

NATIONAL  
BANK OF  
ROMANIA

# Financial Stability Report

June 2024

Year IX (XIX), No. 16 (26)  
New series

Financial  
Stability Report  
June 2024

Year IX (XIX), No. 16 (26)  
New series

## NOTES

The *Financial Stability Report* was prepared by the Financial Stability Department under the coordination of First Deputy Governor Florin Georgescu.

The team would like to thank the colleagues in the Monetary Policy Department, Economics Department, Statistics Department, Macroeconomic Modelling and Forecasting Department, Supervision Department, Regulation and Licensing Department, International Relations Department, Bank Resolution Department, the Financial Market Infrastructures and Payments Oversight Department and Legal Department for their comments.

The *Report* was examined by the National Bank of Romania Board and approved in its meeting of 12 June 2024.

Factual information was updated based on data available by 30 May 2024.

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 1843-3251 (print)  
ISSN 1843-326X (online)

# Contents

OVERVIEW	5
<hr/>	
<b>1. INTERNATIONAL AND DOMESTIC ECONOMIC AND FINANCIAL ENVIRONMENT</b>	<b>15</b>
<hr/>	
1.1. International economic and financial developments	16
1.2. Domestic macroeconomic developments	20
1.3. Non-financial sector indebtedness	27
<b>2. REAL SECTOR</b>	<b>30</b>
<hr/>	
2.1. Non-financial corporations	31
2.1.1. Non-financial corporations' economic and financial performance	31
Box 1. The standard image and the model of successful companies in Romania	35
2.1.2. Financial discipline of non-financial corporations	37
Box 2. Foreign currency lending of non-financial corporations	40
2.2. Households	41
2.2.1. Households' balance sheet and saving behaviour	41
2.2.2. Households' capacity to service debt	45
Box 3. The role of the Alternative Banking Dispute Resolution Centre (ABDRC) in supporting financial stability	48
2.3. Real estate sector	50
2.3.1. Residential and commercial real estate markets	50
2.3.2. Risks generated by the residential real estate sector and real estate lending to households	54
2.3.3. Risks generated by the commercial real estate sector and mortgage-backed lending to non-financial corporations	57
<b>3. THE FINANCIAL SECTOR</b>	<b>59</b>
<hr/>	
3.1. Banking sector	62
3.1.1. Structural developments	62
3.1.2. Liquidity	64
Box 4. Digitalisation of the banking sector in Romania	65
3.1.3. Capital adequacy	68

3.1.4. Asset quality and credit risk	69
3.1.5. Market risk	71
3.1.6. Profitability	73
3.2. Non-bank financial institutions	75
<b>4. FINANCIAL SYSTEM INFRASTRUCTURE – STABILITY OF PAYMENT AND SECURITIES SETTLEMENT SYSTEMS</b>	<b>78</b>
<hr/>	
4.1. Stability of payment systems	78
4.2. Securities settlement systems	80
4.3. Operational and security incidents affecting payment services providers	81
4.4. Technological innovation in payment services	82
<b>5. FINANCIAL STABILITY, REGULATORY FRAMEWORK AND MACROPRUDENTIAL POLICIES</b>	<b>83</b>
<hr/>	
5.1. Capital buffers applicable to credit institutions, Romanian legal entities	83
5.2. The activity of the NBR in its capacity as resolution authority	86
<b>Special feature.</b> The role of trade credit in the financing of firms	90
<hr/>	
Abbreviations	101
Tables	102
Charts	102

# OVERVIEW

Romanian financial institutions remained resilient amid the multiple shocks seen in recent years, from the pandemic crisis and the ensuing supply chain disruptions, followed by Russia's aggression on Ukraine and the energy crisis, to the US and Swiss banking sector turmoil in the spring of 2023 and the intensification of the Middle East conflict. From a cyclical perspective, risks to financial stability in Romania were further broadly similar to those signalled in the previous *Report* (Figure 1), yet, at the same time, new ones emerged.

**Figure 1.** Map of risks to financial stability in Romania



The capacity of borrowers and creditors to withstand less favourable financial conditions was also enhanced by the macroprudential measures implemented by the NBR, and the outlook for the period ahead points to the need to maintain a cautious behaviour.

Over the short term, the most important risk factors to financial stability in Romania are as follows: (i) global uncertainty amid the war in Ukraine and the Middle East conflict, (ii) tensions surrounding domestic macroeconomic equilibria, (iii) default risk for loans to the private sector, and (iv) challenges to cybersecurity and financial innovation.

Risks to financial stability at international level have seen mixed developments since the previous *Report*. Most of the economies, as well as the financial system as a whole, remained resilient throughout the disinflationary process, and investor sentiment was positive, helping ease the financial conditions in international capital markets. Nonetheless, the external economic and geopolitical context continues to be marked by multiple uncertainties. While expectations for global economic growth have mildly improved, they are heterogeneous worldwide and are still subdued by historical values. The growth rate of global economic activity is projected to stay unchanged in 2024 and 2025 at the level of 2023, i.e. 3.2 percent, according to the IMF. At the same time, there is a risk of abrupt corrections in financial asset prices in the event of invalidation of these favourable prospects, which may be challenged by both macroeconomic and geopolitical developments, *inter alia* as a result of the escalating Middle East conflict and the ongoing war in Ukraine. Any new supply-side inflationary shocks may instil volatility in international financial markets and may cause a sudden tightening of financial conditions.

Vulnerabilities to the global financial system can be amplified by high indebtedness both in the public and private sector, given the important election year worldwide, which is likely to exacerbate fiscal policy risks. Against the backdrop of unprecedented support measures, government debt rose markedly during the pandemic and stays high, with fiscal deficits adding to the public debt burden in many economies. Government debt in the European Union stood in absolute values 27 percent higher in 2023 than in 2019, while growing as a share of GDP from 77.8 percent to 81.7 percent in the same period.

On the domestic front, economic growth slowed further in 2023, with the GDP expanding by a real 2.1 percent in annual terms against 4.1 percent in 2022. The slowdown mirrored a slacker pace of increase of domestic demand, the impact of high inflation on households' real disposable income and that of tighter monetary and financial conditions. Although economic activity decelerated in 2023, within a European context Romania posted one of the highest growth rates, above the EU and euro area averages (0.4 percent each), as well as above the economies in the region. Boosting investment, especially in higher value-added sectors, *inter alia* via a wider use of EU funds and in particular those under the National Recovery and Resilience Plan (NRRP), could help steer economic growth towards a sustainable pattern. As for the implementation of the NRRP, Romania has received EUR 9.4 billion since this programme started, but the amounts were spent only to a small extent.

According to the budget execution data published by the European Commission and the Ministry of Finance, at end-March 2024 the funds actually spent ran at EUR 1.9 billion, accounting for about 20 percent of the amounts received and 6.7 percent of total allocations. The delays, especially for projects financed via NRRP grants, could put additional indirect pressure on the fiscal balance due to belated materialisation and in small proportions of the favourable impact on economic growth. In the case of Romania, a European Commission study shows that the implementation of NRRP investment projects may entail additional economic growth of up to 3.7 percent by 2026. In addition, consistent with the European Commission's estimates, the cohesion policy could lead to a cumulative 3 percent rise in GDP in Romania by 2029. Against this background, an analysis by the NCMO working group on the sustainable increase in financial intermediation highlights the need to boost the role of the financial system in co-financing EU-funded projects, *inter alia* by harmonising the process of operationalisation of financial instruments under the NRRP and the Operational Programmes.

The tensions surrounding macroeconomic equilibria have lingered since the past *Report*, with the level and persistence of twin deficits posing significant risks to financial stability. The budget deficit is among the highest in the EU (-6.6 percent in 2023 under ESA 2010), after those of Italy and Hungary. Tax revenue collection is still among the lowest in Europe, accounting for 26.6 percent<sup>1</sup> of GDP, compared to an EU average of 40 percent (data for 2023), while current expenditure amounts to approximately 33 percent of GDP. On the one hand, enhancing revenue collection may significantly contribute to deficit correction, given that the VAT gap rate in Romania stands at 36.7 percent versus 5.3 percent, on average, in the EU. On the other hand, the Fiscal Council recommends more efficient spending, which is why it may be useful to make spending reviews similar to those performed by the OECD<sup>2</sup>.

The external position places Romania among the countries with the highest deficit in the EU, i.e. the second highest current account deficit-to-GDP ratio (-7 percent of GDP, 2023), after Cyprus (-12 percent of GDP). The developments in the balance of payments are driven by incidental factors, such as those derived from fiscal and income policy, with a stimulative impact on domestic demand, as well as structural factors. In order to tackle some of the latter factors, the NCMO issued Recommendation R/6/2020 on addressing vulnerabilities from the widening of the agri-food trade deficit. Ongoing efforts to implement the measures recommended by the NCMO and investment projects in this area may substantially help reduce dependence on agri-food imports, with positive implications for economic growth.

Although the impact of the macroeconomic and geopolitical context on the default rates of credit to the private sector has been limited so far, there are a number of vulnerabilities that could affect the quality of loan portfolios over the medium term, especially for riskier loans such as those granted to SMEs and consumer loans to households. Higher debt servicing costs and lower profits can pose sizeable challenges to non-financial corporations, especially to more vulnerable firms,

<sup>1</sup> Direct, indirect taxes and net social contributions. AMECO database, European Commission.

<sup>2</sup> <https://www.oecd.org/governance/budgeting/spending-reviews/>

i.e. those with a more pronounced interest rate sensitivity. As for households, debt servicing challenges are stronger for vulnerable borrowers with variable-rate loans.

The default risk for loans to the private sector is also influenced by the balance sheet position and financial soundness of firms and households, which have seen mixed developments since the previous *Report*. Hence, non-financial corporations' financial health worsened somewhat in 2023 H1 compared to the same year-earlier period. However, the financial health measure remained well above the risk area, both at aggregate level and in the main segments by size, namely SMEs and large companies. Non-financial corporations' interest coverage contracted, owing to the squeeze in profits, concurrently with the rise in funding costs. However, the interest coverage ratio still stands strongly above one (659 percent). At the same time, liquidity and the level of indebtedness held relatively steady. Turning to households, their balance sheet position remains robust, while there has been a diversification trend of their financial investment portfolio. Even though households' wealth continued to strengthen, inequalities are important from this perspective, given that 10 percent of households own more than half of total wealth.

At aggregate level, the debt servicing capacity of the real sector is further adequate, albeit with mixed developments by component. On the one hand, the loan portfolio quality for bank loans to non-financial corporations improved, with the non-performing loan (NPL) ratio hitting an all-time low at the beginning of 2024 (3.7 percent in January), before posting a marginal rise (3.8 percent in March). On the other hand, households' capacity to service bank debt worsened slightly in the course of 2023, a trend that has persisted into early 2024, with the non-performing loan ratio standing at 3.3 percent in March 2024. Credit risk is higher for some specific loan categories, namely loans to SMEs (NPL ratio of 4.5 percent versus 2.5 percent for large companies, March 2024) and consumer loans to households (NPL ratio of 5.9 percent versus 1.7 percent for housing loans, March 2024).

On the whole, the outlook for the private sector's loan repayment capacity is largely conditional on macroeconomic developments, which are saddled with elevated uncertainty, amid the war in Ukraine and the Middle East conflict. The default rate one year ahead is forecasted to pick up further on both corporate loans (from 3.1 percent in March 2024 to 4.4 percent in March 2025) and the two main segments of household loans (from 0.24 percent in March 2024 to 0.26 percent in March 2025 for housing loans and from 3 percent to 3.2 percent for consumer credit in the same period).

Cyber risk has been an increasingly serious risk factor of late, amid mounting digital connectivity, technological developments and financial innovation, *inter alia* amid heightened geopolitical tensions, given the spate of cyberattacks subsequent to Russia's invasion of Ukraine. From a global perspective, the average total cost of firms affected by data breaches rose in 2023 to a record high of USD 4.45 million, up 15.3 percent from 2020. The financial system is the second most cyberattacked sector, after healthcare services, with an average cost triggered by security breaches of about USD 5.9 million.

Under the circumstances, the banking and NBFIs sectors are exposed to cybersecurity threats, the materialisation of such severe incidents having the potential to pose risks to financial stability via several channels: (i) loss of confidence in financial institutions, (ii) disruption of critical functions and of the capability to fulfil customer requests, and (iii) contagion to other sectors. According to a survey conducted by the NBR at end-2023, credit institutions in Romania made strenuous efforts in terms of cybersecurity and protection of the banking sector from cyberattacks, *inter alia* by: (i) preparing a secondary site where the bank can carry out its critical activities should a cyberattack occur, (ii) making frequent data backups, (iii) adopting the principle of security in depth, (iv) carrying out cyber resilience stress tests on an annual basis, and (v) regularly conducting penetration tests.

Although cybersecurity incidents have had no systemic importance thus far, the risk of loss from such incidents has risen. In this context, the cyber resilience of the financial system should be strengthened. The ECB has announced for 2024 an exercise aimed to determine how well individual banks would respond to and recover from a cyberattack. This year, the NBR will also run a cyber risk stress test for credit institutions in Romania.

### **Banking sector**

The Romanian banking sector continued to strengthen its financial health (Table 1).

The solvency ratio remained at an adequate level, standing above the EU average, i.e. 22.9 percent in March 2024 versus 19.9 percent EU-wide in December 2023. At the same time, banks in Romania hold a significant capital buffer relative to the Overall Capital Requirements (OCR, 17.2 percent), thus ensuring a good capacity to absorb potential unexpected losses in the event of macroeconomic shocks.

In the course of 2023, the steps taken by credit institutions to raise MREL eligible resources continued, so that, once the transition period was complete, i.e. the end of 2023, all credit institutions complied with the final MREL requirement plus the combined buffer requirement.

Liquidity improved, with the liquidity coverage ratio (LCR) rising to 286.0 percent, whereas the net stable funding ratio (NSFR) came in at 194.4 percent in March 2024. The results of the latest liquidity stress test conducted in 2023 confirm the adequate liquidity position of local banks, which generally have the capacity to manage potential short-term liquidity shocks.

Asset quality indicators, such as the non-performing loan ratio and the NPL coverage ratio (2.4 percent and 65.9 percent respectively in March 2024), place the banking sector in the EBA-defined low-risk bucket, the cumulative market share of credit institutions with a below-3-percent non-performing loan ratio standing at 70 percent in March 2024 versus 91 percent EU-wide in December 2023. Although the asset quality indicators testify to a favourable positioning of local banks in terms of credit risk, the current macroeconomic and geopolitical framework points to the need to maintain a cautious behaviour.

**Table 1.** Risk indicators for the banking sector

Risk indicators	EBA-defined prudential range	Romania							EU average
		2018	2019	2020	2021	2022	2023	Mar. 2024	Dec. 2023
<b>Solvency</b>									
Tier 1 capital ratio	>15% [12%-15%] <12%	18.64	20.05	23.22	20.86	20.48	20.66	20.05	17.3
CET1 capital ratio	>14% [11%-14%] <11%	18.64	19.95	23.11	20.76	19.98	20.21	19.61	16.0
Total capital ratio		20.71	22.00	25.14	23.32	23.40	23.60	22.91	19.9
<b>Asset quality</b>									
Non-performing loan ratio	<3% [3%-8%] >8%	4.96	4.09	3.83	3.35	2.65	2.37	2.41	1.9
Non-performing loan coverage by provisions	>55% [40%-55%] <40%	58.51	60.75	63.31	66.10	65.55	64.61	65.94	42.3
Ratio of restructured loans and advances	<1.5% [1.5%-4%] >4%	3.26	2.49	2.40	2.60	1.96	1.57	1.48	1.4
<b>Profitability</b>									
ROE	>10% [6%-10%] <6%	14.59	12.21	8.66	13.28	16.40	20.13	19.77	10.3
Cost-to-income ratio	<50% [50%-60%] >60%	53.17	54.32	53.84	53.92	52.11	47.64	49.91	56.0
<b>Balance sheet</b>									
Loan-to-deposit ratio for households and non-financial corporations	<100% [100%-150%] >150%	71.89	69.48	63.61	63.96	65.66	61.00	59.85	107.1
Liquidity Coverage Ratio – LCR	>140% [110%-140%] <110%	237.84	242.59	292.48	238.77	209.16	280.61	286.05	167.1

■ best bucket  
■ intermediate bucket  
■ worst bucket

Source: NBR, EBA

Banks' profitability indicators fared well, with ROE and ROA standing at 19.8 percent and 1.8 percent respectively in March 2024. However, they ran below the average values of non-financial corporations persistently over the last decade. In 2022, ROE and ROA averages for non-financial corporations equalled 28.7 percent and 10.7 percent respectively, while in the Romanian banking sector ROE and ROA came in at 16.4 percent and 1.5 percent respectively. Net interest income contributed most to the improvement in profitability, chiefly on the back of the increase in interest-bearing financial assets (volume effect), another determinant being the low impairment loss on financial assets. Out of their total profits for 2023, credit institutions, Romanian legal entities, retained a large part (57 percent) with a view to supporting their development capacity.

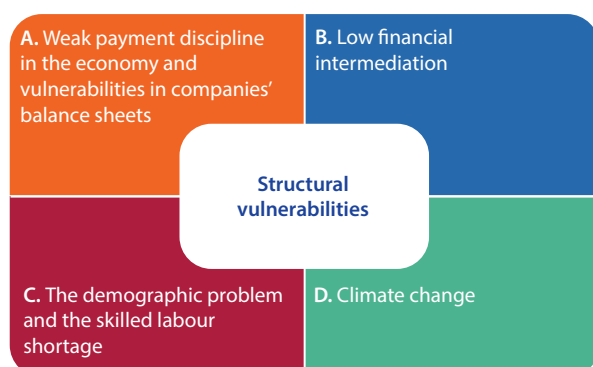
Banks in Romania are characterised by low funding risk, given both the high share of retail deposits and the substantial level of liquid assets. Nevertheless, the banking crises in the USA and Switzerland have shown the ease and speed with which depositors can withdraw their amounts from credit institutions. This can translate into bank runs, especially in the context of fast-paced digitalisation of banking services and the quick spread of information online and in the social media.

Despite the current favourable situation, there are lingering challenges: (i) profit polarisation by bank size, (ii) the lowest financial intermediation in the EU, (iii) credit institutions' shift towards low-risk assets (government securities in particular), enhancing concentration and interest rate risks, and (iv) the prospects for higher credit risk in the real sector amid domestic macroeconomic imbalances. New challenges arise from the need to adapt to climate change, the increase in cyber risks fostered by the geopolitical context and the need to tailor business models to the swift digital progress.

Digitalisation has made notable progress in the banking sector, but the pace of alignment with this trend is heterogeneous, being faster for large banks. The access of customers to digital banking products and services has improved. Specifically, looking at bank clients in 2023, 63 percent of households and 78 percent of legal entities respectively also used digital channels. Due to intensive digitalisation, the role of social media platforms as message amplifiers and the current geopolitical context, the cybersecurity risk has become increasingly relevant. Thus far, credit institutions in Romania have not reported significant losses in the aftermath of cyberattacks, but these events can affect the internal systems of banks and disrupt the functioning of the financial system. Therefore, further measures are needed to enhance operational resilience, especially that the requirements of the Digital Operational Resilience Act (DORA) will apply as of 17 January 2025.

### Structural vulnerabilities

**Figure 2.** Map of structural vulnerabilities to financial stability in Romania



The structural vulnerabilities in the domestic economy (Figure 2) can heighten cyclical risks to financial stability. Implementing adequate and comprehensive measures and policies, including those recommended by the NCMO, should rank among the priorities set at national level.

**A.** The non-financial corporations sector is faced with a series of persistent vulnerabilities, the most important of them being the large share of undercapitalised companies (about one third, i.e. more than 260 thousand firms). The latter have limited access to financing sources, low investment

activity, and also affect productivity and reduce the resource allocation efficiency in the economy. Moreover, capital shortfalls weigh on payment discipline and diminish

firms' resilience during periods of stress. In this context, the payment discipline of non-financial corporations deteriorated in 2023 H1, overdue payments in the economy going up by 4.8 percent compared to the same year-earlier period.

Insolvency remained relatively unchanged, the number of companies undergoing insolvency proceedings increasing marginally in 2023 from the year before (+0.7 percent). Insolvent firms account for a significant share of both overdue payments to non-banks, generating nearly half of them in 2022, and non-performing bank exposures, taking 26 percent of total non-performing exposures as at December 2023. One third of the firms undergoing insolvency proceedings were firms with capital shortfalls (33 percent, 2022).

**B.** Low financial intermediation is another persistent structural vulnerability in the domestic economy. Romania still ranks last among EU Member States in terms of financial intermediation (49.9 percent, calculated as bank assets-to-GDP ratio, 2023 Q3), which is approximately 4.4 times below the EU average and much lower than in peer countries in the region (Poland 89.2 percent, Bulgaria 91.8 percent, Hungary 112.4 percent). Similarly, bank credit to the private sector in Romania remains at the lowest level in the EU (24 percent of GDP). The persistently low financial intermediation in Romania is largely ascribable to structural factors.

The analysis of the NCMO working group on the sustainable increase in financial intermediation identified a number of measures that can help increase financial intermediation, as follows: (i) enhance the absorption capacity of EU funds, (ii) speed up the digitalisation process for financial services, (iii) support firms' access to finance, (iv) improve entrepreneurs' financial education and the professional training of staff in the financial system and (v) underpin the structural shift of the economy to a higher value-added economy. To this end, specific recommendations were made to the relevant authorities, pursuant to NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation.

**C.** Demographic changes are another structural challenge in Romania and worldwide. Over the past 50 years, life expectancy increased considerably in Europe, concurrently with the population decline and ageing. On the domestic front, the demographic ageing stepped up further during 2023, along with a decrease in population. Specifically, as at 1 January 2024, Romania's population went down by 0.5 percent from the same year-earlier period. At the same time, the demographic ageing index rose markedly over a year, showing a number of 127.5 elderly per 100 young people, up from 122 elderly persons in the year before. As a result, the mean age of the population grew by 0.3 years to 42.5 years.

The skilled labour shortage remains a serious challenge for domestic companies and this problem has worsened in time. Additionally, Romania ranks among the last EU countries in terms of skills utilisation in the European Skills Index (ESI), with only 33 percent of the ideal performance having been reached in Romania, as compared to 70 percent in Czechia, 64 percent in Poland and 45 percent in Bulgaria. Moreover, the skilled labour shortage is sharper in Romania than at EU level, 45 percent of the local companies participating in the Eurobarometer survey stating it was very

hard to find and hire skilled workforce over the past 24 months, as compared to the EU average of 38 percent. Skill mismatches are even more important when looking at the level of education of firms' managers, given that executive management members of one third of non-financial corporations are not graduates of tertiary education (economics or other relevant subjects of study for the business sector of the company).

The skilled labour shortage, together with the unfavourable demographic developments and the modest level of financial education, is closely connected with two other structural vulnerabilities to financial stability in Romania, namely the low financial intermediation and the inadequate financial soundness of companies. In order to address these issues, the NBR in collaboration with important players in the financial sector and academia launched the "Antreprenariat de TOP" (TOP Entrepreneurship) project. The objectives of this project are to increase the level of financial and economic education of Romanian entrepreneurs and improve financial inclusion, by encouraging a broader use of financial products and services and stepping up the efforts to enhance the digitalisation of financial and business activities.

**D. Climate risks act as multipliers that can amplify existing risks or vulnerabilities.** The European Environment Agency identified 36 major climate risks in Europe, more than half of them requiring urgent action. In the absence of adequate measures, almost all of the flagged climate risks could reach critical or even catastrophic levels by the end of this century. In particular, multiple climate risks generated by extreme heat and water shortage are concentrated in Southern Europe. According to the Climate Change Performance Index, Romania shows medium performance in what concerns the efforts to combat climate change (with a score of 61.5 percent versus 64.7 percent at EU level, 2024), due to the lower ratings in the Renewable Energy and Climate Policy categories.

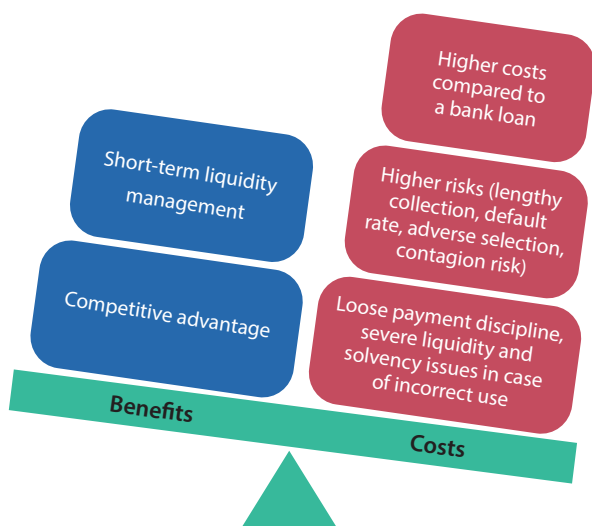
Climate-related financial risks can affect the resilience of banks through the materialisation of physical and transition risks and can hinder the access to financial services and the quality of loan portfolios. In Romania, climate risk remains significant to the domestic banking sector, with lending to climate-relevant (brown) sectors further accounting for about half of total corporate loans, roughly the same as in the European banking sector. Raising firms' awareness on climate change risks should be ranked as a priority, especially that only 3 percent of the total value of corporate loans in 2023 were green loans. To this end, the NCMO issued Recommendation No. R/6/2021 on supporting green finance with a view to sustainably increasing access to finance for projects on the climate change agenda and 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.

### **Special feature**

The financing pattern of non-financial corporations generates a series of major vulnerabilities for the domestic economy. Firms in Romania largely resort to internal

sources of finance and to trade credit for financing their activity and only to a very small extent to loans from local financial institutions. Even though trade credit can help firms manage cash flows over the short term, especially during periods of tight financial conditions, it is generally much costlier and riskier compared to bank financing, Figure 3.

**Figure 3.** Trade credit cost-benefit balance



Romania ranks first in the European Union in terms of trade credit, and recent developments point to a widening of the gap vis-à-vis the European average. Trade credit accounts for about a fourth of the owners' funds and liabilities of non-financial corporations in Romania. The high reliance on this type of finance, in the absence of correct practices of use, constitutes a significant vulnerability of the sector to a contagion shock and limits its development (only a fourth of the companies made investments in 2022, while half of the financing used was over the short term). The default or late payment on debt to suppliers can trigger chain reactions, as firms facing repeated extensions of payment deadlines on client invoices have difficulties paying invoices issued by their own suppliers. Firms' response capacity to such a shock

is limited by the prevalence of short-term finance (43 percent of total liabilities) and by the low recourse to financing from specialised institutions. Moreover, trade credit has a very lengthy collection period (85 days), which is significantly higher than the average estimated at European level (55 days) and well above the maximum period established by law (60 days). In addition, the default rate on trade credit is four times higher than that on short-term bank loans (12 percent at aggregate level, while in the case of small companies and microenterprises it exceeds 14 percent). Raising awareness among firms about the risks and costs involved in granting trade credit to high-risk clients can help restore payment discipline in the economy, with major benefits on the resilience of the non-financial corporations' sector.

The role of trade credit in the economic activity and the implications of late payments on such credit for payment discipline are a major concern both at European level and domestically. Specifically, in Romania, the National Committee for Macroprudential Oversight has issued several recommendations for identifying the measures that can help improve the financial soundness of the non-financial corporations' sector (NCMO Recommendation No. R/2/2018), as well as for the sustainable increase in financial intermediation (NCMO Recommendation No. R/3/2022).

# 1. INTERNATIONAL AND DOMESTIC ECONOMIC AND FINANCIAL ENVIRONMENT

---

Risks to financial stability at international level have seen mixed developments since the previous *Report*. Most of the economies, as well as the financial system as a whole, remained resilient throughout the disinflationary process, and investor sentiment was positive, helping ease the financial conditions in international capital markets. Nonetheless, the external economic and geopolitical context continues to be marked by multiple uncertainties. Thus, while expectations for global economic growth have mildly improved, they are heterogeneous worldwide and are still subdued by historical values, whereas the medium-term outlook remains unfavourable. Despite the geopolitical developments and uncertainties surrounding the future dynamics of economic activity, financial market volatility was generally low.

On the domestic front, economic growth slowed further in 2023, with the GDP expanding by a real 2.1 percent in annual terms against 4.1 percent in 2022. In a European context, however, Romania posted one of the highest growth rates, above the EU and euro area averages (0.4 percent each), as well as above the economies in the region. Forecasts for 2024 highlight faster GDP dynamics in Romania than the EU or euro area average. Boosting investment, especially in higher value-added sectors, *inter alia* via a wider use of EU funds and in particular those under the National Recovery and Resilience Plan (NRRP), could help steer economic growth towards a sustainable pattern. To date, 6.7 percent of the funds allocated under the NRRP have been turned to good account.

The tensions surrounding macroeconomic equilibria have lingered since the past *Report*, with the level and persistence of twin deficits posing significant risks to financial stability. Against the background of successive budget deficits, government debt increased significantly on the domestic front over the past five years, similarly to the situation at EU level (+27 percent in 2023 versus 2019), from 35.1 percent of GDP to 48.8 percent of GDP, while the gross domestic product also posted a sizeable advance.

The level of private sector debt in Romania is still the lowest in the European Union when expressed as a share of GDP, i.e. 40 percent versus the EU average of 111 percent in 2023 Q4, while following an upward trend, albeit at a slower growth rate (4 percent in 2023 compared to 12 percent in 2021 and 9 percent in 2022). Similarly, the level of bank credit to the private sector remains the lowest in the EU (24 percent of GDP). At present, Romania's economy is in the downward phase of the debt cycle, which started during the COVID-19 pandemic, a trend also seen in the euro area and worldwide.

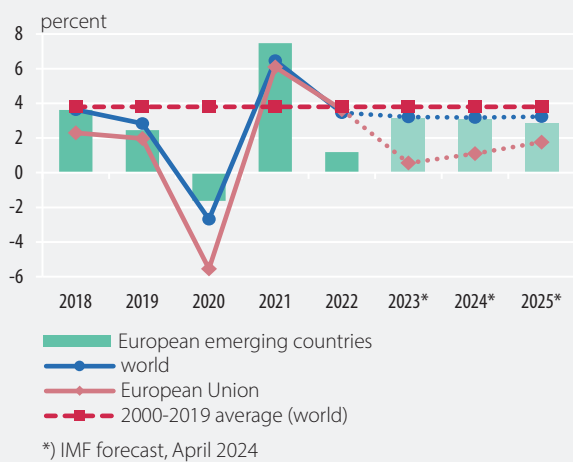
---

## 1.1. International economic and financial developments

Short-term risks to financial stability at international level have seen mixed developments since the previous *Report*. Most of the economies, as well as the financial system as a whole, remained resilient throughout the disinflationary process, and investor sentiment was positive, helping ease the financial conditions in international capital markets<sup>3</sup>. Nonetheless, the external economic and geopolitical context continues to be marked by multiple uncertainties. Thus, while expectations for global economic growth have mildly improved, they are heterogeneous worldwide and are still subdued by historical values, whereas the medium-term outlook remains unfavourable<sup>4</sup>. Although disinflation has continued – amid financing costs further being relatively tight and previous supply-side shocks easing – uncertainty lingers around its future developments, especially in economies where inflation has remained persistent.

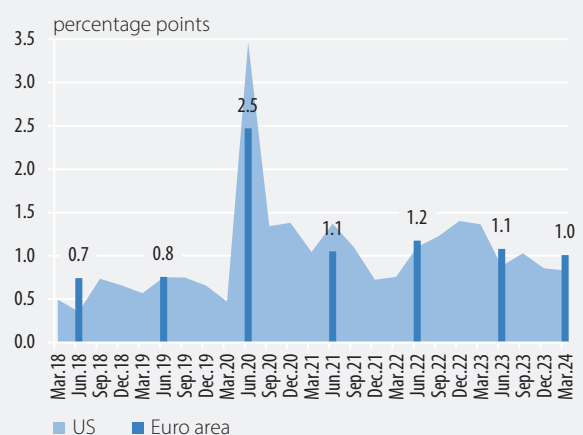
Against this background, investors’ expectations regarding the imminent start of the monetary policy easing cycle by major central banks, as well as the perception that a substantial decline in economic activity would be avoided (there would be a soft landing), led to favourable developments of riskier assets on international financial markets, particularly in advanced economies. Despite the geopolitical developments and the uncertainties surrounding the future dynamics of economic activity, financial market volatility was generally low (except for government securities markets).

**Chart 1.1.** Economic growth worldwide, in the EU and in European emerging countries



Source: IMF, *World Economic Outlook*, April 2024

**Chart 1.2.** Variance of economic growth forecasts for the euro area and the US<sup>5</sup>



Source: *Survey of Professional Forecasters* (ECB, Philadelphia Fed), NBR calculations

At the same time, there is a risk of abrupt corrections in financial asset prices in the event of invalidation of these favourable prospects, which may be challenged by both macroeconomic and geopolitical developments, *inter alia* as a result of the escalating

<sup>3</sup> *Global Financial Stability Report*, IMF, April 2024.  
<sup>4</sup> For further details, see Chapter 3 of *World Economic Outlook*, IMF, April 2024.  
<sup>5</sup> For the US, the interquartile range of expectations for real GDP growth four quarters ahead was calculated (for each quarter). For the euro area, the interquartile range of the aggregate distribution of economic growth in the following year was calculated (for Q2 of each year and 2024 Q1).

Middle East conflict and the ongoing war in Ukraine. Any new supply-side inflationary shocks may instil volatility in international financial markets and may cause a sudden tightening of financial conditions. These developments may occur, in particular, in a context where the positive investor sentiment is already reflected in financial asset prices, and the correlation between different asset classes is at a historically high level<sup>6</sup>.

Under these circumstances, vulnerabilities to the financial system may be amplified by a high level of indebtedness both in the public and private sector, given the important election year worldwide, which is likely to exacerbate fiscal policy risks<sup>7</sup>. Moreover, the relatively tight financing costs may exert pressure on debt sustainability, with signs of deteriorating credit quality already visible in some segments of the market, especially in real estate, although the impact on the financial system has not been significant so far.

Globally, economic growth surprised positively in 2023, standing at 3.2 percent according to the IMF<sup>8</sup>. A similar growth rate is expected for 2024, following an upward revision by 0.3 percentage points against the October 2023 forecast (Chart 1.1). Nevertheless, there is considerable international heterogeneity, the upward revision being mainly driven by the better-than-anticipated performance of the US economy, as well as by the resilience of emerging economies. At European level, growth prospects remain low, particularly in Germany and France. Furthermore, a relatively high degree of uncertainty persists regarding economic growth in the near future, both in the euro area and the US (Chart 1.2).

Additionally, there is also heightened uncertainty surrounding the future monetary policy stance of major central banks<sup>9</sup>. The policy rates of the Fed and the ECB have been kept constant since the release of the previous *Report*. Nevertheless, investor expectations about the future paths of the Fed's and the ECB's key interest rates have repeatedly seen considerable swings, due to both statistical data releases and signals sent by central banks. At the beginning of 2024, investors expected cumulative declines of approximately 160 basis points in the policy interest rates by the end of the year, from both the Fed and the ECB. However, in mid-April 2024, cumulative decreases of less than 80 basis points from the ECB and less than 50 basis points from the Fed were forecasted.

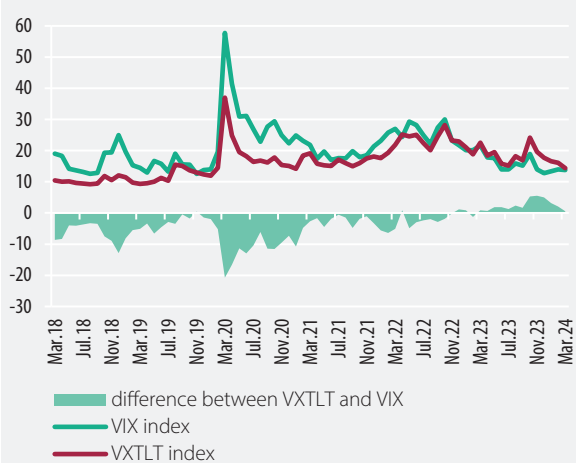
Against this background, government bond yields in advanced economies witnessed relatively large fluctuations, amid uncertainties surrounding developments in economic activity, as well as following the successive revisions of investor expectations on the future monetary policy stance. Thus, between November and December 2023, yields on long-term sovereign bonds issued by the main advanced economies underwent sharp declines (also due to the compression of term risk

<sup>6</sup> For further details, see section "Compressed volatility and high cross-asset correlations could amplify repricing risks" of *Global Financial Stability Report*, IMF, April 2024.

<sup>7</sup> According to IMF estimates, fiscal deficits in election years are on average 0.3 percentage points of GDP higher compared to non-election years. For further information, see section "The great election year and fiscal politics" of *Fiscal Monitor*, IMF, April 2024.

<sup>8</sup> *World Economic Outlook*, IMF, April 2024.

<sup>9</sup> For further details, see Box A "The return of monetary policy uncertainty" of *BIS Quarterly Review*, March 2024.

**Chart 1.3.** Sovereign bond and stock market volatility indices in the US

Source: CBOE, BIS (*Quarterly Review*, March 2024)

premiums<sup>10</sup>), which subsequently partly reversed after the start of 2024. Volatility in the government bond market remained at high levels, both by comparison to capital markets and historically (Chart 1.3)<sup>11</sup>.

Looking ahead, this volatility is expected to persist, *inter alia* as a result of the sizeable fiscal deficits of some developed countries (particularly the US), as well as amid the quantitative tightening pursued by major central banks, which is likely to change the composition of the sovereign bond investor base, thus potentially increasing their sensitivity to price changes and concerns about debt sustainability<sup>12</sup>. For 2024, a fiscal deficit of 6.5 percent of GDP is expected in the US, well above the average of 2.7 percent of GDP forecasted for advanced

economies (excluding the US), which may put pressure on government bond yields both in the US and worldwide<sup>13</sup>.

At OECD level, the government debt-to-GDP ratio remained relatively constant at around 83 percent at end-2023. However, the indicator remains around 10 percentage points above pre-pandemic levels, the effect of its rise in the pandemic period being much larger than the contractionary one in the immediate aftermath of the pandemic, *inter alia* due to high inflation (which led to an increase in nominal GDP)<sup>14</sup>. In the context of higher financing costs, interest expenses of OECD countries reached 2.9 percent of GDP in 2023, up by 0.6 percentage points from 2021. The share of short-term government debt rose with the onset of the COVID-19 pandemic, and 40 percent of the sovereign bonds issued by OECD countries are expected to mature by the end of 2026, amplifying refinancing needs.

Amid the unprecedented support measures taken in the context of the COVID-19 pandemic, government debt in the EU came in 27 percent higher in 2023 compared to 2019, with four of its Member States (France, Italy, Germany and Spain) accounting for around 73 percent of total debt, Chart 1.4. Relative to GDP, EU public debt rose from 77.8 percent to 81.7 percent over the same period. The spreads between yields on government bonds issued by peripheral euro area countries and those on German government bonds remained relatively compressed, reflecting the positive investor sentiment.

<sup>10</sup> Reflecting the additional compensation that investors receive for making long-term investments to the detriment of rolling over short-term instruments.

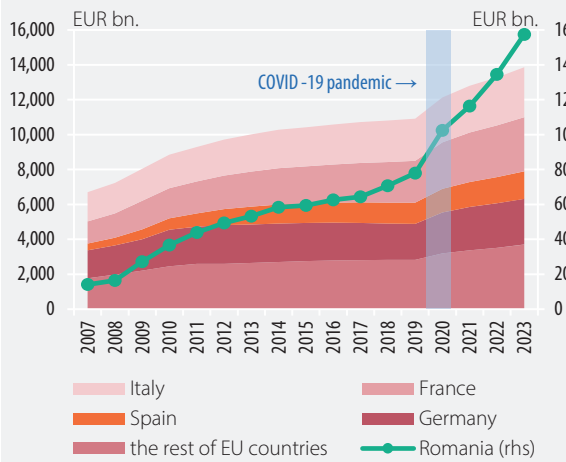
<sup>11</sup> For further details, see *BIS Quarterly Review*, March 2024. For a wider discussion concerning the low volatility of the US capital market, see also Box B "What could explain the recent drop in VIX?" in the same report.

<sup>12</sup> For further details, see *Global Financial Stability Report*, IMF, April 2024, or *Global Debt Report*, OECD, March 2024. For a wider discussion on the implications of quantitative tightening, see also Du, W., Forbes, K., and Luzzetti, M., "Quantitative tightening around the globe: what have we learned?", NBER Working Paper No. 32321, 2024.

<sup>13</sup> Given that, according to the IMF empirical analysis, a 1 percentage point rise in US government bond yields may lead to increases of up to 90 basis points for long-term bond yields in advanced economies and around 100 basis points for those in emerging economies. For further details, see *Fiscal Monitor*, IMF, April 2024.

<sup>14</sup> *Global Debt Report*, OECD, March 2024.

**Chart 1.4.** Consolidated general government gross debt in the EU by main contributing Member State

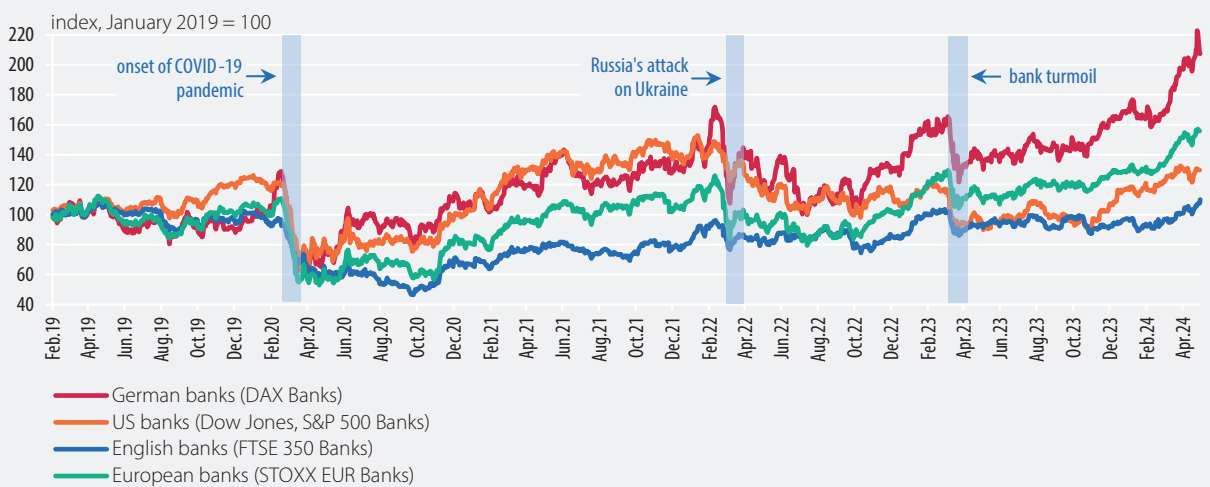


Source: Eurostat

The main capital market indices generally recorded positive dynamics, on the back of an increased investor risk appetite and an improved outlook for corporate profitability. Most benchmark indices went up sharply (the Dow Jones rose by 4.5 percent on average, the S&P 500 by 6 percent, the Euro Stoxx 50 by 14.8 percent, the FTSE 100 by 3.3 percent and the DAX 40 by 14.4 percent in 2023 versus 2022) in both advanced and emerging economies (with the exception of China where the Shanghai index dropped by 0.6 percent on average in 2023 against 2022). Moreover, the positive market sentiment contributed to the ongoing downward trend of the spread between corporate bond yields and government bond yields, in both the investment grade and high yield segments. According to IMF assessments, there is a risk that corporate bonds may

be overvalued, thus being exposed to steep price corrections should investors' risk aversion increase, particularly in the high yield segment in the US and the euro area<sup>15</sup>.

**Chart 1.5.** Stock market indices for the banking sectors



Source: investing.com, NBR calculations

Furthermore, banks' share prices witnessed favourable developments, with the sector's stock indices posting considerable increases over the period under review (Chart 1.5), also against the background of improved profitability due to higher net interest income. The European banking sector remains resilient, based on strong capital and liquidity positions<sup>16</sup>. However, a worsening in the loan portfolio quality is expected as a result of slower economic activity coupled with increased financing costs for the real sector. Given these higher financing costs, an erosion of

<sup>15</sup> For further details, see *Global Financial Stability Report*, IMF, April 2024, section "Global corporate default risk might be underpriced by markets".

<sup>16</sup> *Risk Dashboard*, EBA, 2023 Q4.

firms' interest coverage ratio (ICR) is noticeable, as well as a rise in the number of bankruptcies in the euro area, and also in the US and Japan, especially in the case of small-sized companies, *inter alia* due to the end of the extended government support schemes since the pandemic<sup>17</sup>. Banks' credit standards have tightened since 2022, particularly in the US and the euro area, and this trend has continued over the period under review, albeit in a less pronounced manner. At European level, the demand for loans fell considerably in 2024 Q1, mainly as a result of tight financing costs and declining investment, as well as amid economic and geopolitical uncertainties<sup>18</sup>.

Significant risks to the financial system continue to stem from the real estate sector, in particular the commercial segment, as commercial real estate prices declined globally by 12 percent in real terms in 2023, with the largest drops being recorded in the euro area and the US<sup>19</sup>. Furthermore, China's real estate sector continues to face considerable challenges. Across the EU, the NPL ratio for loans secured by commercial real estate increased slightly (to 4.3 percent in December 2023 from 3.9 percent the same year-ago period), but was still low from a historical perspective. In the US, the NPL ratio for loans secured by commercial real estate doubled in 2023 reaching 0.8 percent, and this upward trend is expected to continue over the short term<sup>20</sup>. Although the turmoil in the US banking sector eased, there have occasionally been episodes of volatility, also amid investors' concerns about banks' exposures to commercial real estate<sup>21</sup>.

Risks to the banking sector can be amplified by the digitalisation of financial services, which is likely to affect the speed and severity of deposit withdrawals in the event of a potential crisis, and by social networks that facilitate the coordination of depositors and investors on international financial markets (as it was exemplified by the March 2023 US bankruptcies). Moreover, cyber risks have increased in the new geopolitical context, with cyberattacks being almost twice as frequent compared to the pre-pandemic period, and the financial system recording relatively high exposures to such incidents.

## 1.2. Domestic macroeconomic developments

Economic growth continued to lose momentum in 2023, as real annual GDP dynamics were estimated at 2.1 percent<sup>22</sup>, compared to 4.1 percent in 2022 (Chart 1.6). The slowdown mirrored the deceleration in the rate of increase of domestic demand, the impact of high inflation on households' real disposable income, and the tighter monetary and financial conditions. Investment and consumption were the key drivers

<sup>17</sup> For further details, see *Global Financial Stability Report*, IMF, April 2024, section "More firms may become vulnerable in the medium term".

<sup>18</sup> *Euro area bank lending survey*, ECB, 2024 Q1.

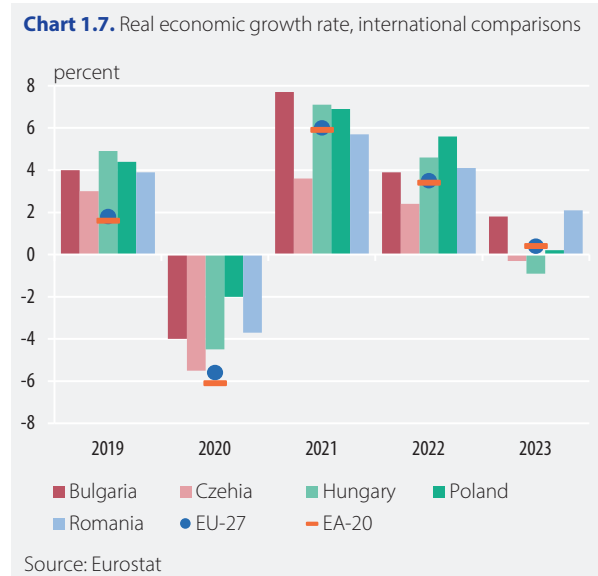
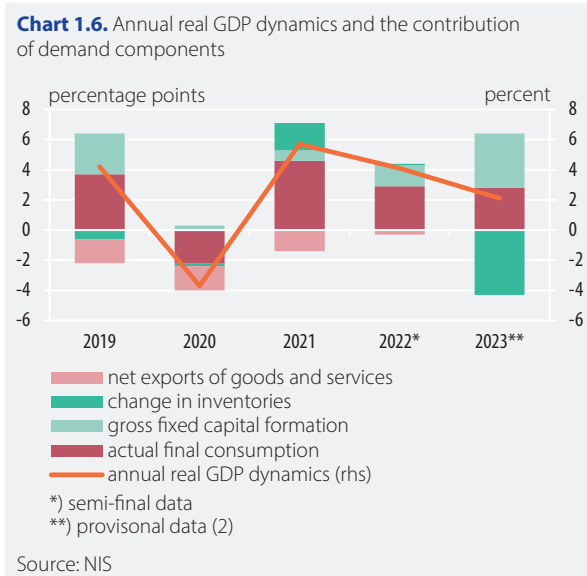
<sup>19</sup> For further details, see *Global Financial Stability Report*, IMF, April 2024, section "Commercial real estate stress has intensified".

<sup>20</sup> IMF, GFSR April 2024, "Concerns are mounting about banks' exposures to commercial real estate".

<sup>21</sup> IMF, GFSR, Box 1.3. "Are regional banks in the United States *Out of the Woods?*". For a wider discussion, see also IMF, "The US banking sector since the March 2023 turmoil: navigating the aftermath", *Global Financial Stability Note* 2024/001.

<sup>22</sup> NIS Press Release No. 86/9 April 2024.

of economic growth, contributing +3.6 percentage points and +2.8 percentage points to GDP growth, respectively, while the change in inventories had a negative impact of -4.3 percentage points thereon.



On the supply side, while making the second largest contribution to GDP (19.6 percent), industry had a negative impact on GDP growth (-0.5 percentage points). The share of construction in GDP increased compared to 2022, reaching 8 percent versus 7.3 percent, and its contribution to GDP growth went up in 2023 to 0.8 percentage points from 0.2 percentage points in the year before, whereas that of services slowed down significantly, adding only 1.1 percentage points to GDP growth compared to 5.4 percentage points in 2022. Flash estimates for 2024 Q1 point to a marginal rise of 0.1 percent<sup>23</sup> in real terms compared to the same year-ago period. The pace of economic growth is expected to hold steady or even gain momentum in 2024, given that the hike in the minimum wage economy-wide, the increase in the pension point, and the public sector pay rises are likely to boost consumption<sup>24</sup>.

Although economic activity decelerated in 2023, Romania posted one of the largest economic growth rates in the EU, exceeding both the EU and euro area averages (0.4 percent each), as well as its regional peers (Chart 1.7). Forecasts for 2024 point to Romania witnessing brisker GDP dynamics compared to the EU or euro area averages, i.e. below 3 percent<sup>25</sup> (versus less than 1 percent in the EU and the EA), and remaining among the fastest-growing countries (after Malta and Croatia).

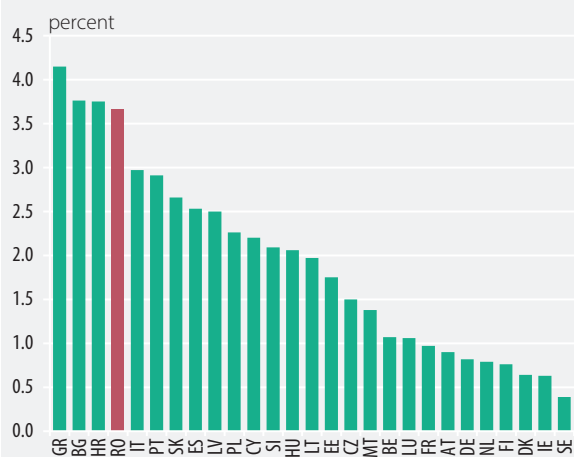
Boosting investment, especially in higher value-added industries, *inter alia* via the wider use of EU funds, particularly those under the National Recovery and Resilience Plan (NRRP), could contribute to steering economic growth towards a sustainable

<sup>23</sup> NIS Press Release No. 122/15 May 2024.

<sup>24</sup> NBR, *Inflation Report*, February 2024.

<sup>25</sup> According to the IMF projections in the *World Economic Outlook*, April 2024, economic growth in Romania will come in at 2.8 percent in 2024, and according to the European Commission's estimates in the Winter 2024 Economic Forecast, GDP growth will stand at 2.9 percent.

**Chart 1.8.** Estimated effect on GDP growth of the investment stimulus via the Next Generation EU programme after 4 years



Source: European Commission (2021)

model. According to a study<sup>26</sup> on the effects of funds raised through the Next Generation EU recovery package on economic growth, the Member States with below-average GDP per capita levels will experience larger boosts to economic activity. As regards the implementation of the NRRP, Romania received EUR 9.4 billion, having fulfilled 14 percent of the set targets and milestones<sup>27</sup>. However, only a small portion of that amount was spent: according to the European Commission and the budget execution, the amount spent was EUR 1.9 billion at end-March 2024, accounting for approximately 20 percent of disbursements and 6.7 percent of total allocated funds. Romania made three payment requests, of which two have already been approved. As for the third request, submitted late for approval in December 2023, national authorities

are still negotiating with the European Commission, also due to the non-fulfilment of the commitment to lower the EUR 500,000 threshold for micro-enterprises. Such situations lead to bottlenecks in the NRRP implementation, jeopardizing compliance with subsequent deadlines for communicating/validating the achievement of the set milestones and targets. This delay, especially for projects funded by NRRP grants, is likely to have a disruptive effect on the schedule of associated financial flows and may put additional indirect pressure on the fiscal balance through the non-materialisation of the favourable impact on economic growth. As for Romania, a study conducted by the European Commission estimating the impact of fiscal stimuli from investment on GDP shows that the implementation of NRRP investments may generate additional economic growth of up to 3.7 percent by 2026 (Chart 1.8). Development opportunities also arise from the European Structural and Investment Funds, through which Romania has been allocated EUR 35.2 billion<sup>28</sup> under the 2014-2020 programmes, with an absorption rate of 93 percent<sup>29</sup> by 31 March 2024, and a further EUR 32 billion for cohesion policy funding under the “investment in jobs and growth” objective through the 2021-2027 programme. According to the European Commission’s estimates, the cohesion policy could result in a cumulative 3 percent increase in Romania’s GDP by 2029<sup>30</sup>. Against this background, the analysis of the NCMO Working Group on sustainable increase in financial intermediation<sup>31</sup> highlights the need to enhance the role of the financial system in co-financing EU-funded projects, *inter alia* by harmonising the process of operationalisation of financial instruments under the NRRP and Operational Programmes.

<sup>26</sup> Pfeiffer, P., Varga, J., Veld, J., “Quantifying spillovers of Next Generation EU investment”, European Commission Discussion Paper No. 144, 2021.

<sup>27</sup> 24 out of 294 investment targets and milestones and 46 out of 224 reform targets and milestones.

<sup>28</sup> European Commission’s Cohesion Open Data Platform – Cohesion Open data.

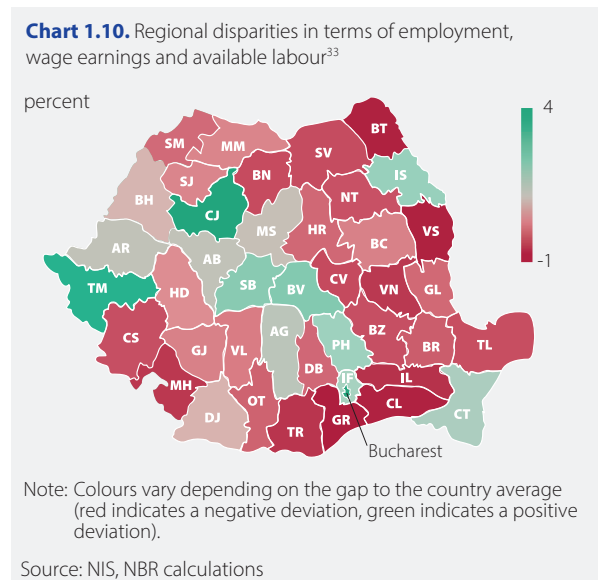
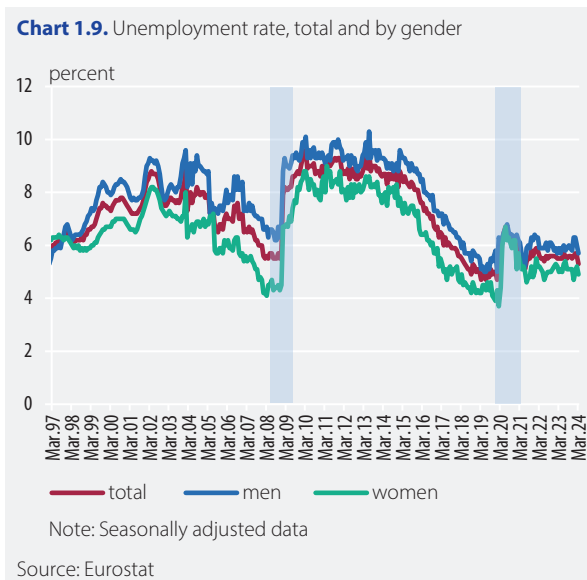
<sup>29</sup> Ministry of Investment and European Projects, State of absorption of EU funds as at 31 March 2024.

<sup>30</sup> European Commission, *Cohesion 2021-2027: forging an ever stronger Union Report on the outcome of 2021-2027 cohesion policy programming*, 2023.

<sup>31</sup> Analysis of the NCMO Working Group on sustainable increase in financial intermediation.

## Labour market

The unemployment rate remained below the EU average at aggregate level (5.3 percent versus 6 percent, March 2024), the breakdown by gender showing mixed developments. Specifically, on the one hand, the unemployment rate for men was similar to that across the European Union (5.7 percent), while, on the other hand, the unemployment rate for women was lower (4.9 percent versus 6.4 percent) (Chart 1.9). Nonetheless, women's employment is significantly lower than men's (59.1 percent against 78.2 percent of the population aged 20 to 64 in 2023) and substantially below the EU level (70.2 percent as compared with an 80.4 percent employment rate for men in the EU in the same period). According to the Global Gender Gap Index<sup>32</sup>, Romania registers one of the largest gender gaps (88th position out of 146 countries in 2023), with a modest score in terms of labour force participation rate in particular (105th position out of 146).



From a regional perspective, labour market tightness is more pronounced in Bucharest, Cluj and Timiș, the most economically developed counties. A large part of southern and eastern Romania is at the opposite end, as it records, in comparison with other administrative units, high unemployment rates, low labour force participation rates and wage earnings below the country average (Chart 1.10).

The regional distribution of labour calls for the implementation of differentiated policies and measures, so as to achieve better economic inclusion and higher living standards in the counties that record significant gaps in terms of wages and employment compared to the rest of the country.

<sup>32</sup> World Economic Forum, *Global Gender Gap Report 2023*.

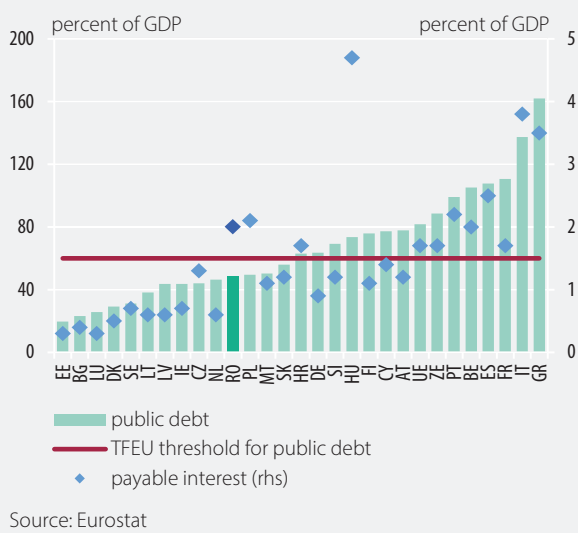
<sup>33</sup> The chart illustrates the average gap versus the national level, measured as the number of standard deviations, based on the following indicators: employment rate, available labour and average net wage (2022).

### Public sector

High public debt begets new debt, amid a pick-up in refinancing<sup>34</sup>. Such a potential development may be compounded by a poor collection of revenues to the general

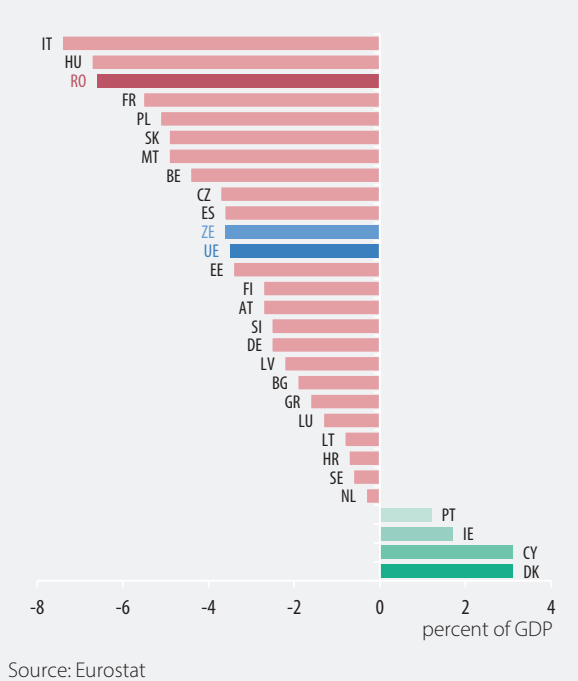
government budget, along with an increase in budget expenditure. This leads to a debt spiral that can only be reverted through continued fiscal consolidation. Romania's government debt is still below the threshold set forth by the Treaty on the Functioning of the European Union<sup>35</sup> (TFEU), yet it has increased from 35.1 percent of GDP to 48.8 percent of GDP over the past five years, while the gross domestic product also posted a sizeable advance. In 2020, the year the pandemic broke out, government debt-to-GDP ratio posted the largest increase in annual terms (11.6 percentage points versus 2019) in almost 30 years, against the backdrop of the adoption of unprecedented government support measures. In this context, in 2023 interest expenses almost doubled from the pre-pandemic level, i.e. 2 percent of GDP in 2023 compared with 1.2 percent of GDP in 2019 (Chart 1.11).

**Chart 1.11.** Government debt and interest rates in the EU, 2023



Source: Eurostat

**Chart 1.12.** Budget deficit/surplus in the EU, 2023



Source: Eurostat

The budget deficit is among the highest in the EU (-6.6 percent in 2023 under ESA 2010), after those of Italy and Hungary (Chart 1.12). This strengthens the constraints on public investment and the need to step up the access to non-repayable EU funds for government investment. In addition, the level of the budget deficit calls for both increasing tax revenue collection and avoiding non-growth-friendly expenditure.

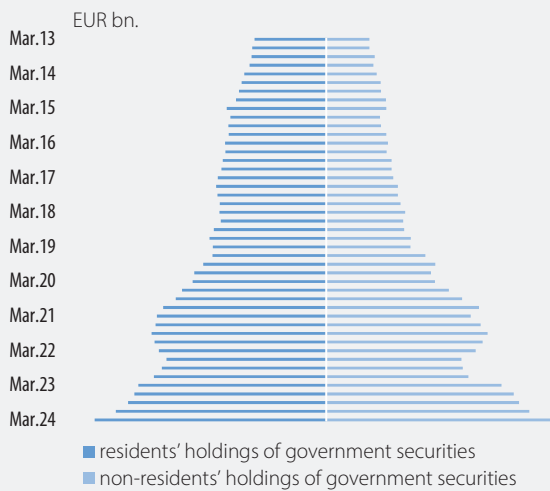
Tax revenue collection is still among the lowest in Europe, accounting for 26.6 percent<sup>36</sup> of GDP, compared to an EU average of 40 percent (in 2023), while current expenditure amounts to approximately 33 percent of GDP. On the one hand, enhancing revenue collection may significantly contribute to deficit correction, given that the VAT gap rate in Romania stands at 36.7 percent versus 5.3 percent<sup>37</sup>, on average, in the EU. On the other hand, the Fiscal

<sup>34</sup> IMF, *Global Financial Stability Report*, April 2024.  
<sup>35</sup> Article 126 of the Treaty on the Functioning of the European Union.  
<sup>36</sup> Direct, indirect taxes and net social contributions. AMECO database, European Commission.  
<sup>37</sup> European Commission, VAT gap in the EU, 2023.

Council recommends more efficient spending, which is why it may be useful to make spending reviews similar to those performed by the OECD<sup>38</sup>.

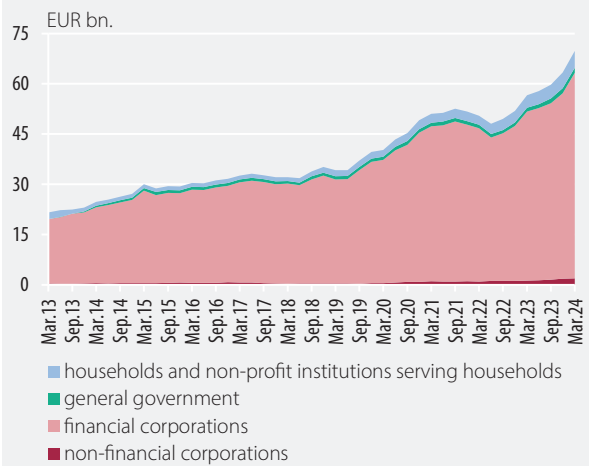
According to the general government budget execution, in 2023 the cash-based budget deficit (national methodology) stood at 5.6 percent of GDP (lei 89.9 billion). In 2024 Q1, the deficit came in at 2.06 percent of GDP (lei 35.88 billion), up by 0.64 percentage points against the same year-earlier period, the deficit target for the current year being set at 5 percent of GDP. The multiple rounds of elections in 2024 may put additional pressure on meeting the deficit target. Behind the upward path of the budget deficit January through March 2024 stood a 15.8 percent annual increase in revenues to the government budget, along with a more significant advance in annual terms in budget expenditure, i.e. 22.7 percent, all types of expenditure leaving their mark on the rise in central government spending.

**Chart 1.13.** Holdings of government securities by residence



Source: NBR

**Chart 1.14.** Residents' holdings of government securities by institutional sector



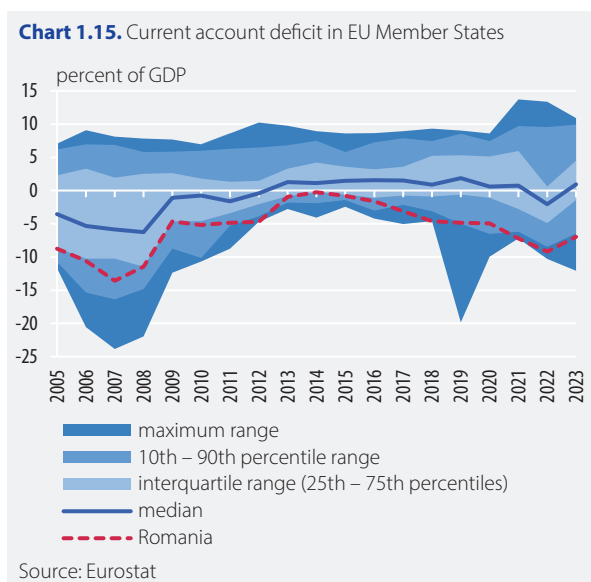
Source: NBR

Public debt financing via the issuance of government securities has grown at a sustained pace over the past 12 years, except for 2022. While at end-2012 residents accounted for 70 percent of the total amount of central government securities, with non-residents holding the remaining 30 percent, at end-2024 Q1 residents and non-residents took approximately equal shares, pointing to the government's more intensive recourse to foreign financing (Chart 1.13). Local financial corporations purchased most of the domestically-issued government securities, but households also complemented their asset portfolio with such instruments over the past years, amid the issues of government securities under the "Tezaur" and "Fidelis" programmes (Chart 1.14).

<sup>38</sup> Fiscal Council's Opinion on the State Budget Law for 2024, the Social Security Budget Law for 2024 and the 2024-2026 Fiscal Strategy.

## External balance

A notable macroeconomic vulnerability of the domestic economy is the high and persistent current account deficit, Romania remaining close to the maximum values of the distribution at EU level (Chart 1.15). In 2023, the current account deficit stood at



7 percent of GDP, marking a moderate improvement as compared with 2022 (9.2 percent of GDP), but being the second highest in the EU, after that of Cyprus (12 percent of GDP) and close to that of Greece (6.3 percent of GDP). 2024 Q1 data show that the deficit remained relatively unchanged from 2023 Q1, i.e. EUR 3.9 billion, down by 0.5 percent as compared with the same year-earlier period.

The developments in the external balance of payments are driven by incidental factors, such as those derived from fiscal and income policy, with a stimulative impact on domestic demand, as well as structural factors. In order to tackle some of the latter factors, the NCMO issued Recommendation R/6/2020 on addressing vulnerabilities from the widening of the agri-food trade deficit. The structural deficiencies identified by

the NCMO Working Group<sup>39</sup> were the low use of technology, the road infrastructure, the lack of agricultural land registration and of appropriate professional training of the persons involved in the agri-food sector. Ongoing efforts to implement the measures recommended by the NCMO and investment projects in this area, also by using EU structural funds, may substantially help reduce dependence on agri-food imports, with positive implications for deficit improvement, economic growth and sovereign risk.

The analysis of indicators on current account deficit sustainability shows mixed developments. On the one hand, non-debt creating capital flows further accounted for the majority share of current account financing (60 percent in 2023 and 73 percent in 2024 Q1), but FDI flows made a lower contribution (48 percent in 2023 against 53 percent in 2022 and 81 percent in 2024 Q1 versus 85 percent in the same year-ago period). On the other hand, the widening of the current account deficit was accompanied by a swift increase in external debt (by 18 percent in 2023, before rising again by 4.5 percent in January-March 2024). The breakdown shows that the share of short-term external debt went down by 1 percentage point from end-2023 to 27.4 percent, while the ratio of foreign exchange reserves to short-term external debt by remaining maturity exceeded the threshold of 100 percent at end-March 2024, reaching 102.6 percent, which points to a low refinancing risk.

<sup>39</sup> <https://www.cnsr.ro/en/publicatii/studii-si-analize/grupul-de-lucru-cnsr-privind-diminuarea-vulnerabilitatilor-provenind-din-cresterea-deficitului-balantei-comerciale-cu-produse-agroalimentare/>

### 1.3. Non-financial sector indebtedness

The private sector debt-to-GDP ratio in Romania is still the lowest in the European Union, standing at 40 percent versus the EU average of 111 percent in 2023 Q4. This position remained unaffected by the post-pandemic adjustments, although Romania saw one of the smallest declines in this indicator across the EU (-6.1 percentage points against the average for EU countries excluding Luxembourg of -10.1 percentage points compared to 2019 Q4). Similarly, bank credit to the private sector remains the lowest in the EU, coming in at 24 percent of GDP in December 2023. The persistently low financial intermediation is largely attributable to structural factors, with Romania ranking among the last EU countries in this respect over the past decade.

Real sector debt followed an upward path in 2023, yet its rate of increase slowed down to 4 percent (from 12 percent in 2021 and 9 percent in 2022), reaching lei 705.6 billion<sup>40</sup> at end-2023. Romania's economy has been in the downward phase of the debt cycle ever since the onset of the COVID-19 pandemic (Chart 1.16), a trend also seen in the euro area and worldwide<sup>41</sup>.

Chart 1.16. Debt cycle<sup>42</sup>

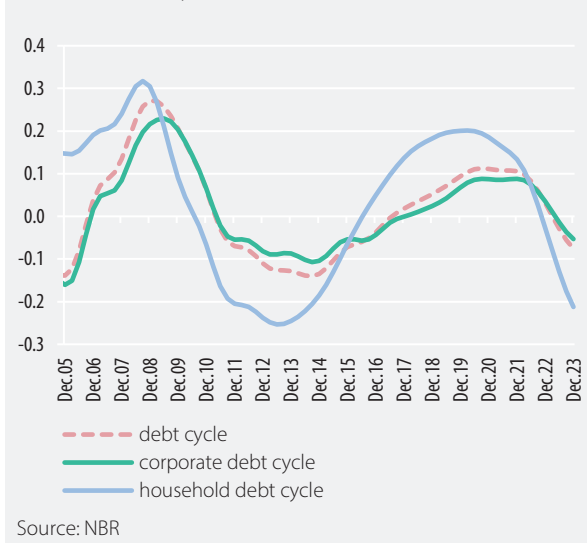
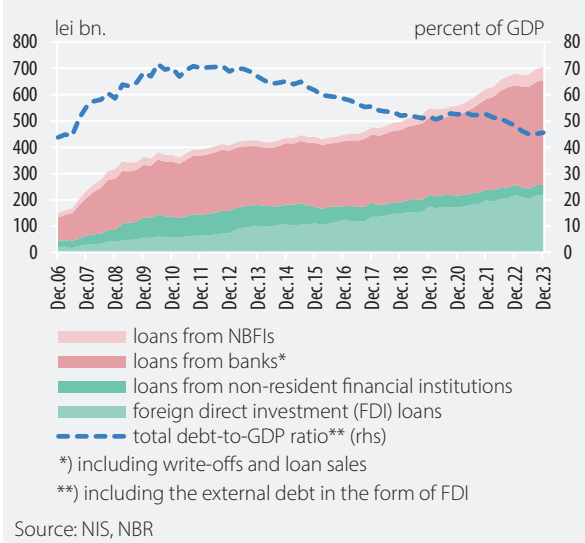


Chart 1.17. Corporate and household debt



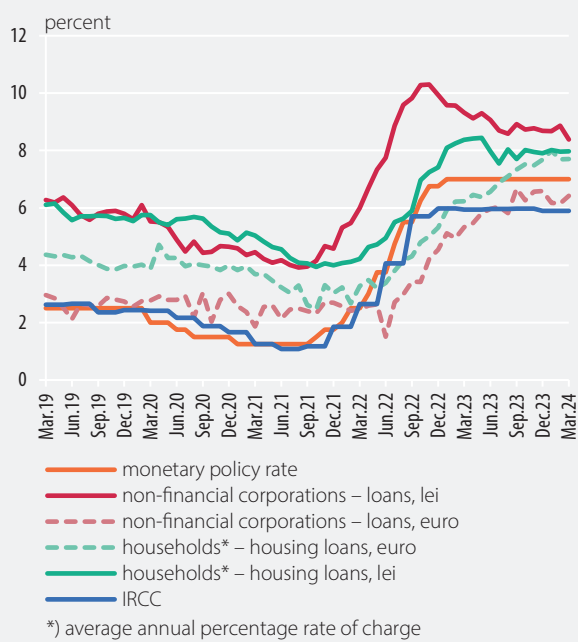
Behind the uptrend in indebtedness visible over the past year stood the dynamics of loans from local credit institutions (+6 percent), Chart 1.17, further bolstered by government programmes, with state-guaranteed loans increasing by 25 percent in 2023. Loans from non-resident creditors held relatively steady, yet the breakdown shows mixed developments: external loans from financial institutions rose moderately by 3 percent, following successive declines over the previous years (-8 percent in 2022), while loans from direct investment enterprises fell slightly (-1 percent).

<sup>40</sup> Total non-financial corporate and household debt comprises: (i) domestic financial debt (loans from local banks, including write-offs and loan sales, and loans from NBFIs), (ii) external financial debt (loans from foreign financial institutions), and (iii) non-financial external debt (non-financial corporations' intercompany loans).

<sup>41</sup> Credit cycle indicator Q4 2023: risks could intensify before the cycle turns.

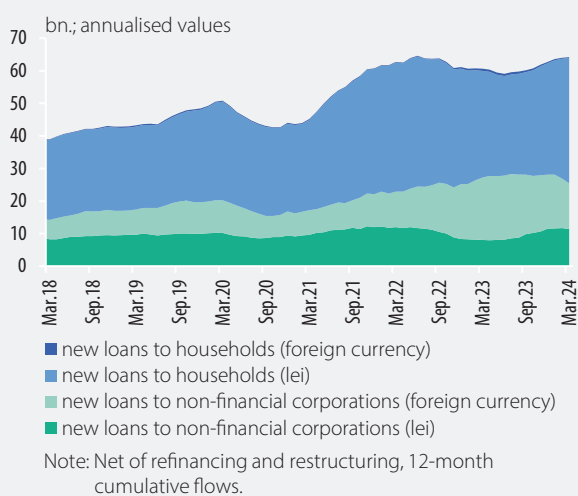
<sup>42</sup> The cycle is calculated using the Christiano-Fitzgerald filter assuming the length of the cycle is 14 years. The Bry-Boschan method was used to identify the minimum and maximum values over a four-quarter period.

**Chart 1.18.** Interest rates on loans



Source: NBR

**Chart 1.19.** New bank loans to the real sector



Source: NBR

These developments owe, on the one hand, to the reversal of the spread of interest rates on external versus domestic EUR-denominated loans and, on the other hand, to households' increased access to credit products provided by European financial institutions lacking physical presence in Romania.

Non-financial corporate debt picked up by 4 percent to lei 508.2 billion, i.e. 31.8 percent of GDP, while household debt increased by 2 percent to lei 197.4 billion, accounting for 12.4 percent of GDP. Loans from credit institutions in Romania make up about 42 percent of non-financial corporations' debt (up by 1.7 percentage points from the previous year and by 5.7 percentage points from December 2019), while the share of FDI loans declined to 42.8 percent of total, from approximately 45 percent in December 2022. Unlike the corporate sector, households take out primarily bank loans (88 percent), with NBFi credit making a modest contribution (only 5 percent).

The average lending rate on new leu-denominated loans to non-financial corporations dropped by 0.9 percentage points in March 2024 versus the same period of the previous year (reaching 8.4 percent), but remained 2.9 percentage points above the value recorded in March 2020 (Chart 1.18). The average interest rate on new consumer loans to households, which were mostly fixed-rate loans, also saw an adjustment during 2023 and in 2024 Q1 (to 11.3 percent in March 2024, down by 2.3 percentage points against March 2023), yet it still exceeds the March 2020 level by 0.9 percentage points. In the case of housing loans, the pass-through of changes in interest rates is slower, as the quarterly benchmark index for loans to consumers (IRCC), which underlies the calculation

of the interest rate on housing loans, is adjusted with a delay. Specifically, the average interest rate stood at 8 percent in March 2024 (-0.4 percentage points versus March 2023 and +2.2 percentage points compared to March 2020).

In 2024 Q1, local banks<sup>43</sup> maintained the status quo of credit standards for loans and credit lines to non-financial corporations amid the stabilisation of interest rates. As far as loans to households are concerned, banks reported an easing of credit standards

<sup>43</sup> Bank Lending Survey, May 2024, for 2024 Q1.

due mainly to the pressure from bank competition, the expectations regarding the general economic activity, and households' expected financial standing. For 2024 Q2, credit institutions foresee credit standards to remain virtually unchanged for loans to non-financial corporations, whereas those for loans to households are envisaged to ease further. Credit demand from the real sector increased in 2024 Q1, especially from households. For 2024 Q2, banks expect the demand for loans from both non-financial corporations and households to continue to rise, regardless of loan type and maturity.

Against this background, in early 2024 new loans from local financial institutions witnessed a faster recovery (+5.9 percent in annual terms in March 2024, annualised flows, versus -3.4 percent in the same year-ago period), driven by the boost in lending to households (+16.1 percent compared to -16.2 percent previously), Chart 1.19. Foreign currency financing remained the main component of new loans to non-financial corporations (55 percent of the flow of new credit, annualised as at March 2024), posting, however, a 15 percentage point decline compared to the same period of the previous year.

## 2. REAL SECTOR

---

In 2023 H1, the financial statements of non-financial corporations in Romania were negatively affected by some developments in the economic environment, such as the increase in financing costs, as well as in commodity and labour costs, alongside the modest annual dynamics of domestic demand and foreign trade. Concurrently, payment discipline deteriorated in 2023 H1, with non-financial corporations' overdue payments standing 4.8 percent above the level recorded in the same period of the previous year. Against this backdrop, the firms' financial position worsened slightly compared to 2022 H1, yet the overall financial health measure of non-financial corporations (Z-score), irrespective of company size, has remained outside the risk area.

Non-financial corporations' debt servicing capacity was affected by the drop in profit, alongside the higher financing costs. Around a third of the companies incurring interest expenses are vulnerable to interest rate developments (June 2023), a rising share in annual terms both at aggregate level and across all business sectors. However, in the course of 2023, the quality of credit institutions' corporate loan portfolios improved. The non-performing loan (NPL) ratio followed a downward trend until the beginning of 2024, hitting an all-time low of 3.7 percent in January 2024, before posting a marginal rise (3.8 percent in March 2024, -0.3 percentage points in annual terms).

The balance sheet position of the households sector is further robust, amid a diversification trend in the financial investment portfolio. The borrower-based macroprudential measures implemented by the National Bank of Romania proved efficient in supporting a sustainable level of indebtedness, especially in recent periods characterised by multiple shocks and high uncertainty. In this context, the share of vulnerable debtors, i.e. borrowers with a level of indebtedness exceeding 45 percent, contracted significantly compared to the period before implementing the cap on the level of indebtedness. Households' capacity to service bank debt worsened slightly in the course of 2023, a trend that has persisted into early 2024, with the non-performing loan ratio exceeding the 3 percent threshold (3.3 percent in March 2024). The default rate one year ahead is forecasted to pick up further for both housing loans and consumer credit, coupled with a modest capacity of debtors with loans more than 90 days past due to bring payments up to date within one year.

The residential real estate market is currently facing an imbalance between supply and demand. On the one hand, demand rose amid the economic recovery, the lower inflationary pressures, and the higher wage earnings. On the other hand, the supply of new dwellings completed and of homes available for sale dropped significantly. This gap is expected to persist, given the sharp decline in the number of residential building permits, as well as in the volume of residential construction works, due,

*inter alia*, to the high construction costs seen in recent years. There are strong regional disparities in households' access to finance for house purchase, which translate into a significant concentration of loans in the main regional centres, reflecting the asymmetrical economic development across the regions. However, regardless of the region, the quality of the portfolio of loans for residential property purchase remains at prudent levels. Against the backdrop of the macroprudential measures implemented by the National Bank of Romania (in November 2011 and April 2022) with respect to the loan-to-value (LTV) ratio, standard housing loans exhibit an adequate LTV ratio that does not exceed 85 percent.

The commercial real estate market continues to face a number of both structural and incidental challenges. At the EU level, there are concerns about the risks and vulnerabilities related to the commercial real estate sector, given the potential implications for financial stability caused by the fall in commercial property prices. At national level, the volume of investment declined markedly in 2023, but construction activity picked up slightly, despite the hike in construction costs. The banking sector's exposure to the commercial real estate market is significant and the quality of the CRE loan portfolio is lower than that of the aggregate portfolio of loans to non-financial corporations. Nevertheless, the non-performing loan ratio has improved over the recent period for this type of loans as well. The assessments made by both the central bank and the European Systemic Risk Board show that the risks to financial stability stemming from the commercial real estate market are low and adequately managed, so that no macroprudential measures are required to address vulnerabilities, but rather close monitoring of developments.

## 2.1. Non-financial corporations

### 2.1.1. Non-financial corporations' economic and financial performance

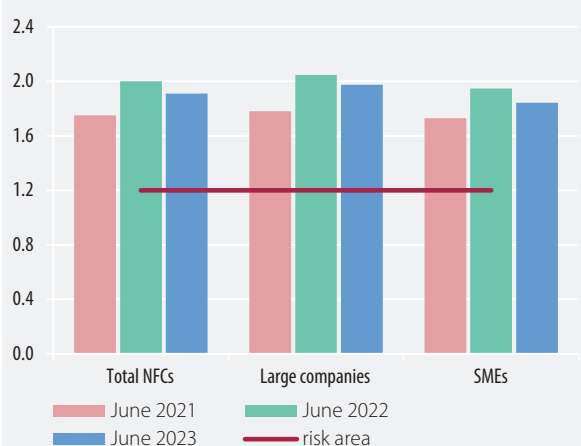
The information presented in this section is based on the financial statements as at end-June 2023 submitted to the Ministry of Finance by around 38 thousand firms (i.e. 4.9 percent of the number of active firms at end-2022). These firms generated 86 percent of turnover, hired 64 percent of employees and held 76 percent of total assets at end-2022.

In 2023 H1, the financial statements of non-financial corporations in Romania were negatively affected by some developments in the economic environment. Thus, in the mentioned period, financing costs went up (and continue to stand at approximately the same levels at present) following the monetary policy tightening on the domestic front and in Europe. At the same time, domestic demand, but also exports of goods and services, posted modest annual dynamics (below 3 percent), while commodity and labour costs increased at a faster pace. In view of these

developments, the financial health measure of firms in Romania<sup>44</sup> deteriorated slightly compared to 2022 H1, as a result of a lower return on assets and a lower efficiency of asset utilisation, i.e. turnover-to-total assets ratio (Chart 2.1). Looking at the breakdown by company size, the overall financial health measure also recorded similar negative developments for both large companies and SMEs (micro, small and medium-sized enterprises included). However, it is worth mentioning that the financial health measure remains significantly above the risk area both at aggregate level and in the two main segments.

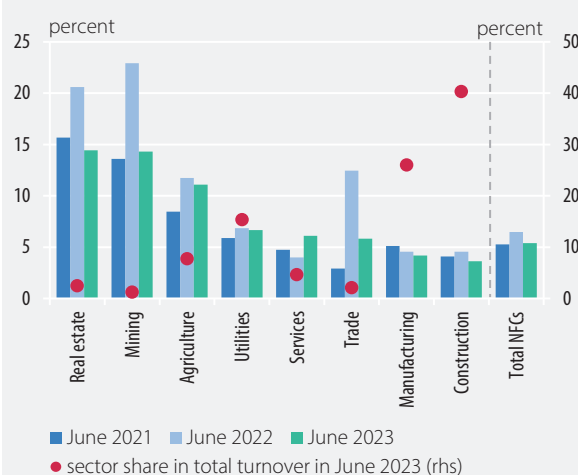
The profitability of non-financial corporations declined in the first half of 2023, amid the growth rate of expenses (5.1 percent) exceeding that of revenues (4.1 percent). The aggregate net profit contracted over this period by 12.6 percent versus 2022 H1. This led to a decrease in the return on equity (ROE) and the return on assets (ROA) by 2.9 percentage points (20.8 percent in June 2023) and by 1.2 percentage points (8.7 percent in June 2023).

**Chart 2.1.** Overall financial health measure of the non-financial corporations sector



Source: MF, NBR calculations

**Chart 2.2.** Net profit margin by business sector

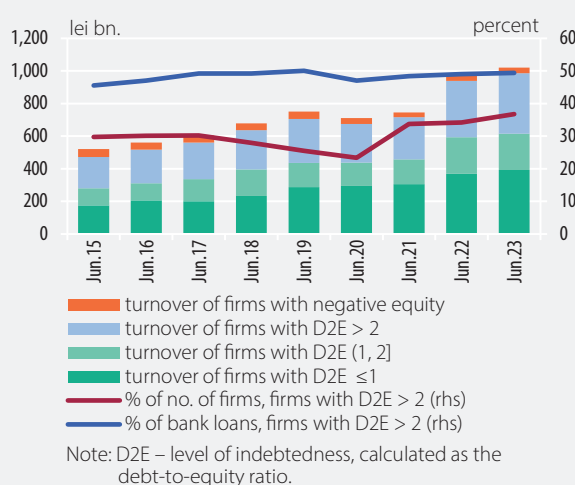


Source: MF, NBR calculations

The net profit margin<sup>45</sup> decreased for all economic sectors in Romania in the first part of 2023, except for construction (Chart 2.2). The largest declines in the net profit margin versus the same year-earlier period were reported by the real estate sector (-8.6 percentage points to 14.3 percent), agriculture (-6.6 percentage points to 5.8 percent) and mining (-6.2 percentage points to 14.4 percent). However, mining remains the most profitable sector, with the highest net profit margin, followed by the real estate sector and utilities (11.1 percent). The other sectors had net profit margins below 10 percent.

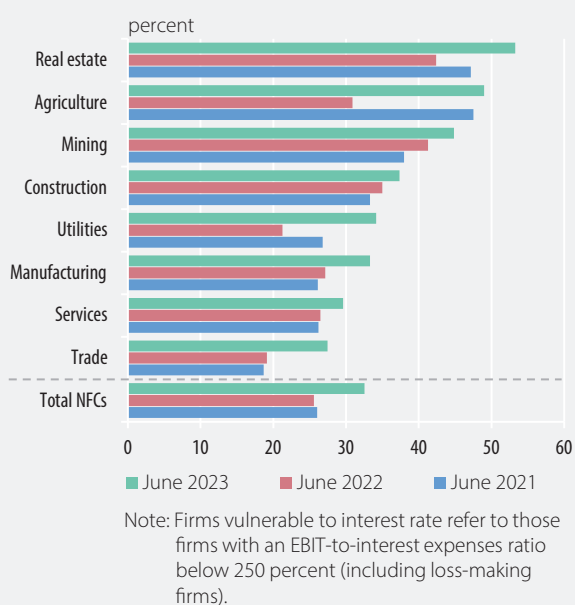
<sup>44</sup> The overall financial health measure of non-financial corporations sector was determined based on the methodology developed by Edward I. Altman, *Predicting Financial Distress of Companies: Revisiting the Z-score and ZETA Models*, 2000. Considering that the non-financial corporations sector in Romania is overwhelmingly made up of unlisted firms, the indicator was calculated based on the method adapted for private firms.

<sup>45</sup> Net profit margin was calculated as a share of net profit in turnover.

**Chart 2.3.** Distribution of firms by level of indebtedness

Source: MF, NBR, NBR calculations

The economic environment marked by elevated financing costs had a limited impact on non-financial corporations' indebtedness. The level of indebtedness (calculated as the debt-to-equity ratio) at aggregate level for the first six months of 2023 remained relatively flat compared to the same year-earlier period (139.9 percent). Looking at the distribution of firms by level of indebtedness, the share of the number of companies with a level of indebtedness above the signalling threshold (200 percent) in total rose by 2.6 percentage points versus 2022 H1 to 36.8 percent (Chart 2.3). However, in terms of turnover, the share of these firms remained steady (36 percent).

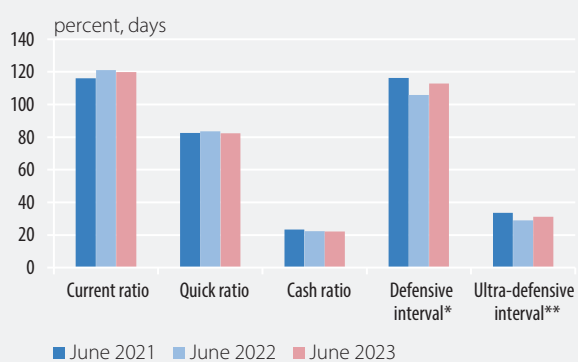
**Chart 2.4.** Share of the number of vulnerable firms by business sector

Source: MF, NBR, NBR calculations

Non-financial corporations' debt servicing capacity was affected by the drop in profit, concurrently with the rise in financing costs. While remaining above the 250 percent signalling threshold, the EBIT-to-interest expenses ratio saw a significant contraction at aggregate level, i.e. by 560 percentage points, from 1,218 percent in June 2022 to 659 percent in June 2023. Moreover, the share of firms vulnerable to interest rate<sup>46</sup> was 33 percent of the total number of companies incurring interest expenses in June 2023, i.e. 7 percentage points above the level seen in June 2022 (Chart 2.4). By business sector, the share of vulnerable companies rose in 2023 H1 against the same year-earlier period in all eight sectors considered for analysis. The real estate sector registered the largest share of vulnerable companies (53 percent), followed by agriculture (49 percent), while trade posted the lowest share of such companies (27 percent). However, it should be noted that in most sectors (except for real estate), most companies report a comfortable EBIT-to-interest expenses ratio of over 250 percent.

In the first half of 2023, the liquidity of non-financial corporations, by category, remained relatively flat compared to the same year-earlier period (Chart 2.5). The current ratio declined marginally to 120 percent (-1.2 percentage points) amid a slightly faster growth rate of short-term liabilities and accrued income (12.8 percent) than that of current assets (11.7 percent). The quick ratio also went down, standing at 82.4 percent at end-June 2023 (-1.1 percentage points versus June 2022), while the cash ratio remained unchanged from the previous year at 22 percent.

<sup>46</sup> Firms with an EBIT-to-interest expenses ratio below 250 percent (including loss-making firms) were deemed to be vulnerable to interest rate.

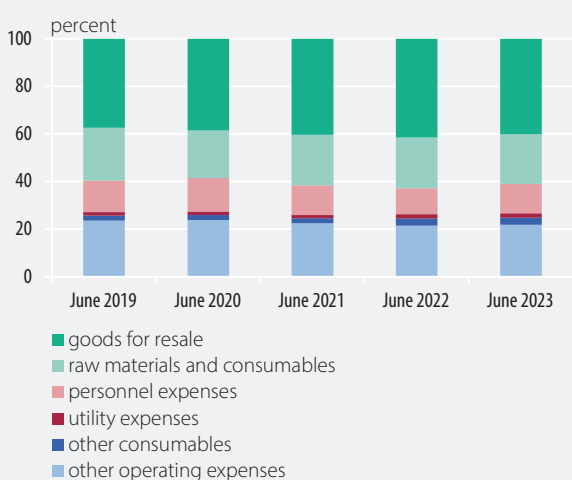
**Chart 2.5.** Firms' main liquidity indicators

■ June 2021 ■ June 2022 ■ June 2023

\*) defensive interval = current assets (net of inventories)/ daily operating expenses (days)

\*\*) ultra defensive interval = liquid assets/daily operating expenses (days)

Source: MF, NBR calculations

**Chart 2.6.** Structure of operating expenses

Source: MF, NBR calculations

The structure of non-financial corporations' operating expenses changed slightly from 2022 H1 (Chart 2.6). Amid the pressures stemming from inflation rate developments and the hike in the minimum wage economy-wide, firms increased their personnel expenses. Thus, in the first part of 2023 non-financial corporations' staff costs were 36 percent higher than in the same period of 2021 and 20 percent higher than in the same year-earlier period.

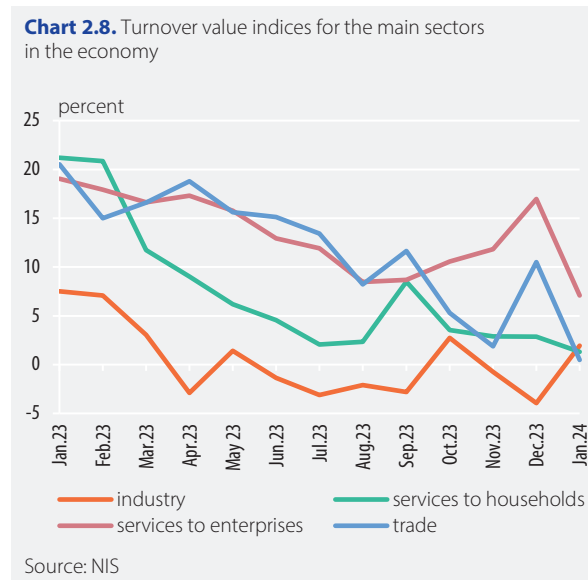
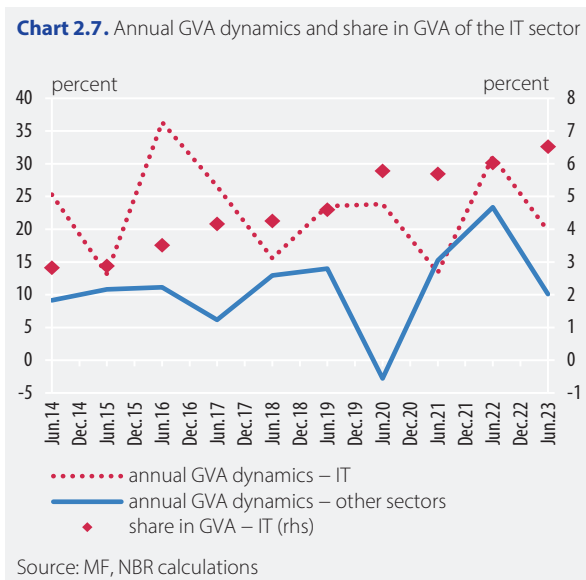
The increase in staff costs reflected also in a widening of their share in total operating expenses compared to June 2022, i.e. from 11 percent to 12.6 percent in June 2023. From a sector perspective, services and construction accounted for the highest shares of staff costs in total operating expenses, i.e. 31 percent and 16 percent respectively. Mining and services reported the largest rises in the share of personnel expenses compared to 2022 H1, i.e. +3.6 percentage points and +2.4 percentage points respectively.

At the same time, in the first half of 2023, utility expenses stayed relatively flat compared to the same year-earlier period, their share in total operating expenses remaining also unchanged (1.8 percent). This owed to the stabilisation and even decline in international energy prices compared to 2022, as well to domestic energy price capping schemes implemented by the government.

According to the semi-annual financial statements<sup>47</sup>, at national level, taking into account a longer period of time (June 2014-June 2023), the IT sector in Romania recorded a higher increase in gross value added (GVA) compared to the other economic sectors each year, except for 2021 (Chart 2.7). In addition, over the same period, the share of this sector in total GVA generated by firms that submitted mid-year financial statements rose markedly by 3.7 percentage points from 2.8 percent in June 2014 to 6.5 percent in June 2023. This sector is highly relevant to the Romanian economy

<sup>47</sup> For the period prior to 2021, only companies that submitted semi-annual financial statements in 2021-2023 were taken into account. This was due to the change in the turnover threshold for submitting these financial statements to EUR 1 million as of 2021.

as it is one of the knowledge-intensive services (KIS) sectors; furthermore, it makes a positive contribution to the trade balance, reporting a trade surplus throughout the period under review, in a context in which the international trade in goods registered a trade deficit throughout the same period.



The same evolution can be seen globally<sup>48</sup>; in 2000-2022, the average growth rate of gross value added in the IT sector almost doubled compared to those in the other sectors in the economy. At the same time, the IT sector in Romania and several other Central and Eastern European countries recorded a cumulative GVA increase of over 10 percent in 2015-2022.

In this context, the development of the IT sector, as well as of the other KIS sectors, is pivotal to the structural change of the economy towards higher value added, as also set out in the National Committee for Macroprudential Oversight's recommendations, namely NCMO Recommendation No. R/6/2021 on supporting green finance and NCMO Recommendation No. R/3/2022 on the sustainable increase in financial intermediation.

The annual dynamics of the monthly turnover for the main sectors in the economy remained in positive territory (except for industry) also in the second part of 2023, albeit on a downward trend, according to data published by the National Institute of Statistics (Chart 2.8). However, in the last part of the year, both trade and business services posted a mildly faster pace of increase.

### Box 1. The standard image and the model of successful companies in Romania<sup>49</sup>

The National Bank of Romania (NBR) initiated an action plan to enhance Romanian entrepreneurs' level of financial education, which materialised in the

<sup>48</sup> World Bank, *Digital Progress and Trends Report 2023*, available at <https://openknowledge.worldbank.org/server/api/core/bitstreams/95fe55e9-f110-4ba8-933f-e65572e05395/content>

<sup>49</sup> Ichim, S., Vid, A., "Imaginea standard și tiparul companiilor de succes din România", NBR Occasional Paper No. 61, 2024.

“Antreprenoriat de TOP”<sup>50</sup> (TOP Entrepreneurship) project. This focuses, among others, on identifying the standard image and the model of successful firms and promoting the features of these companies.

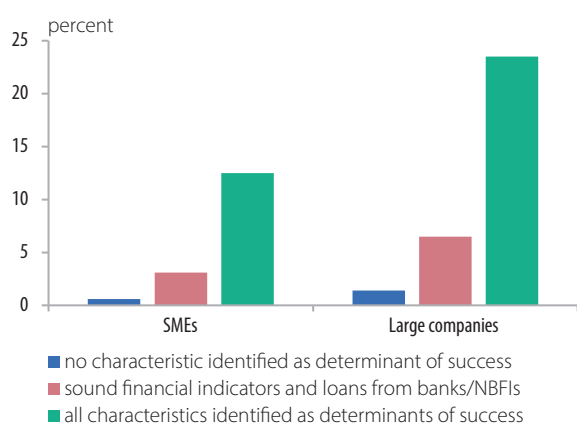
To this end, successful companies were identified using a methodology based on criteria of firms’ longevity and sound business operations, as well as on the adapted OECD criterion for high-growth firms. Applying this methodology resulted in approximately 2,700 successful companies.

The firms thus identified have several distinct characteristics compared to the rest of non-financial corporations, which include a larger share of equity (49 percent versus 36 percent) and of bank/NBFI loans (13 percent versus 9 percent) in liabilities and owners’ equity, as well as certain financial soundness indicators at better-than-average levels and within the recommended limits (debt-to-equity ratio of 98 percent versus 168 percent, current ratio of 1.5 versus 1.2). Successful firms are adequately capitalised, their average equity being approximately 29 times greater than that of the rest of the companies in Romania. In addition, the level of financial education of the firm’s management is shaping up to be an essential factor for the non-financial corporations’ path to success. Specifically, this category of enterprises have higher scores in all financial education components (financial literacy score of 84 out of 100 compared to 68 out of 100), as well as better training for the executive management (94 percent versus 68 percent are people with higher education).

Moreover, a logistic regression identified a series of elements that paint the standard image of successful companies in Romania. The results have shown that a

successful firm is defined by the following essential characteristics, which stay the same regardless of business sector: (a) executive management that have higher education, either in economics or in a field relevant for the industry the company operates in and (b) an above-average level of financial education – financial literacy and digitalisation –, i.e. score above 50 percent according to OECD methodology, (c) higher capitalisation, (d) external sources, such as bank or NBFI loans, for financing the business operations, whereas internal funding sources can be used rather for consolidating equity, and (e) financial soundness indicators within the recommended limits (level of indebtedness below 200 percent, current ratio between 1 and 2).

**Chart A.** Estimated average probability of success, depending on the fulfilment of the characteristics identified as determinants of success and on the size of the firm



Source: NBR, Occasional Paper No. 61

<sup>50</sup> Launched in October 2023, the “Antreprenoriat de TOP” project aims at increasing firms’ financial literacy, by developing financial knowledge, improving financial behaviour and financial attitudes, increasing financial inclusion among companies, encouraging a broader use of financial products and services, and improving the digitalisation of financial and business activities.

If a firm has the above-mentioned characteristics, this leads to a significant increase in the estimated average probability of success compared to a similar firm that does not meet these criteria, by approximately 19 times, more specifically, by 12 percentage points in the case of SMEs and 22 percentage points in the case of large companies (Chart A). The contribution made by the executive management's level of financial education and training to the company's success is significant, raising its probability of success by about four times.

Furthermore, several other qualitative factors, which translate into the firm's capacity to survive for a long period of time and to adapt to inherent changes throughout the economic and financial cycles, are very important for a company's success.

Therefore, the attributes identified as the most relevant for achieving success can be used as a benchmark by companies operating in Romania whose objective is medium- and long-term development, in a healthy and sustainable manner from an economic and financial standpoint.

## 2.1.2. Financial discipline of non-financial corporations

### Non-performing loans in relation to banks

In the course of 2023, the quality of credit institutions' corporate loan portfolios improved. After having gradually declined during 2023, the NPL ratio rose slightly in the first months of 2024, reaching 3.8 percent in March 2024 (-0.3 percentage points in annual terms). By sector, construction reports the highest NPL ratio, although the ratio had a favourable evolution over the last year (8 percent in March 2024, -3.5 percentage points versus the same year-earlier period), whereas utilities continue to register a low NPL ratio (0.7 percent, -0.11 percentage points in annual terms).

Most new loans granted by credit institutions to non-financial corporations went to trade companies (28 percent, March 2024) and services firms (23 percent). New lending to the trade sector was driven by a stronger consumer demand in 2023 Q4, the upward trajectory of demand being expected to continue in the first part of 2024 as well<sup>51</sup>.

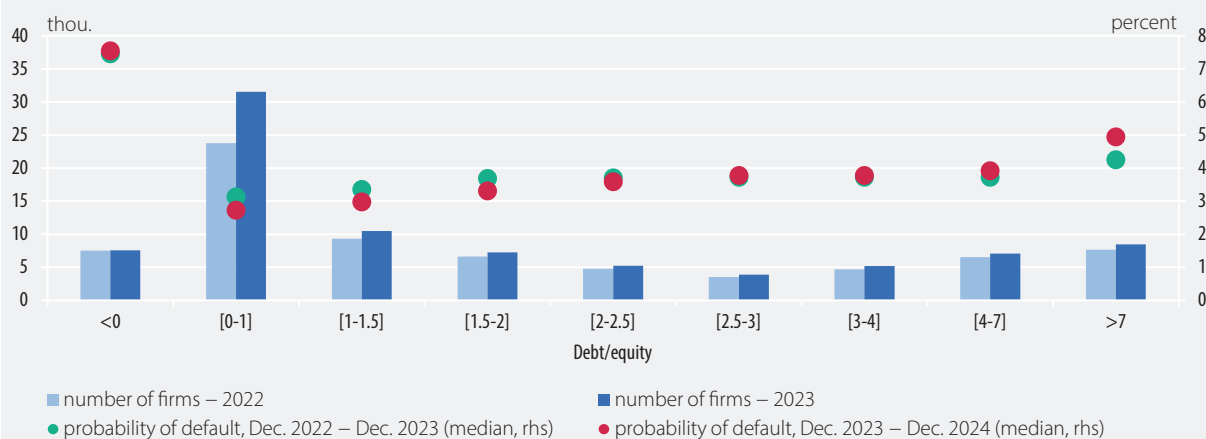
With the government guarantee programmes (started in the context of the COVID-19 pandemic) carrying on, non-financial corporations' resort to such loans increased significantly over the past four years. At the end of March 2024, the outstanding balance was lei 36.4 billion, approximately 11 times higher than in June 2020, when the IMM Invest programme was introduced. There is a rather high concentration of these loans in the banking system, with three credit institutions holding approximately half of the government guaranteed loans in their portfolios.

<sup>51</sup> NBR, *Inflation Report*, May 2024.

In addition, credit risk on government guaranteed loans picked up, the volume of non-performing loans expanding by 53 percent in annual terms in March 2024, albeit reporting a relatively low level in absolute terms. The NPL ratio of government guaranteed loans remains however below average, i.e. 3.1 percent (up from 2.4 percent a year earlier).

Companies from all sectors of the economy resorted to government guaranteed loans, as the introduction of government guarantee programmes helped enhance access to finance for SMEs in Romania. Thus, in June 2020 – March 2024, about 45 thousand companies took loans through government programmes. Out of these, approximately 15 thousand did not have bank loans before 2020, as most of them are micro-enterprises. However, these programmes need to be adjusted to better target the categories of borrowers, especially those in areas deemed strategic, as well as in sectors that can contribute to a greater alignment with the objectives of the European agenda. Companies with outstanding government guaranteed loans report better profitability and liquidity indicators, but are marginally more indebted than those with outstanding non-government guaranteed loans. A more favourable financial situation is also associated with a lower credit risk for firms with outstanding government guaranteed loans, their estimated probability of default being 3.9 percent compared to 5.2 percent for firms with outstanding non-government guaranteed loans in March 2024.

**Chart 2.9.** Probability of default of non-financial corporations by indebtedness level\*



\*) debt-to-equity ratio as reported in 2022 by firms with outstanding loans in 2022 and 2023

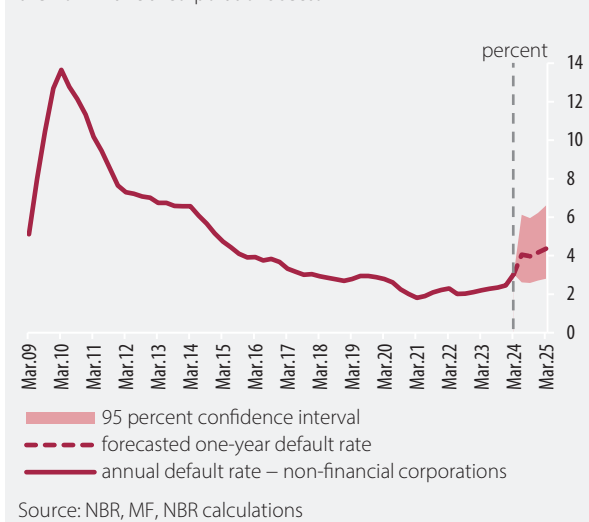
Source: MF, NBR, NBR calculations

The credit risk declined slightly for most companies with outstanding bank loans, but the probability of default<sup>52</sup> for riskier borrowers posted a marginal pick-up. At aggregate level, the median probability of default stood at 3.27 percent at end-2023, down 0.25 percentage points from a year earlier. The distribution of the probability of default by level of indebtedness (Chart 2.9) indicates an increase in the credit risk for overindebted companies and companies with capital shortfalls. The former, with a debt-to-equity ratio above 2, saw a more pronounced deterioration

<sup>52</sup> The annual probability of default, according to banks, estimated for expected credit loss allowances according to IFRS 9.

in the probability of default at end-2023, with the median rising by 0.33 percentage points and the mean going up by 3 percentage points.

**Chart 2.10.** Annual default rate and one-year forecast, the non-financial corporations sector



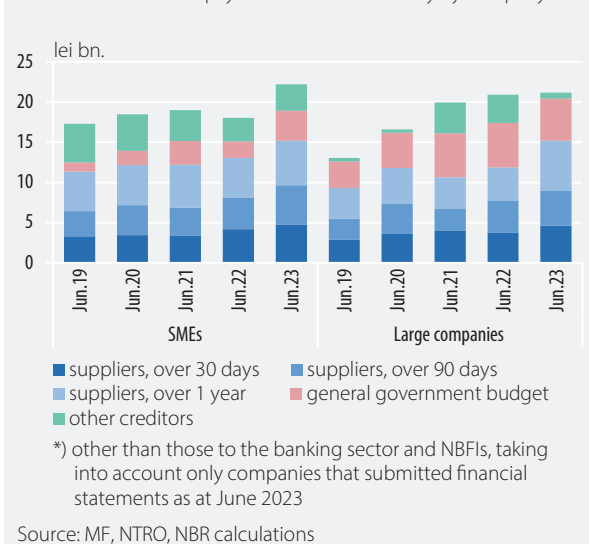
Overindebted companies took about half (47 percent) of the volume of loans to non-financial corporations, accounting for a third of the number of companies with outstanding loans. Companies with negative equity are the most vulnerable to credit risk, yet they account for only 8.7 percent of the total number of non-financial corporations with outstanding loans, taking 6.2 percent of the volume of loans granted by banks. The debt-to-equity increase enhances companies' credit risk, as they have more limited resources to manage potential unfavourable developments, being also less eligible for bank finance.

In a macroeconomic environment marked by persistent uncertainties, the default rate for non-financial corporations reached 3.1 percent in March 2024, up 0.9 percentage points from the same year-earlier period. The average probability of default estimated for March 2024 – March 2025 is 4.4 percent in the baseline macroeconomic scenario (Chart 2.10).

### Payment discipline in the economy

Non-financial corporations' payment discipline deteriorated in 2023 H1, with overdue payments in the economy standing 4.8 percent above the level recorded in the same year-earlier period. Overdue payments decreased for SMEs (-1.8 percent), but rose for large companies (12.1 percent). Looking at the breakdown, arrears to suppliers continued to take the largest share of arrears to non-banks, accounting for

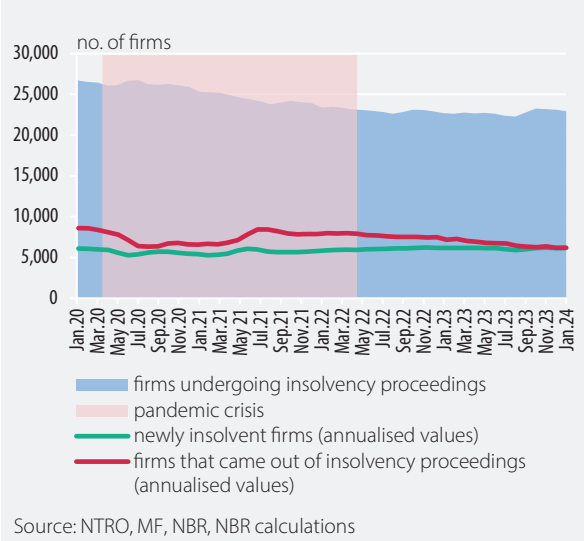
**Chart 2.11.** Overdue payments\* in the economy by company size



approximately 70 percent of total, after an advance by about 15 percent amid the rise in defaults from SMEs (+23.6 percent). As for overdue payments to the general government budget, arrears of large companies surged by 53 percent, which led to an aggregate increase of 10 percent (Chart 2.11).

The number and value of major payment incidents went up by 11 percent and 21 percent respectively in April 2023 – March 2024, compared to the previous 12-month period. Their volume amounted to lei 1 billion, being generated by 5,807 companies of which most were micro-enterprises accounting for 42 percent of total value and for 81 percent of the total number. The sectors with the largest number of companies reporting major payment incidents are services (35 percent) and trade (28 percent).

**Chart 2.12.** Insolvency proceedings



Source: NTRO, MF, NBR, NBR calculations

The concentration level remains significant, with the top 100 companies in terms of the value of major payment incidents accounting for half of their total amount.

In February 2023 – January 2024, the annualised flow of newly-insolvent companies stabilised at around 6,400, while the stock of companies undergoing insolvency proceedings remained at levels similar to the previous year, i.e. approximately 23,000 insolvent companies (+1.1 percent in January 2024 versus the same year-earlier period), Chart 2.12.

Firms undergoing insolvency proceedings have a low relevance for the economy. They generate 1.4 percent of gross value added and hire 1.7 percent of employees in the economy. However, insolvent firms account for a significant share of both overdue

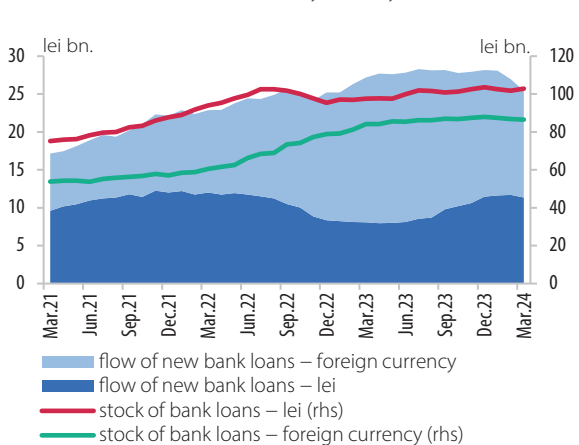
payments to non-banks, generating 49 percent of them in 2022, and non-performing bank exposures, taking 29 percent of total non-performing exposures as at January 2024. Among firms undergoing insolvency proceedings, a third are firms with capitalisation shortfalls (32 percent, 2022).

**Box 2.** Foreign currency lending of non-financial corporations

Foreign currency loans are a key component of non-financial corporations’ financing. However, there are many ways in which the build-up of foreign currency loans can fuel risks to financial stability. When local debtors have an unhedged foreign exchange position, a local currency depreciation would boost the equivalent payment in the domestic currency, causing the debt service capacity to worsen. Moreover, if the foreign currency strengthens alongside an increase in the interest rate on foreign currency loans, this would aggravate the borrowers’ default risk.

In Romania, the faster-paced policy rate hiking than that in the euro area contributed to a temporary pick-up in foreign currency loans to non-financial corporations. Subsequently, as interest rates started to rise in the euro area and were kept unchanged at national level, foreign currency lending saw its advance slow down. Hence, in the past 12 months to March 2024, exchange rate risk associated with non-financial corporations was headed downwards. Although foreign currency loans remain the largest component, accounting for 55 percent of

**Chart A.** Bank loan flow and stock by currency



Note: Net of refinanced and restructured loans, 12-month cumulative flows.

Source: NBR

the annualised flow of bank credit in March 2024, their importance fell markedly against the same year-ago period, when foreign exchange loans had come to hold

70 percent of the loan stock. Specifically, the annualised flow of foreign currency loans shed 27 percent in annual terms (March 2024), amid a growing preference for leu-denominated credit (up 41 percent), Chart A.

At sectoral level, real estate firms make the heaviest recourse to forex credit, yet they pose a lower exchange rate risk than other sectors, given their practice of indexing prices and incomes in foreign currency, which gives them a certain degree of hedging. Foreign currency loans make up 46 percent of loans to non-financial corporations (March 2024), and their share held steady over the past 12 months. The prevalent currency is the euro (96 percent of foreign exchange exposures), ahead of the US dollar (3.5 percent). Foreign exchange loans continue to have a higher asset quality than leu-denominated ones, with the NPL ratio standing at 2.8 percent in March 2024 versus 4.7 percent for the loans denominated in domestic currency. Looking at the financial standing of firms that were granted foreign currency loans in 2023, these companies show a higher level of indebtedness than those that took leu-denominated loans. Specifically, the share of higher-leveraged firms (a debt-to-equity ratio above 2) stood at approximately 40 percent, 10 percentage points above that of companies which opted for leu-denominated loans.

Foreign currency lending is resorted to in green loan agreements as well. The annualised new climate credit flow is 77 percent denominated in foreign currency (March 2024), yet this percentage declined gradually over the past 12 months. Given the small share of green loans in banks' portfolios, the volume of such new business in foreign exchange accounts for merely 5.4 percent of the annualised flow of new foreign currency credit.

Foreign trade companies hold a significant share of foreign currency loans, taken mostly from credit institutions. Net exporting firms received a third of the foreign exchange credit in 2023, while about half of the flow of these loans went to net importing companies. The classification by export activity reveals a contrast in companies' foreign currency exposures. Net exporting firms are mostly hedged at exchange rate risk, since an increase in foreign currency debt service as a result of a weaker local currency can be covered by higher exports-related earnings in lei. Conversely, net importing companies with foreign currency loans show a double exposure to local currency depreciation: through higher costs of raw materials and purchased goods, on the one hand, and through an increased debt service, on the other hand.

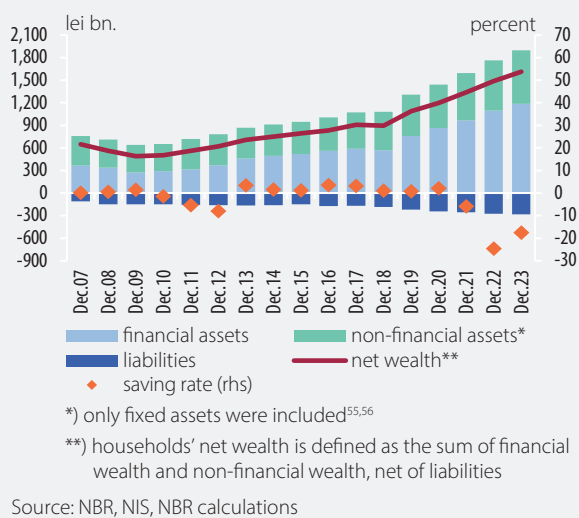
## 2.2. Households

### 2.2.1. Households' balance sheet and saving behaviour

The balance sheet position of the households sector is further robust, amid a diversification trend in investment methods. Households' net wealth is approximately double the gross disposable income (2023 Q4), highlighting its importance for

households' economic resources and for their resilience during periods of stress. However, wealth inequality remains significant, given that 10 percent of the population holds approximately 58 percent<sup>53</sup> of total net wealth.

**Chart 2.13.** Households' net wealth and gross saving rate<sup>54</sup>



In the post-pandemic period, households' financial wealth increased at a sustained pace (Chart 2.13), amid the accumulation of investments in instruments such as pension funds, securities and listed shares (up by 31 percent, 40 percent and 28 percent respectively in 2023 Q4 versus 2022 Q4). Liquid, less risky assets, i.e. currency and deposits, further hold the most significant share in households' financial assets portfolio (35 percent in 2023 Q4, down from 43 percent five years ago), yet households' holdings in the form of investments in private pension funds are on the rise (11 percent of total financial assets in 2023 Q4 versus 9 percent in 2018 Q4).

The government security issues under the "Tezaur" and "Fidelis" programmes proved successful

among the population, as they encouraged the increase in government security holdings through attractive yields. Specifically, the value of government securities in households' investment portfolio went up by more than four times since 2018. In 2023, the total amount of subscriptions via the "Tezaur" programme was lei 12.2 billion, with a value of lei 42.5 thousand per subscription (calculated as the ratio of the total value of subscriptions to their number), whereas under the "Fidelis" programme, the government securities subscribed totalled lei 9.4 billion, with a value per subscription of lei 147.2 thousand.

The composition of financial asset holdings of households in Romania is relatively similar to that in the euro area (Chart 2.14). Currency and deposits hold the most significant share (35 percent of financial assets in Romania as well as in the euro area, data as at 2023 Q4), while one of the main differences is the higher share of insurance, pensions, and standardised guarantees in the euro area. As for similar savings in the region, the composition of financial assets highlights important heterogeneities. Specifically, Polish households have a higher preference for currency and deposits

<sup>53</sup> 2022 data according to the World Inequality Database. It represents the share of net wealth held by individuals in the 90-100 percentile range. Net wealth is calculated as the total value of non-financial and financial assets held by households minus their liabilities.

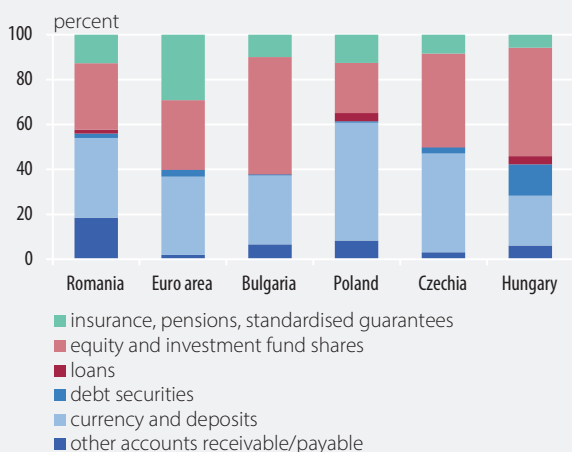
<sup>54</sup> Households' gross saving is calculated as the difference between gross disposable income (including adjustment for the change in pension entitlements) and final consumption expenditure. The saving rate is the ratio of gross saving to gross disposable income. The indicators were estimated based on data from the Quarterly Sector Accounts.

<sup>55</sup> Fixed assets are produced non-financial assets used repeatedly or continuously in production processes for more than one year. These include dwellings, other buildings, machinery and equipment, etc.

<sup>56</sup> Since 2020, the National Institute of Statistics has published non-financial assets, according to the national accounts methodology, prepared in line with ESA 2010. The annual values were linearly interpolated to obtain quarterly data, whereas for 2022 and 2023, the values were extrapolated, considering an annual growth rate of 6 percent (i.e. the average growth rate for 2003-2021) and a quarterly growth rate of 1.5 percent.

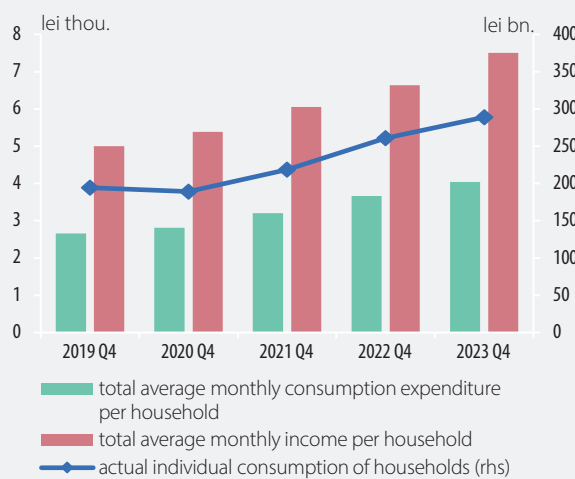
(52 percent of financial assets), whereas Hungarian households prefer debt securities to a greater extent (14 percent of financial assets versus 2 percent in Romania).

**Chart 2.14.** Composition of households' financial assets, regional comparisons, 2023 Q4



Source: Eurostat

**Chart 2.15.** Households' income, expenditure and consumption



Source: NIS

In 2020, amid restrictions and uncertainty stemming from the pandemic outbreak, the saving rate<sup>57</sup> increased significantly, as household income remained relatively steady, while spending fell sharply (Chart 2.13). Once economic activity resumed, households' expenses rose at a faster pace compared to income, the saving rate thus staying in negative territory from 2021 to 2023. Households' actual consumption went up in spite of persistent inflation (Chart 2.15), yet at a declining growth rate (11 percent in 2023 Q4 in annual terms versus 19 percent in the same year-ago period). Final consumption increased *inter alia* on the back of the swifter rise in total average monthly income per household compared to expenses (13 percent versus 10 percent in 2023 Q4), with wage earnings accounting for around 67 percent of income. The breakdown of average monthly consumption expenditure shows that half of it goes towards food items and non-alcoholic beverages (34 percent) and utilities<sup>58</sup> (15 percent), while spending on insurance and financial products makes up less than 1 percent of total average monthly expenses per household. However, more than half of Romanians (55 percent)<sup>59</sup> believe that their financial situation is good, yet this percentage is below the EU average (71 percent).

Household saving in the form of deposits rose by 12 percent in annual terms in March 2024, standing at lei 346 billion, of which time deposits hold a 54 percent share (Chart 2.16). As interest rates went up, time deposits outpaced demand deposits, exceeding the latter's value as of 2023 H2.

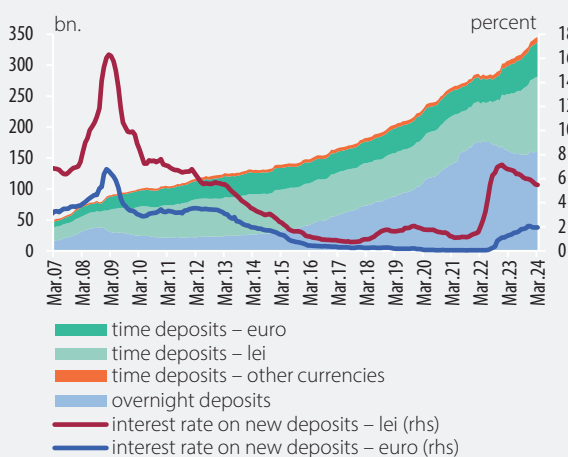
<sup>57</sup> The gross saving rate reflects the share of disposable income that can be used to purchase financial and non-financial assets. Saving represents money that households add to wealth. This can be invested in real fixed assets (non-financial assets) and can lower debt or increase investment (financial assets).

<sup>58</sup> Expenses for housing, water, electricity, gas and other fuels.

<sup>59</sup> *Eurobarometer*, December 2023.

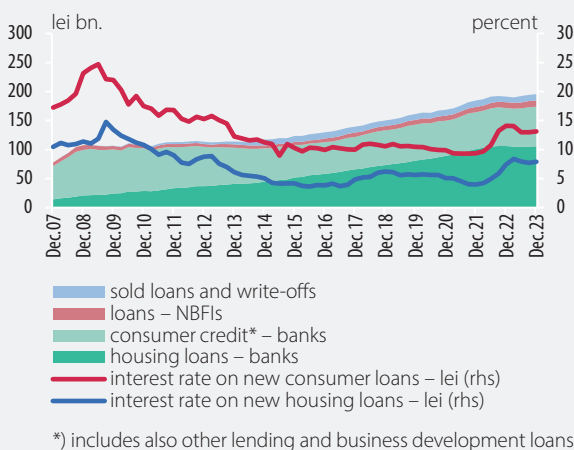
Polarisation and disparities are further significant from this perspective as well. Around 0.5 percent of depositors, i.e. 76.7 thousand individuals, with deposits above the guarantee ceiling<sup>60</sup> totalled at end-2024 Q1 approximately 28 percent (lei 82.5 billion) of the amount of household deposits, holding on average lei 1.07 million per individual. By contrast, the remaining 99.5 percent of depositors, i.e. 14.5 million individuals, who hold 72 percent of deposits, save lei 14.7 thousand on average.

**Chart 2.16.** Composition of household deposits and interest rate on new deposits



Source: NBR

**Chart 2.17.** Composition of households' debt and interest rate on new loans



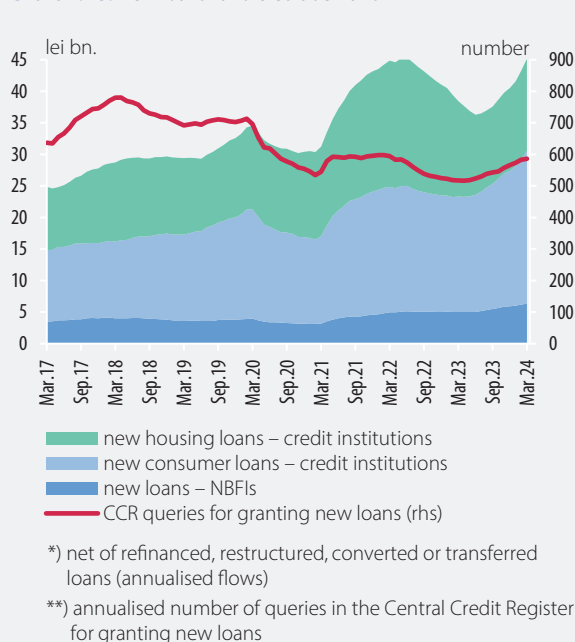
Source: NBR

Conversely, households' total debt continued to increase (+2 percent in annual terms at December 2023, Chart 2.17), amid the rise in both bank loans (+1 percent in 2023 versus 2022) and financing from non-bank financial institutions (+7 percent).

The breakdown of household debt shows that loans from credit institutions prevail (88 percent, data as at December 2023), whereas loans from NBFIs account for 5 percent of the total. Currency risk associated with household debt is low, given that only 12 percent of credit exposures to banks and NBFIs are denominated in foreign currency, down from approximately 30 percent five years ago, amid the macroprudential measures implemented by the NBR. By type of loan, housing loans decreased slightly (-0,4 percent in annual terms in December 2023), amid interest rates stabilising at higher levels<sup>61</sup>, while consumer credit has witnessed more inelastic demand, as it continued to rise (by 4 percent for bank loans and 7 percent in the case of loans from NBFIs). In an international context, household indebtedness in Romania is not only low compared to euro area countries (12.5 percent of GDP versus the euro area average of 47.1 percent, 2023 Q4), but also the lowest in the European Union, at a significant distance from Hungary (16.8 percent).

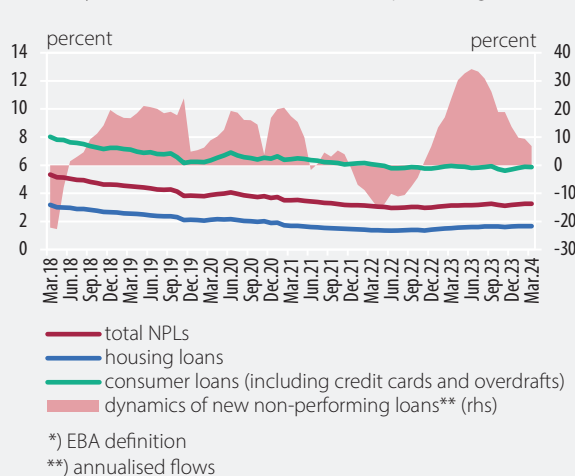
<sup>60</sup> According to the data published by the Bank Deposit Guarantee Fund. The guarantee ceiling is the equivalent in lei of EUR 100,000.

<sup>61</sup> The benchmark index for loans to consumers (IRCC) remained above 5.90 percent in the past five quarters (2022 Q4 – 2023 Q4).

**Chart 2.18.** New loans\* and credit demand\*\*

Source: NBR

New loans<sup>62</sup> to households resumed their positive dynamics, rising by 17.4 percent in April 2023 – March 2024 compared to the previous corresponding period. New loans granted by banks went up by 16 percent at aggregate level (Chart 2.18), the decline in housing loans (-3 percent in April 2023 – March 2024 versus the previous 12-month period) being more than offset by the growth rate of new consumer credit (+32 percent). The role of NBFIs in household lending is increasing, as approximately 14 percent of the flow of new loans is granted by such entities, posting fast annual dynamics (+26 percent in April 2023 – March 2024 compared to the previous corresponding period). These are almost entirely consumer loans. Currency risk associated with new loans to households is negligible, below 1 percent of the flow of new loans granted by banks being denominated in foreign currency.

**Chart 2.19.** Banks' non-performing loan ratio\* by type of loan and annual dynamics of the number of new non-performing loans

Source: NBR

### 2.2.2. Households' capacity to service debt

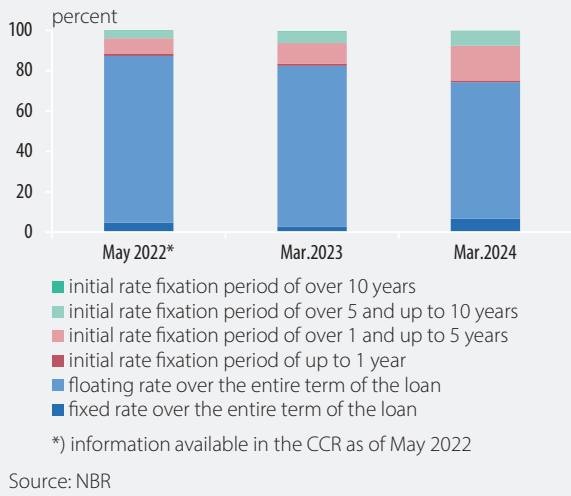
Households' capacity to service bank debt worsened slightly in the course of 2023, a trend that has persisted into early 2024 as well (Chart 2.19). Specifically, the non-performing loan ratio was 3.3 percent in March 2024, up 0.1 percentage points in annual terms, yet stands below the pre-pandemic level (-1.2 percentage points compared to March 2019). Foreign currency-denominated loans pose, in addition to currency risk, an increased credit risk, the NPL ratio in this case being 2.4 times higher than that for leu-denominated loans (6.7 percent versus 2.8 percent in March 2024).

By the type of loan, credit risk associated with housing loans remains subdued (NPL ratio of

1.7 percent, +0.1 percentage points in annual terms in March 2024), while consumer credit (including credit cards and overdrafts) records an NPL ratio 3.5 times higher (5.9 percent). By contrast, the interest rate risk associated with housing loans is higher (Chart 2.20), as a significant share of total loans for house and land purchase have a floating rate over the entire term of the loan (68 percent versus 28 percent in the case of consumer credit, March 2024). However, over the recent period, amid the interest rate hike, the share of housing loans granted fully with a floating rate embarked on a

<sup>62</sup> Net of refinanced, restructured, converted or transferred loans.

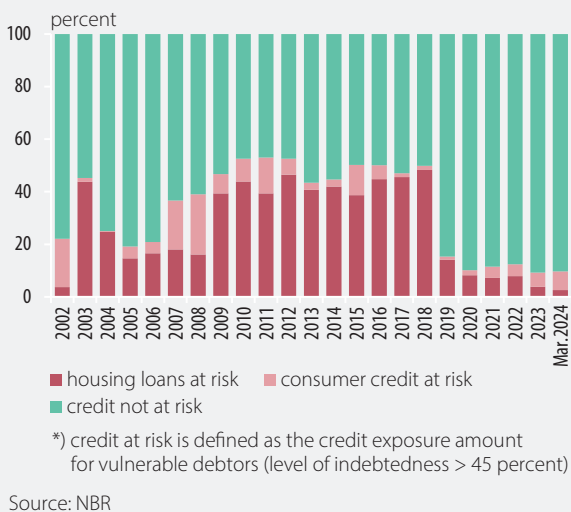
**Chart 2.20.** Composition of housing loans by the initial rate fixation period



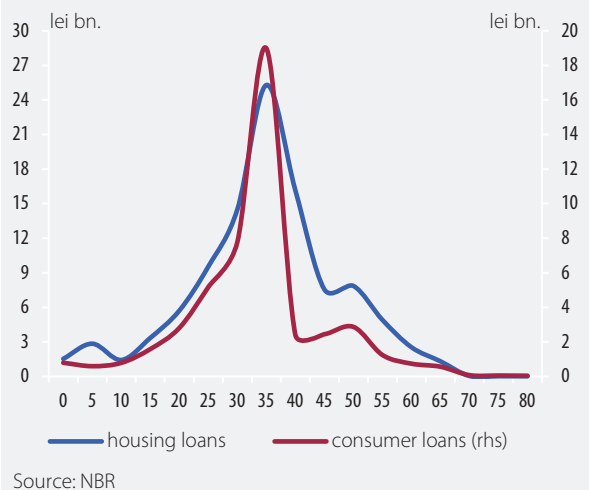
downward trend (68 percent in March 2024 versus 82 percent in May 2022<sup>63</sup>).

The borrower-based macroprudential measures implemented by the National Bank of Romania<sup>64</sup> proved efficient in supporting a sustainable level of indebtedness and in enhancing the resilience of both debtors and credit institutions, especially in recent periods characterised by multiple shocks and high uncertainty. In this context, the median level of indebtedness at loan origination for new credit to households stands at 35 percent for consumer loans and 36 percent for housing loans (March 2024, Chart 2.22), more than 10 percentage points below the corresponding period prior to activating the measure, namely January 2018.

**Chart 2.21.** Credit at risk\* by year of origination and type of loan



**Chart 2.22.** Distribution of the level of indebtedness at origination by type of loan (March 2024)

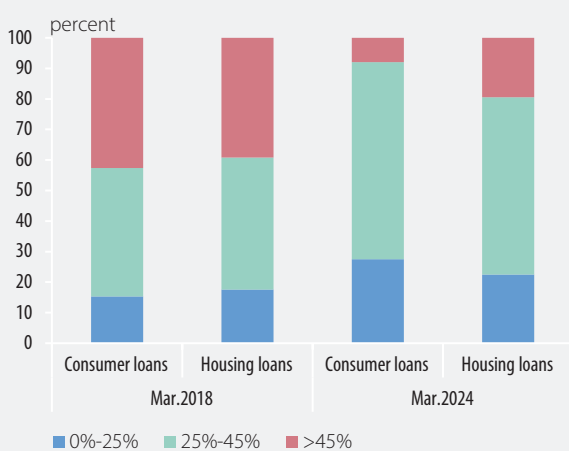


As a result, around 62 percent of outstanding credit at risk was granted before implementing the cap on the level of indebtedness (Chart 2.21). Specifically, the share of vulnerable debtors, i.e. borrowers with a level of indebtedness exceeding 45 percent, contracted significantly, from 43 percent to 8 percent in the case of consumer credit and from 39 percent to 19 percent in the case of housing loans (Chart 2.23). Borrowers of defaulted housing loans had a higher median level of indebtedness at loan origination (44 percent versus 39 percent for borrowers of performing housing loans, outstanding balances as at March 2024), while the value of the indicator for foreign currency-denominated non-performing loans was even more important (46 percent).

<sup>63</sup> Reference is made to May 2022 as this is the first period available where information on the initial rate fixation period was reported to the Central Credit Register.

<sup>64</sup> The cap on the level of indebtedness (2019) and the loan-to-value ratio (2011 and 2022), differentiated by the currency of the loan.

**Chart 2.23.** Share of debtors by level of indebtedness at origination, depending on the type of loan



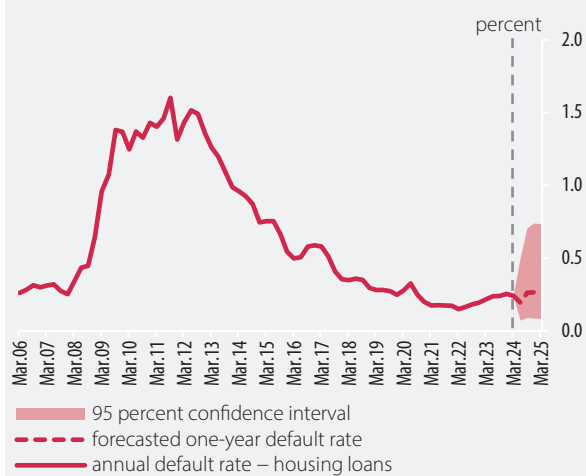
Source: NBR

Looking at the ratio of the borrower's total debt at the loan origination date to the borrower's total annual disposable income at the loan origination date<sup>65</sup> (DTI-O – debt-to-income at origination), almost half of housing loans (49 percent, March 2024) have an associated DTI-O of up to 4. However, a material share of housing loans, i.e. 16 percent, refers to a total level of debt over seven times higher than the borrower's annual disposable income. These loans have an average annual probability of default<sup>66</sup> more than twice higher than loans with a DTI-O below 3.

The quality of loans deferred under the legislative moratoria established in 2020<sup>67</sup>, amid the COVID-19 crisis, deteriorated significantly after the expiry of the deferral period. These loans have an

NPL ratio over four times higher (12.8 percent<sup>68</sup> compared to 3 percent, data as at March 2024) and account for approximately 13 percent of total NPLs, despite only making up 3.3 percent of the entire loan portfolio to households.

**Chart 2.24.** Forecasted one-year default rate for housing loans



Source: NBR, CB, NBR calculations

**Chart 2.25.** Forecasted one-year default rate for consumer loans



Source: NBR, CB, NBR calculations

Households' repayment capacity worsened slightly in March 2024, for both types of loans. Specifically, in the case of housing loans, the one-year default rate<sup>69</sup> stood at 0.24 percent, increasing marginally compared to March 2023 (+0.02 percentage

<sup>65</sup> Reporting on the indicator to the Central Credit Register started in May 2022. The loans for which the indicator was reported cover 25 percent of the value of housing loans.

<sup>66</sup> The annual probability of default estimated for expected credit loss allowances according to IFRS 9 reported by banks.

<sup>67</sup> GEO 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.

<sup>68</sup> The NPL ratio in March 2024 for loans deferred under GEO No. 37/2020 as at June 2020.

<sup>69</sup> According to the 90 days past due criterion.

points), while in the case of consumer credit, it went up 0.4 percentage points to 3 percent. Estimates over the 12-month horizon show the default rate further following an uptrend, for both housing loans (+0.02 percent to 0.26 percent, Chart 2.24) and consumer credit (+0.2 percent to 3.2 percent, Chart 2.25). Looking at debtors with loans more than 90 days past due, their capacity to bring payments up to date within one year stayed modest (1.2 percent, March 2024), most (86 percent) remaining non-performing (more than 90 days past due).

Borrowers encountering difficulty in their relationship with a bank or NBFi can resort to the free services of the Alternative Banking Dispute Resolution Centre (ABDRC), which are dedicated to rebalancing the relationship between creditors and consumers and increasing the confidence in credit institutions (Box 3).

### **Box 3. The role of the Alternative Banking Dispute Resolution Centre (ABDRC) in supporting financial stability**

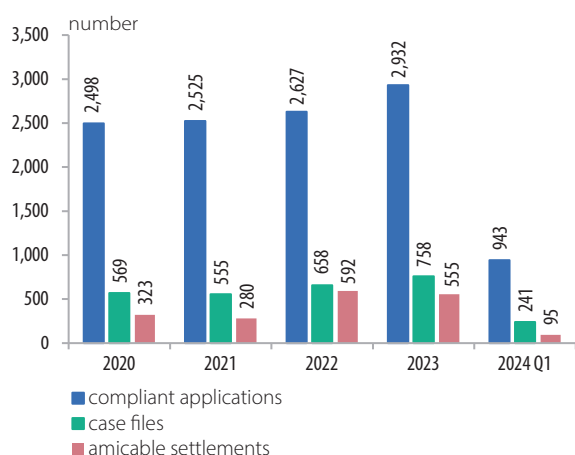
The ABDRC encourages consumers to be open to building a trust-based relationship with banks. Banks understand and acknowledge the issues raised by consumers, particularly when these are justified and reasonable. The improvement in conciliation mechanisms, along with the willingness and flexibility of banks in dealing with customer requests led to a steady increase in the number of applications received, as well as in the number of cases resolved, with an input from all parties concerned. The results of the ABDRC's operating activities are detailed below.

The primary role of the ABDRC, i.e. to amicably settle disputes that may arise in contractual relations between consumers of financial services and banks or NBFIs, also retains an important financial education component. The ABDRC's communication strategy for 2023 focused on financial education, with a dedicated section on the Centre's website containing over 30 podcasts and live streams on financial education topics (over the past two years) featuring presidents and vice-presidents of commercial banks, conciliators, and representatives of the NBR, ARB, and ABDRC. The ABDRC is visible in both traditional and social media, through media partnerships, as well as through the media's organic distribution of the video and written materials provided by the Centre as part of these financial information and education campaigns.

The fourth season of ABDRC Podcasts began in March 2024. The scheduled episodes will be recorded and promoted in the media and on social media throughout the entire year. Banks' top management representatives and legal professionals are invited to the debates moderated by journalists. The general theme of this season of podcasts will be: „Consumers' relationship with banks and personal finances in a volatile and unpredictable socio-economic context”.

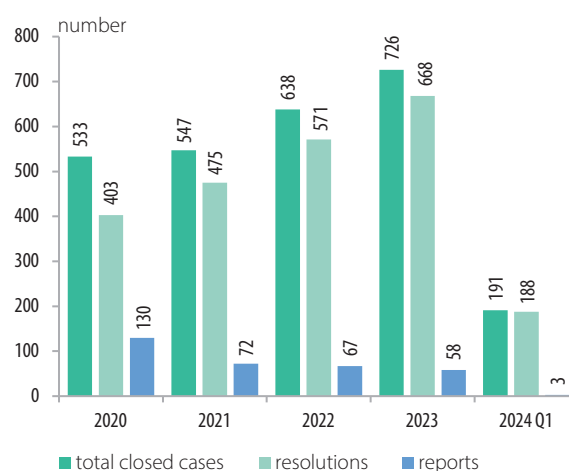
In 2023, the ABDRC received 2,932 applications from consumers requesting banks (1,885 applications) and NBFIs (1,047 applications) to enter negotiations through the Centre. Moreover, 943 applications for conciliation have already been submitted in 2024 Q1 (Chart A).

**Chart A.** Annual dynamics: compliant applications, case files and amicable settlements



Source: ABDRC

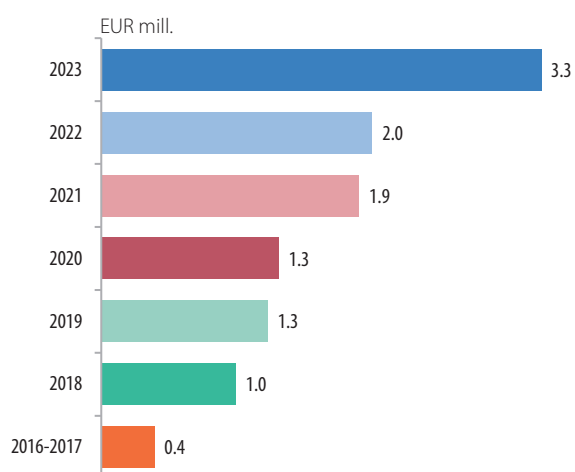
**Chart B.** Closed cases: resolutions versus reports



Source: ABDRC

In 2023, banks accepted 100 more consumer applications than in 2022. Specifically, 754 negotiation files were opened with banks and only 4 with NBFIs. 555 disputes between consumers and banks/NBFIs were settled amicably through direct negotiation after consumers submitted their applications to the ABDRC. Most of these were simple issues that could have been resolved without the help of an ABDRC conciliator or did not depend on negotiable conditions (such as requests for removal from the Credit Bureau records). As at 31 March 2024, 241 case files had already been opened, nearly one-third of the total registered throughout 2023.

**Chart C.** Value of negotiated benefits



Source: ABDRC

In 2023, only 8 out of 100 negotiations ended without the parties accepting the solutions proposed by the conciliators and reaching a settlement. Specifically, the ABDRC conciliators achieved their highest conciliation efficiency rate since the Centre's establishment (92 percent), with 668 resolutions and only 58 reports (Chart B). So far, 2024 has seen a share of 98 percent of resolutions (188) and only 3 reports out of the 195 closed cases (2 percent), with parties withdrawing from the procedure in only 4 cases.

Overall, the benefits derived by consumers from the negotiations conducted via the ABDRC exceeded EUR 11.3 million between 2016 and 2023. The highest negotiated amount was recorded last year (EU 3.3 million), exceeding the 2022 figure by

over 60 percent (Chart C). On average, the benefits obtained from a negotiation amounted to approximately EUR 5,000 per consumer in 2023.

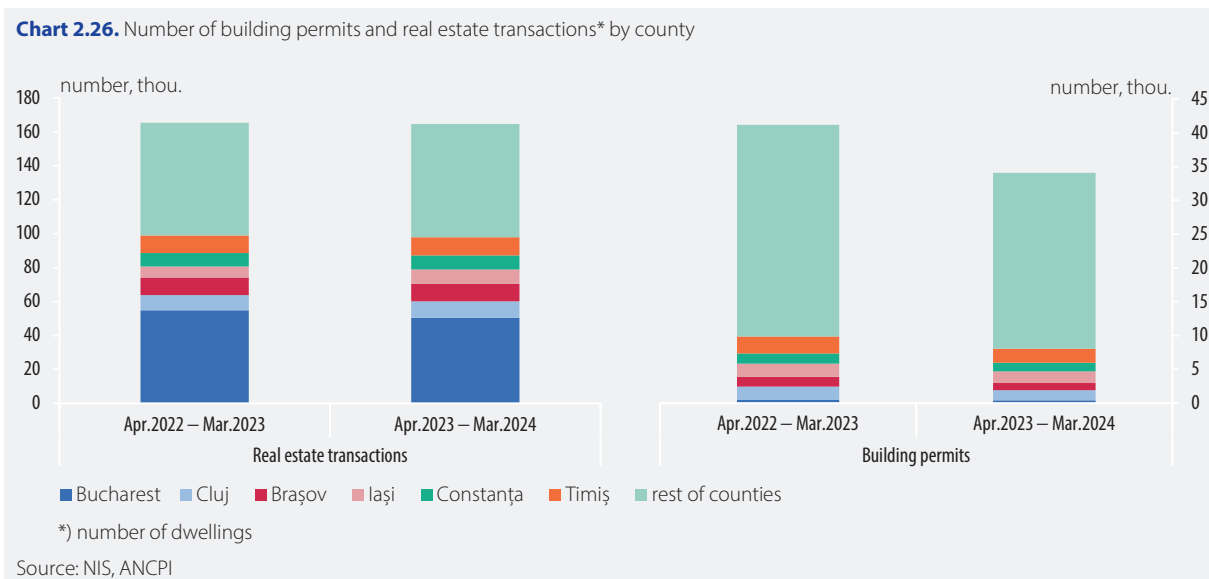
## 2.3. Real estate sector

### 2.3.1. Residential and commercial real estate markets

#### The residential real estate market

The residential real estate market is currently facing an imbalance between supply and demand. On the supply side, there was a significant decline in the number of residential building permits (-55 percent in April 2023 – March 2024 in annual terms), residential construction works (-9 percent in April 2023 – March 2024 in annual terms), new dwellings completed (-3 percent in 2023 in annual terms) and homes available for sale (-17 percent in 2024 Q1 versus the same year-earlier period). Looking at demand, it grew amid the economic recovery, the weaker inflationary pressures and the higher wage earnings. Thus, in 2024 Q1 compared to the same year-ago period, demand for residential property for sale<sup>70</sup> was 3 percent higher at national level and 14 percent higher in Bucharest, chiefly for new dwellings (+22 percent) in the latter’s case.

The gap between demand and supply led to a marginal decrease in the number of real estate transactions at national level, i.e. down 0.4 percent<sup>71</sup> in April 2023 – March 2024 versus the same year-ago period, while Bucharest reported a stronger decline (-8 percent), Chart 2.26.



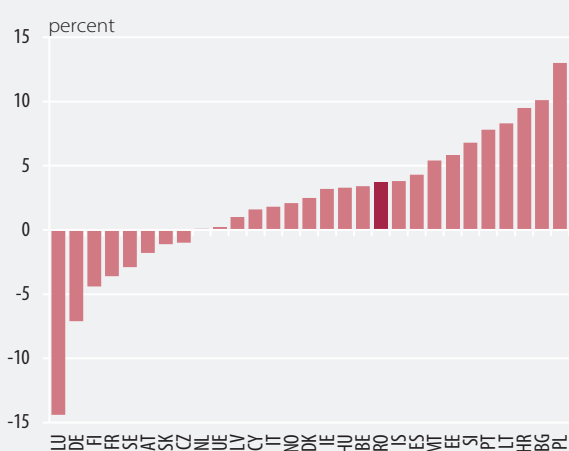
The upward trend in residential real estate prices is supported by the lower supply and the higher construction costs. Residential property prices grew by 3.7 percent in annual terms in 2023 Q4, the pace of increase slowing down however visibly over the course of 2023. New house prices further rose, albeit at a slacker tempo (+10 percent

<sup>70</sup> According to imobiliare.ro Market 360. – Residential real estate market report, 2024 Q1.

<sup>71</sup> According to the data released by the National Agency for Cadastre and Land Registration (ANCPI) based on the number of dwellings traded.

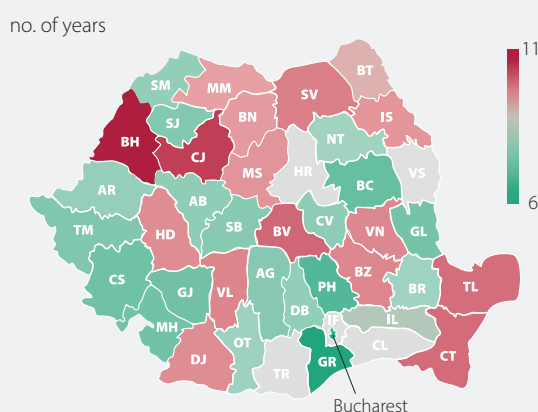
in annual terms in 2023 Q4 versus 13 percent in 2022 Q4), whereas prices of existing dwellings posted a much more modest advance (+0.5 percent against 3.9 percent in 2022 Q4). The elevated construction costs continue to put pressure on new house prices, adding approximately 8 percent<sup>72</sup> in February 2023 – January 2024 as compared with the previous 12-month period. The upward path of construction costs is expected to persist in the coming period, against the backdrop of the acute labour shortage and the fiscal measures implemented in 2024<sup>73</sup>. In addition, the hike in the reduced VAT rate from 5 percent to 9 percent for new houses as of 1 January 2024 is likely to put additional pressure on residential property prices.

**Chart 2.27.** Annual rate of change of house prices in the EU, 2023 Q4



Source: Eurostat

**Chart 2.28.** Adjusted price-to-income ratio<sup>74</sup> by county (2023 Q4)



Note: No data are available for the regions in grey; colours vary depending on the value of the indicator.

Source: ANEVAR, NIS, NBR calculations

Developments at national level stood in contrast to those recorded in peer economies in the region, such as Bulgaria, Poland and Croatia, which posted the largest rises in residential property prices in the EU (Chart 2.27). Romania witnessed a moderate increase in residential property prices among EU countries (the eleventh largest advance), in a context in which house prices in several EU Member States registered negative dynamics. Residential property prices in Luxembourg and Germany saw the sharpest annual declines in 2023 Q4, whereas at aggregate level across the European Union and the euro area price adjustments were marginal (+0.2 percent and -1.1 percent respectively). Disparities in house prices and housing affordability persist in Romania. The value of residential property either increased or remained relatively unchanged in most counties over the course of 2023. It fluctuated between a low of EUR 823 per sqm in the county of Giurgiu (down by 5.8 percent in annual terms) and a high of EUR 2,398 per sqm in that of Cluj. In the case of the latter county, the price per sqm for a flat doubled as compared with 2016 (data as at 2023 Q4)<sup>75</sup>.

<sup>72</sup> Average construction cost index, base year = 2021.

<sup>73</sup> Removal of tax breaks in the construction sector.

<sup>74</sup> The price-to-income ratio highlights the number of years needed to purchase a 2-room flat of 55 sqm. The income was adjusted by deducting subsistence expenses, estimated as a 50 percent share of the net minimum wage economy-wide.

<sup>75</sup> According to ANEVAR data.

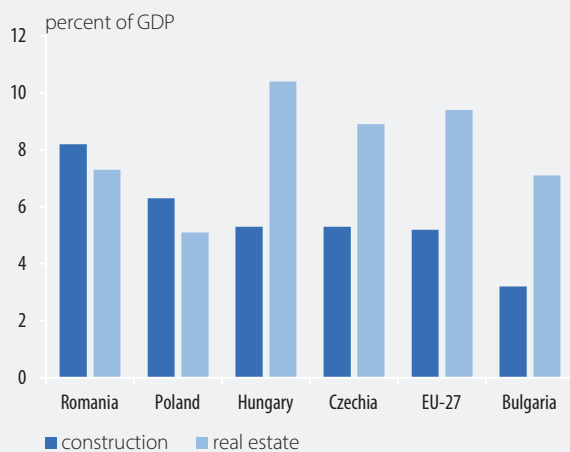
At national level, the price-to-income ratio shows that the average period needed to purchase a standard home is approximately 8.5 years (December 2023). There are significant heterogeneities across regions, the indicator ranging between 6 years in the county of Giurgiu (amid lower house prices) and over 11 years in the county of Bihor (the longest period needed to purchase a dwelling without resorting to a bank loan, amid lower average net wage income and above-average house prices), Chart 2.28.

Demand for residential rental property<sup>76</sup> decreased by 19 percent in 2024 Q1 against 2023 Q1, while the supply for such property increased by 2.5 percent over the same period. Nonetheless, the average residential property rent grew by approximately 11 percent, from EUR 450/month to EUR 500/month.

### The commercial real estate market

The commercial real estate market further faces a number of both structural and incidental challenges. At the EU level, the European Central Bank (ECB) and the European Systemic Risk Board (ESRB) have warned about the risks and vulnerabilities related to the commercial real estate sector, as well as about the potential implications for financial stability, given that commercial property prices in the euro area remained on a downward trend and the number of real estate transactions fell significantly.

**Chart 2.29.** Gross value added in construction and real estate, 2023 Q4



Source: Eurostat

The commercial real estate sector is highly relevant to domestic economic and financial activity and has the potential to trigger spillover risks to the real economy, in a context in which gross value added (GVA) in construction and real estate as a share of GDP was 15.5 percent (Chart 2.29), exceeding by almost 1 percentage point the EU average.

In line with developments at European level, in 2023 the volume of regional investment declined markedly (-52 percent in annual terms), recording a 10-year low across Central and Eastern Europe. Looking at Romania, the volume of investment dropped by 60 percent in 2023 (versus 2022), also amid an uncertain macroeconomic and geopolitical environment<sup>77</sup>, seeing however a rebound in early 2024 (+69 percent in 2024 Q1 against the same year-earlier period)<sup>78</sup>. In 2023 most investment was channelled into retail spaces, ahead of office and industrial spaces. In terms of geography, the capital city

<sup>76</sup> According to imobiliare.ro Market 360. – Residential real estate market report, 2024 Q1.

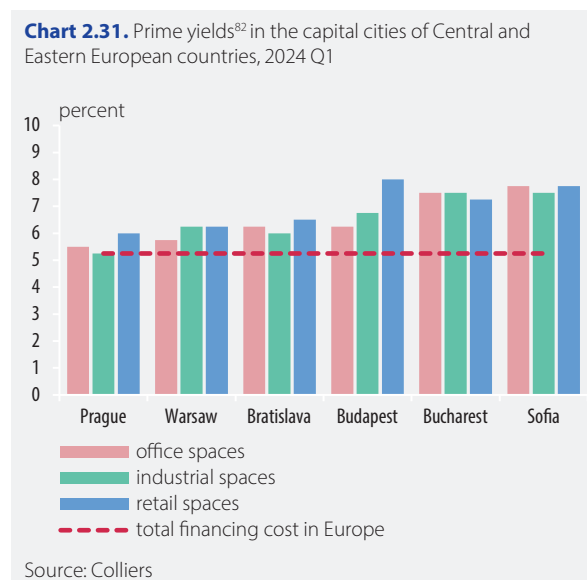
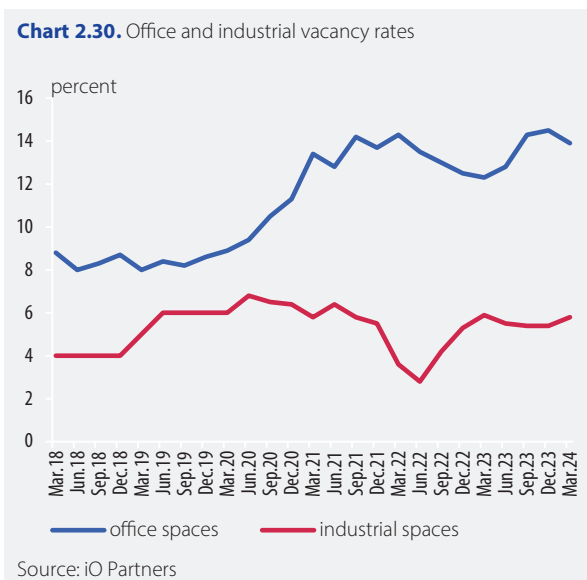
<sup>77</sup> According to the survey conducted by Cushman & Wakefield Echinox at end-2023, the three most salient risks cited by investors in the commercial real estate market in Romania refer to interest rates, the inflation rate and the geopolitical situation.

<sup>78</sup> Colliers, *The CEE Investment Scene Q1 2024*.

and its immediate surroundings accounted for 30 percent of the investment volume in 2023<sup>79</sup>.

Construction activity in the commercial real estate market in Romania picked up slightly, despite the hike in construction costs. The volume of non-residential construction works increased by 4.2 percent in April 2023 – March 2024 versus the previous corresponding period. This pace of growth is expected to persist, as the useful floor area stipulated in non-residential building permits rose by 8.7 percent in April 2023 – March 2024 against the prior 12-month period. Nonetheless, construction costs further followed an upward trend, adding, on average, 6.7 percent April 2023 through March 2024<sup>80</sup> as compared with the previous corresponding period, in spite of a slight decline in total costs of construction materials (-2 percent over the same period).

At national level, a combination of slowing supply and steady demand, along with inflation and cost stabilisation at high levels, led to rent increases in certain market segments. Specifically, in 2023 Q1 – 2024 Q1, prime rents<sup>81</sup> grew from EUR 20/sqm/month to EUR 22/sqm/month for office spaces and from EUR 4.5/sqm/month to EUR 4.75/sqm/month for industrial spaces. Prime retail rents remained at EUR 77/sqm/month. As far as prime retail spaces are concerned, rental prices further stood at EUR 77/sqm/month. The prospects for the period ahead are mixed and vary between rents increasing further and their remaining unchanged.



According to a survey<sup>83</sup> conducted at end-2023 by Cushman & Wakefield Echinox, a global commercial real estate company, the majority of respondents (75 percent

<sup>79</sup> Avison Young, *2023 Romanian real estate market overview*.

<sup>80</sup> Construction cost index for non-residential buildings, base year = 2021.

<sup>81</sup> Notional office property of the highest quality and specification in the best location in a market.

<sup>82</sup> Colliers, *The CEE Investment Scene 2023/2024*.

<sup>83</sup> Cushman & Wakefield Echinox, *Real Estate Investors Sentiment Barometer 2023*.

versus 55 percent in 2022) predicted an upward movement in industrial rents, 56 percent expected a rental level growth for office assets (the same share as in 2022) and about half of respondents indicated a steady evolution of retail rents. On the demand side, half of respondents pointed to stable medium-term developments in demand for all types of spaces, while 30 percent of them estimated a worsening occupier demand for office spaces.

Vacancy rates in Bucharest are higher for office spaces than for industrial spaces and posted a fast pick-up after the outbreak of the COVID-19 pandemic (Chart 2.30). Even though office vacancy rates had followed a downward path during 2022, in 2023 they resumed their upward trend, reaching a five-year high, i.e. 14.5 percent in 2023 Q4, according to iO Partners. As for industrial spaces, the vacancy rate is currently similar to that seen in the pre-pandemic period (5.8 percent in 2024 Q1 versus 6 percent in 2019 Q4).

In comparison with most capital cities of the countries in the region, Bucharest records higher prime yields<sup>84</sup>, which are exceeded solely by those in Budapest and Sofia for retail spaces, and only by those in the latter city for office spaces (Chart 2.31).

### 2.3.2. Risks generated by the residential real estate sector and real estate lending to households

The banking sector's exposure to the residential real estate market<sup>85</sup> remained significant (lei 112.6 billion in March 2024), albeit decreasing marginally in annual terms (Chart 2.32). It accounts for approximately 66 percent of total loans to households. Behind the downward path stood the contraction in both mortgage-backed consumer loans (-16 percent in annual terms, March 2024) and particularly loans granted under the "First Home"/"New Home" government programme. The latter remained on a downtrend, falling by 12 percent in annual terms in March 2024 and by 20 percent from the peak recorded in August 2021. "First Home"/"New Home" loans amounted to approximately lei 29.6 billion, holding 28 percent of housing loans, down from around 38 percent in August 2021 and from almost 50 percent of housing loans in 2016. Over the past years, the volume of new loans granted under the "First Home"/"New Home" programme has declined significantly (-75 percent in April 2023 – March 2024 versus the previous 12-month period, annualised flows), amid the stepwise decrease in the guarantee ceiling from lei 2.5 billion in 2017 to lei 1 billion in 2024 and hence the gradually lower government intervention, as well as amid the advance in standard housing loans and enhanced household access to such bank products. Conversely, standard housing loans posted positive dynamics (+6 percent in March 2024 against March 2023).

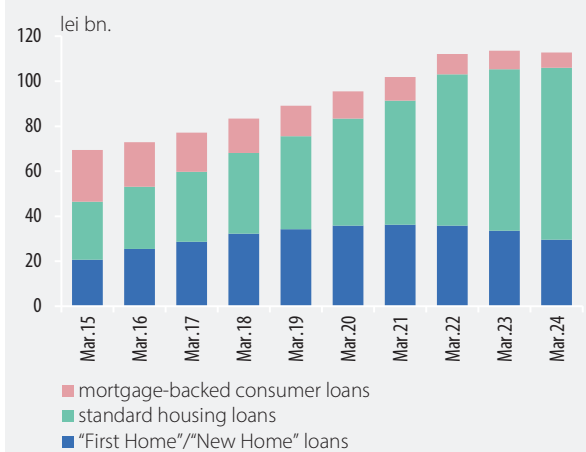
Households further enjoy relatively easy access to housing loans, the housing affordability index showing that the average net wage income was approximately equal to the income needed to purchase a 2-room flat in Bucharest (December 2023)

<sup>84</sup> The prime yield is the ratio of capital income to the cost of capital for a property.

<sup>85</sup> Housing loans and mortgage-backed consumer loans are taken into consideration.

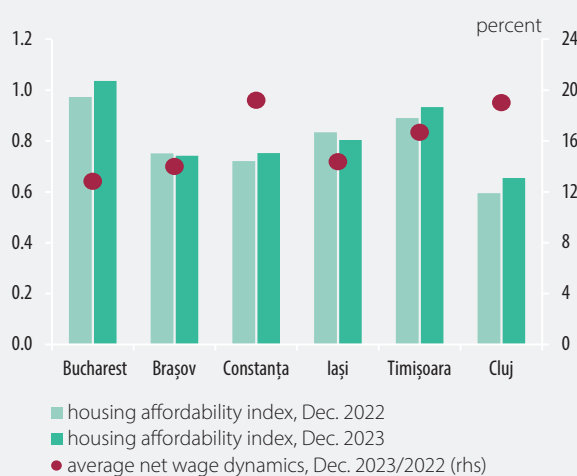
via taking a bank loan. The situation has slightly improved as compared with 2022, against the background of the faster increase in income than in residential property prices. Nevertheless, there are strong regional disparities in households' access to finance for house purchase, the housing affordability index standing below one in the main regional centres except for the capital city (Chart 2.33). These heterogeneities translate into a regional concentration of housing loans, being in line with the asymmetrical economic development across the regions. Thus, the loans granted in Bucharest and Ilfov account for 35 percent of total loans, while the next five counties as a whole (Cluj, Timiș, Constanța, Iași and Brașov) make up 26 percent (data as at March 2024).

**Chart 2.32.** Banking sector's exposure to the residential real estate market



Source: NBR, CB, National Credit Guarantee Fund for SMEs

**Chart 2.33.** Housing affordability index<sup>86</sup>



Source: NBR, NIS, ANEVAR

The NPL ratio for housing loans was low, irrespective of the type of loan (1.4 percent for "First Home"/"New Home" loans and 1.7 percent for standard housing loans), ranging, from a regional perspective, from 1 percent in the county of Neamț to 2.5 percent in that of Sălaj.

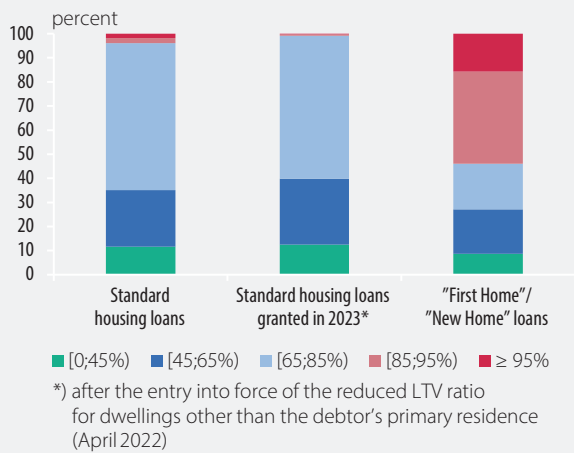
The level of awareness of climate risks is on an upward trajectory in the case of households as well, about a quarter of the housing loans granted in 2023 being green loans, namely for green homes (52 percent) and for increasing energy efficiency (48 percent). However, green loans further account for a small share of the total housing loan portfolio, i.e. 8 percent in March 2024. The distribution of green loans by region also evinces high concentration in the main regional centres. Specifically, the Bucharest-Ilfov region holds the largest share of green loans granted in 2023 (45 percent), ahead of Timiș (8 percent), Constanța (5 percent), Cluj (4 percent) and Brașov (3 percent).

The loan-to-value (LTV) ratio has gained importance amid concerns about corrections in residential property prices. In the event of adverse economic and

<sup>86</sup> The housing affordability index measures the average net income relative to the income needed to purchase a dwelling, at a 15 percent down payment, a 45 percent debt service-to-income ratio, and a 25 year maturity.

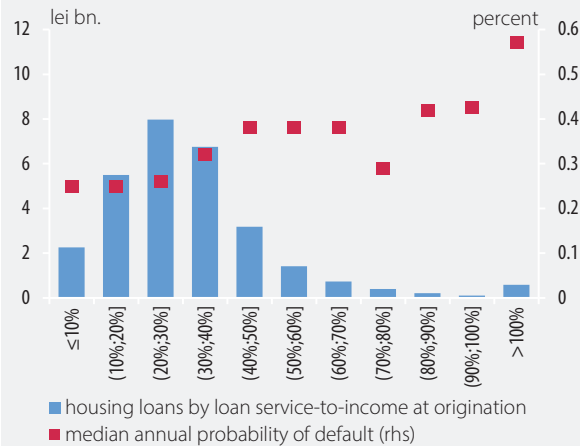
financial developments, the value of the collateral is affected by the fall in property prices, with banks facing higher capital requirements and a smaller capacity to grant loans. The breakdown by type of housing loan shows that more than half of “First Home”/“New Home” loans had an LTV ratio of over 85 percent, given the preferential level of the minimum down payment that the borrower needs to provide for this category of loans (5 percent versus 15 percent for standard first-time home buyer loans in lei), Chart 2.34. By contrast, against the backdrop of the macroprudential measures implemented by the National Bank of Romania with respect to the loan-to-value ratio (in November 2011 and April 2022<sup>87</sup>), around 96 percent of standard housing loans exhibit an LTV ratio that does not exceed 85 percent. Thus, the median loan-to-value ratio for new loans (“First Home”/“New Home” loans excluded) was 73 percent, whereas the median LTV ratio for the entire housing loan stock stood at 69 percent (March 2024).

**Chart 2.34.** Distribution of housing loans by the LTV ratio, depending on the type of loan (March 2024)



Source: NBR

**Chart 2.35.** Loan service-to-income at origination (LSTI-O)<sup>88</sup> and the annual probability of default<sup>89</sup>, March 2024



Source: NBR

Loan service-to-income at origination (LSTI-O) highlights the fact that the annual debt service accounts for less than 40 percent of the borrower's annual income for around 77 percent of the loans for which the indicator was reported (as of May 2022), Chart 2.35. As far as these loans are concerned, the annual probability of default is more than two times lower than that for loans with above-one LSTI-O. In addition, loan-to-income at origination (LTI-O) is greater than seven in the case of approximately 11 percent of housing loans.

<sup>87</sup> Which aimed to raise the prudential requirements for loans granted to purchase a dwelling in addition to the debtor's primary residence.

<sup>88</sup> Loan service-to-income at origination (LSTI-O) has been reported to the Central Credit Register since May 2022, in relation to 28 percent of the housing loan stock as of March 2024.

<sup>89</sup> The annual probability of default estimated for expected credit loss allowances according to IFRS 9, as reported by banks.

### 2.3.3. Risks generated by the commercial real estate sector and mortgage-backed lending to non-financial corporations

The commercial real estate sector is highly important to financial stability. The banking sector's exposure to the commercial real estate sector, i.e. commercial real estate loans

(CRE loans), is significant, accounting for 50 percent of total loans to non-financial corporations, according to data as of March 2024. Direct exposures to the construction and real estate sectors amounted, however, to lei 37.5 billion, whereas indirect exposures (which are loans secured by real estate extended to non-financial corporations) were substantial, approximately 1.5 times larger than direct exposures, totalling lei 56.9 billion (March 2024), Chart 2.36. This is suggestive of the fact that Romanian banks tend to use real estate to collateralise also loans granted to other sectors.

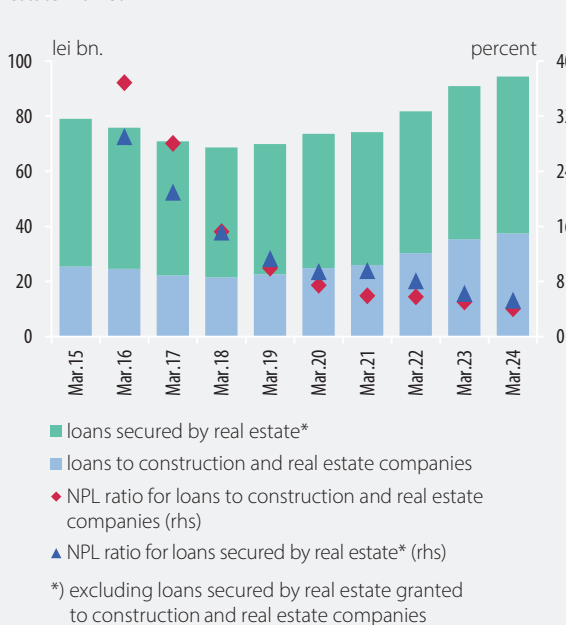
The quality of the CRE loan portfolio is lower than that of the aggregate portfolio of loans to non-financial corporations. Nonetheless, loans granted to companies in the construction and real estate sectors continued to improve, the NPL ratio dropping to 4.1 percent in March 2024 from over 5 percent a year before. Looking at indirect exposures, the NPL ratio was higher, albeit on a declining trend, standing at 5.3 percent in March 2024 versus more than 6 percent in the same year-earlier period and over 8 percent two years ago (Chart 2.37).

The breakdown by type of interest rate shows that floating rate loans (without any interest rate fixation period between the time of origination and the maturity date) make up the largest share of the CRE loan portfolio. Solely 4 percent of the stock of loans have a fixed interest rate over the entire term of the loan. Hence, most CRE loans are exposed to interest rate risk, which may put pressure on the capacity of firms to service debt, amid the normalisation of interest rates.

Another approach to quantifying the banking sector's exposures to the commercial real estate market is that proposed by the ESRB, which allows

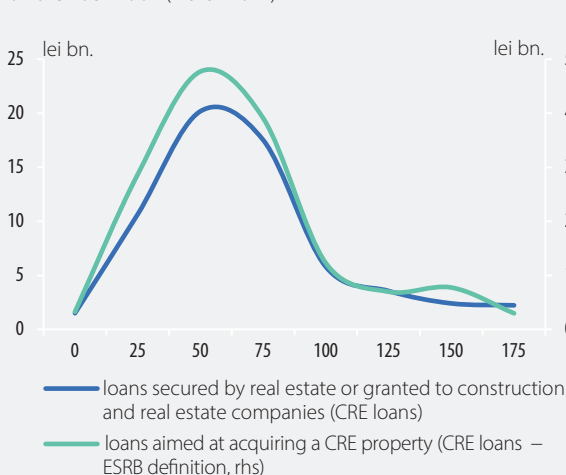
for a more precise identification of loans aimed at acquiring a CRE property (or set of CRE properties), i.e. CRE loans (ESRB definition). According to this approach, these

**Chart 2.36.** Banking sector's exposure to the commercial real estate market



Source: NBR

**Chart 2.37.** Distribution of loans by the LTV ratio, depending on their definition (March 2024)



Source: NBR

loans<sup>90</sup> accounted for 16 percent of the stock of loans to non-financial corporations in March 2024, their breakdown by property type showing the following: industrial spaces held 28 percent, retail spaces took 25 percent and office spaces made up 8 percent.

The data as at March 2024 show that of the total outstanding CRE loans (ESRB definition)<sup>91</sup> for which the loan-to-value (LTV) ratio was reported, about 27 percent posted an LTV ratio of over 100 percent, while 24 percent had an LTV ratio between 75 percent and 100 percent. Around 86 percent of CRE loans (ESRB definition) have a higher than 2 debt service coverage ratio<sup>92</sup>, which means that the companies that took those loans have the capacity to cover at least double of the annual debt service payments. Looking at all direct and indirect exposures (CRE loans) for which the LTV ratio was reported, approximately 30 percent have an above-one LTV ratio and a higher NPL ratio (6.4 percent versus 4.2 percent for loans with an LTV ratio below 100 percent).

At the EU level, important concerns have been raised about CRE price corrections and the higher NPL ratio for loans with a low LTV ratio. Amid the vulnerabilities that have been identified in the commercial real estate sector, the ESRB issued a number of recommendations that are aimed at improving the monitoring of systemic risks stemming from the CRE market, ensuring sound CRE financing practices and increasing the resilience of financial institutions to commercial real estate market shocks (Recommendation ESRB/2022/9).

Thus, overall, in Romania the latest assessments of the vulnerabilities related to the commercial real estate sector indicate that they remain manageable. However, close monitoring is further needed, given that this segment is in the downward phase of the cycle. The National Bank of Romania monitors commercial real estate market developments on a continuing basis, in line with the ESRB methodology, across the four major risk stretches: collateral stretch, income and activity stretch, financing stretch and spillover stretch.

<sup>90</sup> The classification of loans according to Recommendation ESRB/2016/14 groups loans secured by real estate into commercial real estate loans (CRE loans) and residential real estate loans (RRE loans).

<sup>91</sup> CRE loans according to the ESRB definition cover loans granted as of May 2022.

<sup>92</sup> The annual rental income generated by a CRE property that is at least partially financed by debt, net of taxes and any operational expenses to maintain the property's value, relative to the annual debt service on the loan secured by the property.

### 3. THE FINANCIAL SECTOR

---

The expansion of the Romanian financial sector continued throughout 2023, supported by most of its components. The main contributors to these dynamics were private pension funds (+31 percent in 2023 compared to 2022), followed by non-bank financial institutions (+17 percent in 2023 year-on-year), whereas investment funds (-14 percent in 2023 versus 2022) were the only segment on the wane. Despite these positive developments, in the European context Romania still ranks last in terms of financial intermediation, lagging well behind the economies in the region.

The banking sector has continued to strengthen its financial soundness indicators, remaining the most important component of the Romanian financial system. The solvency ratio is adequate and above the EU average, i.e. 22.9 percent in March 2024 against 19.9 percent EU-wide in December 2023. Liquidity has improved, with the liquidity coverage ratio (LCR) climbing to 286.0 percent and the net stable funding ratio (NSFR) increasing to 194.4 percent in March 2024. The funding risk remains low for the Romanian banking sector, given its balance sheet structure. The volume of liquid assets is high, due to credit institutions' large exposures to the central government (in particular government securities) and to the central bank (also as a result of excess liquidity).

Asset quality indicators, such as the non-performing loan ratio and the non-performing loan coverage by provisions (2.4 percent and 65.9 percent in March 2024) place the Romanian banking sector in the EBA-defined low-risk bucket. Banks' profitability indicators fared well, with ROE and ROA standing at 19.8 percent and 1.8 percent respectively in March 2024. However, over the past decade bank profitability indicators have been persistently lower than the averages for the non-financial corporations sector, both on the aggregate and for the main economic sectors (agriculture, industry, trade, construction and real estate, services). As a comparison, in 2022, ROE and ROA averages for non-financial corporations equalled 28.7 percent and 10.7 percent respectively, while in the Romanian banking sector ROE and ROA came in at 16.4 percent and 1.5 percent respectively. Net interest income contributed most to the improvement in bank profitability, chiefly on the back of the increase in interest-bearing financial assets (volume effect), another determinant being the low impairment loss on financial assets. Out of their total profits for 2023, credit institutions, Romanian legal entities, retained a large part (57 percent) with a view to supporting their development capacity.

Despite the current favourable situation, there are lingering challenges: (i) profit polarisation by bank size, (ii) subdued lending, reflected in the lowest financial intermediation in the EU, (iii) credit institutions' shift towards low-risk assets (government securities in particular), enhancing concentration and interest rate risks, (iv) the prospects for higher credit risk in the real sector amid domestic macroeconomic imbalances. New challenges arise from the need to adapt to climate

change, the increase in cyber risks, determined also by the geopolitical context, and the need to tailor business models to the swift digital progress.

Digitalisation has made notable progress in the banking sector, but the pace of alignment with this trend is heterogeneous, being faster for large banks. Technological solutions based on Machine Learning or Artificial Intelligence applications are mainly used for data collection and extraction, risk management, customer scoring, detection and monitoring of fraud and money laundering. The access of customers to digital banking products and services has improved. Specifically, looking at bank clients in 2023, 63 percent of households and 78 percent of legal entities respectively also used digital channels. Due to intensive digitalisation, the role of social media platforms as message amplifiers and the current geopolitical context, the cybersecurity risk has become increasingly relevant. Thus far, credit institutions in Romania have not reported significant losses in the aftermath of cyberattacks. However, it is necessary to raise awareness of the risks and to take measures to increase operational resilience, also given the need to comply with the requirements of the Digital Operational Resilience Act (DORA) that shall apply starting in 2025. In this context, the NBR is conducting a cyber risk stress test this year.

The role of non-bank financial institutions (NBFIs) in lending to the real sector is increasingly important, with NBFIs financing about 10 percent of the private sector financial debt. The majority of NBFi lending is directed towards non-financial corporations (79 percent, December 2023), but these loans carry a high foreign exchange risk, as most of them are denominated in foreign currency (83 percent, December 2023). According to the International Financial Reporting Standards (IFRS) 9, the credit risk for about 11 percent of the loans and advances granted by NBFIs has significantly increased since initial recognition (Stage 2 of impairment).

Financial system assets posted a 12.8 percent annual increase in 2023 Q4, reaching a total of lei 1,126 billion. This growth was supported by all financial sector components, except for investment funds, which saw their assets decline in 2023 H2 (-14.1 percent in 2023 Q4 versus 2022 Q4)<sup>93</sup>. The breakdown shows that banks continued to be the main component, holding 75.7 percent of total (-0.7 percentage points against 2022 Q4), ahead of private pension funds (11.7 percent of total, +1.7 percentage points from 2022 Q4) (Chart 3.1). As of 2023 Q3, investment funds became the sector holding the lowest share, i.e. 3.3 percent of total in 2023 Q4 (-1 percentage point against 2022 Q4), thus replacing the insurance sector which previously held this position (3.7 percent of total). Financial intermediation<sup>94</sup> equalled 70 percent of GDP in 2023 Q4, similarly to the level recorded at end-2022.

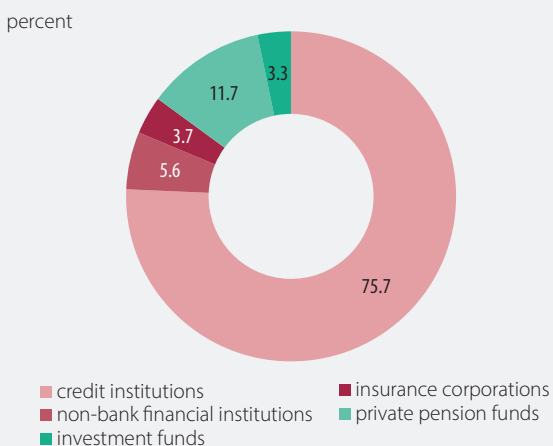
Although assets increased at a sustained pace throughout 2023, i.e. around 10 percent on average in each quarter (+9 percent in 2023 Q3, +11.7 percent in 2023 Q4, in annual terms), the banking sector in Romania remains the smallest in the European Union as a share of GDP (Chart 3.2). The assets of the local banking sector

<sup>93</sup> This decline was driven by the decrease in net assets of Fondul Proprietatea. <http://www.aaf.ro/comunicate/fondurile-de-investitii-locale-si-straine-distribuite-in-romania-in-luna-decembrie-2023/>

<sup>94</sup> Calculated as a share of financial system assets in GDP.

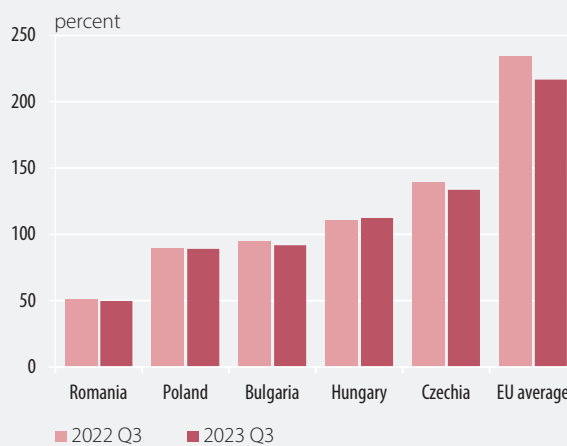
accounted for 49.9 percent of GDP in 2023 Q3, down 0.4 percentage points from 2022 Q3, and considerably lower compared to the other countries in the region, as well as against the EU average (216.9 percent of GDP).

**Chart 3.1.** Distribution of assets in the Romanian financial system, 2023 Q4



Source: NBR

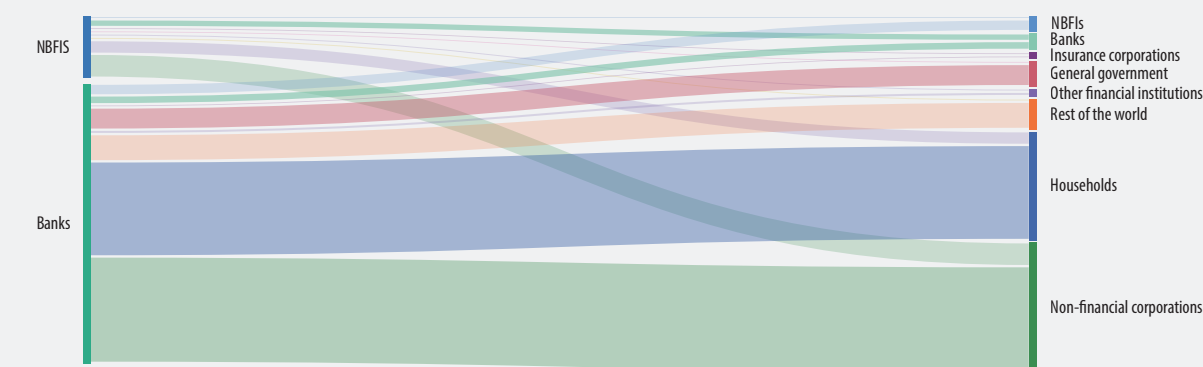
**Chart 3.2.** Total assets of the banking sector as a share of GDP, regional comparisons



Source: ECB

The contagion risk between the banking sector and NBFIs, and the other components of the economy remains manageable (Chart 3.3). The links with the other financial system segments are limited, the banking sector's main connections being with the real sector (about 63 percent of claims are on households and non-financial corporations), followed by the general government.

**Chart 3.3.** Diagram of claims of the banking sector and NBFIs on institutional sectors, 2023 Q4



Note: The diagram shows the gross claims between institutional sectors, and the bandwidth is proportional to the size of the claims. The colour of the band reflects their endpoint. General government consists of: central government, local government and social security funds. Other financial institutions comprise the following: money market funds, investment funds, pension funds and other financial intermediaries.

Source: NBR

Given the global macroeconomic and geopolitical uncertainties, both domestic and cross-border interconnectedness must be further closely monitored.

Private pension funds recorded swift annual asset dynamics in 2023 H2 (over 30 percent in 2023 Q3 and Q4). The average rate of return on Pillar II privately managed pension funds increased in the last three months of 2023, reaching 7.4 percent at the end of the year (+1.5 percentage points from September 2023). Most investments are in safe instruments, such as government securities (66.4 percent of total in December 2023). These are followed by shares, which account for 23.3 percent, the most important investments being in some of the largest companies listed on the Bucharest Stock Exchange<sup>95</sup>. At the same time, the number of participants in Pillar II private pension funds reached 4.05 million at end-2023 (+1.7 percent from 2022), while for Pillar III, although the number of participants remains small, it rose to 710 thousand (+13.4 percent versus 2022). Looking ahead, this upward trend of the assets of private pension funds is expected to continue in 2024 as well, given the increase in contributions to Pillar II starting January 2024, from 3.75 percent to 4.75 percent of the gross monthly income<sup>96</sup>.

The insurance market in Romania continues to hold an untapped potential for development, partly due to the modest financial education of the general population and entrepreneurs<sup>97</sup>. Gross premiums written by local insurers rose by 10 percent in 2023 and totalled lei 18.2 billion. This market is further dominated by non-life insurance, which accounts for 84 percent of total, unchanged from the previous year.

## 3.1. Banking sector

### 3.1.1. Structural developments

Since the previous *Report*, the Romanian banking sector has continued to consolidate. The aggregate balance sheet of credit institutions recorded a 15.0 percent annual increase (up to lei 871.9 billion, March 2024), mainly due to the rise in exposures to the general government and the central bank, and to the pick-up in foreign assets (cumulatively accounting for 77 percent of total growth), financed mainly by retail deposits. Despite the favourable environment, there are several new challenges arising from the need to adapt to climate change, from higher cyber risks and the fast digitalisation. Through appropriate investments and strategies, the banking sector will be able to support the transition to business models that are consistent with the proper management of these challenges.

Given the growing exposures to the central bank and general government, the volume of liquid assets remained high. Banks' claims on the government (i.e. government securities and loans) have reinforced the link between the banking and the public sectors (with a 24.3 percent share in total assets, March 2024), thereby increasing this gap with other European countries. Approximately 82 percent of these claims consist

<sup>95</sup> According to *Raport privind evoluția sistemului de pensii private în anul 2023*.

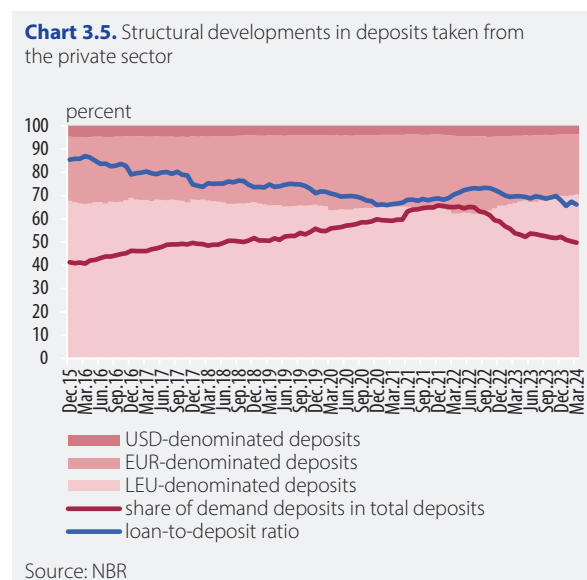
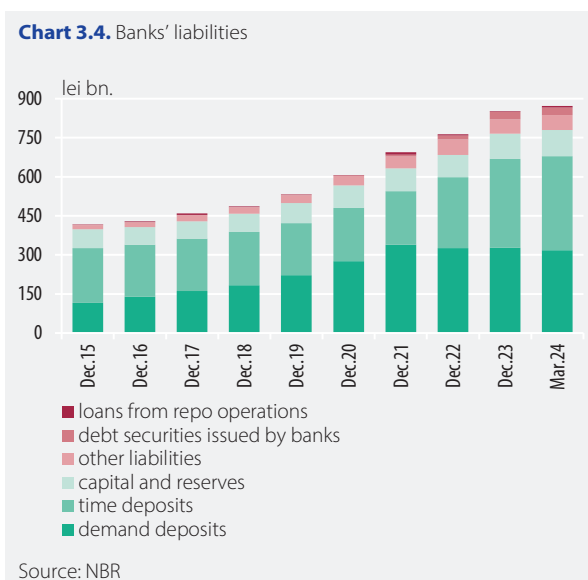
<sup>96</sup> Pursuant to GEO No. 23/2022 on supplementing Art. 43 of Law No. 411/2004 on private pension funds.

<sup>97</sup> According to the *Survey on the access to finance of non-financial corporations in Romania*, the June 2023 issue, only 16 percent of firms have or have had life insurance for the company owner, and only 4 percent insurance for financial losses caused by business interruption.

of central government securities (20 percent of total assets in March 2024), mainly denominated in lei and with maturities of over two years.

Since the prior *Report*, total credit to the private sector rose marginally, i.e. by 1.8 percent, reaching lei 388.0 billion in March 2024. These loans' share in the balance sheet total declined over the same period (from 47.3 percent to 44.5 percent), with negative implications for financial intermediation. In terms of flow, new leu-denominated loans posted a significant rebound, while new loans in euro decreased, on the back of the adjustment in credit demand mainly from non-financial corporations, amid rising costs of borrowing in foreign currency (for details, see Chapter 1.3).

Banks in Romania are characterised by low funding risk, a feature of the current business model, given both the high share of retail deposits and the substantial level of liquid assets. Alternative funding sources, such as bank bonds, account for a small share in total on-balance sheet liabilities, albeit on a recent upward trend (3.3 percent in March 2024, Chart 3.4, from an average of 0.5 percent between 2014 and 2020). This was due to the issuance of securities aimed at meeting the minimum requirement for own funds and eligible liabilities (MREL). The breakdown shows that debt instruments issued are predominantly denominated in foreign currency and are primarily targeted at non-resident institutional investors. These instruments, along with the deposits taken from non-resident customers, contributed to the increase in the share of foreign liabilities in the balance sheet total to 7.2 percent in March 2024.



As for deposits, the migration trend towards time deposits continued, driven by the further attractive interest rates. Consequently, the share of time deposits from the private sector in total private sector deposits increased from 46.2 percent in March 2023 to 50.2 percent in March 2024, amid higher interest rates (Chart 3.5). The ongoing decline in the share of demand deposits from around 65.8 percent (December 2021) points to a potential fall in net interest income in the future.

The breakdown shows that leu-denominated deposits further prevail (70.5 percent, March 2024), ahead of the deposits in euro (25.9 percent) and US dollars (3.6 percent).

Between 2015 and 2024, the loan-to-deposit ratio (LTD) decreased from 85.4 percent in December 2015 to 66.2 percent in March 2024, whereas the balance of exposures to the central government witnessed an increase; these developments were also somewhat driven by a lower appetite for lending products lately, amid the resumption of the policy rate hiking cycle (with effects on bank interest rates). However, the recent period is characterised by a rising flow of loans to households as a result of the easing inflationary pressures, with a direct impact on real interest rates.

Although the LTD level bears positive implications in terms of liquidity, it indicates the further downward trend in financial intermediation, amid banks preferring to take a low level of risks associated with lending to the private sector.

Looking at the banking sector by ownership, since the previous *Report* banks with state-owned capital have strengthened their position, reaching a cumulative market share of 13.5 percent in March 2024 (compared to 7.9 percent in 2019). The analysis of majority shareholders by country of origin shows that Romania has held the top position over the past few years (with a market share of 33.6 percent, December 2023), ahead of Austria (22.2 percent, December 2023). Even though only three local banks have their shares listed on the Romanian capital market (Banca Transilvania, BRD – Groupe Société Générale and Patria Bank), their market share is relatively high, accounting for 31 percent of total bank assets in March 2024.

### 3.1.2. Liquidity

The liquidity of the banking sector continued to improve. Specifically, the central bank maintained its net debtor position vis-à-vis credit institutions, given that they deposited the excess liquidity available in the deposit facility (which hit a record high<sup>98</sup> of average daily transactions of around lei 62 billion in January 2024).

Although the funding risk for local banks is viewed as low (due to the base of deposits from households and non-financial corporations, which proved stable even in the face of significant shocks), the banking crises in the USA and Switzerland have shown the ease and speed with which depositors can withdraw their amounts from credit institutions, in the context of fast-paced digitalisation of banking services (Box 4). Moreover, online social media platforms have the potential to give rise to a social media bank run event<sup>99</sup> by spreading rumours or negative information. Hence, the higher share of government securities holdings in banks' portfolios may foster the adequate management of potential severe liquidity shocks, similar to those that have already occurred elsewhere.

<sup>98</sup> A historical high for the period 2007-2023.

<sup>99</sup> According to Cookson A., Fox C., Gil-Bazo J., Imbet J.F. and Schiller C., "Social Media as a Bank Run Catalyst", Université Paris-Dauphine Research Paper No. 4422754, 2023, the failure of Silicon Valley Bank (SVB) is seen as the first social media bank run. Statistical evidence shows that social media amplifies the bank run risk, the negative sentiment on social networks having a spontaneous effect on the bank (about 10 minutes).

Intensive digitalisation and the current geopolitical situation also increased the relevance of cyber risk. Heavier reliance on digital infrastructures can lead to quick intensification of cyber threats to both financial institutions and providers of critical infrastructure for the financial sector, whose unavailability could affect the smooth functioning of the banking sector (e.g. energy, database storage and management solutions, etc.). Thus far, credit institutions in Romania, have not reported significant losses in the aftermath of cyberattacks, but these events can affect the internal systems of banks and disrupt the functioning of the financial system. Therefore, further measures are needed to enhance operational resilience, especially that the requirements of the EU's Digital Operational Resilience Act (DORA) will apply as of 17 January 2025.

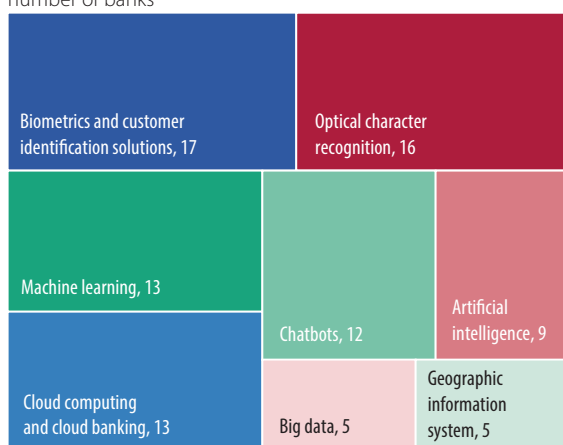
#### Box 4. Digitalisation of the banking sector in Romania

The results of the latest survey on digitalisation developments and prospects (conducted by the NBR at end-2023<sup>100</sup>) highlighted the notable progress of Romanian credit institutions in the digital transformation of their activity and the enhancement of staff skills in this field. In relation to the FinTech industry, most respondent banks (with a cumulative market share of approximately 80 percent of assets) stated that they collaborate to develop financial products and services.

The pace of alignment to technological changes has been heterogeneous, being faster in the case of large and medium-sized banks, due to their greater development potential and higher investment capacity. In the banking sector as a whole, investment in digitalisation is estimated at approximately lei 770 million in 2023.

Chart A. Distribution of implemented technologies

number of banks



Source: NBR

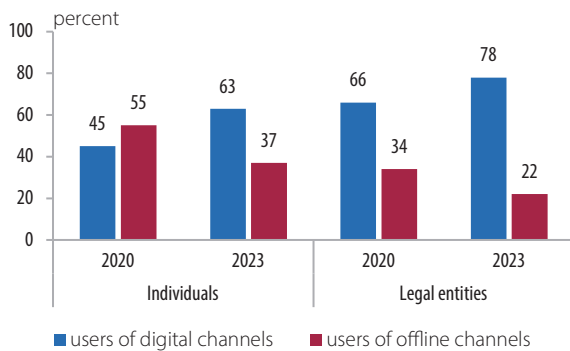
According to respondents, the key challenges to digital transformation in the banking sector are related to high IT costs, the capacity to hire skilled staff and the capacity to ensure cybersecurity. As regards the ethical aspects following the implementation of artificial intelligence (AI) solutions, the main difficulties relate to process transparency and understanding, as well as to the confidentiality and security of data (personal data, in particular).

Concerning the interaction with innovative technologies (Chart A): (i) approximately half of respondent banks (with a cumulative market share of 85 percent) use various Machine Learning (ML) applications, (ii) nearly one third of banks (with a cumulative market share of 68 percent) use AI applications, particularly for processing texts (NLP) and images (CV) and (iii) 20 percent of respondent banks

<sup>100</sup> The survey was addressed to all credit institutions in Romania (legal entities and branches); 27 out of the total number of 32 banks with a cumulative share of 98.4 percent of aggregate assets responded to the questionnaire.

use big data. No bank currently uses blockchain applications. ML- and AI-based technological solutions are mainly used to collect and extract data, manage risks, evaluate and assign a score to customers (customer scoring), as well as to detect and monitor fraud and money laundering (AML).

**Chart B.** Share of online channel users in total bank customers



Note: Users of digital channels are all customers who signed internet banking and/or mobile banking agreements, no matter if they also conduct offline banking operations.

Source: NBR

Although 81 percent of respondent banks (with a cumulative market share of 97 percent) deem that integrating artificial intelligence in the business strategy is important for them to be successful in the medium term, the progress has been slow in adapting the governance framework in this regard.

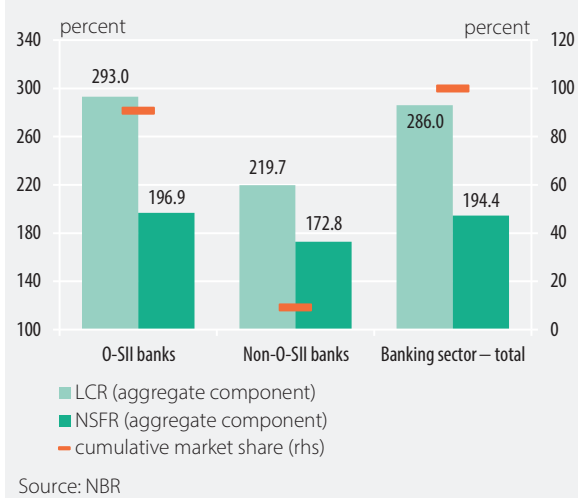
The digitalisation of banking services and products impacted the number of bank units and employees (which continued to fall), as well as the financial inclusion (which improved), given that banks' geographic area of operations has expanded through the use of electronic distribution channels. Specifically, the access of customers to banking products and services via digital channels (Chart B) increased markedly, and so did the number of users, as well as the number and volume of

transactions (especially in the form of payments and domestic transfers) on these platforms. Moreover, there has been a steady growth in interest in mobile banking applications, as well as in the number of users of electronic wallets (provided by Apple Pay, Google Pay or via banks' internally developed solutions).

The majority of customers continue to use traditional methods, such as the use of physical cards at the POS machines and automated teller machine operations. Moreover, mention should be made of both individuals and legal entities' persistent appetite for cash transactions (amounting to approximately lei 250 billion in 2023). In this context, due to the high share of rural population (which primarily uses cash as a means of payment), the transition to digital payment solutions is expected to take place gradually in Romania, while banks are seen to maintain an adequate territorial network. In addition, in view of Romania's specifics, such as the ageing trend of the population, the low IT skills of the people (according to the European Commission, Romania has the lowest Digital Economy and Society Index (DESI), as only 28 percent of Romania's population aged 16-74 have digital skills, in contrast to the European average of 54 percent) and the large disparities in access to financial services by region, income and education, banks are expected to maintain an adequate level of non-digital banking services in order to avoid the risk of financial exclusion due to fast-paced digitalisation.

So far, cyberattacks have not caused major disruptions in the banking services provided to customers, nor have they impaired the quality of such services in the case of banks in Romania, the most frequent incidents being those classified as Distributed Denial of Service (DDoS) and phishing attacks. In this context, prudent behaviour is a must for managing these new challenges.

**Chart 3.6.** Comparison between LCR and NSFR indicators by banks' systemic importance (March 2024)



Developments in the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR) show banks' increasing resilience in terms of both the volume of available liquid assets in the event of unforeseen short-term shocks (30 days) and the level of stable funding sources relative to financing requirements (taking into account the asset composition). In March 2024, the LCR stood at 286 percent (Chart 3.6), i.e. above the EU average of 167.1 percent, while the NSFR equalled 194.4 percent (higher than the EU average of 126.8 percent, December 2023).

The breakdown of the banking sector by the systemic importance of credit institutions (O-SII – *Other Systemically Important Institutions*) points to the heterogeneity of the liquidity

indicators. O-SII banks posted an LCR value of 293 percent, whereas non-O-SII banks recorded a lower yet adequate level (219.7 percent, March 2024). In the case of the NSFR, the indicator stood at 196.9 percent for O-SIIs, compared to 172.8 percent for the group of non-O-SIIs.

The favourable position of O-SII banks in terms of the LCR indicator is based on both the larger stock of liquid assets (29.1 percent higher than that of non-O-SII banks) and lower liquidity outflows (by 8.8 percent). Relative to the balance sheet total, the O-SIIs hold a larger share of liquid assets (33 percent versus 24.6 percent for non-O-SIIs) and a lower share of liquidity outflows (18.7 percent versus 19.7 percent for non-O-SIIs). At the same time, it notes that the composition of liquid assets covered by the LCR is heterogeneous across the EU<sup>101</sup>. Even though liquid assets consist mainly of Tier 1 liquid assets in all European countries, Romanian banks stand out due to their large share of debt instruments<sup>102</sup> (mainly government securities) in the liquidity buffer (similar compositions being observed in only 22 percent of EU Member States). Conversely, banks in 74 percent of EU Member States have a liquid asset composition comprising mainly currency and reserves held with the central bank.

As for the NSFR, O-SIIs are favoured by the 3.1 percent higher amount of items ensuring stable funding and the 9.5 percent lower level of items requiring stable funding. The difference between the two groups of banks is primarily ascribable to stable retail deposits (+30.2 percent in favour of O-SIIs), given the depositors' higher propensity for placing and keeping their savings in large banks (to the detriment of small-sized ones) at interest rates similar to those applied by small-sized banks.

The results of the latest liquidity stress test conducted in 2023 confirm the adequate liquidity position of local banks, which generally have the capacity to manage potential short-term liquidity shocks in an appropriate manner. Furthermore,

<sup>101</sup> According to *EBA Report on Liquidity Measures under Article 509(1) of the CRR (EBA/Rep/2023/04)*.

<sup>102</sup> Tier 1 securities (covered bonds excluded).

the number of banks that might be affected by temporary liquidity shortfalls is small and includes mostly small-sized credit institutions, with no potential systemic implications whatsoever. However, a cautious stance is recommended in managing mounting risks in the new digital context, calling on banks to take measures to enhance cybersecurity with a view to protecting customers’ information and assets.

### 3.1.3. Capital adequacy

The solvency level was adequate throughout 2023, both for the banking sector overall and for each individual bank, Romanian legal entity, the total capital ratio standing at 23.6 percent, according to final data<sup>103</sup> as at December 2023, above the European average of 19.9 percent (Chart 3.7). In 2024, banks in Romania continue to have a significant capital reserve as compared to the overall capital requirement ratio (OCR) of 17.2 percent (March 2024), which ensures an adequate absorption capacity of potential unexpected losses in the event of macroeconomic shocks (Chart 3.7). Half of credit institutions reported a total capital ratio above the OCR by more than 6 percentage points (Chart 3.8). However, the market share and number of banks with total capital ratios of more than 6 percentage points above the OCR have dropped in recent years.

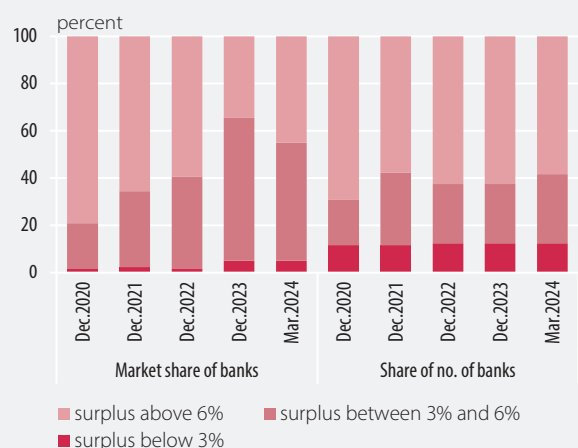
Solvency was positively influenced by the CRR “quick-fix” transitional measures that helped consolidate bank prudential indicators (the aid from the regulatory authorities during the COVID-19 pandemic), but these beneficial effects declined significantly in 2023, the downtrend persisting in 2024. Moreover, the strengthening of the solvency position is also due to the high profit retention rate over the past years, on account of substantial financial results.

**Chart 3.7.** Total capital ratio and the overall capital requirement ratio



Source: NBR

**Chart 3.8.** Breakdown of market share and number of banks by the surplus of total capital ratio above OCR



Source: NBR

<sup>103</sup> According to the audited financial statements.

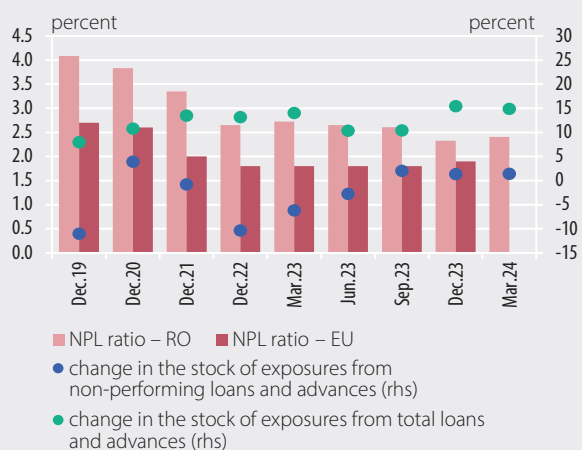
In the medium run, a potential negative impact on capital requirements stems from transposing the latest provisions of the Basel III regulatory framework at EU level through a directive that will be published in 2024. This will lead to an increase by 3.6 percent, on average, in capital requirements for small- and medium-sized European banks, including banks in Romania<sup>104</sup>, until full implementation in 2028, according to the EBA assessments.

### 3.1.4. Asset quality and credit risk

Credit risk remains the main component of capital requirements (85 percent of risk-weighted assets), while the evolution of asset quality influences bank profitability. Asset quality indicators have further improved since the previous *Report*.

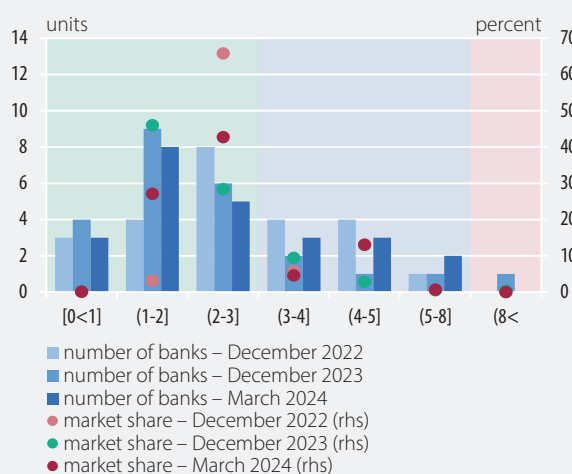
The non-performing loan ratio across the banking sector continued to follow a downward path, posting an annual decline of 0.3 percentage points, i.e. to 2.4 percent in March 2024 (Chart 3.9). Although the stock of non-performing loans went up by 1.4 percent in the same period, the increase in the stock of loans and advances<sup>105</sup> by 15 percent determined the improvement in the indicator. Credit institutions recorded a high NPL coverage ratio of 66 percent (March 2024), close to the March 2023 reading, above the EU's 75th percentile (of 49.3 percent, December 2023).

**Chart 3.9.** Non-performing loan ratio and annual change in the stock of loans and advances



Source: NBR, EBA

**Chart 3.10.** Bank distribution by the non-performing loan ratio



Source: NBR

The distribution by the NPL ratio shows that banks are concentrated in the low-risk bucket<sup>106</sup>, the cumulative market share of credit institutions with an NPL ratio below 3 percent standing at 70 percent (March 2024, Chart 3.10). However, at European level, the cumulative market share of banks with a low NPL ratio is 91 percent

<sup>104</sup> Changes particularly at the level of credit risk and operational risk, as a result of withdrawing the AMA (Advanced Measurement Approach) models and returning to the standardised approach.

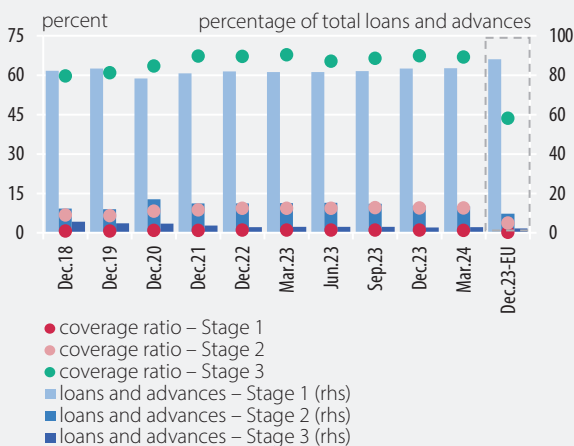
<sup>105</sup> According to the EBA definition, the denominator of the total NPL ratio consists also of exposures to the central bank and loans to central and local government, in addition to exposures to the private sector.

<sup>106</sup> Below 3 percent: low risk; between 3 percent and 8 percent: medium risk; above 8 percent: high risk, according to the definition of the European Banking Authority.

(December 2023). Recent developments reflect the further contraction in the non-performing loan ratio. These dynamics were also influenced by the increase in some low-risk assets (government securities, exposures to the central bank), yet they were further driven by the implementation of macroprudential measures that dampened certain unfavourable cyclical developments (such as minimum conditions on credit standards for loans to households or the systemic risk buffer based on asset quality indicators).

After the stock of restructured loans rose by 31 percent during the pandemic period (December 2019 – December 2021), *inter alia* on the back of moratoria, the recourse to restructuring diminished gradually after the pandemic, the balance of these loans amounting to lei 7.7 billion in March 2024. Of the total restructured loans, 52 percent are non-performing loans, the prevailing restructuring measure being the change in contractual terms (94 percent, March 2024), to the detriment of refinancing. The differential between the restructured loans ratio for the local banking sector (1.5 percent) and that for the EU is on the decline, standing at merely 0.1 percentage points in March 2024.

**Chart 3.11.** Breakdown of loans and advances by the IFRS 9 impairment stage and the corresponding coverage ratio



Source: NBR, EBA

The share of loans in Stage 2 of impairment under IFRS 9 in total loans and advances, which is an indicator associated with short-term developments in asset quality, narrowed to 13.5 percent in March 2024 (Chart 3.11), down 1.6 percentage points from March 2023. The 9.5 percent coverage ratio of Stage 2 loans is higher than the EU average (3.7 percent, December 2023), which reflects the use of more conservative assumptions in the estimates, stemming from the more prudent and proactive nature of the risk policies of banks in Romania.

The NPL coverage ratio is adequate, offering banks a comfortable buffer if expected credit risk materialises (Stages 1 and 2), but also in the event of low recovery of non-performing loans (Chart 3.11). Specifically, the indicators for all stages of impairment went

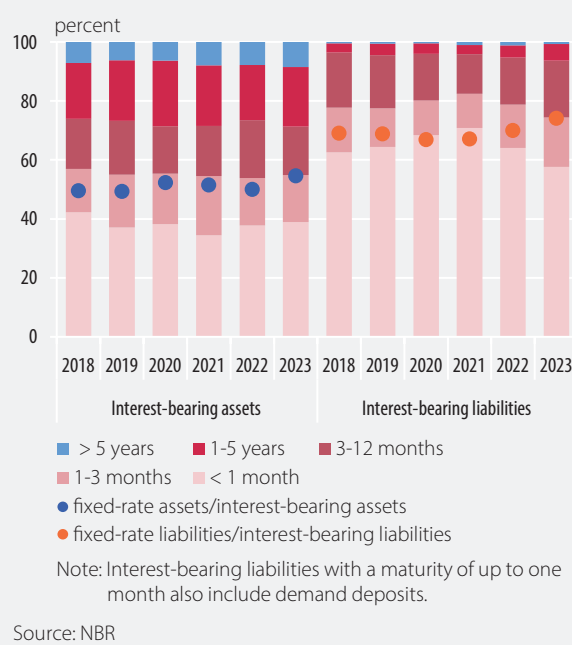
up after the onset of the pandemic crisis, remaining higher despite volatility and economic uncertainty. This confirms banks' willingness to address early a potential worsening in asset quality, as well as the correlation with the macroeconomic environment characterised by relatively high uncertainty.

Although the asset quality indicators testify to a favourable positioning of local banks in terms of credit risk, the current macroeconomic and geopolitical framework points to the need to maintain a cautious behaviour.

### 3.1.5. Market risk

Capital requirements for market risk, specific to trading book activities, make a low contribution of 1 percent to total risk-weighted assets (December 2023), given the long-established business model of the Romanian banking sector, which does not focus on trading. However, the current balance sheet composition, characterised by duration mismatches and the inclusion in the banking book of items subject to mark-to-market valuation (in particular through the high share of fixed-income securities), exposes credit institutions to various forms of interest rate risk (a component of market risk). Interest rate risk in the banking book does not lead to pre-set capital requirements, but excessive risk-taking may translate into additional capital requirements under Pillar 2.

**Chart 3.12.** Breakdown of interest-bearing assets and liabilities by residual maturity and type of interest



The balance sheet structure by duration and residual maturity reflects (i) the mismatch of interest-bearing assets and liabilities – with liabilities that are mostly very short-term, but make a decreasing contribution to total interest-bearing liabilities, and (ii) the prevalence of fixed-rate assets and liabilities in total interest-bearing assets and liabilities respectively. The share of fixed-rate assets in total interest-bearing assets stood at 55 percent in December 2023, while that of fixed-rate liabilities and demand deposits in total interest-bearing liabilities equalled 75 percent. There has been an upward trend in the share of fixed-rate exposures, fuelled in the post-pandemic period by the start of the interest rate hiking cycle and the behaviour of certain depositors, who shifted to time deposits (Chart 3.12). The high share of fixed-rate assets is chiefly ascribed to exposures to the central government, amid larger holdings of government securities, and to the financial sector. As for non-financial corporations, exposures consist mainly of variable-rate loans. In the case

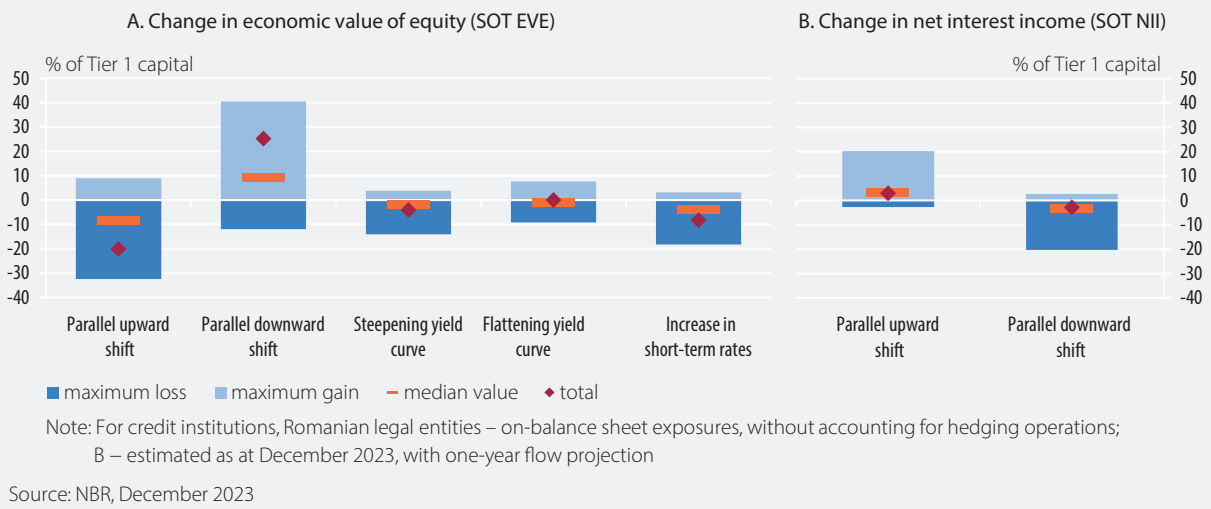
of households, approximately two-thirds of the loan stock are variable-rate loans (for further details, see Section 2.2).

The high share of demand deposits mitigates the duration mismatch, as these funding sources are in fact less interest rate sensitive. Most fixed-rate assets and liabilities have residual maturities of up to three months, so their features are close to variable-rate assets and liabilities (Chart 3.12). The mismatch between the duration of assets (1.5 years, on average; December 2023) and liabilities (0.4 years, on average) is a natural aspect of the long-established business model of banking in Romania, increasing theoretically the exposure to interest rate risk in the event of an interest rate hike. Nevertheless, the actual behaviour associated with demand deposits and their substantial amount help reduce or even change the sign of the duration mismatch, exposing credit institutions to losses if interest rates decline.

Standardised shock scenarios, calibrated consistent with EBA recommendations, were applied to assess the impact of interest rate risk on interest-bearing assets and liabilities in the banking book. Specifically, five scenarios imply the estimation of a change in the economic value of equity (net value of interest-bearing assets and liabilities) and two scenarios reflect the risks related to the change in net interest income (Chart 3.12). According to a severe scenario, i.e. a parallel upward shock of 350 basis points for the lei interest rate curve and 200 basis points for the euro, the change in the economic value of equity is equivalent to a 20.1 percent decline in Tier 1 capital if banks do not resort to hedging.

Most credit institutions would incur losses in the event of an unforeseen interest rate hike. At an individual level, the impact is heterogeneous and ranges between -32.4 percent and +8.9 percent of Tier 1 capital, but this is determined, however, by taking into account a zero duration of demand deposits (*de facto*, their low sensitivity to interest rate changes helps mitigate the impact, as a result of the reduction in the duration mismatch). The same severe economic scenario in terms of economic value of equity would produce favourable effects on net interest income (+2.9 percent of Tier 1 capital).

**Chart 3.13.** Impact of interest rate shock scenarios on interest rate sensitive assets and liabilities (A) and net interest income (B) relative to Tier 1 capital<sup>107</sup>



In a scenario of an instantaneous parallel downward shift in the yield curve, the impact would be theoretically positive on the economic value of equity (+25.3 percent of Tier 1 capital of the banking sector, Chart 3.13, panel A), but it would lead to a significant

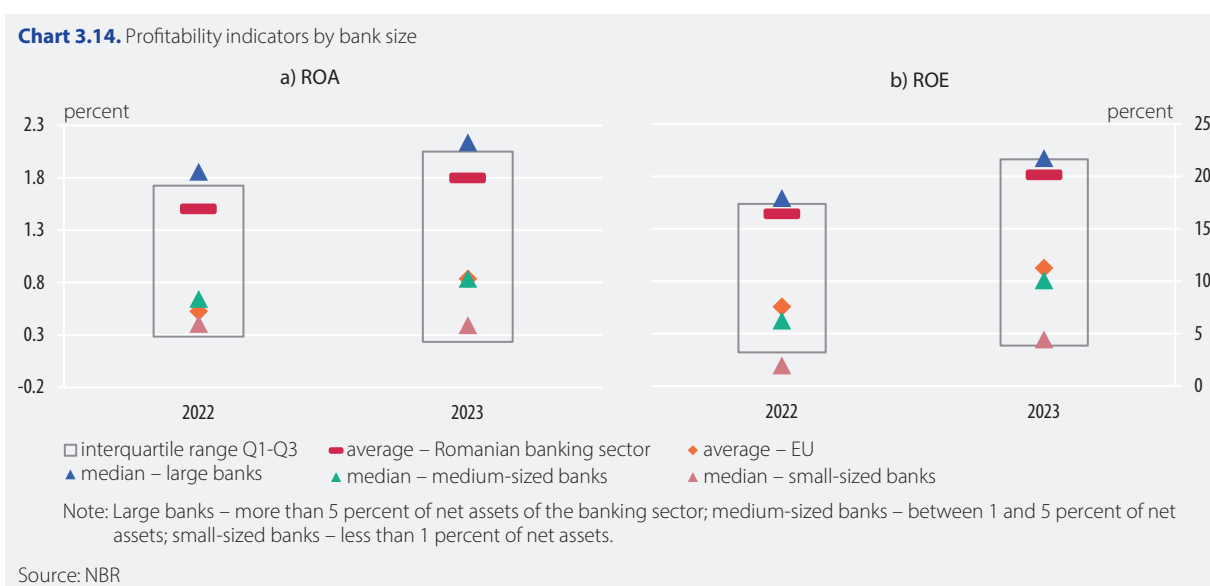
<sup>107</sup> The shock scenarios recommended by the EBA are as follows: (1) a parallel upward shock of 350 basis points on the yield curve of lei-denominated government securities and 200 basis points on the yield curve of EUR-denominated government securities; (2) a parallel downward shock of 350 basis points for lei-denominated government securities and 200 basis points for EUR-denominated government securities; (3) steepening the slope of the yield curve on lei- and EUR-denominated government securities by applying positive shocks of up to 500 basis points on short-term lei yields and negative shocks of up to 250 basis points on long-term lei yields and up to 250 basis points on short-term EUR yields and up to 100 basis points on long-term EUR yields; (4) flattening the slope of the yield curve on lei- and EUR-denominated government securities by applying negative shocks of up to 500 basis points on short-term lei yields and positive shocks of up to 250 basis points on long-term lei yields and up to 250 basis points on short-term EUR yields and up to 100 basis points on long-term EUR yields; (5) increase in short-term interest rates by up to 500 basis points for lei-denominated government securities and up to 250 basis points for EUR-denominated government securities; and (6) decrease in short-term interest rates by up to 500 basis points for lei-denominated government securities and up to 250 basis points for EUR-denominated government securities.

decline in net interest income (-2.9 percent of Tier 1 capital of the banking sector, Chart 3.13, panel B). Under this scenario, the impact associated with net interest income varies at individual level between -20.3 percent and 2.7 percent of Tier 1 capital, with a number of banks exceeding the -5 percent EBA-defined threshold for this test.

The holdings of securities issued by Romania's central government are substantial, being a relevant source of banks' exposure to interest rate risk. At aggregate level, a severe stress scenario of a parallel upward shift in the yield curve by 350 basis points (for leu-denominated exposures) and 200 basis points (for EUR-denominated exposures) would generate losses equivalent to 9.2 percent of Tier 1 capital in the portfolio of securities held on own account by credit institutions, Romanian legal entities, and measured at fair value as at December 2023.

### 3.1.6. Profitability

In 2023, the Romanian banking sector posted a significant rise in net profit, up to lei 13.5 billion, as operating profit expanded (due chiefly to higher net interest income) and net impairment loss on financial assets were kept at bay. The cumulative market share of loss-making credit institutions stood at a low level of 0.4 percent (March 2024).

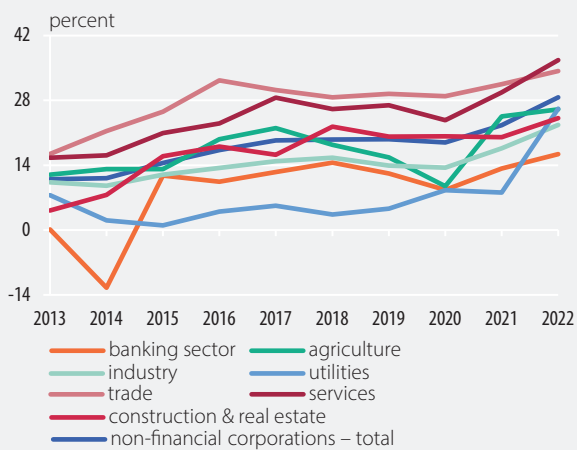


In 2023, the return on assets (ROA) of the local banking sector was 1.8 percent, up from the previous year (1.5 percent) and markedly higher than the EU average of 0.8 percent (Chart 3.14, panel a). The beginning of 2024 shows the further high profitability of a year ago, with ROA staying virtually flat over 2023. However, the distribution of this indicator is highly heterogeneous. Large banks report an ROA of 2.1 percent, above the banking sector average, while medium-sized banks converge towards the EU average (0.8 percent) and small-sized banks are in the proximity of the lower bound of the interquartile range (0.4 percent). The favourable developments in profitability are also reflected by the level of return on equity (ROE), i.e. 20.1 percent

compared to 16.4 percent in 2022 (Chart 3.14, panel b). Large banks' profitability is higher than the EU average (21.7 percent versus 11.3 percent in the EU), whereas medium- and small-sized banks recorded an ROE of 10.1 percent and 4.4 percent respectively.

The return on equity (ROE) stood 3.7 percentage points higher in 2023 from the previous year (Chart 3.16, panel a), as a result of both the rise in operating income and the gradual cut in operating expenses relative to the balance sheet size. In the period under review, equity increased by 9 percent, albeit at a slower pace than the net profits, entailing a negative marginal contribution of 1.4 percentage points to the change in the ROE in 2023.

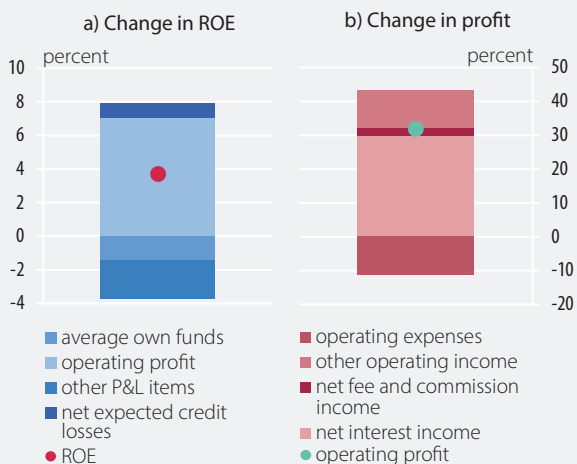
**Chart 3.15.** Return on equity (ROE) – banking sector vs other sectors



Source: NBR

Bank profitability indicators stood, however, persistently lower than the averages reported by non-financial corporations over the last decade, in terms of both total non-financial corporations and the main sectors (agriculture, industry, trade, construction and real estate, services, Chart 3.15). By comparison, in 2022, average ROE and ROA for total non-financial corporations equalled 28.7 percent and 10.7 percent respectively, while in the local banking sector ROE and ROA ran at 16.4 percent and 1.5 percent respectively. Over a longer period, from 2013 to 2022, average return on equity amounted to 8.8 percent for banks and 18.3 percent for non-financial corporations.

**Chart 3.16.** Drivers of the annual growth rates of return on equity (ROE), profit and net interest income – December 2023



Source: NBR

The macroeconomic environment marked by stubbornly high inflation, along with the ongoing digitalisation efforts, sent operating expenses up by about 10 percent. The composition of operating income remained quasi-stable versus the previous period, with net interest income being the main component of operating income (70 percent), ahead of net fee and commission income (16 percent), while net exchange rate differences were still the third largest component of operating income (8 percent). Operating expenses went up, primarily amid the rise in staff costs (13 percent), which is the most important component of operating expenses (50 percent), followed by other administrative expenses and depreciation expenses (37 percent and 13 percent respectively).

Net interest income rose 20 percent in 2023 over the year before, owing mainly to the volume effect (Chart 3.16). Average interest rates stood higher in 2023 than in 2022 for both asset and liability items, but the interest rate differential held relatively steady in the period

under review. The significant contribution of demand deposits to total liabilities helps improve the cost of bank funding, acting as a boon for profitability.

Operational efficiency, measured by the cost-to-income ratio (47.6 percent, December 2023), improved and the banking sector was classified in the EBA-defined low-risk bucket (cost-to-income below 50 percent), also in the context of banks' fast-paced digitalisation and consolidation.

The epidemiological situation and geopolitically-driven uncertainties substantiated the restriction on and/or limitation of dividend distribution by credit institutions in 2020-2023 based on macroprudential measures (by implementing ESRB recommendations at national level<sup>108</sup>) and, as appropriate, microprudential measures. Subsequently, a number of banks signalled their intention to pay out dividends amid sound financial positions and unabated investor interest. However, it is necessary to keep in place prudent dividend distribution policies in view of the lingering global uncertainty, the domestic macroeconomic imbalances and challenges from climate and cyber risks. In fact, 43 percent (preliminary data) of 2023 profits made by banks, Romanian legal entities, were distributed as dividends to shareholders, the largest part (57 percent) being incorporated into banks' own funds in support of their development capacity.

### 3.2. Non-bank financial institutions

The NBFIs sector continues to be a viable alternative to the banking sector, as it could supplement or even substitute banks' loan supply, depending on the beneficiary or purpose of the loan. The financing of retail purchases (e.g., durables such as electronic or ICT products) has been one of the factors that contributed to the increase in NBFIs exposures in the form of consumer loans.

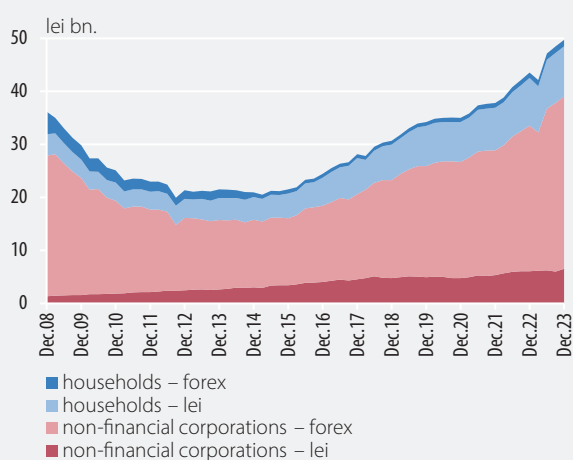
The role of non-bank financial institutions in lending to the real sector has grown significantly over the past few years, as shown by the NBFIs loan stock in December 2023 (lei 49.7 billion), which doubled from the one recorded in December 2016 (lei 24.4 billion). In annual terms, NBFIs lending went up 14 percent at aggregate level, as a result of rises by 16 percent on the non-financial corporations segment and 7 percent on the household segment. Looking at households, loans granted by NBFIs contribute to increasing financial intermediation especially via micro-credit, ensuring that access to finance improves on this segment.

The total stock of loans granted by NBFIs is dominated by corporate financing (approximately 79 percent, December 2023) and consists primarily of foreign currency-denominated loans (65 percent, Chart 3.17). New loans provided by NBFIs to non-financial corporations are mostly in the form of leases for equipment, machinery, and car fleets (Chart 3.18), 98 percent of them being denominated in foreign currencies. Although beneficial to non-financial corporations in terms of access to

<sup>108</sup> Recommendation of the European Systemic Risk Board of 27 May 2020 on restriction of distributions during the COVID-19 pandemic (ESRB/2020/7) and Recommendation of the European Systemic Risk Board of 15 December 2020 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic (ESRB/2020/15)

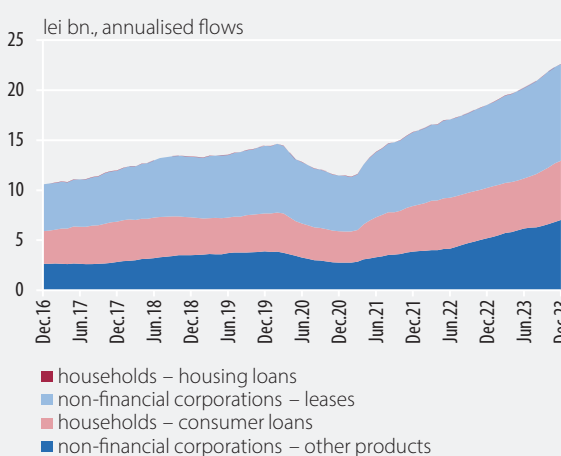
finance, which is below the potential, the developments call for close monitoring, given firms' significant exposure to currency risk. The same as in the case of bank loans, foreign currency-denominated loans to non-financial corporations granted by NBFIs are strongly seasonal, the data<sup>109</sup> showing the higher volatility of the random variable when shocks occur (such as COVID-19, interest rate hikes). For households, consumer credit is the main component of new loans granted by NBFIs. The currency risk associated with household lending by NBFIs remains low, as the prevailing share of loans are denominated in the domestic currency (89 percent).

**Chart 3.17.** Stock of loans granted by NBFIs to non-financial corporations and households



Source: NBR

**Chart 3.18.** New loans granted by NBFIs to non-financial corporations and households



Source: NBR, NBR calculations

Overall, the financing conditions for non-financial corporations provided by NBFIs – in terms of interest rate (excluding other fees and costs) and original maturity – are relatively similar to those offered by banks (Chart 3.19). As for households, the interest margins applied by NBFIs when lending small amounts to this segment are higher than those applied by banks.

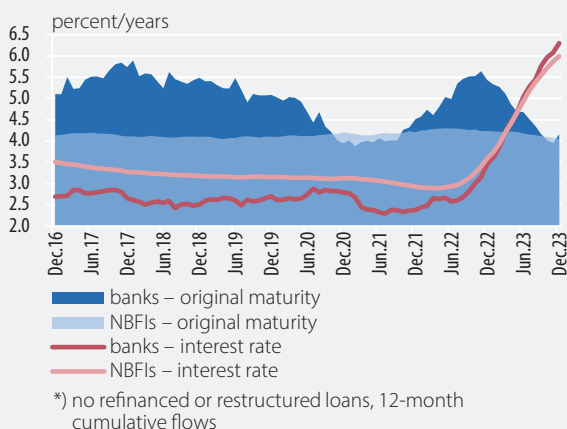
The NPL ratio<sup>110</sup> for loans granted by NBFIs held relatively steady in annual terms, standing at 3.5 percent in December 2023 (Chart 3.20). This owed to the dynamics of loans more than 90 days past due (+17 percent, December 2023 versus December 2022) being similar to those of total loans (+18 percent). By currency, the NPL ratio for foreign currency-denominated loans granted by NBFIs is lower than that of leu-denominated loans (1.9 percent versus 6.9 percent). Domestic and foreign currency-denominated loans to non-financial corporations and housing loans to households are the best-performing components in terms of portfolio quality. Consumer credit to households further posted a high NPL ratio (8.2 percent, December 2023). Conversely, the lower NPL ratio for foreign currency-denominated loans to non-financial corporations is explained is the faster growth rate of these loans (especially leases) than that of related non-performing loans<sup>111</sup>.

<sup>109</sup> The monthly data series for this type of lending (foreign currency leases to companies) were processed to remove seasonal changes and the trend.

<sup>110</sup> The NPL ratio in the case of NBFIs is calculated as the ratio of the sum of loans more than 90 days past due to total credit.

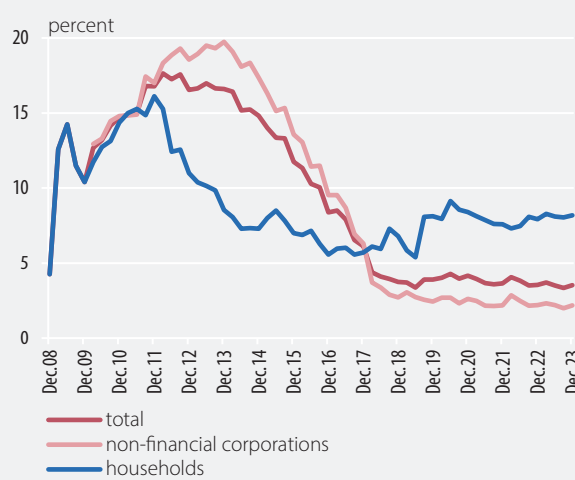
<sup>111</sup> A loan granted by a NBFIs is considered non-performing if it is more than 90 days past due.

**Chart 3.19.** Credit terms and conditions for new loans\* in foreign currency granted to non-financial corporations by banks and NBFIs (weighted average)



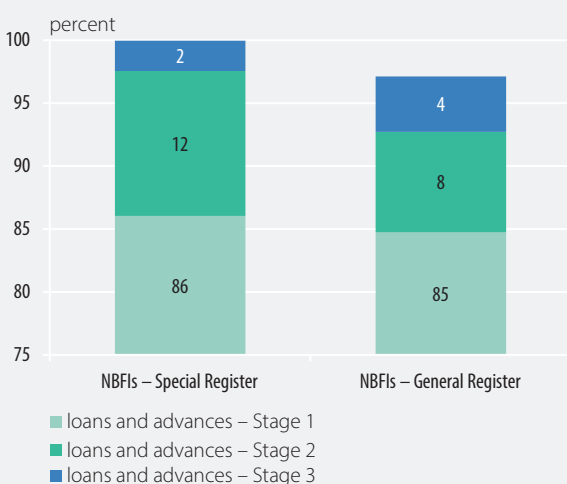
Source: NBR

**Chart 3.20.** NBFIs' non-performing loan ratio



Source: NBR, CB, NBR calculations

**Chart 3.21.** Share of assets under various stages of impairment in total loans and advances, December 2023



Note: The difference up to 100 percent are purchased or issued financial assets that became depreciated. The NBFIs - General Register category in this chart includes only those NBFIs that are not entered into the Special Register.

Source: NBR, NBR calculations

Compared to the banking sector, credit risk at NBF level remains high, the ratio of loans more than 90 days past due to total loans standing at 3.5 percent versus 1.7 percent in the case of bank loans (December 2023).

As of January 2023, non-bank financial institutions have started to apply the reporting standards applicable to banks (IFRS 9). NBFIs' aligning with the international financial reporting standards is likely to contribute significantly to increasing NBF discipline in terms of accounting and reporting standards. The situation regarding the stages of impairment of NBF assets at the level of the entire sector is similar to that of NBFs entered into the Special Register, given that the latter hold approximately 98 percent of the total assets of the NBF sector. According to December 2023 data, the share of loans and advances for which credit risk has increased significantly since the initial recognition (Stage 2) is around 11 percent (Chart 3.21).

## 4. FINANCIAL SYSTEM INFRASTRUCTURE – STABILITY OF PAYMENT AND SECURITIES SETTLEMENT SYSTEMS<sup>112</sup>

---

Payment and securities settlement systems in Romania functioned smoothly, without major operational incidents.

The National Bank of Romania has been steadily monitoring financial market infrastructures in order to ensure their effective and safe operation with a view to maintaining financial stability. This implies, *inter alia*, monitoring and testing the action plans where improbable but predictable risks materialise. The oversight by the National Bank of Romania is based on the international oversight standards set out in the Principles for financial market infrastructures and implemented by way of NBR Regulation No. 3/2018.

---

### 4.1. Stability of payment systems

#### Functioning of ReGIS<sup>113</sup>

In 2023 H2, ReGIS system rules underwent a series of changes. These envisaged: (i) changes in the system's functionalities following the operationalisation of an improved version of the ReGIS system application (ReGIS v.4) and (ii) the change in the pricing scheme<sup>114</sup> for the system services with a view to restructuring and updating fees so as to comply with the applicable monitoring principles and rules, observe the European best practices in the field and diminish the financial risk borne by the NBR in its capacity as system administrator.

Looking at the system activity, in 2023 H2 the value of processed payments increased to lei 13,805 billion compared to lei 11,401 billion recorded in 2023 H1. Moreover, the number of transfer orders amounted to 5.48 million compared to 4.89 million in the first half of 2023.

---

<sup>112</sup> This chapter was prepared by the Financial Market Infrastructures and Payments Oversight Department.

<sup>113</sup> ReGIS is the most important payment system in Romania, ensuring the real-time gross final settlement of participants' transfer orders and of net positions arising from ancillary systems.

<sup>114</sup> The new pricing scheme can be found in Annex No. 10 to the ReGIS system rules published on the NBR's website.

On 21 December 2023, the system reported a peak number of payments per day, i.e. 70,488 payment instructions. It is worth mentioning that, in spite of this elevated volume, the system faced no problems in terms of processing capacity<sup>115</sup>.

In 2023 H2 the average settlement ratio<sup>116</sup> amounted to 99.97 percent, reflecting a good settlement discipline. Furthermore, the average monthly availability ratio<sup>117</sup> came in at 100 percent, indicating that the system, which functions on the technical platform operated by the central bank, was fully reliable.

The probability for the liquidity risk to materialise remains low, as reflected by the absence of gridlock situations in the waiting queues. At the same time, the number of intraday loans required by the participants to facilitate payments in ReGIS decreased from 146 in 2023 H1 to 126 in the period under review.

The number of participants in ReGIS amounted to 36 entities, including ancillary systems. Both the number and the value of transactions posted a slightly lower concentration ratio<sup>118</sup>. Specifically, the records show a decrease from 61.70 percent to 61.45 percent for the volume of transactions and from 61.72 percent to 58.03 percent for the value of transactions. These trends suggest a reduced likelihood for the contagion risk to materialise in the system.

#### **Functioning of SENT<sup>119</sup>**

In the period under analysis the system rules remained unchanged.

In 2023 H2, the value of netted orders in lei in SENT totalled lei 283 billion compared to lei 279 billion in 2023 H1. The number of transactions posted a lower volume, i.e. 76.6 million compared to 81.54 million in the previous six-month period.

Looking at transactions in euro, the value of netted orders rose from EUR 1.99 billion to EUR 2.23 billion. At the same time, the number of payment transactions in euro saw a mild decrease, going down from 315.14 thousand to 308.27 thousand in 2023 H2.

The monthly availability ratio of SENT, operated by TRANSFOND S.A., stood at 100 percent<sup>120</sup> for the multiple payment component in lei and at 100 percent for the multiple payment component in euro, which proves the smooth functioning of this system.

<sup>115</sup> According to the oversight standards in the field, ReGIS is designed to take in, within one hour, 40 percent of the estimated highest daily volume of payments in order to process in a short period of time a large volume of payments left unprocessed in the aftermath of a major, lengthy incident (including a cyber incident). At the same time, the processing power of ReGIS servers is scalable, so as to quickly accommodate sustained increases in the volume of payments.

<sup>116</sup> Calculated as a ratio of transfer orders settled in the system to the accepted transfer orders.

<sup>117</sup> The availability ratio is defined as a ratio of the actual operating time to the scheduled operating time, during the system's normal operating hours.

<sup>118</sup> Calculated as the sum of the five largest individual market shares in terms of the value or volume of settled transfer orders. The alert threshold stands at 80 percent, with higher values indicating a significant probability for the systemic risk to materialise.

<sup>119</sup> SENT is an electronic system for the multilateral netting of retail interbank payments among participants, during several daily sessions.

<sup>120</sup> The system rules set forth a minimum accepted limit of 99 percent.

The settlement ratio<sup>121</sup> of leu-denominated payment instructions remained elevated, i.e. 99.61 percent. This stability indicates a good settlement discipline. In parallel, the netting ratio went up from 21.65 percent to 24.79 percent. This evolution reflects an efficient management of leu-denominated liquidity, without significant risks<sup>122</sup>. The settlement ratio of EUR-denominated payment instructions remained at 100 percent, which indicates a further very strong payment discipline.

The number of participants in SENT – the lei component stood at 34 institutions.

In terms of the volume of netted leu-denominated transfer orders, the participants' concentration ratio went down slightly from 63.44 percent to 62.40 percent, while in terms of value it rose from 60.64 percent to 61.37 percent. These developments show a low likelihood for the contagion risk to materialise in the SENT system.

## 4.2. Securities settlement systems

### Functioning of SaFIR

In the period under analysis the system rules remained unchanged.

In the period reviewed by this *Report*, the government securities registration and settlement system SaFIR was subject to a comprehensive assessment against its compliance with the requirements of NBR Regulation No. 3/2018. The results of the assessment showed that SaFIR largely met the requirements of NBR Regulation No. 3/2018, but some recommendations – that are currently being implemented – were also made to improve the operational and cyber security of this system.

SaFIR functioned optimally, the availability ratio<sup>123</sup> standing at 100 percent.

In 2023 H2 the aggregate value of leu-denominated securities recorded in SaFIR followed an upward trend reaching lei 329 billion from lei 316.37 billion in the previous six-month period.

The number of transactions increased from 19.5 thousand to 20.6 thousand<sup>124</sup>. At the same time, the value of transactions fell from lei 456.70 billion to lei 372.84 billion. The number of EUR-denominated transactions posted a marked decline from 368 in 2023 H1 to 272 in 2023 H2. Moreover, the value of EUR-denominated transactions plunged from EUR 1.76 billion in 2023 H1 to EUR 0.79 billion in the period under review.

<sup>121</sup> Calculated as a ratio of the value of netted-settled transfer orders to the value of processed transfer orders.

<sup>122</sup> The alert threshold consists in a netting ratio below 10 percent, coupled with large-value net debit positions, which can pose systemic risks if a critical participant does not participate in the settlement.

<sup>123</sup> The availability ratio is defined as a ratio of the actual operating time to the scheduled operating time, during the system's normal operating hours.

<sup>124</sup> The system's processing capacity allows for much larger volumes of instructions to be settled.

Free-of-payment transfers dropped in terms of volume, i.e. from 3,166 in 2023 H1 to 3,075 in 2023 H2.

The settlement ratios<sup>125</sup> continued to be high, standing at 99.99 percent for transactions in lei and at 100 percent for transactions in euro, which indicates a very good settlement discipline.

The number of participants in SaFIR amounted to 31 institutions, of which: 3 central depositories, the National Bank of Romania, the Ministry of Finance and the remaining were credit institutions or branches of credit institutions.

### Functioning of RoClear

During the period under review, the Central Depository, the administrator of the securities settlement system RoClear, obtained the NBR's approval to make several changes to the system rules. These changes envisaged mainly the implementation of some recommendations made by the NBR during the comprehensive assessment of RoClear in 2023 based on NBR Regulation No. 3/2018, as well as other amendments and supplementations for a greater clarity of the wording or updates resulting from the current activity of the Central Depository.

At the same time, in the period covered by this *Report*, the NBR and the European Central Bank (ECB) in their capacity as relevant authorities, together with the Financial Supervisory Authority (FSA) in Romania, reviewed and evaluated the Central Depository's compliance with the provisions of Regulation (EU) No 909/2014 on improving securities settlement in the European Union and on central securities depositories (CSDR). Based on the information provided to the evaluation team, no significant changes were found affecting the Central Depository's compliance with CSDR requirements and the delegated regulations issued for its application, nor were any issues identified that could reveal the existence of potential major risks to RoClear's proper functioning and its participants.

## 4.3. Operational and security incidents affecting payment services providers

In 2023 H2, 18 major operational incidents and 2 major security incidents were reported to the central bank by 9 payment services providers (PSPs), i.e. up by 50 percent from the previous six-month period. The major incidents that occurred affected the availability or integrity of some payment services relating to: (i) credit transfers performed by means of internet or mobile banking applications, (ii) card payment acceptance (e.g. the impossibility of using POS/ATM terminals), (iii) card payment transactions and cash withdrawals from a payment account, (iv) direct debit payment transactions and (v) open-banking – the provision of account information and payment initiation services.

<sup>125</sup> Calculated as a ratio of the value of netted-settled transfer orders to the value of processed transfer orders.

These major incidents were caused by both internal issues (10 incidents reported by payment services providers – PSPs) and technical issues (8 incidents faced by technical service providers – TSPs), as well as two Distributed Denial of Service (DDoS) attacks. Thus, there were human errors, failures facing TSPs, system errors coming from technical components used in the process of payment services provision to users (hardware, network and software failures) and process errors. Although the number of reported incidents increased compared to the previous six-month period, the analysis conducted by the central bank through on- and off-site inspections for assessing the security measures of payment services providers shows that PSPs are able to adequately manage the operational and security risks to the payment services they provide.

#### **4.4. Technological innovation in payment services**

The NBR remains committed to projects that aim to develop the payments market by supporting innovation, as well as enhancing payment security. In this context, the NBR continued to communicate with the Fintech entities by means of the FinTech Innovation Hub. In 2023 H2 four new applications were sent, with the number of entities having submitted an application since the launch of this monitoring tool reaching 66. Thus, it is noted that entities continue to show interest in developing innovative solutions, in particular payment development solutions, involving either activities for which authorisation is required or technical solutions supporting the digitalisation process of payment services.

In terms of payment security, an increasing trend was noticed for social engineering frauds based on various forms of user manipulation (e.g. investing small amounts of money with the promise of big returns, data updating or taking actions to unlock the account, etc.). The central bank has been monitoring this phenomenon on a continuous basis, issuing recommendations for payment services providers to strengthen security measures in line with existing fraud scenarios. In this context, mention should be made that, in general, the security measures proposed are aimed at improving transaction monitoring mechanisms, implementing solutions such as the Beneficiary Name Display Service (BNDS) that allow for the verification of the correspondence between the IBAN code and the beneficiary's name and improving the security of linking cards to various payment applications.

## 5. FINANCIAL STABILITY, REGULATORY FRAMEWORK AND MACROPRUDENTIAL POLICIES

### 5.1. Capital buffers applicable to credit institutions, Romanian legal entities

Macroprudential policymakers closely monitor the developments in the macroeconomic and financial environments. The agenda of the 53rd meeting of the General Board of the European Systemic Risk Board<sup>126</sup> included topics such as (i) financial stability risks in the current macroeconomic and geopolitical context, (ii) lessons that can be drawn from the 2023 bank runs in the United States and Switzerland, (iii) the strong risk appetite of investors in the capital market and the fact that possible market corrections could be amplified by high credit and liquidity risks in the non-bank financial sector and (iv) cyber threats and the solutions to be implemented at national and European level to enhance financial system resilience. As for financial stability risks arising from current macroeconomic developments, the role of macroprudential policies was highlighted in the new context marked by a decline in inflation rate, which would entail interest rate changes<sup>127</sup> and interaction with the monetary policy. Another topic referred to macroprudential policy conduct and to the fact that 27 EEA countries had built up or were building up capital buffers, such as the countercyclical capital buffer (CCyB) or the systemic risk buffer (SyRB), with a view to enhancing the resilience of their national banking sectors. In this respect, the importance of building capital buffers during periods of credit booms and favourable liquidity, solvency and profitability conditions was underlined for enabling the intervention of authorities in the event risks materialise.

In line with the above, 19 out of 30 EEA countries reported countercyclical capital buffer rates above zero in May 2024.

Northern countries stand out with the highest CCyB rate, i.e. 2.5 percent in Norway, Denmark and Iceland. The second group of countries with a CCyB rate of 2 percent also comprises a Northern country, i.e. Sweden, together with Bulgaria and the Netherlands. Czechia set the CCyB rate at 1.75 percent, whereas Estonia and Slovakia are the only countries applying a CCyB rate of 1.5 percent. The group of countries with a CCyB rate of 1 percent is the largest, including Romania, Croatia, France, Ireland, and Lithuania. However, there are also countries applying positive, but lower CCyB rates, namely 0.75 percent in Germany and 0.5 percent in Cyprus, Slovenia, Luxembourg, and Belgium, Table 5.1.

<sup>126</sup> The General Board of the European Systemic Risk Board held its 53rd regular meeting on 21 March 2024

<sup>127</sup> In order to have the whole picture of how interest rates can evolve in a new economic context marked by lower inflation, see the speech by Isabel Schnabel, Member of the Executive Board of the ECB, R(ising) star?

**Table 5.1.** CCyB rates applied by EEA countries in May 2024 and CCyB rates announced for 2025

Country	CCyB rate (%) in May 2024	CCyB rate (%) announced for 2025
Austria	0	0
Belgium	0.5	1
Bulgaria	2	2
Croatia	1	1.5
Cyprus	0.5	1
Czechia	1.75	1.75
Denmark	2.5	2.5
Estonia	1.5	1.5
Finland	0	0
France	1	1
Germany	0.75	0.75
Greece	0	0
Hungary	0	0.5
Iceland	2.5	2.5
Ireland	1	1.5
Italy	0	0
Latvia	0	1
Liechtenstein	0	0
Lithuania	1	1
Luxembourg	0.5	0.5
Malta	0	0
Netherlands	2	2
Norway	2.5	2.5
Poland	0	0
Portugal	0	0
Romania	1	1
Slovakia	1.5	1.5
Slovenia	0.5	1
Spain	0	0
Sweden	2	2

■ unchanged, 
 ■ 0.5 pp increase, 
 ■ 1 pp increase

Source: European Systemic Risk Board

In Romania, the NPL ratio in the banking sector reached 2.3 percent in December 2023, down by 3.8 percentage points versus March 2018, when the CCyB was introduced in the national regulatory framework, whereas the NPL coverage by provisions increased by approximately 10 percentage points in the same period.

Romania's countercyclical capital buffer rate thus ranks close to the European average. In light of the evidence from the pandemic, the role that applying the buffer can have is now viewed from a different angle. Specifically, the buffer's feature to act towards strengthening the resilience of the banking sector has gained centre stage in the broader suite of effects that authorities can pursue once it is activated.

The series of buffer rate increases after 2022 and the fact that nearly two thirds of EEA countries use this macroprudential instrument validated Romania's timely

decision to start the macroprudential policy tightening shortly before the outbreak of the war in Ukraine and the emergence of the energy crisis in Europe.

Specifically, the initial announcement of the CCyB rate increase to 0.5 percent was made in October 2021, the measure becoming effective 12 months later, according to the applicable European framework, which gave credit institutions the time necessary for capital planning. Then the buffer rate was raised by another 0.5 percentage points to the current level of 1 percent, starting in October 2023. The rationale for the CCyB rate increases refers to the tense geopolitical environment, the considerable growth pace of the volume of loans, which marked the post-pandemic rebound and, more importantly in the current context, the need for the banking sector to build up additional capital reserves during an upturn, which could be released should potential adverse effects materialise. As the financing cost rose above the average for the past years, lending growth started to lose momentum, but Romania has remained a frontrunner among European countries as regards the dynamics of loans to non-financial corporations.

The overall risk dashboard calls for prudence and close monitoring by the authorities of the main global instability sources. Under the circumstances, the importance of the adequate CCyB calibration is enhanced by the general context, as this macroprudential instrument is the only one designed to be released particularly in the event of adverse scenarios materialising and, thus, can help ensure the continued financing of the real economy.

Macroprudential policy decision-making is a four-step process, consisting in: (i) identification of systemic risks, where vulnerabilities are detected and assessed based on relevant indicators and indicative thresholds are set; (ii) selection and calibration of macroprudential instruments; (iii) communication and implementation (application of instruments) and (iv) assessment of macroprudential instruments. In this vein, the NCMO General Board is regularly informed of the assessment of capital buffers implemented at national level. The latest assessment exercise highlighted that the measures adopted so far were in line with EU-wide tendencies, given the tightening trend of macroprudential requirements over the past two years. At European level, many countries became concerned with strengthening the banking sector resilience, amid the post-pandemic economic recovery signals, along with the advance in lending to both non-financial corporations and households. In particular, they aimed to build up reserves that can be used during crises or should an exogenous shock occur, resuming the adoption of decisions to raise the CCyB rate.

Assessing the O-SII<sup>128</sup> buffer effectiveness focused on comparing solvency, credit risk, asset quality, profitability and liquidity indicators of O-SIIs to those recorded by the banking sector on the aggregate and to the EBA-defined prudential thresholds. It is worth noting that since 2016, when this indicator was implemented in the national macroprudential framework, the indicators for both O-SIIs and the banking sector have converged towards the green areas set by the EBA, with systemically important banks being slightly faster in touching these thresholds. This shows that the adopted

<sup>128</sup> Other Systemically Important Institutions (O-SIIs).

macroprudential measures were appropriate and timely, helping improve the financial soundness indicators of banks at national level. The latest exercise to identify systemically important institutions based on data available as at 31 December 2022 found nine systemically important credit institutions<sup>129</sup>, which hold 79.5 percent of bank assets, provide a significant part of financial services to the real economy, i.e. 79.2 percent of outstanding loans, 79.1 percent of deposits taken, and 64.1 percent of payments made, while in terms of interconnectedness with the other undertakings conducting financial activities, they provide 70.0 percent of intra-financial assets, they use 73.2 percent of intra-financial liabilities and hold 98.1 percent of bonds issued.

The systemic risk buffer (SyRB) was assessed based on the evolution over time of the two indicators used to set the buffer, namely the NPL ratio and the NPL coverage by provisions, the results showing the effectiveness of the instrument. Specifically, the NPL ratio in the banking sector reached 2.3 percent in December 2023, down by 3.8 percentage points versus March 2018 (when this buffer was introduced in the national regulatory framework), whereas the NPL coverage by provisions rose by approximately 10 percentage points in the same time period. Due to the gradual improvement of the two indicators, starting in 2024 H1 there were no longer any credit institutions in Romania to apply a SyRB rate of 2 percent, their number declining steadily from 14 banks in 2018 H2. Thus, credit institutions have migrated from a SyRB rate of 2 percent to 1 percent or 0 percent rates.

As regards the coordination of EU-wide macroprudential measures to reduce regulatory arbitrage, the NCMO General Board decided, since the previous *Report*, not to apply through voluntary reciprocity the macroprudential measures adopted by Belgium<sup>130</sup>, given that total eligible exposures of the local banking sector to this country were immaterial, standing below the threshold recommended by the competent authorities of the country requesting reciprocation.

With a view to harmonising the national methodologies with those of EU Member States, the NCMO General Board decided, in its meeting of 28 March 2024, to submit to the EBA the national macroprudential authority's intention to comply with the provisions of Guidelines EBA/GL/2023/10 amending Guidelines EBA/GL/2020/14 on the specification and disclosure of systemic importance indicators starting with the date when a relevant institution (G-SII) exists in the financial system in Romania.

## 5.2. The activity of the NBR in its capacity as resolution authority<sup>131</sup>

The bank resolution activity continued to focus on resolution planning, as no major disruptions affected banking operations in Romania.

<sup>129</sup> The list of systemically important institutions and the applicable O-SII buffer is available at: List of systemically important banks and the other systemically important institutions buffer (O-SII buffer) applicable in 2024.

<sup>130</sup> The measure is outlined in Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures, as subsequently amended and supplemented.

<sup>131</sup> This section was prepared by the Bank Resolution Department.

The updated resolution plans provide that the resolution strategies set in the previous planning cycle are maintained. Large domestic banks or the subsidiaries of cross-border groups with MPE resolution strategies continue to prefer the bail-in resolution tool, whereas the subsidiaries of cross-border groups with SPE resolution strategies prefer to write down or convert the eligible debt instruments. By contrast, for some local credit institutions, the sale of business or a bridge institution are the main tools envisaged for resolution.

In addition to formulating the resolution strategy, the resolution planning focused on functional aspects, testing resolution mechanisms and completing the configuration of the dataset necessary for valuation in order to ensure the conditions for promptly conducting the potential resolution actions. The steps taken by credit institutions to further improve resolvability were also monitored, *inter alia* as regards the compliance with EBA Guidelines on improving resolvability.

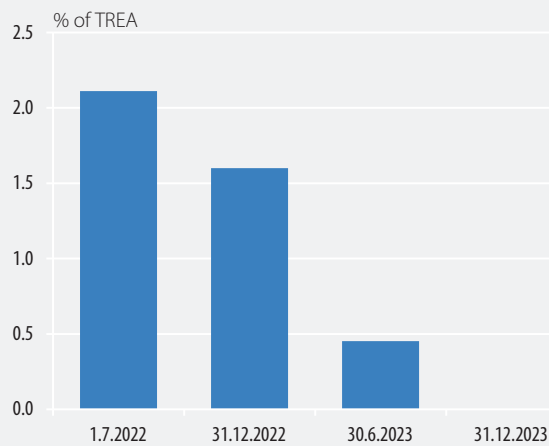
The final minimum requirement for own funds and eligible liabilities (MREL) that has been applied since the beginning of 2024, once the transition period stipulated by the European regulatory framework (BRRD2) ended, is 24.6 percent of the total risk exposure amount (TREA) of resolvable institutions (Chart 5.1), excluding the combined buffer requirement, whose weighted average accounts for approximately 5 percent of the TREA. The average final MREL (without the combined buffer requirement) is 24.8 percent of the total risk exposure amount for credit institutions that are resolution entities<sup>132</sup> and 24.3 percent for institutions that are not resolution entities<sup>133</sup>.

Chart 5.1. MREL final target



Source: NBR

Chart 5.2. Estimated shortfall against the MREL final target including the combined buffer requirement



Source: NBR

The aggregate MREL in nominal terms amounts to lei 74 billion for resolvable credit institutions, out of which lei 38 billion is the requirement imposed by the NBR, in its capacity as resolution authority (NBR-RA), in addition to own funds requirements.

<sup>132</sup> Banks in cross-border groups with a multiple point of entry (MPE) resolution strategy or local credit institutions subject to the resolution measures set forth in the resolution plan.

<sup>133</sup> Banks in cross-border groups with a single point of entry (SPE) resolution strategy.

The shortfall of eligible resources, estimated against the MREL final target (including the combined buffer requirement), was covered entirely by the end of the transition period, i.e. end-2023 (Chart 5.2), amid the rise in the stock of eligible debt instruments<sup>134</sup>.

All credit institutions under the remit of the NBR-RA met the final MREL as at 1 January 2024. According to the regulatory framework, credit institutions shall comply with the final MREL on a permanent basis after the specified reference date, as MREL resources are the first line of defence to fulfil bank resolution objectives when needed, and thus an essential element of resolvability, likely to increase the credibility of resolution strategies. Specifically, the resolution powers and instruments allow these resources to be converted into capital, helping restore the solvency of banks failing or likely to fail, according to the resolution principle based on which shareholders and creditors are the first to incur losses.

MREL eligible resources were raised primarily via issues of senior non-preferred (SNP) bonds, as well as of Tier 2 capital instruments (subordinated debt) and senior bonds. Due to the increase in the share of long-term debt instruments, the compliance with the MREL requirement contributed, *inter alia*, to improving maturity mismatches, with a favourable impact on the asset and liability management. Moreover, the presence of credit institutions in local and international capital markets has increased significantly, as also shown by foreign investors and investment banks' interest in those instruments (based on their analysis activity).

Once the transition period ended, credit institutions have specific obligations to disseminate information on the MREL requirements and eligible resources, on a half-yearly or annual basis, as appropriate, starting in 2024.

### **Bank Resolution Fund**

At end-2023, the Bank Resolution Fund's resources slightly exceeded lei 3 billion (up by approximately lei 0.5 billion from end-2022). The target level of 1 percent of the amount of covered deposits of all the credit institutions authorised on the territory of Romania set for the end of 2024 was fulfilled to a degree of 99.2 percent, the shortfall standing below 0.008 percent of the calculation base. For 2024, the NBR-AR has communicated to credit institutions the estimated non-binding contributions to be paid to the Bank Resolution Fund since the end of 2023 in order to facilitate the budget planning of contributing banks.

### **Regulatory framework for bank resolution**

The resolution framework was extended at the level of primary legislation through the adoption of a directive on indirect subscription chains that amends the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism Regulation (SRMR) to include targeted proportionality requirements to the treatment of internal MREL in bank resolution groups. As part of the legislative package known

<sup>134</sup> Additionally, Tier 2 securities were issued.

as the reform of the Crisis Management and Deposit Insurance framework (CMDI), the European Commission presented this legal act as a self-standing legal instrument to fast-track its adoption ahead of the remainder of the CMDI review proposals. The Directive defines the liquidation entity and its scope, specifying the conditions for implementing the consolidated internal MREL. The new rules introduce a specific MREL treatment for subsidiaries of banking groups to be wound up under normal insolvency proceedings in the event of failure, so that they would not be subject to a resolution plan providing for the write-down and conversion of MREL instruments. These rules confer the resolution authorities the power to set the internal MREL on a consolidated basis subject to certain conditions. Where the resolution authority allows a banking group to implement the consolidated internal MREL, the intermediate entities should not be required to deduct their holdings of own funds instruments and eligible liabilities instruments.

## Special feature. The role of trade credit in the financing of firms

Trade credit<sup>135</sup> is a major source of finance for non-financial corporations' working capital needs, especially in economies with less developed financial systems<sup>136</sup>. Even though trade credit can help firms manage cash flows and liquidity over the short term, as well as gain competitive advantage, it is generally costlier and riskier compared to bank credit. Thus, it may be more beneficial for customers to make prompt invoice payment to take advantage of the discounts offered by suppliers and take up a bank loan until collecting the receivables from their own customers<sup>137</sup>. Moreover, the suppliers providing this type of facility may increase their sales volume, yet at the expense of a default risk in relation to customers. This risk can rise substantially if an adverse selection effect occurs, namely if sales via trade credit are preferred especially by less creditworthy customers that find it challenging to manage cash flows and have limited access to bank credit, while the rest of the customers go for immediate payment, as trade credit is much too costly for them<sup>138</sup>.

The use of trade credit can vary markedly over a financial cycle and depending on the firm's characteristics. First, trade credit expands during periods of interest rate increases<sup>139</sup>, such as the current one, because it lessens firms' financial constraints. Also, trade credit can decline substantially during financial crises<sup>140</sup> owing to the uncertainty about customers' payment capacity or suppliers' liquidity problems. In case of a systemic event, trade credit is a major channel whereby shocks pass through into the economy, and effects can be strongly asymmetrical. Thus, firms under higher stress will seek to reduce trade credit vis-à-vis their customers, whereas companies with a better financial standing may decide to extend this type of credit preferentially to certain customers. Second, trade credit takes preference over bank credit when suppliers can obtain information on their customers in more advantageous conditions (the informational asymmetry is lower) and when they incur lower costs related to monitoring and enforceability of contracts (for instance,

<sup>135</sup> Trade credit is provided by suppliers to their customers based on deferred payment agreements, whereby the purchased goods or services are paid at a later date. Trade credit can be identified both on the owners' funds and liabilities side of companies' balance sheets, in the form of commercial debt, when the firm buys goods or services from its trading partners, and on the asset side, in the form of commercial claim, if the firm extends trade credit to customers.

<sup>136</sup> Hardy, B., Saffie, F. E., and Simonovska, I., "Economic stabilizers in emerging markets: The case for trade credit", presented at CESifo Area Conference on Macro, Money, and International Finance, 2022.

<sup>137</sup> Ng *et al.* calculate the financing cost of a trade credit as an opportunity cost, considering that the firm may opt for either payment ahead of the specified date, in which case it could be offered a discount, or the payment of the entire amount on the specified date. Thus, a 2 percent discount for payment within 10 days and a net period ending on day 30 defines an implicit interest rate of around 44 percent per annum. Ng, C. K., Smith, J. K., and Smith, R. L., "Evidence on the determinants of credit terms used in interfirm trade", *The Journal of Finance*, 54(3), 1999, pp. 1109-1129.

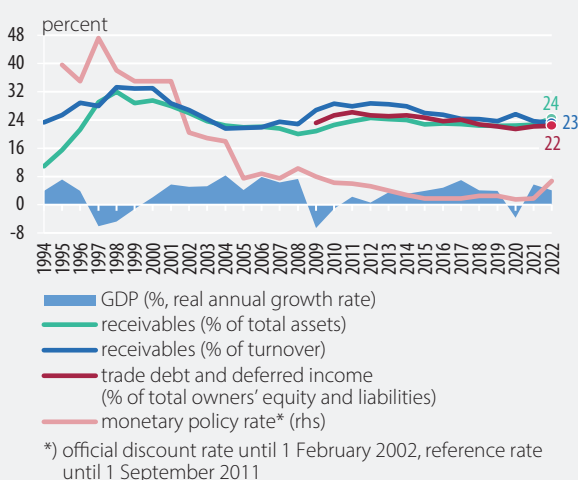
<sup>138</sup> Cuñat, V., and Garcia-Appendini, E. "Trade credit and its role in entrepreneurial finance", in Cumming, D. (Ed.), *Oxford Handbook of Entrepreneurial Finance*, Oxford University Press, New York, 2021, pp. 526-557.

<sup>139</sup> Calomiris, C. W., Himmelberg, C. P., and Wachtel, P., "Commercial paper, corporate finance, and the business cycle: a microeconomic perspective", in *Carnegie-Rochester Conference Series on Public Policy*, Vol. 42, 1995, pp. 203-250.

<sup>140</sup> European Central Bank, "The use of trade credit by euro area non-financial corporations" (Box 2), *Monthly Bulletin*, April 2011.

through penalty of terminating the commercial relationship)<sup>141</sup>. Third, firms with better access to the credit market may provide trade credit to firms with limited access, thus leading to a redistribution of bank loans in the economy, which may be more visible in times of economic downturn<sup>142</sup>.

**Chart 1.** Trade credit of non-financial corporations in Romania<sup>143</sup>



Source: MF, NBR

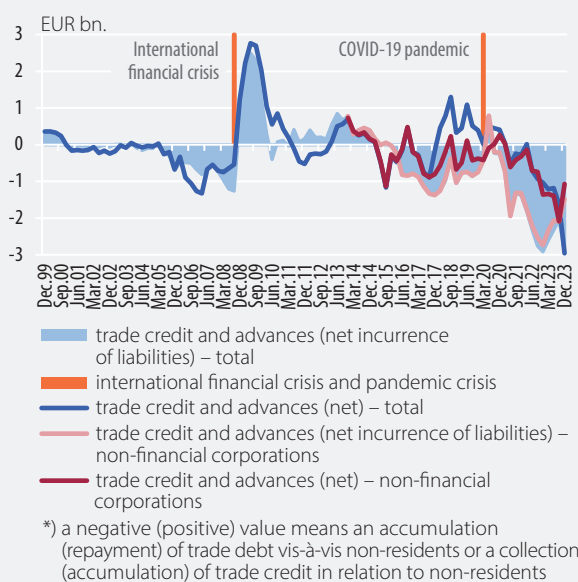
### The role of trade credit in the financing of firms in Romania

Trade credit is a major component of financing for non-financial corporations in Romania, yet its use implies substantial costs and vulnerabilities for firms, amid a weak payment discipline in the economy. Furthering the efforts to improve governance and capitalisation, as well as those to enhance entrepreneurs' financial education can mitigate these vulnerabilities and thus can help diminish risks to financial stability from the non-financial corporations sector.

Trade credit accounts for about a fourth of the owners' funds and liabilities of non-financial corporations in Romania and more than a third of their debt. Recourse to trade credit has varied significantly over the past 30 years, the largest share (33 percent of turnover and 32 percent of total owners' funds and liabilities) being recorded at the end of the 90s, due to the difficulties faced by companies amid the economic recession and the very high financing cost of the time (Chart 1).

The largest part of trade credit arises from trade among residents, as trade credit from non-residents accounts for a low share in total (below 15 percent of trade debt, while the trade credit flow is less than 3 percent of the volume of imports of goods). Besides, this type of financing is volatile in times of financial crises or of high uncertainty (Chart 2). In the case of the 2008 international financial crisis, the hardships encountered by firms, such as the swift rise in insolvencies and in the default rate, made non-resident companies cut down substantially on trade credit to firms in Romania or even deny them altogether.

**Chart 2.** Trade credit between residents and non-residents (annualised flow\* according to balance of payments financial account data)



Source: NBR

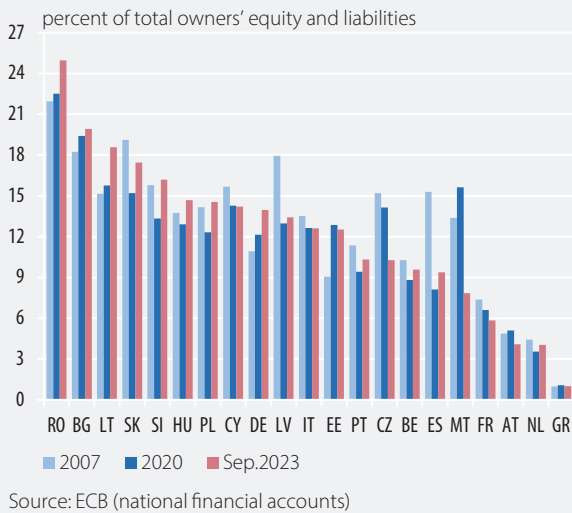
<sup>141</sup> Cuñat, V., "Trade credit: suppliers as debt collectors and insurance providers", *The Review of Financial Studies*, 20(2), 2007, pp. 491-527.

<sup>142</sup> Petersen, M. A., and Rajan, R. G., "Trade credit: theories and evidence", *The Review of Financial Studies*, Vol. 10, Issue 3, 1997, pp. 661-692.

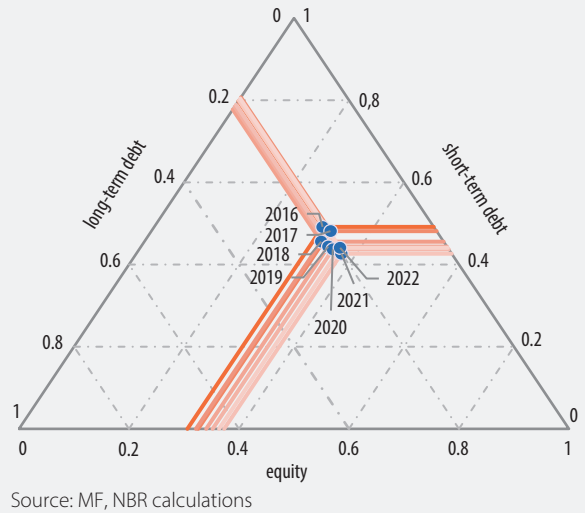
<sup>143</sup> Deferred income comprises income for the periods ahead, yet collected in advance during the current period, such as: rental fees, subscriptions, insurance, interest on financial leasing contracts, etc., but also subsidies for investment and deferred income related to assets received by transfer from customers.

Recourse to trade credit has re-embarked on an uptrend in recent years, amid the interest rate hiking cycle as of 2021 Q4. These developments, while similar to those observed at European level, are of a larger magnitude compared with the EU average (2.5 percentage points in the period from 2020 to September 2023, the third most visible increase after Slovenia and Lithuania), with Romania already ranking topmost in the EU as regards the use of trade credit (Chart 3).

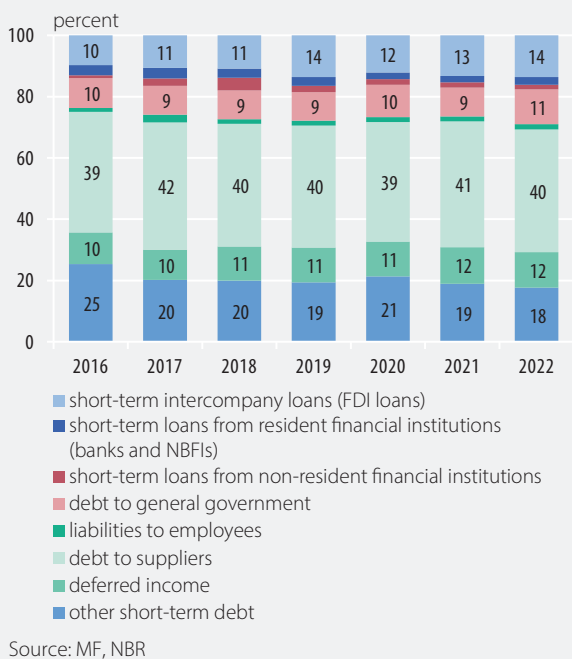
**Chart 3.** Trade debt in the EU – non-financial corporations



**Chart 4.** Breakdown of the financing of non-financial corporations



**Chart 5.** Composition of short-term debt

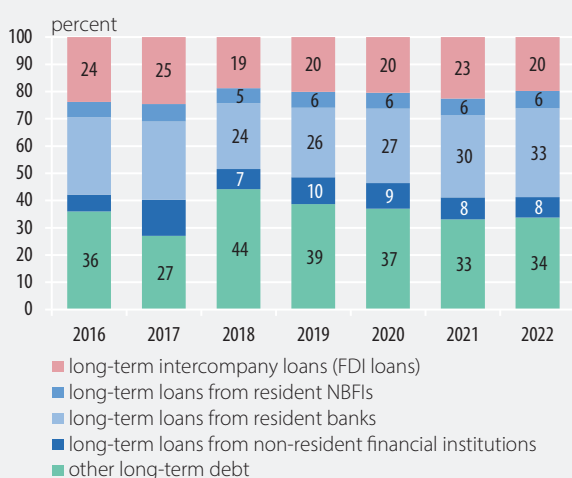


Trade credit is an instrument for managing cash flows because it helps better correlate the periods of collecting invoices from customers with those of paying suppliers. When used for other purposes, it can expose the firm to major vulnerabilities. For instance, postponing payment to suppliers for developing the firm’s activity or carrying out other investment can pose severe liquidity problems to the company, as investment takes longer to generate a cash flow ensuring the necessary resources for invoice payment.

The large share of trade credit in the balance sheets of firms in Romania, in the absence of correct usage practices, indicates the sector’s major vulnerability to a contagion shock, as firms can pass financial problems through to their partners via late payments or default on trade credit.

The firms’ response capacity to such a shock is limited by the prevailing recourse to short-term loans (creditors may decide to withdraw financing if the firm faces financial distress, Chart 5) and by the subdued use of credit from resident financial institutions. Specifically, companies in Romania are financed in a significant share through short-term debt

**Chart 6.** Composition of long-term debt



Source: MF, NBR

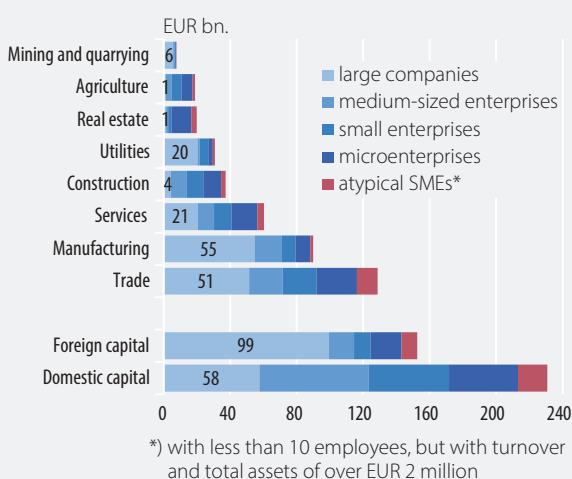
(43 percent, approximately double the share of long-term debt, 19 percent), with trade credit holding the largest weight (Chart 5). This vulnerability is more pronounced in the case of SMEs (45 percent versus 21 percent), especially microenterprises (52 percent against 25 percent). At a sectoral level, firms in construction and trade account for the largest shares of short-term debt (51 percent and 53 percent respectively). Short-term loans from specialised financial institutions are at a modest level compared to that of trade credit (the latter stood 16 times higher than short-term credit from banks and NBFIs). The share of specialised financing in total long-term debt is also low (below 40 percent in 2022, when taking into account only local banking institutions and NBFIs, Chart 6).

The recent years' improvement notwithstanding (Chart 5), the still high reliance on short-term financing dents the development capacity of firms and hence of the sector. In 2022, only one fourth of non-financial corporations carried out investment, yet half of the additional financing used was in the form of short-term debt (more than one third of which came from increases in trade credit), whereas internal sources (rise in equity) and long-term finance contributed around one fourth each (28 percent and 22 percent respectively). Unlike these firms, those that reported no investment activity or even disinvestment reduced their long-term financing and increased the short-term component, to which added a much smaller rise in capital.

The investment made by firms that accessed long-term finance was more important relative to the company size (as a share in total assets) compared with those that used internal sources or short-term external finance (16 percent in total assets versus 7 percent of total assets, median values), yet long-term bank credit plays a smaller

role than other long-term financing. Thus, more firms carried out investment by taking long-term loans other than bank ones (17 percent against 11 percent of total firms that invested in 2022), while the investment they made held a larger share (19 percent in total assets versus 12.3 percent of total assets).

**Chart 7.** Trade debt by firms' characteristics



\*) with less than 10 employees, but with turnover and total assets of over EUR 2 million

Source: MF, NBR

### Companies that use trade credit

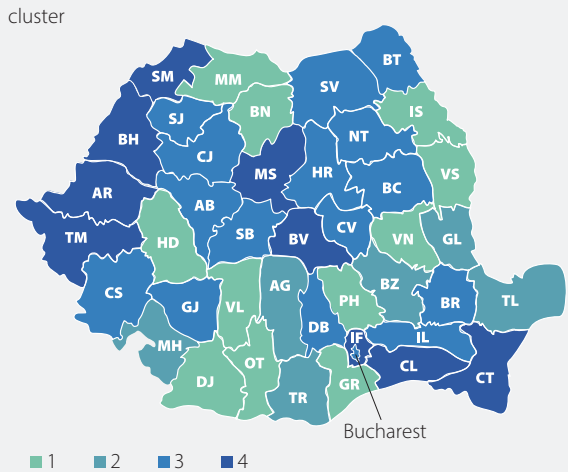
Larger companies enjoy much higher bargaining power in commercial relations and more financing options than other categories of firms and they can obtain a larger volume of trade debt (Chart 7).

Across the economy, large companies account for 40.6 percent of trade debt. They make a hefty contribution to the activity of sectors such as

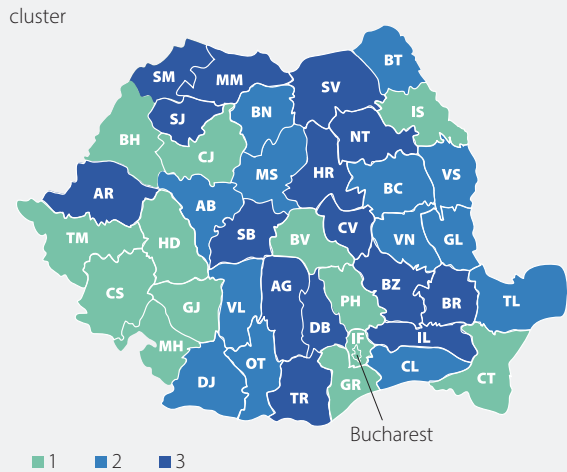
manufacturing, trade and services (generating 62 percent, 35 percent and 34 percent respectively of gross value added), which reflects in larger volumes of trade debt of these sectors. Moreover, in the case of firms with foreign capital, large companies generate two thirds of gross value added and account for 65 percent of trade debt of these firms.

Another important category of firms in terms of using trade debt is that of microenterprises (20.7 percent of total). In their case, the financial hardships and the deficiencies in managing the cash conversion cycle entail a higher risk of default. Specifically, microenterprises report a supplier payment period of approximately three months, almost twice that of large companies (82 days against 45 days), while the receivables collection period is more than two months longer than the supplier payment period (150 days). This gap has negative effects on the liquidity of microenterprises. The current ratio for this segment of firms is the lowest economy-wide (104 percent versus an average of 119 percent for non-financial corporations) and the level of indebtedness is substantially higher than for the rest of companies (the debt-to-equity ratio stands at 3.37, compared to an average of 1.67 for the non-financial corporations sector). The NPL ratio for trade debt in the case of micro-firms is significant (14.2 percent), the total volume of arrears generated by these entities making up one fourth of total trade credit overdue of the non-financial corporations sector.

**Chart 8.** Use of trade debt<sup>144</sup>



**Chart 9.** Use of bank credit<sup>145</sup>



The geographic breakdown of companies by the degree of using trade debt points to a keener appetite in counties to the west and centre of the country (Chart 8).

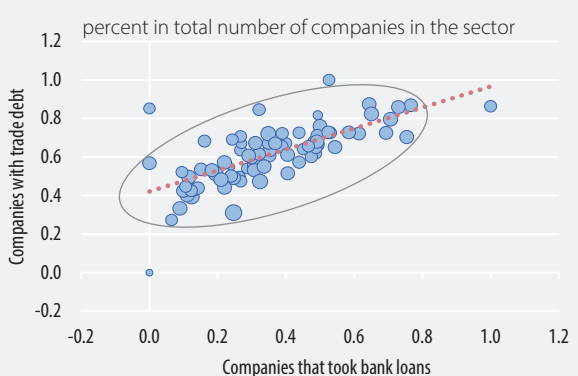
<sup>144</sup> This map is based on a k-means multivariate clustering analysis using Euclidean distances. The indicators used were the shares of firms with trade debt in total firms across the county and the ratio of trade debt to total assets for each county (values normalised on a scale from 0 to 1). The silhouette score indicated an optimal number of four clusters. The resulting clusters were put in an ascending order, from 1 to 4, based on the level of the centre associated with the shares of firms with trade debt in total county-wide firms for each cluster.

<sup>145</sup> This map has been designed similarly to that on trade debt. The indicators used in this case were the shares of firms with bank loans in total firms across the county and the ratio of bank loans to total assets for each county (values normalised on a scale from 0 to 1). The silhouette score indicated an optimal number of three clusters. The resulting clusters were put in an ascending order, from 1 to 3, based on the level of the centre associated with the shares of firms with bank loans in total county-wide firms for each cluster.

Bucharest belongs to the group with large shares of companies using this type of finance. Unlike the preference for trade debt, recourse to bank credit is more visible in lower-income counties (Chart 9).

At a sectoral level, both the practices in business relations and the supply chain specifics, such as the degree of customer and supplier concentration, determine the level of using trade debt. Thus, the sectors with a larger recourse to financing via trade debt are trade, construction and manufacturing, with trade debt accounting for 44 percent, 38 percent and 37 percent respectively of the owners' funds and liabilities.

**Chart 10.** Correlation between the number of firms using trade debt and that of companies with bank loans by sector

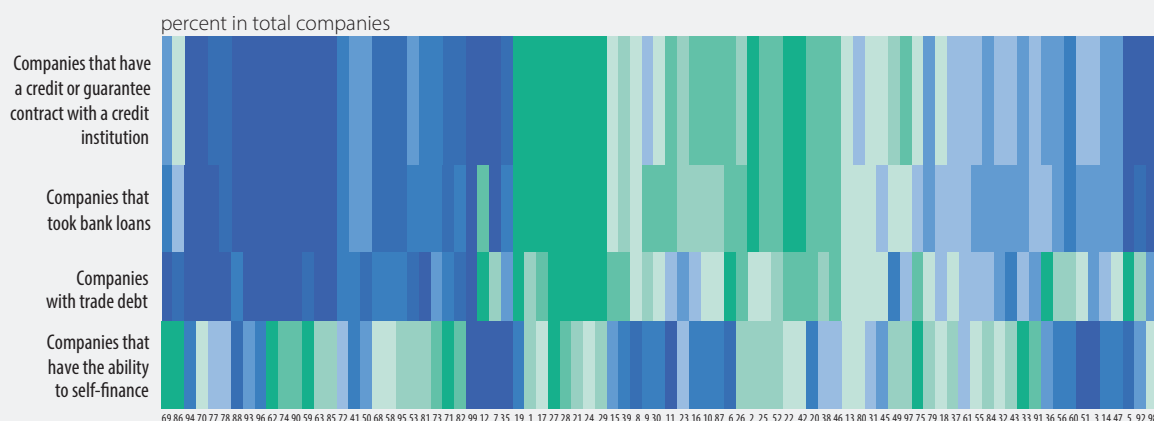


Note: The size of the circles is given by the share in total number of companies in a business sector that have the ability to self-finance.

Source: MF, NBR

Looking at manufacturing, the breakdown of firms by technological intensity shows a larger use of trade debt by medium high-tech companies (33 percent of the volume of trade debt for manufacturing) and by medium low-tech firms (32 percent). High-tech companies use trade debt to the least extent, i.e. 5 percent of the volume for manufacturing. Similarly, services by knowledge intensity show that the degree of using trade debt is inversely proportional to the degree of complexity of services provided. Specifically, firms rendering less knowledge intensive services make up 41.1 percent of total trade debt economy-wide, whereas companies providing knowledge intensive services account for 8.7 percent of total trade debt.

**Chart 11.** Use of bank loans and trade credit at sectoral level and self-financing capacity



Note: Values ranging from dark blue (associated with the lowest readings) to dark green (associated with the highest readings). Codes on the Ox axis represent the two-digit divisions of NACE rev. 2.

Source: MF, NBR, NBR calculations

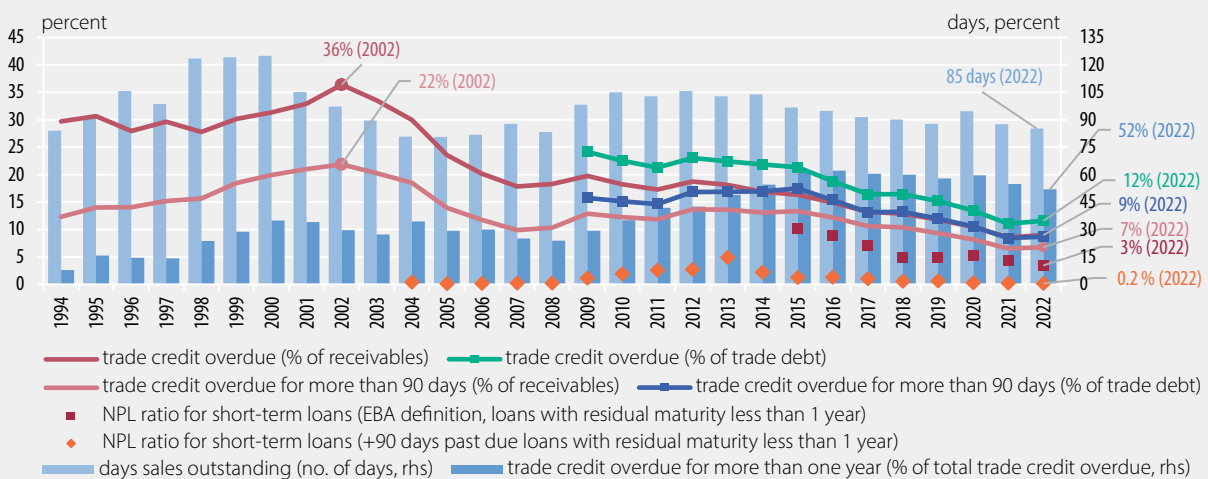
In addition, the sectoral analysis shows a strong positive correlation between the use of trade debt and bank loans (Chart 10 and Chart 11), although the volume of the latter is substantially lower than that of the former. This points to a larger use of bank credit in sectors with a more widespread practice of using trade debt. In fact,

the decision to grant a trade credit can be determined by customers’ creditworthiness, verifiable *inter alia* by the fact that they took a bank loan. Moreover, a firm with trade debt may decide to resort to bank credit in order to address working capital financing problems. Some 15.6 percent of total companies with trade debt have also taken bank loans, with these companies jointly accounting for half the volume of trade credit.

### Trade debt and payment discipline

The large degree of using trade credit is in contrast with the lower degree of collection thereof. At end-2022, the non-performing ratio for trade credit (calculated as a share of trade credit overdue in total trade debt) was 12 percent (four times higher than that on short-term bank loans), while the ratio of trade credit overdue for more than 90 days stood at 9 percent versus merely 0.2 percent in the case of similar bank loans of up to one year (Chart 12). Moreover, trade credit overdue for more than one year accounts for more than half of total.

Chart 12. Non-performing ratio of trade credit compared to bank loans<sup>146</sup>



Source: MF, NBR

By size, small companies and microenterprises are the categories with the highest risk of default, recording non-performing ratios of 15.4 percent and 14.2 percent respectively. Atypical SMEs and large companies paint a more favourable picture, with an approximately 9 percent share of overdue payments to suppliers in trade debt.

By sector, payment discipline is looser in the case of utilities firms, with a non-performing ratio of 25 percent, ahead of services and agriculture (with shares of 13 percent). Trade, although reporting the largest use of trade debt, stands at the opposite end, with an 8 percent share of late payments, the second lowest value after real estate (7 percent). In manufacturing, medium-tech companies have a non-performing ratio of 13.3 percent, more than double the figure for high-tech firms (6 percent).

<sup>146</sup> Information on trade credit is available starting 2009; the DSO (days sales outstanding) uses information on all company receivables.

In the services sector, the risk of default increases with the degree of complexity of services provided. Specifically, firms with less knowledge intensive services have a non-performing ratio of 9 percent, i.e. 4 percentage points below that of knowledge intensive companies.

The non-performing ratio for trade debt is around three times higher in the case of state-owned companies (39 percent), Chart 12. Furthermore, state-owned firms take, on average, more time to pay their invoices compared with private businesses. The supplier payment period for public entities exceeds three months (93 days), whereas for local private companies it is less than two months (57 days). This evolution is also observed at European level. According to the analysis conducted by the EU Payment Observatory<sup>147</sup>, the average payment period for transactions carried out by state-owned companies is lengthier than in the case of private businesses, the differences varying significantly by country. Romania stands in the upper half of the distribution, namely in the group of countries with the largest differences in payment periods between the two types of firms.

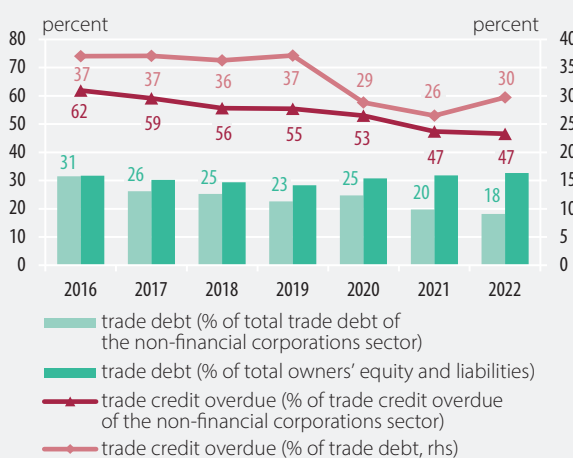
Another important aspect is the on-time payment of invoices. The receivables collection period (the days sales outstanding) was 85 days in 2022, significantly higher than the average estimated at European level (55 days, EU Payment Observatory) and the maximum period established by law (60 days pursuant to Article 5 of Law No. 72/2013<sup>148</sup>). Moreover, it takes a long time to pay invoices to suppliers (71 days when considering the cost of goods and services or 55 days when considering the turnover). Nevertheless, the payment periods have stuck to the improvement trend noticed in the non-financial corporations sector after the international financial crisis, a trend temporarily halted during the COVID-19 pandemic.

The late payment of invoices can trigger a chain reaction, as firms facing repeated non-compliance with payment deadlines on client invoices have difficulties paying invoices issued by their own suppliers. In fact, a significantly larger share of companies in Romania than the European average have flagged this to be the main factor behind the delay in invoice payment (half of the companies in Romania participating in the SAFE survey conducted by the ECB and the European Commission compared to only one third of respondents at European level). Furthermore, merely one fourth of large companies and of medium-sized firms pay their invoices on time, while only 16 percent of small firms and 13 percent of microenterprises do so. The values are significantly lower than in Hungary and Poland (where more than half of companies, irrespective of size, reported on-time payments), but relatively similar to those in Bulgaria (according to the EU Payment Observatory).

SMEs are most affected by the problems arising from the late payment of invoices, with a receivables collection period of 100 days on average and a 74-day average period of paying suppliers. Taking a closer look, microenterprises report the longest

<sup>147</sup> European Commission, European Innovation Council and SMEs Executive Agency (EISMEA), EU Payment Observatory, *Annual Report 2023*.

<sup>148</sup> Law No. 72/2013 on measures to combat late payment of obligations resulting from contracts concluded between professionals and between the latter and the contracting authorities.

**Chart 13.** Trade debt of undercapitalised companies<sup>149</sup> and share of their overdue trade credit

Source: MF, NBR

periods for collecting receivables and for paying supplier invoices (150 days and 85 days respectively). By sector, firms in agriculture, utilities and services face the biggest challenges in managing the cash conversion cycle (with a receivables collection period of more than 100 days), while the specific contractual terms in the construction and real estate sectors entail longer periods of recovering and paying trade debt.

The payment discipline-related problems generated by a notable segment of non-financial corporations, i.e. companies with severe capital shortfalls (pursuant to Article 153<sup>24</sup> of Law No. 31/1990 as subsequently amended) affect trade credit as well. These firms account for approximately one fifth of trade debt of the non-financial corporations sector, while

generating about half of overdue payments to suppliers (Chart 13). Moreover, these companies finance approximately one third of their assets via trade credit, yet record past due payments to suppliers for 30 percent of it. Recent years' developments point to a reduction in the negative impact of this segment of firms on the economy through the trade credit channel. Both the share of trade debt held by them in total and that of trade credit overdue shrank by more than 10 percentage points.

Raising awareness among firms about the risks and costs involved in granting trade credit to high-risk clients can help restore payment discipline in the economy, with major benefits to the resilience of the non-financial corporations sector.

Factoring is also an instrument that firms can use to address problems related to cashing invoices from customers. This financial service consists in the purchase and payment of a firm's receivables before maturity under certain conditions. The costs of this service are made up of a commission (percent charged against the face value of each invoice amount), the interest charged monthly over the period of financing, and the default risk premium (if the factoring includes this facility as well, in which case it is called non-recourse factoring). Factoring can help firms manage their cash conversion cycle by increasing short-term payment and liquidity predictability (if it is non-recourse factoring), as well as assess and manage risks vis-à-vis customers (if it also includes customer risk analysis/estimating the applicable exposure limits). The latter benefit is particularly useful for small companies or for entrepreneurs with limited knowledge on risk management (low degree of financial literacy). In Romania, the use of this service is below the European average (2.7 percent of GDP versus 12.6 percent of GDP in the EU), being comparable with the degree of use in Latvia (2.4 percent of GDP) and Slovakia (2.7 percent of GDP), yet well below the values recorded in Hungary (7.1 percent of GDP), Bulgaria (7.7 percent of GDP) and Poland (15 percent of GDP), according to

<sup>149</sup> The undercapitalised companies are the entities with equity below the level set forth in Law No. 31/1990 as subsequently amended (the company's net assets are lower than half the value of the subscribed share capital, Article 153<sup>24</sup>).

the 2022 data released by the EU Federation for the Factoring & Commercial Finance Industry<sup>150</sup>.

### **Measures to mitigate the risks and vulnerabilities stemming from trade credit**

Late payments in relation to commercial agreements and the implications they can have for the economy and the financial system are a major concern at European level. The analyses of the regulatory framework in place across the EU (Directive 2011/7/EU) have identified a series of weaknesses<sup>151</sup>, such as unclear provisions, lack of adequate mechanisms to reward or stimulate on-time invoice payment, scarcity of data on payment discipline in the economy.

In September 2023, the European Commission put forward a proposal to amend the regulatory framework in place. Specifically, the proposal included, *inter alia*, a clearer definition of the authorities' tasks as regards the implementation of legal provisions. Also in 2023, the Commission established the EU Payment Observatory for monitoring trends and developments on payment performance and behaviour in commercial transactions in the EU, in order to identify problems and possible solutions to reduce payment delays, as well as to protect companies affected by the repeated late payment of invoices. This instrument also includes a repository of the measures taken by public authorities and the initiatives of the private sector in EEA countries to combat late payments<sup>152</sup>. According to data collected by the EU Payment Observatory, most measures are preventive (64 percent) and cover all categories of firms (61 percent), with 23 percent of them addressed to public authorities.

Moreover, the EU Payment Observatory conducted an analysis on the enforcement measures of the regulatory framework regarding payment discipline and identified several measures and practices that could improve the mechanisms in place<sup>153</sup>. The most important ones consist in setting up an authority in charge of monitoring the payment discipline of companies and their compliance with legal provisions, as well as implementing mediation solutions between trading partners, especially for small-sized companies.

In Romania, the National Committee on Macprudential Oversight issued recommendations<sup>154</sup> with a view to identifying the measures that can help improve the financial soundness of the non-financial corporations sector (NCMO Recommendation No. R/2/2018), as well as for the sustainable increase in financial intermediation (NCMO Recommendation No. R/3/2022). The NCMO working group set up to analyse issues regarding non-financial corporations' financial soundness (NCMO Recommendation No. R/6/2017) identified several measures for: (i) reducing the number of firms with owners' equity below the regulatory threshold (set forth in

<sup>150</sup> <https://euf.eu.com/data-statistics/annual-factoring-data.html>

<sup>151</sup> [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13665-Late-payments-update-of-EU-rules\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13665-Late-payments-update-of-EU-rules_en)

<sup>152</sup> [https://single-market-economy.ec.europa.eu/smes/sme-strategy/late-payment-directive/eu-payment-observatory/observatory-documentation\\_en](https://single-market-economy.ec.europa.eu/smes/sme-strategy/late-payment-directive/eu-payment-observatory/observatory-documentation_en)

<sup>153</sup> [https://single-market-economy.ec.europa.eu/document/download/4d5faf6a-0b52-447c-8ba8-a29762c830e4\\_en?filename=Thematic%20report%20on%20enforcement%20measures\\_Final.pdf](https://single-market-economy.ec.europa.eu/document/download/4d5faf6a-0b52-447c-8ba8-a29762c830e4_en?filename=Thematic%20report%20on%20enforcement%20measures_Final.pdf)

<sup>154</sup> <https://www.cnsmro.ro/en/lista-recomandari/>

Article 153<sup>24</sup> of Law No. 31/1990 on commercial companies), (ii) increasing compliance in the area of fulfilling payment obligations, and (iii) enhancing the insolvency framework for legal entities.

As regards the degree of financial intermediation, the NCMO recommendation (NCMO Recommendation No. R/3/2022) sets forth several measures to enhance entrepreneurs' financial education, some of which are addressed to the National Bank of Romania<sup>155</sup>. The measures include, *inter alia*, the recommendation to start, alongside academia and the financial system, programmes to increase firms' awareness that funding via trade credits and loans from shareholders might have, in the medium term, higher total costs than those of borrowing from financial institutions and those related to capital market-based funding. An action plan was prepared to this end, the first stage consisting in assessing the initial level of entrepreneurs' financial education and defining the indicators for the regular progress reviews (e.g., once every two years). The first round of assessing the level of entrepreneurs' financial literacy, based on the OECD methodology, was included in the June 2023 *Survey on the access to finance of non-financial corporations in Romania*<sup>156</sup>.

Another initiative aimed at improving the level of firms' financial education, coordinated by the NBR, is the "Antreprenoriat de TOP" (TOP Entrepreneurship) project<sup>157</sup>, launched in October 2023. Project-specific objectives include developing entrepreneurs' financial knowledge, improving financial behaviour and increasing the financial inclusion of companies, *inter alia* by improving the digitalisation of financial and business activities. The project will include organising various events in cooperation with the academia, the banking sector and representatives of the real economy, as well as designing applications and/or platforms to help raise the degree of digital literacy of local companies.

<sup>155</sup> <https://www.cnsmro.ro/res/ups/Analysis-of-NCMO-Working-Group-on-sustainable-increase-in-financial-intermediation.pdf>

<sup>156</sup> <https://www.bnr.ro/DocumentInformation.aspx?idDocument=43493&idInfoClass=16645>

<sup>157</sup> <https://www.bnr.ro/Antreprenoriat-de-TOP27214.aspx> (Romanian only)

## Abbreviations

---

ANCP	National Agency for Cadastre and Land Registration
ANEVAR	National Association of Romanian Authorised Valuers
BIS	Bank for International Settlements
CB	Credit Bureau
CCR	Central Credit Register
CEE	Central and Eastern Europe
CRD IV	Capital Requirements Directive IV
CRR	Capital Requirements Regulation
DSTI	debt service-to-income
EBA	European Banking Authority
EBIT	earnings before interest and taxes
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
ESA	European System of Accounts
ESRB	European Systemic Risk Board
EU	European Union
Eurostat	Statistical Office of the European Union
FDI	foreign direct investment
FSA	Financial Supervisory Authority
GDP	gross domestic product
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LCR	liquidity coverage ratio
LTV	loan-to-value
MF	Ministry of Finance
NBFIs	non-bank financial institutions
NBR	National Bank of Romania
NCMO	National Committee for Macroprudential Oversight
NIS	National Institute of Statistics
NPL	non-performing loans
NSFR	net stable funding ratio
NTRO	National Trade Register Office
OECD	Organisation for Economic Co-operation and Development
O-SII	Other Systemically Important Institutions
ReGIS	Romanian electronic Gross Interbank Settlement
ROBOR	Romanian Bid Offered Interest Rate
ROE	return on equity
SaFIR	Government securities depository and settlement system
SENT	Electronic Net Settlement System
SMEs	small- and medium-sized enterprises
VAT	value added tax

## Tables

---

Table 1	Risk indicators for the banking sector	10
Table 5.1	CCyB rates applied by EEA countries in May 2024 and CCyB rates announced for 2025	84

## Charts

---

Figure 1	Map of risks to financial stability in Romania	5
Figure 2	Map of structural vulnerabilities to financial stability in Romania	11
Figure 3	Trade credit cost-benefit balance	14
Chart 1.1	Economic growth worldwide, in the EU and in European emerging countries	16
Chart 1.2	Variance of economic growth forecasts for the euro area and the US	16
Chart 1.3	Sovereign bond and stock market volatility indices in the US	18
Chart 1.4	Consolidated general government gross debt in the EU by main contributing Member State	19
Chart 1.5	Stock market indices for the banking sectors	19
Chart 1.6	Annual real GDP dynamics and the contribution of demand components	21
Chart 1.7	Real economic growth rate, international comparisons	21
Chart 1.8	Estimated effect on GDP growth of the investment stimulus via the Next Generation EU programme after 4 years	22
Chart 1.9	Unemployment rate, total and by gender	23
Chart 1.10	Regional disparities in terms of employment, wage earnings and available labour	23
Chart 1.11	Government debt and interest rates in the EU, 2023	24
Chart 1.12	Budget deficit/surplus in the EU, 2023	24
Chart 1.13	Holdings of government securities by residence	25
Chart 1.14	Residents' holdings of government securities by institutional sector	25
Chart 1.15	Current account deficit in EU Member States	26
Chart 1.16	Debt cycle	27
Chart 1.17	Corporate and household debt	27

Chart 1.18	Interest rates on loans	28
Chart 1.19	New bank loans to the real sector	28
Chart 2.1	Overall financial health measure of the non-financial corporations sector	32
Chart 2.2	Net profit margin by business sector	32
Chart 2.3	Distribution of firms by level of indebtedness	33
Chart 2.4	Share of the number of vulnerable firms by business sector	33
Chart 2.5	Firms' main liquidity indicators	34
Chart 2.6	Structure of operating expenses	34
Chart 2.7	Annual GVA dynamics and share in GVA of the IT sector	35
Chart 2.8	Turnover value indices for the main sectors in the economy	35
<b>Box 1</b>		
Chart A	Estimated average probability of success, depending on the fulfillment of the characteristics identified as determinants of success and on the size of the firm	36
Chart 2.9	Probability of default of non-financial corporations by indebtedness level	38
Chart 2.10	Annual default rate and one-year forecast, the non-financial corporations sector	39
Chart 2.11	Overdue payments in the economy by company size	39
Chart 2.12	Insolvency proceedings	40
<b>Box 2</b>		
Chart A	Bank loan flow and stock by currency	40
Chart 2.13	Households' net wealth and gross saving rate	42
Chart 2.14	Composition of households' financial assets, regional comparisons, 2023 Q4	43
Chart 2.15	Households' income, expenditure and consumption	43
Chart 2.16	Composition of household deposits and interest rate on new deposits	44
Chart 2.17	Composition of households' debt and interest rate on new loans	44
Chart 2.18	New loans and credit demand	45
Chart 2.19	Banks' non-performing loan ratio by type of loan and annual dynamics of the number of new non-performing loans	45
Chart 2.20	Composition of housing loans by the initial rate fixation period	46

Chart 2.21	Credit at risk by year of origination and type of loan	46
Chart 2.22	Distribution of the level of indebtedness at origination by type of loan (March 2024)	46
Chart 2.23	Share of debtors by level of indebtedness at origination, depending on the type of loan	47
Chart 2.24	Forecasted one-year default rate for housing loans	47
Chart 2.25	Forecasted one-year default rate for consumer loans	47
<b>Box 3</b>		
Chart A	Annual dynamics: compliant applications, case files and amicable settlements	49
Chart B	Closed cases: resolutions versus reports	49
Chart C	Value of negotiated benefits	49
Chart 2.26	Number of building permits and real estate transactions by county	50
Chart 2.27	Annual rate of change of house prices in the EU, 2023 Q4	51
Chart 2.28	Adjusted price-to-income ratio by county (2023 Q4)	51
Chart 2.29	Gross value added in construction and real estate, 2023 Q4	52
Chart 2.30	Office and industrial vacancy rates	53
Chart 2.31	Prime yields in the capital cities of Central and Eastern European countries, 2024 Q1	53
Chart 2.32	Banking sector's exposure to the residential real estate market	55
Chart 2.33	Housing affordability index	55
Chart 2.34	Distribution of housing loans by the LTV ratio, depending on the type of loan (March 2024)	56
Chart 2.35	Loan service-to-income at origination (LSTI-O) and the annual probability of default, March 2024	56
Chart 2.36	Banking sector's exposure to the commercial real estate market	57
Chart 2.37	Distribution of loans by the LTV ratio, depending on their definition (March 2024)	57
Chart 3.1	Distribution of assets in the Romanian financial system, 2023 Q4	61
Chart 3.2	Total assets of the banking sector as a share of GDP, regional comparisons	61
Chart 3.3	Diagram of claims of the banking sector and NBFIs on institutional sectors, 2023 Q4	61
Chart 3.4	Banks' liabilities	63

Chart 3.5	Structural developments in deposits taken from the private sector	63
<b>Box4</b>		
Chart A	Distribution of implemented technologies	65
Chart B	Share of online channel users in total bank customers	66
Chart 3.6	Comparison between LCR and NSFR indicators by banks' systemic importance (March 2024)	67
Chart 3.7	Total capital ratio and the overall capital requirement ratio	68
Chart 3.8	Breakdown of market share and number of banks by the surplus of total capital ratio above OCR	68
Chart 3.9	Non-performing loan ratio and annual change in the stock of loans and advances	69
Chart 3.10	Bank distribution by the non-performing loan ratio	69
Chart 3.11	Breakdown of loans and advances by the IFRS 9 impairment stage and the corresponding coverage ratio	70
Chart 3.12	Breakdown of interest-bearing assets and liabilities by residual maturity and type of interest	71
Chart 3.13	Impact of interest rate shock scenarios on interest rate sensitive assets and liabilities (A) and net interest income (B) relative to Tier 1 capital	72
Chart 3.14	Profitability indicators by bank size	73
Chart 3.15	Return on equity (ROE) – banking sector vs other sectors	74
Chart 3.16	Drivers of the annual growth rates of return on equity (ROE), profit and net interest income – December 2023	74
Chart 3.17	Stock of loans granted by NBFIs to non-financial corporations and households	76
Chart 3.18	New loans granted by NBFIs to non-financial corporations and households	76
Chart 3.19	Credit terms and conditions for new loans in foreign currency granted to non-financial corporations by banks and NBFIs (weighted average)	77
Chart 3.20	NBFIs' non-performing loan ratio	77
Chart 3.21	Share of assets under various stages of impairment in total loans and advances, December 2023	77
Chart 5.1	MREL final target	87
Chart 5.2	Estimated shortfall against the MREL final target including the combined buffer requirement	87

**Special feature**

Chart 1	Trade credit of non-financial corporations in Romania	91
Chart 2	Trade credit between residents and non-residents (annualised flow according to balance of payments financial account data)	91
Chart 3	Trade debt in the EU – non-financial corporations	92
Chart 4	Breakdown of the financing of non-financial corporations	92
Chart 5	Composition of short-term debt	92
Chart 6	Composition of long-term debt	93
Chart 7	Trade debt by firms' characteristics	93
Chart 8	Use of trade debt	94
Chart 9	Use of bank credit	94
Chart 10	Correlation between the number of firms using trade debt and that of companies with bank loans by sector	95
Chart 11	Use of bank loans and trade credit at sectoral level and self-financing capacity	95
Chart 12	Non-performing ratio of trade credit compared to bank loans	96
Chart 13	Trade debt of undercapitalised companies and share of their overdue trade credit	98

