.6	44.6	44.5	44.4	44.8	44.8	45.1	45.2	45.7	45.8

		2017	2018	2019	2020	2021
Banking system – key prudential indicators						
Total capital ratio (previously solvency ratio)	percent	20.0	20.7	22.0	25.1	23.3
Tier 1 capital ratio	percent	18.0	18.6	20.0	23.2	20.9
Common Equity Tier 1 capital ratio	percent	18.0	18.6	19.9	23.1	20.8
Leverage ratio	percent	8.9	9.3	10.2	10.3	8.6
Non-performing loan ratio (EBA definition)	percent	6.4	5.0	4.1	3.8	3.4
Immediate liquidity	percent	40.0	38.9	43.8	48.2	47.2
ROA	percent	1.3	1.6	1.3	1.0	1.4
ROE	percent	12.5	14.6	12.2	8.7	13.3
Balance of payments^{1,9}						
Current account, balance	EUR million	-5,819	-9,496	-10,905	-10,902	-16,754
	percent of GDP	-3.1	-4.6	-4.9	-5.0	-7.0
Balance on trade in goods	EUR million	-12,807	-15,341	-17,852	-18,949	-23,159
	percent of GDP	-6.8	-7.5	-8.0	-8.7	-9.6
Balance on trade in services	EUR million	8,187	8,361	8,651	9,439	9,541
	percent of GDP	4.4	4.1	3.9	4.3	4.0
Capital account balance	EUR million	2,218	2,515	2,850	4,178	5,243
Financial account, net	EUR million	-3,120	-5,149	-5,134	-7,808	-12,976
External debt⁹						
External debt, total	EUR million	97,445	99,841	109,783	126,750	134,617
	percent of GDP	51.9	48.8	49.2	57.9	56.0
Long-term external debt, <i>of which</i> :	EUR million	68,520	68,286	74,319	93,484	97,166
	percent of GDP	36.5	33.4	33.3	42.7	40.5
Direct public debt	EUR million	33,118	34,498	39,192	57,251	58,092
	percent of GDP	17.6	16.9	17.6	26.2	24.2
Publicly guaranteed debt	EUR million	432	351	285	224	163
	percent of GDP	0.2	0.2	0.1	0.1	0.1
Private non-guaranteed debt	EUR million	31,331	30,808	33,209	34,706	34,880
	percent of GDP	16.7	15.1	14.9	15.9	14.5
Long-term deposits of non-residents	EUR million	2,469	1,433	417	144	667
	percent of GDP	1.3	0.7	0.2	0.1	0.3
Loans from the IMF	EUR million	0	0	0	0	0
	percent of GDP	0.0	0.0	0.0	0.0	0.0
SDR allocations from the IMF	EUR million	1,171	1,196	1,216	1,160	3,365
	percent of GDP	0.6	0.6	0.5	0.5	1.4
Short-term external debt	EUR million	28,925	31,554	35,463	33,266	37,451
	percent of GDP	15.4	15.4	15.9	15.2	15.6

1) 2017-2019: final data; 2020 semi-final data; 2021: provisional data; 2) current prices; 3) real term; 4) ESA 2010 methodology; 5) national methodology; 6) annual figures based on monthly averages; monthly values are calculated as the average of the daily exchange rates calculated and published by the NBR; 7) annual figures are annual averages; 8) total loans to the private sector; 9) BPM6 methodology.

Source: National Bank of Romania, National Institute of Statistics, Ministry of Finance, Eurostat, European Commission, NBR calculations

2021											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
x	x	24.6	x	x	23.9	x	x	23.1	x	x	23.3
x	x	22.7	x	x	22.1	x	x	21.4	x	x	20.9
x	x	22.6	x	x	22.0	x	x	21.3	x	x	20.8
x	x	10.0	x	x	9.8	x	x	9.5	x	x	8.6
3.9	4.0	3.9	3.9	3.9	3.8	3.7	3.6	3.6	3.5	3.5	3.4
50.6	50.3	50.2	49.7	49.6	49.4	48.4	49.3	48.2	47.8	47.5	47.2
1.2	1.2	1.3	1.5	1.6	1.4	1.5	1.5	1.5	1.4	1.4	1.4
10.6	10.9	12.2	13.4	14.3	13.0	13.7	14.0	13.6	13.5	13.3	13.3
15	-1,442	-2,736	-4,114	-5,698	-7,203	-9,122	-10,444	-12,313	-13,871	-15,188	-16,754
x	x	-5.9	x	x	-7.0	x	x	-7.3	x	x	-7.0
-1,171	-2,959	-5,076	-6,720	-8,456	-10,261	-12,562	-14,355	-16,434	-18,758	-20,827	-23,159
x	x	-10.9	x	x	-10.0	x	x	-9.8	x	x	-9.6
707	1,332	2,141	2,825	3,472	4,266	5,031	5,754	6,604	7,612	8,596	9,541
x	x	4.6	x	x	4.2	x	x	3.9	x	x	4.0
55	113	501	963	1,163	1,258	1,433	1,801	2,238	2,590	2,820	5,243
-57	-1,737	-2,473	-3,488	-4,933	-7,257	-7,253	-7,855	-9,764	-11,290	-13,071	-12,976
125,394	123,616	123,651	126,975	126,984	128,964	131,985	135,211	133,856	132,634	133,237	134,617
x	x	x	x	x	x	x	x	x	x	x	x
91,457	90,947	91,032	92,334	92,192	94,023	95,931	99,049	98,335	96,438	96,501	97,166
x	x	x	x	x	x	x	x	x	x	x	x
57,699	56,001	54,737	57,865	57,575	57,583	60,251	60,777	59,720	57,576	57,619	58,092
x	x	x	x	x	x	x	x	x	x	x	x
215	213	209	208	208	191	191	184	179	179	175	163
x	x	x	x	x	x	x	x	x	x	x	x
32,251	33,458	34,760	33,006	33,067	34,885	34,010	34,544	34,830	35,032	34,993	34,880
x	x	x	x	x	x	x	x	x	x	x	x
122	105	137	87	177	183	297	268	297	346	343	667
x	x	x	x	x	x	x	x	x	x	x	x
0	0	0	0	0	0	0	0	0	0	0	0
x	x	x	x	x	x	x	x	x	x	x	x
1,170	1,170	1,190	1,168	1,167	1,181	1,183	3,277	3,309	3,305	3,371	3,365
x	x	x	x	x	x	x	x	x	x	x	x
33,937	32,669	32,619	34,641	34,791	34,942	36,053	36,162	35,521	36,196	36,736	37,451
x	x	x	x	x	x	x	x	x	x	x	x

Abbreviations

BIS	Bank for International Settlements
BRRD	Bank Recovery and Resolution Directive
CCR	Central Credit Register
CPI	Consumer Price Index
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
ECOFIN	Economic and Financial Affairs Council
EIB	European Investment Bank
ESA	European System of Accounts
ESCB	European System of Central Banks
ESRB	European Systemic Risk Board
EU	European Union
Eurostat	Statistical Office of the European Union
FAO	Food and Agriculture Organisation of the United Nations
FSA	Financial Supervisory Authority
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communications Technology
IFRS	International Financial Reporting Standards
ILO	International Labour Organisation
IMF	International Monetary Fund
IRCC	benchmark index for loans to consumers
IT&C	Information Technology and Communications
MF	Ministry of Finance
MRR	Minimum reserve requirements
NBFI	non-bank financial institution
NCMO	National Committee for Macroprudential Oversight
NIS	National Institute of Statistics
NPL	non-performing loans
OECD	Organisation for Economic Co-operation and Development
OPCOM	Romanian gas and electricity market operator
PIR	Payment Incidents Register
ROBOR	Romanian Interbank Offered Rate
SDR	Special Drawing Rights
SME	small- and medium-sized enterprise
TiVA	Trade in Value Added
ULC	unit labour costs
WB	World Bank

Tables

Box 3

Table A	Indicators monitored in order to identify (dis)inflationary pressures across the economy	48
---------	--	----

Box 4

Table A	Macroeconomic developments and monetary policy stance in advanced economies and in the region	82
Table 4.1	O-SII buffer calibration methodology	111
Table 4.2	Main indicators used by the CCR – credit institutions	130
Table 4.3	Main indicators used by the CCR – non-bank financial institutions and payment institutions	131
Table 6.1	Credit institutions by ownership	147
Table 6.2	Market share of credit institutions	148
Table 6.3	Credit institutions as a share in aggregate capital	149
Table 6.4	Key indicators of the banking system	151
Table 6.5	Net assets and own funds as at 31 December 2021	155
Table 6.6	Topics of thematic reviews	158
Table 6.7	Supervisory measures imposed pursuant to GEO No. 99/2006 on credit institutions, as subsequently amended and supplemented	159
Table 6.8	Sanctions imposed in 2021	159
Table 6.9	Number of persons in the category of those referred to in Article 108 of GEO No. 99/2006, subject to the NBR's approval in 2021	160
Table 6.10	Breakdown of NBFIs by activity as at 31 December 2021	161
Table 6.11	Key indicators of the NBFIs sector as at 31 December 2021	162
Table 6.12	Share/endowment capital by country of origin as at 31 December 2021	163
Table 8.1	The 2021 numismatic issues	186
Table 8.2	Monthly distribution of counterfeits	187
Table 8.3	Counterfeits by denomination	187
Table 9.1	Payments traffic in ReGIS	190
Table 9.2	Composition of payments in ReGIS in 2021	190
Table 9.3	Operations in government securities settled in SaFIR	192
Table 9.4	Payments traffic in TARGET2-România	194
Table 9.5	Geographical distribution of payments/receipts related to TARGET2-România in 2021	195

Table 11.1	Current account	213
Table 11.2	Financial account	215
Table 11.3	Key external indebtedness indicators	217
Table 11.4	Romania's external debt	218
Table 13.1	Maastricht criteria (nominal convergence indicators)	227
Table 13.2	Macroeconomic imbalance procedure scoreboard	240
Table 14.1	Events focusing on monetary, banking and financial issues, organised by the National Bank of Romania in 2021	254
Table 18.1	NBR balance sheet structure as at 31 December 2021	302
Table 18.2	Result of transactions conducted in 2021	304
Table 18.3	Revaluation differences as at 31 December 2021	304
Table 18.4	Budgeted income statement for 2021	305
Table 18.5	Equity	307
Table 18.6	Operating result	307

Charts

Chart 1.1	Global economic growth	17
Box 1		
Chart A	Trade patterns around global recessions: goods and services import volume	18
Chart B	Effects of COVID-19 lockdown policies on global value chains	19
Chart C	Shipping	20
Chart D	Euro area: contributions to industrial production fluctuations (A) and contributions to manufacturing PPI fluctuations (B)	22
Chart 1.2	Outlook for global economic growth	24
Chart 1.3	International prices of main commodities	25
Chart 1.4	Gold price and uncertainty	26
Chart 1.5	International consumer prices	26
Chart 1.6	Policy rate	27
Chart 1.7	Euro exchange rate	27
Chart 1.8	Demand	28
Chart 1.9	Household consumption	28
Chart 1.10	Trade and services to households	29
Chart 1.11	Direct investment and absorption of EU investment funds	29

Chart 1.12	Investment excluding construction	30
Chart 1.13	Construction activity	30
Chart 1.14	Foreign trade	31
Chart 1.15	Current account and main components	31
Box 2		
Chart A	Balance on goods and services	33
Chart B	Relationship between the pick-up in investment dynamics and presence on external markets	39
Chart 1.16	Public/private composition of the saving-investment balance	41
Chart 1.17	Reserve adequacy indicators	41
Chart 1.18	Evolution of the number of employees economy-wide	42
Chart 1.19	The Beveridge curve	43
Chart 1.20	Contribution of determinants to the dynamics of average gross wage economy-wide	44
Chart 1.21	Annual inflation rate	44
Chart 1.22	Contributions to the annual CPI inflation rate (December 2021)	45
Chart 1.23	Energy prices	45
Chart 1.24	Main components of the adjusted CORE2 inflation	46
Box 3		
Chart A	Heat map of inflationary pressures in the economy	48
Chart B	Adjusted CORE2 inflation rate* – breakdown by sub-component	50
Chart C	Succession of inflationary/disinflationary cycles for selected indicators	50
Chart 1.25	Expectations on price developments	51
Chart 1.26	Industrial producer prices on the domestic market and their determinants	52
Chart 1.27	Unit labour costs economy-wide	53
Chart 1.28	Unit wage costs in industry	53
Chart 1.29	General government deficit	54
Chart 1.30	Public debt-to-GDP ratio	55
Chart 1.31	Decomposition of the change in public debt-to-GDP ratio	56
Box 4		
Chart A	Annual inflation rate in the euro area, US and countries in the region	77
Chart B	Monetary policy rate in the euro area, US and countries in the region	81
Chart 3.1	Exchange rate developments on emerging markets in the region	87

Box 5

Chart A	Credit to the private sector	88
Chart B	New loans to households and non-financial corporations	89
Chart C	New loans to the private sector and the average lending rate on new business in lei	90
Chart D	Demand for loans	91
Chart E	Credit standards	91
Chart F	Broad money and GDP	92
Chart G	M3 and its counterparts	93
Chart H	Share of M1 in M3, international comparison	94
Chart 3.2	Inflation rate	96
Chart 3.3	NBR rates	98
Chart 3.4	MRR ratios	100
Chart 3.5	Policy rate and ROBOR rates	101
Chart 3.6	Bank rates	103
Chart 4.1	Maximum capital requirements for macroprudential policy instruments applicable in Romania	110

Box 6

Chart A	Financial intermediation in Romania	114
Chart 4.2	Private sector debt	116
Chart 4.3	Financial standing of companies after resorting to the loan repayment suspension facility (2020)	116
Chart 4.4	The debt service-to-income (DSTI) and non-performing loan ratio for loans to households	117
Chart 4.5	Dynamics of the main balance sheet items	119

Box 7

Chart A	Bank distribution by ratio of IT costs to total operating income – Romania versus EU	121
Chart 4.6	Evolution of risk-weighted assets	123

Box 8

Chart A	Share of loans under moratoria in total loans and advances (highest share, i.e. June 2021)	125
Chart 4.7	Breakdown of the banking sector profit as at December 2021	126
Chart 4.8	Main indicators of payment incidents, 2014-2021	133
Chart 6.1	Distribution of credit institutions subject to SREP by overall score	156
Chart 6.2	SREP elements by score assigned	157

Chart 8.1	Composition of currency outside banks in 2020 and 2021	181
Chart 8.2	Denomination composition of banknotes in circulation in 2021	182
Chart 8.3	Denomination composition of coins in circulation in 2021	182
Chart 8.4	Denomination composition of banknotes used for payments in 2021	183
Chart 8.5	Denomination composition of coins used for payments in 2021	184
Chart 8.6	Denomination composition of banknotes collected in 2021	185
Chart 8.7	Denomination composition of coins collected in 2021	185
Chart 9.1	Large-value or urgent payments in 2021 versus 2020 (daily average)	190
Chart 9.2	Volume and value of operations in government securities settled in SaFIR in 2021, the value of intraday repo transactions	192
Chart 9.3	Payments traffic in TARGET2-România in 2021	194
Chart 9.4	Fraud rate by payment instrument	200
Chart 9.5	The share of fraudulent remote card-based payment transactions	200
Chart 9.6	The share of fraudulent non-remote card-based transactions	201
Chart 9.7	The fraud rate for credit transfers payment transactions, by channel	201
Infographic	Statistical information on the main payment market developments in 2021	202
Chart 10.1	International reserves	206
Infographic	Variation bounds composition of foreign currency reserves	210
Chart 10.2	Composition of Romania's foreign exchange reserves at end-2021	210
Chart 10.3	Returns on portfolio management	211
Chart 10.4	Comparative returns – NBR vs benchmark portfolio	211
Infographic	NBR representation in international organisations	224
Chart 13.1	Inflation rate (HICP)	228
Chart 13.2	General government deficit (ESA 2010 methodology)	228
Chart 13.3	EUR/RON exchange rate	228
Chart 13.4	Long-term interest rates	228
Chart 13.5	GDP per capita in Romania	230
Chart 13.6	Share of economic sectors in GDP	230
Chart 13.7	Openness of the economy	230
Chart 13.8	Share of trade with the EU in total foreign trade	230
Chart 13.9	Current account deficit and financing through stable flows	231
Chart 13.10	Indirect financial intermediation	231

Box 9

Chart A	Share of RRF spending on climate and digitalisation objectives	233
Chart B	Developments in the budget deficit – historical data and outlook	235
Chart C	Potential revenue-boosting channels	236
Infographic	The putting into circulation of the lei 20 banknote	248
Chart 17.1	Vacancies in the NBR's head office as at 31 December 2021	293
Chart 17.2	Vacancies in the NBR's territorial units as at 31 December 2021	293
Chart 18.1	Foreign assets of the NBR at year-end	303

