# FINANCIAL STABILITY REPORT

# 2024

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*Financial stability: a condition of the financial system enabling it to withstand shocks, thereby mitigating the likelihood of disruptions in the provision of financial services in the financial intermediation process.*

*Systemic risk: the risk of disruption in the financial system with the potential to have a significant negative impact on the functioning of the financial system as a whole along with the real economy.*

*The objective of the Financial Stability Report is to raise public awareness regarding the development of the Latvian financial system and to draw attention to systemic risks.*

*The Financial Stability Report analyses and assesses the functioning and risks of the Latvian financial system based on data up to the end of March 2023 or at the time of compiling the current report.*

*The calculation of the ROE, the total capital ratio, Tier 1 capital ratio, CET1 ratio, liquidity, and credit risk stress test results excludes data on branches of foreign credit institutions registered in the Republic of Latvia.*

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# Contents

Abbreviations 3

Summary 4

**1. Macrofinancial environment and borrowers' solvency 7**

External macrofinancial environment 7

Domestic macrofinancial environment 8

Real estate market development 10

Box 1.1. Mortgage co-financed dwelling purchasing activity during the pandemic, cost and interest rate shock periods 11

Box 1.2. Comparison of housing market activity and lending for house purchase trends in the Baltic countries 13

Financial vulnerability of borrowers 17

**2. Developments and risks in the credit institution sector 21**

Lending development 21

Credit risk 24

Funding and liquidity risks 26

Box 2.1. Dynamics of NFC deposits with credit institutions by sector 28

Box 2.2. Impact of interest rate changes on the interest rates offered by credit institutions 29

Profitability 31

Capitalisation 33

**3. Stress tests of credit institutions 35**

Credit risk and market risk shock absorption capacity stress tests 35

Box 3.1. GaR (growth-at-risk) model for developing credit institutions' stress test scenarios 40

Liquidity stress tests of credit institutions 41

**4. Macroprudential policy 43**

Box 4.1. The growing international support for a positive neutral CCyB approach 44

**5. Development and risks of the non-bank financial sector 48**

**Appendix 1. Preliminary assessment of the exposure of the Latvian financial system to biodiversity and other nature risks 54**

**Appendix 2. Results of the credit institution survey on risks 57**

**Appendix 3. Heatmap of early warning indicators 58**

**Appendix 4. Performance indicators of credit institutions 59**

## Abbreviations

AS – joint stock company
CCRI – composite cyclical risk indicator
CCyB – countercyclical capital buffer
CDS – credit default swaps
CET1 – Common Equity Tier 1
CIS – Commonwealth of Independent States
CISS – composite indicator of systemic stress
CIT – corporate income tax
CSB – Central Statistical Bureau of Latvia
DSTI – debt-service-to-income
DTI – debt-to-income
EBA – European Banking Authority
ECB – European Central Bank
EEA – European Economic Area
EIOPA – European Insurance and Occupational Pensions Authority
ESRB – European Systemic Risk Board
EU – European Union
EURIBOR – Euro Interbank Offered Rate
FCMC – Financial and Capital Market Commission
GaR – growth-at-risk
GDP – gross domestic product
HTM – securities held to maturity at amortised cost
IMF – International Monetary Fund
IT – information technology
LCR – liquidity coverage ratio
LGD – loss given default
LTV – loan-to-value
MFI – monetary financial institution
MREL – minimum requirement for own funds and eligible liabilities
NFC – non-financial corporation
NPLs – non-performing loans
NSFR – net stable financing ratio
O-SII – other systemically important institution
PD – probability of default
RE – real estate
RET – real estate tax
ROA – return on assets
ROE – return on equity
SCR – solvency capital ratio
SFPS – state-funded pensions system
SIA – limited liability company
SRS – State Revenue Service
SSM – ECB's Single Supervisory Mechanism
SyRB – systemic risk buffer
T1 – Tier 1 capital ratio
TC – total capital ratio
TLTRO III – targeted longer-term refinancing operations
TREA – total risk exposure amount
UK – United Kingdom
US – United States of America

# Summary

Decisive monetary policy action and falling energy prices contributed to a significant decline in inflation, thereby easing cost pressures on the solvency of NFCs and households. At the same time, the Latvian economy stagnated in 2023, constrained by weak external demand. Uncertainty persists regarding future inflation and, consequently, the trajectory of interest rate developments in the euro area. **The most significant systemic risks** to the stability of the Latvian financial sector remain **tied to persistently weak economic activity and generally stringent lending conditions. These factors could adversely affect bank customers, particularly businesses, and potentially hinder the recovery of economic growth** in the medium term.

Domestic lending remains sluggish overall, especially in the NFC segment. **A weak investment environment and insufficient lending support for investment have long been constituting a significant structural deficiency** hampering Latvia's development and competitiveness. In addition to the primary reasons for weak investment and lending highlighted in the previous "Financial Stability Reports", including deficiencies in structural policies within the construction and other segments as well as insufficient bank competition in the small loan segments, investment and lending are also hindered by soaring interest rates and sluggish growth among Latvia's key trade partners. Geopolitical tensions are a source of ongoing systemic vulnerabilities related to **cyber-attacks and other large-scale unexpected disruptions to financial intermediation**.

The downturn in the real estate market puts additional pressure on lending and growth in the Nordic-Baltic region. **Purchasing activity in the Latvian housing market has declined, and overall house price growth is gradually decelerating**. The housing market continues to be dominated by the supply of energy-inefficient housing. This exerts downward pressure on the prices of such dwellings. At the same time, the supply of new housing has long been inadequate, the pace of building renovations remains slow, and the availability of new housing has deteriorated due to inflation and rising interest rates. **Risks in the commercial property market remain elevated**, although there is no sharp decrease in commercial property transaction prices or increase in forced sales.

**Overall, the resilience of Latvian borrowers remains good**. With inflation rapidly declining and income growth remaining strong, the financial situation of households is gradually improving. Mortgage borrower support also reduces the risk of household borrowers becoming insolvent.

At the same time, NFC solvency and debt servicing capacity have weakened somewhat amid rapidly rising labour and financing costs. The quality indicators of the corporate loan portfolio have deteriorated slightly. **Overall, borrower loan payment discipline is good, with NPL growth limited to a small number of firms**, while an increase in forborne loans has been observed across many firms in various sectors. It should be noted that despite the strong growth of forborne loans during the pandemic, there was no subsequent rise in NPLs. However, **it is important that credit institutions continue to monitor their credit portfolio, recognise potential problematic loans in a timely manner, and build up appropriate provisions for expected losses**.

**The liquidity ratios of credit institutions remain robust. The resilience of the banking sector to shocks is also good, benefiting from improved profitability**. The rapid rise in market interest rates along with the prevalence of variable interest rate loans in the bank loan portfolio, the stable quality of the loan portfolio, and a relatively slower increase in interest expenditure, have collectively driven a substantial increase in bank profitability. Changes in the corporate income tax regime and the introduction of a mortgage protection fee have reduced banks' profits. However, despite these measures, banks continue to achieve excellent profitability.

The substantial increase in profits and changes in the corporate income tax regime have prompted the significant banks to review their dividend distribution policies, resulting in larger distributions of the previous years' profits than in the past. If this trend continues, the banks' voluntary capital buffers could decrease. **Bank capitalisation was generally high** in 2023.

**Macroprudential policy is generally aimed at strengthening banks' resilience in a timely manner**, taking into account the strong financial performance of banks and the risks of unexpected shocks in the future, **as well as at making targeted regulatory changes to develop sustainability and lending**. In December 2023, Latvijas Banka decided on a new approach – positive neutral – to the application of the countercyclical capital buffer as well as a gradual increase of the buffer requirement to 1%. The current sound financial conditions of Latvian credit institutions allow for strengthening the resilience without adverse procyclical effects. At the same time, a way to balance the regulatory treatment of risk weights for exposures secured by commercial real estate mortgages has been found for credit institutions using the standardised approach for the calculation of capital requirements.

Latvijas Banka also reviewed borrower based measures. To motivate borrowers to choose energy-efficient housing, thereby contributing to the development of a more energy-efficient housing stock and also to the renovation of buildings, income-based lending standards for loans issued for the purchase of energy-efficient housing have been eased as of the beginning of 2024. Furthermore, a more flexible approach has been introduced with regard to lending standards for loans for the purchase of housing with a purpose to let it or otherwise generate income from it.

To alleviate the refinancing of customers' credit obligations from one credit institution to another, the requirements for loan collateral assessment set out in Latvijas Banka's "Regulation on Credit Risk Management" have been revised accordingly.

Numerous nature-related risks present significant threats to the economy and financial system over the medium to long term. **In addition to the exposure of commercial banks to climate change risks, Latvijas Banka has begun to assess their exposure to biodiversity risk and other nature-related risks**. The results of the initial assessment show the high dependence of the corporate loan portfolio on ecosystem services, as well as the relatively significant impact of many bank-funded sectors on natural capital.

# The financial sector and economy are affected by tight financial conditions, weak external demand, and the regional and global geopolitical situation; however, the resilience of the financial sector is solid

## Systemic risks

Protractedly weak economic growth and continued tight credit conditions, which may affect bank customers, especially businesses, and the quality of banks' assets, as well as limit the rebound in economic growth

Persistently weak investment environment and insufficient lending support for investment

Dependence on developments and policies in the parent banks and their home countries

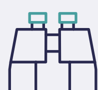
Cyberattacks and other large-scale unexpected disruptions in financial intermediation

## Potential systemic vulnerabilities

Unsustainable housing market developments, including weak investment in the renovation of housing stock

Risks associated with climate change and other nature-related risks, including loss of biodiversity

## Several macroprudential policy decisions adopted in 2023



**A forward-looking build-up of resilience buffers to help banks absorb losses and continue lending in the event of a crisis**

Gradual introduction of a CCyB rate of **1%**

**Supporting sustainability and lending**

**45%** for DSTI and **8 times** for DTI loans for energy-efficient housing

More flexible lending standards for the loans to obtain housing with a purpose to rent it out (buy-to-let) or otherwise generate income from it

Revised risk weight (**80%**) for exposures secured by commercial real estate

## The range of existing macroprudential policy instruments

**Capital instruments**

O-SII capital buffer (0.25–2%)

CCyB 1%[1]

Risk weight for exposures secured by commercial real estate (80%)

**Borrower-based measures**

90% (95%[2], 70%[3;4]) LTV

40% (45%[5]) DSTI[3]

6 (8[5]) times DTI[3]

30 year maturity for a housing loan[3]

7 year maturity for consumer loan[3]

## Recommendations

→ Credit institutions should pay close attention to signs of an increase in the credit risk of borrowers with low cash flow coverage. Accordingly, potential problematic loans should be recognised in a timely manner and provisions for expected losses should be made.

→ Long-standing structural problems in the areas of investment, construction, and credit need to be addressed.

[1] The CCyB rate of 0.5% will enter into force on 18 December 2024, the CCyB rate of 1% will enter into force on 18 June 2025.
[2] For the participants of the state support programme.
[3] 10% of the amount of new loans issued by the institution to natural persons per quarter may exceed this limit.
[4] For buy-to-let housing loans or other housing loans generating income as a result of real estate activities.
[5] For credit to purchase energy-efficient housing.

# 1. Macrofinancial environment and borrowers' solvency

## External macrofinancial environment

*Prepared by Olga Lielkalne*

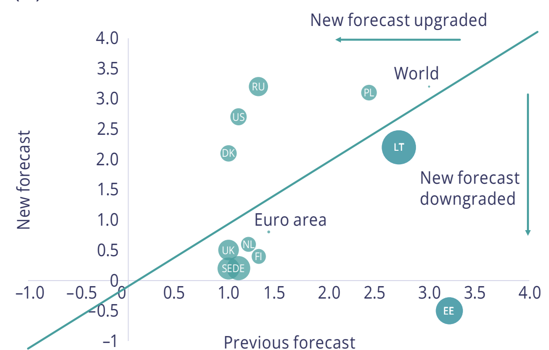
**Determined monetary policy action and decreasing energy prices contributed to a significant fall in inflation. This supported a shift in the financial market expectations of further rate cuts and, consequently, also more favourable financing conditions as of the end of 2023. The economic growth of the euro area and Latvia's other major trade partners, however, has decelerated significantly. Weak RE markets put additional pressure on lending, investment, household consumption and, ultimately, on the overall economic development of the region. Nevertheless, the financial performance of major Nordic banks remains strong.**

Contrary to the trends observed in the US and many other advanced economies, the euro area's economic growth has decelerated significantly. According to the IMF's forecasts, global economic growth will remain at 3.2% in the coming years, **whereas the growth rates in the euro area and some of Latvia's other major trade partners were low or even negative in 2023 and are expected to remain weak in 2024**, below 1%[1] (see Chart 1.1).

Growth in the euro area was negatively impacted by tighter financing conditions, low consumer confidence, and deteriorated export competitiveness on account of euro appreciation and structurally higher energy costs[2]. The interest rate hikes implemented to quench the soaring inflation, and generally tighter financing conditions, led to a **deceleration** in lending and housing prices, while **the commercial RE market remains in a downturn driven by both structural and cyclical factors**.

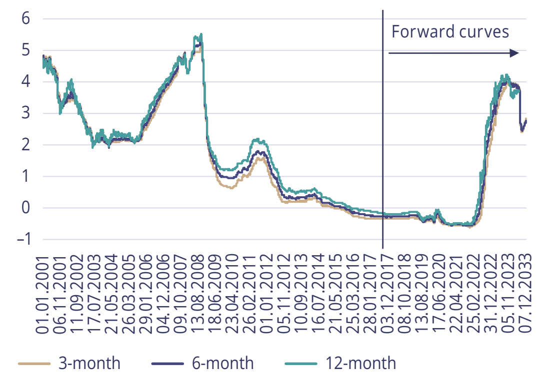
**Decisive monetary policy decisions and decreasing energy prices contributed to a significant fall in inflation**. The strong labour market, however, suggests that the domestic inflationary pressure remains high. Moreover, global geopolitical tensions have intensified,

Chart 1.1
**Annual changes in real GDP of Latvia's major export partners, April 2023 forecast (previous) and April 2024 forecast (new) of the IMF**
(%)




Note. The sizes of the circles (except "World" and "Eurozone") correspond to the share of trade partners in total Latvia's exports of goods and services.

Chart 1.2
**3-, 6-, and 12-month EURIBOR rates (daily data) and their forward curves (monthly data)**
(%)




Sources: Latvijas Banka and Chatham Financial.

posing further risks to future global economic and inflation developments and subsequent monetary easing both across the globe and in the euro area.

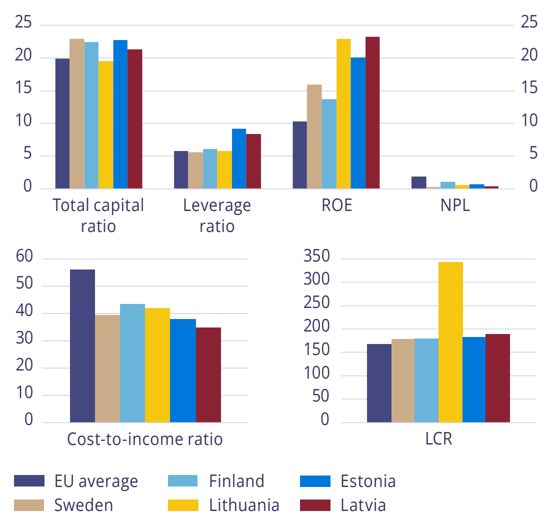
The policy rates of the ECB (and other major central banks) are still relatively high. Nevertheless, **the financing conditions in the euro area have become more favourable since the end of 2023, supported by a shift in the financial market expectations of further rate cuts**. For example, EURIBOR forward curves suggest that the market expects the variable part of the lending rates (where they are based on the developments in different maturity EURIBOR rates) could significantly decrease (see Chart 1.2).

[1] See IMF World Economic Outlook of April 2024.
[2] See Latvijas Banka's Macroeconomic Projections Report of March 2024.

**The overall resilience of the euro area banking sector to shocks is solid, in the short term underpinned by improved profitability**. Overall, the borrowers' financial position remains buttressed by a strong labour market, support measures and, to some extent, by the savings accumulated during the pandemic. NPLs in the loan stock of banks have increased only marginally, but in some loan portfolio segments (for example, commercial RE and consumer credit) credit risk has grown. Therefore, the banks' profitability may be gradually eroded by deteriorating loan quality on the back of weak economic growth, sluggish lending, as well as the rising financing costs faced by banks. The financial stability risks in the euro area remain related to potential turbulences in the global financial markets, the downturn in the commercial RE market, and the close links between the banking and non-banking financial sectors (which could increase contagion risks in financial stress episodes). Addressing the effects of climate-related and other nature-related risks on the financial system is becoming increasingly important.

**Latvia's financial sector is affected by developments in parent banks as well as the Nordic and Baltic region**. Previously, Sweden (and other Nordic countries) had been experiencing a continuous build-up of risks associated with RE market imbalances and high indebtedness of households and some NFC sectors. However, with inflation and interest rates on the rise, housing prices in the region, like elsewhere in Europe, have declined. At the same time, the refinancing and solvency risks in the commercial RE market have grown. The Nordic banks have large exposures to housing and commercial RE; therefore, **the weak RE markets put an additional pressure on lending, investment, household consumption and, ultimately, on the overall economic development of the region**. Given the geopolitical context, **systemic risks associated with cyberattacks and other unexpected large-scale disruptions to financial intermediation in the region and globally continue to grow**. Nevertheless, these risks are mitigated by the strong profitability, capitalisation, and other financial indicators of the major Nordic banks (see Chart 1.3), as well as the low level of government debt (with only Finland facing a government debt-to-GDP ratio above the 60% threshold).

Chart 1.3
**Main financial indicators of Nordic, Baltic, and EU banks**
(at the end of 2023; EBA sample of major banks; %)




Source: EBA.

## Domestic macrofinancial environment

*Prepared by Andrejs Semjonovs and Jekaterina Petkeviča*

**Constrained by weak external demand, Latvia's economy was stagnant in 2023. A recovery in the purchasing power of consumers and private consumption, government investment, and an expected strengthening of the external demand in the second half of the year is anticipated to kick-start growth in 2024, albeit the growth will remain at a low level. Inflation has decreased considerably and the risks of it becoming entrenched have also subsided. With unemployment remaining persistently low, wages continue to rise robustly. This supports household solvency, but also increasingly erodes corporate profitability in the environment of weak growth.**

**Following a shallow recession in the first half of the year, Latvia's economy resumed growth at the end of 2023, resulting in a broadly unchanged annual GDP growth rate** (at constant prices; seasonally and calendar adjusted data). Exports contracted by 5.8% due to weak external demand, representing a major headwind to economic growth. Private consumption recovered gradually, whereas investment picked up significantly in the fourth quarter.

Weak external demand is also expected to constrain economic growth in 2024, particularly in the first half of the year. In the first quarter of 2024, GDP grew by 0.9% year on year (seasonally and calendar adjusted data). **According to Latvijas Banka's June 2024 forecasts, annual GDP growth will reach 1.8% in 2024 (3.3% in 2025)**. The otherwise sluggish GDP growth in 2024 will be supported by a recovery in the purchasing power of consumers on account of higher real wages

as well as the implementation of public investment projects, including the construction of Rail Baltica and investment in defence.

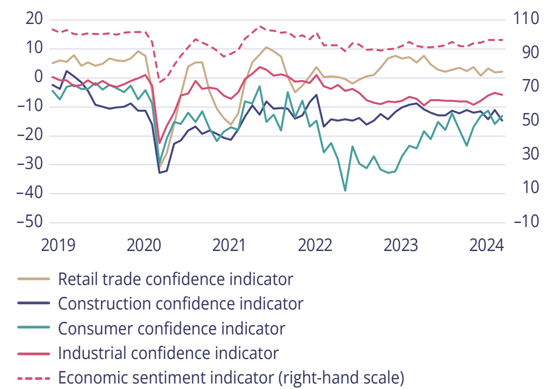
Despite the weak economic growth observed since the beginning of 2023, **the overall sentiment has slightly improved (see Chart 1.4), while the economic sentiment remains below its long-term average**. Its improvement was supported by a less pessimistic outlook of households on the financial situation of their families and on overall economic situation in the country against the background of falling inflation and rising wages. A pick-up in industrial confidence points to a potential recovery in production volumes in 2024.

**On the back of weaker economic growth, tightened monetary policy**[3]**, and lower energy prices, inflation in Latvia has receded (see Chart 1.5).** With core inflation, including the growth of prices of services, gradually decelerating, **the risks of inflation becoming entrenched have also subsided**. According to Latvijas Banka's June 2024 forecasts, consumer prices are expected to grow at a rate of below or close to 2% in the coming years[4].

**The labour market shows resilience, and wage growth is strong**. At the end of 2023 and in the first quarter of 2024, unemployment slightly increased. This increase is explained by seasonal factors and a more negative economic performance in 2023. According to Latvijas Banka's June 2024 forecasts, unemployment will overall remain low in the period from 2024 to 2026.[5]

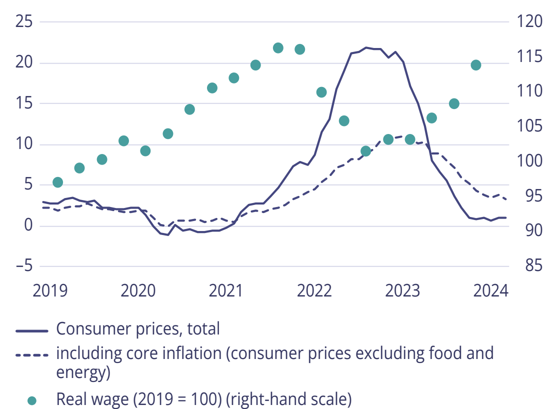
The low unemployment continues to exert an upward pressure on wages which are growing swiftly, helping **to improve household solvency**. A raise of the minimum wage will be another factor contributing to higher wages in 2024. At the same time, with the economic growth overall remaining weak in 2024, **the steadily rising labour costs have an increasingly negative effect on the profitability of the NFCs in some sectors**, contributing to the need for them to consolidate spending in other areas, for example, investment.

Chart 1.4
**Economic sentiment indicator of Latvia's bussinesses and sectors**
(in points, net replies)




Source: European Commission.

Chart 1.5
**Consumer price changes** (%) **and average real wage**
(2019 = 100)




Sources: CSB, Eurostat and Latvijas Banka's estimates.

**Investment and lending have been weak for a prolonged time, representing a significant systemic structural deficiency constraining Latvia's growth and competitiveness**. In 2024, private investment will continue to be hampered by high uncertainty and global geopolitical risks, overall still tighter financing conditions and high financing costs. The cessation of credit interest rate increases and their expected decline will gradually boost private sector investment activity.

The level of public debt is expected to increase gradually over the coming years, approaching 46% of GDP. This level of debt is not excessive compared to other EU countries. However, its rise, in combination with a growing budget deficit which, according to Latvijas Banka's June 2024 forecasts, is expected to reach a relatively high level of 3.8% of GDP this year, highlights **the need for very well-targeted government spending, including spending to address structural deficiencies**.

[3] Latvijas Banka has estimated that, because of the ECB's rate hikes, Latvia's average inflation in 2023 was 2 percentage points lower than it would have been in a no-change scenario. See more details in Latvijas Banka's Macroeconomic Developments Report of September 2023.
[4] 1.5%, 2.1%, and 1.8% on average in 2024, 2025 and 2026 respectively. Upside risks to inflation are caused by the rising global trade barriers and import prices due to geopolitical tensions and climate change. See: https://www.bank.lv/en/operational-areas/task-monetary-policy/forecasts.
[5] Unemployment is projected to stand at 6.7%, 6.4%, and 6.1% in 2024, 2025 and 2026 respectively.

## Real estate market development

**The housing market is in a moderate downturn – the buying activity has diminished and overall house prices are gradually decelerating. Cautious mortgage lending, low household indebtedness, and a resilient labour market have helped to cushion the downturn and limit the risks to financial stability. An improvement in household solvency, the halt of the rise in interest rates, and financial market expectations of interest rate decline will facilitate a gradual recovery in the market.**

**The activity on the commercial RE market is still low and the growth prospects remain limited. A significant increase in energy-efficient office space and tax rebates granted to climate-certified sustainable buildings[6] have resulted in an over-supply of energy-inefficient premises, particularly in the office segment. Although commercial RE prices did not drop significantly, and the number of forced sales did not grow in 2023, for some market participants insolvency risks are still elevated.**

### *Housing market*

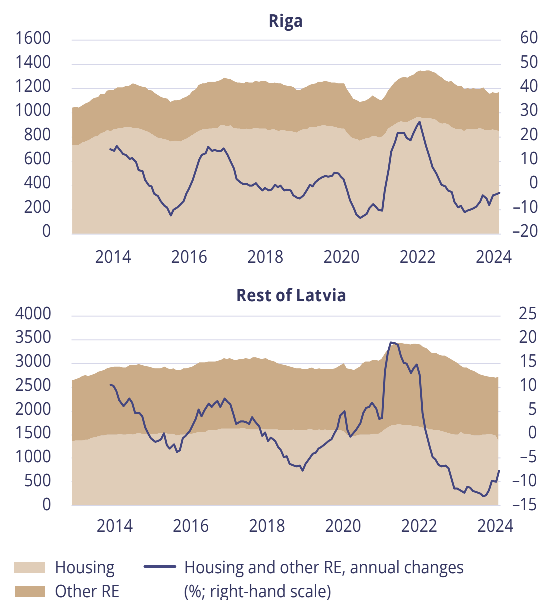
*Prepared by Andrejs Semjonovs*

Constrained by high interest rates for mortgages and deteriorating affordability of new housing, the activity in Latvia's housing market has become sluggish. In the first quarter of 2024, the number of RE purchases was by moderate 5.8% lower year on year. Overall, the purchasing activity in both housing (particularly when co-financed by banks[7]) and non-residential premises, as well as building plot segments decreased in 2023.[8] The fall was particularly steep for the number of new apartments purchased in Riga.[9]

Chart 1.6

**Monthly number of purchase contracts in Riga and the rest of Latvia registered in the Land Register**

(12-month moving average)




Sources: State Unified Computerized Land Register, Latvian Open Data Portal and Latvijas Banka's calculations.

The overall decline in market activity has been moderate. Despite a more pronounced drop in comparison with 2021 and 2022, the total number of housing purchases in Riga in 2023 was only slightly below the 2017–2019 average, with the decrease being stronger outside Riga[10] (see Chart 1.6). Due to the lending for house purchase being cautious, household indebtedness low, and the labour market resilient, the risks of a sharper adjustment are low. As a result, the housing market does not pose significant risks to financial stability. Despite the market turbulence of the most recent years, there has not been any sizeable and sustainable adjustment in purchasing activity for housing co-financed by housing loans (see Box 1.1 "Mortgage co-financed dwelling purchasing activity during the pandemic, cost and interest rate shock periods").

[6] From 2024, a 50% RE tax rebate from the calculated amount is granted to taxpayers on newly built or fully-renovated buildings with a BREEAM International New Construction, BREEAM Refurbishment and Fit-Out, LEED BD +C or DGNB certificate with at least 55% rating. The rebate is granted on buildings commissioned after 1 January 2024, for a period of 10 years, starting with the first month after the commissioning and the certificate taking effect, but not beyond the certificate's expiry date.

[7] According to the Open Data Portal statistics on RE purchases, the purchases of residential space – apartments and single or two apartment dwelling houses – decreased by 7.2% in 2023 as compared to 2022, whereas Latvijas Banka's statistics on new housing loans reveal a decline by 10.4% in the number of loans originated in 2023. The data of RE companies also show that the decline in the number of housing purchases involving a loan decreased at a slightly faster pace than the total number of purchases. For example, according to SIA LATIO information on its transactions and market intelligence data, in January 2024, 45% of all housing transactions in Latvia were carried out without loan involvement, and this proportion grew gradually in 2023 (from 30% in July 2023 to 42% in December).

[8] According to the Open Data Portal statistics on RE purchases, the number of purchases of non-residential buildings (for example, garages and barns) decreased by 15.6% year on year in 2023. According to SIA LATIO estimates, the number of building plot transactions in 2023 contracted by 19% year on year.

[9] According to data from cenubanka.lv, the number of transactions with newly built apartments decreased by 20.7% in comparison with 2022.

[10] In 2023, the number of housing purchases in Riga was 1.5% lower than the average of 2017–2019. The number of purchases outside Riga was 11.7% below the average of 2017–2019.

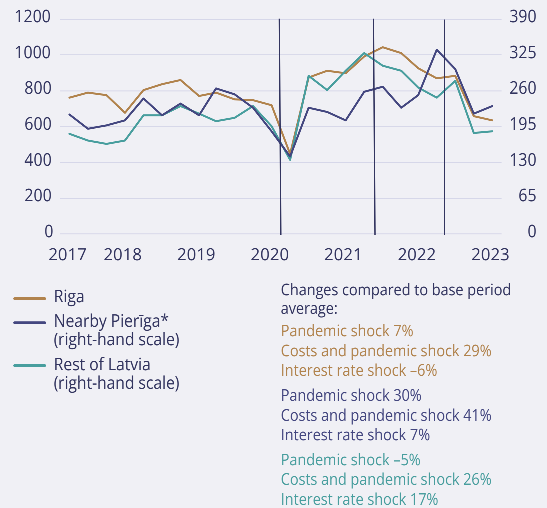
# Box 1.1. Mortgage co-financed dwelling purchasing activity during the pandemic, cost and interest rate shock periods[11]

*Prepared by Andrejs Semjonovs*

**Since 2020, Latvia's housing market has been significantly affected by several developments, while the housing lending activity has remained rather resilient overall, albeit generally weak.** Hit by the first wave of the Covid-19 pandemic, the purchasing activity involving a loan in both apartment and house segments decreased notably in the second quarter of 2020, but then bounced back quite swiftly in the second half of the year. Moreover, despite the following rapid rise in costs, and with the pandemic far from over, the activity in transactions involving a loan overall remained resilient in 2021 and the beginning of 2022. The recovery in activity was supported by high demand for more spacious dwellings due to the population changing their daily habits because of the rapid spread of remote work, as well as by the household savings accumulated during the pandemic (inter alia, with the help of government measures to overcome the pandemic and compensate for the soaring energy prices).

Towards the end of 2022, with rising construction costs already pushing up the prices on newly built housing significantly, and high interest rates further deteriorating borrowers' creditworthiness, overall activity started to decline. Affected by the rapidly rising interest rates, the number of apartments and residential houses purchased swiftly decreased; nevertheless, the number of residential houses purchased was still higher than before the pandemic. **With interest rates rising, the tendency fostered by remote work to buy housing with more rooms and housing outside Riga using a housing loan has disappeared** (see Chart 1.7) **and the purchasing activity in the segment of new housing has also started to decline more notably.**

Chart 1.7
**Number of suite of rooms (apartment) purchases involving a housing loan**




Notes. Nearby Pierīga – Jūrmala, Ķekava municipality, Mārupe municipality, Olaine municipality, Salaspils municipality, Ogres municipality, Ropaži municipality, Ādaži municipality, Sigulda municipality, and Saulkrasti municipality. To exclude the possibility of seasonality affecting the rate of change, the number of purchases has been compared with the corresponding quarters of the base period. For example, in the case of an interest rate shock, the number of transactions from the third quarter of 2022 to the first quarter of 2023 has been compared with the average number of transactions in the third, fourth, and first quarters of 2017, 2018, 2019 and the first quarter of 2020.

A more detailed description of the chronology of events is available at: https://www.makroekonomika.lv/raksti/caur-pandemijas-izmaksu-un-procentu-likmju-sokiem-krediteto-majoklu-pirkumu-dinamika. (in Latvian).

Sources: State Unified Computerized Land Register, Latvian Open Data Portal, Credit Register of Latvijas Banka, and Latvijas Banka's calculations.

[11] Analysis covers the period from the second quarter of 2017 to the first quarter of 2023, chronologically distinguishing between the periods influenced by various events as much as possible. A more detailed analysis is available at: https://www.makroekonomika.lv/raksti/caur-pandemijas-izmaksu-un-procentu-likmju-sokiem-krediteto-majoklu-pirkumu-dinamika. (in Latvian).

**Activity will gradually recover supported by an improvement in household financial situation, halt in the interest rate increases, expectations of interest rate decline, as well as a gradual improvement in the affordability of new housing.** Significantly larger state guarantees available to families with children will contribute to boosting activity in Latvia's regions outside Riga and its adjacent municipalities. The amount of the state guarantee has been raised to up to 50% of the loan amount.[12] This will help to facilitate the previously sluggish housing lending beyond Riga and Pierīga municipalities.

**The number of dwellings available for purchase remains elevated and limits the growth in house**

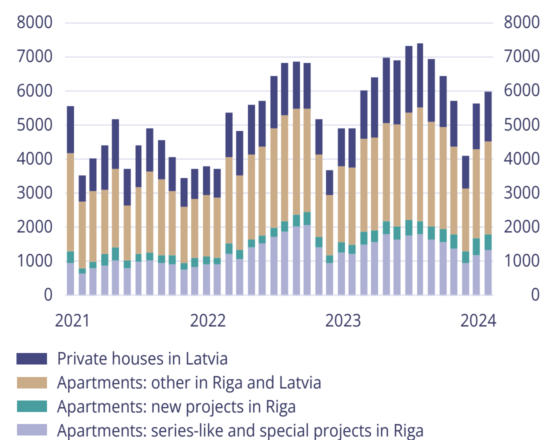
[12] Amendments to Cabinet Regulations No. 95 "Regulations Regarding the State Assistance in Purchase or Construction of Residential Space" of 20 February 2018 are effective as of 3 April 2024. In accordance with the amendments, a guarantee in the amount of up to 50% of the loan but no more than 50 000 euro may be granted to large families. See more detail in: "State guarantee to families for housing construction or purchase in Latvia's regions to be increased" | Ministry of Economy (em.gov.lv). (in Latvian).

**prices in the environment of slower purchasing activity.** With the supply of energy-inefficient housing significantly increasing in 2022 due to energy price increases and households being less able to afford larger, newly built properties in 2023 due to high inflation and interest rates, the number of sales advertisements for both apartments and private houses increased and remained at a higher level in early 2024 as compared to 2021 (see Chart 1.8). **The supply of standard series-type and special projects apartments in Riga has been high for an extended period of time,**[13] **ontributing to a gradual decline in their prices.**

The number of sales advertisements for new apartments in Riga on the primary and secondary market has also been growing since the second half of 2023 (see Chart 1.8), with the affordability of new housing deteriorating, and the number of the respective purchases contracting significantly. Nevertheless, households preserved their interest in higher-quality and more sustainable housing, and the number of new housing units available for purchase is expected to decline as the housing market cycle recovers and the affordability of new housing gradually improves, supported by stable wage growth and the financial market expectations of a future decline in interest rates.

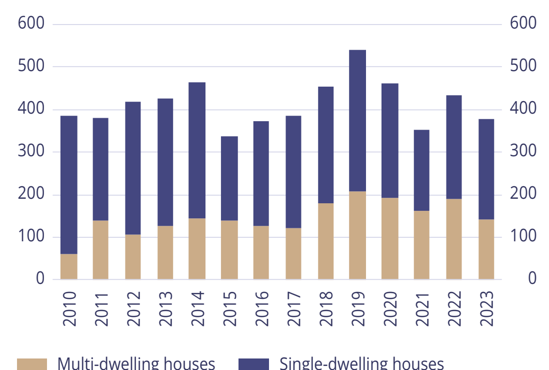
**New housing construction continues to be sluggish. This has limited the supply of new dwellings and worsens their future affordability.** According to the CSB data, in 2023, the total area of commissioned new housing in Latvia declined by 13.2% compared to 2022 (see Chart 1.9). According to SIA Colliers International Advisors' estimates, at the end of 2023, the total number of new apartments available for purchase in Riga and Pierīga was 7% lower than a year earlier,[14] whereas the number of new apartments under construction was 30% lower than in 2022. **With the housing market cycle recovering, a limited supply of new housing will continue to exert an upward pressure on their prices.**

Chart 1.8
**Number of apartment and private house sale advertisements**




Sources: ad posting websites (ss.com, city24.lv, inch.lv) and Latvijas Banka calculations.

Chart 1.9
**Floor-area of commissioned new housing**
(thousands of m²)




Source: CSB.

The persistently slow growth of the housing stock has also had an effect on housing lending and it provides at least a partial explanation as to why the new housing lending volumes in Latvia are lower than in Lithuania and Estonia (see Box 1.2 "Comparison of housing market activity and lending for house purchase trends in the Baltic countries"). **The action plan to reduce the administrative burden in construction is a positive step contributing to boosting the supply of new housing, while reducing the bureaucracy associated with construction**[15] **should ensure its successful implementation. In addition to that, other structural gaps, like challenges associated with the grey economy and lack of adequately skilled labour in the regions, require further attention.**

[13] According to SIA ARCO REAL ESTATE assessment, the supply of series-type apartments in Riga's housing districts has been increasing since mid-2022 and reached the highest levels of the last five years in January and February 2024.

[14] It should be noted that according to SIA Colliers International Advisors' estimates, the total number of apartments available for purchase has decreased on the account of a decline in new apartments under construction. The reservation rate for new apartments gradually declined for the second consecutive year (around half of all apartments under construction were reserved in 2021, whereas at the end of 2022 the reservation rate had dropped to 38% and to only 32% at the end of 2023). The number of finished new apartments in 2023 was higher than in 2022.

[15] The plan approved by the Cabinet on 2 April 2024 includes almost 60 measures to reduce the administrative burden; see more detail here: https://tapportals.mk.gov.lv/legal_acts/5b9161db-61e7-44a4-bc75-961773e11844. (in Latvian).

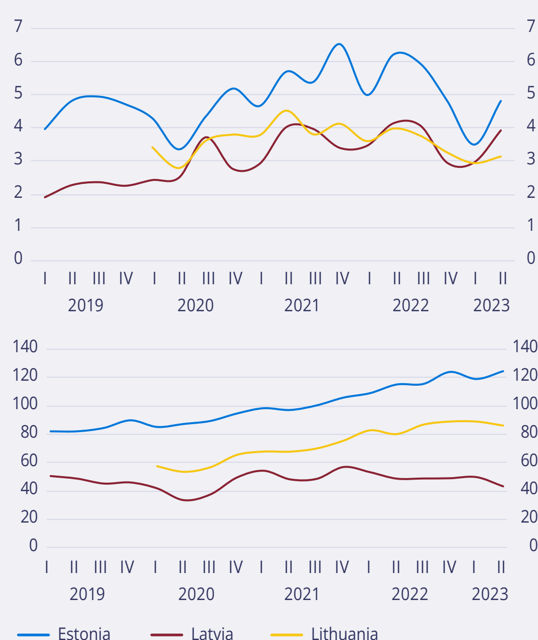
# Box 1.2. Comparison of housing market activity and lending for house purchase trends in the Baltic countries

*Prepared by Andrejs Semjonovs*

Looking at the number of new loans for house purchase per 1000 population aged 18–64 granted since 2020 (the first period for which data are available for Lithuania), the level of activity is similar in the Latvian and Lithuanian lending for house purchase markets, whereas in Estonia it is higher. In terms of the average size of new loans, however, Latvia is significantly outperformed by the other two Baltic countries, with the gap even widening over recent years. Consequently, households equally often undertake commitments to purchase housing in Latvia and Lithuania, but the borrowers of Lithuania and Estonia are taking increasingly larger loans for house purchase over the most recent years, while no such tendency can be observed in Latvia (see Chart 1.10).

Chart 1.10

**Monthly number of new housing loans per 1000 population aged 18–64** (upper panel) **and average size of a new housing loan** (thousands of euro; lower panel)




Notes. The data on housing loans reflect the number of new housing loan agreements. The statistics do not include cases when the housing loan agreements have been renegotiated. Annual data on the number of population (assuming that the number remains unchanged in a single year). Data on Lithuania are available since 2020.

Sources: ECB, the statistics of the Baltic central banks and Latvijas Banka's estimates.

**At least to some extent, this can be explained by significantly lower prices on the vast supply of standard series (built during the Soviet era) apartments in Latvia compared to Estonia and Lithuania[16] and a long-lasting increase in purchasing transactions in the new housing segment in Lithuania and Estonia, while the share of new housing in total purchase transactions in Latvia remains low.** The activity in the newly built housing market is well-represented by the changes of the component weights of the house price index (reflecting the volume of housing transactions in housing segments rather than house prices themselves) and, more specifically, the share of new housing purchases in the total volume of purchases. In Latvia, this share has lingered around 20% over the last decade, whereas in Lithuania and Estonia it has been rising steadily since 2015, approaching 40% in Lithuania and a slightly higher level in Estonia.

**The market for new housing in Latvia is characterised by five significant challenges[17]:**

1) **low activity in new housing construction;**
2) **limited ability or willingness of the population to purchase newly built housing in the presence of much cheaper alternatives in standard series houses;**
3) **unfavourable demographic situation;**
4) **uneven regional development;**
5) **affordability of newly built energy-efficient housing, which has been decreasing since 2022.**

[16] The price comparability for standard series apartments is inter alia affected by differences in quality, including generally more active housing renovation in Lithuania and Estonia, and the availability of accurately comparable data is limited. According to AS Ober-Haus Real Estate Advisors' estimates, at the end of 2022, the price on non-renovated standard series apartments in Riga was 750–800 euro/m$^2$, whereas in Vilnius it was 1400–1500 euro/m$^2$ and in Tallinn 1800–2200 euro/m$^2$. It is important to note that the prices on housing in new developments are also significantly higher in Lithuania and Estonia compared to Latvia.

[17] A more detailed analysis of the challenges and their differences across the Baltic States is available at: https://www.makroekonomika.lv/raksti/majoklu-tirgus-aktivitates-un-majoklu-kreditesanas-tendences-neilgtspejiga-lidzsvara (in Latvian).

**Like in several other European countries, with the housing market cycle decelerating, house price growth in Latvia has slowed significantly** (see Chart 1.11). In the fourth quarter of 2023, the CSB house price index was 1.0% higher year on year and slightly decreased for a second consecutive quarter. The developments in prices of existing and new housing remain quite different, with prices of existing dwellings, including series-like apartments, declining[18] and those on new housing transactions continuing to climb rather swiftly (see Chart 1.12).

**With the growth of construction costs decelerating and the number of new housing purchases decreasing significantly, the asking price for new housing[19] has stopped rising.** Latvijas Banka's analysis of advertisement data show that the average selling price of new dwellings in Riga remained broadly unchanged in the second half of 2023.[20] Once the construction of the pre-booked housing is finished and their asking prices are duly reflected in the transaction statistics, the rise in the new house price index will abate in the coming quarters. **The risks of a significant downward adjustment in prices of new housing are limited by the persistently weak demand and deceleration of new housing construction in 2023.**

On average, housing prices are now growing at a much slower pace than wages, resulting in **a shrinking and historically low ratio of house prices-to-wages** (see Chart 1.13). **Nevertheless, given the price and interest rate hikes experienced over the past two years, the affordability of new housing remains deteriorated.** For example, at the end of 2023, to buy a 50m$^2$ apartment in a new project one's income had to be almost two times larger than at the beginning of 2021 (see Chart 1.14). With the financial situation of households gradually recovering further, the affordability of new housing can also be expected to improve.

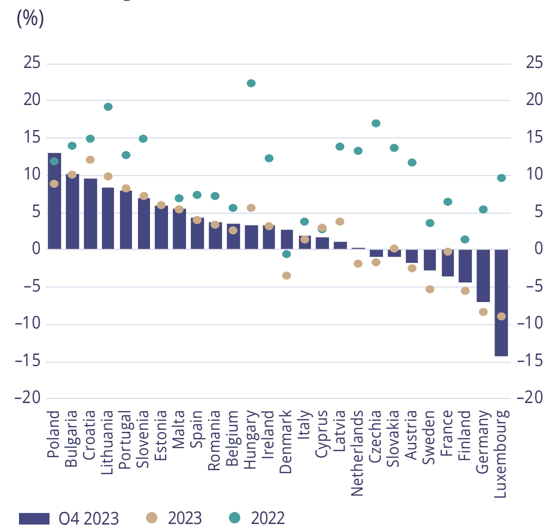
**Interest rate hikes and deterioration in affordability of new housing have not caused instability in the rental market.** A sharp decline in affordability of new

[18] According to SIA ARCO REAL ESTATE data, in February 2024, the prices on series-like apartments in Riga were 6.8% lower than in February 2023.

[19] In the new housing segment, the asking price and transaction price may differ. For example, in the previous years, a significant part of new housing was reserved during the construction stage, and the total housing price fixed at the time of reservation is reflected in the transaction data with a delay of up to 1–1.5 years.

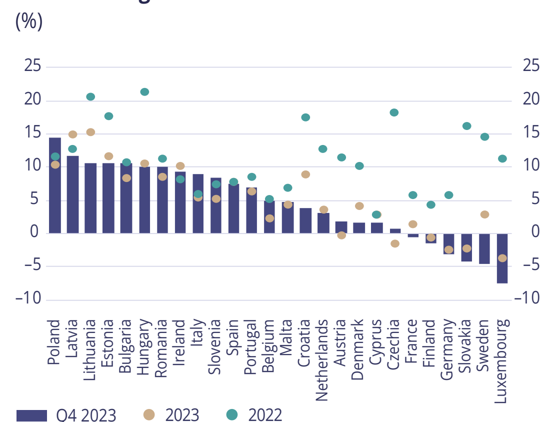
[20] SIA Colliers International Advisors' estimates also suggest that the asking prices in new projects in Riga and Pierīga stopped rising and stabilised in 2023.

Chart 1.11
**Annual changes in the house price index – all dwellings**
(%)



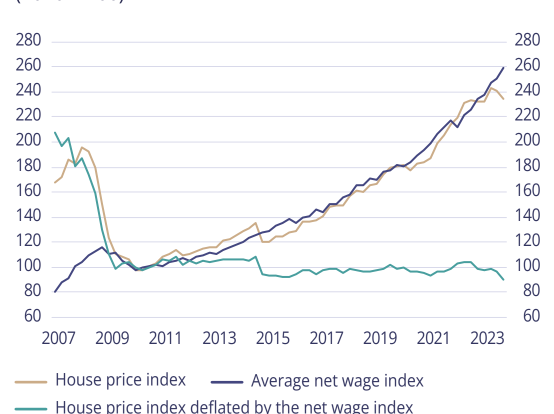

Sources: Eurostat and Latvijas Banka's calculations.

Chart 1.12
**Annual changes in the house price index – new dwellings**
(%)




Sources: Eurostat and Latvijas Banka's calculations.

Chart 1.13
**Ratio of house prices to average net wage**
(2010 = 100)




Sources: CSB and Latvijas Banka's estimates.

housing has put an upward pressure on its rental prices in Riga; nevertheless, the overall rise in rental prices was moderate in 2023[21]. Latvijas Banka's analysis of advertisement data shows that the number of apartment rental advertisements in Riga at the beginning of 2024 was similar to that of 2021.

### *Commercial real estate market*

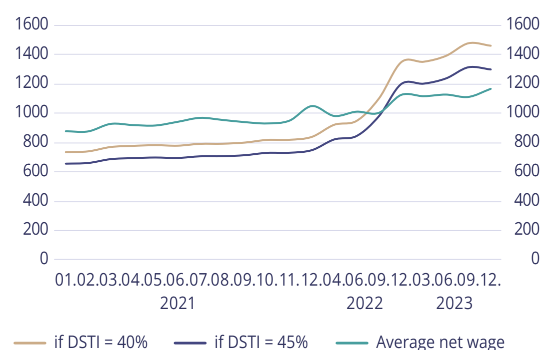
*Prepared by Jekaterina Petkeviča*

**Uncertainty, persistently high financing costs, and shortage of sound investment opportunities remain the main factors limiting activity in the commercial RE market.** According to data from SIA Colliers International Advisors, the volume of investment totalled 226 million euro in 2023[22], representing a fall of 27% as compared to 2022. Low activity in the commercial RE investment market is observed not only in Latvia, but across the whole Baltic and Nordic regions as well as other European countries. The bulk of investment was made in the industrial (42%) and trade segments (20%) by investors from the Scandinavian countries (42% of the total value of transactions) and the Baltic States (30% of the total value of transactions). **With lending rates no longer rising, and potentially decreasing gradually, investment in commercial RE could pick up gradually** (according to SIA Colliers International Advisors' forecasts, it may reach 300 million euro).

Debt financing has become more expensive over the most recent years and has exerted an upward pressure on the expected yield in the commercial RE segment, thereby compressing the prices and market values of commercial RE[23]. With the expected yield stabilising in the second half of 2023, **the fall in the market values of commercial RE decelerated, and prices decreased by 5–10% on average in 2023 overall** (according to data from SIA Colliers International Advisors). As the sub-sectors of the commercial RE sector are overall cyclical and investments in the sector are more exposed to the interest rate risk, banks, as a rule, pursue a more cautious lending policy towards the commercial RE sector and grant loans at a lower loan-to-value ratio than in less risky sectors (see Chart 1.15). Therefore, even when interest rates increase significantly, the market value of commercial RE still exceeds the outstanding loan. Due to that reason, property impairment poses no significant risks at the current juncture.

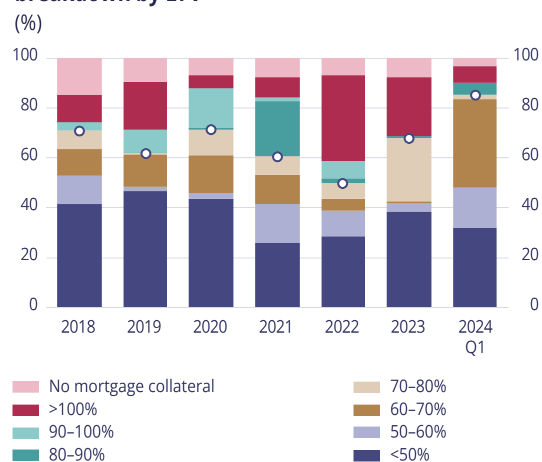
Financial markets' expectations of interest rate cuts may reduce the debt service burden on the borrowers from the commercial RE segment. The rate cuts, however, would be passed on to the interest payments by borrowers with a time lag; therefore, **some vulnerable borrowers from the commercial RE market would still face the risks of deteriorating payment**

Chart 1.14
**Income minimum to purchase a 50 m2 apartment in a new project**
(euro)




Assumptions. Borrower's obligations are repaid according to annuity repayment schedule of 30 years, and the borrower pays the down payment of 15%. Total interest rate of the loan is 2.0% + the 6-month EURIBOR of the time.

Chart 1.15
**New lending to borrowers from RE activities sector, breakdown by LTV**
(%)




Source: Latvijas Banka's calculations.

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[21] According to data from CenuBanka.lv, rent prices increased in all apartment categories in Riga in 2023, but the increase was limited to 2–7%.

[22] The volume of investment is the total of the largest commercial RE transactions where the properties were bought using an existing or potential cash flow. In 2023, the volume of investment was the second lowest in the last decade, only ahead of 2017.

[23] In an illiquid market the volume and number of commercial RE transactions is low, and the existing prices may not reflect the actual market value. More detailed analysis of market values of commercial RE and the valuation method is available at: https://www.makroekonomika.lv/blogi/komercialo-nekustamo-ipasumu-tirgus-vertibas-kapumi-un-kritumi (in Latvian).

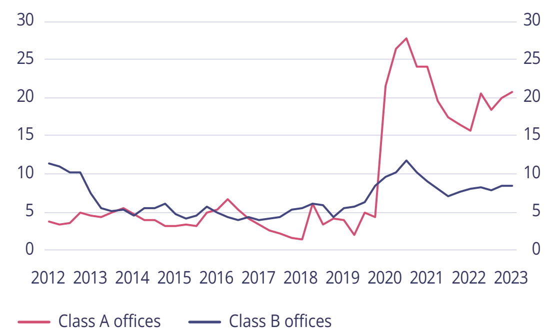
**discipline.** An analysis[24] of the 74 largest borrowers[25] in the commercial RE segment, based on preliminary 2023 data and assumptions, shows that the share of credit obligations with the interest coverage ratio below 1.0 (the company's income is insufficient to cover interest payments) is growing and the share of borrowers with a good ability to pay interest in the credit portfolio is shrinking. In order to be able to cover interest and loan amortisation payments as they fall due, those borrowers make adjustments by, for example, indexing rent[26], injecting owner's capital into the company to cover payments, or renegotiating the repayment schedule with the bank by extending the maturity, introducing a grace period, or changing the payment schedule from a linear schedule to an annuity schedule (thereby reducing the monthly payment burden). For example, from the fourth quarter of 2023 to the second quarter of 2024, borrowers whose loans account for 18% of the credit portfolio of the 74 largest borrowers, negotiated changes to the provisions of their loan agreements, including: 8% agreed on a reduction of interest rate, 3% on changes in the amortisation schedule, 3% on switching from a variable to a fixed rate, 1.5% on introducing or extending the grace period; at the same time, 5% made a partial early repayment of the loan. By the end of 2023, the amount of outstanding forborne loans in RE activities had increased (see Section "Credit Risk").

Despite higher interest rates and lower profitability in RE activities (see Section "NFC Solvency"), the aforementioned measures have so far been sufficient **to prevent an increase in the number of forced sales in the commercial RE market**[27].

In the circumstances of an illiquid and shallow commercial RE market, an immediate selling of a commercial RE unit is difficult. Also, if the investor has decided on exiting a commercial RE project or fund, the actual selling price may be significantly lower than in normal market circumstances. In those circumstances, RE funds carry a significant redemption risk. Although about 1/3 of the credit portfolio of the largest borrowers consists

Chart 1.16

**Share of vacant Class A and Class B office space in Riga** (%)




Source: SIA Colliers International Advisors.

of loans granted to borrowers owned by RE funds (mostly registered in Estonia), these are closed-end funds, therefore, **the redemption risk is limited.**

**Potential difficulties with loan refinancing are also still a concern.** Given the elevated interest rates, lower commercial RE values and tighter financing conditions, companies find it more challenging to refinance their existing loans used to finance commercial RE or to raise new loans.

**Demand and supply tendencies differ across various commercial RE segments**. The activity in the industrial and warehouses segment is robust, the hotels segment is slowly recovering, the offices segment is affected by tight competition, while the development potential in the shopping centers segment remains limited.

The supply of Class A office space increased significantly in 2023 (by 19%) in the office segment, boosting the proportion of vacant space in both Class A and Class B office buildings (see Chart 1.16), as tenants of both Class A and Class B offices moved to the newly commissioned offices[28]. The demand in the offices segment is sustained by the existing tenants, while the number of new tenants is small. Therefore, **the competition for tenants in the offices segment in Riga remains tight**, and will continue to tighten when new office buildings come on the market. At the same time, no reduction in office rent is observed: the high rents charged for Class A offices reflect the elevated construction and financing costs, while in the case of Class B office buildings, the owners are reluctant to adjust the rents in the circumstances of strong competition.

[24] Borrowers whose credit obligations are at least 5 million euro and accounting for 50.8% of the total amount outstanding of commercial institution loans granted to the RE sector.

[25] The debt-servicing capacity of borrowers is analysed by combining company-level financial data in 2022 with loan-level data in 2023 and projecting the interest coverage ratio in 2023.

[26] In 2023, the turnover in RE activities grew by 6.7% compared to 2022 on account of indexation.

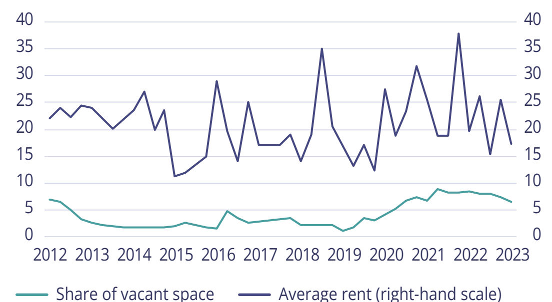
[27] According to information published by SIA Colliers International Advisors, the share of such transactions did not grow in 2023.

[28] According to SIA Colliers International Advisors' assessment, in 2023, the share of vacant office premises in Riga was 23% in Class A segment and 13% in Class B segment.

An RE tax rebate to climate-certified sustainable buildings in Riga (as of taxation year 2024) could encourage the construction of new office buildings and the renovation of the old ones, as international tenants are likely to give preference to certified premises in order to meet ESG standards.

According to SIA Colliers International Advisors' estimates, the turnover in the shopping centers segment continued to grow in 2023 due to high inflation, while **vacant space in the shopping centers segment is slowly decreasing** (see Chart 1.17). The total floor area of shopping centers (in m²) in Riga is larger than in Vilnius and Tallinn; therefore, new shopping mall development is unlikely, except in the segment of food retail chains. Shopping centers can expect some concept improvements and refurbishments. **Rents have remained flat**; nevertheless, some tenants are starting to consider the options of moving from high-end shopping centers to lower-end shopping centers to reduce rental costs.

Chart 1.17
**Share of vacant retail space** (%) **and retail rent rates** (euro/m²) **in Riga**




Source: SIA Colliers International Advisors.

**NFC solvency has slightly weakened, but their debt servicing ability remains good overall. The rapidly rising labour and financing costs have put a downward pressure on the profitability of NFCs. The financial situation of some part of NFCs is also negatively impacted by weak economic development and consumer cautiousness.**

**The market for industrial and warehouse premises is active and demand stable.** The floor area of industrial premises and warehouses has expanded along with an increase in units specifically designed to satisfy the needs of tenants. Vacant space has also slightly grown, without putting a downward pressure on rents.[29] As high-quality premises are still in shortage, rents for industrial and warehouse space may increase.

**The recovery in the hotels segment is slow**: hotel room occupancy rates and guest numbers are growing[30], but the activity still remains below pre-pandemic levels.

## Financial vulnerability of borrowers

**With inflation on a rapid descent and continued solid income growth, the financial situation of households is steadily improving. Although the household debt servicing burden has grown significantly, its impact on the economy and financial stability is alleviated by borrower support measures and limited by the still low level of indebtedness. Household debt repayment discipline is very good.**

### *Household solvency*

*Prepared by Andrejs Semjonovs*

**The financial situation of households is gradually improving.** The average wage has been rising faster than consumer prices since mid-2023, and households' purchasing power is overall expected to reach its pre-inflation-shock level this year.[31] According to Latvijas Banka's March 2024 forecasts, on average, income will outpace inflation this year and the following two years.

[29] According to SIA Colliers International Advisors' assessment, in 2023, industrial floor-space in Riga and Pierīga grew by 9%.
[30] According to the CSB data, the occupancy rate for hotel rooms in Riga and Latvia improved by 9% in 2023. The number of passenger arrivals and departures in Riga airport grew by 23% in 2023.

[31] The purchasing power of the average wage reached its previous peak in the third quarter of 2021.

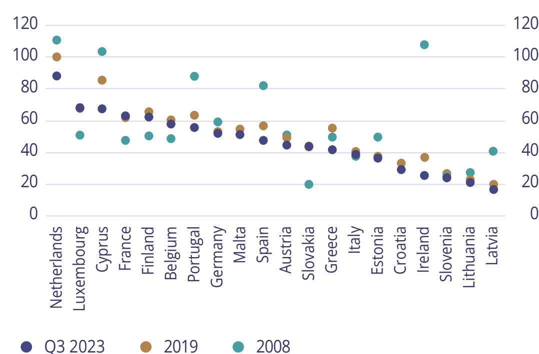
**Support to mortgage borrowers[32] reduces the insolvency risks of household borrowers, including the most vulnerable ones.** Support has been granted to a very wide range of household borrowers and, according to estimates based on the Credit Register data, the amount of support disbursed will not exceed 550 euro for half of the borrowers in 2024.[33] This support will reduce the debt servicing and daily spending burden on borrowers while boost the savings of others.[34]

**Some household borrowers are facing very low insolvency risks,** as suggested, for example, by the increase in early repayments of housing loans (see Section "Credit Risk"). The level of household deposits with MFIs also remains high.[35]

**The household debt burden has increased rapidly.** As a result of the interest rate hikes, the ratio of household debt payments payable to banks to their total disposable income grew significantly by 0.5 percentage point in 2023 (from 0.9% in 2022 to 1.4% in 2023). The ratio of calculated interest payable to non-bank lenders to disposable income increased by 0.1 percentage point (from 0.6% to 0.7% respectively). Debt burden to non-bank lenders grew on account of both higher interest rates on leasing loans and a significant expansion, by 20.5%, in loans granted by other lending service providers, including payday loans.

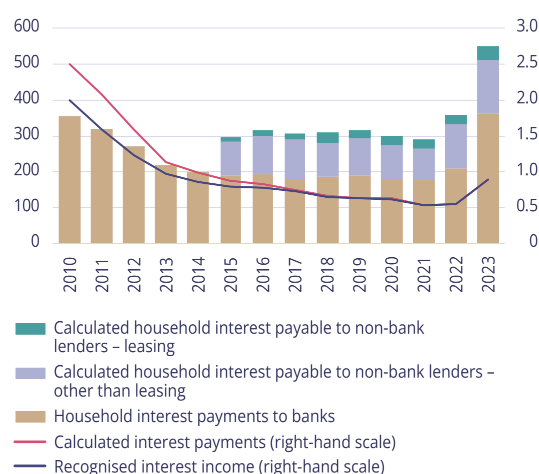
**As household indebtedness remains very low, the negative effect of the sharp increase in debt service burden on the economy and financial stability is limited.** Latvia's aggregate household debt[36] is the lowest in the euro area and amounted to 17.6% in the third quarter of 2023 (see Chart 1.18). The ratio of household interest payments to GDP in 2023 was at a level similar to that observed at the end of 2014[37]. Following the expected decline in lending rates, the debt burden will gradually shrink.

Chart 1.18
**Aggregate household debt in euro area countries**
(% of GDP)




Sources: ECB and Latvijas Banka's calculations.

Chart 1.19
**Household interest payments to MFIs and non-bank lenders** (left-hand scale; millions of euro)**, their ratio to GDP** (%)




Note. Data on interest payments to non-bank lenders are available since 2015.
Sources: Latvijas Banka, CSB and Latvijas Banka's calculations.

[32] In the light of the increased debt burden on household borrowers caused by the rising EURIBOR and inflation, amendments to the Consumer Rights Protection Law were made on 6 December 2023, imposing a fee in the amount of 0.5% of the total mortgage loans granted by the payer – credit institutions and capital companies registered in Latvia as well as permanent representations of credit institutions and capital companies of other countries in Latvia - as of 31 October 2023 for each quarter of 2024. The mortgage borrowers' protection fee is administered and disbursed to each eligible borrower by the State Revenue Service. The eligibility criteria are highly inclusive: 1) the mortgage contract was concluded by 31 October 2023; 2) the mortgage is secured by RE collateral which is located in Latvia; 3) the mortgage contract does not provide for fixing the interest rate throughout the life of the loan; and 4) the outstanding mortgage loan does not exceed 250 000 euro. The support has been set in the amount of 30% of the quarterly interest payments calculated according to the respective mortgage contract, but no more than 2 percentage points of the interest rate set for the given period (total borrowing rate). See more detail at: https://likumi.lv/ta/id/348453-grozijumi-pateretaju-tiesibu-aizsardzibas-likuma (in Latvian).

[33] The precise allocation of support will also depend on the interest rate developments in 2024 and the number of mortgage loans refinanced in the course of 2024 and/or the number of loans whose repayment schedule will be changed.

[34] According to AS Citadele banka and a survey conducted by Norstat research data company in March 2024, 42% of support beneficiaries intend to use it on housing loan repayments, 27% to cover daily spending, and 19% of beneficiaries plan to increase their savings.

[35] Deposits increased by 1.0% as compared to the first quarter of 2023.

[36] Debt to MFIs, leasing companies and other non-bank financial sector (other than leasing) participants, companies, and other households.

[37] At the end of 2023, the ratio of household interest payments to GDP was 1.4% (0.9% of GDP in relation to MFIs and 0.5% in relation to non-bank lenders).

**Household debt repayment discipline is very good.** In 2023, the gap between the calculated and recognised interest payments on household loans remained at its historically lowest level (see Chart 1.19). **With the financial situation of households gradually improving, inter alia, as a result of borrower support measures, repayment discipline is expected to remain strong this year.**

## *NFC solvency*

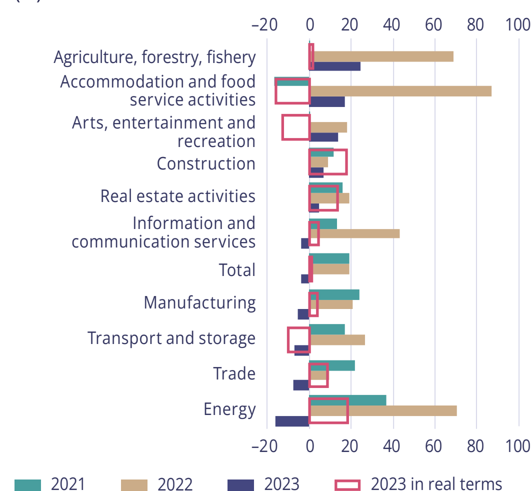
*Prepared by Jekaterina Petkeviča*

Latvia's economy had to face many challenges over the last four years. NFC turnover both contracted under the impact of the shallow economic recession and expanded with the return of demand following the lifting of Covid-19 restrictions. After being on an upward trend for two years, **the total turnover of NFCs has contracted** (by 4.0% in nominal terms in 2023[38], see Chart 1.20). This was mainly determined by lower turnover in the largest sectors of the economy: trade (–7.6%), manufacturing (–5.6%), and transport and storage (–7.3%).

**In real terms, the total turnover in 2023 was close to its pre-pandemic level in 2019** (an increase of 1.1%). At the same time, the sectors that suffered most from the pandemic (arts, entertainment and recreation, transport and storage) are still below their pre-pandemic turnover levels. Geopolitical tensions, the fact that certain sub-sectors remain rather heavily dependent on Russian and Belarusian markets, tighter conditions of the mobility package with regard to freight transportation in Europe, and weak economic development in external markets continue to have a negative effect on transport and storage. Although the turnover in construction has grown due to the implementation of Rail Baltica projects, the real annual turnover of the sector is significantly below its pre-pandemic level (–12.5% in 2023). Persistently high construction costs, sluggish private sector activity, a cumbersome approval process for construction projects, and a shortage of qualified labour are all headwinds to the sector's future growth.

The downward pressure on borrowers' profit has eased on account of the rapid decline in inflation and stabilisation of energy prices. **Overall, profitability**

Chart 1.20
**Annual changes in NFC turnover and changes in NFC turnover in 2023 in real terms compared to turnover in 2019**
(%)




Source: CSB.

**of NFCs has remained at the level of 2022** (4.0%) **and is still slightly lower than in 2019, before the pandemic.** At the same time, companies are no longer able to transfer the burden of costs to consumers, as suggested by a decline in their turnover. Another negative contributor to corporate profitability remains the steadily rising labour costs. **Therefore, several of the largest sectors have seen a fall in their profitability** (see Chart 1.21).[39] The weak economic development is expected to hinder the improvement of NFC solvency in 2024.

The effect of increased annual interest payments (0.34 percentage point relative to turnover) on NFC profitability is overall quite limited, with the exception of the RE activities sector (see Chart 1.21). **The profitability and solvency ratios of NFCs operating in the RE activities sector are highly sensitive to the rise of EURIBOR**, as interest payments on loans granted for RE development represent a large share of costs in companies engaged in RE activities. The sectoral profitability ratio notably decreased by 5.4 percentage points in 2023, albeit remaining relatively high at 6.47%.

**The overall debt servicing capability of NFCs has slightly weakened** under the impact of high interest

[38] In real terms, the contraction of turnover was more notable as a result of the high inflation observed in the first half of the year (–8.4%).

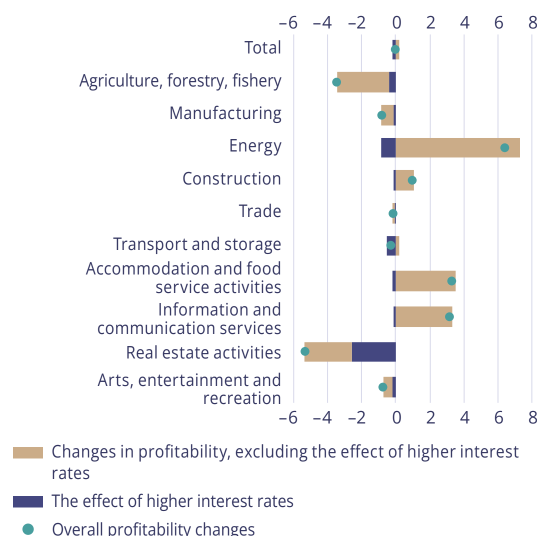
[39] For example, profitability in transport and storage has also been weak previously, profitability in agriculture, forestry and fishery as well as arts, entertainment, and recreation remain good despite its fall in 2023, whereas the weak external demand and high costs continue to have a negative effect on profitability in manufacturing.

rates, **but it remains good: earnings before interest and taxes are 7.0 times larger than interest payments**[40] (see Chart 1.22). Only the RE activities sector has seen a major decline in its debt servicing capability, with the interest coverage ratio retreating to a low level (2.0). Looking by sector, the interest coverage ratio has decreased, but it is still sufficiently high in other sectors, except accommodation, food service activities (4.9), and transport and storage (2.6), where the debt service capability has been historically low.

Over the last four years, **NFC indebtedness has decreased notably**, with debt-to-equity reaching 1.06 (1.49 and 1.17 in 2019 and 2022 respectively). This can be partly explained by both cash balances and equity in nominal terms growing in the circumstances of high inflation. Nevertheless, the capitalisation level of NFCs was also positively affected by the corporate income tax reform implemented in 2018 and supporting reinvestment of earnings in companies. At the end of 2023, the aggregate NFC debt stood at 42.4% of GDP (including debt to credit institutions and leasing companies amounting to 19.0% of GDP). A lower level of debt reflects the persistently weak investment and lending development.

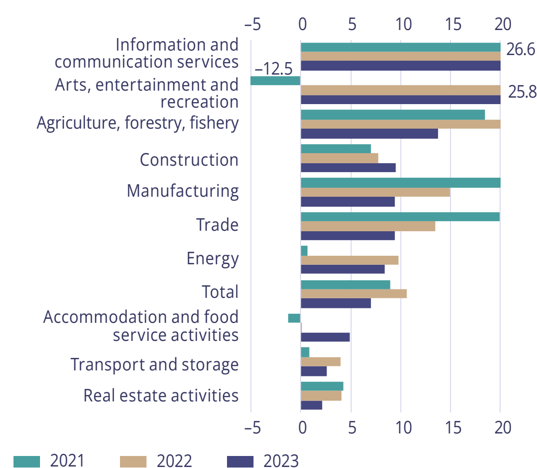
An increase in the number of insolvencies filed for legal entities in 2022 was followed by a decline in 2023, and the existing level is close to the historical low observed during the pandemic when a temporary restriction to file for insolvency of legal entities was imposed on creditors. According to SIA Lursoft data, the number of newly registered companies remained broadly unchanged in 2023 as compared to 2022, while being the lowest figure of the last twenty years. **The insolvency risks faced by NFCs remain contained, as businesses are still cautious to pursue new investment projects requiring large financing.**

Chart 1.21
**Changes in NFC profitability* and impact on profitability from higher interest rates**
(percentage points)




* The ratio of earnings before tax to turnover in the respective sector.
Source: CSB.

Chart 1.22
**NFC's interest coverage***
(times)




* The ratio of earnings before taxes and interest to interest payments in the respective sector and period.
Source: CSB.

[40] The 12-month moving interest coverage ratio stood at 7.0.

# 2. Developments and risks in the credit institution sector

## Lending development

**Lending has remained weak for an extended period of time. Following a temporary but notable increase at the end of 2022, the pace of domestic lending has slowed once again. This is largely due to a sharp rise in interest rates, low economic activity, and the repayment of short-term loans to the NFC sector. Both banks and borrowers remain cautious, and several structural factors continue to weigh on lending. Lending is still insufficiently supportive of investment, with the credit-to-GDP ratio remaining at very low levels. The non-bank portfolio of loans to households and NFCs continues to grow faster than the respective bank loan portfolio.**

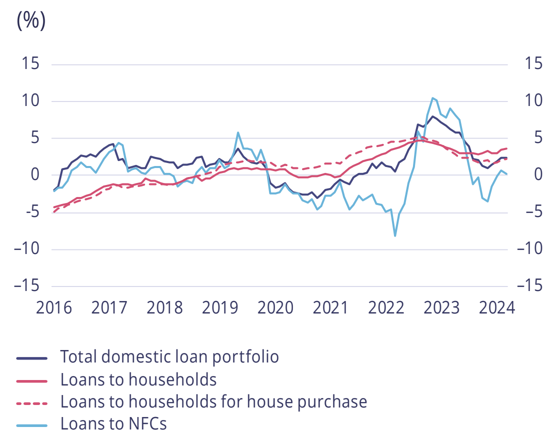
### *Lending by credit institutions*

*Prepared by Andrejs Kurbatskis*

**Domestic lending has slowed down**. The annual growth rate of domestic loans was 2.4% in March 2024 (down from 6.3% in March 2023)[41]. A significant slowdown has been observed for loans to NFCs, while the dynamics of lending to households are more resilient. According to the euro area bank lending survey, demand for credit from both NFCs and households declined in 2023 and early 2024, while bank lending standards were generally slightly tightened.[42]

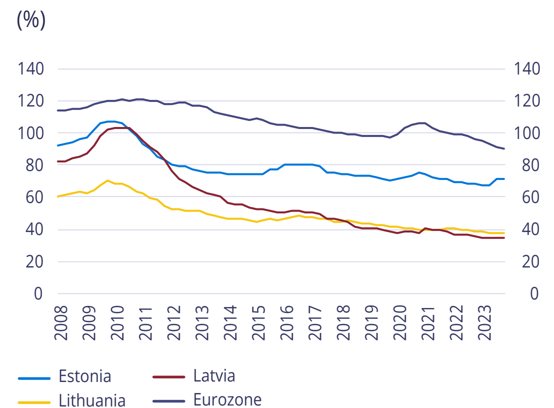
**The ratio of domestic loans[43] to GDP remained very low** and stood at 34% at the end of 2023, well below not only the euro area average, but also that of neighbouring Estonia (91% and 72% respectively; see Chart 2.2). **Insufficient lending support for investments, as well as a persistently weak investment environment and economic growth are relevant and systemically important problems**, especially considering the urgent need for large-scale investments in improving energy efficiency and for the co-financing required to capitalise on the opportunities provided by Next Generation EU.

Chart 2.1
**Annual rate of change in loans to domestic NFCs and households**
(%)




Source: Latvijas Banka and its calculations.

Chart 2.2
**Domestic loan-to-GDP ratio**
(%)




Sources: ECB, Eurostat and Latvijas Banka.

**Lending to NFCs has remained weak for an extended period of time.** Following short-lived but notable growth at the end of 2022, the annual rate of change of bank lending to NFCs is again close to zero (0.2% in March 2024). Lending dynamics have been very volatile over the past two years, driven by overdrafts, credit lines, and other short-term loans used to increase current assets. In 2022, outstanding short-term loans expanded rapidly, as the corporate demand for short-term financing to fund their current assets increased amid high inflation and a significant rise in energy prices. In 2023, however, these loans (mainly in energy) were repaid, and so the contribution of short-term loans to the annual changes in loans to NFCs remained negative,

[41] For the purposes of comparison, the one-off effects associated with the structural changes in the banking sector and the sectoral reclassification have been excluded from the sections on lending development and credit risk as well as their Charts (apart from Chart 2.2).

[42] According to a survey conducted by the ECB in April 2024, lending standards may be eased somewhat further as banks expect some growth in demand.

[43] The outstanding loans to domestic non-financial corporations, households, non-bank financial institutions, and general government.

also at the beginning of 2024. Long-term loans and leasing (mainly leasing provided by bank-linked leasing companies) show moderate growth (see Chart 2.3).

**Growth of long-term loans to NFCs is mainly driven by real estate activities** (see Chart 2.4). While the rise in interest rates significantly limits the development of new real estate projects and activity in the real estate market has declined significantly (see the Section "Commercial property market"), credit growth has been driven by the contracts concluded in 2021–2022, under which a significant part of the financing was disbursed in 2023. To a large extent, the financing has been provided for the construction of energy-efficient office premises.

**As a result of rising interest rates, the growth rate of loans to households has decelerated only marginally.** Annual growth of loans to households stood at 3.6% in March 2024.

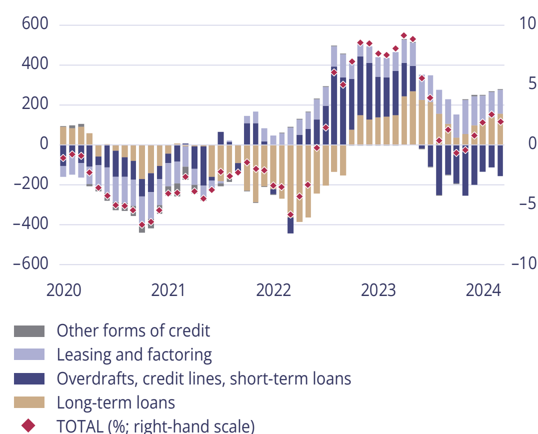
**The rise in interest rates has somewhat limited the provision of housing loans**, which constitute the largest share (83%) of the household loan portfolio in the banking sector. The volume of new housing loans is lower than in 2021–2022, when it was relatively significant, but still significantly exceeds the volume of new housing loans in all previous years since the 2008 crisis. The annual growth rate of the outstanding housing loans also declined moderately in 2023, **although there has been a slight uptick in recent months** (see Chart 2.5). In March 2024, the annual growth rate of housing loans stood at 2.3%.

**The state support programme for house purchase continues to be actively used in housing lending.** Its role in new housing loans continued to gradually decline in 2023 and early 2024, while its role in outstanding housing loans continued to grow slowly. In 2023, 36% of new residential loans were issued under the programme, with loans with a state guarantee already accounting for 34% of the outstanding housing loans at the end of the year. In an environment of rising interest rates, housing lending is more severely constrained by the debt service-to-income (DSTI) requirement and, to a relatively lesser extent, by the insufficient savings for the down payment and the fulfilment of the loan-to-value (LTV) requirements addressed by the guarantee programme. At the same time, the guarantee programme plays an important role in regions (outside Riga and Pieriga) where bank lending standards are stricter and lending activity is much lower. The recently adopted programme amendments,

Chart 2.3

**Annual changes in the domestic NFC loan portfolio of banks and related leasing companies**

(millions of euro)

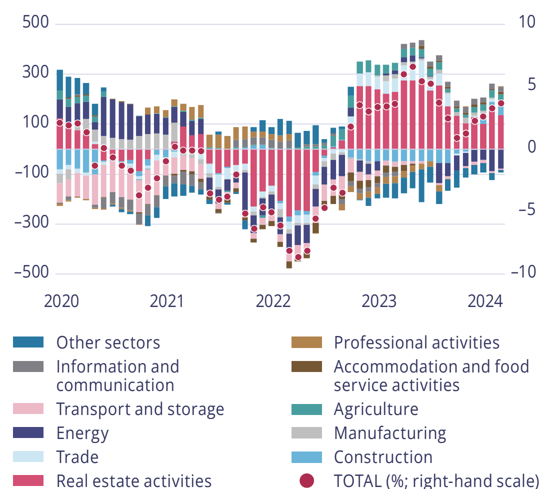



Source: Latvijas Banka and its calculations.

Chart 2.4

**Annual changes in long-term loans to NFCs of banks and related leasing companies**

(millions of euro)

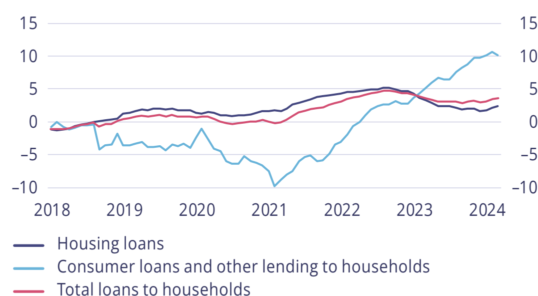



Source: Latvijas Banka and its calculations.

Chart 2.5

**Annual rate of change in loans to domestic households**

(%)




Source: Latvijas Banka and its calculations.

which provide for more support in Latvia's regions,[44] are generally viewed positively. Improvements to the programme remain relevant to ensure that government support is more targeted.[45] This includes measures to prevent inefficient use of the programme funds as some borrowers apply for the programme solely to benefit from reduced stamp duty for property registration in the Land Register.

**Since the beginning of 2023, there has been a significant increase in outstanding consumer loans and other bank lending. However, at present, this trend does not pose significant risks to financial stability.** These loans still account for a relatively small share of the household loan portfolio in the banking sector (17% in March 2024). In the context of high interest rates, consumer credit became more attractive than housing loans in some cases, due to simpler conditions for obtaining it and a narrowing interest rate spread. Unlike housing loans, which are largely tied to money market indices, consumer credit is typically offered at fixed interest rates, which have seen minimal increases. While the average interest rate on consumer credit remains significantly higher than that on housing loans, for small amounts of credit, the difference in credit payments may be negligible. Part of the increase in consumer credit could be explained by a more active provision of such credits for renovation and energy efficiency solutions (e.g. for the purchase of solar panels). A temporary drop in household purchasing power due to high inflation may have also contributed to a more active use of consumer credit. It is noteworthy that this increase is primarily observed in the sub-category of consumer loans (other than credit card loans).

**Lending is likely to remain sluggish in 2024,** mainly due to weak corporate lending. A downturn in the commercial property market would, most likely, affect lending activity in the capital-intensive real estate sector, which accounts for the most significant share of the corporate loan portfolio. For the time being, it continues to stimulate growth in long-term loans to NFCs. However, there is some inertia in lending for real estate activities, as the dynamics of lending in this sector are largely influenced by the financing of large projects that typically involve extended implementation periods and some of the loans are granted in instalments. Companies in other industries also remain cautious in implementing large-scale investment projects. The outlook for housing lending is more optimistic, as the inflation shock has passed, and the financial situation of households is gradually improving. With real income growth and the gradual decline in interest rates, housing-related lending will continue to grow moderately.

### *Lending by the non-bank financial sector*

*Prepared by Kārlis Ločmelis*

**Non-bank lending continues to grow faster than the loan portfolio of banks.** In 2023, the domestic loan portfolio of non-bank lenders to households and NFCs increased by 11.3%. **The total loan portfolio of credit institutions and non-bank lenders to domestic NFCs and households grew by 2.6% in 2023.**

In 2023, the loans granted to domestic NFCs by leasing companies rose by 7.4% year on year. This was facilitated by the normalisation of supply chains, enabling car dealers to replenish vehicle stocks in their warehouses and expedite deliveries to their customers. Farmers were also actively using leasing funding to modernise their machinery for more efficient field management, even amidst sharp increases in interest rates.

In 2023, loans granted to domestic households by leasing companies expanded by 2.1% year on year (compared to 6.0% in 2022). Due to the sharp rise in interest rates, some households chose to repay their loans, either in full or in part, ahead of schedule, while others opted to refinance them for longer terms to lower their monthly payments.

**In 2023, inflation continued to impact the car market, reducing the credit risk of the existing car leasing portfolio, but increased the potential credit risk associated with new car leasing loans.** Average car price inflation in the euro area was 5.0% in 2023 (down from 8.2% in 2022). The growing car prices influence the risk of the leasing loan portfolio in two, contradictory, ways. They reduce the risk of the existing leasing loan portfolio, as the value of collateral increases. At the same time, the risk of new leasing loans rises, since the average amount of funding for the purchase of a car and loan servicing costs are higher.

**The annual growth rate of loans to households from other non-bank financial sector companies (excluding leasing companies) has been around**

[44] https://lvportals.lv/dienaskartiba/361801-palielinas-valsts-garantiju-majokla-buvniecibai-vai-iegadei-gimenem-latvijas-regionos-2024.

[45] See Latvijas Banka's Financial Stability Report 2022.

**20% for more than two consecutive years**, with these loans amounting to 600 million euro at the end of 2023. This is due to increases in prices and wages, enabling borrowers to qualify for larger loans. However, with the debt burden growing faster than wages, the solvency of these households becomes constrained, increasing the risk of falling into a debt trap. This may lead to reduced future consumption, hinder the ability to save for a down payment for the purchase of housing, and limit the available funds for other investments.

## Credit risk

*Prepared by Andrejs Kurbatskis*

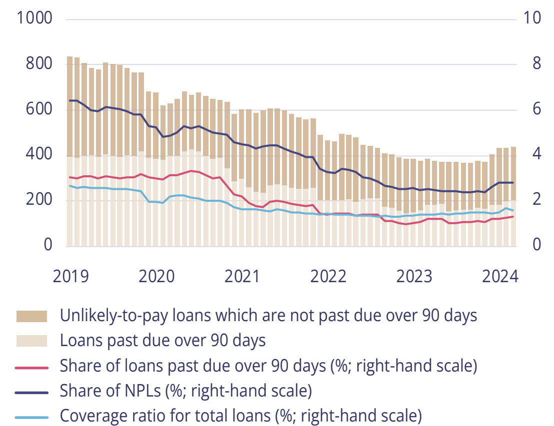
**In an environment of persistently weak economic activity coupled with a significant rise in interest rates, credit risk in the loan portfolio of the banking sector has increased with some time lag, as previously expected. While there has been a slight deterioration in the quality of the corporate loan portfolio, the still high profitability and capitalisation of credit institutions enhance their resilience to a potential further deterioration of the loan quality.**

**Following a protracted decline in NPLs to a historically low level, their share started to increase slightly at the end of 2023** (see Chart 2.6). The outstanding NPLs mainly increased for specific vulnerable companies[46]. The share of NPLs in the total loan portfolio increased from 2.4%[47] in September 2023 to 2.8% in March 2024. Accordingly, the loan loss provisions also increased slightly (see Chart 2.6).

**The outstanding amount and share of forborne loans, which surged during the pandemic but gradually declined later, have begun to slowly increase again since the second half of 2023** (see Chart 2.7). An early sign of deterioration in the loan portfolio quality is the increase in forborne loans other than NPLs. Borrowers of these loans have been granted concessions due to financial difficulties to prevent (sometimes very proactively) the entrenchment of problems and, as much as possible, avoid further migration of these loans to NPLs. The share of forborne loans other than NPLs in the total loan portfolio stood at 3.1% in March 2024 (compared to 2.4% the previous year).

[46] The largest loan, which became an NPL in December 2023, is reflected in the statistics as a loan to a foreign company, as the company is registered in another euro area country. However, this company operates in Latvia and the loan was issued to finance a local project.
[47] This section analyses the preliminary credit quality data at an individual bank level.

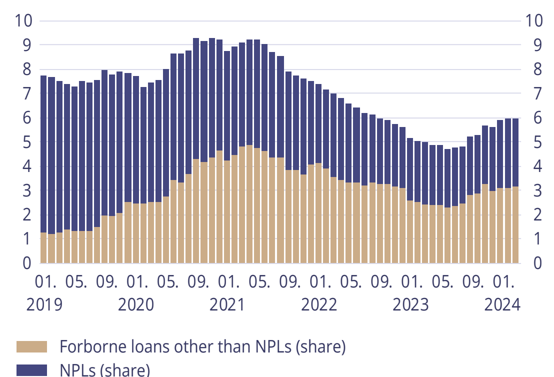
Chart 2.6
**NPLs** (millions of euro) **and the share of NPLs and provisions in the total credit institution loan portfolio** (%)




Unlikely-to-pay loans which are not past due over 90 days
Loans past due over 90 days
Share of loans past due over 90 days (%; right-hand scale)
Share of NPLs (%; right-hand scale)
Coverage ratio for total loans (%; right-hand scale)

Source: Latvijas Banka and its calculations.

Chart 2.7
**NPLs and forborne loans other than NPLs**
(% of total loan portfolio)




Forborne loans other than NPLs (share)
NPLs (share)

Source: Latvijas Banka and its calculations.

**From a sectoral perspective, the forborne loans increased only in the domestic NFCs sector** (to 7.9% in March 2024; see Chart 2.8). However, forborne loans and NPLs to domestic NFCs are still below the levels reached during the pandemic. While an increase in forborne loans could indicate a risk of a future increase in NPLs, it should be noted that the surge in forborne loans witnessed during the pandemic did not result in a subsequent rise in NPLs.

**NPL growth has so far been observed for a small number of companies, while many companies in a number of industries have significant increases in forborne loans.** This shows that so far borrowers have generally been able to avoid serious solvency problems. At the same time, the interest rate shock, accompanied with the still weak economic activity and industry-specific problems, posed some difficulties for a wide range of borrowers. The increase in NPLs was strongly influenced by two companies that encountered

difficulties several years ago. Furthermore, the companies' ties to Russia amplified the negative dynamics following its invasion of Ukraine. Forborne loans have increased significantly in real estate activities as well as in manufacturing and agriculture, which have experienced a notable decline in profitability (see the Section "NFC solvency"), as well as in trade (see Chart 2.9).

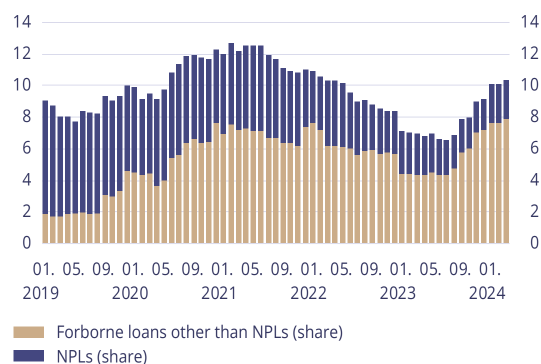
**In the household sector, the quality of the loan portfolio has not changed significantly.** Since the beginning of 2023, the outstanding amount and share of NPLs have increased slightly from their historical lows, particularly on account of stronger NPL increase in consumer credit and other non-housing lending, although this constitutes a relatively small portion (17% in March 2024) of the domestic household loan portfolio. The share of forborne loans in the household sector continues to decline gradually (see Chart 2.10).

**The outstanding amount of Stage 2 loans[48] and their share in the total loan portfolio has remained broadly unchanged.** Stage 2 loans are slightly increasing in the domestic NFC sector but decreasing in the domestic household sector. A significant part of domestic NFC loans granted forbearance measures in recent months have already been classified as Stage 2 loans under accounting standards.

**The amount of provisions made for problem loans has been increased, improving the resilience of credit institutions in the event of a potential deterioration in loan quality.** The level of provisions for Stage 3 loans has historically been relatively low and its adequacy has previously received increased scrutiny.[49] Since 2023 overall, provisions have increased for both Stage 3 and Stage 2 loans (see Chart 2.11). It should be noted that, in addition to the provisions for expected losses recognised in the financial statements, individual banks also adjust their common equity Tier 1 capital[50]. This has a significant impact on the total amount of provisions for supervisory purposes (a total of 19% of the outstanding NPLs as of December 2023).

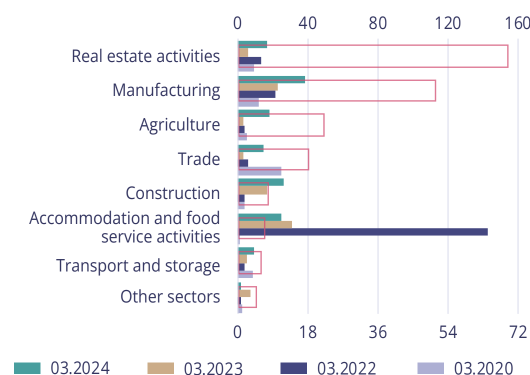
**As economic development remains weak, there may be a further deterioration in the quality of the loan portfolio, which may primarily affect the portfolio of loans to NFCs.** However, as experience

Chart 2.8
**NPLs and forborne loans other than NPLs in the domestic NFC loan portfolio**
(% of loan portfolio)



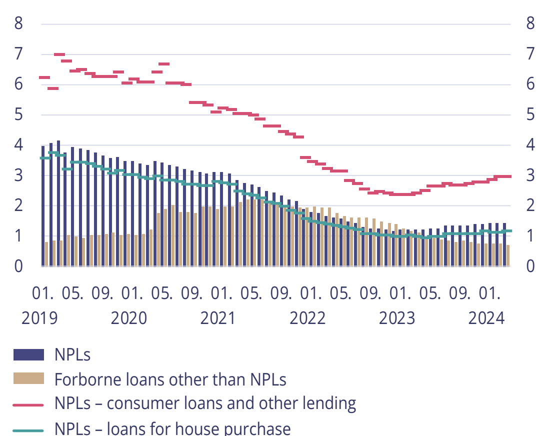

Source: Latvijas Banka and its calculations.

Chart 2.9
**Forborne loans to domestic NFCs other than NPLs by sector (March 2024) and the share of these loans in the loan portfolio of the respective sector**
(%)




Source: Latvijas Banka and its calculations.

Chart 2.10
**NPLs and forborne loans other than NPLs in the domestic household loan portfolio**
(% of relevant loan portfolio)




Source: Latvijas Banka and its calculations.

[48] Stage 2 loans are loans whose credit risk has increased significantly since the initial recognition, but they are not yet credit-impaired within the meaning of IFRS 9.
[49] See, for instance, Latvijas Banka's Financial Stability Report 2022, p. 40.
[50] CET1 capital deduction in accordance with Article 3 of the Capital Requirements Regulation (CRR). Some credit institutions in Latvia make capital adjustments for an insufficient amount of provisions for credit risk.

has shown, the increase in forborne loans to NFCs does not necessarily lead to further significant increases in NPLs, as forbearance measures often help to prevent defaults. In the household sector, the quality of the loan portfolio is less likely to deteriorate, as the financial situation of households is gradually improving, and borrower support measures further reduce risk. It is important that credit institutions **continue to carefully assess credit risk, recognise problematic loans in a timely manner, and build up appropriate provisions for expected losses.**

## Funding and liquidity risks

*Prepared by Mārcis Risbergs*

**Funding and liquidity risks remain low. This is mainly due to the stable amount of deposits from the domestic private sector, which significantly exceeds the amount of loans granted to the national economy, the still high level of claims on Latvijas Banka, and limited investment in high-risk assets.**

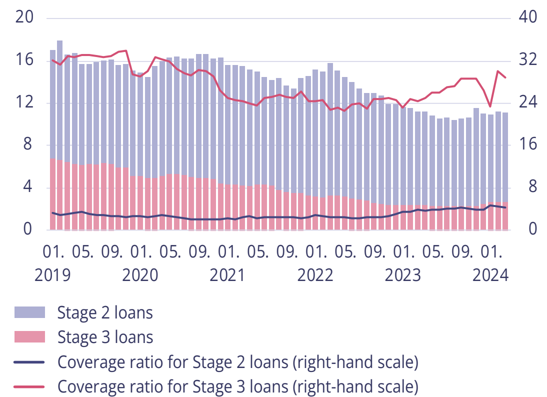
**The total balance sheet of the credit institution sector continues to grow slowly** (in the first quarter of 2024, annual growth was slightly above 5%; see Chart 2.12). It is mainly driven by an increase in deposits from the domestic private sector. On the asset side, this trend is supported by claims on Latvijas Banka (primarily Latvijas Banka's deposit facility operations), which increased by 24% over the year, as well as by moderately increasing domestic lending. Substantial amounts of funding continue to be lent to parent banks.

**Domestic non-bank deposits continue to be the primary source of financing for credit institutions.** 2In March 2024, they accounted for 80% of the total funding attracted by credit institutions, with a moderate annual growth rate of 3%, mainly sustained by an annual 4% increase in NFC deposits (see Box 2.1 "Dynamics of NFC deposits with credit institutions by sector"). Meanwhile, household deposits resumed moderate growth after contracting in the second half of 2023 (see Chart 2.13).

**Growth of domestic household deposits with credit institutions is hindered by an increasingly active investment of financial resources in other financial instruments** (see Chart 2.14). In March 2024, household investments in financial instruments reported by credit institutions[51], as well as investments in Treasury savings

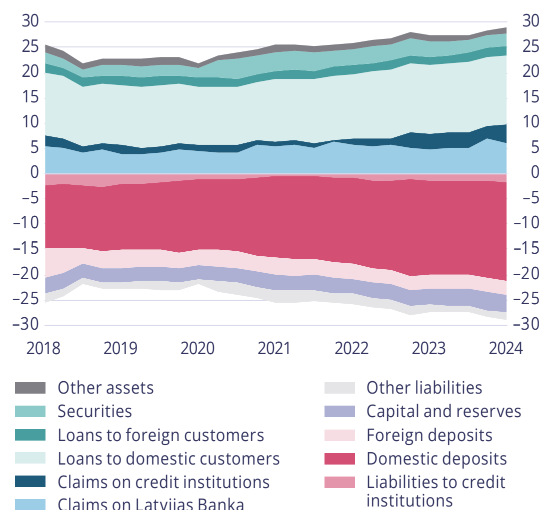
[51] Household investments in debt securities, shares, investment funds held by Latvian credit institutions.

Chart 2.11
**Stage 2 and Stage 3 loans** (% of the total loan portfolio) **and the coverage ratio for these loans** (%)



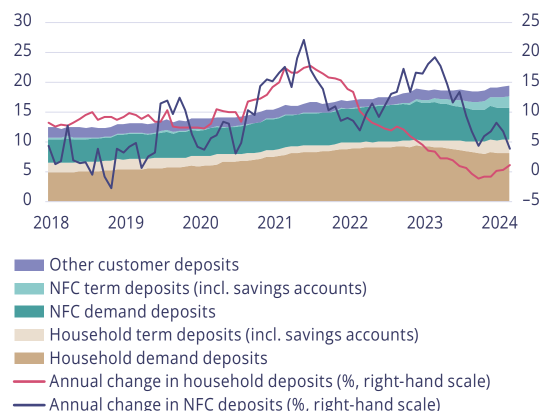

Source: Latvijas Banka and its calculations.

Chart 2.12
**Structure of credit institution assets and liabilities**
(billions of euro)




Source: Latvijas Banka.

Chart 2.13
**Developments in domestic customer deposits**
(billions of euro)




Source: Latvijas Banka.

bonds totalled 1.7 billion euro or 16% compared to the amount of domestic household deposits attracted by credit institutions (12% a year ago). Households invest mainly in quoted shares, but also, to a lesser extent, in investment funds and long-term debt securities. Over the past year, the amount invested in Treasury savings bonds has increased significantly, driving the surge in household investments in financial instruments since 2023. The total annual growth rate of investments reached 42%, mainly due to an increase in business volumes. However, it should be noted that overall household investments in financial instruments accounted for only 4% of households' disposable funds at the end of 2023[52], which is low compared to other euro area countries.

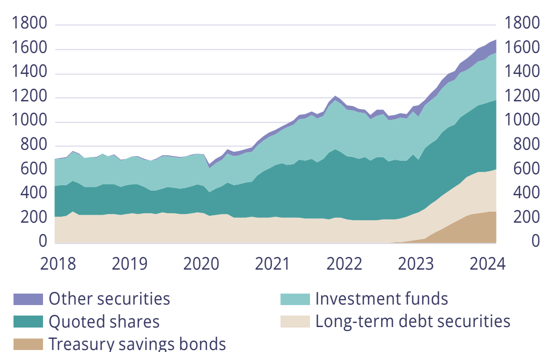
**As the share of time deposits in total deposits increased, the overall margin between interest rates on loans and deposits, while beginning to narrow somewhat, remains much higher than in the past ten years** (see Box 2.2 "Impact of interest rate changes on the interest rates offered by credit institutions").

**The rise in interest rates significantly contributed to the steady increase in NFC deposits, as it motivated many companies to manage their excess funds more efficiently by placing them in short-term term deposits**. Furthermore, the increase in NFC deposits was bolstered by a recovery in consumer purchasing power, along with rising private consumption and increased public investment in the second half of 2023 (see the Section "Domestic macrofinancial environment"). **Meanwhile, the dynamics of household deposits may be improved by the economic recovery and the strong labour market**, as well as by the compensation for interest payments on housing loans to borrowers in 2024.

**Deposits from foreign customers also resumed growth**, with the annual growth rate reaching 8% in March 2024 (compared to –10% a year ago). This recovery occurred as some Latvian credit institutions shifted their funding sources from the ECB TLTRO III operations to deposits from EU platforms, which are potentially more accessible than deposits from domestic customers. As a result, the deposited amount collected from EU internet platforms increased by 58% over the year (see Chart 2.15). In turn, **deposits from foreign customers attracted from non-EU countries continue to decrease and account for only 4% of the total deposits attracted.**

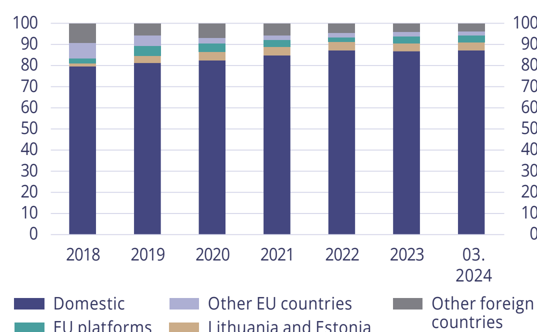
[52] National Financial Accounts, Latvijas Banka.

Chart 2.14
**Securities held by Latvian households in EU credit institutions and Treasury savings bonds**
(millions of euro)




Sources: Latvijas Banka and the Treasury.

Chart 2.15
**Structure of deposits attracted by credit institutions by country**
(%)



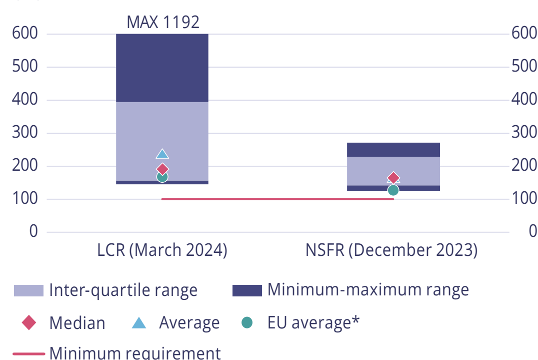

Source: Latvijas Banka.

**Credit institutions still need not seek market financing to fund their loan portfolio**, as the domestic loan-to-deposit ratio remains low (72% in March 2024). The four largest credit institutions, with their domestic deposits, are able to fully finance domestic loans. If deposits attracted from euro area countries (mainly those raised from deposit platforms) are additionally taken into account, almost all credit institutions can finance domestic loans without attracting additional market funding, except for small branches of foreign credit institutions, which usually use parent bank financing in Latvia. At the same time, there are credit institutions in the Baltic States which regularly attract funds from the financial markets, with their branches also operating in Latvia.

**The liquidity ratios of credit institutions remain robust.** The LCR and NSFR ratios are well above the minimal liquidity requirements (see Chart 2.16). Credit

institutions have accumulated large amounts of liquid assets. They are mainly supported by the high ECB deposit rate, which facilitates participation in Latvijas Banka's deposit facility operations, as well as moderate credit growth. In March 2024, claims on Latvijas Banka accounted for 72% of the liquid assets of the LCR and 21% of the total assets of credit institutions. Liquidity stress tests conducted by Latvijas Banka also show that there are no significant liquidity risks in the banking sector (see the Section "Liquidity stress tests of credit institutions").

Chart 2.16
**LCR and NSFR of credit institutions**
(%)



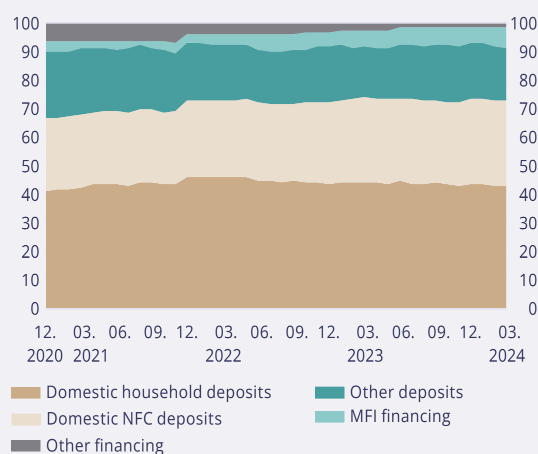

* EBA Dashboard, December 2023.
Sources: Latvijas Banka and EBA.

# Box 2.1. Dynamics of NFC deposits with credit institutions by sector

*Prepared by Mārcis Risbergs*

**Over the past year, growth in deposits with credit institutions from the domestic non-bank private sector has continued to be supported by developments in NFC deposits.** LAlthough deposits from domestic households remain the largest funding source for credit institutions (see Chart 2.17), their growth rate was close to zero or even negative over the past year. As a result, domestic NFC deposits play an increasingly important role in the funding structure of credit institutions (30% at the end of 2023).

Chart 2.17
**Structure of financing attracted by Latvian credit institutions**
(%)




Source: Latvijas Banka.

Statistics provided by credit institutions do not provide more detailed information on deposits from NFCs by sector, therefore data from the CSB NFC survey have been used for an in-depth analysis of NFC deposits. They provide insights into the dynamics of NFC deposits by sector and the overall trends in Latvian NFC deposits, including deposits held with credit institutions in other countries. At the end of 2023, these deposits accounted for 8.1 billion euro (11% more than the total of domestic NFC deposits held with Latvian credit institutions) and their annual growth rate was 7.9% (1 percentage point higher than deposits attracted by Latvian credit institutions). Survey data show that **developments differ widely across sectors** (see Chart 2.18).

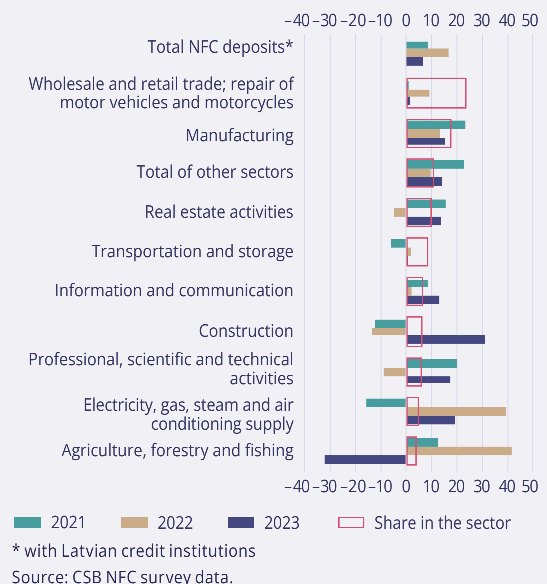
The trade and manufacturing sectors account for the largest deposits, followed by real estate activities and the construction sector. Furthermore, **the manufacturing and construction sectors make the largest contributions to sustaining the growth rate of NFC deposits**.

Various subsectors have also experienced notable increases. The subsectors of forestry and the manufacture of products of wood exerted the most downward impact on the growth of NFC deposits. Conversely, subsectors

such as the manufacture of communication equipment, computer programming, and the rental of real estate contributed positively to deposit growth.

Overall, experience of other EU countries shows that when interest rates on loans increase faster than interest rates on deposits, companies, driven by financial motives, typically prioritise loan repayment, thereby reducing their accumulated financial resources. However, this trend is not observed across most Latvian sectors. There could be several reasons for this – the specific nature of companies' activities, periodic accumulation of funds, and uncertainty for the future, leading companies to hold onto financial resources, refrain from investments, and avoid taking on credit obligations.

Chart 2.18
**Annual growth rate of NFC deposits with credit institutions by sector and the share of sector deposits in total NFC deposits with banks**
(%)




* with Latvian credit institutions
Source: CSB NFC survey data.

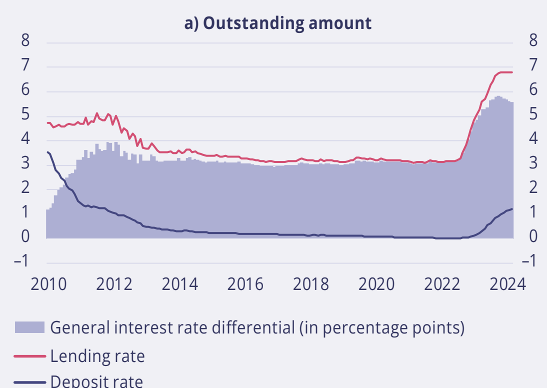
# Box 2.2. Impact of interest rate changes on the interest rates offered by credit institutions

*Prepared by Mārcis Risbergs and Mikus Āriņš*

The ECB's efforts to combat inflation resulted in a significant increase in borrowing interest rates in Latvia. At the same time, there were concerns that a corresponding rise in interest rates was not observed also on the deposit side. This box assesses how the increase in market interest rates has been passed on to interest rates on loans and deposits in Latvia.

**The spread between the average interest rates charged by credit institutions on loans from and deposits to domestic customers** (see Chart 2.19, panel (a)) has been stable over an extended period of time, at around 3 percentage points. However, with market interest rates on the rise, the spread between the total outstanding loans and deposits has widened significantly, owing to slower increases in average deposit rates compared to average lending rates.

Chart 2.19
**Average interest rates on credit institution loans granted to and deposits attracted from domestic households and NFCs** (%) **and their differential**
(in percentage points)

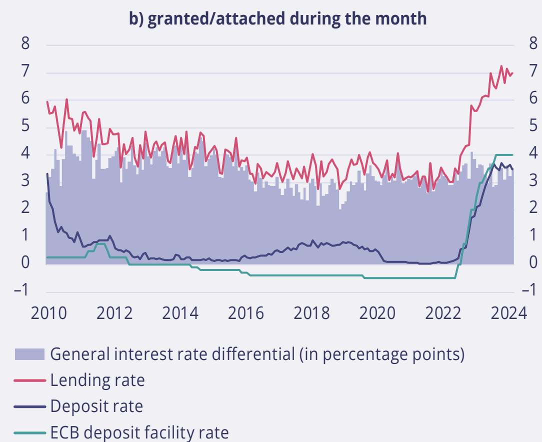



**This is partly due to differences in setting interest rates on loans and deposits.** According to the specific agreement terms, interest rates on loans are adjusted as the fixed term of the variable lending rate, typically 3, 6, or 12 months, expires.[53] Thus, **the average lending rates in Latvia increase almost simultaneously with the rise in market interest rates** and borrowers are not required to participate in rate adjustments, as

[53] More than 90% of loans to domestic households and NFCs are at variable interest rates. The interest rate for these loans typically consists of a fixed part that is constant throughout the life of the loan and a variable part that is linked to one of the market reference rates, such as EURIBOR.

these are already stipulated in the loan agreement.

In turn, deposit rates on term deposits are usually fixed in the contract for the remaining term of the deposit, but they are adjusted in accordance with the policy and price list of the respective credit institution. Moreover, the transfer of deposits from demand deposits into term deposits or savings accounts is not automatic: the depositor is required to take action by concluding an agreement and transferring the funds in the current account to the term deposit account or the savings account. Thus, **the average deposit rates depend both on the interest rates offered by credit institutions and on the behaviour of depositors**.




Notes. The deposit rate on outstanding deposits covers all deposits, whereas for deposits issued in a given month, only time deposits are covered.

The overall interest rate spread is calculated as the difference between the average lending rate and the average deposit rate.

The ECB deposit facility rate is one of three interest rates set by the ECB every six weeks as part of its monetary policy. The rate defines the interest banks receive for depositing money with the central bank overnight.

Sources: Latvijas Banka and ECB.

To exclude the effect of depositor behaviour, one can compare only the interest rates on loans granted and those on term deposits and savings accounts[54] attracted in the respective month (see Chart 2.19, panel (b)). This breakdown reveals that **the average interest rates on new term deposits and savings accounts have followed the general interest rate developments relatively closely.** Accordingly**, one of the main factors explaining the interest rate spread between average loans and deposits was the slow growth of interest-bearing deposits.**

An analysis of the movement of the average interest rates on domestic households (see Chart 2.20, panel (a)) and NFCs (see Chart 2.20, panel (b)) deposits toward the ECB deposit facility rate shows that, at the start of the ECB interest rate hikes at the end of 2022 and in the first half of 2023, these average deposit rates followed the ECB interest rates relatively slowly. Aggregate interest rates on household term deposits only surpassed the interest rates on newly attracted term deposits at the beginning of 2024. This suggests that the outstanding amount of new term deposits increased only slowly compared to that of the existing term deposits. Meanwhile, for NFCs, this trend is less clear, as new transactions include short-term deposits with low interest rates that are not reflected in outstanding deposits as term deposits. However, there was a tendency for NFC deposit rates to approach the deposit facility rate set by the ECB in early 2023. This was likely due to the funds deposited by large companies, which have alternatives to placing funds in financial markets, and typically manage large amounts of deposits by placing them in short-term accounts.

**Meanwhile, interest rates on demand deposits increased very slowly, contributing significantly to the widening gap between lending and deposit rates.** For households, this growth rate was bolstered by the inclusion of a savings account service with no notice period, offered by a major market participant, in the interest rate statistics, under demand deposits. The rate on these deposits is reflective of the average savings account rate in the market. Later, other credit institutions also started to pay interest on household demand deposits over various periods of time, but their impact on the increase in the overall interest rate in the banking sector was negligible.

**Thus, it can be concluded that one of the main reasons why the overall interest rate spread between deposits attracted and loans granted remains so high is the relatively passive transformation of demand deposits into term deposits.** This may be explained by the persistently low interest rate environment, particularly the sluggish movement of household funds into term deposits.[55] However, it cannot be

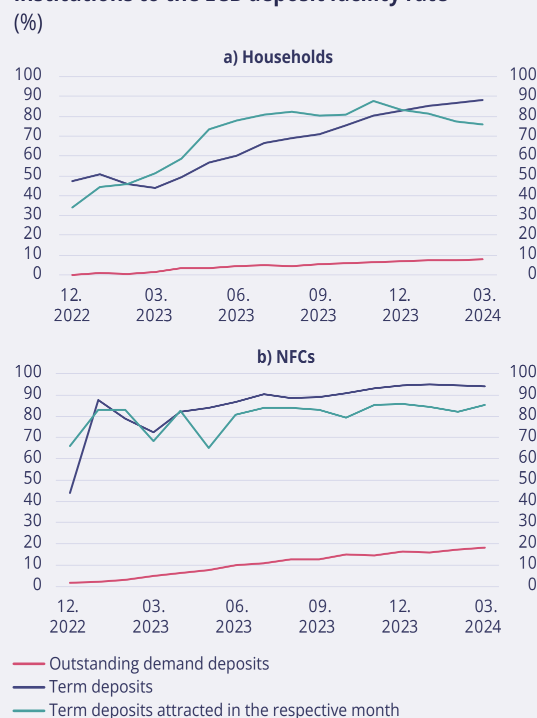
[54] Savings accounts are defined here as deposits redeemable at notice. Although some credit institutions also have savings accounts with no notice period, they are not distinguishable from demand deposits in the statistics, and therefore the amount deposited in a given month cannot be determined.

[55] More information on changes in household savings see in the blog article of Anete Kravinska, economist of Latvijas Banka: "Krājam zeķē jeb kāpēc Latvijas iedzīvotāji izvairās noguldīt un ieguldīt?" ("Stash the Cash: Why Do Latvians Refrain from Making Deposits or Investments?")

excluded that the hesitancy of households to place their deposits in savings accounts and term deposits was also influenced by the fact that the deposit rates offered by credit institutions initially lagged behind the market interest rates. Banks were also discouraged from adjusting quickly to market interest rates, as their loan-to-deposit ratio was approximately 0.7, meaning that banks did not have an acute need for additional funding. In addition, the Treasury offered favourable terms for savings bonds, attracting a significant portion of funds that households wanted to invest for one year or more. This compelled credit institutions to raise interest rates on the term deposits with similar maturity. Meanwhile, NFCs managed their available funds more efficiently, more quickly, and on a larger scale by capitalising on the yields offered for short-term deposits.

In order to promote financial literacy of citizens and NFCs, and motivate the use of term deposits, Latvijas Banka started publishing an overview of interest rates offered by credit institutions in April 2023, covering the largest banks in Latvia and the Baltics.

Chart 2.20
**Ratio of the interest rate on euro deposits placed by domestic households and NFCs with credit institutions to the ECB deposit facility rate**
(%)




Sources: Latvijas Banka and calculations by the ECB and Latvijas Banka.

## Profitability

*Prepared by Mikus Āriņš*

**In 2023, the profitability of credit institutions increased significantly. This was driven by the surge in market interest rates, the predominance of variable interest rate loans in the credit institutions' portfolios, as well as the continuously stable quality of the loan portfolio and slower growth of credit institutions' interest expenditure. Changes in the corporate income tax regime and the introduction of a mortgage borrower protection fee reduced credit institutions' profits. However, the profitability of these institutions and their ability to absorb potential adverse shocks remain robust despite these measures.**

**In 2023, the profitability of credit institutions[56] was mainly driven by the ECB's policies to contain inflation which resulted in a sharp market interest rate rise**. Since more than 90% of the loan portfolio of Latvian credit institutions consists of loans with variable interest rates, the interest rates applicable to loans increased in line with market interest rates, thus significantly increasing the interest income of credit institutions. At the same time, interest expenditure of credit institutions increased more moderately, as their financing is dominated by deposits from households and NFCs (see Box 2.2 "Impact of interest rate changes on the interest rates offered by credit institutions").

**As a result, the net interest income of credit institutions increased by 93.8% in 2023** (see Chart 2.21). Slightly more than half of the total increase in net interest income was due to an increase in interest income received from households and NFCs. However, a significant part – 18% of the total increase in net interest income – was due to an increase in income received from the central bank and other credit institutions, as credit institutions also place their available funds with these institutions.

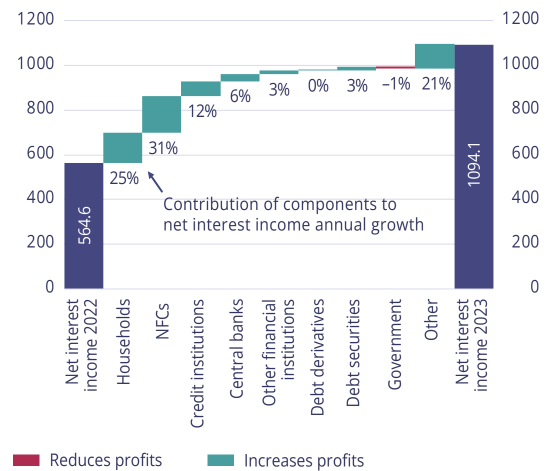
[56] In this section, all profitability data include only the credit institutions active at the time of reporting. The impact of the following one-off effects has also been excluded from the sample: the sale of VISA Europe Limited shares has been excluded from 2016 data, and the impact of the establishment of Luminor Bank AS group and the deferred tax asset write-offs of AS Citadele banka and Signet Bank AS due to the amendments to the Law on Corporate Income Tax have been excluded from 2017 data, as well as the impact experienced in 2022 from the merger of Signet Bank AS and AS Expobank. For unadjusted profitability indicators characterising all credit institution sets, see Appendix 4 "Performance indicators of credit institutions".

**Against the background of the impressive increase in interest rates, changes in the other items contributing to credit institutions' profits appear to be relatively small** (see Chart 2.22). The credit institutions' net income from commission and fees increased by 2.5%, mainly owing to an increase in net income from commission and fees charged for payment services, but their contribution to total profit growth is only 3%. The gains from trading and revaluation of financial instruments decreased by 19.0%, contributing only –3% to the overall profit growth. Meanwhile, net provisioning expenses increased by 17.6%, mainly owing to risks faced by households and NFCs from the sharp increase in the interest payment burden. However, this position also made a relatively small contribution (–2%) to the overall profit increase.

**At the same time, two factors have had a significant dampening effect on credit institutions' profits. First, an 18.4% increase in administrative expenditure in the course of 2023.** They account for a large share of the credit institutions' costs, so their increase has also had a greater impact on overall profits. The rise in administrative expenditure was driven by an increase in wages, the impact of inflation, and the rise in expenditure on consultancy and other services in some credit institutions.

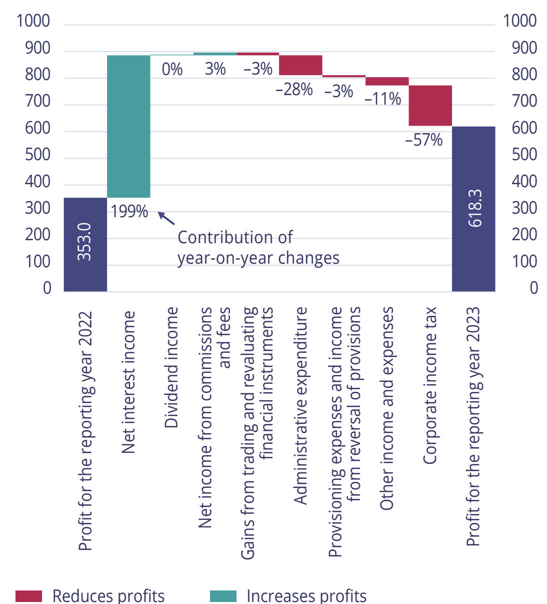
**The second factor involves amendments to the Law on Corporate Income Tax**[57] that entered into force on 1 January 2024[58]. Since 2018, credit institutions and providers of consumer credit services have been subject to the general corporate tax regime under which retained earnings were not taxed. The tax was paid at the time of the distribution of profits or by covering expenses unrelated to business activity, meaning the corporate income tax amount was determined by the profit distribution amount. According to the amendments to the Law on Corporate Income Tax, credit institutions and consumer credit service providers must pay a 20% corporate income tax advance payment from the profits of the previous year as of 2024, regardless of whether the profits are distributed in dividends or not. This will result in more predictable tax payments. The first instalment is due in 2024 but given that the calculation of the corporate income tax surcharge is based on 2023 profits, changes in the corporate income tax regime were already reflected in the credit institution profit or loss accounts for 2023.

Chart 2.21
**Net interest income of credit institutions in 2022 and 2023 and the contribution of its components to changes in net interest income**
(millions of euro)




Source: Latvijas Banka.

Chart 2.22
**Credit institutions' retained earnings in the reporting years 2022 and 2023 and the contribution of its components to changes in profits**
(millions of euro)




Source: Latvijas Banka.

Despite these two factors, **credit institutions' profit for the reporting year increased by 75.2% in 2023. The ROE and ROA of credit institutions were robust in 2023** and well above the euro area average (see Chart 2.23). As income has grown much faster

[57] Amendments to the Law on Corporate Income Tax; 7 December 2023.
[58] "Bankām un nebanku kreditētājiem papildu UIN piemaksa 20% apmērā" ("Additional 20% corporate income tax surcharge for banks and non-bank creditors").

than costs, the cost efficiency of credit institutions has significantly improved. This is evident from the cost-to-income ratio of credit institutions which has fallen sharply to 37.2% (see Chart 2.24).

According to operational data, the average profit of credit institutions in the first three months of 2024 slightly exceeded their average monthly profit for 2023. Profit levels will decline when market interest rates start to fall and credit institutions are forced to increase their provisioning expenses. **Profit will be affected by the one-off mortgage borrower protection fee**[59] (see the Section "Household solvency"), that the credit institutions will pay each quarter in 2024. According to Latvijas Banka's estimates, this levy will reduce the profit of credit institutions by more than 90 million euro. **However, credit institutions will also remain highly profitable in 2024.** Credit institutions may use this period to contribute to the development of their services, strengthen their resilience to cybersecurity and other risks, and align their activities with environmental sustainability objectives.

## Capitalisation

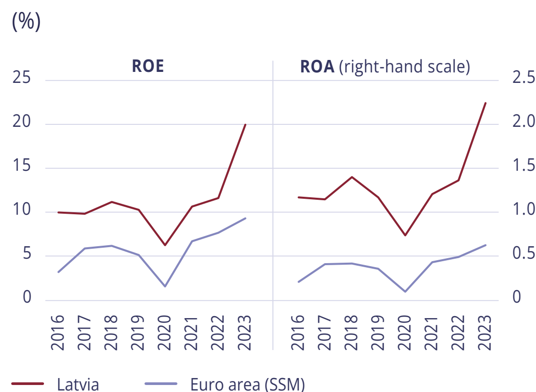
*Prepared by Ilze Vilka*

**Overall, the voluntary capital buffers of credit institutions are sufficient to absorb potential losses in the event of a decline in borrowers' solvency. The significant increase in profits and changes in the corporate income tax regime have prompted the significant credit institutions to review their dividend distribution policies, resulting in larger distributions of previous years' profits compared to previous years. If this trend continues, the amount of voluntary capital reserves of credit institutions could decrease.**

**Latvian credit institutions**[60] **overall remained well capitalised.** At the end of 2023, credit institutions had an average total capital ratio (TC) of 20.9% at a consolidated level, a CET1 capital ratio of 20.1%, and a leverage ratio of 9.4%.[61] By comparison, the EU significant banks had an average TC ratio of 19.9%, a CET1 capital ratio of 16.0%, and a leverage ratio of 5.8% at the end of 2023.[62]

**The capitalisation of significant credit institutions**[63] **remains robust overall, but the average TC ratio of these three institutions has declined from 23.4% in 2022 to 20.8% at the end of 2023.** This is largely due to the increase in the total risk exposure amount (TREA) for two credit institutions that use the Internal Ratings Based (IRB) approach to calculate their own funds requirements (see Chart 2.25). The increase in TREA was mainly due to the alignment of the internal

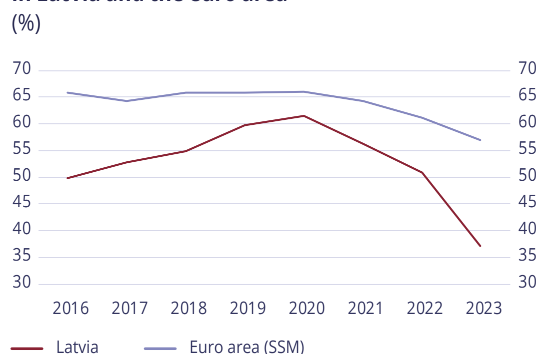
Chart 2.23
**Average ROE and ROA of credit institutions in Latvia and the euro area***
(%)




* Euro area averages are calculated based on the data on credit institutions under direct supervision of the ECB's SSM, covering all euro area countries and Bulgaria.

Sources: Latvijas Banka and EBA.

Chart 2.24
**Expenditure-to-income ratio of credit institutions in Latvia and the euro area***
(%)




* The average values of expenditure to income ratio of euro area credit institutions are calculated based on the data on credit institutions under direct supervision of the ECB's SSM, covering all euro area countries and Bulgaria.

Sources: Latvijas Banka and EBA.

[59] https://lvportals.lv/skaidrojumi/358069-hipotekara-kredita-nemejiem-kompenses-procentu-maksajumus-30-apmera-2023

[60] Only currently active credit institutions are included in the capitalisation calculations and charts, while credit institutions whose licences have been withdrawn by 31 December 2024 are excluded from the sample.

[61] In 2022 – 23.2%, 22.2%, and 9.3% respectively.

[62] EBA Risk Dashboard Q4 2023.

[63] The significant credit institutions are Swedbank AS, AS Citadele banka, and AS SEB banka – all supervised by the ECB.

models with the EBA Guidelines[64] as part of the EBA IRB Repair Plan[65]. In 2023, the TREA of significant institutions expanded by 1411 million euro or 18.1%, while the amount of own funds increased by 90.0 million euro or 4.9%. In its turn, the TREA of other credit institutions increased by 244.5 million euro or 12.1%, while their own funds grew by 26.7 million euro or 5.8%.

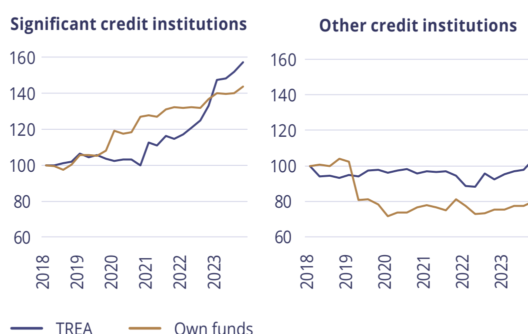
**The voluntary capital buffers of the significant credit institutions decreased from 7.6% to 4.8% at the end of 2023.** Yet, they are sufficient to absorb potential losses due to borrowers' solvency and other shocks (see the Section "Credit risk and market risk shock absorption capacity stress tests"). The voluntary capital buffers of other credit institutions reached an average of 5.5% at the end of 2023 (see Chart 2.26).

**As the revenues of credit institutions rose, some of them significantly increased their reported dividend payments**. In 2024, the significant credit institutions announced dividend payments totalling 386 million euro, equivalent to 78.5% of their 2023 profits. In 2024, profit distribution plans announced by the significant credit institutions are more than three times the amount of dividends paid in 2023, totalling 117.9 million euro or 49.0% of the profit of the previous year. Other credit institutions have not been modest either in their profit distribution plans, with dividends announced in 2024 amounting to 44.5 million euro, which corresponds to 98.4% of 2023 profit (in 2023 – 9.0 million euro or 26.6% of profit).

If this trend continues, the voluntary capital buffers of Latvian credit institutions could decrease. Risks that may arise from the decline in credit institutions' voluntary capital buffers are mitigated by the build-up of resilience buffers as part of a positive neutral CCyB approach (see the Section "Macroprudential policy"). Credit institutions will be able to use this buffer if risks in the financial sector materialise and the voluntary buffers are insufficient to cover losses.

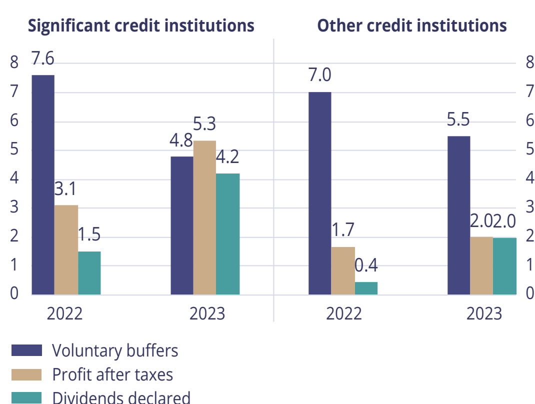
**As of 2024, credit institutions are fully bound by the minimum requirement for own funds and eligible liabilities (MREL).** The MREL is set higher than the sum of the minimum 8% requirement and the individual Pillar 2 requirements (P2R) for all institutions recognised as O-SIIs. At the same time, the MREL also includes a higher leverage ratio requirement determined on an individual basis, with the credit institution having to comply with the higher of the two requirements. Given the current level of the credit institutions' voluntary buffers and their potential to further capitalise on profits, no credit institution is expected to experience difficulties in meeting the MREL in 2024.

Chart 2.25
**Capital ratio numerator and denominator**
(Q1 2018 = 100)




Source: Latvijas Banka.

Chart 2.26
**Voluntary capital buffers, profits, amount of dividends paid and declared by credit institutions at a consolidated level**
(% of the TREA)




Source: Latvijas Banka.

[64] Guidelines on PD estimation, LGD estimation and treatment of defaulted assets.
[65] The EBA plan aims to address weaknesses in IRB models, including reducing the spread of risk weights among IRB credit institutions in the EU.

# 3. Stress tests of credit institutions

## Credit risk and market risk shock absorption capacity stress tests

*Prepared by Nadežda Siņenko, Ilze Vilka, Jānis Strazdiņš, Mikus Āriņš*

**The results of macroeconomic stress test suggests that the resilience of Latvian credit institutions to potential shocks is high. Despite dividend payouts, the voluntary capital buffers for significant credit institutions[66] will remain sufficiently high to absorb shocks, which will also be driven by this year's expected profits[67]. The stress test results for other credit institutions have generally improved, with a decline in the level of NPLs on the balance sheets of some institutions. The resilience of credit institutions to market risk, including the revaluation of HTM securities to their current market value, has improved.**

**According to the results of the sensitivity analysis, at the end of 2023, all credit institutions would be able to meet the minimum own funds requirement of 8%, even in the face of a potential increase in credit risk that would result in a rise in the share of loans past due by more than 20.0 percentage points** (by 17.0 percentage points at the end of 2022). The performance of the largest lenders has improved, with the amount of NPLs on their balance sheets declining, while provisions remained at the same level as the previous year.

**The macroeconomic stress test was carried out to assess the capacity of credit institutions to absorb potential increases in credit risk and market risk in the event of the deterioration of the macrofinancial environment.** In the stress scenario, the main risks are persistently weak economic growth and continued tight financial conditions. Combined with an unexpected external shock, they may affect banks' customers and asset quality, while also limiting the recovery of economic growth.

[66] Significant institutions are credit institutions supervised by the ECB: Swedbank AS, AS Citadele banka, and AS SEB banka.
[67] Even if the profit projection is not included in the calculations, the shock absorption capacity of credit institutions remains high.

### *Methodology*

Latvijas Banka regularly conducts sensitivity analysis[68] and macroeconomic stress tests[69] of credit institutions. The calculations of the macroeconomic stress test are based on the consolidated data of credit institutions as at the end of 2023, and the assessment covers the period until the end of 2024. The thresholds used for the stress tests are as follows: the total capital ratio of 8.0%, the Tier 1 capital ratio of 6.0%, and the CET1 capital ratio of 4.5%[70]. Failure to meet any of the minimum capital requirements is considered a failure to meet the overall capital requirements.

Taking into account the high share of secured loans in the loan portfolio of Latvian credit institutions, from 2022 onwards, the weighted average loss given default (LGD) of each credit institution is used instead of the former single provisioning rate. The weighted average LGD is calculated for each group of resident loans presented separately from other loans in the stress test description, as well as for the largest sectors. Its calculation is based on the data available in the Credit Register of Latvijas Banka on collaterals of individual credit obligations. When making this calculation, the state guarantees and cash are taken in full amount, for real estate, a differentiated haircut is applied depending on scenario assumptions, while for physical collateral a haircut of 30% is applied.

As of 2023, Latvijas Banka's **stress test** of credit institutions **includes a profit projection before**

[68] A credit risk sensitivity analysis provides an indication of the magnitude of an increase in loans past due over 90 days a credit institution would be able to absorb before its capital adequacy ratios fall below the minimum capital requirements. The sensitivity analysis assumes that a credit institution must build provisions in the amount of at least 50% for its portfolio of loans past due over 90 days and build additional provisions totalling 50% of the increase in the loans past due over 90 days; unlikely-to-pay loans must be provisioned by at least 35%. The capital of credit institutions and TREA are reduced by the amount of the additional provisions.
[69] The macroeconomic stress test measures the resilience of Latvia's credit institutions to adverse macroeconomic shocks whose materialisation is plausible, yet their probability is low. The results of the credit risk and market risk stress tests allow for the assessment of whether credit institutions have sufficient capital for absorbing losses that could occur under particularly adverse and even extreme macroeconomic stress conditions without additional capital injections.
[70] A characteristic feature of the capital structure of Latvian credit institutions is the fact that the Tier 1 capital requirement is met with CET1 capital; therefore, compliance with the Tier 1 capital requirement automatically means compliance with the CET1 capital requirement as well. As a result, a relatively high stress test threshold is applied to high-quality capital.

**taxes, provisioning expenses for loans and securities** (according to each scenario).

**The market risk component of the stress test** uses data from each credit institution's securities portfolio, including securities at fair value through profit and loss, securities at fair value through other comprehensive income, and HTM securities. In this stress test methodology, market shocks are applied to all securities to assess the overall "economic" impact of changes in the market value of the securities portfolio on capital assuming that the changes in the securities' value will need to be recognised regardless of their accounting treatment. In view of the shocks experienced in the US regional banking sector in early 2023, **all HTM securities have been revalued to their current market value already before the shock was applied in the stress scenario**. Although in the situation of a bank's liquidity crisis, such revaluation of securities may theoretically take place (a credit institution is forced to sell securities at a lower than market price), such risks are very low for Latvian credit institutions due to the high level of liquidity.

Since data on the securities portfolios of individual credit institutions are available at the highest level of granularity, the analysis was based on these data, while the group-level securities portfolio was extrapolated assuming it was structurally similar to that of a credit institution's level.

The securities of each credit institution's bond portfolio are grouped by major risk factors (euro area and US bond yields of different maturities, credit rating, and sector) according to the assessment of experts. Given their share in the portfolio, the bonds of the three largest issuers have been reported separately. The modified duration of each bond is set using Refinitiv data or, in the absence of data, using the residual maturity of the bond as a proxy. The modified duration is used to calculate the impact of the interest rate shock scenario. The foreign exchange risk is reported separately from the revaluation effect, and the shock scenario is applied to the open foreign exchange position.

### *Stress test scenarios*

Tables 3.1–3.4 summarise the parameters of the stress test scenarios.

**The baseline scenario** uses Latvijas Banka's forecasts of June 2024 for the domestic loan portfolio, which projects Latvia's economic growth to be modest in 2024, with seasonally adjusted GDP rising by 1.8%.

Under the baseline scenario, when calculating the loss given default, a haircut applied to real estate collaterals reflects the depreciation in the value of the collateral as a result of a firesale.[71] Under the stress scenario, the haircuts applied to the real estate values are higher than under the baseline scenario, as they reflect the risk of impairment due to both the fire sale and the decrease in the real estate prices. Under both scenarios, the haircuts applied to commercial real estate are larger than those applied to the residential segment (see Table 3.1).

In 2023, in an environment of persistently weak economic activity and a marked increase in lending rates, banks' balance sheets started to experience an increase in forborne loans (see the section "Credit risk"). Continuing weak economic growth may lead to a further deterioration in the quality of forborne loans. To reflect this risk, both stress test scenarios envisage a migration of these loans to the category of loans past due over 90 days. **The increase in NPLs foreseen in the scenarios is applied after this migration.**

[71] Under the baseline scenario, a haircut is not a forecast of price dynamics in the real estate market.

Table 3.1
**Parameters of the macroeconomic stress test**
(%; percentage points)

| Macroeconomic and credit risk parameters | Baseline scenario | Stress scenario |
|---|---|---|
| **Latvia** | | |
| Annual changes in Latvia's GDP in 2024 | 1.8 | –6.9 |
| 3-month EURIBOR forecast[72] | 3.5 | 3.5 |
| Probability for a performing loan or loan that is past due less than 90 days and not forborne to become a loan past due over 90 days within a year | 0.6 | 6.4 |
| Probability for an unlikely-to-pay loan to become a loan past due over 90 days within a year | 2.6 | 25.6 |
| Share (%) of forborne loans other than NPLs that will migrate to the category of loans past due over 90 days within a year | 10[73] | 100 |
| Increase in the share of loans past due over 90 days[74] in the loan portfolio of domestic customers at the end of 2024[75] | 1.1 | 8.9 |
| Haircut applied to commercial real estate | 20% | 40% |
| Haircut applied to residential real estate | 10% | 30% |

[72] 3-month EURIBOR annual average by the end of 2024; Eurex Exchange, 25.03.2024.
[73] Only for loans to NFCs.
[74] Loans that have migrated from the categories "a performing loan or loan that is past due less than 90 days", "unlikely-to-pay loans", and "forborne loans other than NPLs" to the category "loans past due over 90 days" have been added up.
[75] This increase cannot be regarded as a forecast because of a static balance sheet and other conservative assumptions.

Increase in NPLs in the stress test (see Table 3.1) is assessed using a credit risk model.

**Both the baseline and stress scenarios assume that all loans to residents of Russia, Belarus, and Ukraine become NPLs** (as well as all loans for which Russia, Belarus, and Ukraine are identified as risk transfer countries[76]). However, when writing them off, account has been taken of previously accumulated provisions and real estate collaterals located in Latvia or in other EU countries, to which the haircut was applied according to scenario assumptions (see Table 3.1). Investments by significant credit institutions in Russia, Belarus, and Ukraine are generally low, and their write-offs have no material impact on the capitalisation of institutions.

Assumptions regarding credit risk for customers of other countries are presented in Table 3.2. The stress test scenarios assume that the PD on loans to borrowers in the Baltic States is the same as that of loans to domestic customers, while the provisioning rate is 60%. The PD on loans to customers from other countries is larger than to customers of the Baltic States, whereas the LGD has been set at 75%. In turn, borrowers from the CIS countries have an increased PD, but the LGD is set individually for each bank with such investment, taking into account only the real estate collaterals located in Latvia or other EU countries and applying the haircut to them in accordance with scenario assumptions.

[76] I.e. an indirect exposure to the risk related to Russia and Belarus has also been taken into account.

Table 3.2
**Assumptions regarding loans to foreign customers under the baseline scenario**
(%)

| Loans to foreign customers | PD | LGD |
|---|---|---|
| Customers from Russia, Belarus, and Ukraine | 100 | $LGD_i$ |
| Customers from CIS countries[77] | 20 | $LGD_i$ |
| Customers from Lithuania and Estonia | 0.6 | 60 |
| Customers from other countries | 5 | 75 |

To ensure a more accurate reflection of the potential losses arising from investment in the CIS countries, the amount of investment made in these countries has been adjusted according to the Credit Register data on the country risk transfer.

The **market risk component** under the baseline scenario does not foresee significant shocks and losses from changes in the securities portfolio, assuming that even in the case of turmoil in the securities markets, they will return to the previous states over the stress test period.

It should be noted that the **assumptions made under the baseline scenario are rather conservative, thus the results of the stress test in this scenario cannot be considered a forecast of capital ratios.**

[77] Excluding customers from Russia and Belarus.

**From 2023 onwards, the stress scenario has been developed using the forecasts of the GaR (growth-at-risk) model,** which reflect the **5th percentile** of the future probability distribution of GDP growth rates, taking into account the latest available values of GDP and the deflated composite cyclical risk indicator developed by Latvijas Banka (see Box 3.1 "GaR (growth-at-risk) model for developing credit institutions' stress test scenarios"). **According to GaR estimates, under the stress scenario GDP would contract by 6.9% in 2024.**

The assumptions made for foreign investment in the stress scenario are presented in Table 3.3.

Table 3.3

**Assumptions regarding loans to foreign customers under the stress scenario**

(%)

| Loans to foreign customers | PD | LGD |
|---|---|---|
| Customers from Russia, Belarus, and Ukraine | 100 | $LGD_i$ |
| Customers from CIS countries[78] | 40 | $LGD_i$ |
| Customers from Lithuania and Estonia | 6.4 | 60 |
| Customers from other countries | 10 | 75 |

[78] Excluding customers from Russia and Belarus.

The stress scenario for the **market risk component** is based on the securities portfolio as at the end of December 2023. For market risk, **a stress scenario simulates a global market shock scenario**[79] **(see Table 3.4) where significant shocks are applied to risk premia on government and corporate securities,** while a smaller shock is applied to stock indices. The impact calculation assumes constant initial amounts of securities. **The discount rate of 100% (due to the war) has been applied to the value of securities issued by Russian and Belarusian issuers.** These securities have been reported separately.

[79] Under the stress scenario, shock parameters have been set for the debt securities portfolio, mostly using the historic monthly changes in indices corresponding to each risk factor (market data since 2006 have been used) and assuming that the current investments in securities remain unchanged. 1% of cases or months with the largest estimated hypothetical losses of the aggregate portfolio of credit institutions are calculated. The average values of the identified cases are used in the scenario. Given that the stock and funds portfolio of Latvian credit institutions is rather small, and notably lacks market data, the shock scenario applied to this portfolio uses a simple parameter of a percentage fall in the portfolio value, corresponding to 1% of the most adverse changes in the S&P 500 stock index value since 2006. Financial derivatives comprise a wide range of financial assets, characterised by a lack of market price and liquidity, as well as relatively high risk. Thus, based on experts' opinion, a plain percentage value shock of 50% has been applied to these instruments.

Table 3.4

**Parameters of market risk stress test under the stress scenario**

| Instrument | Original value (%) | Changes under the stress scenario (in basis points) |
|---|---|---|
| Benchmark yield curve | | |
| Securities in euro (1 month–10 years) | 2.3 to 3.7 | –43 to 38 |
| Securities in US dollars (1 month–10 years) | 4.1 to 5.4 | –32 to 22 |
| Risk premium of the key categories[80] | | |
| Investment class (government, corporate sector) | 1.1 to 2.1 | 36 to 148 |
| High yield class (government, corporate sector) | 5.2 to 6.9 | 86 to 147 |
| Risk premium of the three major issuers | 0 to 2.0 | 19 to 144 |
| Other significant market shocks | | **Changes under the stress scenario (%, compared to the baseline value)** |
| Equities, funds, and other instruments (excluding financial derivatives) | | –9 |
| Financial derivatives | | –50 |

[80] The difference between the yield on a security and the benchmark rate of the respective currency. No risk premium shock is applied to German and US government bonds.

### *Stress test results*

Table 3.5 summarises the **results of the stress test**.

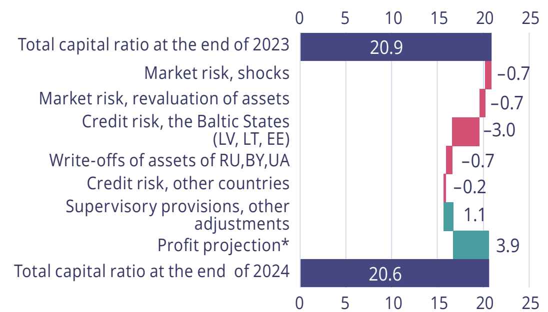
**Under the conservative assumptions of the baseline scenario, it is expected that the estimated total losses could reach 151.1 million euro or 0.6% of credit institutions' total assets. The projected losses are more than covered by the expected profits of credit institutions.** Losses in the baseline scenario are mainly driven by losses arising from investments in the countries affected by warfare[81] (60.6%). These losses are concentrated in individual non-significant credit institutions, and the write-off of these assets from balance sheets would not pose a problem in meeting capital requirements even in a stress scenario. The remaining losses are determined by the necessary additional provisions for the loan portfolio of residents and that of other countries.

Table 3.5
**Aggregated macroeconomic stress test results[82]**

| Indicator | Baseline scenario | Stress scenario |
|---|---|---|
| Estimated losses (millions of euro) | 151.1 | 713.5 |
| Additionally required provisions (% of total assets of credit institutions) | 0.6 | 3.1 |
| **Total capital ratio** | | |
| Number of credit institutions with the total capital ratio below 8% | 0 | 0 |
| Additionally required capital (millions of euro) | 0 | 0 |
| **Tier 1 capital ratio** | | |
| Number of credit institutions with Tier 1 capital ratio below 6% | 0 | 0 |
| Additionally required capital (millions of euro) | 0 | 0 |
| **CET1 capital ratio** | | |
| Number of credit institutions with CET1 capital ratio below 4.5% | 0 | 0 |
| Additionally required capital (millions of euro) | 0 | 0 |

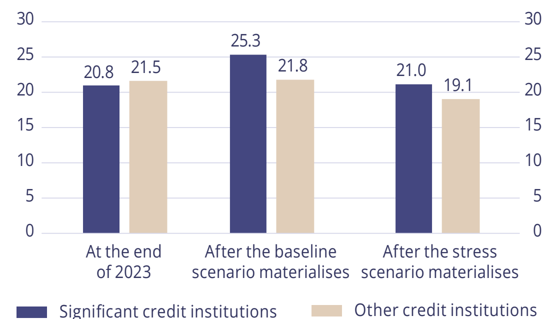
**Under the stress scenario**, the share of loans past due over 90 days in the domestic loan portfolio would increase by 8.9 percentage points by the end of 2024. In the event of the stress scenario materialising, the estimated total losses could reach 713.5 million euro or 3.1% of credit institutions' total assets. Expected

Chart 3.1
**Change in total capital ratio under the stress scenario**
(% of TREA)




*Profit projection before taxes, provisioning expenses for loans and securities.
Source: Latvijas Banka's calculations.

Chart 3.2
**Total capital ratios under stress test scenarios**
(% of TREA)




Source: Latvijas Banka's calculations.

profits of credit institutions, which are lower under the stress scenario than under the baseline scenario owing to NPL growth and losses arising from market risk, are channelled to absorb projected losses. Losses arising from market risk would constitute 26.6% of the total losses (13.6% would be losses from market risk shocks and the remaining 13.0% – losses from revaluation of HTM securities to their actual market value), while losses from investments in Russia, Belarus, and Ukraine would amount to 13.1%[83]. Meanwhile, losses from loans to domestic customers and customers from other countries would account for 60.3% of total losses (Chart 3.1 shows changes in the total capital ratio of the banking sector under the stress scenario). Also under the stress scenario, no credit institution experiences capital deficit (even without including profits in the capital). Chart 3.2 reflects the weighted average total capital ratio in significant and other credit institutions.

[81] As the assumptions made under the baseline scenario are rather conservative, the results of the stress test in this scenario cannot be considered a capital ratio projection for 2024.
[82] The results remained identical even without the inclusion of profits in the capital.
[83] Includes losses arising from investments in securities and shares of these countries.

**It should be stressed that the assumption that customers from Russia and Belarus, as well as those whose country risk has been transferred to Russia and Belarus, will fail to fulfil their obligations in full is rather conservative.** First, direct investments in Russia and Belarus do not take into account the transfer of country risk to other countries, e.g. there are many loans whose country risk is transferred to Latvia (e.g. a firm's economic activity takes place in Latvia), thus reducing the risk of default. Second, the stress scenario assumes that all loans, whose country risk has been transferred to Russia and Belarus are not repaid either. The country risk has been transferred while also taking account of factors such as the country where the collateral is registered and the country where the guarantor is situated. Indeed, the location of the collateral or guarantor in Russia or Belarus increases the risk of losses, but the PD may turn out to be lower than 100%.

## Box 3.1. GaR (growth-at-risk) model for developing credit institutions' stress test scenarios

*Prepared by Velga Ozoliņa, Nadežda Siņenko*

A credit risk model linking macroeconomic developments to the quality of the credit portfolio of the banking sector was developed for macroeconomic stress testing in Latvijas Banka in 2009 and modified in 2014.

In the macroeconomic credit risk model, changes in GDP play an important role as a proxy for borrowers' income and the stage of the business cycle. Since 2023, the stress scenario is built by estimating the GDP growth rate with the GaR (growth-at-risk) model[84].

Using the GaR model for scenario development has several advantages over the previous approach. First, the GaR model allows modelling theoretically plausible GDP growth rate values several periods ahead depending on the state of the business cycle. This GaR feature allows scenarios to be constructed with a pre-specified probability (e.g. 1%, 5%, or 10%) that determines the severity of the scenario. Second, the use of the GaR model does not require identifying specific shocks that trigger the relevant GDP developments.

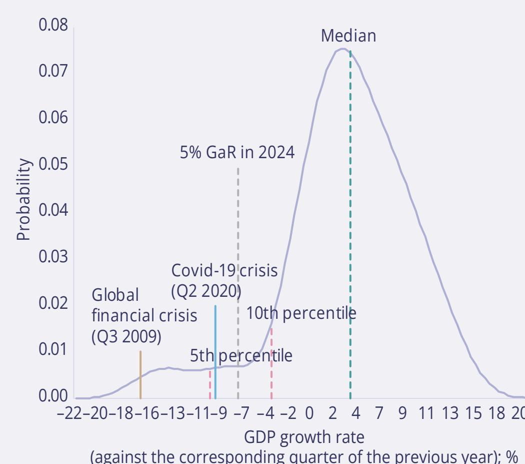
The GaR model is estimated using quantile regression according to the equation:

$$Q_p\,(Y_{t+h}|I_t)=\alpha^p+\beta_0^{\,p}Y_t+\beta_1^{\,p}X_t,$$

where $Q_p(Y_{t+h}|I_t)$ denotes *the p*% percentile of the GDP growth rate ($Y_t$) *h* quarters ahead conditional on the present information ($I_t$), but $X_t$ denotes the values of the selected indicator characterising the financial cycle – the composite cyclical risk indicator (CCRI) developed by Latvijas Banka and adjusted for inflation – in period *t*.[85] Under the stress scenario, the 5th percentile is used.

The results of the calculations show that the GaR model estimates a year-on-year drop in GDP in 2024 (–6.9%). Compared to historical GDP developments (Chart 3.3), this result is between the 5th and 10th percentiles of the probability distribution of the GDP growth rate.

Chart 3.3
**Probability distribution of the quarterly growth rate of Latvia's GDP (adjusted)**




Note. The calculations are based on seasonally and calendar adjusted real GDP data for Q1 1995 to Q4 2023.
Sources: CSB and Latvijas Banka's calculations.

[84] Previously, Latvia's Macroeconomic Model was used, applying various macroeconomic shocks (see Beņkovskis, K., Stikuts, D. Latvia's Macroeconomic Model, Riga: Latvijas Banka, 2006, Working Paper No 2/2006).
[85] For more details on the GaR model, see https://www.macroeconomics.lv/articles/preparing-turmoil-gar-new-model-develop-stress-test-scenarios-banking-sector.

## Liquidity stress tests of credit institutions

*Prepared by Mārcis Risbergs*

**The liquidity stress tests of credit institutions conducted by Latvijas Banka suggest that their capacity to absorb the shocks caused by potential funding outflows remains high.**

Liquidity stress tests are used to evaluate the significance of the potential consequences of funding outflows. They are based on the data available at the end of March 2024 and use consolidated supervisory reporting data on liquid assets and liabilities up to 30 days[86]. The tests have been carried out to calculate the liquidity ratio[87], which would be equivalent to the liquidity ratio previously used for banking supervision, with a minimum requirement of 30% binding on all credit institutions until the LCR requirements became fully effective.

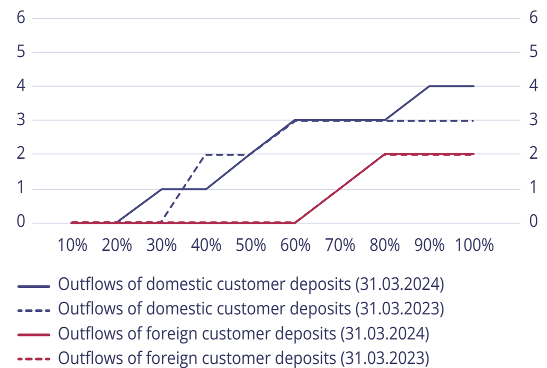
The methodology from the previous years is still used to conduct short-term liquidity stress tests, and it reflects the resilience of banks to liquidity risks in a more understandable manner[88].

The results of the stress tests indicate the tolerance of credit institutions to the outflows of domestic non-MFI customer deposits and of foreign non-MFI customer deposits before their liquidity ratio (and thus the amount of their liquid assets) would decrease to 0, assuming that credit institutions have no access to additional resources to offset the funding outflows.

According to the stress test results (see Chart 3.4), **all credit institutions would be able to withstand the outflows of up to 20% of domestic customer deposits or the outflows of more than 60% of foreign customer deposits**. The stress test results have deteriorated somewhat compared to the end of March 2023, mainly due to minor operational changes in some banks. Credit institutions have still placed a significant part of their assets in Latvijas Banka's deposit facility

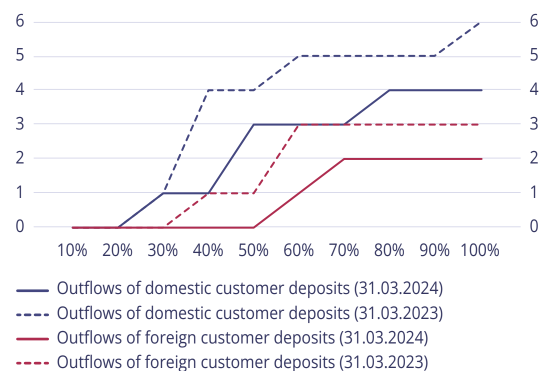
[86] According to the requirements of the common reporting framework (COREP), a report on additional liquidity monitoring metrics (ALMM) has been prepared on a consolidated basis or, if a bank does not provide reports on a consolidated basis, on an individual bank level.
[87] The ratio of unencumbered liquid assets to the total current liabilities of credit institutions with residual maturity of no more than 30 days.
[88] For a description of the methodology, see Financial Stability Report 2023.

Chart 3.4
**Results of liquidity stress tests**
(number of illiquid credit institutions*)



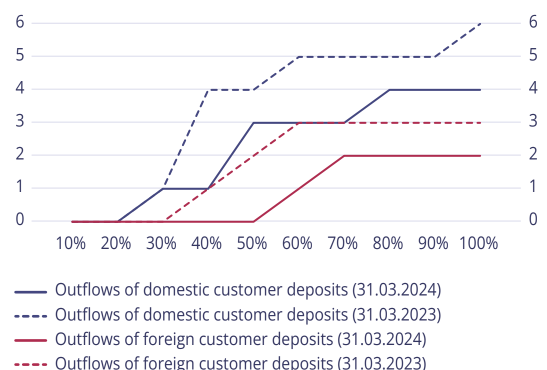

* Only banks active at the end of March 2024 (eight credit institutions).
Source: Latvijas Banka and its calculations.

Chart 3.5
**Results of the stress tests for the first adverse scenario** (number of illiquid credit institutions)




Source: Latvijas Banka and its calculations.

Chart 3.6
**Results of the stress tests for the second adverse scenario** (number of illiquid credit institutions)




Source: Latvijas Banka and its calculations.

operations and, overall, the increased interest rates had no significant effect on the results of the stress tests in 2023. The largest credit institutions, mainly subsidiaries of Nordic banks with centralised liquidity management and good possibilities to obtain additional liquidity from their parent banks if needed, have less capacity to withstand the outflows of domestic customer deposits.

Additional stress tests involving two particularly adverse scenarios were performed.

According to the assumptions of the first adverse scenario, it is impossible to pledge or sell the securities portfolio, except euro area government securities with a credit rating no lower than A– and those issued by countries' governments where at least one of the long-term ratings by three international credit rating agencies is AAA. Regarding euro area government securities, it is assumed that they would lose 15% of their value under the first adverse scenario and could be used in Eurosystem's monetary policy operations with a haircut of 3.0%.

Under the second adverse scenario, in addition to the assumptions of the first adverse scenario, it is provided that no credit institution has access to overnight claims on credit institutions from a country on whose credit institutions the specific credit institution has the highest volume of overnight claims[89] (including claims on the credit institutions within the group).

The application of the first adverse scenario does not yield significantly worse results than the standard stress test, and credit institutions **would be able to withstand the outflows of up to 20% of domestic customer deposits or 50% of foreign non-MFI customer deposits** (see Chart 3.5). **The application of the second scenario does not practically change the ability to withstand outflows of non-MFI deposits** either (see Chart 3.6). In year-on-year terms, a significant reduction in overnight claims in most banks improved the results. **Credit institutions would be able to withstand outflows of up to 20% of domestic customer deposits or 50% of foreign non-MFI customer deposits.**

[89] For example, if the value of the security portfolio decreases substantially due to turmoil in the global financial markets, the repayment of overnight claims to a credit institution from another foreign credit institution is delayed.

# 4. Macroprudential policy

*Prepared by Dace Antuža and Kristīna Bojāre*

**In December 2023, Latvijas Banka adopted significant macroprudential policy decisions on both macroprudential capital instruments and borrower-based measures. Macroprudential policy is generally aimed at strengthening banks' resilience in a timely manner, given the current strong financial performance of banks and the risks of unexpected shocks in the future, as well as at making targeted regulatory changes to foster sustainability and lending development.**

### *Capital buffer instruments*

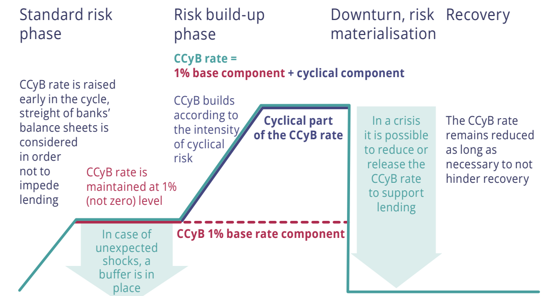
**In 2023, Latvijas Banka decided to implement a new – positive neutral – CCyB approach.**[90] In order to start the gradual implementation of the new approach, on 18 December 2023, the Council of Latvijas Banka decided[91] that **the 0.5% CCyB rate requirement takes effect on 18 December 2024 and the 1% CCyB rate requirement – on 18 June 2025**.[92]

This approach entails the following:

- **The CCyB rate is maintained at a certain base level above zero already under standard risk conditions or in the neutral phase of the financial cycle** when the cyclical systemic risk is neither elevated nor significantly low (see Chart 4.1.).
- Latvijas Banka has considered 1% to be an appropriate base level of the CCyB rate.[93] **Maintaining the CCyB rate at 1% already in the neutral phase of the financial cycle increases the likelihood of sufficiently large resilience buffers and improves the ability to face unexpected shocks**.

Chart 4.1

**Schematic illustration of a positive neutral CCyB approach in different phases of the financial cycle**




- Latvijas Banka continues to assess the intensity of the cyclical systemic risk and the applicable CCyB rate on a quarterly basis. In the event of an increasing cyclical risk, the CCyB rate will be raised in proportion to its intensity from an already positive base rate rather than from zero. The total CCyB requirement will, therefore, comprise the base rate and the cyclical component.
- In times of crisis when risks materialise, as well as in the post-crisis recovery period the CCyB rate can be reduced or released. This helps credit institutions to continue to offer funding to the economy, thereby reducing the duration of crises and mitigating their impact on the economy.

**A positive neutral CCyB approach allows for a build-up of additional capital buffers earlier in the financial cycle**. This reduces uncertainty surrounding the difficulty of accurate and timely identification of the risk level as the cyclical systemic risk indicators are often lagging, and so they insufficiently predict future developments and sometimes give contradictory signals. Moreover, unexpected shocks may occur regardless of the phase of the financial cycle. As there is a 12-month implementation period (a shorter period is only set in exceptional cases) before the CCyB rate takes effect, the resilience buffer may be built up too late in the event of a rapid accumulation of risks.

**An early application of the CCyB requirement creates a safety buffer and increases flexibility in the implementation of macroprudential policy throughout the financial cycle and in cases of unexpected crises since the CCyB is a macroprudential capital tool that can be most easily released**.

[90] The intention to increase the CCyB rate to 1% and to launch a positive neutral CCyB approach was announced in Latvijas Banka's statement published on 19 July 2023 following the meeting of the Macroprudential Council.

[91] On setting the countercyclical capital buffer rate for exposures to residents of the Republic of Latvia at 1% (likumi.lv).

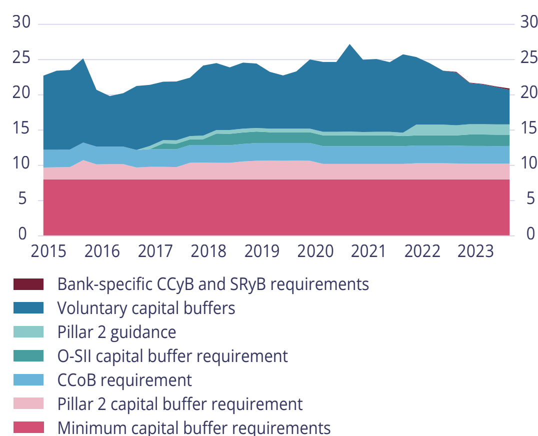
[92] The CCyB rate is expressed as a percentage of the total value of exposures to Latvian residents. The CCyB requirement must be met by CET 1 capital.

[93] For more details on the calibration of the baseline, see Latvijas Banka's approach to applying the CCyB rate. The CCyB rate of 1% as an appropriate baseline has been assessed on the basis of quantitative calculations, expert judgement, and international experience. The calculation of the base rate also takes into account the stress test assessment carried out by Latvijas Banka on the average total capital reduction of the credit institution sector in the event of a shock, which is not covered by the existing capital requirements, along with the free capital available in the credit institution sector. The impact of the applicable CCyB rate is also assessed in the context of the overall capital requirements of the credit institution sector. In addition, it is assessed whether the requirement produces any negative side effects.

**The current financial performance of Latvian credit institutions** – the strong profit indicators, the high voluntary capital buffers (see Chart 4.2), and the persistently low cost of funding – **allow for a timely and forward-looking strengthening of the resilience of credit institutions without negative pro-cyclical effects.**

**In other countries, macroprudential policy also generally focusses on strengthening the resilience of credit institutions.** While the current macrofinancial conditions are challenging, macroprudential capital buffers are being increased in many places, given the strong financial performance of banks and the benefits of building up resilience buffers. An increasing number of countries opt for a positive neutral CCyB approach (see Box 4.1 "The growing international support for a positive neutral CCyB approach").

Chart 4.2
**Capital requirements and voluntary capital buffers of credit institutions**
(% of TREA)



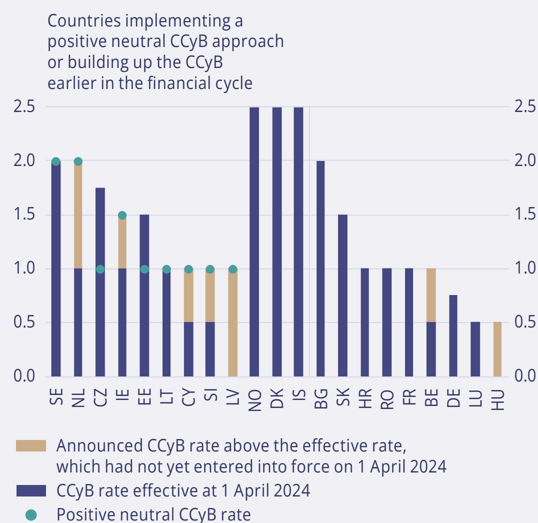

Source: Latvijas Banka.

## Box 4.1. The growing international support for a positive neutral CCyB approach

*Prepared by Dace Antuža*

Having accumulated experience in the application of the CCyB, national macroprudential authorities and international institutions have drawn conclusions on the previous use of macroprudential capital buffers. The pandemic proved that unexpected large-scale shocks are possible, and a timely build-up of additional capital buffers is useful. It has been concluded that the credit-to-GDP gap does not sufficiently signal the cyclical risk intensity, and it is complicated to determine the right moment when an excessive accumulation of the cyclical risk starts. When waiting for clear signals of an increase in the cyclical systemic risk and without increasing the capital buffer requirements in a timely manner, it may turn out that sufficient capital buffers are not in place as the crisis unfolds.

Chart 4.3
**Effective and announced CCyB requirements**
(% of TREA)




Source: ESRB.

As a result, an increasing number of countries are more proactive in building up additional capital buffers that can be used in times of unexpected financial turmoil. At the end of March 2024, the CCyB requirement was set above zero in most EEA countries, including an increasing number of countries opting for a positive neutral CCyB approach (see Chart 4.3). This approach is already in place in Lithuania, Estonia, Sweden, Czechia, the Netherlands, Ireland, Cyprus, Slovenia, and Latvia; outside the EEA – the United Kingdom, Australia, and Hong Kong. Denmark, Norway, and Iceland are also proactively building up the CCyB earlier in the cycle.

In October 2022, the Basel Committee on Banking Supervision published a report on capital buffer usability

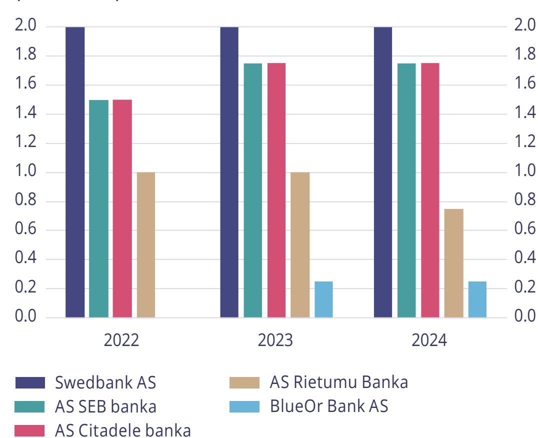
and cyclicality in the Basel framework[94] and a newsletter on positive cycle-neutral CCyB rates[95]. The Basel Committee on Banking Supervision noted that, while the Basel standard prescribes various aspects of the CCyB, numerous elements of CCyB application remain under the discretion of the responsible authorities, and an increasing number of jurisdictions have chosen to implement a positive neutral CCyB approach. The Basel Committee on Banking Supervision expressed support for the ability of the responsible authorities to set a positive neutral CCyB rate on a voluntary basis and considers that it ensures appropriate general flexibility within the overall Basel III framework.

In the context of the review of the EU macroprudential framework, the ECB[96] and the ESRB[97] have also voiced support for the creation of additional macroprudential policy space via a higher amount of releasable capital buffers. This could be, inter alia, achieved by pursuing a positive neutral CCyB approach or by allowing for more active use of the CCyB tool. Building capital buffers in normal times at relatively lower costs works as an insurance against systemic risks that are difficult to capture and can be very costly when they materialise.

[94] Buffer usability and cyclicality in the Basel framework.
[95] Newsletter on positive cycle-neutral countercyclical capital buffer rates.
[96] ECB response to the European Commission's call for advice on the review of the EU macroprudential framework. A positive neutral rate for the countercyclical capital buffer – state of play in the banking union.
[97] Review of the EU Macroprudential Framework for the Banking Sector. Response to the call for Advice

Within the framework of the annual O-SII identification and recognition, the Administrative Act **on the identification of O-SIIs and the capital buffer rates applicable to them**. adopted by the Council of Latvijas Banka on 18 December 2023 took effect on 20 December 2023. Due to the slightly decreased relative systemic importance of AS Rietumu Banka, its O-SII buffer rate was reduced from 1% to 0.75%, while the O-SII buffer rates for other O-SIIs were left unchanged (see Chart 4.4).

Chart 4.4
**Latvia's O-SIIs and their O-SII capital buffer requirements**
(% of TREA)




Source: Latvijas Banka.

### *Borrower-based measures*

On 18 December 2023, **Latvijas Banka reviewed borrower-based measures**, replacing the FCMC's "Regulation on Credit Risk Management" with the new Latvijas Banka's Regulation No 265 "Regulation on Credit Risk Management", which contains several changes.

**In order to motivate borrowers to choose energy-efficient housing, thereby contributing to the development of a more energy-efficient housing stock and also to the renovation efforts of buildings, income-based lending standards for loans for the purchase of housing with energy efficiency class C or higher have been eased**. The maximum debt service-to-income (DSTI) ratio for such loans is set at 45%, while the maximum debt-to-income (DTI) ratio is set at 8 times. Differentiated indicators have been calibrated taking into account the potential savings from different simulations for expenditure on heating in energy-efficient housing compared to similar energy-inefficient housing. As the expenditure saved on heating can be redirected to loan payments, the overall relaxation of restrictions does not significantly change the solvency risk for borrowers.

**The purchase of energy-efficient housing is facilitated, taking into account the diminished affordability of energy-efficient housing in the context of higher interest rates, as well as the low quality of the Latvian housing stock** (buildings with energy efficiency certificates of class C and higher only account for about 15% of the total housing stock). Further investments in energy-inefficient housing, sluggish long-term renovations of existing buildings, and insufficient construction of quality new buildings,

considering the path towards achieving climate objectives, lead to the accumulation of different types of risks related to investment in such assets for both borrowers and lenders.

Taking into account the practical experience gained with the borrower-based measures introduced in 2019, **other provisions of the "Regulation on Credit Risk Management" have also been revised**.

- **A more flexible approach has been introduced for loans granted to natural persons for obtaining housing for rental purposes (buy-to-let) or other income-generating activities**. A flexibility margin has been introduced for compliance with the loan-to-value (LTV) ratio of 70%: 10% of loans granted to natural persons over a quarter may exceed this requirement, as well as the DSTI, DTI, and loan maturity limits; see Chart 4.1). The quantitative 70% LTV requirement for housing loans, if the borrower's (who is a consumer) income from the real estate exceeds 20% of total income, has been revoked, and the restriction that the borrower's income from real estate should only be taken into account at 70% has been removed. Instead, a qualitative requirement is in place to prudently assess the credit risk of such a borrower.
- **The scope of borrower-based measures has been adjusted in cases when lending services to natural persons are provided in foreign countries**, where requirements of this type are already in place to avoid the overlap with equivalent requirements.

### *Other measures with macroprudential impact*

In addition to the aforementioned changes in the borrower-based measures, **the process of refinancing credit commitments from one credit institution to another has been made easier for customers** – the "Regulation on Credit Risk Management" has been supplemented by a requirement for credit institutions to establish in their internal regulatory documents the criteria under which they require a new collateral assessment from the borrower in order to properly assess the credit risk. At the same time, amendments to The Consumer Rights Protection Law reduce the cost of refinancing – for example, they state that a consumer cannot be charged a refinancing fee (except for fixed-rate loans) and abolish the fee for the registration of collateral rights for refinanced loans and reduce the fee for notary services. At the same time, lifting the ban on advertising mortgage loans will increase the borrower's awareness of the supply of loans.

On 18 December 2023, **Latvijas Banka reduced the risk weight for exposures secured by mortgages on commercial real estate located in the Republic of Latvia.**[98] The decision entered into force on 30 June 2024 and applies to credit institutions that calculate their capital requirements for these exposures using the standardised approach. The overall impact of the decision on the financial sector will not be significant, as the size of exposures classified as fully secured by commercial real estate by credit institutions is relatively small, and additional time is needed for credit institutions to appropriately reclassify exposures that may potentially qualify as fully secured by commercial real estate. The reduction is made by assessing the weighted average risk weights assigned to exposures to commercial real estate by banks using different types of models and by concluding that there is a possibility to balance this regulatory provision. In cases when the risks associated with the respective exposures remain elevated at the level of individual institutions, it is possible to use individual supervisory measures.

[98] On setting the risk weight for exposures secured by mortgages on commercial real estate located in the territory of the Republic of Latvia at 80% (likumi.lv).

Table 4.1
**The macroprudential policy measures that are currently in place in Latvia**

| Measure | Rate | Effective and decision dates |
|---|---|---|
| CCyB | 0%<br>0.5%<br>1% | 01.05.2022<br>18.12.2024<br>18.06.2025<br>(decision taken on 18.12.2023) |
| O-SII capital buffer | Swedbank Baltics AS – 2%<br>Swedbank AS – 2%<br>AS Citadele banka – 1.75%<br>AS SEB banka – 1.75%<br>AS Rietumu Banka – 0.75%<br>BlueOr Bank AS – 0.25% | 20.12.2023<br>(decision taken on 18.12.2023) |
| Risk weight of exposures secured by commercial real estate located in Latvia | 100%<br>80% | 30.11.2007<br>30.06.2024<br>(decision taken on 18.12.2023) |
| Loan-to-value (LTV) ratio | 90% for all consumer credits exceeding 100 minimum wages and secured by a mortgage on real estate | 12.06.2007<br>(decision taken on 17.05.2007) |
| | 95% for loans secured by a mortgage on real estate and a state guarantee in accordance with the Law on Assistance in Solving Apartment Matters | 25.09.2014<br>(decision taken on 18.09.2014) |
| | 70% for buy-to-let housing loans or other housing loans generating income as a result of real estate activities*# | 01.06.2020<br>(*regulatory amendments were adopted on 18.12.2023 and took effect as of 01.01.2024)<br># the tolerance margin may not exceed 10% of loans granted to natural persons in a given quarter. |
| Debt service-to-income (DSTI) (the total monthly amount of loan payments to financial institutions to the borrower's monthly net income) | 40%<br>45% for loans for obtaining energy efficient housing*# | |
| Debt-to-income (DTI) ratio | 6 times<br>8 times to loans issued for the purchase of energy efficient housing*# | |
| Loan maturity limits | 30 years for mortgage loans,<br>7 years for consumer credits# | |

Source: Latvijas Banka.

# 5. Developments and risks in the non-bank financial sector

*Prepared by Kārlis Ločmelis and Kristīne Petrovska*

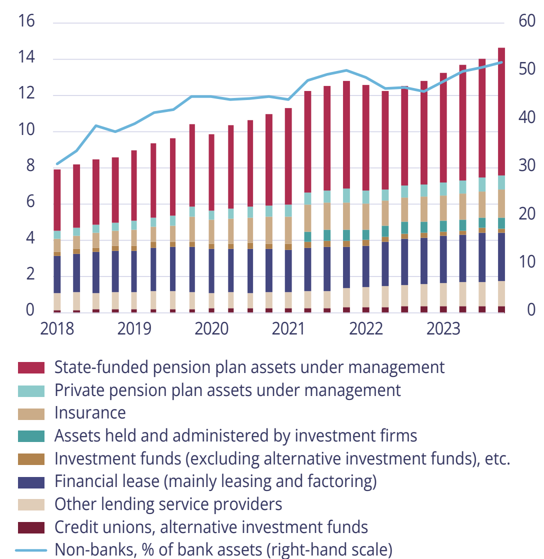
**The optimism in financial markets and the possibility to purchase government debt securities with higher yields have fostered the development of sub-sectors of the non-bank savings service providers – the 2nd and 3rd pillar pension plans and insurers. Insurance corporations have managed to pass through the increasing costs to the consumer, so their solvency and liquidity ratios also remain high. The business model of those investment firms that sell securitised credit claims depends on credit flows, but even during mild downturns of the economic cycle it can bring profit. The crypto-asset industry is preparing for the transformation that regulation of crypto-assets in the EU brings. The average amounts invested in crypto-assets by households remain low, albeit growing.**

**The non-bank financial sector experienced strong growth in 2023. The assets of the sector grew by 14.6% over the year (see Chart 5.1). This was mainly due to contributions to pension funds and an increase in the value of financial instruments.** The non-bank lending sectors also experienced significant growth: the assets of other lending service providers and financial leasing companies increased by 9.9% and 4.3% respectively in 2023 (see the section entitled "Lending development").

**The direct interconnectedness of the Latvian non-bank financial sector with the Latvian credit institutions remain low.** According to Latvijas Banka's financial accounts statistics, in 2023 the assets of the participants of Latvia's non-bank financial sector accounted for 12.3% of the total assets of credit institutions in the structure of assets of credit institutions (12.8% in 2022), while their liabilities –10.7% of the total liabilities of credit institutions in the structure of liabilities (10.3% in 2022).

The continuity of service availability in Latvia's non-bank financial system is high. This can be seen in cases when a market participant exits the market, the services provided by it to ensure the functioning of Latvia's financial system are often replaced by the

Chart 5.1
**Assets of the non-bank financial sector by sub-sector** (billions of euro)**, in relation to credit institutions' assets** (%)




Source: Latvijas Banka and its calculations.

services provided by other market participants. The role of Latvia's non-bank financial sector in the financial sector, and the economy as a whole, is still considerably less important as compared to other euro area countries. This is mainly due to the low share of long-term savings of the population in their financial assets (the share of financial assets in the third income quintile reached only 10.1% in 2020; the lion's share of financial assets is made up of short-term deposits[99]), with such savings in Latvia being accumulated for a shorter period of time than in many other euro area countries, and to the low financial literacy level (below the OECD average[100]).

### *Saving service providers*

**Household savings for retirement purposes account for the largest share of the non-bank financial sector's assets.** At the end of 2023, the funds accumulated under the state funded pension

[99] See Graphs 10.a and 10.b in p. 14 of the Discussion Paper Household Finance and Consumption Survey 2020 in Latvia: Summary Report.
[100] For Latvia 59 points on a 100-point scale, OECD average of 63 points. See OECD (2023), OECD/INFE 2023 International Survey of Adult Financial Literacy, OECD Business and Finance Policy Papers, No 39, OECD Publishing, Paris, https://doi.org/10.1787/56003a32-en.

scheme amounted to 48.1%, while the assets of the 3rd pillar pension scheme – to 4.8% of the total assets of the non-bank financial sector.

**Inflation in Latvia is a significant long-term risk to pension savings.** In 2023, the average returns on investment plans of the state funded pension scheme and private pension plans were 12.5% and 10.3% respectively. Although in 2023 the return on them significantly exceeded the rate of inflation recorded in Latvia at the end of the year (0.6%), it will take several years with a strong investment return to regain and, eventually, increase the purchasing power of pension savings eroded by the elevated inflation and the drop in the value of investments in 2022.

**Higher interest rates not only raise the opportunities for investing funds with higher expected returns, but also increase the possibilities for risk diversification.** This reduces the investment risk as the distribution of the investment plan between equity and debt securities has the potential to reduce the return volatility.

**The increase in geopolitical risks increases the likelihood** that supply chains may be disrupted and other types of **risks that may affect the value of savings with a low probability, but a potentially high impact,** may materialise.

**In 2023, Latvijas Banka proposed how to improve the method for calculating the cap on the fixed fee under the state funded pension scheme.**[101] The proposal aims to ensure that managers share with the participants of the state funded pension scheme, under conditions of imperfect price (management costs) competition, economies of scale, which are mainly formed by the participants themselves with regular contributions of 6% of their gross remuneration, and to motivate managers to focus their efforts less on increasing their market share in a fast-growing market and more on increasing returns on pension assets.

Latvijas Banka also made proposals to the Ministry of Welfare and the Ministry of Finance on how to improve the procedure for calculating the variable part of remuneration.[102] Meanwhile, these proposals are aimed at establishing a representative stock reference index against which to measure the excess profit of investment plans, and also to establish an adequate distribution between stock and bond reference indices for investment plans, which do not invest all the funds in shares and other securities of equivalent risk.

### *Investment firms that offer securitised credit claims (investment platforms)*

**Investment platforms have transformed their business model into offering financial instruments (securitised[103] credit claims), acting as investment brokers.** Thus, both the number of investment brokers (reaching nine, of which six are investment platforms) and their holdings of assets have increased rapidly (616.4 million euro at the end of 2023, of which 98.7% constitute the assets held by investment platforms[104]), while the total amount of holdings of assets has stabilised over the past year. In recent years, investment platforms have been expanding investment asset classes with bonds, exchange-traded funds, and securities backed by non-performing real estate loans. Investment platforms provide investors with access to an alternative investment class and are currently not considered systemically important for Latvia's financial system.

The income of these investment platforms depends essentially on the flow of the offered securitised credit claims, which in turn is directly tied to the economic cycle. Despite the downturn of the economic cycle in the countries of origin of credit claims, investment platforms maintain a positive return on equity (7.3% in 2023), with assets remaining unchanged.

[101] For more information, see the article entitled More than 100 million savings for future pensioners.

[102] Latvijas Banka proposes to revise the stock reference index against which investment plans calculate, account for, and deduct the variable part of remuneration. Currently, the stock reference index is composed only of STOXX Europe 600 Net Return, but since investment plans invest funds in global stock markets, Latvijas Banka proposes that the stock reference index be composed of two indices – STOXX Europe 600 Net Return and MSCI ACWI Net EUR –, each of which would be assigned a weight of 50% in the total stock reference index. Latvijas Banka also proposes to revise the part of the reference index distribution between fixed and non-fixed income securities, specifying their amount mainly for 100% and 75% share investment plans, i.e. in the prospectus of which the maximum allowed investment in equity securities and instruments of equivalent risk does not exceed 100% and 75% of the plan's assets respectively, as well as to improve the calculation method in order to allow for the creation of a representative reference index for life-cycle plans at times when they are gradually reducing the proportion of shares in order to reduce the market risk as people approach retirement age.

[103] The term "securitisation" is used in the context of the ECB Regulation (No 1075/2013).

[104] The assets held include previously assigned loans, securitised credit claims, shares, bonds, and investment funds, as well as uninvested funds and other assets.

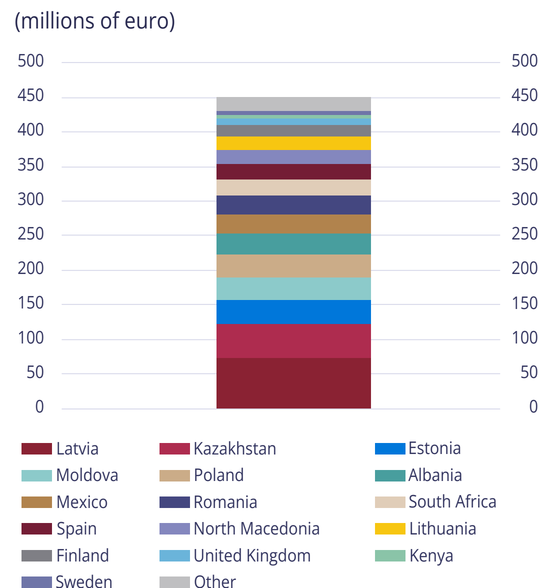
Along with the transformation of the business model of investment platforms from the sale of assigned consumer credits to the offering of financial instruments (securitised credit claims), **Latvia has seen the development of securitisation, which also entails various risks for non-professional investors in relation to such securities.**[105] Traditionally, securitisation is carried out by banks in order to sell previously issued loans (both of higher and lower quality) and to obtain funds for issuing new loans (and to reduce the capital requirements). The buyers of these securitised loans in other countries are usually other professional investors – investment funds, insurance corporations, etc. By contrast, in Latvia, securitised instruments are mainly purchased by households from EU countries. This involves **a high risk that investment platform investors will not be able to carry out an objective and comprehensive analysis in order to understand the risks associated with the investment in all cases.**[106] It is therefore particularly important to ensure investors' eligibility for such high-risk investments and the disclosure of complete information in easily understandable language.

In Latvia, securitisation is carried out by companies related to investment firms – special purpose vehicles –, which, in addition, securitise third-party consumer credit claims. Active securitisation started in 2022 and, two years later, 59 special purpose vehicles related to 5 investment firms, were already registered. At the end of 2023, the outstanding amount of securitised credit claims reached 451.3 million euro.

The largest share of the credit claims (credits) securitised in Latvia is accounted for by Latvia, Kazakhstan, Estonia, Moldova, and Poland (see Chart 5.2). The range of countries whose residents are most involved in such transactions also includes those countries where consumer protection, particularly in consumer lending, is at a lower level than in Latvia.

Loans issued in such remote countries as Colombia, Kenya, and Botswana are also securitised in Latvia.

Chart 5.2
**Initial credit risk country distribution of securitised credit claims in 2023**
(millions of euro)




Source: Latvijas Banka and its calculations.

Moreover, **the interest rates on these credits reach levels that ensure a positive return even if half of the loans are not repaid** (at the end of 2023, 48.6% of the outstanding amount of loans have an annual interest rate of more than 50%). Due to particularly high interest rates, these loans pose risks of debt traps and should not be characterised according to ESG standards due to non-compliance with the principle of social responsibility.[107] **88.4% of the total amount of securitised credit claims consist of unsecured household loans covered by the original lender's guarantee only.**

The information publicly available on the largest platforms shows that, due to the insolvency of the original lender, the outstanding amount of loans in workout reaches 132.7 million euro as opposed to the active portfolio of securitised financial instruments in the amount of 490 million euro (with 7.3 million euro written off), with the average duration of the recovery process exceeding two years.[108]

Securities statistics maintained by Latvijas Banka show that the **credit claims securitised in Latvia have been**

[105] More information on the securitisation model and the risks associated with it can be found in the article "Securitisation in Latvian FinTech Style" at makroekonomika.lv.

[106] Securitised credit claims entail a number of risks. The most significant risks are the credit risk (it is important to assess it skilfully), guarantee, and liquidity risks. The risk of legal loopholes, particularly in cross-border (non-EU) activity, the risk of currency fluctuations, the risk of the servicer of the securitised loan portfolio, the risk of "originate to distribute", as well as sanctions risks, and other risks are also significant.

[107] In Latvia, for example, the ceiling on the total cost of loans to consumers is set at 0.07% per day (annual interest rate ~29.10%). This limitation of costs shall not be applied to such consumer loan agreements upon entering into which an item is to be deposited as security in the lender's safe-keeping and according to which the liability of the consumer is limited only to the pledged item (see Section 8 of the Consumer Rights Protection Law).

[108] https://www.mintos.com/lv/statistika/aizdevumu-statistika/

**primarily purchased by households from Germany, Latvia, Spain, Czechia, and the Netherlands** (the share of investors from these countries in the total outstanding amount was 61.7% in 2023). The high concentration of investors has remained unchanged in recent years and, if there is a change in the sentiment of investors from any country, this may create potential vulnerabilities to the business model of the platforms.

### *Insurance corporations*

**2023 has been twofold for the insurance sector. Although non-life insurers have managed to pass on the cost increases to their customers, the declining contributions and the attractiveness of other investment products in times of rising interest rates may put at risk the sustainability of the life insurance business.** A further source of uncertainty is the purchasing power of consumers, particularly as the frequency of natural disasters increases and the scope of policy coverages widens. At the same time, insurance corporations continue to maintain high solvency capital ratios (SCR)[109] (see Chart 5.4) and liquidity ratios.

Also, in view of the favourable financial market situation (re-evaluating investment portfolios) and the purchase of securities, including government securities, with higher interest rates, insurance corporations have managed to achieve positive returns on both assets and investments (see Table 5.1).

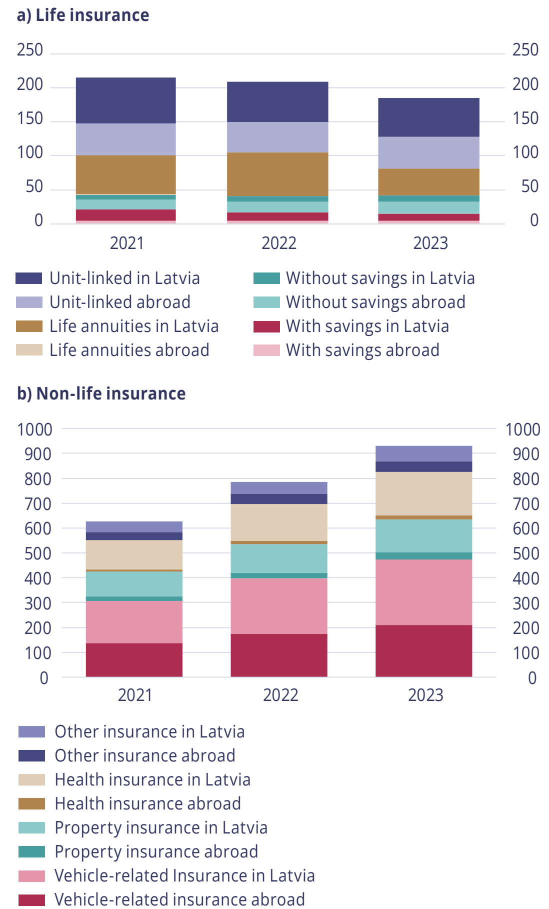
Table 5.1
**Key indicators of insurance corporations**

| Indicator | 2021 | 2022 | 2023 |
|---|---|---|---|
| Assets (millions of euro) | 1507.9 | 1391.8 | 1546.1 |
| Return on assets of life insurers (%) | 1.9 | 1.0 | 0.8 |
| Return on assets of non-life insurers (%) | 2.9 | 3.0 | 4.9 |
| Return on investments of life insurers (%) | 18.2 | –33.2 | 5.0 |
| Return on investments of non-life insurers (%) | 1.1 | 0.5 | 1.6 |

Source: Latvijas Banka and its calculations.

[109] The available ratio of equity to the solvency capital requirement. The calculation of the solvency capital requirement is based on the assessment of all the risks an insurance corporation is exposed to, including the assessment of the insurance underwriting risk, the market risk, the credit risk, and the operational risk. Each risk module is calibrated according to VaR method, using a 99.5% confidence level over a one-year time horizon; see the Regulation on the calculation of the solvency capital requirement and own funds of insurers and reinsurers.

Chart 5.3
**Annual premiums written by Latvian insurance corporations and branches of foreign insurance corporations**
(millions of euro)




Note: Premiums written abroad include both premiums written by foreign branches of Latvian insurance corporations and those written according to the principle of freedom to provide services
Source: Latvijas Banka.

**The limited competitiveness of life insurance products creates potential vulnerabilities.** Life insurance premiums written continued to decrease in 2023 (by 11.7% compared to 2022; see Chart 5.3, panel (a)). By comparison, the amount of life insurance premiums written in the EEA have, on average, increased by 1.2% in the first half of 2023.[110] **The sharpest decline has been recorded for life annuities (–38% compared to 2022)**, as the ban on withdrawing most of the accumulated capital in the first 5–10 years took effect[111]. As a result, this product lost attractiveness in the view of future pensioners. Overall, the remu-

[110] https://www.eiopa.europa.eu/document/download/e3c0abd4-49d5-4d54-bc57-867352a43835_en?filename=Data%20and%20figures%20-%20EIOPA%20Financial%20Stability%20Report%20December%202023.xlsx
[111] The Law on State Funded Pensions (Paragraph 30 of the Transitional Provisions).

neration paid currently also exceeds contributions by 4%. The negative impact of the rising interest rates, along with alternative investment options, significantly affect the competitiveness of life insurance with an investment component (accumulative life insurance and unit-linked life insurance). **Undoubtedly, the attractiveness of the product is also influenced by the revision of the consumption and investment basket of households and the persistently negative investor sentiment.**

The amount of non-life insurance premiums written increased by 18.2% in 2023 (see Chart 5.3, panel (b)) **as the cost increases continued to be passed on to consumers**. Last year, inflation mainly spilled over into vehicle-related insurance, but this year **a steep rise in premiums has been observed in property insurance** (+37%), which is driven by the increase in the cost of property renovation and the re-evaluation of coverages. Rapid price increases affect consumers' ability to purchase property insurance, which in turn **contributes to vulnerability due to climate change** and disasters. In a survey on the insurance protection gap resulting from natural disasters, EIOPA concluded that this gap in Latvia is currently small, albeit above the current EEA average.[112]

As the demand of entrepreneurs and other investors to insure geopolitical risks grows, Latvian insurance corporations should further explore the possibilities of offering political risk insurance, also using the reinsurance products and possibilities offered by international institutions. This would allow for the development of a new niche of activity, as well as promote the export capacity of Latvian enterprises in times of growing geopolitical turmoil.

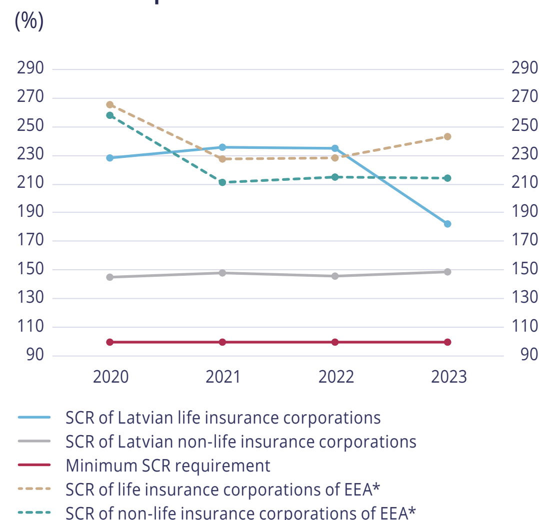
**Cross-border activities are important to Latvian insurance corporations, as is the case for insurance corporations in other small markets, as it helps diversify and manage risks.** The share of non-life insurance premiums written abroad in the total amount of premiums written was 32.3% (remaining relatively stable for several consecutive years) at the end of 2023, while that of life insurance premiums written abroad – 37.1% (an increase of 5.6 percentage points).

**The liquidity structure of the assets** of insurance corporations **has remained broadly unchanged**. The share of cash in the assets of life insurance corporations is 5.3%, while that of non-life insurance corporations – 6.6% (higher than the EEA average[113]).

Chart 5.4

**Solvency capital ratio (SCR) of Latvian and EEA insurance corporations**

(%)




* Data at the end of the second quarter of 2023

Sources: Latvijas Banka, Latvijas Banka's calculations and EIOPA.

According to EIOPA's assessment, the main systemic risks for the insurance sector at the EU level are the geopolitical tensions, the revaluation of the technical provisions (given the rising yields and the increasing interest rates), the risk of investment revaluation, the insurance underwriting profitability risk[114], as well as the overall risk of macroeconomic growth[115].

**At the same time, the ability of insurance corporations to absorb potential shocks remains good, as their solvency capital ratios remain high** (see Chart 5.4), with none of the insurance corporations using exemptions under the regulation[116] to improve the SCR. The decrease in the SCR of Latvian life insurance corporations can be explained by the distribution of dividends from the previous years.

[112] https://www.eiopa.europa.eu/tools-and-data/dashboard-insurance-protection-gap-natural-catastrophes_en. EIOPA estimates the gap on a scale of 0–4, where – depending on the type of disaster – the level attained by Latvia is 1-2.

[113] https://www.eiopa.europa.eu/document/download/e3c0abd4-49d5-4d54-bc57-867352a43835_en?filename=Data%20and%20figures%20-%20EIOPA%20Financial%20Stability%20Report%20December%202023.xlsx

[114] The insurance underwriting profitability risk is understood as the risk that the insurer will set an improper amount of premiums and, thus, the level of compensations will exceed that of the premiums written. Inflation is leading to an unpredictable rise in the compensation costs, while the revision of premiums is constrained by competition and the duration of the contracts concluded.

[115] https://www.eiopa.europa.eu/publications/financial-stability-report-december-2023_en

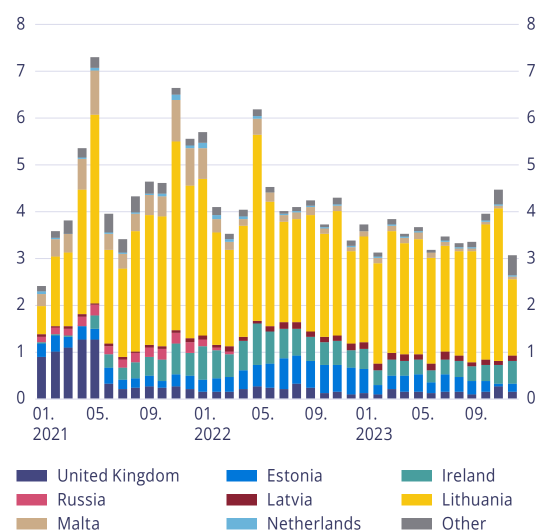
[116] Exemptions cover, for example, the long-term guarantee assessment and the time premium of the long-term risk-free interest rate used to discount the technical provisions.

**The risks are somewhat alleviated by using reinsurance.** In 2023, the portion of reinsurance in the payments of compensations guaranteed accounted for 17% in non-life insurance and 0.25% in life insurance.[117] The Fund for the Protection of the Insured in Latvia is also established in Latvia (at the end of 2023, the balance of accumulated funds reached 19.8 million euro, exceeding the pre-set minimum threshold amount for the funds accumulated in the Fund by life (5 million euro) and non-life (11 million euro) insurance corporations[118]. It is expected that the amount of funds accumulated in the Fund will continue to increase (Latvijas Banka managed to achieve yield of 2.84% in 2023 by managing the assets of the Fund[119]), with interest rates and, thus, the return on its deposits rising. The accumulated funds serve as an additional buffer in case of potential insolvency of the insurance corporation to cover the part of the compensations guaranteed that the insolvent insurance corporation would no longer be able to cover itself.

Chart 5.5

**Payments made with payment cards issued by Latvian credit institutions by country of the crypto-wallet maintainer's account**

(amount; millions of euro)




Source: Latvijas Banka and its calculations

### *Crypto-assets*

**As expectations regarding the introduction of the framework for supervision of crypto-asset service providers and the increase in crypto-asset prices, so does the number of Latvian households that purchase crypto-assets** (7% in February 2024; 4% in February 2023[120]).

At the same time, the value of payments made by Latvia's residents to holders of crypto-asset wallets with payment cards issued by Latvian credit institutions[121] decreased by 17.6% in 2023 (in comparison with 2022), reaching 42.7 million euro (51.76 million euro in 2022; 55.6 million euro in 2021; see Chart 5.5). The sharp decline in December 2023 clearly illustrates the reaction (reluctance) of households to invest in crypto-assets as soon as the sector is hit by scandals, as was the case with Binance.[122] Such a reaction followed despite the market expectations regarding the US supervisor's authorisation to trade funds on stock exchanges based on the daily value of Bitcoin, as well as an increase in the overall price level of crypto-assets.

Payments to accounts opened in Lithuania continue to dominate. This is due to the activity of the popular crypto exchange Binance in the neighbouring country and the openness of various payment institutions to cooperate with the holders of crypto wallets. The share of on-site payments is low (1.5%), suggesting that the use of crypto-asset ATMs is not popular in Latvia. At the same time, the average amount of payment has increased: 50% of payments are up to 60 euro, while 70% – up to 100 euro.

The main risks in the crypto-asset market are related to ill-considered investments of consumers in risky and fraudulent assets, the growing links of crypto-asset companies with the supervised financial sector participants, the high concentration among service providers (abuse of market power), as well as the involvement in money laundering and other illegal activities.

[117] The low proportion of reinsurance is attributable to the fact that investment risks are primarily undertaken by the insured rather than by the insurance corporation.

[118] Section 288 of the Insurance and Reinsurance Law prescribes that insurance payments are suspended if the amount of the accumulated funds exceeds the minimum threshold amount of funds. The thresholds were last doubled in 2016 when the Solvency II Directive entered into force in parallel.

[119] https://gadaparskats.latvijasbanka.lv/en/2023/foreword

[120] According to the results of the survey conducted by Latvijas Banka and SIA Latvijas Fakti.

[121] For more information on the methodology and calculations, see the article entitled "Prevalence of crypto-assets in Latvia: the first steps of evaluation".

[122] For more information on the reaction of Latvia's residents, see the article entitled "A record fine on a crypto-asset exchange scares holders of crypto-assets also in Latvia".

# Appendix 1. Preliminary assessment of the exposure of the Latvian financial system to biodiversity and other nature risks

*Prepared by Olga Lielkalne and Jānis Strazdiņš*

**Using data from the Credit Register of Latvijas Banka and the ENCORE[123] database, Latvijas Banka has carried out an initial assessment of the exposure of Latvian commercial banks to biodiversity risk and other nature risks. The results of the assessment show the high dependence of the corporate loan portfolio on ecosystem services, as well as the relatively significant impact of bank-funded sectors on natural capital. The assessment conducted by Latvijas Banka is supplemented by data from a survey of environmental experts. This survey assesses environmental factors specific to Latvia and identifies the sectors having the most significant impact on habitats.**

Numerous nature risks present significant threats to the economy and financial system over the medium to long term. **In addition to the economic and financial system's exposure to climate change risks, recent analyses have also highlighted other nature risks, including those related to biodiversity loss.**

Latvijas Banka has carried out an initial assessment of the exposure of Latvian commercial banks to biodiversity and other nature risks. The assessment of the exposure of the financial sector to nature risks was carried out in two stages.[124] In the first stage, granular data from the Credit Register of Latvijas Banka and the ENCORE database were used to assess the dependence of the credit portfolios of Latvian commercial banks and the major sectors of the economy on ecosystem services, as well as the impact of these sectors on natural capital. The advantages of using the ENCORE database are: 1) a detailed approach, since the database provides information both on the impact of the national economy on the environment and on the dependence of economic sectors on the environment (ecosystems, natural assets) in various aspects; and 2) international use, which allows the results of the analysis to be compared with other European countries and the world. However, a significant drawback of this methodology, as emphasised by its authors, is the same international perspective, since the impact of sectors is assessed in general terms, without considering the differences between countries and the peculiarities of the interaction between the natural and economic processes within each country. In the second stage **the assessment provided by Latvian local environmental and nature experts and scientists[125] regarding the impact of diverse economic sectors on ecosystems and environmental pollution were consolidated.**

## Exposure of the Latvian financial sector to nature risks: observations

The assessment conducted using the ENCORE methodology reveals that at least 80% of Latvia's banking loan portfolio is highly dependent on at least one ecosystem service. Only the agriculture and forestry sectors were

[123] ENCORE is a platform designed to help companies and organisations assess their exposure to natural risks. It includes an online tool and database to assess the impact and exposure of economic sectors to natural assets and ecosystem services and is maintained by several international organisations, including the UN Environment Programme World Conservation Monitoring Centre and Finance Initiative (more details are available here: https://www.encorenature.org/en/about/about-encore).

[124] Both approaches were based on an assessment of direct effects without an assessment of indirect or second-round effects. For example, in determining the impact of the construction sector, the analysis focuses solely on the environmental effects of construction activities, while neglecting the significant environmental impact of producing construction materials.

[125] The habitats included in the assessment have been chosen based on established classification of habitats used in the field of nature conservation and by selecting the most predominant of them. In addition, three categories of pollution were added: soil, water, and non-GHG air pollution. Meanwhile, the selection of economic sectors and subsectors was executed by identifying the 20 sectors that contribute the most value added within the GDP structure, alongside the 20 sectors that hold the largest share in the loan portfolio. Most of the sectors appeared on both lists, leading to the selection of 25 sectors. The questionnaire asked experts to assess the impact of each sector on each of the 10 habitats using a scale ranging from 1 (no impact) to 5 (very high impact). Twelve completed questionnaires were received, with environmental experts offering evaluations based on their expertise and experience in the field.

highly dependent on more than three ecosystems, while more than 80% of companies' loan portfolio depend on two ecosystems on average.

An assessment of the impact of bank-funded firms on different ecosystems concludes that **at least 80% of the credit portfolio significantly affects at least three ecosystems.** Terrestrial ecosystems are subject to a material effect (see A1.1) – mainly due to the high share of the real estate sector in the loan portfolio and its impact on these ecosystems.

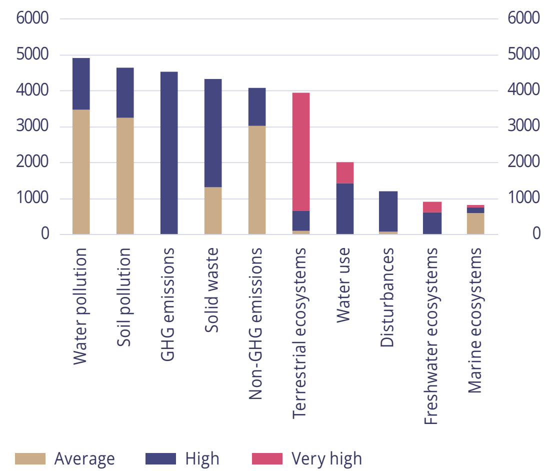
High and significant impacts on GHG emissions and solid waste have also been observed. From a sectoral perspective, agriculture and forestry stand out for their notable impact on a wide range of ecosystems. The manufacturing sectors, particularly the chemical industry and metalworking, exert a significant influence on several ecosystems.

Meanwhile, upon assessing the dependence of funded sectors on various ecosystem services using the ENCORE methodology, it was concluded that the range of ecosystems relevant to the loan portfolio is significantly broader (see Chart A1.2). The highest dependency is on groundwater and open water ecosystem services, followed by climate regulation services, flood protection, and maintenance of water flows.

Assessing the potential adverse impact of economic sectors on Latvian habitats, **environmental experts primarily focused on the sectors exerting the most significant environmental pressures**. By sector, agriculture and logging, construction and public works, as well as electricity generation emerged with both the highest number of assessments and highest impact scores(see Chart A1.3). The assessment of the effects on specific habitats concludes that the subsector of non-perennial crop cultivation exerts the most significant ("high" and "very high") impact on grasslands and water pollution. Additionally, the logging sector demonstrates considerable impact on forest habitat.

According to expert estimates, economic sectors have a relatively stronger impact on water pollution and freshwater ecosystems (see Chart A1.3). On the one hand, due to the small number of respondents and ratings, this picture is incomplete. On the other hand, the expert assessment places a specific emphasis on Latvia, as local environmental experts have greater competence and experience regarding the threats and

Chart A1.1
**Volume of loan portfolio by ecosystem impact**
(millions of euro)

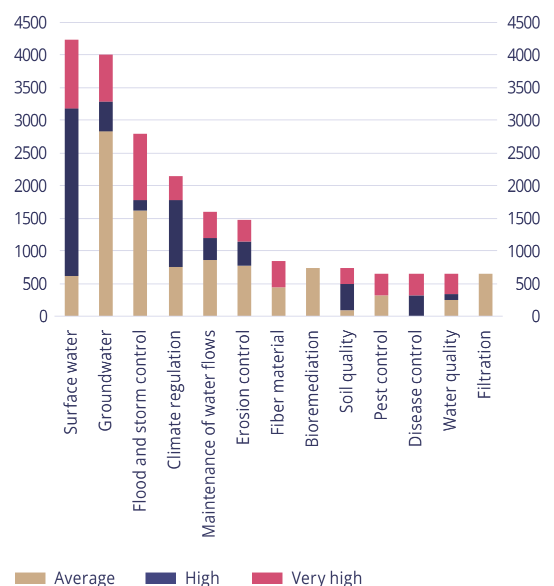



Notes. In this context, ecosystems refer to ecosystems representing the link between natural processes and the economy, which contribute directly or indirectly to production and economic processes. This link concerns both wildlife (vegetables, animals) and non-living (water, atmosphere) assets and their importance by economic sector. The Ecosystem Classification here corresponds to the CICES (Common International Classification of Ecosystem Services) framework adapted to ENCORE objectives (more details are available here: https://www.encorenature.org/en/data-and-methodology/services).

Image bars in general cannot be summed up in the total loan portfolio of companies because a company can affect several ecosystems at the same time.

Sources: ENCORE, Latvijas Banka and its calculations.

Chart A1.2
**Volume of loan portfolio by ecosystem dependency**
(millions of euro)




Notes. Image bars in general cannot be summed up in the total loan portfolio of companies because a single company may depend on several ecosystems simultaneously. The key ecosystems on which loans totalling at least 500 million euro depend are presented.

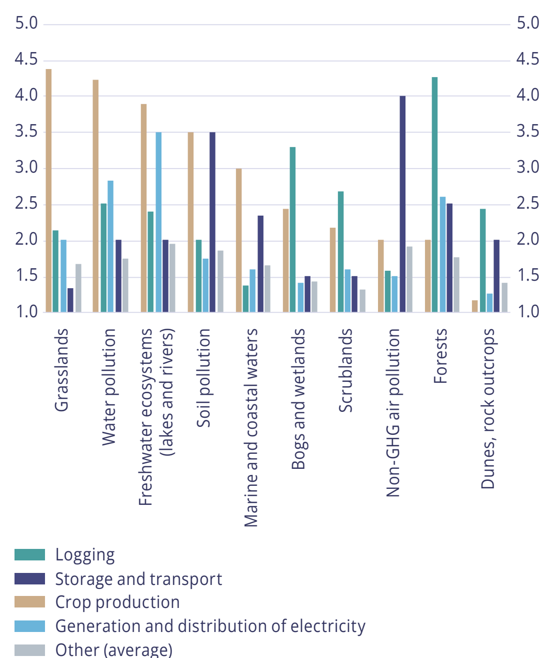
For an explanation of the concept of "ecosystem", see the notes to Chart A1.1.

Sources: ENCORE, Latvijas Banka and its calculations.

sectors that have a more substantial impact. Sectors that have not demonstrated a significant direct negative impact on the environment (for example, IT, financial services, wholesale) receive not only a lower score but also a significantly lower number of scores.

Chart A1.3

**Sectoral* impact on habitats from 1 (no impact) to 5 (very high impact); Average rating of experts surveyed by Latvijas Banka**




* Displays the four sectors with the highest average rating and the rest in total.

Source: Latvijas Banka and its calculations.

## Conclusions and proposals for future work

The results of the analysis based on the ENCORE methodology are not directly comparable to those of the expert survey for methodological reasons, yet certain correlations between the findings can be identified. **The results of both the analysis based on ENCORE methodology and the expert survey point to a profound connection between economic sectors and the bank loan portfolio with Latvia's water ecosystems.**[126]

**Both methods also point to the high impact of agriculture and forestry on a number of ecosystems**, while the ENCORE methodology also allows for conclusions regarding the sector's high dependence on various ecosystem services. Construction and energy also have a high impact on natural capital.

It is important to underline that while **the ENCORE methodology assesses potential exposure to risks, it does not assess the significance of risks, the degree of threat posed to specific ecosystems, or the resilience of the economy**.

**It is important to develop other approaches and models for analysing these risks in Latvia**. This will offer a more comprehensive understanding of the economy and the impact and dependence of the financial system on natural processes and risks. Given the crucial role of the geographic factor as well as other country-specific factors in the development of nature risks and, consequently, their mitigation, it is important to use the opinion of local experts in assessing the financial risks associated with nature. Latvijas Banka will continue its cooperation with Latvian experts and scientists to obtain a comprehensive view of nature risks.

Given the high exposure of the Latvian financial system to the risk of biodiversity loss and other nature risks, it is important to develop a common understanding of the identification and management of these risks in the Latvian financial sector and to focus efforts on limiting the nature risks that are most relevant for Latvia. **Credit institutions and other financial sector actors need to integrate environmental and nature-related aspects in their risk assessment processes.**

[126] This observation is not surprising considering Latvia's abundant water resources. For example, Latvia ranks third among EU countries in terms of renewable freshwater resources per capita.

# Appendix 2. Results of the credit institution survey on risks

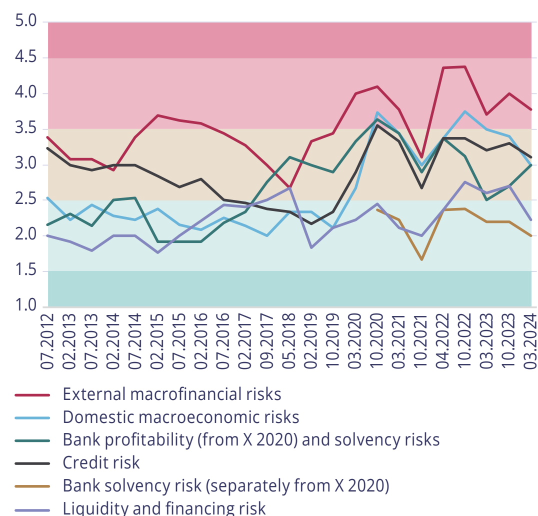
In the assessment of credit institutions, the degree of all risks decreased, except bank profitability risk, possibly due to the introduction of a borrower protection levy. In the assessment of individual risk factors, most factors showed a decrease, with the notable exception of IT security risks, where the probability of occurrence increased. The most notable decline among risk factors was observed in the risk of household solvency deterioration, with comments attributing mortgage compensation payments as a factor mitigating this risk.

Risk factors (in descending order)

1. Negative impact of significant deterioration of the external macro-financial environment on the Latvian economy
2. IT security risk to Latvia's financial system (recommended to be completed by IT specialists)
3. Deterioration of non-financial corporation creditworthiness
4. Deterioration of Latvia's economic situation due to domestic factors
5. Deterioration of household solvency
6. A significant fall in demand in the commercial real estate market
7. Reputation risk and other risks related to financial crime (including fraud, AML/CFTP and circumvention of sanctions) in Latvia and the Baltics
8. Effects of climate change's physical and transitional risks on Latvia's financial system (unlike other risks, it would be preferable to assess this risk over a medium term, 5 to 7 year, horizon)
9. Rising risks in parent banks of major Latvian banks or in their home countries (including rising macrofinancial risks in their economies or increase in funding risks in the parent banks)
10. Substantial changes in residential real estate prices

Chart A2.1

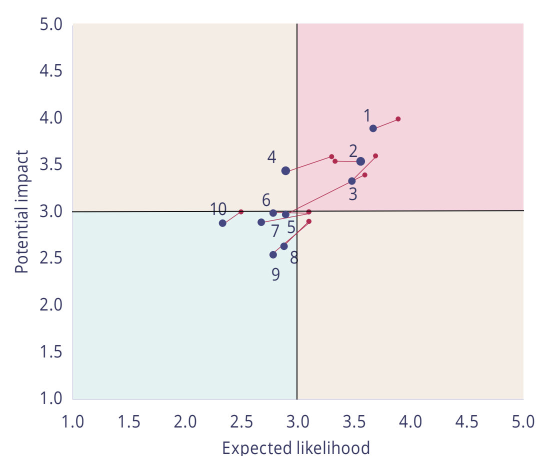
**Assessment of the key risk categories by credit institutions in terms of risk level over the coming year** (taking the expected likelihood of a risk and the potential negative impact into account)




Note. In March 2024, Latvijas Banka conducted a credit institution survey regarding their assessment of risks to Latvia's financial system. The survey respondents were Swedbank AS, AS SEB banka, Latvian branch of Luminor Bank AS, AS Citadele banka, BlueOr Bank AS, AS Reģionālā investīciju banka, Signet Bank AS, AS Rietumu Banka and AS Industra Bank.

Chart A2.2

**Assessment of the risk factors provided by credit institutions in March 2024 over the coming year** (in a scale from 1 to 5; potential impact)



# Appendix 3. Heatmap of early warning indicators

| External macrofinancial risks | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spread of *iBoxx EUR HY NFC* securities yield premium (percentage points)[#] | | | | | | | | | | | | | | |
| *Dow Jones Euro Stoxx 50* volatility index | | | | | | | | | | | | | | |
| CISS of euro area countries (equally weighted, average quarterly value) | | | | | | | | | | | | | | |
| EU economic sentiment indicator (long-term average = 100) | | | | | | | | | | | | | | |
| Imports in the main trade partners (annual changes; %)[#] | | | | | | | | | | | | | | |
| Spread between 10-year and 2-year euro area government bond yields (percentage points) | | | | | | | | | | | | | | |
| Three-year changes in the euro area private sector debt-to-GDP ratio (percentage points) | | | | | | | | | | | | | | |
| **Domestic macro-financial risks** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| Economic sentiment indicator in Latvia (long-term average = 100) | | | | | | | | | | | | | | |
| 5-year CDS spread of the Latvian government | | | | | | | | | | | | | | |
| Four-period moving average of annual changes of house price index | | | | | | | | | | | | | | |
| Domestic loan-to-GDP ratio (%) | | | | | | | | | | | | | | |
| Latvian government debt-to-GDP ratio (%) | | | | | | | | | | | | | | |
| Current account-to-GDP ratio (%) | | | | | | | | | | | | | | |
| **Credit risk of NFCs** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| Interest coverage; four-quarter moving average (%) | | | | | | | | | | | | | | |
| NFC debt-to-equity ratio (%) | | | | | | | | | | | | | | |
| Sectoral concentration in the domestic loan portfolio (HH index) | | | | | | | | | | | | | | |
| NFC annual interest payments-to-GDP ratio (%) | | | | | | | | | | | | | | |
| Share of NFC forborne loans which are not past due over 90 days (%) | | | | | | | | | | | | | | |
| Three-year changes in the NFC loan-to-GDP ratio (percentage points) | | | | | | | | | | | | | | |
| **Household credit risk** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| Ratio of the house price index vis-à-vis the average net wage index (%) | | | | | | | | | | | | | | |
| Three-year changes in the households' loan balance-to-GDP ratio (percentage points) | | | | | | | | | | | | | | |
| Share of households' forborne loans which are not past due over 90 days (%) | | | | | | | | | | | | | | |
| Households' interest payments-to-GDP ratio (%)* | | | | | | | | | | | | | | |
| Households' loan-to-deposit ratio (%) | | | | | | | | | | | | | | |
| Changes in real wages of employees, deviation from the three-year average (%) | | | | | | | | | | | | | | |
| Increase in annual household interest payments (%)** | | | | | | | | | | | | | | |
| **Solvency and profitability risk of credit institutions** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| Return on assets [#] *** | | | | | | | | | | | | | | |
| CET1 capital ratio (%) | | | | | | | | | | | | | | |
| Leverage ratio (%) | | | | | | | | | | | | | | |
| Cost-to-income ratio (%) | | | | | | | | | | | | | | |
| Spread of interest rates on new loans (percentage points[#]) | | | | | | | | | | | | | | |
| Credit institutions' exposure to government sector risk (% of assets) | | | | | | | | | | | | | | |
| Share of the credit institution sector in the financial sector (%)[#] | | | | | | | | | | | | | | |
| **Liquidity and funding risk of credit institutions** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| Liquidity ratio for the largest banks – domestic lenders**** (%) | | | | | | | | | | | | | | |
| Liquidity ratio for other credit institutions (%) | | | | | | | | | | | | | | |
| Resident loan-to-deposit ratio (%) | | | | | | | | | | | | | | |
| Net foreign assets-to-assets ratio (%) | | | | | | | | | | | | | | |

Source: CSB, Refinitiv, Bloomberg, Eurostat, ECB, Latvijas Banka and its calculations.

Notes.
[#] A two-sided indicator.
* The risks posed by the sharp rise in household interest payments and their elevated levels will be alleviated in 2024 by support measures for mortgage borrowers.
** Since 2014, non-bank interest payments as well.
*** The unusually high profitability was supported by the significant surge in interest rates. This level of profitability is unsustainable and will adjust as interest rates normalise. Currently, there is no reason to believe it poses significant risks to the activity of credit institutions in the medium term, as borrowers' solvency remains stable, and the present high profitability allows credit institutions to maintain an adequate level of provisioning.

**** Data until 2019 and those for 2019 include four and three largest credit institutions respectively, since branches are excluded from the calculation of liquidity ratio. The liquidity ratio of this credit institution group is relatively lower, as liquidity of subsidiaries is managed at group level. The liquidity ratio is not a mandatory supervision requirement for these credit institutions; the liquidity ratio is employed for risk monitoring. The heatmap is only one of the tools used by Latvijas Banka for the analysis of systemic financial stability risks. The assigned risk level should not be interpreted in absolute terms. Instead, it should be viewed in comparison with the historical benchmarks of the chosen indicators, warning of the build-up of risks. For the explanation of the heatmap methodology, see Appendix "Heatmap: analytical tool for the analysis of systemic financial stability risks in Latvia" of Latvijas Banka's "Financial Stability Report 2018".

The risk level is indicated by colour:

# Appendix 4. Performance indicators of credit institutions

Table A4.1. **Overall performance indicators of credit institutions**

| Variable | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | March 2024 |
|---|---|---|---|---|---|---|---|
| **Balance sheet indicators** | | | | | | | |
| Number of credit institutions and branches of foreign credit institutions | 20 | 19 | 16 | 16 | 14 | 13 | 13 |
| Total assets (millions of euro) | 22 870.5 | 23 202.9 | 24 558.1 | 25 447.2 | 27 880.7 | 28 495.8 | 28 959.8 |
| Share of loans in assets (%) | 59.3 | 58.1 | 52.7 | 56.7 | 55.4 | 54.7 | 53.9 |
| Annual growth rate of domestic loans (%)[127] | –4.1 | –1.5 | –3.3 | 11.8 | 7.6 | 1.4 | 2.4 |
| Share of deposits in total liabilities (%) | 71.4 | 74.2 | 76.0 | 78.6 | 78.2 | 77.3 | 76.6 |
| Annual growth rate of domestic deposits (%) | 6.6 | 7.3 | 8.4 | 10.3 | 11.8 | 0.7 | 3.3 |
| Share of liabilities to MFIs in total liabilities (%) | 10.8 | 6.6 | 3.2 | 2.5 | 4.3 | 4.7 | 6.0 |
| Domestic loan-to-deposit ratio (%) | 91.7 | 84.1 | 73.8 | 74.8 | 72.0 | 72.5 | 71.6 |
| **Profitability**[128] | | | | | | | |
| ROE (%)[129] | 9.7 | 3.1 | 5.2 | 10.0 | 10.0 | 20.0 | – |
| ROA (%)[130] | 1.2 | 0.4 | 0.7 | 1.2 | 1.2 | 2.2 | – |
| Cost-to-income ratio (%)[131] | 60.0 | 65.0 | 68.2 | 62.5 | 55.6 | 39.3 | – |
| **Capital adequacy**[132] | | | | | | | |
| Own funds (millions of euro) | 2 697.3 | 1 936.8 | 2 316.1 | 2 335.5 | 2 310.5 | 2 397.3 | – |
| Common Equity Tier 1 capital (millions of euro) | 2 454.2 | 1 802.6 | 2 219.7 | 2 241.6 | 2 206.9 | 2 299.4 | – |
| TREA (millions of euro) | 12 091.3 | 9 188.8 | 8 624.5 | 9 266.5 | 10 055.6 | 11 468.2 | – |
| Total capital ratio (%) | 22.3 | 21.1 | 26.9 | 25.3 | 23.0 | 20.9 | – |
| CET1 (%) | 20.3 | 19.6 | 25.7 | 24.3 | 21.9 | 20.1 | – |
| Leverage ratio (%) | 10.6 | 9.8 | 10.5 | 10.3 | 9.3 | 9.5 | – |
| **Liquidity**[133] | | | | | | | |
| Liquid assets to total assets ratio (%)[134] | 31.8 | 32.1 | 35.6 | 35.3 | 37.6 | 39.3 | 40.0 |
| LCR (%) | 252.9 | 286.3 | 353.7 | 288.8 | 211.3 | 242.8 | 230.0 |
| NSFR (%)[135] | 138.2 | 144.9 | 155.9 | 187.2 | 169.7 | 177.3 | – |
| **Asset quality**[136] | | | | | | | |
| Ratio of provisions for non-performing loans in the loan portfolio (%) | 3.1 | 3.3 | 1.9 | 1.6 | 1.6 | 1.7 | 1.6 |
| Share of loans past due over 90 days in the loan portfolio (%) | 4.0 | 3.9 | 2.3 | 1.5 | 1.1 | 1.2 | 1.3 |
| Share of NPLs in the loan portfolio (%) | 7.5 | 7.1 | 4.7 | 3.6 | 2.7 | 2.8 | 2.8 |

[127] The indicator has been calculated using individual-level data and incorporates all one-off effects referred to in Chapter 2 "Development and Risks of the Credit Institution Sector".
[128] Indicators for 2018–2021 have been calculated based on Latvijas Banka's consolidated-level data. The one-off effects referred to in Chapter 2 "Development and Risks of the Credit Institution Sector" have not been excluded from profitability ratios.
[129] Annualised profit/loss ratio to average capital and reserves of the reporting period (data of foreign credit institution branches excluding).
[130] Annualised profit/loss ratio to average assets of the reporting period.
[131] Cost-to-income ratio = (administrative expenses + intangible and fixed asset depreciation and disposal)/(net interest income + income from dividends + net commissions and fees + profit/loss from trades of financial instruments + financial instrument revaluation result + net ordinary income + adjustment for impairment of available-for-sale financial assets) × 100.
[132] Data are shown at the consolidated level.
[133] Data are presented at the level of individual credit institutions.
[134] Liquid assets = vault cash + claims on central banks and other credit institutions + central government fixed income debt securities (those having a regular, unlimited market, i.e. they can be sold in a short period of time without considerable loss or used as loan collateral).
[135] Until 2021 – Latvijas Banka's estimate.
[136] The loan quality indicators for 2018–2023 have been calculated based on consolidated-level data for the credit institutions subject to consolidated supervision and on individual-level data for other credit institutions and branches of foreign credit institutions (for the first quarter of 2024 – at the level of individual credit institutions). Credit risk ratios have been presented without excluding the one-off effects referred to in Chapter 2 "Development and Risks of the Credit Institution Sector".