LATVIJAS BANKA
EIROSISTĒMA

FINANCIAL STABILITY REPORT 2021

ISSN 2500–9729

Financial stability: the condition in which the financial system (financial intermediaries, market and market infrastructure) is capable of withstanding shocks without significant disruptions in the financial intermediation process and the supply of general financial services.

Systemic risk: the risk that the inability of one participant to meet its obligations will cause other participants to be unable to meet their obligations when they become due, potentially with spillover effects threatening the stability of or confidence in the financial system, economic growth and welfare.

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

The "Financial Stability" Report analyses and evaluates the performance of the Latvian financial system and risks on the basis of data available up to the end of March 2021 or at the moment of compiling the current report.

Data on the branches of foreign banks registered in the Republic of Latvia have been disregarded for the purposes of calculating capital and liquidity ratios and credit risk sensitivity and stress tests.

Charts and tables have been compiled on the basis of the following data sources:

Chart 1.1 – the IMF, Chart 1.2 – the EBA, Chart 1.3 – estimates by Latvijas Banka, Eurostat, Chart 1.4 – Bloomberg, Chart 1.5 – the EBI, Chart 1.6 – estimates by Latvijas Banka, the CSB, Eurostat, Chart 1.7 – the CSB, Chart 1.8 – Finance Latvia Association, Chart 1.9 – estimates by Latvijas Banka, Ministry of Finance of the Republic of Latvia, AS Attīstības finanšu institūcija Altum, Table 1.1– AS Attīstības finanšu institūcija Altum, Chart 1.10 – the CSB and Latvijas Banka, Chart 1.11 – the CSB, State Employment Agency and SSIA, Chart 1.12 – the public opinion poll conducted by Latvijas Banka, Chart 1.13 – Latvijas Banka, Chart 1.14 – the CSB, Chart 1.15 – the CSB and State Revenue Service, Chart 1.16 – the CSB, Chart 1.17 – the public opinion poll conducted by Latvijas Banka, Charts 1.18 and 1.19 – the public opinion poll conducted by Latvijas Banka, Charts 1.20–1.23 – the CSB, Chart 1.24 – State Unified Computerized Land Register, Chart 1.25 – the CSB, SIA Latio, SIA Ober Haus Real Estate Latvia and SIA ARCO REAL ESTATE, Charts 1.26 and 1.27 – the CSB, Chart 1.28 – the CSB, the Central Statistical Bureau of Lithuania, the Central Statistical Bureau of Estonia, Chart 1.29 – the CSB, Charts 1.30–1.32 – SIA Colliers International Advisors, Charts 1.33 and 1.34 – the Credit Register of Latvijas Banka, Chart 2.1 – estimates by Latvijas Banka, the CSB, Chart 2.2 – Latvijas Banka, Charts 2.3 and 2.4 – estimates by Latvijas Banka, Chart 2.5 – ECB, Eurostat, Chart 2.6 – estimates by Latvijas Banka, Chart 2.7 – Latvijas Banka, the CSB, Charts 2.8–2.10 – estimates by Latvijas Banka, Chart 2.11 – Latvian Leasing association, Charts 2.12–2.14 – the FCMC, estimates by Latvijas Banka, Chart 2.15 – the FCMC, estimates by Latvijas Banka, Charts 2.16–2.19 – estimates by Latvijas Banka, Chart2.20 – EBA, Chart 2.21 – Latvijas Banka, Chart 2.22 – ECB, estimates by Latvijas Banka, Charts 2.23–2.25 – estimates by Latvijas Banka, Charts 2.26–2.32 – the FCMC, estimates by Latvijas Banka, Charts 2.33 and 2.34 – the FCMC, Charts 2.35 and 2.36 – the EBA, Chart 2.37 – the FCMC, estimates by Latvijas Banka, Tables 2.1–2.5 – estimates by Latvijas Banka, Table 3.1 – the FCMC, Charts 3.1 and 3.2 – estimates by Latvijas Banka, Chart 4.1 – Latvijas Banka, the CSB, Chart 4.2 – the FCMC, estimates by Latvijas Banka, Chart 4.3 – estimates by Latvijas Banka, Table 4.1 – the FCMC, estimates by Latvijas Banka, Chart 4.4 – the FCMC, estimates by Latvijas Banka, Chart 4.5. – estimates by the FCMC, the EIOPA and Latvijas Banka, Chart A1.1 – the FCMC, Latvijas Banka and its estimates, Table A1.1 – estimates by Latvijas Banka, Chart A1.2 – Reuters Refinitiv, estimates by Latvijas Banka, Charts A1.3–A1.5 – the FCMC, Latvijas Banka and its estimates, Charts A1.6 and A1.7 – Latvijas Banka and its estimates, Chart A1.8 – estimates by the FCMC and Latvijas Banka, Charts A1.9 and A1.10 – Latvijas Banka and its estimates, Chart A2.1 – ECB, Charts A2.2–A2.6 – estimates by Latvijas Banka, Chart A2.7 – ECB, Chart A2.8, Tables A2.1 and A2.2 – estimates by Latvijas Banka, Charts A3.1 and A3.2 – the Credit Register of Latvijas Banka, Charts A5.1 and A5.2 – the credit institution survey conducted by Latvijas Banka, Table A6.1 – the FCMC, the CSB, Reuters, Bloomberg, Eurostat, ECB, Latvijas Banka and its estimates.

Latvijas Banka
K. Valdemāra iela 2A, Riga, LV-1050
Tel.: +371 67022300 info@bank.lv
https://www.bank.lv

CONTENTS

Abbreviations

AIF – alternative investment fund
AML/CFT – anti-money laundering and combating the financing of terrorism and proliferation
AS – joint stock company
CCB – countercyclical capital buffer
CCRI – composite cyclical risk indicator
CET1 – common equity Tier 1
CIS – Commonwealth of Independent States
CO_2 – carbon dioxide
CO_2pmUSD – CO_2 per USD 1 million revenues
CRD – Capital Requirements Directive
CRR – Capital Requirements Regulation
CSB – Central Statistical Bureau of Latvia
DSTI – debt-service-to-income
DTI – debt-to-income
EBA – European Banking Authority
EC – European Commission
ECB – European Central Bank
EEA – European Economic Area
EIOPA – European Insurance and Occupational Pensions Authority
EPI – environment performance index
ESG – Environment, Social, Governance
ESRB – European Systemic Risk Board
EU – European Union
EURIBOR – Euro Interbank Offered Rate
FCMC – Financial and Capital Market Commission
FRS – US Federal Reserve System
GDP – Gross Domestic Product
IFRS 9 – International Financial Reporting Standard 9
IMF – International Monetary Fund
IOSCO – International Organization of Securities Commissions
IT – information technologies
LCR – liquidity coverage ratio
LGD – loss given default
LTI – loan-to-income
LTV – loan-to-value
MFI – monetary financial institution
NFC – non-financial corporation
NPLs – non-performing loans
NSFR – net stable financing ratio
O-SII – other systemically important institution
PD – probability of default
PIT – personal income tax
PEPP – Pandemic Emergency Purchase Programme
ROA – return on assets
ROE – return on equity
RWA – risk-weighted assets
SIA – limited liability company
SME – small and medium-sized enterprise
SRB – systemic risk buffer
SSIA – State Social Insurance Agency
TLTRO III – targeted longer-term refinancing operations
US – United States of America

SUMMARY

The Covid-19 pandemic has caused a significant shock to the economy; nonetheless, **the Latvian financial system remains stable**. The financial indicators of credit institutions and the non-bank financial sector are solid. The credit institutions' capitalisation has reached record-high levels. Moreover, credit institutions are liquid and continue to make profits, albeit smaller than before. Following a sharp fall at the beginning of the pandemic, lending has returned to its pre-pandemic level and is gradually growing as the demand recovers and credit institutions make use of the long-term funding provided by the ECB under the TLTRO III. So far, the loan portfolio quality of both credit institutions and non-bank lenders has not deteriorated since the impact of the pandemic has been uneven across various groups of lenders, the credit institutions' exposure to sectors most affected by the crisis has been relatively low and lending standards have been prudent since the global financial crisis.

Furthermore, **financial stability was preserved largely owing to the unprecedented fiscal and monetary support and more flexible financial sector supervision** in Latvia, the euro area and elsewhere around the globe. Amid persistently high uncertainty about the epidemiological situation and economic development in Latvia and abroad, targeted support measures remain essential. However, the ability of countries to provide further fiscal support may vary: since the beginning of the pandemic, many of them have seen their debt levels rise sharply, thus increasing government debt sustainability risks across the globe. Furthermore, support measures – alongside their stabilising impact – might also create side effects[1].

The impact of the COVID-19 pandemic on the economy and the financial system both globally and domestically represents the main systemic risk to the financial stability. The transmission of the pandemic crisis to Latvia's financial stability mostly takes place via the macroeconomic channel[2]. With the crisis dragging on and the appropriate structural adjustments being delayed, the private sector's ability to withstand the crisis may wane, and the liquidity pressures and turnover decline experienced by businesses may lead to solvency issues. Secondary effects may also impact businesses which, so far, have not been directly hit by the crisis. In Latvia, an increase in forborne and Stage 2 loans points to a rise in credit risk. It is essential that lenders recognise the deterioration of their asset quality in a timely manner and that they distinguish and support viable borrowers. To prevent an accumulation of impaired assets, mechanisms for their management are needed (e.g. efficient insolvency procedures and non-judicial procedures for the settlement of disputes and an efficient judiciary system). **The sound level of capitalisation of Latvian credit institutions, the moderate level of government and private sector indebtedness, relatively balanced development before the crisis and the euro area membership are factors mitigating the Covid-19 pandemic shock.**

The continuity and accessibility of financial intermediation services are essential for overcoming the crisis. **Financial intermediation deficiencies, i.e. persistently weak lending, were observed in Latvia already before the pandemic** owing to both demand and supply factors: a large share of the shadow economy, shortcomings in the legal environment and corporate and public governance, lending market segmentation, an underdeveloped capital market, difficult-to-predict business regulation, insufficient NFC capitalisation, demographic trends and a shortage of appropriate human capital as well as some challenges in cooperation between credit institutions and their customers due to the way of the implementation of the AML/CFT requirements. Several of the above factors also explain why interest rates on credit institution loans to Latvian

[1] Support is sometimes used inefficiently, structural adjustments are potentially delayed, investment quality deterioration is not recognised in a timely manner, financial assets are assessed inadequately in the financial markets.

[2] Declining external demand and supply, weakening economic activity and sentiment and deteriorating creditworthiness of borrowers are affecting financial institutions' credit risk and profitability as well as their lending decisions.

NFCs are among the highest in the euro area[3]. If these deficiencies are not addressed in a sufficiently timely[4] and comprehensive manner, **the structural flaws in financial intermediation may persist, thus limiting the financial sector's development and its contribution to the economy**.

In view of the significant presence of foreign banks in the Latvian financial sector, **the sector's dependency on developments in parent banks and their strategic decisions** (inter alia, with regard to their business volumes, risk appetite and ROE targets) **as well as on the macrofinancial situation in their home countries** (including the risks associated with the real estate market development and the high level of household indebtedness) **should be mentioned as a potential structural vulnerability**. At the same time, an important aspect, in times of crisis in particular, is the fact that the largest parent banks are resident in a region considered a "safe harbour", having a stable macrofinancial environment and fiscal resources for the support of its economies, a high level of digitalisation and developed public (including health care) services. Moreover, the financial indicators of the parent banks are solid and their borrowing costs are low.

The cybersecurity risk to the information systems of financial institutions is a continuous potential systemic vulnerability to Latvia's financial stability. This risk has particularly risen amid the Covid-19 pandemic since financial institutions are also increasingly operating remotely.[5]

Climate change and the related transition risks also pose a potential systemic vulnerability to the financial stability in Latvia as well as in the euro area and elsewhere. ESG issues are high on the list of Latvijas Banka's priorities. In order to mitigate climate risks, institutions should take a forward-looking and coordinated stance and action. In this Report, the climate change impact assessment is focussed on the securities portfolio of Latvia's financial sector, analysing its exposure to climate risks[6].

Recommendations

1. The government support measures for crisis management and economic recovery should be implemented in a targeted and sustainable way. It should be monitored that the state support programme for house purchase for families with children does not, over time, facilitate an unjustified decline in lending standards and a build-up of imbalances in the real estate market. The programme should be refined to remove incentives for the borrowers who actually need no state guarantees to apply for the support.

2. Credit institutions should recognise impaired loans in a timely manner, make adequate provisions and approach dividend payouts with caution.

3. The ongoing structural issues that are holding back the development of lending should be addressed.

4. Measures should be taken to facilitate more efficient credit risk assessments of borrowers and adequate management of non-performing assets.

5. The AML/CFT framework should be improved further to maximise its efficiency and ensure that it is risk-based (including private sector education, clear and uniform guidelines on requirements, interinstitutional coordination, reduction of the administrative burden).

[3] See Appendix 2 "Interest rates on new loans to NFCs. Evidence from Latvijas Banka's Credit Register microdata".

[4] Several measures, e.g. capital market development initiatives, adoption of the Law on Covered Bonds, amendments to income tax regulation promoting reinvestment of earnings, improvements in insolvency proceedings and the AML/CFT system, have already been/are still implemented.

[5] Information systems' risk assessments are published in Latvijas Banka's Financial Stability Reports (see Financial Stability Reports 2017 and 2020 as well as Appendix 4 "Increasing relevance of cybersecurity risk" to the present Financial Stability Report).

[6] See also Appendix 4 "Risks associated with climate change in the context of financial stability" to the Financial Stability Report 2020.

THE SYSTEMIC RISKS TO LATVIA'S FINANCIAL STABILITY

1. The global and domestic impact of the Covid-19 pandemic

New waves of the Covid-19 pandemic

Slow vaccination roll-out

Weaker external environment

Inadequate support stimuli

Fiscal exhaustion

Incapability to adapt structurally

Slower and uneven economic growth

Deteriorating solvency of borrowers, emigration, a decreasing number of credit institution customers

Weak lending, investment and development

An increase in credit institution credit risk and profitability risk

2. Financial intermediation deficiencies and persistently weak investment environment

Shadow economy

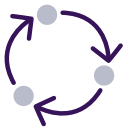
Inadequate NFC capitalisation

Difficult-to-predict business regulation

Ineffective human capital development

Governance shortcomings

Legal environment deficiencies



Underdeveloped capital market

Banking market segmentation

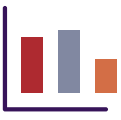
The impact of the previous crises on the credit pricing and risk appetite

Insufficient implementation of AML/CFT requirement

Persistently weak lending and investment

Non-competitive financing price for the real sector

Lagging economic development



Weaker profitability prospects for the financial sector

POTENTIAL SYSTEMIC VULNERABILITIES

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

IT security risk

Climate change and the related transition risks

1. MACROFINANCIAL ENVIRONMENT AND BORROWERS' SOLVENCY

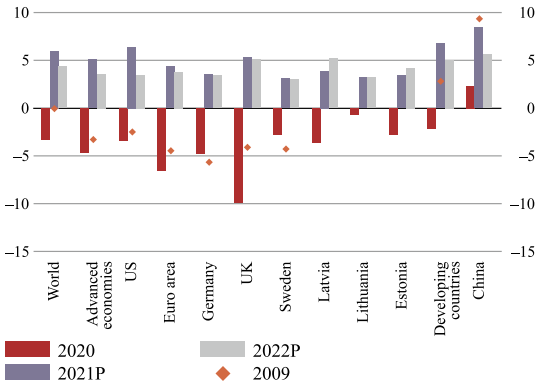
External macrofinancial environment

The global economy and economic sentiment continue to develop in waves mirroring the path of the pandemic and the associated containment measures. Unprecedented support measures have significantly mitigated the shock to the global economy. At the same time, the roll-out of vaccinations and new and better targeted fiscal support programmes bolster confidence and significantly improve the global economic outlook. Uneven economic recovery and an abrupt withdrawal of support measures could increase loan losses and heighten the risk perception of banks, limiting their ability to fund the post-pandemic economic recovery.

According to the IMF's assessment[7], the global economy contracted by 3.3% in 2020 (see Chart 1.1). This is a much better outturn than expected, as **the sizable fiscal and monetary stimuli, a more flexible financial sector supervision policy as well as loan moratoria significantly mitigated** the economic and labour market shocks as well as financial market stress and its spillovers to the financial sector. According to the IMF, in the absence of support measures, the drop of the global GDP would have been at least three times deeper.

Roll-out of vaccinations, additional fiscal stimuli as well as the successful adapting of the private sector to the pandemic circumstances have lifted the global economic outlook. The IMF projects that the global GDP could grow by 6.0% and 4.4% in 2021 and 2022 respectively. Easing of trade tensions between the US and its cooperation partners as well as the signing of the Brexit deal also helped to diminish uncertainty. As a result of postponed consumption, precautionary considerations and fiscal support measures, household savings have increased considerably across the globe[8]. When the pandemic containment measures are eased

Chart 1.1
REAL GDP – ANNUAL CHANGES AND IMF PROJECTIONS (P)
(%)



and the uncertainty subsides, even a partial release of the postponed consumption will contribute to economic growth. At the same time, the persistently complicated global epidemiological situation, limited fiscal space in several countries and the economic fallout from the Covid-19 crisis (for example, rising indebtedness, uneven effects across economic sectors and enterprises of various sizes, growing income and opportunity inequality, structural changes) sustain high uncertainty and increase the medium-term risks to economic growth and financial stability.

The economic downturn in the euro area was, on average, relatively deeper than in other advanced economies. The euro area's GDP contracted by 6.6% in 2020, with the individual rates ranging from a 10.8% fall in Spain to a 3.4% growth in Ireland[9]. Uneven development across the euro area countries was determined by the differences in the spread of the Covid-19 pandemic and its restrictions, vaccination progress as well as the structure of the economies and implemented government support measures.

The pandemic shock to the euro area economy was overall more severe than that of the global financial crisis of 2008, but the monetary, fiscal, supervisory as well as borrower support measures this time were also much more sizeable, effectively limiting the pandemic's fallout on the financial sector. The above measures helped a large part of businesses and

[7] See IMF World Economic Outlook of April 2021.

[8] Bloomberg has estimated that the extra savings built up during the pandemic (household account balances and deposits above the historical average) in the US, China, United Kingdom and major euro area countries range from 2.7% to even as much as 7.2% of GDP.

[9] Ireland's positive GDP growth rate can be explained by the significant role of large multinational companies in its economy rather than a small impact of the pandemic.

households overcome the initial shock. Yet with the crisis dragging on, the liquidity challenges and falling turnover faced by businesses could quickly trigger solvency problems, thereby increasing credit risk and potentially weighing on economic activity. At the same time, support measures like loan guarantees, moratoria or tax deferrals partly mask the financial challenges faced by businesses and delay the build-up of NPLs, making it difficult to assess the real quality of bank assets. NPLs in euro area banks have been shrinking so far, but **the increase in forborne and Stage 2 loans points to rising credit risk**. In such circumstances, timely recognition of credit quality risks, adequate provisioning, enhanced monitoring of those risks as well as timely planning of the banks' balance sheet repair measures is essential.

The overall resilience of the euro area banks to shocks remains good, yet the financial stability risks have grown substantially. Euro area banks suffered from low profitability already before the Covid-19 pandemic, and it has currently weakened further. With the expected loan losses growing and margins narrowing in the environment of persistently low interest rates, the uncertainty surrounding the future profitability prospects and lending development remains high. The overall solid capitalisation level and loss absorption capacity of euro area banks masks differences across countries and banks (see Chart 1.2). In addition to the low profitability of banks and the rising credit risk, the risk of abrupt financial market corrections, growing private and public sector indebtedness, corporate solvency challenges as well as intensifying risks in the non-bank sector all increase the vulnerability of the euro area's financial system.

Along with stabilising effects, support measures also may have some undesirable side effects adding to the imbalances accumulated already before the pandemic. Policy makers need to find a balance between premature unwinding of the support and keeping poorly targeted measures in place for too long and thereby sustaining non-viable businesses and delaying structural changes in the economy.

Funding of support measures pushes up the levels of sovereign debt. Part of the measures contributes

Chart 1.2
PROFITABILITY AND TOTAL CAPITAL RATIOS OF MAJOR EUROPEAN BANKS IN 2020 (EBA SAMPLE OF BANKS)
(%)

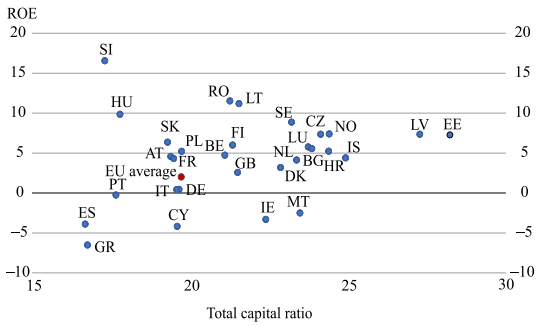
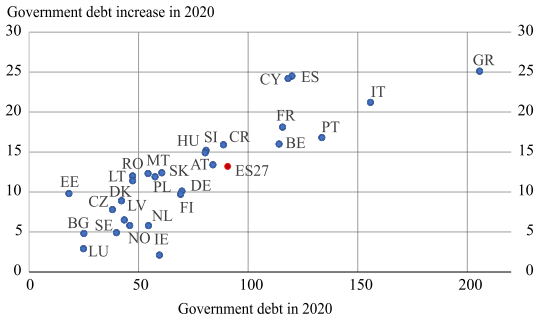


Chart 1.3
GOVERNMENT DEBT
(% of GDP)



to rising corporate and household debt, with borrowers undertaking new loan commitments or increasing their debt on account of deferring the existing debt payments. **That, in turn, intensifies the debt sustainability risks**, i.e. concerns about the longer-term debt repayment ability. Indebtedness increased more significantly during the Covid-19 pandemic in countries with pre-existing high government debt levels (see Chart 1.3), although, to some extent, the rise can also be explained by the plunging GDP. The potential effects of negative feedback loops between the government, private and financial sectors are also intensifying.

Despite higher uncertainty and volatility since the onset of the pandemic, the overall sentiment in financial markets remains optimistic. It is supported by positive news about roll-out of vaccinations and fiscal policy stimuli, while the accommodative monetary policies pursued by central banks have ensured particularly favourable financing conditions. Following a temporary drop in risk appetite at the beginning of the pandemic, the search for yield observed in the previous years is back. Therefore, the prices of

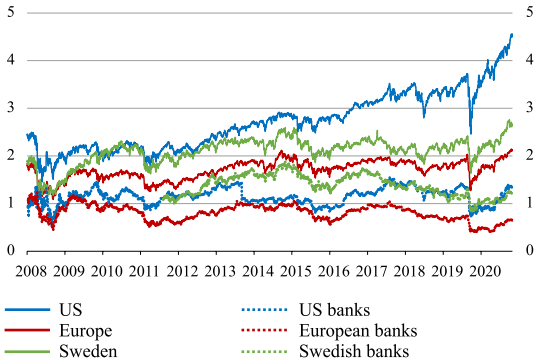
many assets continue to rise and have reached their record-highs. The number of speculative and high-risk transactions is growing and that could contribute to bringing large and concentrated losses to financial institutions. **Risks related to overvalued financial assets, decoupled from economic fundamentals and development prospects, are accumulating and increasing the probability of abrupt corrections and financial stability risks.**

At the beginning of 2021, higher inflation expectations in the US and anticipation of a respectively faster raise of the FRS rates contributed to a bond markets adjustment. The overall improvement in economic sentiment slightly eased the concerns about the effects of the persistently low interest rates environment on bank profitability in advanced economies and contributed to rising stock prices of the banking sector. The market financing conditions for banks have also remained favourable. At the same time, **European bank valuations in stock markets overall remain rather low** (see Chart 1.4), **reflecting the persistent structural issues as well as relatively weaker recovery forecasts for the euro area**.

Vulnerability in the euro area real estate markets continues to grow. Developments in the residential and commercial property markets, however, are divergent. Cyclical and structural changes in consumption composition and the economy overall, additional savings, household support measures, decreased activity in construction, low interest rates as well as the search for yield and safe-haven investments have contributed to a rapid rise in mortgage lending and/or housing prices across the euro area. In some countries, the rise is viewed as excessive and involving a risk of significant adjustment in housing prices, particularly in countries with high household indebtedness levels.

At the same time, European commercial property markets experience a considerable fall in prices and transaction volumes, albeit with uneven developments across countries and market segments. The overall exposure of European credit institutions to real estate market risks is high, whereas the non-bank financial institutions have made considerable investments in the commercial property markets. Consequently, **a sharp price adjustment in the real estate market could significantly elevate the credit risk in the financial sector and affect investment and economic activity.**

Chart 1.4
BROAD MARKET INDICES AND P/B VALUES OF BANK STOCKS
(price to book value)



The resilience of the Nordic economies and their financial sectors to the Covid-19 pandemic shock overall is assessed to be better than the European average. This limits the rise of financial stability risks in Latvia, as Latvia's financial sector remains highly dependent on developments in the home countries of the parent banks and the strategic decisions of the parent banks[10].

The economic downturn experienced in the Nordic and Baltic countries was milder than the EU average. The fiscal capacity of the countries to implement economic support measures has been overall relatively high. At the same time, the government debt levels remain rather low also following the expansion of the fiscal room to accommodate the measures to address the fallout from the Covid-19 pandemic (see Chart 1.3)[11]. Microprudential and macroprudential support measures, recommendation of a cautious approach to distribution of profit as well as the monetary policy incentives enable the Nordic credit institutions to continue lending and absorb losses, if necessary. Strong social protection and health care and well as advanced information and communication technologies along with high levels of household savings and economic

[10] The financial systems of the region are closely interlinked, as some banks are significant market players in several Nordic and Baltic countries. For example, Sweden is the home country of two systemically important credit institutions of Latvia, whereas the Latvian branch of the Estonian credit institution Luminor Bank AS is the third biggest lender in Latvia.

[11] Out of all Nordic countries, only Finland had government debt above 60% of GDP in 2020.

wealth are significant factors mitigating the pandemic shock in the Nordic region.

The Covid-19 shock did not cause adverse developments in the Nordic real estate market and financial sector. The Swedish and Norwegian real estate markets swiftly recovered from the initial shock, and the housing prices and mortgage loans have resumed vigorous growth. Banks also have quite large investments in commercial properties.

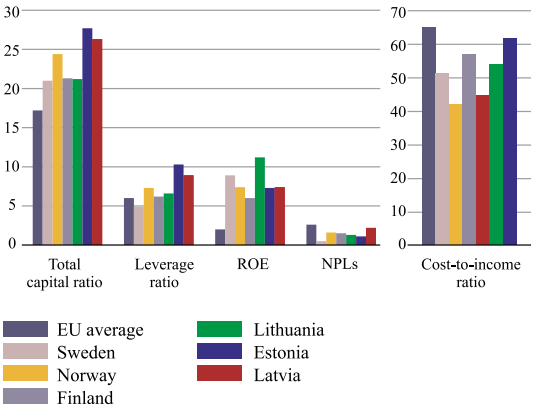
This means that the previously accumulated risks associated with an imbalanced real estate market development and the high levels of household debt are still significant.

The resilience of the Nordic financial sector to shocks is underpinned by the solid financial performance of the major banking groups. Although the Nordic banks suffered some profitability losses in 2020, their profitability remains good, if compared to the EU average (see Chart 1.5). The stock prices of Swedish banks fully recovered from the fall following the initial shock at the onset of the pandemic. Overall, the perception of their credit risk remains rather low and stock valuations quite high in financial markets, and the cost of funds for the Nordic banks is low. Major Nordic banks are relying on market-based financing and the Nordic economies are open; therefore, favourable financing conditions, confidence of market participants and foreign investors as well as external market developments are significant factors affecting their financial stability and economic growth, which could also have an indirect effect on the lending policies of the Nordic banks in the Baltic region and the economic growth of this region.

Domestic macrofinancial environment

The impact of the Covid-19 pandemic on the growth of the national economy, the solvency of borrowers and the financial system is still the main systemic risk for Latvia's financial stability. At the same time, financial conditions for both the private sector as well as the state as a whole have not deteriorated, substantial government support mechanisms have been put in place, and vaccination has commenced, allowing economic recovery to be expected in the coming two years.

Chart 1.5
MAIN FINANCIAL INDICATORS OF NORDIC, BALTIC BANKS AND EU AVERAGES (EBA SAMPLE OF BANKS)
(%)



The Latvian national economy shrank by 3.6% due to the impact of the Covid-19 pandemic in 2020. The drop in GDP was less than initially forecast as governmental and other types of support, and the ability of many economic players to adapt to the pandemic's restrictions, enhanced the stability of the economy. In addition, financial conditions for the private sector as well as the state as a whole have not deteriorated. The decline in economic activity in Latvia was less than the average in the EU. This can partly be explained by the structure of the Latvian economy and exports (for example, the size of the tourism sector is smaller) as well as by the absence of significant macroeconomic imbalances prior to the pandemic (in contrast to the global crisis of 2008).

Economic activity in Latvia is closely linked to the epidemiological situation. Growth in GDP was restored in the second half of 2020, with a reduction in the numbers of new infections, whereas during the second wave of the pandemic in the first quarter of 2021, economic growth fell once again. According to Latvijas Banka's June 2021 forecasts, Latvia's GDP will increase by 3.3% in 2021 and by 6.5% in 2022. The growth will be based on a reduction in restrictions along with an increase in the number of vaccinated persons, fiscal support and the gradual improvement in confidence of economic players. However, the pandemic and the associated restrictions as well as an insufficiently swift vaccination process continue to be significant risks to growth and to borrowers' solvency.

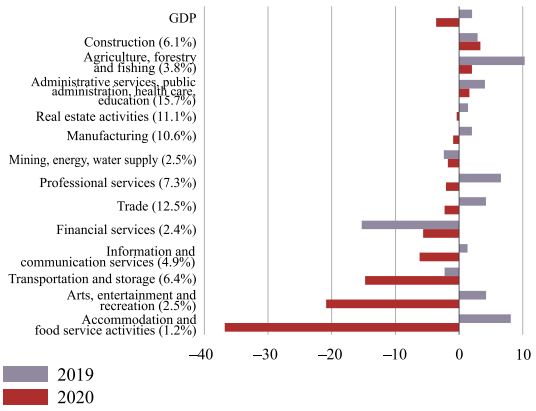
The impact of the pandemic on various economic sectors has been very uneven up till now (see

Chart 1.6). Measures for containing the pandemic have had the most notable effect on the accommodation and food services sector, and the art, entertainment and recreation sector, although the financial sector's exposure to these sectors is relatively small. There has also been a substantial decline in the transportation sector – in addition to the shock of the Covid-19 pandemic on freight transport by road and passengers by air, this sector continued to be affected by the reduction in the transit of Russian freight through Latvian ports. At the same time, the Covid-19 pandemic had little effect on agriculture, forestry and fishing. Growth continued in sectors closely linked to government services (health care, public administration and education). The government's investment in infrastructure stabilised construction development. The performance of the manufacturing and trade sectors was relatively more successful.

The decrease in private consumption has had the greatest influence on economic decline, while investment and external demand have turned out to be more stable (see Chart 1.7). The fall in consumption was influenced significantly by measures introduced to restrict the pandemic making some types of consumption impossible, by a reduction in employment and income for a part of the population as well as consumer caution. Private consumption is forecast to recover significantly in 2021, and it will be the main driving force for economic growth. This will be facilitated by the utilisation of savings made during the period of the pandemic and the fiscal support.

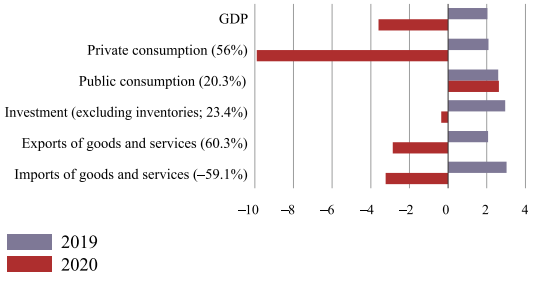
Overall investment activity has continued to be sluggish as private sector investors have become cautious in conditions of high uncertainty – some investors are postponing their investment plans, and lending to firms is also weak. Further development of investment could be stimulated by an improvement in economic sentiment and the gradual availability of the EU Recovery Fund financing. **The protractedly weak investment and lending environment in Latvia points to lingering structural deficiencies in the economy and financial intermediation, the correction of which is important for the strengthening of long-term growth and the development of the financial sector** (see the section on the lending development).

Chart 1.6
GDP FROM THE PRODUCTION SIDE
(annual changes; %; seasonally and calendar adjusted data)



Contribution of the respective sector to GDP in 2020 is indicated in brackets at the axis (% of nominal GDP).

Chart 1.7
GDP FROM THE EXPENDITURE SIDE
(annual changes; %; seasonally and calendar adjusted data)



The share of the respective GDP component in GDP in 2020 is indicated at the axis (% of nominal GDP)

The epidemiological situation around the world and the decline in global economic activity have caused a decline in external demand. The competitiveness of Latvian goods has been relatively stable. Furthermore, the exports of goods have been facilitated by both the more successful economic development of the country's main trading partners as well as the structure of Latvian exports of goods, where quite a significant proportion consists of commodities for which demand remained resilient during the pandemic. At the same time, the exports of Latvian services declined significantly, and this determined the overall fall in exports. In turn, the contraction of domestic demand was reflected in the reduction in imports of goods and services.

Government spending and measures for reducing the crisis provided significant support to the Latvian economy. Latvia's participation in the euro area and the fiscal discipline observed in previous years created positive conditions for government borrowing, whereas the accommodative monetary policy of the ECB facilitated financing on very favourable terms.

The budget deficit and government debt at the end of 2020 reached their highest levels since the previous crisis at 4.5% and 43.5% of GDP respectively. The government's financial sustainability is not under threat, but g**overnment support should be increasingly focused on more targeted post-crisis economic stimuli and long-term investment in human capital and productive economic development.** It should be noted that all leading credit rating agencies maintained their credit ratings for Latvia at the same level during the Covid-19 crisis.

Measures introduced in Latvia to reduce the consequences of the Covid-19 pandemic

Government support measures, accommodative monetary policy, a more flexible financial sector prudential policy[12] as well as loan moratoria and individual solutions offered by credit institutions to borrowers helped many businesses and households to overcome their short-term liquidity problems and mitigated the effect of the pandemic on the Latvian economy, and this, in turn, significantly reduced the transmission of the shock to the financial sector. It is important to provide targeted support to businesses and households that have been affected by the crisis. At the same time, adaptation of companies to the new conditions and the development of labour skills should be encouraged, thereby supporting sustainable lending and economic recovery as well as restricting side effects that include an increase in medium-term risks to financial stability.

Monetary policy

In reaction to the consequences of the shock caused by the Covid-19 pandemic to the economy and financial markets, the ECB decided on immediate monetary policy support. The regular asset purchase programme was increased. Several non-traditional monetary policy instruments were also utilised. The Governing Council of the ECB decided on the commencement of a new PEPP and an increase in the asset purchases, while the financing conditions for the TLTRO III[13] were eased significantly. **The measures put into effect by the ECB have been important for reducing the pandemic's negative effect on the economy, providing liquidity support to the euro area's financial system, supporting favourable financing conditions, facilitating lending and promoting stability in financial markets.**

Accommodative monetary policy provides significant direct and indirect benefits to Latvia. The ECB's monetary policy measures facilitate confidence and external demand in Latvia by reducing the negative effect of the pandemic on the euro area's economy. Latvia, as a euro area member state, has favourable funding conditions available to it on international financial markets. In total, the Eurosystem has purchased 1/3 of all of Latvia's government bonds, including in the amount of almost 1.1 billion euro within the framework of the PEPP. Several Latvian credit institutions have participated in TLTRO III operations. Latvian credit institutions have borrowed 1.3 billion euro at record-low interest rates. These operations provide credit institutions with the opportunity to be rewarded by the central bank for lending their funds to the economy. The effect of the accommodative monetary policy of the ECB and the Nordic central banks is that funding costs for Latvia's credit institutions have remained low. In turn, financing terms for the private sector as a whole have not deteriorated, even though interest rates on loans to Latvian businesses and households continue to be among the highest in the euro area.

Loan moratoria and credit institutions' individual support measures for borrowers

To provide liquidity relief to borrowers, loan moratoria or other solutions were announced in many European countries to support borrowers. In Latvia, support measures of this type could be divided into the three following groups:

1) The Finance Latvia Association, in compliance with EBA guidelines, has developed a non-legislative industry-wide moratorium for individuals and legal

[12] See the sections on capitalisation and macroprudential policy.

[13] See Latvijas Banka's "Macroeconomic Developments Report" published in March 2021.

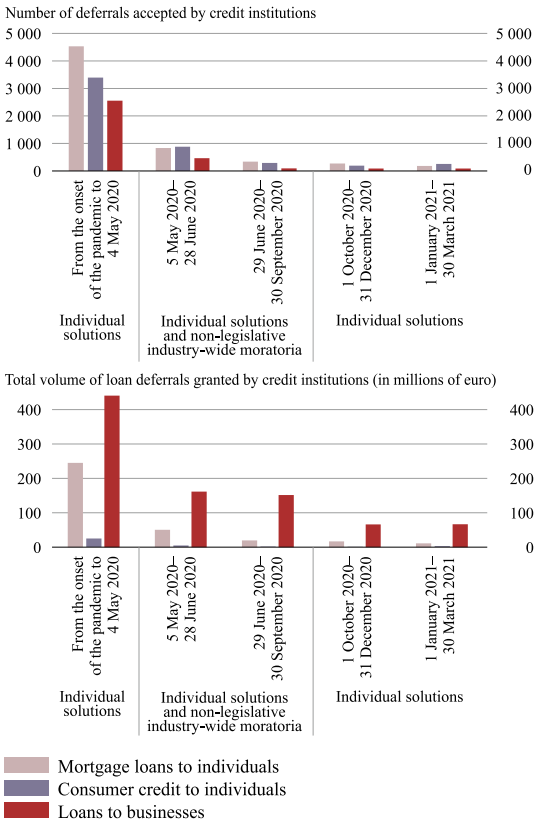
entities[14] with the aim of offering standardised solutions to borrowers who have ended up in difficulties due to the restrictions imposed by Covid-19. In Latvia, the moratoria provided an opportunity to postpone loan principal payments for a certain time (up to 12 months in the case of household loans for house purchase and up to six months in the case of corporate loans as well as leasing and consumer credit to households). The deadline for submission of applications and their approval expired on 30 September 2020, and the moratoria were not extended due to the low demand from borrowers.

2) A legislative moratorium of up to six months was introduced for the repayment of the loan principal for study and student loans and was applied upon borrower request up to 31 December 2020. The number of these loans is negligible.

3) Latvia's credit institutions were forthcoming and were offering individual solutions to borrowers who had ended up in financial difficulties due to the effect of the pandemic already from March 2020. The individual solutions were utilised cumulatively even more than the industry-wide moratorium, and this could be linked to two factors: firstly, for a large proportion of loans, the loan principal payments had already been postponed before the industry-wide moratoria came into effect; secondly, borrowers with overall liabilities greater than 5 million euro, for whom solutions are usually adapted individually, did not qualify for the industry-wide moratorium.

According to the Latvijas Banka's Credit Register data, **overall loan moratoria and individual solutions have been applied to 9% of domestic loan portfolio since the beginning of the pandemic**. At the same time, information collected by the Finance Latvia Association[15] shows that from the beginning of the pandemic until 30 September 2020 the performance of obligations was postponed for 13 393 contracts for an overall total of 1.1 billion euro. Furthermore, in terms of numbers, the majority of contract had already been postponed prior to the introduction of the industry-wide moratorium (see Chart 1.8). After the end of the industry-wide moratorium, from 1 October 2020 until 31 March 2021, the performance of obligations was postponed on an individual basis for a relatively small number of borrowers 1135 contracts for a total amount of 168 million euro.

Chart 1.8
NUMBER OF DEFERRALS OF LOAN REPAYMENT OBLIGATIONS AND VOLUME OF DEFERRED LIABILITIES (MEMBERS OF FINANCE LATVIA ASSOCIATION)



Moratoria and individual support measures mitigated the immediate effect of the pandemic's economic consequences on the financial situation of borrowers and the quality of credit institutions' loan portfolios, thus restricting the decline in economic activity and short-term risks to financial stability. At the same time, this type of support can facilitate an increase in the "hidden" credit-risk in loan portfolios, consequently slowing down the improvement process in the balance sheet quality of credit institutions in the long-term, correspondingly limiting the capacity of credit institutions to finance economic development after the pandemic (see section on credit risk).

Fiscal support measures

Government support had a crucial role in reducing the influence of the pandemic and its containment

[14] Came into force on 29 April and 5 May 2020 respectively.
[15] Statistics about the moratoria for legal entities and individuals were provided by Finance Latvia Association members.

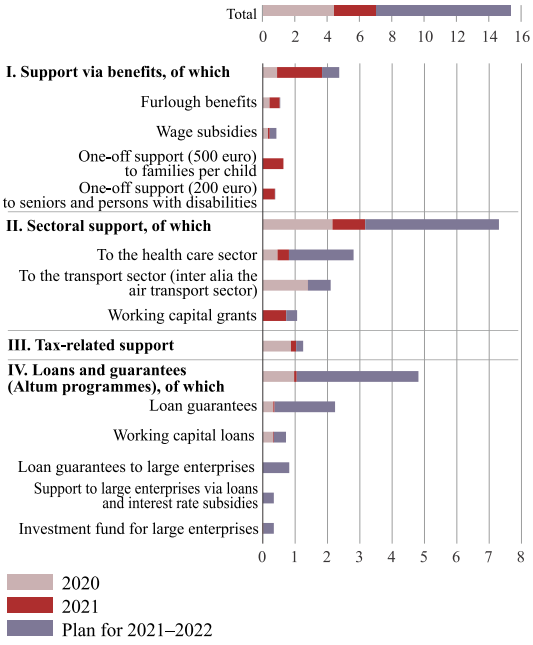
measures on the Latvian economy. The scope of supportive measures provided up till now to overcome the crisis caused by Covid-19 equals 7.1% of the 2020 GDP. In total, the range of overall support allocated since March 2020, and the balance which has been approved for 2021–2022 equals 15.7% of the 2020 GDP[16] (see Chart 1.9).

Government support has varied in both the range of instruments as well as the scope. Overall, these measures can be divided up into five groups: social benefits and income support, direct support to economic sectors, tax measures, loans and guarantees provided by AS Attīstības finanšu institūcija Altum (hereinafter, Altum) as well as additional financing from EU funds.

Benefits, including measures to maintain employment, have had an important role in supporting consumer sentiment and economic activity in European countries. In Latvia, such instruments were used relatively little during the first state of emergency, but their range was later expanded. Therefore, **their influence on the solvency and confidence of Latvian households has been belated**. During the first wave of Covid-19, the criteria for the allocation of furlough benefits were quite strict, which is why the actual uptake of the programme was weaker than expected. But, in the summer of 2020, the range of income support measures was broadened: partial furlough or wage subsidies for individual sectors (those involved in exports and companies in the tourism sector) were introduced, later full furlough and partial furlough benefits were provided for all sectors. At the same time, almost half of the benefits were distributed over a very short period in an untargeted way, paying out a one-off benefit to all families with children, pensioners and other groups in spring 2021, irrespective of how seriously the benefit's recipients from those wide groups of population had been affected by the pandemic's economic consequences. The proportion of sickness and unemployment assistance benefits was relatively small.

Almost half of the actual uptake of the support package in Latvia consisted of support to economic sectors, although its direct effect on economic activity has been relatively limited, as the majority was allocated to the transport sector (including 0.9% of the 2020 GDP granted to the air transport sector) as well as to health care. Working capital grants were introduced in the second wave of the crisis, which broadened support for businesses in a targeted and inclusive way.

Chart 1.9
GOVERNMENT SUPPORT MEASURES TO MITIGATE COVID-19 PANDEMIC CONSEQUENCES IN LATVIA; THEIR ACTUAL UPTAKE AND THE PLANNED AMOUNT OUTSTANDING AT THE END OF APRIL 2021
(% of GDP in 2020)



Tax-related measures in many European countries provided significant support to companies, and partly also to households to reduce their expenses. In Latvia, tax-related measures included extending the terms for the payment of all types of taxes by up to three years, as well as the cancellation of the advance payment of personal income tax, and refunds of overpaid value added tax within a shorter period. **At the same time, tax deferrals actually increase the indebtedness of businesses.** Therefore, debt repayment problems could appear for businesses with rather large debts after the end of the support period.

Financial instruments, particularly guarantees, have a significant role in the overall support package in many countries. In **Latvia too, Altum introduced**

[16] Data at the end of April 2021. Support measures approved later have not been included in the analysis.

several new financial instruments[17] (see Table 1.1).

Altum working capital loans provide liquidity support to businesses affected by the pandemic. The role of Altum financial instruments in the loan market has grown in the weak lending environment: **working capital, and other types of Altum loans compensated for the reduction in the flow of newly issued loans in the economy** (see section on lending development).

In some European countries (including all three Baltic States) mechanisms were developed for state equity participation. **Altum established an investment fund with the aim of providing financing to large businesses, the operations of which had been negatively affected by the pandemic, and that were ready to adapt or transform their current business model.** Private funding was also attracted in addition to the 50 million euro government funding. Furthermore, the investors – the managers of several Latvian pension funds – publicly expressed their readiness to increase this funding several times if there was demand from businesses.

Altum developed two loan guarantee programmes to support borrowers whose operations had been affected by the spread of Covid-19. Substantial funds were allocated to the loan holidays guarantee programme, but only 16% of the planned amount was used. At the same time, there was no interest in the guarantee programme for large businesses.

In Latvia, loan guarantees were mainly allocated as an additional guarantee for existing borrower liabilities and as an instrument for postponing repayment of the loan principal. Accordingly, the effect of the Altum loan guarantee on lending is seen as small. This could be associated with several factors, for example, the overall weak lending dynamic in the period before the pandemic, some "competition" with the moratorium developed by credit institutions, as well as programme conditions (for example, relatively

[17] During the pandemic, Altum's programme for long term loans and their interest subsidies to preserve and increase Latvia's exports and competitiveness, as well as for the implementation of viable projects was also approved, but it has not been classified as an instrument for businesses affected by the pandemic and has therefore not been examined in detail.

Table 1.1
ALTUM FINANCIAL INSTRUMENTS FOR BUSINESSES AFFECTED BY THE PANDEMIC

Support measure	Conditions	Programme size
Working capital loans	Up to 1 million euro Term – up to 1–3 years Loan holidays – up to 1 year Reduced interest rates and reduced collateral requirements	Up to 210 million euro
Loan holidays guarantees (individual and portfolio guarantees)	Up to 5 million euro Term – up to 3–6 years Guarantee coverage – up to 50% New and existing loans Loan holidays	Indicative volume of guaranteed loan portfolio – up to 655 million euro
Loan guarantees for large businesses	Up to 15 million euro Term – up to 8 years Guarantee coverage – up to 90% New and existing loans Loan holidays	Indicative volume of guaranteed loan portfolio – up to 240 million euro
Investment fund	Investment in companies' capital, mezzanine financing, investment in listed bonds Up to 10 million euro Investment period – up to 7 years (possibility of a 1-year extension)	100 million euro (government funding of 50 million euro)
Export guarantees	Up to 2 million euro for losses, which have arisen with one foreign purchaser	Additional funding has not been allocated

Source: Altum

low guarantee coverage, and proof of the effect of the pandemic). According to the information[18] aggregated by the ESRB about support programmes, loan guarantees have also been used very little in the other Baltic States and in Europe as a whole, except for a few countries (for example, Spain, France, Italy and Portugal).

The Latvian government's support measures had a central role in mitigating the effect of the crisis, protecting the economy from a wave of mass bankruptcies and losses of employment and thus facilitating the stability of the financial sector against the crisis caused by the pandemic. Latvijas Banka's estimates show that the state support measures announced for reducing the consequences of the second wave of the pandemic could increase Latvia's GDP growth by up to 3.5%[19].

With respect to sectors, the greatest support was received by the trade and manufacturing sectors, while the accommodation sector was the third largest recipient within the support package related to the Covid-19 pandemic[20]. At the same time, government support was also received by such sectors as construction, and information and communication services, which can be considered to have been generally successful in 2020. During the period of the second wave of the pandemic, the government offered a much wider scope of support. Even though approximately 1/3 of the overall support package continued to be debt-creating support measures (loans, guarantees, and tax deferrals), the actual uptake of these instruments was small (less than 1% of GDP).

The epidemiological situation continues to be complex which is why **it is important to continue providing targeted liquidity and income support to businesses and households affected by the crisis**. At the same time, if support measures continue too long, they can facilitate non-productive allocation of government funding or bank credit resources. Therefore, **support mechanisms should be structured in an intelligent way**, increasing the role of support measures that are focused on strengthening solvency and adaptation of businesses to the new conditions, making long-term investment in human capital and raising productivity, **promoting sustainable lending and economic recovery as well as avoiding side effects, including an increase in risks to medium-term financial stability.**

Financial vulnerability of borrowers

The effect of the Covid-19 pandemic on the solvency of various borrower groups has been heterogeneous. The financial vulnerability of businesses from sectors most directly affected by the pandemic has increased significantly. Moreover, the financial performance of those sectors was weaker and salaries were lower than in other sectors already before the crisis. As a result of government support measures as well as given that some sectors maintained growth, the average financial soundness of households and credit payment discipline has not deteriorated, and gross savings and wage bill have even increased. The increase in the financial vulnerability of NFCs has so far been overall insignificant; nevertheless, the elevated solvency risks in the sectors hit hard by the crisis and the dependence of those sectors on government support as well as the high uncertainly and various second-round effects elevate the risks also for the less affected sectors.

Financial soundness of households

Despite the significant impact of the Covid-19 pandemic on people employed in the sectors most directly affected by the crisis, the overall financial soundness of Latvia's households has not deteriorated notably, and the wage bill and gross savings have even grown (see Chart 1.10). In 2020, the wage bill of households[21] increased by 2.1% (by 3.2% when including the received furlough benefits and wage subsidies). This is a more moderate growth rate as compared to 8.0% in 2019. The wage bill developments,

[18] See the ESRB's report "Financial stability implications of support measures to protect the real economy from the COVID-19 pandemic" published in February 2021.

[19] See the Latvijas Banka's " Macroeconomic Developments Report " published in March 2021.

[20] See Brusbārde, B. (Latvijas Banka). "Business Activity in the Covid-19 Year: Crisis and Responses".

[21] In crisis circumstances, changes in the overall financial soundness of households are better characterised by the wage bill developments rather than the evolution of the average wage, as the wage bill reflects changes in both the received salaries and the number of hours worked.

however, were uneven across sectors. Notable declines were reported for the sectors directly affected by the crisis, like tourism as well as accommodation and food services sector where the wage bill contracted by almost 1/3. Moreover, the wages in those sectors had been lower than in other sectors already before the crisis (see Box 1.1). The results of Latvijas Banka surveys (see Box 1.2) also confirm that the effect of the pandemic on household income was uneven.

Government support measures helped to cushion the crisis effect on employment (see the Section on government support measures). The increase in the rate of jobseekers was moderate during the pandemic: from 6.0% at the end of 2019 to 8.1% in the first quarter of this year. Significant declines in employment, however, were reported in hospitality, tourism and transport sectors as well as among young people and relatively low-income population.

Moreover, **with the Covid-19 pandemic dragging on, the number of unemployed left without any income upon the expiry of their unemployment benefit entitlement also is growing** (see Chart 1.11). In the circumstances of the Covid-19 pandemic, unemployment assistance benefit[22] was introduced in March 2020, to be paid out to those unemployed whose unemployment benefit entitlement has expired (after 8 months) and who are still unable to find a job. The unemployment assistance benefit is scheduled for termination at the end of June 2021 for all beneficiaries, regardless of the duration a beneficiary has been receiving the benefit. **Depending on the actual spread of the pandemic and the associated containment measures, the option of not withdrawing the benefit so abruptly at the end of June regardless of the duration of receiving the benefit or, if tight restrictions remain in place, perhaps even extending the disbursements of the unemployment assistance benefit should be considered.** The benefit could be withdrawn no earlier than following a significant easing of the Covid-19 pandemic related restrictions. Moreover, well-targeted public support to retraining of population also needs to be intensified.

Chart 1.10
HOUSEHOLD DEPOSITS AND DEBT TO MFIs AND LEASING COMPANIES, ANNUAL CHANGES IN HOUSEHOLD CONSUMPTION AND WAGE BILL
(%)

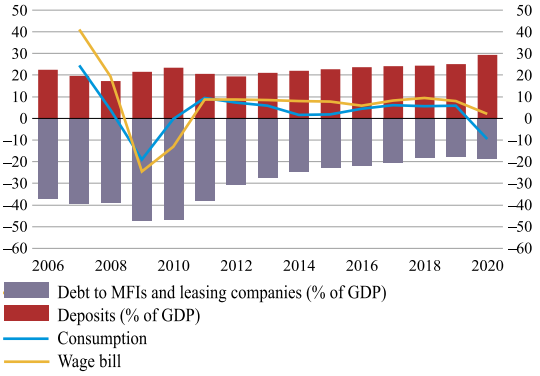
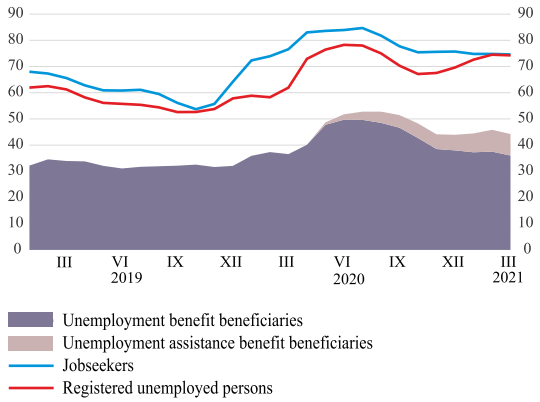


Chart 1.11
NUMBER OF UNEMPLOYMENT BENEFIT AND UNEMPLOYMENT ASSISTANCE BENEFIT BENEFICIARIES
(thousands)



The Covid-19 pandemic has had an uneven effect on household savings: while the aggregate household savings in the economy have increased, a large share of households has insufficient or no savings at all. The prolonged Covid-19 containment measures are progressively depleting the savings of most households. According to a public opinion poll, as at the end of 2020, almost 70% of the population had no savings or insufficient savings (see Chart 1.12). As a result of the implemented government support measures[23], the

[22] Unemployment assistance benefits in the amount of 180 euro will be disbursed until 30 June 2021. Disbursements last for a maximum period of six or four months, depending on the start date of benefit disbursements. The number of beneficiaries of the unemployment assistance benefit is growing. As at March 2021, 8216 people were registered as beneficiaries.

[23] A single benefit in the amount of 500 euro per child was disbursed to families with children in March 2021. The minimum furlough benefit was increased from 330 euro to 500 euro as of 1 January 2021. Larger disbursements of wage subsidies also started in December 2020 and were continued through the first quarter of 2021. In April, a single benefit of 200 euro was disbursed to pensioners and persons with disabilities.

proportion of households with no savings decreased significantly in March 2021. At the same time, a part of households was able to increase gross savings, given the above government support measures, limited spending opportunities and precautionary considerations. In 2020, the consumption of Latvia's households declined by 9.5%, whereas their aggregate deposits with MFIs grew by 12.8%. Similar trends have been observed globally – gross household savings have reached record high levels.

The overall financial soundness of households remains resilient: overall indebtedness and interest burden are low and payment discipline has not deteriorated. Latvia's household debt[24] to GDP ratio is among the lowest in the EU (19.7% at the end of 2020; 19.0% at the end of 2019[25]). Consequently, interest payments on household loans are also small: in 2020, 0.62% of GDP on loans from MFIs and 0.41% of GDP on loans from non-bank lenders. Moreover, the gap between the calculated and recognised interest income has not widened, suggesting that the payment discipline has not deteriorated (see Chart 1.13).

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

[25] The 0.7 percentage point increase relative to GDP in 2020 is mostly attributable to the fall in GDP. In absolute terms, the household debt has remained broadly unchanged.

Chart 1.12
POPULATION RESPONSES TO THE SURVEY QUESTION "HOW ARE YOUR SAVINGS DURING THIS CRISIS?"
(%)

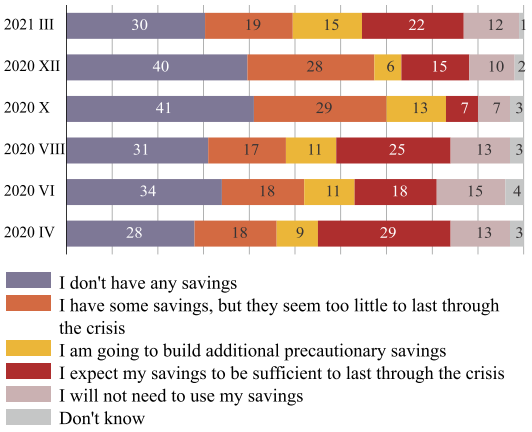
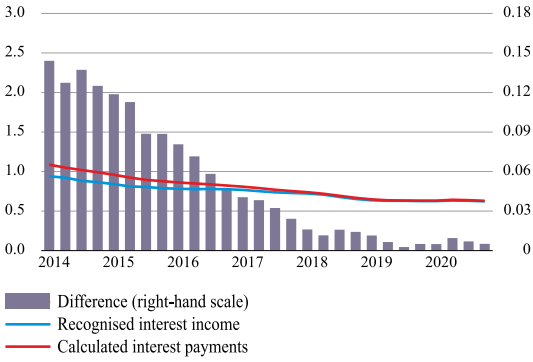


Chart 1.13
DIFFERENCE BETWEEN CALCULATED AND RECOGNISED HOUSEHOLD INTEREST PAYMENTS TO MFIs
(% of GDP)



BOX 1.1. HETEROGENEOUS IMPACT OF THE PANDEMIC ON HOUSEHOLD SOLVENCY

The pandemic has significantly affected people receiving relatively low income, young people and employed persons with little work experience, mainly in such sectors as accommodation and food services, arts, entertainment and recreation, tourism, transport, and personal service activities. The estimated share of population most affected by the crisis is about 17%–18% of all employed in 2019, i.e. the persons employed in the above sectors constituted 17% of the total number of employed persons in 2019. Also, the share of the age group of young people up to 29 years, which were fired most often during this crisis, was similar (18% of the total number of employed persons).

The negative effect of the crisis on income of employed persons was long-lasting and significant in the hardest hit sectors. In 2020, the wage bill in tourism sector dropped by 32.5%, in accommodation and catering – by 31.1%, in personal services activities – by 13.8%, whereas in transport sector and arts, entertainment and recreation sector the decrease was 6.9% and 7.0% respectively. In all sectors most affected by the crisis, except for arts, entertainment and recreation, income of employed persons was considerably lower compared to the pre-crisis level also in the third quarter of 2020 when the restrictions were significantly eased (see Chart 1.14). A large share of persons employed in the aforementioned sectors now face a high

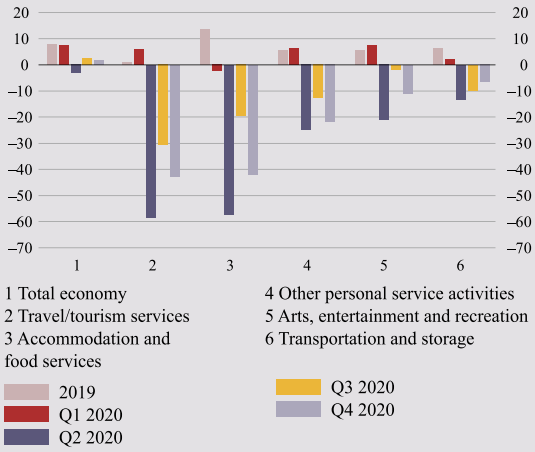
financial vulnerability and their solvency is highly dependent on government support measures that have only partly alleviated the negative effect of the crisis. In 2020, the drop in total income of persons employed in the listed sectors was considerably larger than the funds received through different government support measures.

Income of persons employed in the sectors hit the hardest by the crisis was relatively low also before the pandemic. According to the State Revenue Service data, in 2019, about one half of the persons employed in the accommodation and catering sector as well as in the other service activities subsector received the minimum wage or less than the minimum wage (see Chart 1.15). First, it means that a significant share of persons employed in hardest hit sectors had limited possibilities to make savings and borrow already before the crisis[26]. Lower savings aggravate the negative effect of the pandemic since people do not have any financial safety cushion. Second, it could be an evidence of a higher share of shadow economy in these sectors, hence reducing the possibilities of people employed in these sectors to receive sufficient state social guaranties.

"Other service activities" sector includes repair of computers and personal and household goods as well as different personal service activities. The drop in the wage bill in this sector is mainly attributable to the significant decrease in the wage bill in the personal service activities subsector, including hairdressing and other beauty treatment.

Youth employment fell the most during the Covid-19 pandemic (see Chart 1.16). In 2020, the number of employed persons under 30 shrank by 9.7%, while the total number of employed persons decreased by 2.3%. It serves as an evidence that the share of youth employed in the sectors hit the hardest by the Covid-19 pandemic was higher and that businesses initially opted for firing of less experienced, recently hired employees. **An abrupt withdrawal of government support measures or a slower recovery from the pandemic than in other countries poses emigration risks in population groups most affected by the pandemic, especially among young and mobile people.**

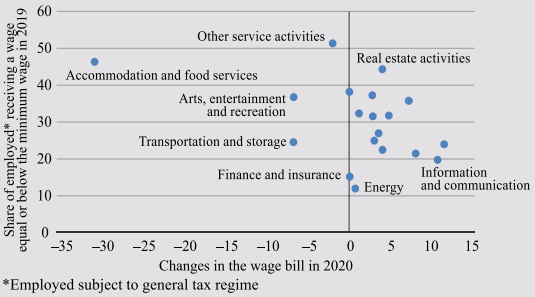
Chart 1.14
ANNUAL CHANGES IN THE WAGE BILL IN SECTORS MOST AFFECTED BY THE CRISIS
(%)



1 Total economy
2 Travel/tourism services
3 Accommodation and food services
4 Other personal service activities
5 Arts, entertainment and recreation
6 Transportation and storage

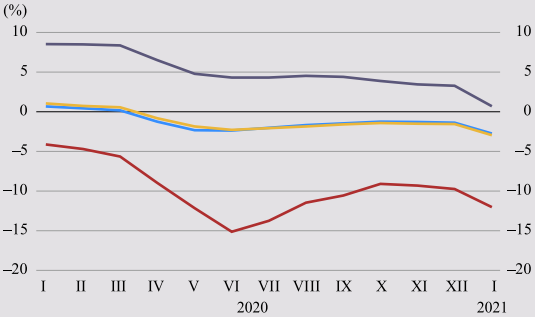
2019
Q1 2020
Q2 2020
Q3 2020
Q4 2020

Chart 1.15
ANNUAL CHANGES IN THE WAGE BILL AND SHARE OF EMPLOYED RECEIVING A WAGE EQUAL OR BELOW THE MINIMUM WAGE
(%)



*Employed subject to general tax regime

Chart 1.16
ANNUAL CHANGES IN THE NUMBER OF EMPLOYED IN DIFFERENT AGE GROUPS
(%)



Up to 29 years
30–44 years
45–64 years
65 years and more

[26] The CSB EU-SILC household survey results serve as a good illustration for the savings level of less wealthy households: in 2020, more than one half of households in the least wealthy quintile did not have any savings. 40% of households in the next less wealthy quintile did not have any savings.

BOX 1.2. THE NEGATIVE IMPACT OF COVID-19 PANDEMIC ON BORROWERS: RESULTS OF LATVIJAS BANKA HOUSEHOLD SURVEYS

Latvijas Banka has conducted its regular public opinion survey in Latvia[27] and the survey of household borrowers[28]. They comprised inter alia questions on the impact of the Covid-19 pandemic on employment and income.

According to the public opinion survey results, most of the respondents who had been employed before the onset of the pandemic[29] believe that their employment has not declined during the Covid-19 pandemic period, while on average **17% of the respondents acknowledge that in the period from April 2020 to March 2021 they were on furlough or worked reduced number of hours, or were just registered or about to register as the unemployed** (see Chart 1.17). The latter are mostly young employed persons aged 15–34 and employees with relatively low income (with the monthly income not exceeding 300 euro per household member).

Chart 1.17
REPLIES BY PERSONS AGED 15–64 WHO HAD BEEN EMPLOYED BEFORE THE ONSET OF THE COVID-19 PANDEMIC TO THE SURVEY QUESTION "DO YOU HAVE A PERMANENT JOB AT A COMPANY OR AN ORGANISATION?"
(%)

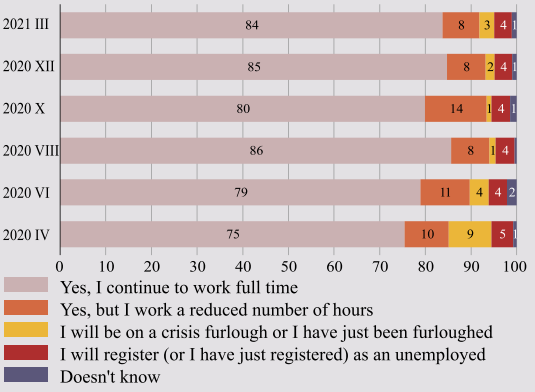
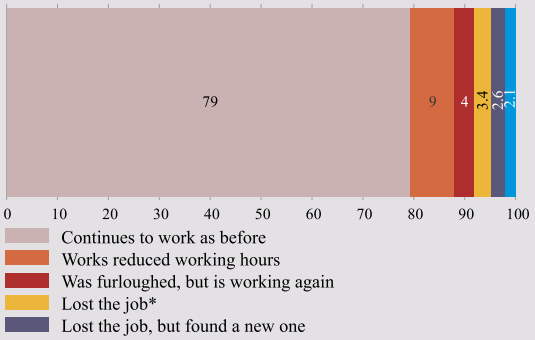


Chart 1.18
REPLIES BY EMPLOYED* PERSONS AGED 15–64 WITH CREDIT LIABILITIES TO THE SURVEY QUESTION "HOW HAS THE COVID-19 PANDEMIC AFFECTED YOUR EMPLOYMENT?"
(%)



* Incl. the employed who lost their job in the crisis and are still unemployed.
Source: Latvijas Banka's survey of household borrowers of 2020.

A similar situation is also observed with respect to the borrowers' group. The results of Latvijas Banka's survey of household borrowers[30] surveying households with at least one loan for house purchase suggest that on account of the Covid-19 pandemic, 9% of respondents are working a reduced number of working hours, 4% of the sample employed had been furloughed, but have resumed working, and 2% of respondents were furloughed at the time of the survey. Furthermore, 3% of the employed had lost their job, and another 3% of respondents, who had lost their job, had already found a new one (see Chart 1.18).

The impact of the Covid-19 pandemic on household borrowers' income has been uneven. Over the last year, 23% of households have seen their income contract, while it has even increased for 39% of households (see Chart 1.19).

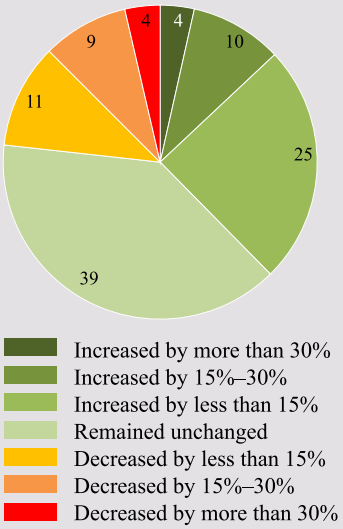
[27] Latvijas Banka commissioned LATVIAN FACTS Ltd. to conduct the survey; respondents were surveyed in April, June, August and October 2020 and in March 2021.

[28] The regular survey of household borrowers is conducted to assess the financial situation of borrowers and their resilience to the shocks of interest rate rises, growing unemployment and shrinking income. See the results of the previous survey and the description of the methodology of the analysis in Āriņš, Mikus, Siņenko, Nadežda, Laube, Laura. Survey-based assessment of household borrowers' financial vulnerability, Latvijas Banka, Discussion paper No. 1/2014, as well as in Latvijas Banka Financial Stability Report for 2018.

[29] An average of 685 employed persons aged 15–64 were interviewed in each public opinion poll from April 2020 to March 2021.

[30] It was conducted from September 2020 to February 2021. 809 households with at least one loan for house purchase took part in the survey. There were 1395 employed persons aged 15-64 in these households in 2019.

Chart 1.19
RESPONDENT REPLIES TO THE QUESTION "WHAT ARE THE CHANGES IN YOUR HOUSEHOLD'S TOTAL INCOME IN COMPARISON WITH THE PREVIOUS YEAR?"
(%)



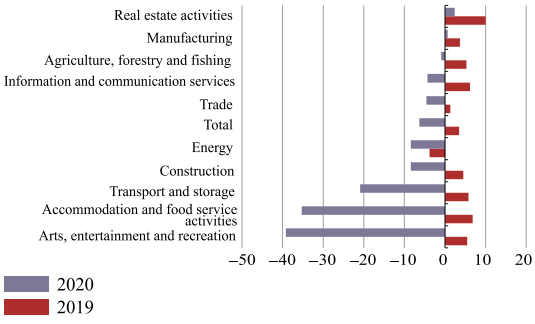
Source: Latvijas Banka's survey of household borrowers of 2020.

NFC solvency

The impact of the pandemic on NFC solvency has varied significantly across sectors. All sectors, except real estate activities[31] and manufacturing, where turnover increased only modestly, experienced a decline in turnover in 2020 as compared to 2019. In sectors directly affected by the crisis, the drop in turnover was sharp: 39.2% in arts, entertainment and recreation, 35.3% in accommodation and food service activities and 20.9% in transport and storage sector. In other sectors, it was much smaller[32] or even negligible (see Chart 1.20). Overall, the NFC turnover contracted by an average of 6.3% in 2020.

The financial soundness of NFCs from sectors directly affected by the Covid-19 pandemic has significantly deteriorated. These sectors operated with losses in 2020.

Chart 1.20
CHANGES IN NFC TURNOVER IN 2020 AND 2019
(%)



Moreover, accommodation and food service activities as well as transport and storage reported long-lasting losses in all quarters of 2020. Earnings and profitability decreased significantly also in real estate activities and trade. At the same time, the profitability in agriculture, forestry and fishing, energy and information and communication services improved in 2020 (see Chart 1.21). The aggregate earnings of NFCs contracted by almost 1/3 and profitability by 1/4, with costs shrinking more moderately as compared to turnover[33].

With NFC earnings contracting considerably, their overall debt service capacity has also decreased: their

[31] As to real estate activities, the developments in the residential and commercial property segments are highly different. The activity in the housing market has grown significantly, whereas the commercial property segment has suffered a notable fall in rental income.

[32] Although the effect on the sector overall may be small, it may be significant in individual segments of the sector. For example, looking at the trade sector, restrictions had a much heavier impact on segments other than the sale of food and hygiene products, and the financial situation of NFCs in these segments has worsened more noticeably.

[33] Some major cost items continued to grow. For example, staff costs increased by 2.1% in 2020.

overall interest coverage ratio has shrunk by roughly 1/4 (see Chart 1.22)[34]. Deterioration in the debt service capacity, particularly in sectors most directly affected by the crisis, is also evident in the rising borrowers' credit risk. The weakening in the financial soundness of the directly affected NFCs has worsened their borrowing potential to fund investment and development. At the same time, on account of the rising earnings, the debt service capacity in agriculture, forestry and fishing, energy and information and communication services sectors has improved.

The negative crisis effects on the NFCs solvency were softened by the government support and crisis mitigation measures, and the financial viability of a large share of NFCs has not deteriorated. The aggregate NFC indebtedness has remained broadly unchanged[35], whereas equity has moderately grown. As a result, the average debt-to-equity ratio of NFCs has improved[36]. Investment by both company owners and the state (for example, a 250 million euro injection into Air Baltic Corporation AS) contributed to an increase in equity of NFCs.

The support and crisis mitigation measures, including restrictions on filing for insolvency[37], have also prevented a rise in corporate insolvency cases. In 2020, the number of filed insolvencies decreased by 1/3 and, according to SIA Lursoft data, was at a historically low level. **Nevertheless, the financial vulnerability and insolvency risks in sectors directly affected by the crisis** are highly elevated, particularly in accommodation and food services, where the sectors' total equity became

Chart 1.21
NFC PROFITABILITY IN 2020 AND 2019
(%)

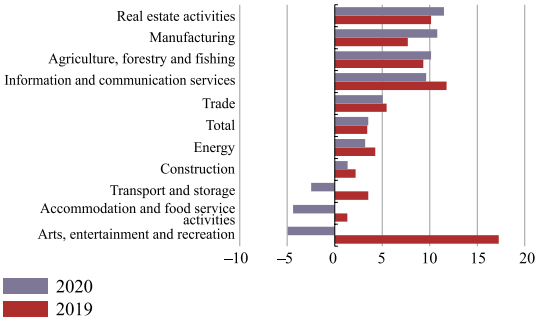


Chart 1.22
NFC INTEREST COVERAGE RATIO IN 2020 AND 2019
(%)

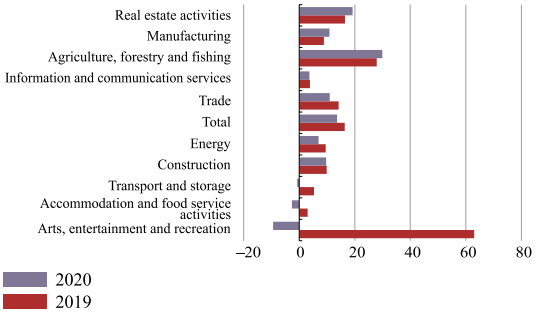
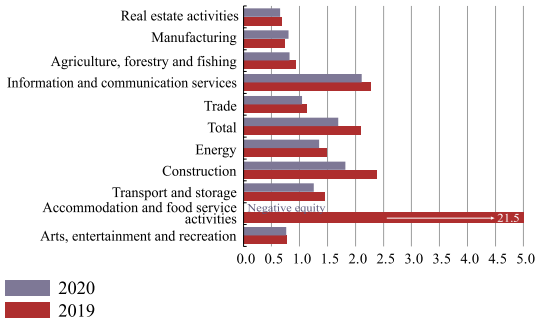


Chart 1.23
NFC DEBT-TO-EQUITY RATIO IN 2020 AND 2019
(%)



negative as of the end 2020 as a result of continuously sustained losses (see Chart 1.23). With the risks in sectors directly affected by the pandemic rising, the risks of negative second-round effects to businesses in other sectors also are growing, inter alia given the uncertainty surrounding the insolvency risks of foreign counterparties.

The numbers of NFCs facing solvency problems and filed insolvencies are likely to increase. Like

[34] From 9.5 in 2019 to 7.0 in 2020. The impact of early termination of Air Baltic Corporation AS plane leasing agreements on the interest coverage ratio in the second quarter of 2020 has been excluded from the calculation.

[35] As at the end of 2020, the aggregate debt of NFCs to credit institutions, NFCs, households and other financial intermediaries amounted to 55.4% of GDP (54.7% of GDP in 2019). The increase relative to GDP in 2020 was determined by the fall of GDP. In absolute terms, the NFC debt contracted by 2.2%.

[36] From an average of 1.49 in 2019 to 1.35 in 2020.

[37] In order to safeguard financial and legal stability, on 21 March 2020, a ban was imposed on creditors to file for insolvency of legal persons until 1 September 2020. The ban was subsequently extended and is currently valid until 1 September 2021. Given the fulfilment of several conditions, a debtor has no obligation to file for insolvency of a legal person up to the end of 2021; see https://likumi.lv/ta/en/en/id/315287-law-on-the-suppression-of-consequences-of-the-spread-of-covid-19-infection.

elsewhere in Europe[38], it will depend on the gradual phasing out of government support and narrowing and ending of crisis mitigation measures (including the ban on filing for insolvency of a legal person), high financial vulnerability of businesses in sectors directly affected by the crisis as well as the structural changes brought about by the pandemic. In order to preserve fundamentally viable businesses that are facing difficulties because of the pandemic, support in addressing their financial problems is crucial.

The legal protection proceedings provide an opportunity of a successful return to business, but its effectiveness also depends on the company's ability and willingness to timely recognise its financial problems. The use and effectiveness of the legal protection proceedings have been relatively low over the last decade[39]. At least to a certain extent, it is explained by the fact that businesses most often start addressing their financial problems very late. In this case, the development and agreement of a workout plan is highly complicated, as it is much more difficult to convince creditors that anything can be salvaged and going into liquidation seems more effective.

Inability and unwillingness of businesses to timely recognise and start resolving their financial problems also pose risks of a major wave of insolvencies following the withdrawal of the support measures. Like with the filed insolvencies of legal persons, government support and crisis mitigation measures also have resulted in a much lower number of the filed for legal protection proceedings in 2020[40]. This could mean that a certain share of yet unrecognised insolvent businesses is failing to actively address their financial difficulties. Phase-out of support measures in combination with delaying the resolution of the financial difficulties faced by businesses pose the risks of a significant increase in insolvencies. The wave of insolvencies would also be a significant challenge for the institutions involved in the insolvency proceedings.

A draft law developed in Latvia in order to improve the quality of the legal protection proceedings and implement the EU Restructuring Directive[41] **will reduce the opportunities of using the legal protection proceedings merely to delay the creditors' actions.** Several changes incorporated in the draft law are worth mentioning. First, it is planned to enhance the qualification criteria of the supervisors of the legal protection proceedings, their responsibility and involvement in the development of a workout plan is also envisaged. Second, an option to extend the effects of filing for legal protection proceedings[42] (for a period of up to six months) is planned to be added, providing debtors with better opportunities to negotiate with creditors as well as, in certain cases, for creditors to cancel the legal protection proceedings. This should decrease cases of filing for legal protection proceedings merely to receive court protection. The court's monitoring of the overall quality of legal protection proceedings also is envisaged to be strengthened, inter alia entitling the court to refuse the approval of a workout plan if it sees that the plan is ineffective for the purpose. The court also will have access to more detailed information about the debtor.

[38] According to the ESRB estimate, the numerous support measures in EU countries have significantly softened the pandemic impact on the financial position of NFCs, and the number of filed insolvencies in Europe has overall been at historically low levels in 2020. After the withdrawal of the support measures, however, the number of insolvencies in Europe could increase considerably. See ESRB report "Prevention and management of a large number of corporate insolvencies".

[39] According to the Insolvency Register data, 1359 legal protection proceedings were initiated in 2008–2019 or an average of 113 legal protection proceedings per year. For comparison: 13 501 insolvencies of a legal person have been filed during the same period or 1125 insolvencies of a legal person have been filed per year. The ratio of declared workout proceedings to filed workout proceedings in 2018 and 2019 was 13% and 16% respectively. A large part of the filed legal protection proceedings has been terminated prior to implementation of a reorganisation plan, which suggests that in most cases the legal protection proceedings are used merely as a means to delay creditors' actions.

[40] In the period from 1 March 2020 to 28 February 2021, the number of the filed legal protection proceedings decreased by 19.9% in comparison with the previous 12-month period.

[41] Directive (EU) 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency). Latvia has requested a six-months extension to the official implementation period, and the Directive is now to be implemented by 17 January 2022.

[42] Various bans on creditor actions come to effect after filing for workout proceedings in order to protect the debtor during the development of the workout plan. The effects of filing for workout proceedings are listed in Section 37 of the Insolvency Law (https://likumi.lv/ta/en/en/id/214590-insolvency-law).

Real estate market development

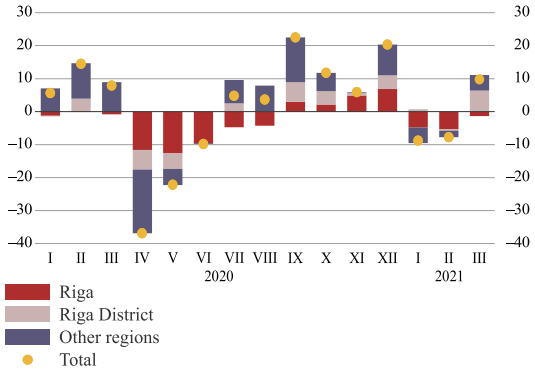
The effect of the Covid-19 pandemic on the housing market has been wavy. Nevertheless, in general, the market reports a notable rise in demand. At the same time, the supply lags behind the demand due to slow housing construction in previous years. Thus, the housing prices are following an upward trend again. However, commercial real estate market reports a contrary development – just before the Covid-19 pandemic, the supply increased considerably in the shopping centres and offices' segments which were later severely affected by the Covid-19 restrictions. Credit institutions have already applied relief measures to a large share of shopping centre loans and to a small part of office rental loans, while 1/4 of loans in the hotel sector, which is the market segment hit the hardest by the crisis, are already non-performing. Overall, the credit institutions' exposure to commercial real estate is moderate, inter alia their exposure to the hotel segment is negligible.

Housing market

Activity in the Latvian real estate market increased significantly in the second half of 2020; however, it declined again during the second wave of the Covid-19 pandemic at the beginning of 2021, albeit much more moderately than during the first wave. Like elsewhere in the world, remote work possibilities have boosted demand for larger properties outside major cities – the demand for housing and/or land plots outside Riga rose in the summer of 2020. Meanwhile, the number of real estate purchases in the capital also experienced a significant rise in the autumn of 2020 (see Chart 1.24). The growing demand was fostered by purchases to meet the postponed demand, an increase in savings for a part of households and extended government support programmes for families with children[43]. **Considering the build-up of the overall household savings and the gradual economic recovery, it is likely that the activity in the real estate market will continue to grow.**

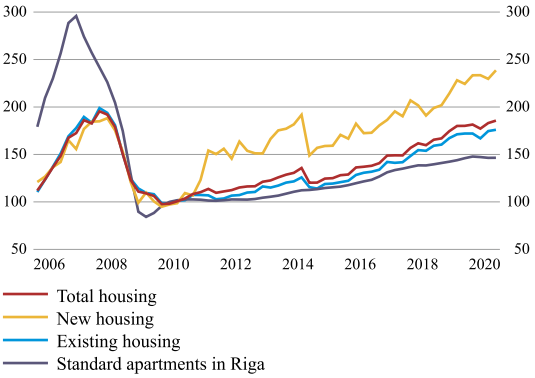
As the market activity increased, housing prices also rose gradually at the end of 2020 and during

Chart 1.24
ANNUAL CHANGES IN THE NUMBER OF PURCHASE CONTRACTS REGISTERED IN THE LAND REGISTER BY REGION
(%)



All types of property, including land.

Chart 1.25
CSB's HOUSE PRICE INDEX AND THE AVERAGE PRICE INDEX FOR STANDARD APARTMENTS IN RIGA COMPILED BY REAL ESTATE COMPANIES
(2010 = 100)



[43] The guarantee available under the programme was increased for families with at least four children as well as for loans financing purchases of higher energy efficiency housing. In addition, a support programme Balsts was launched for families with many children. Families with an average income of no more than 17 thousand euro per year and per household member, which do not own any housing, are entitled to a house purchase subsidy of up to 12 thousand euro; however, this subsidy may not exceed 50% of the total house purchase costs. The maximum subsidy amount is available if the housing to be financed has energy efficiency level close to zero. The Balsts subsidy payment is available for loans issued starting with July 2020.

the first months of 2021 (see Chart 1.25). The CSB's house price index that reflects housing price data adjusted for quality changes recorded an increase of 3.7% in 2020 (9.0% in 2019), inter alia 7.7% and 2.8% rises in the new and the existing house price index respectively (8.8% and 8.9% respectively in 2019). At the same time, the prices of standard apartments revealed no significant fluctuations. Considering the recovery of activity in the real estate market and the economy in general, housing prices will continue to follow an upward trend.

The rise in the average net wage still slightly exceeds the increase in housing prices, thus the overall availability of housing has remained broadly unchanged (see Chart 1.26). However, it should be noted that data on the average wage does not fully reflect the negative effect of the pandemic, particularly on certain household groups. Furthermore, the housing availability has decreased further for the households which had difficulties purchasing housing already before the Covid-19 pandemics due to their lower income.

In 2020, construction of new housing was more moderate than in the previous years (see Chart 1.27). According to the CSB data, in 2020 the total area of the commissioned new housing in Latvia declined by 14.7% compared to 2019, while in Riga the respective decrease was 22.4%. In 2020, 3101 new apartments were commissioned in Latvia – more than 50% below the National Development Plan target for 2024[44] and less than 33% of the 2027 target. The pace of construction of new housing in Latvia has been persistently lower that in Lithuania and Estonia (see Chart 1.28).

To improve the availability of quality housing, it is necessary to solve several structural shortcomings (for example, bureaucratic obstacles to construction[45], shadow economy, shortage of adequately skilled workforce in regions). Amendments adopted in March 2021 to reduce renters' risks[46] should be

Chart 1.26
AVAILABILITY OF HOUSING
(2010 = 100)

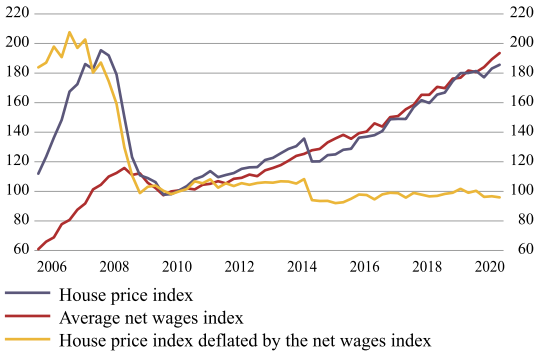


Chart 1.27
NEW COMMISSIONED APARTAMENTS AND ISSUED BUILDING PERMITS IN LATVIA
(thousands of m²)

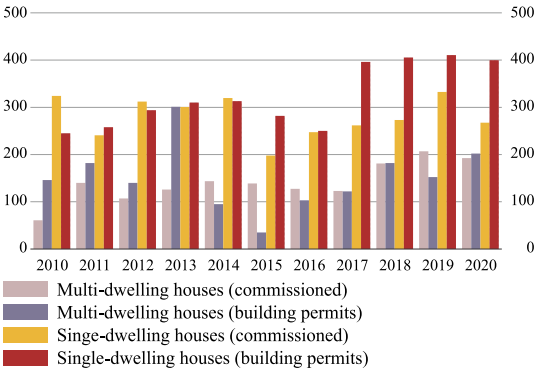
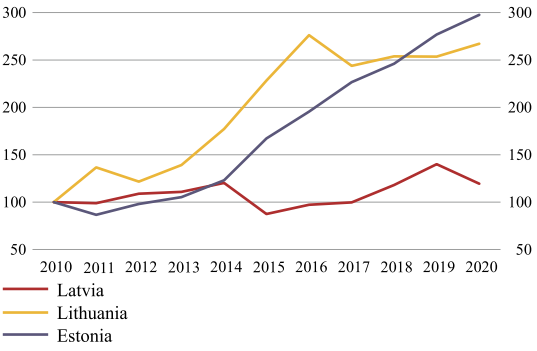


Chart 1.28
TOTAL AREA OF NEW SINGLE-DWELLING AND MULTI-DWELLING HOUSES IN THE BALTICS
(index 2010 = 100)



[44] See the National Development Plan (https://www.pkc.gov.lv/sites/default/files/inline-files/NAP2027__ENG_3.pdf).

[45] For example, for several years now (including 2020), Doing Business surveys have ranked Latvia lower than the other Baltic countries and placed Latvia below the regional averages in categories such as receiving building permits and obtaining new connections to electricity grid as well as below the other Baltic countries in terms of registering property.

[46] Renters' risks are reduced by e.g. envisaging a possibility for the renter to evict a tenant acting in bad faith without going to the court by applying the procedure of undisputed compulsory execution. The renter will be entitled to apply the said procedure only in cases when the tenant fails to pay rent for at least two months or fails to leave the apartment despite the rental agreement's expiry. So far, the eviction of tenants acting in bad faith was possible only by a court decision which often took several years, see https://lvportals.lv/wwwraksti/TEMAS/FAILI/DZI%CC%84VOJAMO_TELPU_I%CC%84RES_LIKUMS.PDF.

assessed as a positive step towards this objective, and they make the construction of new rental housing more profitable for developers. The amendments will boost the construction of new rental housing that was sluggish in the previous years. The construction and availability of rental housing in regions will be further encouraged also by 42 million euro earmarked under the European Recovery and Resilience Facility for the construction of approximately 700 new rental housing objects.

Commercial real estate market

Like elsewhere in the world, the Covid-19 pandemic and the related restrictions have significantly affected the hotel, shopping centre and office building segments in the commercial real estate market as well as the credit risk of borrowers operating in said segments. Due to travel restrictions and reduced willingness to travel, **Latvian hotel occupancy reported a pronounced decrease in 2020 causing a strong pressure on their owners' funds**. In the summer of 2020, the hotel occupancy rate experienced a slight increase on account of the "Baltic travel bubble"[47]; however, it dropped sharply again during the second wave of the pandemic (see Chart 1.29). The government support measures to partially finance accommodation costs for those needing to isolate themselves during the pandemic[48] did not facilitate a rise in the hotel occupancy rate.

Shortly before the outbreak of the Covid-19 pandemic, the office segment reported a significant increase in the supply of new and renovated office premises; due to the pandemic, however, the need for and possibilities to occupy office premises declined and the share of the vacant offices increased (see Chart 1.30). According to the estimate of the real estate company Collier International, the share of unoccupied offices in Riga

Chart 1.29
HOTEL OCCUPANCY RATE IN LATVIA
(%)

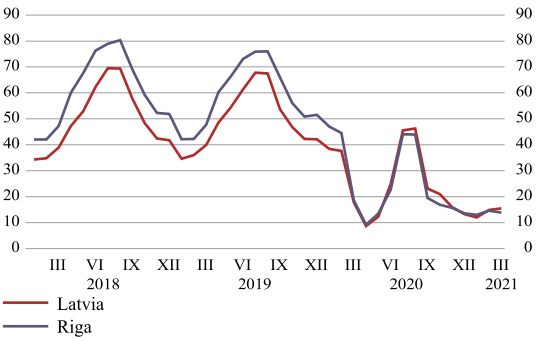
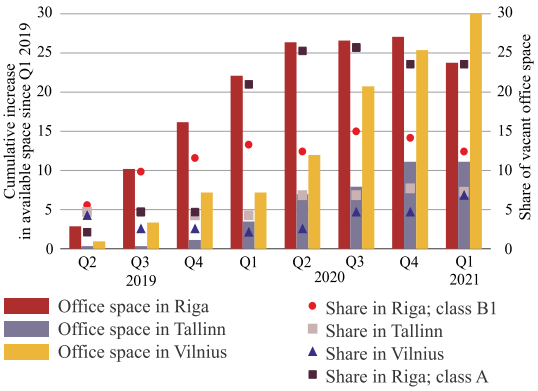


Chart 1.30
THE INCREASE IN TOTAL OFFICE SPACE AND THE SHARE OF VACANT OFFICE SPACE IN THE CLASS A AND CLASS B1 OFFICE SEGMENT IN THE CAPITALS OF THE BALTICS
(%)



totalled almost 15%[49] in the B1 category segment and almost 28% in the A category segment in the first quarter of 2021.

Furthermore, the share of office premises, for which the rent agreement is signed but which the tenants do not use in a full-fledged way and sublet part of the rented premises, is expanding in Riga[50]. Such situation is seen mostly in new buildings with relatively recently concluded rent agreements where a non-terminable agreement has been signed for a period of five years. Thus, the financial burden rests mainly with the tenant rather than the renter, and it will remain that way for the foreseeable future. The companies whose premises have

[47] The border control on the internal borders of the Baltics was lifted from May 2020 until September 2020, thus giving the Baltic population more freedom of movement in the region.

[48] The government covered 80% of accommodation costs, albeit no more than 35 euro per night and per person. Such support facility did not gain much popularity.

[49] While the share of unoccupied offices has increased in Vilnius and Tallinn, it is much lower (in the first quarter of 2021, the figures for A and B1 category segments in Vilnius were almost 5% and 11% respectively and those for Tallinn – approximately 9%).

[50] According to the estimates of Colliers International, about 10 thousand m^2 of such office premises were available in Riga at the beginning of 2021 (out of the total of 568 thousand m^2 of the available office premises).

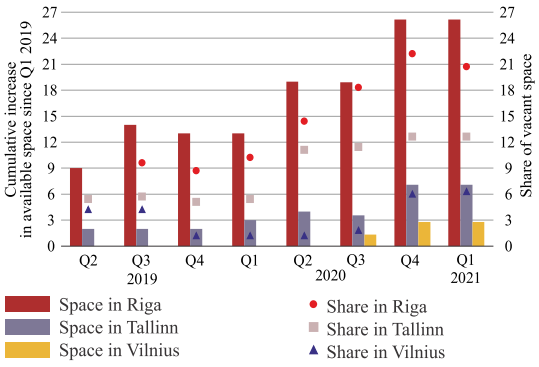
been vacated due to Covid-19 have, so far, experienced no significant impact, and such decisions are mainly attributable to efficiency considerations, rather than financial circumstances.

With the economic activity recovering and, at the same time, the development of new offices slowing down, the share of unoccupied office premises is likely to decline; however, **it is highly likely that the demand for office premises will not return to the pre-pandemic level even after the pandemic restrictions are lifted**[51]. Considering the fall in demand for office premises, there is a risk that the share of unoccupied office premises will remain high for a prolonged period of time. It is likely that, as a result of a change in behaviour patterns, the role of office premises will switch to business centre, meeting and team co-ordination function.

The office premises segment in Riga receives both investor funding (including AIFs registered in the Baltics) and credit institution co-financing. Investors' involvement in the office projects developed over the last few years has been considerable (unfortunately, exact data on the total amount of financing are unavailable) reducing the credit institutions' credit risk in real estate-related investments (see Box 1.3)[52].

The share of unoccupied space in the shopping

Chart 1.31
THE INCREASE IN TOTAL SHOPPING CENTRE SPACE AND THE SHARE OF VACANT SHOPPING CENTRE SPACE IN THE CAPITALS OF THE BALTICS
(%)



premises segment has also increased on account of the pandemic and the related restrictions – in the first quarter of 2021, this figure was two times bigger than before the pandemic (6.9%; see Chart 1.31). It should be noted that several large shopping centres were opened in the trade segment just before the outbreak of the pandemic, thus increasing the total shopping area and tightening competition. The pandemic and the related restrictions had a significant impact on tenants that do not operate in the segments of food products, pharmacies and pet products. Several tenants of large shopping centre premises could not reach an agreement on postponing the rent payments and had to terminate their contracts and release the premises since the financial burden was excessive.

As a result of the prohibition to conduct operational activities, the ability of a large part of tenants to pay the reduced rent to the shopping centres was also significantly affected. Rent is the principal source of the shopping centre income[53], and, according to the estimates of the Alliance of Real Estate Developers, the rent income of the largest shopping centres has declined significantly (see Chart 1.32)[54]. The benefit for the tenants from the working capital grant has been very limited, and they have failed to pay full rent to the renters from the received funds. To mitigate the losses of shopping centres, in April 2021 the government approved a support facility to compensate for the fall

[51] According to the survey conducted by Latvijas Banka in March 2021, 11% of office workers believe that they will continue working remotely also after the Covid-19 ends and restrictions are lifted. At the same time, 19% of the employed believe that, in future, they will work at least 1–2 days per week less in the office. The survey conducted by Latio Ltd. and the public opinion research centre SKDS at the end of 2020 also suggests similar trends – 17% of the surveyed Latvian businesses admitted it was likely that only a small proportion of employees will return to working in offices. 18% of businesses are certain that none of the employees currently working remotely will return to working in offices. Source: http://latio.lv/lv/par-mums/jaunumi/432

[52] During the last three years, the following largest office premises projects co-financed by foreign investors were implemented: Business Garden, round 1 (investor – Vastint Latvia SIA, owned by the Swiss holding company Interogo Holding AG), Mežaparka Biroji (investor – SIA DOMUSS, a subsidiary of the USA investor group NCH Capital), Jaunā Teika biroji (LithuanianHanner group), Origo One (investor – SIA Attīstības aģentūra, Norwegian real estate developer Linstow Center Management), Z-Towers (investor – AS Towers Construction Management, owned by the international group of companies SPI group).

[53] According to annual reports for 2019 of 10 largest shopping centres in Riga, their rent income constituted 62–100% of the total turnover of the shopping centres.

[54] In February 2021, the rent income dropped by 8.6 million euro year-on-year, see https://www.db.lv/zinas/tirdzniecibas-centri-nomas-maksa-zaudejusi-86-miljonus-eiro-501346.

in the rent income of shopping centres by allocating a one-off grant totalling 20 million euro.

The industrial and storage premises segment has reported no significant negative pandemic impact. With the volume of e-commerce growing, the demand for storage premises even increased.

The data of Latvijas Banka's Credit Register allow assessing the credit institutions' risk exposure in the commercial property segment. **Credit institution investments in commercial properties in general and in more affected commercial property segments in particular should be assessed as moderate.** Loans by credit institutions to 89 largest borrowers in the real estate sector[55] account for 68.2% of all credit institution loans to the real estate sector or 9.2% the credit institutions' total loan portfolio. The sample portfolio of the largest borrowers consists mainly of loans to shopping centres (see Chart 1.33). 694.87 million euro or 5.0% of the credit institutions' total loan portfolio were granted for financing 31 shopping centres (including businesses whose principal activity is related to sale of food products). 22 office space renters have also been identified in the sample loan portfolio. The credit institution loans granted to these renters amount to 269.44 million euro or 1.9% of the total credit institution portfolio. The hotel loan portfolio is insignificant totalling 50.65 million euro or 0.4% of the credit institution portfolio.

Due to the pandemic, the credit risk of shopping centre and office loans has increased, and the credit quality has already deteriorated for 1/4 of hotel loans. As a result of the pandemic, a significant share of the shopping centre loans have already been granted concessions (these loans account for 11.1% of the total credit institution loans granted in the real estate sector). Concessions have also been granted to some borrowers in the office space segment. Meanwhile, in March 2021 more than 1/4 of hotel loans have already become non-performing. Nonetheless, their overall amount is negligible accounting for a mere 0.7% of the real estate credit portfolio (see Chart 1.34).

[55] The sample portfolio covers the largest real estate borrowers, with their credit portfolio totalling 1291.12 million euro (March 2021). The sample is drawn from borrowers with loan commitments of at least 5 million euro.

Chart 1.32
RENT IN THE LARGEST SHOPPING CENTRES IN RIGA
(per month; EUR/m²)

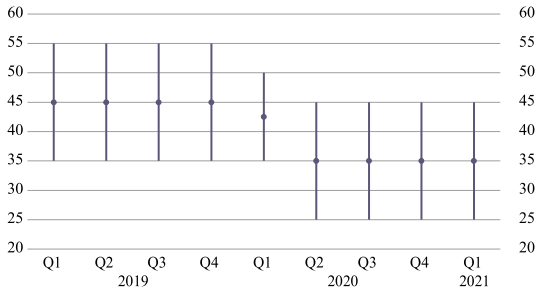
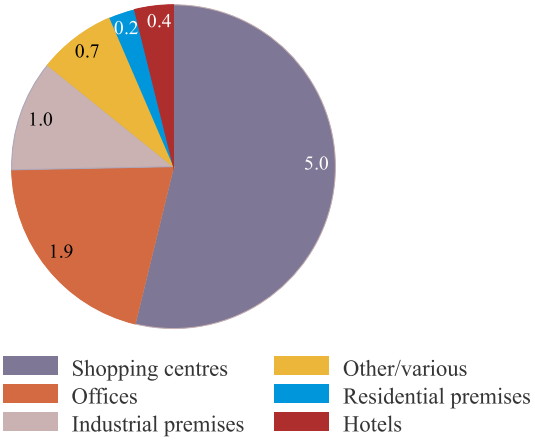
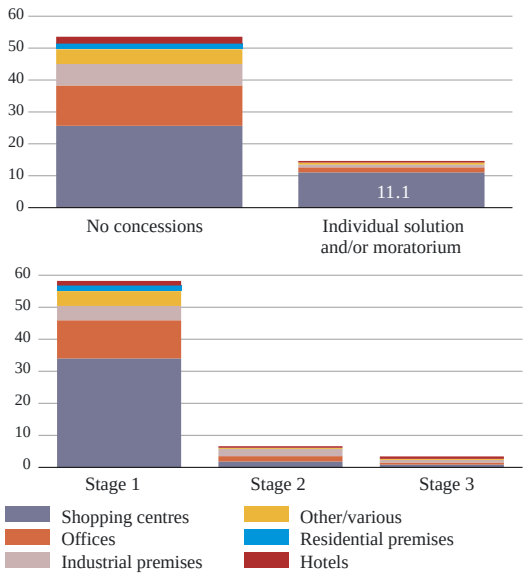


Chart 1.33
LOANS GRANTED TO 89 LARGEST BORROWERS IN THE REAL ESTATE SECTOR*
(% of the overall credit institutions' loan portfolio)



* Sample of the largest borrowers in the real estate sector with the total credit portfolio of 1291.12 million euro (March 2021). The sample is drawn from borrowers with loan commitments of at least 5 million euro.

Chart 1.34
QUALITY OF LOANS GRANTED TO 89 LARGEST BORROWERS IN THE REAL ESTATE SECTOR*
(% of the overall credit institutions' loan portfolio in the real estate sector)



* The charts show the overall loan portfolio of 89 largest borrowers in the real estate sector in the breakdown by quality. On the left, the chart shows whether any of the sector's largest borrowers have been granted concessions, i.e. an individual solution or moratorium, in the period from March 2020 to March 2021. On the right, the chart shows the loans granted to 89 largest borrowers in the real estate sector in the breakdown by Stage 1, Stage 2 and Stage 3 loans.

BOX 1.3. THE ROLE OF AIFs IN REDUCING THE CREDIT INSTITUTIONS' CREDIT RISK EXPOSURE TO REAL ESTATE INVESTMENTS

Real estate AIFs are reducing the potential negative impact of the Covid-19-induced rise in commercial real estate risks on credit institutions. At the end of 2019, the assets of the AIFs registered in the Baltics and primarily invested in real estate[56] exceeded 1.2 billion euro. These funds are focussed on commercial real estate in the capital cities of the Baltics and primarily invest in segments such as offices as well as retail trade and storage (including logistics) facilities. These funds diversify their investments across countries and market subsegments, thus mitigating the income and asset value shocks caused by the Covid-19 pandemic.

Real estate AIFs use debt financing to increase their return on investments. At the end of 2019, the overall debt-to-assets ratio of the real estate AIFs stood at 44.4%, with credit institution loans accounting for the largest share of their debt. This allows developing closer links with other financial sector participants. **However, given that real estate AIFs make capital investments, the investors of these AIFs are first to incur losses from potential declines in real estate value, while reducing the credit risk of loans granted by credit institutions in the commercial real estate segment.**

To mitigate the pandemic-induced shock to the rental income of real estate AIFs, part of AIF managers applied for credit institution moratoria. The temporary postponement of loan payments allowed AIFs to reduce the rent for their tenants, maintain a positive cash flow, where debt repayments form a large part of the outflow, and avoid a significant increase in vacant property space. Some AIFs also decreased the amount of their dividend payouts. Both of these measures helped real estate AIFs build liquidity reserves, should the Covid-19 pandemic drag on.

Exposure of real estate AIFs to the refinancing risk is considered moderate as 1) these funds are large and diversified, 2) their portfolio investments are well managed and 3) they invest in high quality real estate. However, risks may significantly grow due to an increase in vacant property space because property maintenance and management costs are mostly fixed and a decline in the number of tenants only marginally reduces costs.

[56] The data are based on the following real estate AIFs: SIA Baltic Real Estate Fund, Baltic Horizon Fund, East Capital Baltic Property Investors AB, SIA SG Capital and I-IV EfTEN Kinnisvarafondi.

2. CREDIT INSTITUTION SECTOR DEVELOPMENT AND RISKS

Lending development

The lending trends of credit institutions during the crisis were fluctuating. Overall, however, no significant changes have taken place. The non-bank loan portfolio shrank more than the credit institution loan portfolio. The availability of loan funds for SMEs improved due to loans granted by Altum. The state support programme for house purchase had an important role in the household sector as well, providing the opportunity for families to purchase new housing during the pandemic. At the same time, there is a risk that, over time, it could enable the development of imbalances in the real estate market; therefore, the support programme should be refined.

Lending by credit institutions

Domestic lending was slow already prior to the Covid-19 pandemic and, with the onset of the crisis, it became even weaker. Since late 2020, however, the credit institution loan portfolio has stopped decreasing, and at the end of March 2021 the loans[57] issued by credit institutions to domestic NFCs and households were almost at the same level as a year before (–0.5% as compared to March 2020; see Chart 2.1). The domestic loan-to-GDP ratio also remained stable and low at 38.8%.

In 2021, domestic lending data were significantly influenced by a one-off factor – in early 2021, AS Citadele banka purchased the company SIA UniCredit Leasing which operated in the Baltics and granted it a large loan, thus replacing the funding provided by the leasing company's previous owner (see Box 2.1 "Further consolidation of the Baltic financial sector"). This deal increased the annual rates of change in domestic lending by about 7 percentage points. The issue of this type of loan does not mean an injection of new funds into the economy, as it was envisaged for the leasing company's operations not only in Latvia but also in the other Baltic States. Therefore, this factor has been excluded from the data analysis in this report.

Chart 2.1
ANNUAL RATES OF CHANGE IN DOMESTIC LOANS TO NFCs AND HOUSEHOLDS AND THEIR RATIO TO GDP
(%)

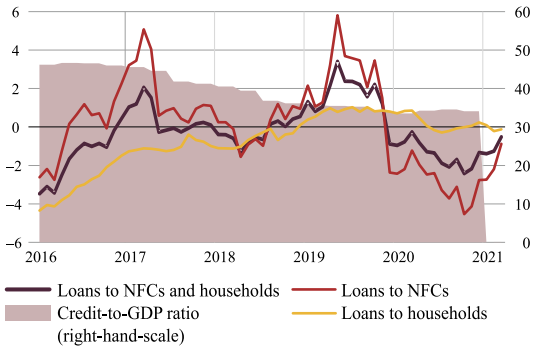
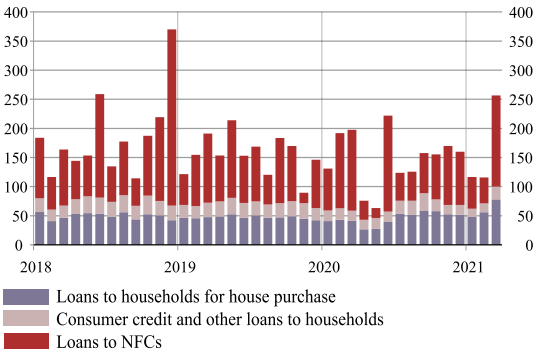


Chart 2.2
AMOUNT OF NEW LOANS GRANTED TO NFCs AND HOUSEHOLDS
(in millions of euro)



The negative impact of the Covid-19 pandemic on household lending overall has been much less pronounced than that on NFC lending. Household lending shrank significantly at the beginning of the pandemic. Nonetheless, in the summer of 2020 mortgage loans came back strongly with a significant increase in demand for housing. In March 2021, loans to households for house purchase recorded a 1.9% year-on-year rise, and in the first quarter of 2021 new loans to households for house purchase expanded by 46% compared to the corresponding period of the previous year (see Chart 2.2). By contrast, consumer credit to households decreased significantly during the pandemic on account of restricted consumption opportunities. Thus, the overall domestic household loan portfolio of credit institutions was 0.1% smaller than in the corresponding period of the previous year.

[57] In the report, one-off effects, including those related to the cancellation of credit institution licences and sectoral reclassification, have been excluded from the data on the annual rates of change in domestic lending.

The state support programme for house purchase for families with children was expanded in July 2020 (see the section on real estate), **providing a significant stimulus for mortgage lending**. Since mid-2020, new loans for house purchase granted under the state support programme have increased significantly, accounting for almost half of the total new loans for house purchase (see Chart 2.3). The LTV requirement for these state-guaranteed loans is set at a maximum of 95% (the general maximum LTV requirement is 90%[58]). This explains the rise in the LTV value for new loans to households for house purchase (see Chart 2.4).

Chart 2.3
NEW LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE GRANTED UNDER THE STATE SUPPORT PROGRAMME AND THEIR SHARE IN TOTAL NEW LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE
(in millions of euro)

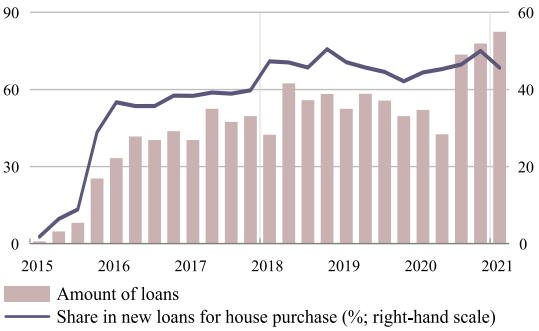
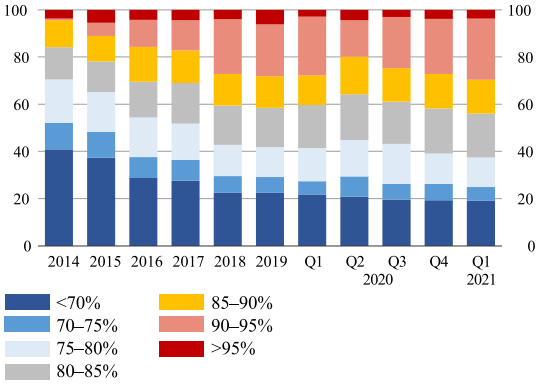


Chart 2.4
LTV DISTRIBUTION FOR NEW LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE
(%)



The programme has helped to reduce the shock of the pandemic and to stimulate mortgage lending. At the same time, as elsewhere in Europe, mortgage lending growth is likely to accelerate in future, taking into account the increase in household savings and, with people working remotely, the desire to improve living conditions. **It is important to monitor that the programme does not, over time, facilitate an unjustified decline in lending standards and a build-up of imbalances in the real estate market**, as well as **to refine the programme** to remove incentives for the borrowers who actually need no state guarantees to apply for the support (for example, by discontinuing the rebate on state duty when registering a property purchased under the programme in the Land Register). Structural problems with Latvia's outdated housing should also be considered when refining the state support programme (for example, by limiting the state stimuli for the purchase of the housing which does not comply with certain energy efficiency or other requirements).

The effect of the initial shock of the Covid-19 pandemic on business lending was large – in April and May 2020, the amount of new loans fell significantly (see Chart 2.2) as both borrowers and lenders became extremely cautious. Lending standards tightened, the number of rejected loan applications increased, and the demand for long-term loans to businesses declined significantly. Nonetheless, the shock was short-lived, and **in mid-2020 the volume of new loans to NFCs gradually began to grow. However, lending remained modest** – in March 2021, loans issued by credit institutions to domestic NFCs shrank by 0.9% year-on-year.

Several government and credit institution support measures helped to avoid a greater drop in the loan portfolio – tax holidays, the state support programme for the crisis-affected NFCs, the moratorium announced by the Finance Latvia Association on principal loan repayments and the individual support measures applied by banks (see the section on measures to mitigate the impact of the Covid-19 pandemic). **Accommodative monetary policy also facilitated the availability of financing to banks and encouraged them to provide loans more actively.** Even before the Covid-19 pandemic, the targeted longer-term refinancing operations (TLTRO III) introduced by the ECB helped credit institutions to obtain central bank loan resources on very favourable terms. The receipt of a premium from the central bank was possible by

[58] The LTV requirement applies only to loans, the sum of which exceeds four minimum monthly wages.

increasing the loan portfolio or at least maintaining it at its existing level. Some credit institutions in Latvia used this opportunity and increased their lending to businesses to take advantage of the opportunities provided by the ECB.

Lending has been weak in Latvia for a prolonged period, indicating deficiencies in the financial intermediation. For a long time, the lending dynamic in Latvia has been one of the weakest in the euro area, and the loan-to-GDP ratio is currently at its lowest (see Chart 2.5). At the same time, credit institution interest rates for Latvian borrowers are among the highest in the euro area (see Appendix 2 "Interest rates on new loans to NFCs. Evidence from Latvijas Banka's Credit Register microdata"). This is due to both demand and supply factors, including the segmentation of the lending market, several structural problems in the economy (for example, the high share of the shadow economy, the insufficient capitalisation of NFCs, deficiencies in the legal environment), as well as the still difficult cooperation between credit institutions and their customers due to the non-exhaustive way of implementing the AML/CFT requirements. Even though the progress is gradually being achieved in some areas[59], the overall situation is not improving sufficiently quickly.

The persistently weak lending is mutually connected with the protracted weak investments. According to the annual research[60] by the Stockholm School of Economics in Riga and the FICIL, the Foreign Investment Index in 2020 was 2.7 on a 5-point scale, although it is gradually improving. The greatest hurdles to investment from the perspective of foreign investors are the demographic trends, the mediocre level of education and science, insufficient investment incentives and the availability of labour. According to the survey[61] of 370 Latvian businesses by the European

Chart 2.5
ANNUAL RATES OF CHANGE IN DOMESTIC LOANS TO NFCs AND HOUSEHOLDS AND THEIR RATIO TO GDP BY COUNTRY
(%)

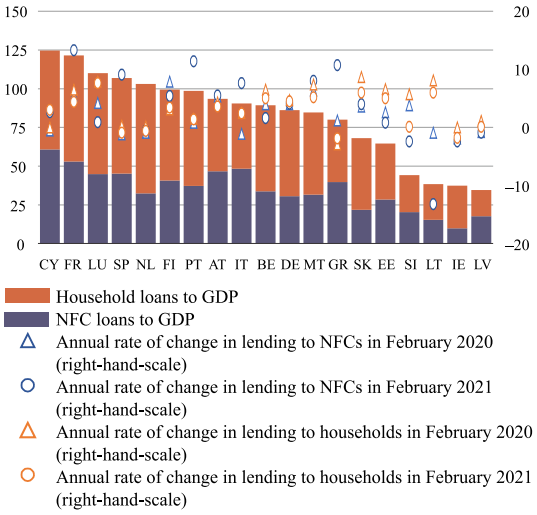
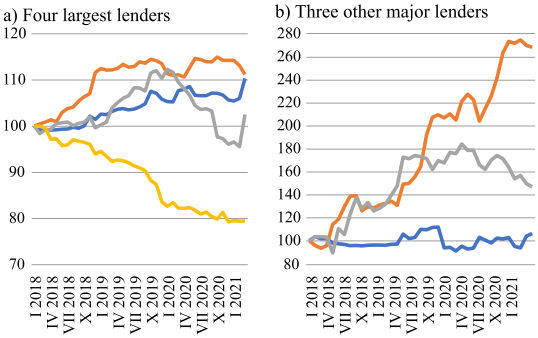


Chart 2.6
INDEX OF OUTSTANDING LOANS GRANTED TO DOMESTIC NFCs AND HOUSEHOLDS
(2018 I = 100)



Investment Bank, insufficient financing is an important hurdle to investments, although several other factors such as the availability of skilled staff, low demand for products/services (these aspects are associated with demographic trends), energy costs, tax policy and business regulations were evaluated as being more important. Thus, the issues with weak lending should be addressed along with improvements in the investment climate.

Lending developments of various credit institutions differed both prior to and during the pandemic. The domestic NFC and household loan portfolio of some of the large lenders remained fairly stable (see Chart 2.6), but two credit institutions, the loan portfolios of which had grown rapidly prior to the pandemic, were very cautious during the crisis and reduced their loan portfolios significantly. In turn,

[59] For example, the CIT exemption for reinvested earnings, which has been in force since 2018, is gradually facilitating an increase in business capitalisation. In 2021, a specialised Economic Affairs Court was created which could improve the efficiency of dispute settlement. In May this year, the Law on Covered Bonds was adopted, etc.

[60] https://www.sseriga.edu/sites/default/files/2021-02/ENG_2020_FICIL_Sentiment_Index_0.pdf

[61] https://www.eib.org/attachments/efs/eibis_2020_latvia_en.pdf

some credit institutions significantly increased their role in the lending market during the crisis. **Credit institutions which continue to transform their business models issued loans quite actively during the crisis.** The role of these institutions in the domestic lending market remains relatively small. They were, however, able to increase their role somewhat in the NFC sector where they were already previously much more specialised. In March 2021, the share of these institutions in the domestic NFC and household loan portfolio was 7.0%, inter alia 12.1% in the NFC loan portfolio and only 1.6% in the household loan portfolio. Since these institutions have higher financing costs, they are unable to compete with the large credit institutions in terms of the cost of loans. However, considering that lending in Latvia has remained weak for an extended period and the loan policies of the largest credit institutions are conservative, the smaller institutions play an important role as they offer loans to higher risk customers who may have problems finding alternative financing sources, especially taking into account the fact that the corporate bond market in Latvia is underdeveloped.

Lending by the non-bank financial sector

During the Covid-19 pandemic, lending by the non-bank financial sector decreased more than that by credit institutions (see Chart 2.7). In 2020, the non-bank financial sector's loan portfolio[62] declined by 6.0%, mainly on account of a decrease in leasing loans to NFCs. In this way, the total domestic NFC and household loan portfolio of credit institutions and non-banks fell by 4.1% (by 3.5% when accounting for loans granted by Altum).

Taking into account that loans granted by leasing companies related to credit institutions dominate in the total loan portfolio of the non-bank financial sector and more recent data are available on these loans, the analysis of the non-bank financial sector's lending is hereinafter focused on the leasing companies which are related to credit institutions.

[62] The non-bank loan portfolio is made up of loans provided by leasing companies, credit unions and other loan service providers (including instant loans) and their data is available up until the end of 2020.

Chart 2.7
CREDIT INSTITUTION, NON-BANK FINANCIAL SECTOR AND ALTUM LOANS TO NFCs AND HOUSEHOLDS
(in billions of euro)

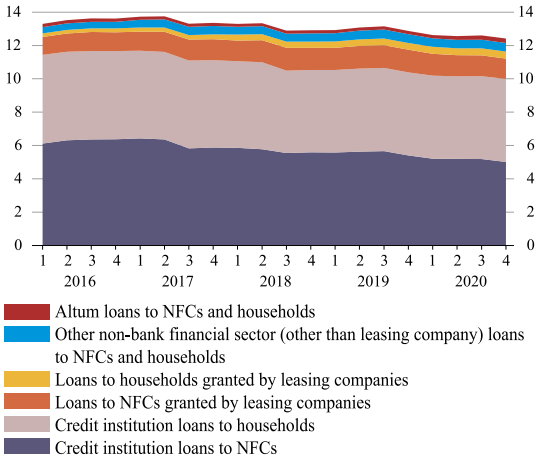
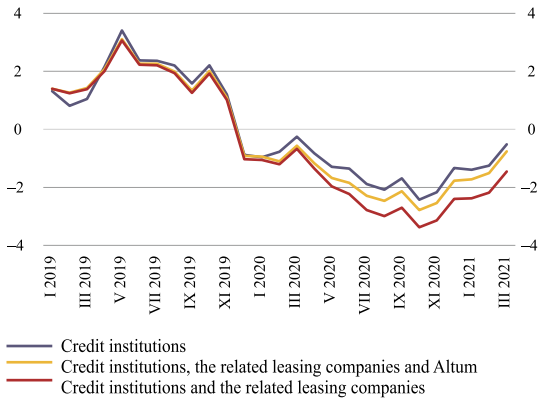


Chart 2.8
ANNUAL RATES OF CHANGE IN LOANS GRANTED TO DOMESTIC NFCs AND HOUSEHOLDS AT CREDIT INSTITUTIONS, THE RELATED LEASING COMPANIES AND ALTUM
(%)



In March 2021, the loan portfolio of leasing companies related to credit institutions had declined by 9.8% year-on-year. Thus, loans granted by credit institutions and leasing companies related to them to domestic NFCs and households decreased by 1.5% (by 0.8% when accounting for loans granted by Altum) compared to the corresponding period of the previous year (see Chart 2.8).

It seems that **the income shock in the Covid-19 pandemic conditions was less severe for the households which were customers of leasing companies, as leasing loans granted to households had decreased only slightly** – in March 2021, they recorded a 1.1% decline year-on-year. The largest proportion of leasing loans to households constituted loans for car purchase. It is possible that the mobility shock and supply chain

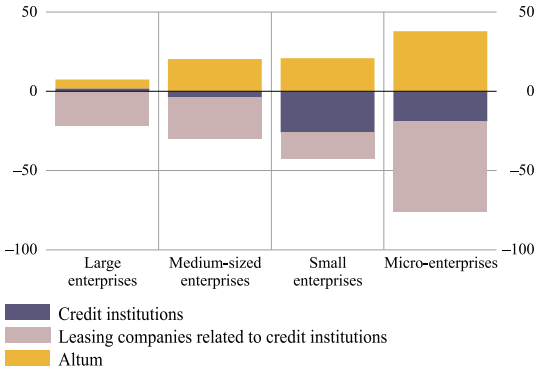
disruptions influenced the opportunities to purchase the desired cars, thereby hindering a steeper rise in lending. The quality of leasing loans to households remained good – at the end of the first quarter of 2021, the share of loans past due over 90 days in the total household leasing portfolio was 0.4%, and customers did not actively use loan moratoria.

However, the income and mobility shocks have significantly influenced leasing loans to NFCs. In late 2020, these loans recorded a 13.9% decline compared to the corresponding period of the previous year, but in March 2021 – a 12.2% decrease year-on-year. In 2020, the volume of new leasing loans to NFCs dropped by 21.9%. The new leasing loans granted in the transportation sector fell the most (by 60.0%)[63]. Meanwhile, the new leasing loans granted in the trade sector dropped by 16.7%. This sector was also significantly affected by mobility restrictions and falling consumption, as well as postponed investment. New leasing loans granted in the agricultural sector fell by 4.4%. Even though agriculture has not suffered significantly from the crisis caused by the Covid-19 pandemic, demand has been affected by greater caution. The Rural Support Service stimulated lending with various support programmes.

In 2020, about 1/3 of the entire leasing companies' portfolio of loans to NFCs declined due to targeted portfolio reductions by some leasing companies. Competition among leasing companies was reduced because in early 2021 AS Citadele banka purchased the company SIA UniCredit Leasing and its affiliates in the Baltic States, and the entrance of any new leasing companies into the market is not expected. In 2019, the fee for issuing a consumer lending services license was increased from 71 140 euro to 250 000 euro, and the annual monitoring fee – from 14 225 euro to 55 000 euro. Consequently, it has become more difficult for new companies to enter and compete both in the leasing market and other consumer credit markets. **The reduction of competition is likely to affect lending conditions negatively. Consequently, it may also weigh on the competitiveness of borrowers if lending becomes more expensive for them.**

[63] In 2020, the share of loans granted in the transportation, agricultural and trade sectors in the total portfolio of leasing loans constituted 15.9%, 17.0% and 15.3% respectively.

Chart 2.9
ANNUAL CHANGE IN OUTSTANDING LOANS GRANTED TO NFCs IN MARCH 2021
(in millions of euro)



The Covid-19 pandemic has not significantly affected the leasing companies' NFC loan quality. At the end of the first quarter of 2021, the share of loans past due over 90 days in the total NFC leasing portfolio was 0.9% as compared to 1.8% in the corresponding period of the previous year. Meanwhile, the share of loans past due less than 90 days has not changed significantly accounting for 2.7% of the NFC leasing portfolio at the end of the first quarter of 2021.

Role of loans granted by Altum

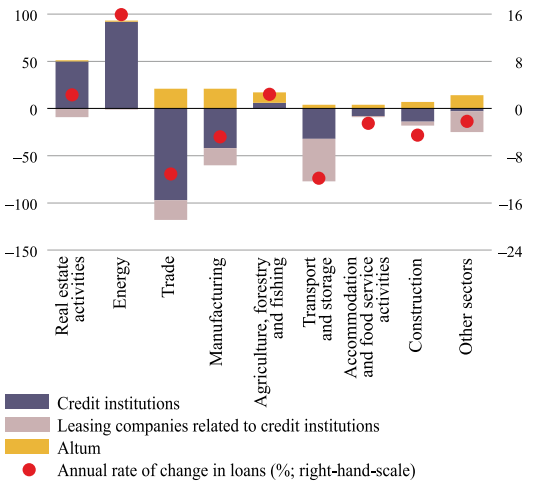
In the crisis conditions, the loans granted by Altum provided some support to NFCs (mainly SMEs) for the financing of their working capital. From April 2020 to March 2021, these loans compensated for the drop in the credit institutions' loan portfolio and partly also the fall in the leasing companies' portfolio. Adding the corresponding Altum loan portfolio to the domestic NFC and household loan portfolio of credit institutions and the related leasing companies, in March 2021 the annual rate of change in loans would be 0.7 percentage point higher (i.e. –0.8% instead of –1.5%; see Chart 2.8).

The role of Altum increased in the SME segment. These companies usually have greater difficulty obtaining bank financing during a crisis. The loan portfolio of credit institutions and especially the related leasing companies contracted significantly in the SME segment in particular (see Chart 2.9). Taking account of the unprecedented Covid-19 situation, the government sector's loan offer during the Covid-19 pandemic can be evaluated positively overall; however, the development finance institution should carefully

consider the lending criteria and specialise in segments where the credit institution financing is insufficient, and it should be able to manage the credit risk of the rapidly growing loan portfolio[64].

However, the growth in the Altum loan portfolio is very diversified, and its role in each individual sector is relatively small. Looking by sector, the credit institutions' lending dynamic differs a great deal. The credit institution loan portfolio has increased significantly in two sectors: energy and, to a lesser degree, also in real estate activities, with several large long-term loans issued for implementing investment projects. The most significant loan portfolio declines (for both credit institutions and leasing companies) were observed in the crisis-affected trade and transportation sectors and, slightly less, in the manufacturing sector, with Altum compensating these drops only somewhat (see Chart 2.10).

Chart 2.10
ANNUAL CHANGE IN OUTSTANDING LOANS GRANTED TO DOMESTIC NFCs BY SECTOR IN MARCH 2021
(in millions of euro)



The loan portfolio is expected to remain broadly unchanged in 2021. According to a lending survey, credit institutions are assessing demand for loans more optimistically; however, in conditions of great uncertainty, the sentiment will most likely remain cautious. The new Law on Residential Tenancy may encourage investment in the construction and fitting out of rental housing, thus facilitating lending. Household lending will become more active, taking into account the sound financial standing of potential borrowers, i.e. the more well-off households, the build-up of savings, the desire to change housing as well as the state support programme. The introduction of the Next Generation EU Recovery Fund and the development of the Rail Baltica project will facilitate lending in the medium term. However, it is important to decrease structural hurdles for the development of healthy lending.

[64] In March 2021, Altum's domestic NFC loan portfolio recorded a 49.2% increase year-on-year, accounting for 4% of the corresponding loan portfolio of the credit institutions and the leasing companies related to them.

BOX 2.1. FURTHER CONSOLIDATION OF THE BALTIC FINANCIAL SECTOR

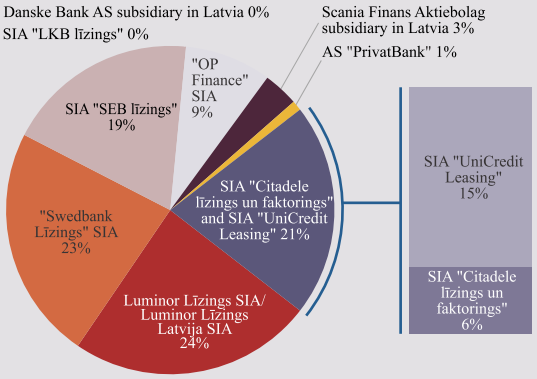
In January 2021, AS Citadele banka[65] completed a transaction purchasing SIA UniCredit Leasing[66], UniCredit S.p.A's leasing company operating in the Baltics. Consequently, AS Citadele banka became one of the leading participants in the leasing market in the Baltics, as well as to significantly increased the amount of loans granted to non-banks by allocating additional financing to its subsidiary leasing company. According to publicly available information, the transaction was worth about 850 million euro[67], i.e. almost 1/5 of the assets of AS Citadele banka at the end of 2020[68]. Funds accumulated at Latvijas Banka and other central banks in the Baltic States, as well as the sale of part of its liquid securities was used for completing the transaction.

As a result of the transaction, the asset structure of AS Citadele banka changed significantly; loans granted to non-bank financial institutions increased considerably, while the non-financial private sector credit

[65] AS Citadele banka Annual Report for 2020, p. 5.
[66] UniCredit S.p.A was the 100% owner of SIA UniCredit Leasing with branches in Lithuania and Estonia and a subsidiary SIA UniCredit Insurance Broker with a branch in Estonia.
[67] Citadele purchased the leasing company UniCredit Leasing (forbesbaltics.com)
[68] Banku-statistika-2020.-gada-4.-ceturksnī.pdf (financelatvia.eu)

portfolio remained broadly unchanged. **This transaction also significantly increased the overall domestic non-bank loan portfolio of Latvian credit institutions,contributing to the total domestic loan portfolio growth.** To get a comprehensive insight into the domestic lending trends, the effect of this transaction should be excluded from the credit institution loan portfolio analysis.

Chart 2.11
COMPOSITION OF THE LATVIAN LEASING ASSOCIATION MEMBERS' CREDIT PORTFOLIO BY COMPANY AT THE END OF 2019
(%)



The above transaction is a good example of an alternative way of expanding the market share in the Baltics in the short term: acquisition of the business of another financial institution. According to a public statement by AS Citadele banka, the credit institution's long-term goal is to become the leading provider of financial services in the Baltics for both individuals and SMEs. AS Citadele banka has also announced its 2021 plan to purchase the mortgage loan portfolio worth over 170 million euro of ABLV Bank, AS in liquidation. Currently, AS Citadele banka is the second largest credit institution in Latvia in terms of its assets.

Mergers and acquisitions allow market participants to gain cost and income synergy, but at the same time increased concentration and reduced competition can affect the end consumer negatively. **This transaction represents a further reduction in leasing company competition.** When Luminor Bank AS was established in late 2017, with SIA DNB līzings (now – Luminor Līzings Latvija SIA) and SIA Nordea Finance Latvia (now – Luminor Līzings SIA) no longer competing with each other, the largest affiliated leasing group in Latvia was formed. By purchasing SIA UniCredit Leasing in January 2021, AS Citadele banka also reduced the competition in the leasing market. The four largest market participants still dominate the market controlling 86.8%[69] of the overall leasing market in late 2019 (see Chart 2.11).

Large company acquisitions have not taken place too often in the Baltic financial sector. This shows the inert nature of the Baltic financial market, dominated by Nordic banks. **The previous largest merger and acquisition case was the creation of Luminor Bank AS, merging DNB Bank AS and Nordea Bank ABP structural units in the Baltics**, and afterwards in 2019, selling it to an investment fund consortium managed by Blackstone. In this transaction, 60% of Luminor Bank AS shares, worth about 1 billlion euro, were purchased. A significant takeover also took place in 2020, when Estonia's AS LHV Pank purchased the Estonian non-bank sector loan portfolio of Danske Bank Oyj for 273 million euro.

The Baltic financial sector might still face a further consolidation in the future. This could be particularly relevant to some medium and small credit institutions in Latvia, for which mergers could be a good solution for continued profitable activity.

[69] The most recent publicly available data for the levels of individual institutions are from 2019. Source: Latvian Leasing Association.

Credit risk

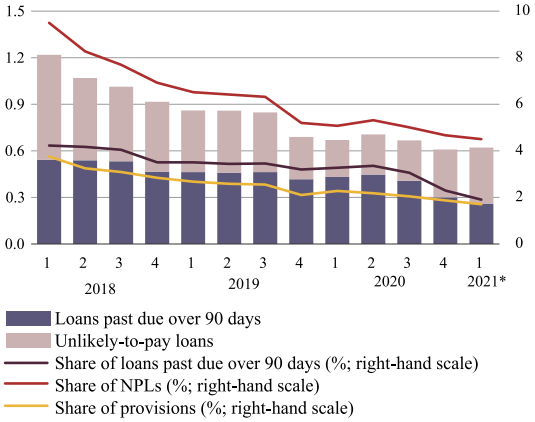
As a result of government support measures, non-legislative industry-wide moratorium and individual measures of credit institutions, the impact of the Covid-19 pandemic on the quality of loans has been limited so far. The loan quality indicators significantly deteriorated only for loans granted in the accommodation and food service activities sector. Overall, the credit institutions' exposure to sectors most affected by the crisis was not large. The credit risk was also mitigated owing to relatively prudent lending policies of credit institutions before the crisis. It should be noted, however, that a gradual increase in forborne and Stage 2 loans has been observed. The future credit risk development hinges on the evolution of the Covid-19 pandemic and the economic recovery.

Despite a fall in GDP, the credit institutions' loan portfolio quality has improved. With credit institutions continuing to gradually write off the NPLs accumulated during the previous periods, at the end of March 2021 their share in the loan portfolio stood at 4.5%, down from 5.1% a year ago (see Chart 2.12), while the share of loans past due over 90 days was 1.9%, down from 3.3% a year ago. **Deterioration in the loan portfolio quality was averted owing to government support measures to mitigate the consequences of the Covid-19 pandemic as well as the conservative lending policies implemented by credit institutions before the crisis, thus limiting the build-up of imbalances.**

Moreover, the effect of the Covid-19 pandemic on various groups of borrowers has been heterogeneous. Amid the pandemic, some of the wealthier households, which are mostly also credit institution customers (borrowers), have seen increases in their income and savings. **The share of NPLs in loans to households for house purchase edged down** from 3.0% in February 2020 to 2.5% at the end of March 2021[70]. The quality of consumer credit has also improved.

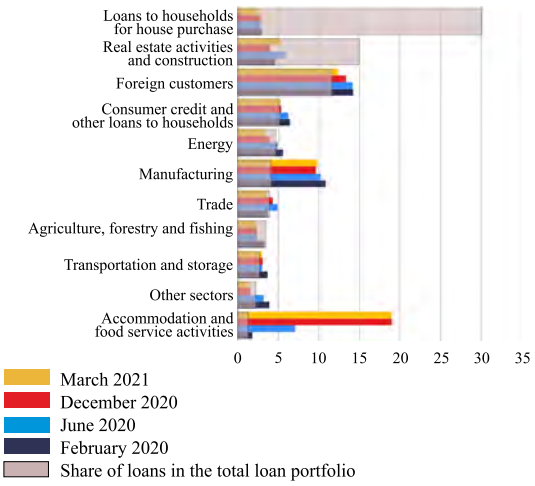
Similarly, some economic sectors reported no or only slight deterioration in their financial conditions. Loan quality has remained broadly unchanged in most sectors. The accommodation and food service activities sector, which suffered the largest losses during the pandemic, was the only sector recording a significant loan quality decline. In March 2021, the share of NPLs in the sector's loans reached 19.0%. Nonetheless, the share of the sector's loans in the total credit institution loan portfolio was small (1.3%) and, thus, their impact on the total loan portfolio was insignificant (see Chart 2.13). The credit institutions' exposure to other severely affected sectors, e.g. arts, entertainment and recreation, administrative and support service activities as well as other service activities, is even less significant, and the share of NPLs in loans granted to these sectors has not expanded overall.

Chart 2.12
NPLs, PROVISIONS AND THEIR SHARE IN THE TOTAL CREDIT INSTITUTION PORTFOLIO
(in billions of euro)



* The non-consolidated data for the first quarter of 2021 are not fully compatible with the previous observations.

Chart 2.13
STRUCTURE OF THE LOAN PORTFOLIO AND THE SHARE OF NPLs IN THE RESPECTIVE LOAN PORTFOLIO
(%)



[70] Hereinafter, the analysis covers the credit institutions' non-consolidated data.

The share of NPLs in loans to the real estate activities sector (loans in this sector account for 13.7% of the credit institution loan portfolio) has increased only slightly from 4.6% in February 2020 to 5.2% in March 2021. **In the future, however, the share of such NPLs may grow more notably** as several large borrowers' activity in the sector is associated with shopping centres and offices. The borrowers in this sector have been relatively active in using moratoria on principal loan repayments and other individual support measures offered by credit institutions (see the section on real estate market development). This risk is mitigated by a new government programme, which provides support to shopping centres, and by capital investments of large borrowers, i.e. AIFs (see Box 1.3).

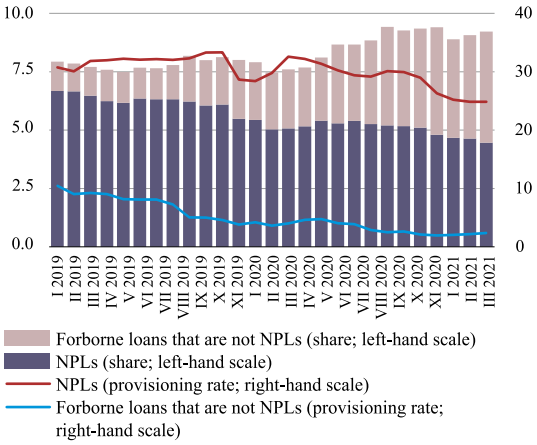
The shares of NPLs in loans to the trade and transportation sectors have shrunk compared to their pre-pandemic levels, and in March 2021 they accounted for 3.5% and 2.9% respectively. The shares of loans to the above sectors in the total loan portfolio are relatively small, accounting for merely 3.9% and 2.6% respectively. The loan quality indicators of these sectors may deteriorate with some time lag. However, no significant impact on credit institutions is expected as the trade sector's loan portfolio is largely made up of loans to the segments of trade that have been less affected by the crisis. Meanwhile, the largest borrowers in the transportation sector are primarily state- and local government-owned businesses; such loans have a lower credit risk.

The quality of the foreign customer loan portfolio was already low **before the Covid-19 pandemic, and it may deteriorate even further**. Should this risk materialise, the impact on the overall financial sector will be limited since the risk would not affect the largest domestic lenders and loans granted to foreign customers (except those from Lithuania and Estonia[71]) would continue to shrink (in March 2021, the share of such loans in the total loan portfolio had declined to 5.9%[72]).

[71] The credit risk of Lithuanian and Estonian customers has been assessed as similar to that of domestic customers. One credit institution is attempting to significantly increase its role in the Baltic lending market.

[72] Chart 2.13 reflects data on all foreign customers (including Estonian and Lithuanian customers).

Chart 2.14
FORBORNE LOANS THAT ARE NOT NPLs AND THEIR PROVISIONING RATE
(%)



Although the share of NPLs has declined, the forborne loans that are not NPLs have grown significantly. In March 2021, the share of these loans in the to total credit institution loan portfolio reached 4.8% as compared to 2.4% recorded before the crisis in February 2020 (see Chart 2.14), inter alia their share in the domestic NFC loan portfolio reached 7.2% as compared to 4.3% in February 2020. Meanwhile, in the household sector, the share of the forborne loans that are not NPLs is much lower and it has increased at a more moderate rate from 1.1% in February 2020 to 2.2% in March 2021. The share of the forborne loans that are not NPLs has grown most rapidly in the loan portfolio of foreign customers, i.e. from 2.5% in February 2020 to 8.8% in March 2021.

The non-legislative industry-wide moratorium on principal loan repayments helped prevent an even higher rise in forborne loans. Credit institutions granted concessions to several borrowers in financial distress. In line with the EBA guidelines, credit institutions were not obliged to classify these loans as forborne during the period of the non-legislative industry-wide moratorium. At the end of 2020, the portfolio of loans to business had almost no loans subject to the non-legislative industry-wide moratorium, and such loans also declined in the household loan portfolio. The non-legislative industry-wide moratorium expired in 2020 for almost all loans to businesses. In the second half of 2020, loans to households subject to the moratorium declined significantly, and at the end of December they accounted for 2.4% of the household loan portfolio

and 1.0% of the total loan portfolio (see Chart 2.15). For most of the remaining loans to households, the moratorium will expire by mid-2021 at the latest. It should be noted, however, that the credit institution concessions granted to some loans remained in place after the expiry of the non-legislative industry-wide moratorium, and these loans were reclassified as forborne.

The accommodation and food service activities sector recorded the steepest rise in forborne loans as well (see Chart 2.16) – the share of the forborne loans that are not NPLs in the portfolio of loans granted to this sector reached 57.9% in March 2021 as compared to 5.5% in February 2020. A moderate rise in forborne loans was observed in the real estate activities sector (from 3.8% to 6.4% respectively) and the transportation and storage sector (from 1.6% to 4.8% respectively). In 2020, businesses in these sectors were granted concessions, i.e. moratoria and individual support measures of credit institutions, as they had difficulties to fully meet their loan obligations.

Since the start of the pandemic, Stage 2 loans[73] have been gradually growing suggesting a moderate increase in credit risk. The share of these loans expanded from 9.5% in February 2020 to 11.2% in March 2021 (see Chart 2.17). Although Stage 2 loans are not NPLs, their credit risk has increased considerably since the initial recognition according to IFRS 9. The most significant increase in Stage 2 loans was observed in the accommodation and food service activities sector and the real estate activities sector as well as the loan portfolio of foreign customers.

However, looking by credit institution group, the dynamics of loan quality changes differs. For instance, the share of Stage 2 loans granted by the three largest credit institutions included in the EBA sample of banks[74] overall even declined slightly, while the share of Stage 2 loans granted by other credit institutions overall expanded considerably (see Charts 2.18 and 2.19).

[73] 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.

[74] Swedbank AS, AS SEB banka and AS Citadele banka.

Chart 2.15
SHARE OF LOANS TO NFCs AND HOUSEHOLDs SUBJECT TO THE NON-LEGISLATIVE INDUSTRY-WIDE MORATORIUM IN THE TOTAL CREDIT INSTITUTION LOAN PORTFOLIO AND IN THE LOAN PORTFOLIO OF THE RESPECTIVE SECTOR
(%)

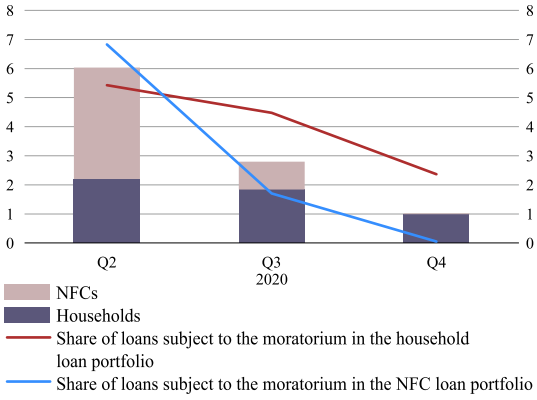


Chart 2.16
FORBORNE LOANS THAT ARE NOT NPLs AND THEIR SHARE IN THE LOAN PORTFOLIO OF THE RESPECTIVE SECTOR, HOUSEHOLDS AND FOREIGN CUSTOMERS IN MARCH 2021
(%)

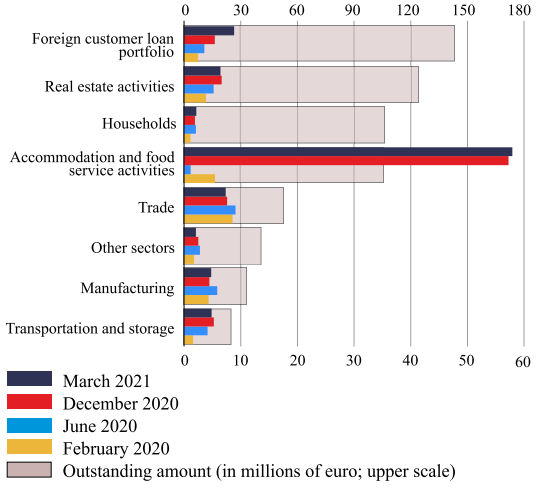
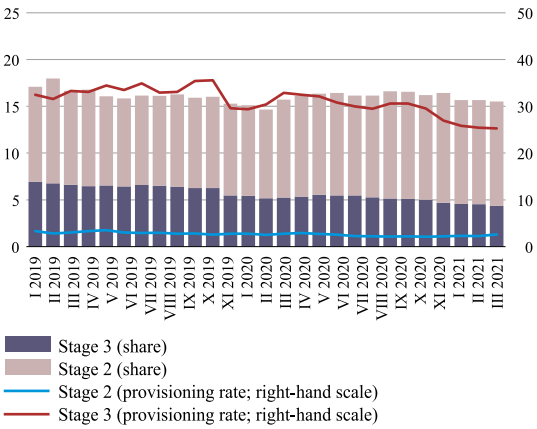
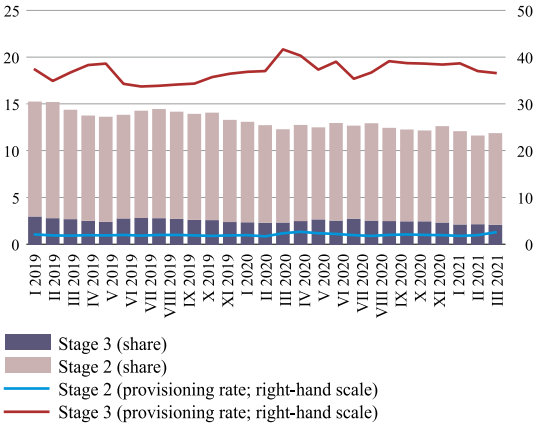


Chart 2.17
STAGE 2 AND STAGE 3 LOANS (% OF THE LOAN PORTFOLIO) AND THEIR PROVISIONING RATES
(%)



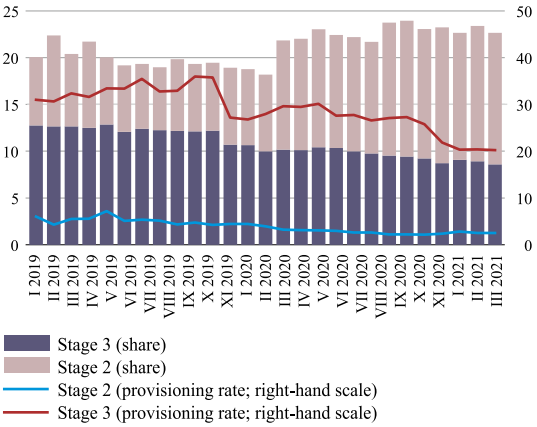
At the beginning of the pandemic, credit institutions made additional provisions for NPLs and potentially problematic loans. However, these provisions were later reduced and continued declining during the second wave of the pandemic. Moreover, provisions for Stage 3 loans[75] (see Chart 2.17) shrank most notably in the group of other credit institutions or, in other words, the group of credit institutions not included in the EBA sample (see Chart 2.19). Such a provisioning policy can be regarded as insufficiently prudent. Meanwhile, the three largest credit institutions included in the EBA sample of banks, the provisioning rate for Stage 3 loans, i.e. the ratio of provisions for these loans to their outstanding amount, has remained stable since mid-2020 (see Chart 2.18).

Chart 2.18
STAGE 2 AND STAGE 3 LOANS (% OF THE LOAN PORTFOLIO) AND THEIR PROVISIONING RATES IN THE THREE LARGEST CREDIT INSTITUTIONS (EBA SAMPLE)
(%)



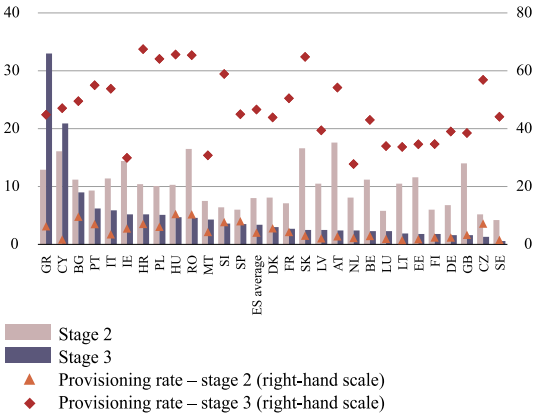
The loan quality of Latvia's largest credit institutions (EBA sample) is good, i.e. the share of Stage 3 loans is relatively low. At the same time, the share of Stage 2 loans is significant and exceeds the EU average. This indicates that the credit institutions have implemented a sufficiently efficient early warning system, and any loan quality changes are recognised in a timely manner. In some euro area countries, a significant share of Stage 1 loans are immediately reclassified as Stage 3 loans suggesting that they are not classified as Stage 2 assets in a timely manner (see Chart 2.20).

Chart 2.19
STAGE 2 AND STAGE 3 LOANS (% OF THE LOAN PORTFOLIO) AND THEIR PROVISIONING RATES IN OTHER CREDIT INSTITUTIONS (NOT INCLUDED IN THE EBA SAMPLE)
(%)



The increase in credit risk is reflected in loan quality indicators with some time lag. Taking account of an increase in forborne loans and Stage 2 and Stage 3 loans as well as the likelihood that the Covid-19 pandemic restrictions will remain in place due to the persistently high infection rates, **going forward, the loan portfolio quality indicators may deteriorat**e. At the same time, the credit institutions' exposure to sectors most affected by the crisis is relatively low, and risks associated with them have, to a large extent, already materialised. However, with the pandemic dragging on, the loan portfolio quality of other sectors and households may also deteriorate moderately. Nevertheless, the credit institutions' resilience to these potential shocks is high (see the stress test results).

Chart 2.20
STAGE 2 AND STAGE 3 LOANS AND THEIR PROVISIONING RATES IN THE LARGEST BANKS (EBA SAMPLE) IN SEPTEMBER 2020
(% of the loan portfolio)



[75] Stage 3 loans are credit-impaired loans within the meaning of IFRS 9.

It is essential that in 2021 credit institutions recognise loan quality deterioration in a timely manner and make adequate provisions. It is important that they continue to offer solutions to problematic borrowers. At the same time, they must practice efficient risk management in order to distinguish viable solutions from non-viable ones in a timely manner, thus protecting the credit institution from negative credit risk consequences. Moreover, they must ensure timely identification of unlikely-to-pay and forborne loans. The potentially riskier loan portfolio segments should be monitored further, focussing in particular on the borrowers which have been previously granted concessions. Attention should also be paid to the provisioning practices of some credit institutions. Some smaller credit institutions will have to make additional provisions also due to their currently low provisioning rate.

Funding and liquidity risks

The funding and liquidity risks of credit institutions are viewed as below average. Credit institutions have solid liquidity ratios and hence their capacity to absorb potential liquidity shocks is high. Their funding was boosted by the significant rise in domestic deposits as well as the recourse to the long-term funding facilities of the ECB. The ratio of domestic loans to deposits suggests that credit institutions have sufficient funds to provide loans.

The balance sheets of credit institutions have been expanding since the first quarter of 2020. A significant contributing factor was the participation of some credit institutions in the ECB's TLTRO III operations organised by Latvijas Banka. The securities portfolio component of the credit institution assets has grown, as securities were used as collateral in the above operations. Despite this participation, no significant increase in NFC loans has been observed so far (with the exception of a rise in March 2021), while claims on Latvijas Banka have continued to grow (see Chart 2.21).

At the same time, the liabilities side of the credit institution balance sheet displays a notable rise in domestic deposits. Their dominant role in credit institution funding continued to strengthen, and,

Chart 2.21
COMPOSITION OF CREDIT INSTITUTION ASSETS AND LIABILITIES
(billions of euro)

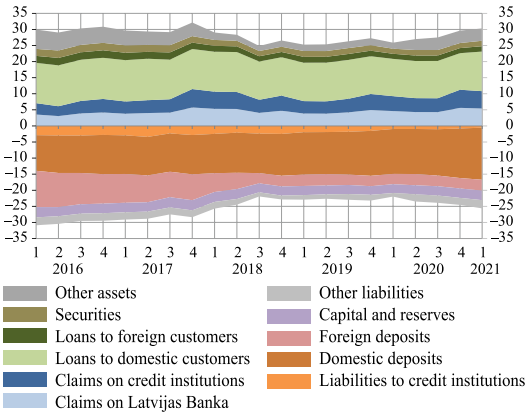
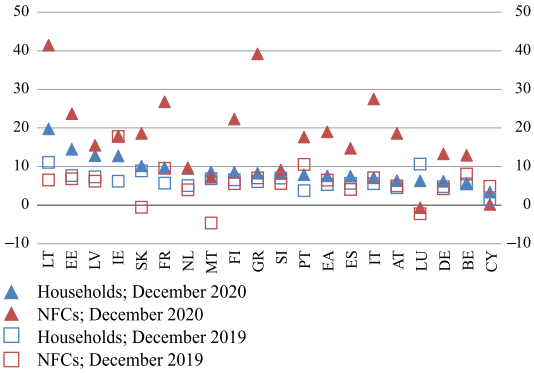


Chart 2.22
ANNUAL CHANGES OF DOMESTIC HOUSEHOLD AND NFC DEPOSITS IN EURO AREA
(%)



at the end of March, domestic deposits amounted to 74.7% of the total funding of credit institutions, whereas total deposits represented 83.1% of all received funding (including the TLTRO III operations which accounted for 5.9% of total funding).

Like in other euro area countries, a significant rise in domestic deposits during the Covid-19 pandemic also has been observed in Latvia (see Chart 2.22). In March 2021, the annual growth rate of domestic deposits in Latvia reached 16.0%, including a 17.5% annual increase in domestic household deposits and a 17.6% rise in deposits by NFCs (see Chart 2.23). The increase in private sector deposits both in Latvia and abroad is mainly associated with the postponed consumption and investment as well as the government support measures to overcome the Covid-19 crisis.

In 2020, Latvian households received a total of 130 million euro in various benefit disbursements and

another 239 million euro up to 28 March 2021[76] (overall, 3 percentage points of the aggregate annual increase in household deposits as at the end of March 2021). The rise in deposits was affected by the postponed consumption and precautionary considerations in relation with the pandemic restrictions. With the situation normalising, consumption is likely to increase considerably. At the same time, NFCs[77] (including those with state capital shares) received 1104 million euro in government support in 2020 and another 280 million euro up to 28 March 2021. This means that, in the absence of government support to NFCs, the annual changes in their deposits most likely would have been negative, as the deposits of NFCs have overall increased by 825 million euro since the beginning of March 2020.

Deposits from foreign customers have stabilised. In March 2021, they accounted for 17.2% of all deposits (see Chart 2.24), inter alia deposits from non-EU countries constituted 7.0%. Credit institutions previously seeking additional funding via foreign deposit platforms have cut back on this type of funding, inter alia because it is relatively expensive and credit institutions have access to much cheaper funding, for example, by recourse to the ECB's long-term financing operations.

Given the notable rise in domestic deposits and the credit institutions' cautious approach to lending, credit institutions did not need to draw additional funding from financial markets. Domestic loan-to-deposit ratio reached 76.0% at the end of March 2021, and the holdings of domestic deposits are sufficient to finance lending (see Chart 2.25).

With access to funding improving, parent banks also continue to reduce the amount of funding provided to their subsidiaries, hence the amount of net funding was close to zero or even negative in March 2021. Parent banks no longer need to inject additional liquidity into their subsidiaries, as taking deposits is a cheaper source of funding. Moreover, long-term funding provided by the ECB under TLTRO III operations is also available. The particularly favourable rates of these operations will now be in place until 1 June 2022 and the final

Chart 2.23
DEVELOPMENTS IN DOMESTIC CUSTOMER DEPOSITS
(billions of euro)

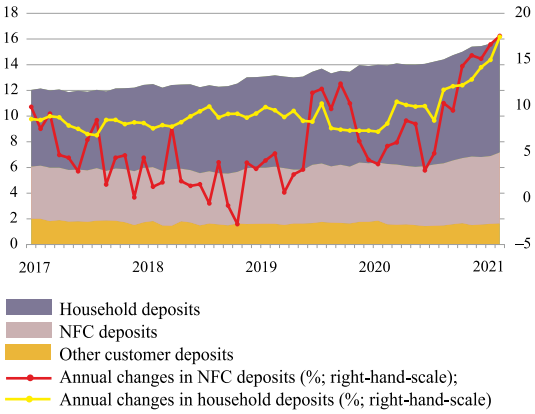


Chart 2.24
COMPOSITION OF DEPOSITS WITH CREDIT INSTITUTIONS BY COUNTRY
(%)

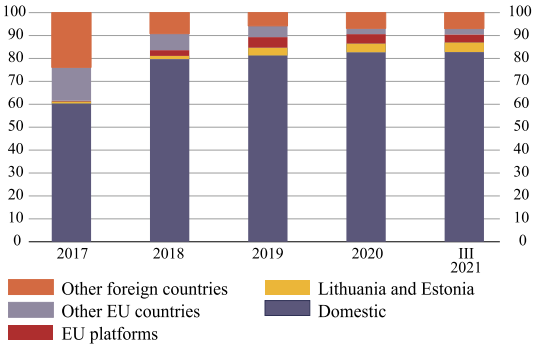
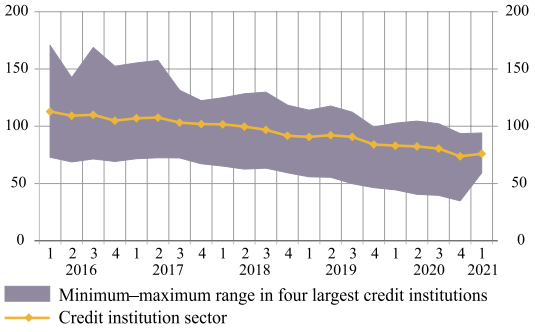


Chart 2.25
DOMESTIC LOANS-TO-DEPOSITS RATIOS OF CREDIT INSTITUTIONS
(%)



maturity date is a year later. At the end of March 2021, the total amount of recourse to TLTRO III operations by Latvia's credit institutions was 1.3 billion euro.

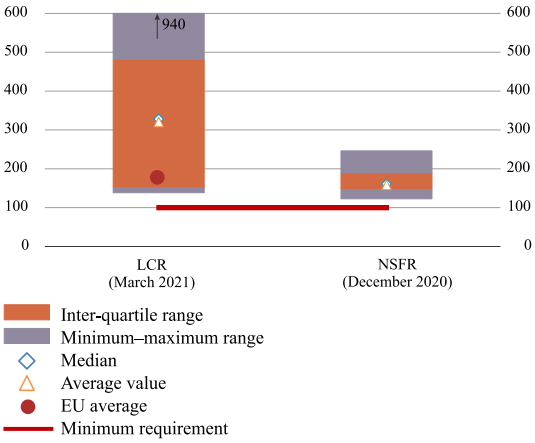
In the future, additional opportunities to draw market-based financing will be provided by the Law on Covered Bonds.

Credit institutions maintain high liquidity. The LCR of Latvia's credit institutions significantly exceeds

[76] https://www.fm.gov.lv/lv/pieskirto-valsts-budzeta-lidzeklu-sadalijums-un-izlietojums-covid-19-laika
[77] The calculation excludes state guarantees.

the minimum requirement and the EU average (see Chart 2.26). Due to the low interest rates and sluggish lending, an increasingly larger part of liquid assets is comprised of deposits with Latvijas Banka (at the end of March 2021, over 70% of LCR liquid assets and 21% of aggregate credit institution assets). The ratio was even higher at the end of 2020, prior to AS Citadele banka transaction of purchasing SIA UniCredit Leasing (see Box 2.1), which reduced it considerably. The high liquidity ratio, however, also points to the limited opportunities of the credit institutions to invest in liquid assets with positive yields. At the end of June 2021, the NSFR requirement addressing long-term liquidity mismatch is coming to effect (see Box 2.2). The levels of NSFR in Latvia's credit institutions also are high.

Chart 2.26
LCR AND NFSR OF CREDIT INSTITUTIONS
(%)



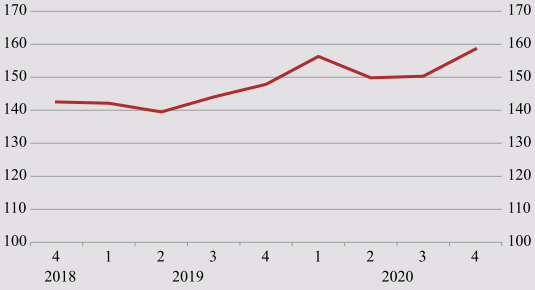
BOX 2.2. LONG-TERM LIQUIDITY RATIO NFSR REQUIREMENT COMING TO EFFECT IN THE EU AS OF JUNE 2021

A new long-term net stable funding ratio (NSFR) requirement for EU credit institutions is coming to effect in June 2021. This requirement supplements the existing short-term liquidity requirement LCR and limits the overreliance of credit institutions on short-term funding to finance their long-term assets. The NSFR is aimed at reducing the funding risk that might materialise in prolonged stress situations when credit institutions are facing funding outflows. The NSFR is calculated as a ratio of available stable funding to required stable funding. The NSFR determines the minimum amount of required stable funding, given the composition of a credit institution's assets or operational profile. Starting from June 2021, the requirement will be for the NSFR equal at least 100%.

With the NFSR requirement coming to effect, Basel III long-term liquidity standard, published by the Basel Committee in October 2014, is being implemented in the EU. It is, however, implemented with minor specific modifications. Moreover, credit institutions classified as small and incomplex, may apply a simplified approach to the NSFR requirement, if authorised by the FCMC.

Although compliance with the NSFR requirement has not been mandatory for these credit institutions so far, they did have an obligation of quarterly reporting of the data on NSFR items compliant with Basel III standard, so that the supervisory authorities could calculate the NSFR and be aware of its levels. After the NSFR requirement becomes mandatory, EU credit institutions will report on compliance with the NSFR requirement based on the EU framework.

Chart 2.27
AVERAGE NSFR OF LATVIA'S CREDIT INSTITUTIONS (ACCORDING TO BASEL III STANDARD)
(%)



Latvia's credit institutions have been able to fulfil the NSFR requirement already for several years (see Chart 2.27). At the end of 2020, the average NSFR of Latvia's credit institutions, calculated on the basis of Basel III standard, was 158.6%.

The available stable funding of Latvia's credit institutions is dominated by retail deposits (see Chart 2.28). It is also supplemented by capital and long-term funding in full amount, as well as a portion (as it is weighted by applying appropriate weights to each category of funding) of demand deposits and other short-term funding.

The required stable funding of Latvia's credit institutions is dependent on the asset composition: each asset category is assigned a specific risk weight determining the extent to which each asset category has to be covered with the available stable funding. At the end of 2020, the required stable funding of Latvia's credit institutions was dominated by non-renewable loans and receivables (see Chart 2.29).

Chart 2.28
AVAILABLE STABLE FUNDING OF LATVIA'S CREDIT INSTITUTIONS FOLLOWING APPLICATION OF RESPECTIVE WEIGHTS (ACCORDING TO BASEL III STANDARD) AT THE END OF 2020
(billions of euro)

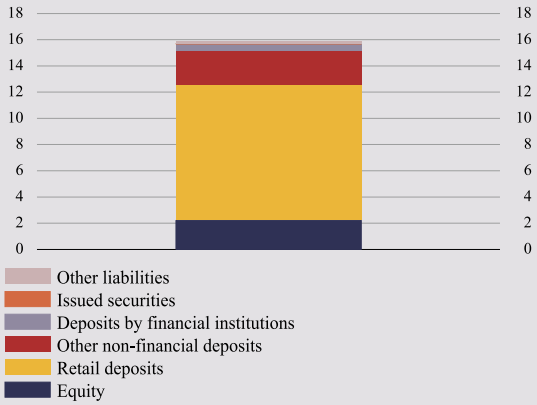
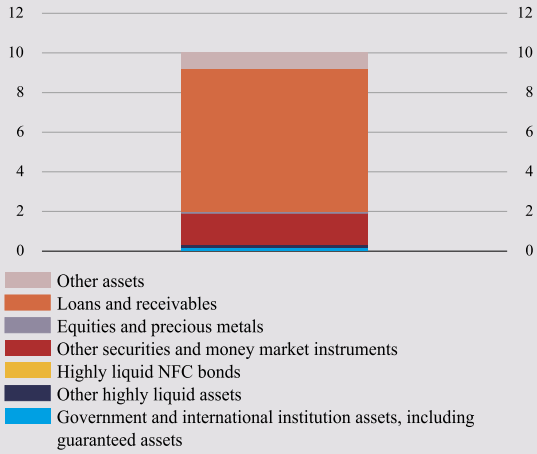


Chart 2.29
REQUIRED STABLE FUNDING OF LATVIA'S CREDIT INSTITUTIONS FOLLOWING APPLICATION OF RESPECTIVE WEIGHTS (ACCORDING TO BASEL III STANDARD) AT THE END OF 2020
(billions of euro)



The liquidity stress tests conducted in March 2021 suggest that credit institutions hold sufficient liquidity to cope with potential funding outflow shocks, including a potential fall in deposits accumulated during the pandemic (see Box 2.3).

BOX 2.3. STRESS TESTS OF CREDIT INSTITUTIONS' LIQUIDITY

Liquidity stress tests evaluate the significance of the potential consequences of funding outflows. The cut-off date for data was the end of March 2021 and the tests were conducted employing the liquidity ratio[78] that the FCMC uses for setting individual additional liquidity requirements for credit institutions providing services to foreign customers within the SREP and which is equivalent to the FCMC liquidity ratio whose minimum requirement of 30% was binding on all credit institutions prior to the LCR requirements took effect in full.

[78] The ratio of unencumbered liquid assets (vault cash; claims on Latvijas Banka and solvent credit institutions whose residual maturity does not exceed 30 days, and claims with other maturity if their recovery prior to the maturity has been stipulated in the agreement; investment in financial instruments whose maturity (repayment, sale term) is up to 30 days as well as other securities whose market is permanent and unrestricted) to the total of credit institutions' current liabilities with residual maturity under 30 days.

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 2.30), all credit institutions would be able to withstand the outflows of up to **30% of domestic customer deposits (a slight improvement from 20% yielded in the previous year's test) and the outflows of more than 60% of foreign customer deposits**. The ability of the largest credit institutions, mainly subsidiaries of Nordic banks with centralized liquidity management and possibilities to obtain additional liquidity from their parent banks, to withstand the outflows of domestic customer deposits is lower.

Additional stress tests involving two severely adverse scenarios were performed.

The assumptions of the additional Scenario 1 foresee that it is impossible to pledge or sell the securities portfolio, except euro area government securities with a credit rating no lower than A– and other foreign sovereign securities where at least one of the long-term ratings by three international credit rating agencies is AAA. As to euro area government securities, it is assumed that they would lose 30% of their value under Scenario 1, and, applying a 3.0% discount, they could be used in the Eurosystem's monetary policy operations.

In the additional Scenario 2, Scenario 1 is supplemented with the assumption that no credit institution has access to claims on credit institutions from a country on whose credit institutions the specific credit institution has the highest volume of claims (including claims on the credit institutions within the group).

Chart 2.30
LIQUIDITY STRESS TEST RESULTS
(number of illiquid credit institutions)

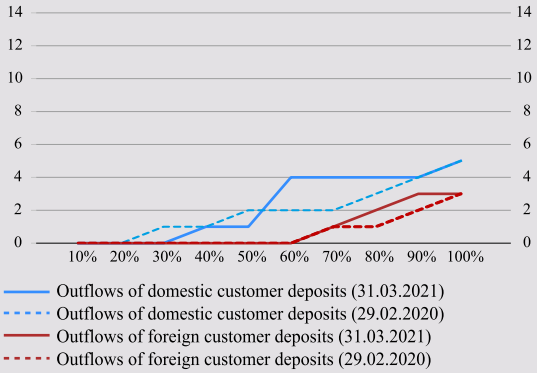


Chart 2.31
ADDITIONAL SCENARIO 1 STRESS TEST RESULTS
(number of illiquid credit institutions)

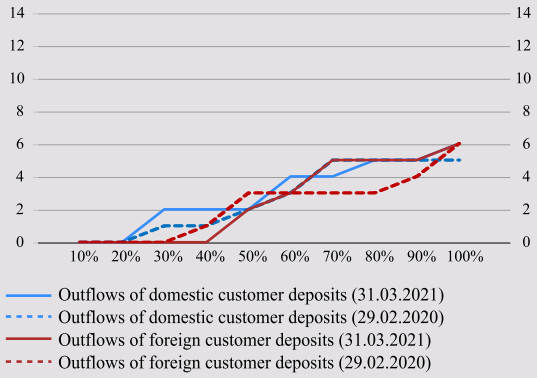
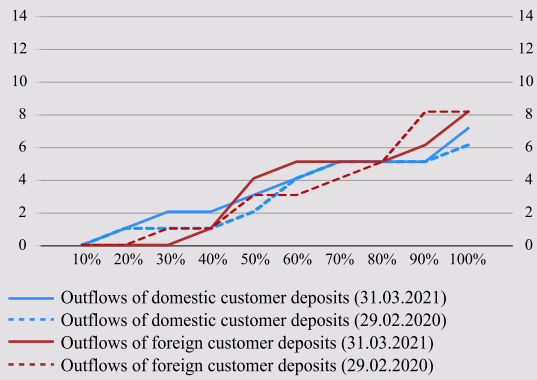


Chart 2.32
ADDITIONAL SCENARIO 2 STRESS TEST RESULTS
(number of illiquid credit institutions)



The application of Scenario 1 yields slightly worse results that the standard test, as the liquid assets of several credit institutions partly consist of foreign securities of a slightly lower liquidity. Nevertheless, **they would be able to withstand the outflows of no less than 20% of domestic non-MFI customer deposits and 40% of foreign non-MFI customer deposits** (see Chart 2.31). **The application of Scenario 2 shows lower ability to withstand the outflows of non-MFI deposits** (see Chart 2.32). **Credit institutions would be able to withstand the outflows of no less than 10% of domestic non-MFI customer deposits and up to 40% of foreign non-MFI customer deposits** (the ability to withstand the outflows of foreign customer deposits has improved in comparison with the previous year).

Profitability

Although the Covid-19 pandemic has affected the profitability of credit institutions, the negative impact of the pandemic has so far been moderate owing to the government support measures, the swift response of supervisory authorities and the cautiousness of credit institutions themselves. Yet, the profitability risk remains high, since the uncertainty is still elevated due to the medium-term impact of the pandemic on the borrowers' solvency and lending development.

Amid the Covid-19 pandemic, the profitability of credit institutions declined. Nonetheless, most credit institutions concluded the year 2020 with profit. In 2020, the overall credit institution profit before taxes decreased by 32.0% on a consolidated basis[79] (see Chart 2.33). This decline was mostly due to lower gains from trading financial instruments associated, to a large extent, with one-off losses incurred by one credit institution due to its tail risk management strategy[80].

The net interest income shrank moderately, albeit no more than in the previous years (see Chart 2.34), since **the possibility to apply moratoria on loan repayments and government support measures implemented in the hardest-hit sectors enabled most borrowers to continue servicing at least the interest payments on their loans.** The decline in the net interest income was mostly related to a decrease in loans to NFCs.

Meanwhile, **net provisioning expenditure of credit institutions grew only slightly during the pandemic** both due to the fact that the implementation of moratoria on loan repayments and government support measures had not yet created the need for much larger provisions for NPLs, and due to the fact that, already in 2019, the overall net provisioning expenditure of credit institutions was increased largely on account of a deterioration in some large borrowers' credit risk assessment. A decline in administrative expenses is mostly related to a reclassification effect[81], as the costs related to wages and salaries of credit institution employees remained broadly unchanged.

Chart 2.33
ANNUAL GROWTH RATE OF CREDIT INSTIUTION PROFIT BEFORE TAXES ON A CONSOLIDATED BASIS AND CONTRIBUTION OF ITS COMPONENTS TO GROWTH
(percentage points)

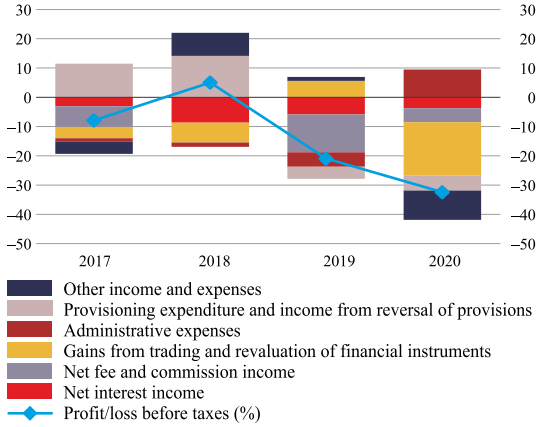
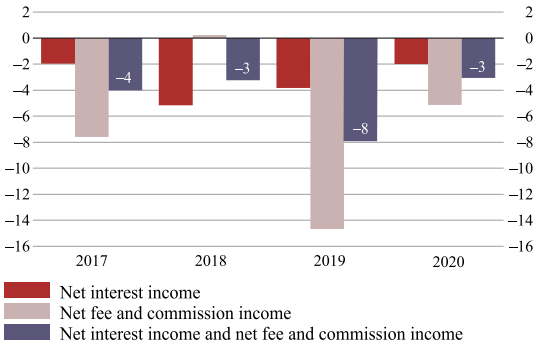


Chart 2.34
ANNUAL RATE OF CHANGE IN NET INTEREST INCOME AND NET FEE AND COMMISSION INCOME
(%)



The decline in profit weighed on the credit institutions' return indicators. In 2020, their ROE and ROA stood at 5.4% and 0.67% respectively, down form 9.6% and 1.05% in the previous year. The profitability of Latvia's largest credit institutions remained above the average indicators of the largest EU credit institutions. However, in 2020 it was lower than

[79] In this section, the one-off effects have been excluded from all the data reflecting profitability: In 2018, the banking licence of ABLV Bank, AS was cancelled, and in 2019 AS PNB BANKA was determined to be a credit institution that was or would become financially troubled, and insolvency proceedings were opened against it; as a result, the credit institution recorded sizeable provisions. The effect of the sale of VISA Europe Limited shares has also been excluded from 2016 data, and the effects 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.

[80] AS Citadele Banka Annual Report 2020, p. 6.

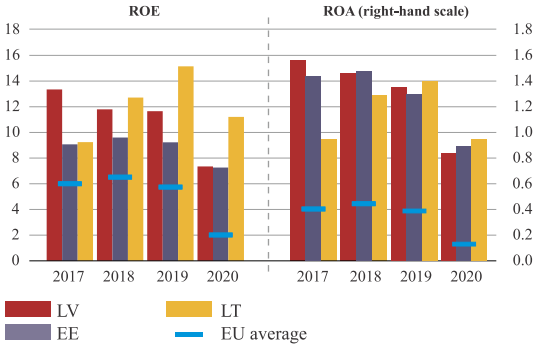
[81] Given that a separate reporting item was introduced for contributions to the Single Resolution Fund and the Deposit Guarantee Fund, these expenses were reclassified from administrative to other expenses.

the average indicators of the largest credit institutions in the neighbouring countries (see Chart 2.35)[82]. In 2020, the credit institutions' total cost-expenditure ratio deteriorated to 64.5% as compared to 62.5% in 2019.

According to the preliminary data provided by the credit institutions,[83] in the first three months of 2021 **the main profitability sources of credit institutions, i.e. net interest income and net fee and commission income, remained relatively stable compared to the respective period of the previous year.** While the fee and commission income remained at the previous year's level, the interest income shrank somewhat to reflect the changes in the loan portfolio. Meanwhile, higher income from dividends received from affiliated companies and lower expenditure for provisions as compared to the previous year (the build-up of precautionary provisions began already at the onset of the pandemic in March 2020) accounted for the largest contributions to the overall changes in profit.

While the above performance results of credit institutions may be interpreted as stabilisation, this impression can be misleading, since the economic crisis caused by the pandemic is not over yet and some customers of credit institutions will most likely face solvency issues owing to the prolonged operational constraints. As the number of vaccinated people increases, economic restrictions are expected to be eased and economic growth – to resume. However, these developments may not be sufficiently rapid to prevent the deterioration of the borrowers' solvency and avoid an unfavourable impact on the credit institutions' profitability. **The profitability of the largest credit institutions remains relatively solid, and they would be able to withstand profitability shocks without jeopardising their solvency.** Moreover, the largest credit institutions have indicated that, even after the non-legislative industry-wide moratorium ends, they will continue to offer individual solutions to the customers facing solvency issues, thereby reducing the adverse impact on the credit institutions' profitability also in the near future.

Chart 2.35
AVERAGE ROE AND ROA OF THE LARGEST CREDIT INSTITUTIONS IN THE BALTICS AND THE EU
(%)



Capitalisation

In 2020, the capitalisation of credit institutions grew significantly as they responded to the call of regulators to refrain from profit distribution. Considering the government support measures and moratoria on loan repayments, credit risk provisions were not increased significantly. Credit institutions have large voluntary capital buffers, suggesting that their shock absorption capacity is good and their capacity to increase loan supply to the economy is not limited by a shortage of capital.

Restrictions on dividend payouts have helped to strengthen the credit institutions' capitalisation. In 2020, Latvian credit institutions saw their total CET1 capital expand by 262 million euro or 13.4% (3.0% of RWA) and their retained earnings – by 272 million euro or 45%. As a result, credit institutions increased their reserve holdings which can be used to absorb any potential losses should such losses arise after the government support measures expire.

The average capital ratios of both Latvian and euro area credit institutions[84] have reached their historic highs. At the end of 2020, the total average capital ratio of Latvian credit institutions was 26.8% on a consolidated basis, including CET1 capital ratio which stood at 25.7% (23.4% and 22.1% respectively

[82] Chart 2.35 reflects sample data of the largest Latvian credit institutions compiled by the EBA, which differ from the previously shown data on all Latvian credit institutions. According to the EBA sample data for Latvian credit institutions, in 2020 the average ROA and ROE was 7.4% and 0.8% respectively.

[83] Individual-level data of the Monthly Financial Position Reports of MFIs compiled by Latvijas Banka.

[84] Calculations only include the credit institutions operating at the end of 2020.

in 2019). The credit institutions' leverage ratio was also high and reached 10.1%[85] (10.3% in 2019). At the end of 2020, the average CET1 capital ratio of euro area credit institutions was 15.5%, while their leverage ratio stood at 5.8%[86] (see Chart 2.36).

At the end of 2020, the voluntary capital buffers of Latvian credit institutions reached 12.2% of RWA, a much higher ratio than the average of the largest EU credit institutions (see Chart 2.37). In 2020, the average weighted CET1 capital requirement for Latvian credit institutions was 11.6%, including the capital buffer requirements. Moreover, as opposed to many euro area credit institutions, the leverage ratio of Latvian credit institutions is not a limiting factor when it comes to using the capital buffers. While Latvian credit institutions still have sufficient capital buffers to expand their lending, the lending development is slow. Credit institutions not only in Latvia but also in other euro area countries maintain a cautious approach to lending to ensure that the capital buffer requirements are met even after their easing. The Covid-19 pandemic crisis highlighted the need for the capital buffers to be sufficiently flexible so that, in times of crisis, they could be used to absorb losses and continue lending.

In 2020, the supervisory authorities of credit institutions were more focussed on the credit institutions' ability to overcome the increased risks brought about by the pandemic. To facilitate this, they introduced several operational relief measures. **None of the capital requirements were increased for Latvian credit institutions.** The revised Pillar 2 requirements[87] for the banks supervised by the FCMC entered into force in May 2020. With the institution-specific operational risks decreasing, the requirements were reduced significantly.

Overall, the shock absorption capacity of credit institutions, systemically important credit institutions

Chart 2.36
CREDIT INSTITUTION CAPITALISATION RATIOS
(on a consolidated basis; %)

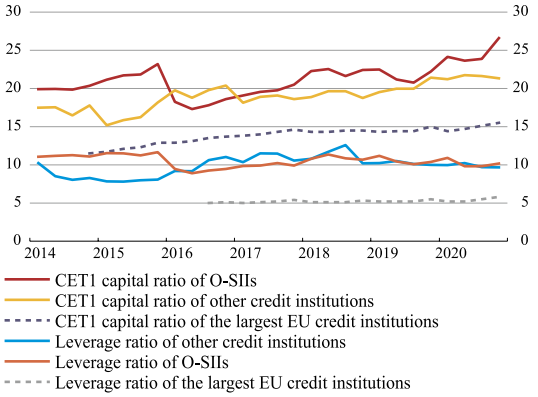
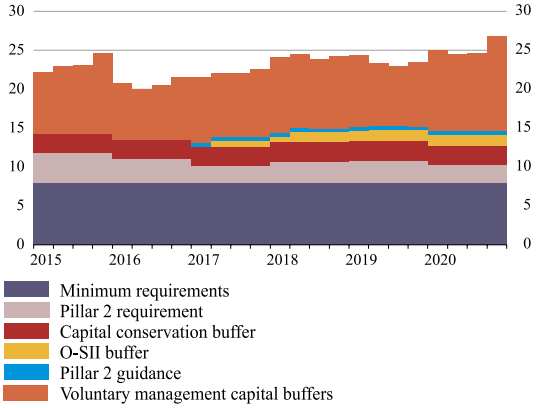


Chart 2.37
CAPITAL REQUIREMENTS FOR CREDIT INSTITUTIONS
(%)



in particular, remains good. Solvency risks have increased only for some very small credit institutions whose profitability was low already before the Covid-19 pandemic.

Credit risk and market risk shock-absorption capacity

The macroeconomic stress test results suggest that the credit institutions' resilience to potential shocks is overall high because the credit institutions' capitalisation increased owing to their decisions not to pay out dividends. Moreover, so far the impact of the crisis on credit institutions has been insignificant since they have relatively small investments in the sectors most affected by the crisis. The sensitivity analysis results also indicate that the capacity of systemically important credit institutions to absorb potential future losses has improved notably. Due to moratoria on loan repayments and the individual measures of credit institutions, the credit risk has

[85] Previously, the leverage ratio was used for monitoring purposes only, i.e. leverage ratio requirements were not mandatory but credit institutions were expected to meet them. The 3% minimum leverage ratio requirement entered into force on 28 June 2021. None of the Latvian credit institutions will have difficulties to meet this requirement.

[86] EBA Risk Dashboard.

[87] These capital requirements cover the institution-specific operational risks not covered by the minimum capital requirements.

not yet fully materialised on the credit institutions' balance sheets. However, the quality of renegotiated loans may deteriorate.

Latvijas Banka conducts the sensitivity analysis[88] and macroeconomic stress tests[89] of credit institutions on a regular basis. The assessment is based on the consolidated data of credit institutions as at the end of 2020. The macroeconomic stress test assessment covers the period up to the end of 2021. 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%[90]. A failure to meet any of the minimum capital requirements is automatically considered a failure to meet overall capital requirements.

In 2021, Latvijas Banka changed the provisioning rates used in its macroeconomic stress test and sensitivity analysis. The baseline scenario assumes 45% provisions for loans past due over 90 days[91] and 25% provisions for unlikely-to-pay loans past due less than 90 days. Under the stress scenario, the provisioning rates have been raised to 50% for loans past due over 90 days and to 35% for unlikely-to-pay loans[92].

The sensitivity analysis results indicate that the capacity of systemically important credit institutions to absorb potential future losses has improved significantly since the credit institutions' capitalisation has increased owing to their decisions not to pay out dividends. At the end of 2020, the major lenders, on a consolidated basis, would have been able to absorb a potential rise in the credit risk, which would result in an increase in the share of loans past due over 90 days by 20.0 percentage points (11.0 percentage points at the end of 2019), without any additional capital investments. Two small credit institutions, which incurred losses in 2020, have no sizeable voluntary capital buffers. Having built provisions for their current NPLs in the amount set by the sensitivity analysis assumptions, those credit institutions would have to absorb any losses incurred due to an increase in NPLs from their capital conservation buffers.

The macroeconomic stress test results suggest that overall the resilience of credit institutions to potential shocks is high because credit institutions are well capitalised. The crisis has not affected the credit institutions' capitalisation yet as their investments in the sectors most affected by the crisis are relatively insignificant and various support measures have helped reduce the impact of the Covid-19 pandemic.

In the stress test market risk component, the data on each credit institution's securities portfolio, including the securities measured at fair value through profit or loss, securities measured at fair value through other comprehensive income and securities measured at amortised purchase cost, have been used. Market shocks have been applied to all securities in order to assess the overall economic effect of the changes in the securities portfolio market value on capital, assuming that the securities' value changes will need to be recognised regardless of their accounting treatment.

[88] 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. It is assumed that a credit institution has to 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 have to be provisioned by at least 35%. The credit institution capital and RWA are reduced by the amount of the additional provisions.

[89] Macroeconomic stress tests measure the resilience of Latvian credit institutions to adverse macroeconomic shocks whose materialisation is plausible, yet their probability is low. The results of the credit risk stress tests allow assessing whether credit institutions have sufficient capital for absorbing losses stemming from a rise in credit risk in particularly severe and even extreme macroeconomic stress circumstances without additional capital injections.

[90] 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.

[91] Upon consulting the FCMC, the provisioning rate in the stress test baseline scenario has been lowered from 60% to 45%, taking into account the high share of collateralised loans in the loan portfolio of Latvian credit institutions; under the stress scenario, the 50% provisioning rate reflects a potential decline in the collateral value under stress. Meanwhile, the provisioning rates for unlikely-to-pay loans have been revised slightly upwards. In the future, the provisioning rates will be set depending on the level of loan collateralisation.

[92] The table of results compares losses depending on whether the new or previously set provisioning rates are applied.

Although at the group level a few credit institutions have different securities portfolios, the more detailed data at the level of individual credit institutions (at the level of International Securities Identification Number (ISIN)) have been used. Then, the securities portfolio has been extrapolated at the group level assuming that it is structurally similar to the securities portfolio at the credit institution's level.

Each credit institution's bond portfolio securities have been grouped by major risk category, e.g. euro area and US bond yields of different maturities, credit rating and sector, according to expert assessment. Bonds of the three largest issuers have been reported separately, taking account of their share in the portfolio. The modified duration of each bond is set using Thomson Reuters data or, in case of lack of data, using the residual maturity of the bond as an approximation. The modified duration is used to calculate the impact of the interest rate shock scenario. The foreign exchange risk has been reported separately from the revaluation effect, and the shock scenario is applied to each credit institution's total open foreign exchange position in US dollars and Russian roubles.

The macroeconomic stress test has been carried out to assess the capability of credit institutions to absorb a potential increase in credit risk and market risk caused by a deterioration of the domestic macrofinancial environment. The main risks under the stress scenario are the slow vaccination rate and the potential new virus variants which have lead to an extension of the Covid-19 pandemic containment measures in Latvia and abroad as well as a significant decline in foreign demand and a rise in uncertainty. As a result, the creditworthiness of borrowers in already weakened economic sectors is deteriorating and the economic downturn is deepening. The capacity of credit institutions to absorb potential losses associated with the loan portfolio of foreign customers has also been modelled.

It should be noted that, due to the Covid-19 pandemic shock, Latvia's economy shrank by 3.6% in 2020. As a result, the macroeconomic situation at the starting point of the stress tests scenarios is significantly worse than the situation observed at the starting points of the previous stress tests.

Due to moratoria on loan repayments and the individual measures applied by credit institutions to their borrowers, the credit risk has not yet fully materialised on the credit institutions' balance sheets. However, the quality of renegotiated loans is very likely to deteriorate. To reflect this risk, both the baseline and stress scenarios project the migration of these loans to the "past due over 90 days" category.

Tables 2.1 and 2.2 provide a summary of the stress test parameters.

Under the baseline scenario, the evolution of domestic loan portfolio is based on Latvijas Banka's GDP forecast of June 2021. According to the forecast, GDP will continue declining at the beginning of 2021. In the second half of 2021, with the Covid-19 pandemic containment measures being eased, economic growth will accelerate significantly, and the annual growth rate of GDP will reach 3.3% in 2021 (seasonally adjusted data).

The baseline scenario assumes that 35% of renegotiated loans that are not NPLs will migrate to the "past due over 90 days" category within a year. As to the market risk component under the baseline scenario, no significant shocks and losses from changes in the securities portfolio have been included. It is assumed that, even in case of turmoil, the securities market will return to the present conditions over the stress test period.

Table 2.1

PARAMETERS OF MACROECONOMIC STRESS TEST. BASELINE SCENARIO
(%; percentage points)

Macroeconomic and credit risk parameters	Baseline scenario	Stress scenario
Latvia		
Annual changes in Latvia's GDP in 2021	3.3	–5.8
3-month EURIBOR forecast[93]	–0.546	–0.546
Probability for a performing loan or a loan that is past due less than 90 days and is not renegotiated to become a loan past due over 90 days within a period of one year	–	4.8
Probability for an unlikely-to-pay loan to become a loan past due over 90 days within a period of one year	–	19.2
Share of the renegotiated loans that are not NPLs and that will migrate to the category of loans past due over 90 days within a period of one year (%)	35	100
Increase in the share of loans past due over 90 days in the domestic customers' loan portfolio at the end of 2021[94] (percentage points)	1.4	9.1
Customers from CIS: loans and claims on MFIs		
PD	5	20
LGD	75	75
Expected loss rate	3.75	15

[93] Annual average of 3-month EURIBOR by the end of 2021; Eurex Exchange, 29 March 2021.
[94] Loans that have migrated from the category "performing loans or loans past due less than 90 days" and from the categories "unlikely-to-pay loans" and "renegotiated loans that or not NPLs" to the category "loans past due over 90 days" have been added up.

Under the stress scenario, the confidence shocks caused by the Covid-19 pandemic will lead to an economic downturn in the EU, reducing the foreign demand by 15%. Amid heightened uncertainty, investment and private consumption will decline by 35% and 30% respectively, and the fall in GDP will reach 5.8% in 2021.

In the stress test, the overall increase in NPLs is assessed according to the credit risk model results. However, based on experts' credit risk assumptions for each sector or group of loans, the assessed growth in NPLs differs depending on the group of loans, while the overall increase in NPLs in the total loan portfolio remains unchanged.

Under the stress scenario, assumptions about the PD on loans in various economic sectors are reflected in Table 2.2. The repeated COVID-19 pandemic containment measures are expected to have the most pronounced impact on the accommodation and food service activities sector as well as the arts, entertainment and recreation sector. A heightened PD can also be observed in the transportation sector[95], the real estate activities sector which reflects an increase in the risks caused by the Covid-19 pandemic associated with commercial property (hotels, shopping centres and offices in particular), as well as segments of the trade sector other than the sale of food and hygiene products. The group subject to a heightened PD also includes the loans granted in the administrative and support service activities sector and other service activities sector. In the sector of administrative and support service activities, the bulk of exposures are associated with the rental of motor vehicles which was affected by the contraction in mobility due to restrictions. The largest share of exposures to other service activities sector is associated with dry-cleaning and beauty treatment segments.

[95] The development of this sector will also largely hinge on the adoption of the Mobility Package (Regulation (EU) 2020/1054 of the European Parliament and of the Council).

Table 2.2
CREDIT RISK PARAMETERS BY LOAN GROUP UNDER THE STRESS SCENARIO
(%)

Loans to Latvia's residents	Residents (total)	Loans to house-holds	Loans to NFCs		
			Transportation and storage, real estate activities, trade, administrative and support service activities, other service activities	Accommo-dation and food service activities, arts, entertain-ment and recreation	Other sectors
Probability for a performing loan or a loan past due less than 90 days to become a loan past due over 90 days within a period of one year (PD)	4.8	3.1	8	30	3.1
Provisioning rate	50	50	50	50	50
Expected loss rate	2.4	1.6	4.0	15.0	1.6
Probability for an unlikely-to-pay loan to become a loan past due over 90 days within a period of one year	19.2	12.4	32	100	12.4
Provisioning rate	50	50	50	50	50
Expected loss rate	9.6	6.2	16.0	50.0	6.2
Probability for a performing loan or a loan past due less than 90 days to become an unlikely-to-pay loan within a period of one year	4.8	3.1	8	30	3.1
Provisioning rate	35	35	35	35	35
Expected loss rate	1.7	1.1	2.8	10.5	1.1

The stress scenario assumes that all renegotiated loans that are not NPLs will migrate to the "past due over 90 days" category within a year. The rise in NLPs projected by the scenario is applied after the migration.

The stress scenario assumptions with respect to foreign investment are reflected in Table 2.3. As per the stress scenario assumptions, the PD on loans to the borrowers from the Baltic countries is, on average, equivalent to the PD on loans to domestic customers, whereas the provisioning ratio is 60%. Under the stress scenario, the PD and LGD on loans to customers from the CIS countries have been set at 20% and 75% respectively. The PD on loans to customers from countries other than the Baltic and CIS countries is equivalent to the PD on loans to domestic customers, whereas the LGD has been set at 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.

Table 2.3
STRESS SCENARIO ASSUMPTIONS WITH RESPECT TO FOREIGN INVESTMENTS
(%)

Loans to foreign customers	PD	LGD	Expected loss rate
Customers from CIS: loans and claims on MFIs	20	75	15
Customers from Lithuania and Estonia	4.8	60	2.9
Customers from other countries	4.8	75	3.6

The stress scenario for the **market risk component** has been developed by using the securities portfolio as at the end of 2020 as a reference point (a common reference point is used for the stress tests of other risks). For the market risk, a global market shock scenario

has been modelled under the stress scenario[96] (see Table 2.4) where significant shocks have been applied to government and corporate securities' risk premia and to the value of shares, while smaller shocks have been applied to the US dollar and Russian rouble exchange rates. Constant initial RWA have been assumed for impact calculations.

Under the baseline scenario assumptions, the migration of renegotiated loans to the "past due over 90 days" category is expected to increase the share of such loans in the domestic portfolio by 1.4 percentage points. The estimated total losses could reach 132.9 million euro or 0.7% of the total credit institution assets. The losses in the baseline scenario arise due to the projected additionally required provisions for the above migrating negotiated loans and loans to customers from the CIS countries, and due to the fact that, in some credit institutions, the actual level of provisions for loans past due over 90 days is below the provisioning rate used in the stress test.

Table 2.4
PARAMETERS OF MARKET RISK STRESS TEST UNDER THE STRESS SCENARIO

Instrument	**Initial value** (%)	**Stress scenario** (change; in basis points)
Benchmark yield curve		
EUR securities (1 month – 10 years)	–0.5 to –0.7	0 to –60
USD securities (1 month – 10 years)	0.1 to 0.9	–27 to –118
Risk premia for the main categories[97]		
Investment grade (Sovereign governments, corporate sector)	1.3 to 1.9	99 to 311
High yield grade (Sovereign governments, corporate sector)	2.7 to 5.3	332 to 767
Risk premium for the largest issuers		
Latvian government	0.5	48
Lithuanian government	0.6	12
Swedbank Hypotek AB	0.4	58
Other market shocks	**Stress scenario** (changes compared to the baseline value; %)	
USD/EUR exchange rate		3.1
RUB/EUR exchange rate		–6.8
Equities, funds and other instruments (excluding financial derivatives)		–14
Financial derivatives		–50

Table 2.5 features the aggregated **stress test results**.

[96] The stress scenario shock parameters have been set mostly using the historic monthly changes in indices corresponding to each risk factor and assuming that the current investments in securities remain historically unchanged. 1% of cases or months with the largest estimated aggregate market risk losses of the credit institutions have been assessed in hypothetical terms. The average values of the identified cases are used in the scenario. In view of the fact 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. An equivalent method is used for the securities of the three largest issuers, based on the historic monthly price changes in each issuer's securities reflected in the available data time series. Financial derivatives comprise a range of various types of financial assets, characterised by 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 the fair values of these instruments.

[97] The spread of the securities yield vis-à-vis the respective currency's benchmark. No risk premium shock is applied to German and US government bonds.

Table 2.5
AGGREGATED MACROECONOMIC STRESS TEST RESULTS

Indicator	Baseline scenario	Stress scenario – new provisioning rates (50% and 35%)	Stress scenario – previous provisioning rates (60% and 20%)
Potential losses (in millions of euro)	132.9	722.9	731.9
Additionally required provisions (% of total credit institution assets)	0.7	3.6	3.8
Total capital ratio			
Number of credit institutions with the total capital ratio below 8%	0	1	1
Additionally required capital (in millions of euro)	–	3.7	7.0
Tier 1 capital ratio			
Number of credit institutions with Tier 1 capital ratio below 6%	0	0	1
Additionally required capital (in millions of euro)	0	0	2.0
CET1 capital ratio			
Number of credit institutions with CET 1 capital ratio below 4.5%	0	0	0

Under the stress scenario, the share of loans past due over 90 days in the domestic loan portfolio would increase by 9.1 percentage points, reaching 10.9% by the end of 2021. In the event of the stress scenario materialising, the estimated total losses could reach 722.9 million euro or 3.6% of the total credit institution assets. Losses arising from market risk could amount to 19.4% of the total losses, while those from investment in CIS countries would stand at 10.5% of total losses. Meanwhile, losses arising from domestic loans and loans to customers from other countries would account for 70.1%. As shown in Table 2.5, lowering of the provisioning rate had no significant impact on the stress test results: the total capital ratio is slightly below 8% in one relatively small credit institution.

3. MACROPRUDENTIAL POLICY

Latvia has currently activated the following macroprudential measures: capital buffer requirements for O-SIIs and borrower-based measures. There were no new decisions effectively changing the macroprudential requirements made in Latvia during 2020 and the first half of 2021, but several borrower-based requirements took effect in June 2020. The macroprudential measures in place are adequate in light of the current state of financial stability and the assessment of systemic risks. In crisis circumstances, accommodative monetary and fiscal policies, a more flexible approach to microprudential supervision, as well as changes in the EU-level regulatory framework, including supervisory recommendations regarding dividend payouts and permission to use combined capital buffer and liquidity requirements, also are important. At the same time, primarily structural measures are required to boost the protractedly weak lending, whereas targeted government support for restructuring of viable enterprises and effective insolvency procedures are necessary to limit the growth of NFC credit risk.

Latvia has currently activated the following macroprudential measures: capital buffer requirements for O-SIIs and borrower-based measures (see Table 3.1). According to the Credit Institution Law, the FCMC is the authority designated for applying the macroprudential tools in Latvia. Latvijas Banka conducts an assessment, provides recommendations and assists in implementation of the required macroprudential measures to support the overall financial stability. These measures are regularly discussed at the Macroprudential Council, a cross-institutional consultative forum[98].

There were no new decisions effectively changing the macroprudential requirements made in Latvia during 2020 and the first half of 2021, but several borrower-based requirements took effect in June 2020: a 40% DSTI ratio , a DTI ratio of 6 times, a maximum loan maturity of 30 years for house purchase and 7 years for consumer credit, as well as a 70% LTV limit for buy-to-let housing loans or other income-generating housing loans and for borrowers with more than 20% income consisting of income from real estate[99]. A decision regarding the above requirements was taken in November 2019, when the lenders were given six months to prepare for the implementation[100].

Despite the Covid-19 pandemic, Latvia did not opt for postponing the effective date or changing the new borrower-based requirements, as these standards were implemented as permanent structural standards to strengthen consumer resilience to potential financial shocks and promote responsible lending through the cycle rather than as cyclical standards. Moreover, credit institutions were compliant with these standards already prior to adopting the requirements, and they also can use a 10% tolerance margin[101].

Despite an initial slump in the real estate market at the onset of the Covid-19 pandemic, like elsewhere around the globe, there was a strong rebound in demand for housing in Latvia and the real estate market activity returned to the highest level of the most recent years in summer 2020. Lending for house purchase also resumed growth. In Latvia, the expansion of the state support programme for families with children as of July 2020 contributed significantly to the above developments. According to the Law on Assistance in Solving Apartment Matters, the maximum LTV value for loans secured by a real estate mortgage and a state guarantee is 95% instead of the maximum 90% LTV effective within the general framework. With the volume of housing loans involving a state guarantee growing significantly, the distribution of new housing loans by LTV value also shows an increase in loans with a higher LTV value (see the section on lending).

[98] https://www.bank.lv/en/tasks/financial-stability.

[99] https://www.fktk.lv/wp-content/uploads/2020/02/Regulation-on-credit-risk-management_012020.pdf

[100] A detailed description of the rationale behind the implementation of these tools, their choice and calibration is provided in Appendix 2 "Implementation of New Borrower-Based Measures – an Important Addition to Latvia's Macroprudential Policy Tools" of Latvijas Banka's Financial Stability Review 2020 (https://datnes.latvijasbanka.lv/fsp/FSP_2020_en.pdf#page=70).

[101] 10% of all lending granted to natural persons in a quarter may exceed the limits.

Table 3.1

MACROPRUDENTIAL MEASURES ADOPTED IN LATVIA

Instrument	Objective	Level	Effective date	Regulatory act
CCyB	To prevent procyclical lending development, increase the banks' resilience and lending capacity in an eco-nomic downturn	0%	Set on a quarterly basis since 21 January 2015.	Credit Institution Law FCMC Board decision https://www.fktk.lv/en/media-room/macroprudential-supervision/countercyclical-capital-buffer/
O-SII capital buffer	To increase O-SIIs loss-absorbing capacity, thereby mitigating potential systemic risks to the financial system and reducing costs to the national economy, as large institutions may pose greater risks to the system	Swedbank AS – 2.00% AS SEB banka – 1.75% AS Citadele banka – 1.50% AS Rietumu Banka – 1.25%	8 December 2020 Reviewed on an annual basis.	Credit Institution Law FCMC Board decision https://www.fktk.lv/en/media-room/macroprudential-supervision/other-systemically-significant-institutions/
Loan-to-value (LTV) ratio	To strengthen the resilience of borrowers and lenders during the downturn phase of the financial cycle, contribute to prudent credit risk management and thorough assessment of borrowers' creditworthiness	90% for all consumer lenders granting consumer credit exceeding 100 minimum wages and secured by a real estate collateral 90% for loans secured by a real estate collateral and state guarantee in accordance with the Law on Assistance in Solving Apartment Matters	10 July 2007 (decision adopted on 17 May 2007)	Consumer Rights Protection Law https://likumi.lv/ta/en/en/id/23309-consumer-rights-protection-law
Debt service-to-income (DSTI) ratio[1]		40%	1 June 2020 (decision adopted on 27 November 2019)	FCMC Regulation No.242 "Regulation on Credit Risk Management" https://www.fktk.lv/wp-content/uploads/2020/01/Regulation-on-credit-risk-management_012021.pdf
Debt-to-income (DTI) ratio		6 times		
Maximum maturity limits for loans to natural persons		30 years for mortgage loans, 7 years for consumer loans (including financial leasing transactions)		
Loan-to-value (LTV) ratio		70% for housing loans granted for the purchase of a property for the purpose of renting it out (buy-to-let) or otherwise deriving income from real estate transactions by the borrower as well as in cases when, according to the assessment of the borrower's creditworthiness, income from real estate exceeds 20% of borrower's total income		
Other		As to housing loans granted for the purpose of generating income from real estate activities, when assessing the borrower's creditworthiness, a maximum of 70% of the projected income from real estate may be considered		

[1] The FCMC has provided credit institutions with an option of applying a 10% tolerance margin, i.e. 10% of the institution's newly granted loans to natural persons in a quarter may exceed the limits.

Consequently, the new DSTI and DTI requirements balance out the risks caused by de facto reduction in the LTV requirement as a result of a more active recourse to the state support programme and the associated easing of the LTV requirements.

If the LTV value distribution deteriorates more significantly and if the pace of lending for house purchase or real estate price developments become excessively fast, tailoring the LTV requirement to the level of risks or reviewing the conditions of the state support programme should be considered. The annual rate of change in housing prices so far is still considered moderate, particularly in the context of the persistently weak lending. Nevertheless, it is possible that, like elsewhere in the world, the housing market activity will continue to increase, considering the extra savings built by some part of the population and willingness to improve the living standards or use real estate as an alternative investment type in the low interest rate environment. In this case, timely implementation of preventive consumer lending standards will assist in avoiding potentially imbalanced development.

European countries have pursued different approaches with regard to borrower-based measures in the pandemic circumstances. Only six out of 24 European countries with effective borrower-based measures eased the requirements[102] in order to support lending. **Most countries have left the limits unchanged**, on the grounds that the borrower-based measures are permanent structural standards and any easing of the requirements might result in a risk that borrowers failing to fulfil prudent lending standards enter the market, thereby compromising the consumer protection principles and also increasing the reputation risks for policy implementers, if these borrowers can no longer meet their obligations when circumstances deteriorate. The strong rebound of the real estate market following the initial shock caused by the Covid-19 pandemic was also considered. Like Latvia, three more countries (France, Belgium, Slovakia) adopted new consumer lending standards already in 2019, which subsequently became effective as planned, while two more countries made a decision to implement or extend the application of such standards in 2020[103].

In addition to a 2.5% capital conservation buffer, Latvia has set an O-SII buffer requirement for four institutions which are identified as O-SIIs: Swedbank AS, AS SEB banka, AS Citadele banka and AS Rietumu Banka, with the respective O-SII buffer rates set at 2.00%, 1.75%, 1.50% and 1.25% of RWA respectively. In November 2020, the FCMC conducted the annual O-SII identification and O-SII capital buffer rates setting exercise. **It was decided to leave the list of O-SIIs and their respective capital requirements unaltered**, as the proportional size and systemic significance of these institutions was broadly unchanged.

In 2021, with amendments to the Credit Institution Law taking effect, the cap of O-SII capital buffer rate was raised from 2% to 3% of RWA (see the box on changes in capital requirements framework in 2021). However, considering the Covid-19 pandemic effects, there is no intention of raising the capital requirements at the moment. Moreover, the option of activating the maximum 3% O-SII capital buffer requirement is also limited by the changes made in the Sweden's regulatory framework for O-SIIs[104], making the imposition of an O-SII capital buffer requirement above 2% on the Latvian subsidiaries of Swedish parent banks impossible.

Considering the persistently sluggish lending, a 0% CCyB rate had been set already prior to the Covid-19 pandemic in Latvia. In the Covid-19 pandemic circumstances, systemic risks to financial stability associated with excessive cyclical development are currently irrelevant, lending growth is not excessive; therefore, increasing of the current 0% CCyB rate is not planned at the moment.

[102] For example, the Czech Republic, Slovenia and Malta reduced the DSTI requirement, whereas Finland eased the LCR requirement and Sweden the loan amortisation requirement, while Norway increased the tolerance margins for borrower-based measures. In 2021, also France eased part of the restrictions, while another part of the restrictions was tightened.

[103] In 2020, Luxembourg made a decision that the LTV requirement would take effect as of January 2021, whereas Norway decided on another extension for its effective consumer lending standards (Norway has a regular review procedure).

[104] For subsidiaries identified as O-SIIs, the O-SII capital buffer rate may not exceed 1% of RWA above the O-SII or G-SII capital buffer rate set at a group level. Following a review of the capital buffer framework in Sweden, the O-SII buffer rate for Swedish O-SIIs was set at 1.0% of RWA.

The CCyB guide – the credit-to-GDP gap – also remains negative. It was –17.0% according to the narrow definition of loans at the end of 2020 and –28.0% according to the broad definition of loans for the purposes of the financial accounts at the end of the third quarter of 2020. That being said, the reliability of this indicator as a signal for cyclical risks, which was limited already before, in the current circumstances of a falling GDP (with a respective rise in the credit-to-GDP ratio) has weakened further.

CCRI has decreased from 4.5 in the fourth quarter of 2019 to 3.75 in the fourth quarter of 2020 (maximum CCRI value is 10; see Chart 3.1). At the same time, the standard deviation of the standardised CCRI was –0.5 relative to the maximum standard deviation of 1.7 observed in the first quarter of 2007 (see Chart 3.2).

Since the introduction of the CCyB and other macroprudential capital buffers framework in 2014, this is the first crisis when it would be possible to benefit from the CCyB release, as the lowering of a positive CCyB rate (i.e. above 0%, as set during the previous cycle) would free resources to support credit supply during the crisis. Of 14 European countries that had set positive CCyB rates or where a positive CCyB rate was scheduled to take effect in the near term, **nine countries fully released the CCyB and four countries partly released the CCyB.**

In Latvia, activating the CCyB above 0% over the most recent years would have been unjustified due to the weak lending. In the case of **a positive CCyB rate, releasing of the CCyB in the current circumstances would rather have a signalling effect and an unclear upward effect on credit supply, as Latvia's credit institutions hold significant voluntary management buffers** (as at the end of 2020, they constituted 12.2% of RWA, including an average of 13.8% of RWA for three major lenders (EBA sample)), and the credit supply is limited primarily because of the cautious behaviour of both borrowers and lenders, given the high degree of uncertainty and several structural factors rather than shortage of capital. Moreover, **accommodative monetary policy and fiscal measures also contribute to maintaining credit supply and financial stability**. When the crisis is over and the real solvency state of

Chart 3.1
LATVIA'S CCRI
(in points)

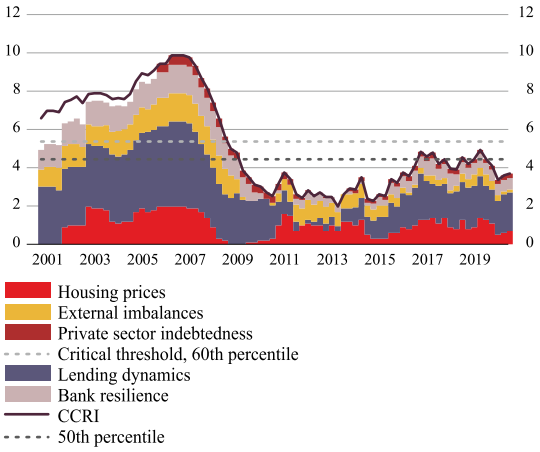
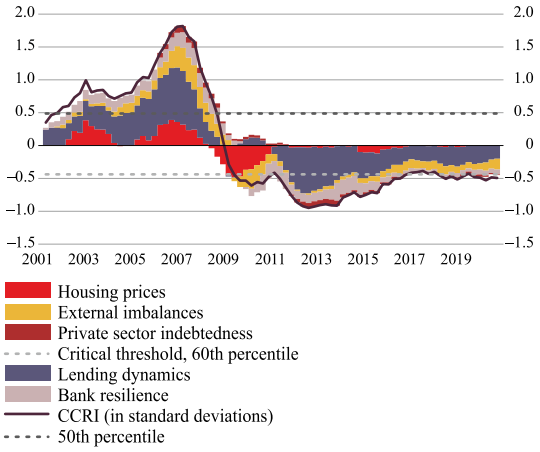


Chart 3.2
STANDARDISED CCRI
(in standard deviations)



businesses has become clearer, it will be important to maintain the government's fiscal support well-targeted and phase it out gradually, as well as to have access to effective solutions for restructuring of viable businesses, insolvency proceedings, debt enforcement and out-of-court disputes.

The approach of various European countries to releasing structural buffers in the crisis circumstances has been uneven. Some countries where a positive CCyB rate was not activated lowered or cancelled the SyRB requirement due to the pandemic considerations[105] and/or lowered the previously set higher O-SII rates or postponed their effective date. On the one hand, it frees capital for lending and credit institutions do not have to worry that their capitalisation level could approach the level of the total capital requirement if they

[105] For example, Estonia, Finland.

continue lending, but, on the other hand, the coverage of structural risks by capital thereby decreases. Due to this reason, several countries (including **Latvia) did not lower the structural buffer rates**[106], especially given that the crisis is still ongoing and systemically important institutions have to preserve their resilience to shocks.

During the Covid-19 pandemic, there have been more active discussions about the usability of the macroprudential capital buffers in crisis circumstances. Although capital buffers are generally designed to be used in a crisis and, at the beginning of the crisis, the ECB and national macroprudential authorities allowed credit institutions to use the combined capital buffer[107], there are growing concerns that credit institutions could be unwilling to use capital buffers (i.e. decrease capitalisation) in order to continue lending. This caution is stemming from credit institution concerns about profit distribution restrictions, market and rating agency reactions potentially leading to higher funding costs, further credit losses and uncertainty about the timing and speed of required buffer replenishment. Furthermore, some credit institutions with low risk weights are constrained by concerns about fulfilment of the leverage ratio requirement and some – about the minimum requirement for own funds and eligible liabilities (MREL)[108]. European credit institutions have increased their capitalisation levels (largely on account of dividend payout restrictions), and hence the usability of capital buffers also has not yet been fully tested; however, the initial empirical evidence suggests that the European credit institutions with lower voluntary management buffers have become more cautious in lending. Thus, the increasing of the capital buffers' usability in a crisis and the necessary further improvements in the capital buffer framework are in the focus of the European macroprudential authorities' discussions. This issue could end up on the agenda of the forthcoming 2022 review of the EU macroprudential framework.

In 2021, the Credit Institution Law was amended to transpose the previous changes in the EU macroprudential framework introduced by CRD V[109] (see the box on changes in capital requirements framework in 2021). The above changes will enable a more targeted application of several macroprudential tools, in order to strengthen the resilience of credit institutions to shocks and prevent risks to financial stability.

In addition to the ECB and national macroprudential authorities permission to the credit institutions not to fulfil several capital instruments at least until the end of 2022 as well as implementation of the so-called pragmatic supervisory approach (reduced disclosure and reporting requirements, cancellation of 2021 stress test etc.), **the European Parliament also adopted several quick-fixes**[110] **to the CRR**[111] **and CRR II**[112] in June 2020, so that to temporarily relieve the capital requirements burden on credit institutions and implement provisions that support lending earlier than planned. The amendments included, for example,

[106] Latvia did not change the effective O-SII rates. The SyRB is not activated in Latvia.

[107] As of March 2020, until at least the end of 2022, credit institutions are allowed to use the capital conservation buffer and the capital defined by the Pillar 2 Guidance, as well as use additional Tier 1 or Tier 2 instruments to meet the Pillar 2 requirements.

[108] MREL requirement is the minimum amount of equity and liabilities convertible to equity that would allow a credit institution to restore compliance with capital requirements in case of its resolution when it is recognised as failing or likely to fail.

[109] Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0878&from=EN

[110] Regulation (EU) ES 2020/873 of the European Parliament and of the Council.

[111] Regulation (EU) ES 2020/873 of the European Parliament and of the Council. Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (EUR-Lex - 32013R0575 - EN - EUR-Lex (europa.eu)).

[112] Regulation (EU) 2019/876 of the European Parliament and of the Council (EU) 2019/876 of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R0876).

relief in calculating the leverage ratio (permission to exclude certain central bank exposures from the leverage ratio, thereby easing the implementation of the ratio), a permission for banks to fully add back to their CET 1 capital any increase in new expected loan loss provisions that they recognise in 2020 and 2021 for their non-defaulted assets in accordance with IFRS 9[113], as well as supervisory relief to publicly guaranteed loans.

Giving the permission to use the combined capital buffer to absorb the expected losses, **credit institutions were at the same time invited to refrain from dividend payouts for 2019 and 2020 as well as from share buy-backs aimed at remunerating shareholders**[114]. Initially, this recommendation to credit institutions covered the period up to October 2020. Given the persisting uncertainty about the magnitude of the expected losses, the ECB's recommendation to strengthen capital was extended until the end of the year. Considering that most credit institutions operated at a profit in 2020, in December 2020[115], **the ECB's recommendation to refrain from dividend payouts was modified,[116] asking banks to exercise prudence on dividend payouts until the end of September 2021** and announcing its expectations that dividends should remain below 15% of the cumulated profit for 2019 and 2020 and not higher than 20 basis points of the CET1. The FCMC has asked credit institutions to implement the ECB's recommendation on a prudent dividend policy. Sweden's financial market supervisor Finansinspektionen[117] also has published a similar recommendation on remaining prudent at least until the end of September 2021 and allowing dividend payouts up to 25% of aggregate net earnings for the previous two years. Following a consultation with the supervisor, dividends could be paid out by credit institutions that have maintained good profitability during the pandemic and that, based on a conservative assessment, have such a level of capitalisation that ensures their resilience to any further shocks.

[113] CET1 deductions have been set at 100% from 2020 to 2021, 75% for 2022, 50% for 2023 and 25% for 2024.
[114] ECB's press release of 27 March 2020.
[115] ECB's press release of 15 December 2020.
[116] FCMC's press release of 18 December 2020.
[117] Finansinspektionen's press release of 18 December 2020.

BOX 3.1. THE CHANGES MADE TO THE CAPITAL REQUIREMENTS FRAMEWORK IN 2021

The CRR II requirements that were developed during the previous review of the EU macroprudential framework **became binding as of 28 June 2021**. The **CRR II introduces the minimum leverage ratio requirement of 3%** in addition to the risk-weighted capital requirements. A part of EU credit institutions has good risk-weights based capitalisation ratios, but relatively low leverage ratios due to low risk weights[118]. The minimum leverage ratio requirement will promote a capitalisation of such credit institutions.

In 2021, amendments were made to the Credit Institution Law to incorporate the CRD V and Bank Recovery and Resolution Directive II[119] requirements into the national law. Amendments to the Credit Institution Law introduce changes to the use of the SyRB and the O-SII buffer. From now on, the SyRB will apply both to all risk exposures and, in a more targeted way, to certain types of risk exposures in a given sector (risk exposures to residents or non-residents, natural or legal persons whose loans are or respectively are not backed by mortgages on residential or commercial real estate[120]). The

[118] The leverage ratio shows the proportion between a credit institution's capital and its risk non-weighted assets and off-balance sheet items.
[119] Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC (https://eur-lex.europa.eu/legal-content/LV/TXT/HTML/?uri=CELEX:32019L0879&from=LV).
[120] In September 2020, EBA, after consulting the ESRB, published Guidelines (EBA/GL/2020/13) on the appropriate subsets of sectoral exposures to which the SyRB may be applied by national competent authorities. Section 3517, Paragraphs 1–5 of the Credit Institution Law list in detail the exposures which may be subject to an additional SyRB requirement.

flexibility of application of the SyRB is also enhanced by removal of a reference indicating that the SyRB is only applicable to cover the long-term structural non-cyclical risks, which means that the SyRB may be used to cover the systemic risks of different types.

At the same time, a clear distinction has been made saying that the SyRB cannot be used instead of the O-SII buffer to cover the risks related to the specific features of O-SIIs in the future. So far, in several countries the SyRB was activated instead of or in addition to the O-SII buffer since, in line with the previous framework, the maximum limit of the SyRB was 3%, while that of the O-SII buffer – 2% of the total risk exposure amount.

From now on, the maximum limit of the SyRB will be 5%, but that of the O-SII buffer – 3% (it will be also possible to set a higher buffer level upon agreement with the EC). The maximum limit of the O-SII buffer to be set for the subsidiaries of foreign banks has been also increased to 1% above the O-SII buffer or the G-SII buffer limit set for the parent bank (but no more than 3%). **Moreover, it will be also possible to combine the SyRB with the O-SII buffer in the future.**[121] The combined O-SII buffer and the SyRB may not exceed 5% of the total risk exposure amount unless it is agreed with the EC.

The O-SII buffer for the Latvian subsidiaries of Swedish banks has been currently set in line with the 2% cap set out in the previous CRD4[122], although their systemic importance is likely to require a higher capital buffer level. **In September 2020, the supervisor of Swedish banks proposed to reduce the O-SII buffer requirement for three major Swedish banks from 2% to 1% of the total risk exposure amount[123]. Thereby, the 2% O-SII buffer cap for Latvian systemically important subsidiaries of Swedish banks has been implicitly maintained also after the changes to the capital requirements framework.** To maintain proportionality in the regulatory requirements, the upper threshold of the O-SII buffer will be lowered also for those Latvia's O-SIIs which are not subject to such limitations.

---

[121] The previous regulation established that the highest of the O-SII buffer and the SyRB had to be applied.

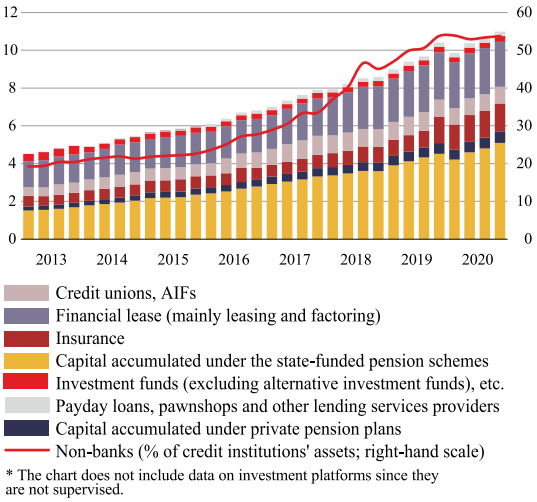
[122] Directive 2013/36/EU of the European Union and the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (https://eur-lex.europa.eu/legal-content/LV/TXT/HTML/?uri=CELEX:02013L0036-20150101&from=EN).

[123] Consultation memorandum: New capital requirements for Swedish banks (Summary; https://www.fi.se/contentassets/1133c05a423b4ff6be0207527e20eea6/consultation-memo-new-capital-requirements-swedish-banks.pdf).

4. DEVELOPMENT AND RISKS OF THE NON-BANK FINANCIAL SECTOR

The growth of the non-bank financial sector has decelerated under the impact of the Covid-19 pandemic. Accommodative fiscal and monetary policies ensured that the initial asset price shock was temporary, and the current impact of the crisis on the non-bank financial sector has been overall limited. The return on investment of both pension funds and insurance corporations has remained in a positive territory. The liquidity and solvency of insurance corporations is high. The tightening competition and amendments to the Law on State Funded Pensions have contributed to a significant decline in the management costs of the 2nd and the 3rd pillar pension schemes; however, it is important to further improve the financial literacy of people so that they would take full advantage of the opportunities to save for their retirement.

Chart 4.1
ASSETS OF THE NON-BANK FINANCIAL SECTOR BY SUB-SECTOR AND IN RELATION TO THE ASSETS OF CREDIT INSTITUTIONS*
(billions of euro)



* The chart does not include data on investment platforms since they are not supervised.

The growth of the non-bank financial sector has moderated significantly from its earlier rapid pace under the impact of the Covid-19 pandemic. In 2020, the assets of the non-bank financial sector rose by 5.7% (by 21.3% in 2019), reaching 11.0 billion euro or 37.5% vis-a-vis GDP and 44.8% in relation to the total assets of the credit institution sector at the end of the year. The increase in the assets of the non-bank financial sector was mainly driven by the stable contributions to the 2nd pillar pension scheme (see Chart 4.1). At the onset of the Covid-19 pandemic, the value of the 2nd and the 3rd pillar assets declined notably; however, accommodative fiscal and monetary policies implemented by countries contributed to a rebound in the growth of the asset value by the end of 2020. The steepest decline in growth was recorded by the assets of leasing companies as they decreased by 4.9% in 2020, mostly on account of the contraction in lending on the back of the postponed investment and the deferred demand during the Covid-19 pandemic, as well as a more cautious behaviour of lenders and a more targeted reduction in the loan portfolio of some leasing companies.

The continuity of accessibility of the services provided by the non-bank financial sector in Latvia's financial system is high as, in the event of the withdrawal of a market participant, the services provided by it to ensure the functioning of Latvia's financial system may be replaced by other market participants due to the relatively low market concentration. Thus, the non-bank financial sector does not represent systemic risks to the financial system. The role of Latvia's non-bank financial sector in the financial sector and the economy as compared to other euro area countries is still considerably less important. This is primarily due to the low level of long-term savings of the population: in Latvia they have evolved over a shorter period of time comparing to many other euro area countries.

Saving service providers

Household savings to provide for their future pension account for the largest share of the non-bank financial sector assets. At the end of 2020, the funds accumulated under the state funded pension scheme accounted for 46.4%, while the 3rd pillar assets – for 5.6% of the total assets of the non-bank financial sector.

The asset price shock caused by the Covid-19 pandemic was temporary, and the value dynamics curve took a V-shaped form as the crisis mitigation measures were taken in a timely manner and

accommodative monetary and fiscal policies supported the recovery of prices in the financial markets. Thus, the return on assets of both the state funded pension scheme and the private pension plans was positive in 2020 (2.1% and 2.0% respectively).

The assets of the state funded pension scheme grew primarily on account of the contributions made by participants (460 million euro in 2020, i.e. 11.0% less than in the previous year). Contributions contracted mostly on account of a rise in the registered unemployment rate from 6.2% at the end of 2019 to 7.7% at the end of 2020, the non-payment of the social tax from furlough benefits and the extension of the tax (including the social tax) payment period which might increase these contributions in the future. The reduction of the contributions to the 2nd pillar pension scheme was also not so notable as the wage bill grew by 2.1% in 2020 (8.0% in 2019).

During the financial crisis of 2008, people tended to be risk-averse and shifted from the active 50%[124] investment category investment plans to the conservative[125] ones. Thus, they saw the decrease in the unrealised investment value and suffered a loss, without benefiting from the upsurge in the stock markets in the coming years. At the same time, such risk aversion was not observed in 2020, and, **despite the crisis, the participants of the state funded pension scheme even increased their participation in investment plans with a higher risk level**. In 2020, about 2/3 of the cases when the 2nd pillar pension scheme participants changed their investment plans[126] were related to their transfer to 75%[127] investment plans. Like in 2019, most of these transfers were carried out by the participants of the active 50% investment category investment plans. Thus, the largest part of the population did not take advantage of the short-term fall in prices, and the Covid-19 pandemic shock did not cause losses to the participants of the investment plans. The non-risk aversion as a result of the Covid-19 pandemic crisis might be attributable to the fact that the slump in the financial markets was temporary and that, considering the low level of the public's understanding of the pension system, people were not aware of the decrease in their 2nd pillar pension capital.

At the beginning of 2021, essential amendments were made to the Law on State Funded Pensions, thus bringing a higher growth potential for public pension savings in the long-run, while also increasing the short-term volatility risk and the need to enhance the public's understanding of investment of pension savings. The Law repeals the prohibition to invest the maximum amount – 75% of the total assets of the investment plan – in equity securities and instruments of equivalent risk. Thus, investment plans in which all assets are invested in shares or instruments of equivalent risk might be developed, thus increasing the dependence of the state funded pension scheme on the stock price volatility and the overall level of the system risk. Until the end of 2021, there is a possibility to reclassify the investment plans in the prospectus of which investment in shares or instruments of equivalent risk is 50%-70% as the investment plans in which all assets are invested in shares or instruments of equivalent risk. At the end of 2020, the share of such investment plans to be potentially reclassified in the total assets of the state funded pension scheme was 12.0%. The rapid rate of reclassification of investment plans might heighten the overall system risk by leaps; however, looking from the perspective of the long-term growth potential, the permission to develop such investment plans in which all the funds are invested in shares and instruments of equivalent risk, especially amid exceptionally low interest rates, is welcome. It would also be necessary to review the regulations of the Cabinet of Ministers of the Republic of Latvia[128] on how the manager of funds of the state funded pension scheme calculates and deducts the variable part of

[124] Investment plans in the prospectus of which the maximum allowed investment in equity securities and instruments of equivalent risk does not exceed 50% of the plan's assets.

[125] Investment plans in the prospectus of which it is not allowed to invest the assets of the plan in equity securities and instruments of equivalent risk.

[126] The calculations do not take into account the number of the participants who have migrated within one investment category.

[127] Investment plans in the prospectus of which the maximum allowed investment in equity securities and instruments of equivalent risk does not exceed 75% of the plan's assets.

[128] The Cabinet of Ministers Regulation No 765 of 19 December 2017 "Procedures by which the Manager of Funds of the State Funded Pension Scheme shall Calculate the Payment for the Management of an Investment Plan and Procedures for the Accounting and Deduction of the Abovementioned Payment".

remuneration by adding, by analogy, the strategic share index part KAP[129] = 0.72 to the aggressive 100%[130] investment plans.

Changes to the limits imposed on investment funds were also made, allowing for an increase in the share of one investment fund in the investment plan assets from 10% to 25% if this investment fund replicates the composition of the debt or the equity securities index. It is intended to reduce the investment fund management costs of investment plans, thus raising the rate of their return. No significant increase in the level of investment risk is expected if the managers invest money in many diversified funds which replicate the composition of the index. At the same time, the increased investment concentration and reduced diversification might fail to offset the resulting decrease in the costs if the managers invest money in an investment fund which replicates a specific market niche or do not make a geographical diversification among investment options.

The Law stipulates a higher share of investment in AIFs and the risk capital.[131] This, however, will not have a significant impact on the assets of the state funded pension scheme since at the end of 2020, the share of the active 50% investment plans in AIFs accounted for a mere 4.4% and that of AIFs and the risk capital – 6.0% of the total assets of this investment risk category. This suggests that the demand for investments in AIFs and the risk capital is low since, prior to amendments to the Law on State Funded Pensions, the limits were not fully used; however, the future demand might grow.

The low interest rates continue to exacerbate the risks to pension savings and reduce the possibilities to diversify the investment plan-related risk with bonds. Under normal circumstances when the interest rates of the central banks have not hit the zero bound, bonds act as a diversification tool in the moments of crisis – with the central banks reducing the interest rates, the prices of bonds increase and offset the drop in stock prices which is typical during the times of crisis. Meanwhile, in the environment of the low interest rates the central banks have limited potential to reduce interest rates.

To prevent the sharp fall in the investment value caused by the Covid-19 pandemic shock at the beginning of 2020, the Saeima of the Republic of Latvia adopted amendments to the Law on State Funded Pensions providing that **the participants of the state funded pension scheme have the right**, when claiming the old age pension (including the early retirement pension), **to postpone the choice of using the state funded pension capital until 30 November 2021**[132]. However, people have not much used this possibility. It means that, despite the fact that there is an array of instruments to reduce the short-term fluctuations in the value of investment and increase the amount of pension available to the public, it would be important to improve the financial literacy of people.

The investment plan management costs have been reduced significantly since 2018, and they have stabilised at the level of 0.48% of the average amount of net assets. **In the last three years overall, the decline in the commission fee payments helped the 2nd pillar pension scheme participants to save 96 million euro** (see Chart 4.2).

The reduction of the commission fee will raise the monthly pension by 115 euro and the wage replacement

[129] KAP – the share index part which is specified according to the maximum share of investment in equity securities, AIFs or such investment funds that can make investment in equity securities or other financial instruments of equivalent risk, as provided for in the investment plan prospectus.

[130] Investment plans in the prospectus of which the maximum allowed investment in equity securities and instruments of equal risk is 100% of the plan's assets.

[131] The new conditions provide that the total investment in AIFs may be increased from 15% to 25% of the assets of the investment plan if more than 70% of these additional AIF assets are invested in sustainable investment. The amendments also increase the total investment limit in AIFs and the risk capital from 20% to 25% of the assets of the investment plan.

[132] For example, the pension would be computed and paid out to a person who retires, based on the amount of his/her 1st pillar pension capital. At the same time, the 2nd pillar pension capital of this person would be added to his/her 1st pillar pension capital after 30 November 2021, thus increasing the amount of his/her monthly pension respectively or would be passed to an insurance company by concluding an annuity contract. At the moment when a significant short-term decrease in the securities market value has been observed it is more beneficial to wait until the 2nd pillar pension capital is disbursed.

coefficient – by 3.5 percentage points[133]. The commission fee follows a downward trend also in the 3rd pillar of the pension scheme where the management and administration costs have decreased from 1.8% of the average net assets at the end of 2017 to 1.0% of the average net assets at the end of 2020. This can be explained by the expected tightening of competition in the private pension market, as well as by the development of new indexed pension schemes. The decrease in the commission fee in the 3rd pillar of the pension scheme will increase the monthly pension for the new participants of the 3rd pillar of the pension scheme by 4.0%[134] or 89 euro per month. The reduction of the commission fee in the 2nd and the 3rd pillars of the pension scheme, overall, increases the wage replacement coefficient from 64.0% to 70.2% or by 204 euro per month (see Chart 4.3).

The leaving of the pension capital in heritage increases the financial stability of households and enhances the confidence in the pension system. In 2020, only 13.4% of the 2nd pillar pension scheme participants selected one of the options as to how to leave the accrued pension capital in heritage in case the person dies before reaching the retirement age. 71.0% of these participants selected to leave the capital of the 2nd pillar pension scheme in heritage in accordance with the procedures specified by the Civil Law, thus giving their heirs the possibility to add it to their 2nd pillar pension capital or transfer this capital to their settlement account. By selecting the option to transfer the capital to his/her settlement account, the person will have to pay PIT from the amount of the capital to be inherited. Meanwhile, when a person adds the capital to his/her 2nd pillar pension capital, he/she will have to pay PIT from the part of the monthly pension exceeding the non-taxable minimum. 27.0% of the population selected the option to add the accrued capital to another person's 2nd pillar pension capital, while 2% of the 2nd pillar pension scheme participants selected the option to transfer the accrued capital to the special budget of state pensions. Overall, the low activity points to the need to improve the public understanding of the pension system and the opportunities to inherit the pension in order to strengthen the resilience of the people to financial turbulences.

Chart 4.2
MANAGEMENT (INCLUDING CUSTODIAN) FEE OF THE 2ND PILLAR PENSION SCHEME, ESTIMATED SAVINGS RESULTING FROM THE REDUCTION OF THE MANAGEMENT FEE OF INVESTMENT PLANS
(millions of euro)

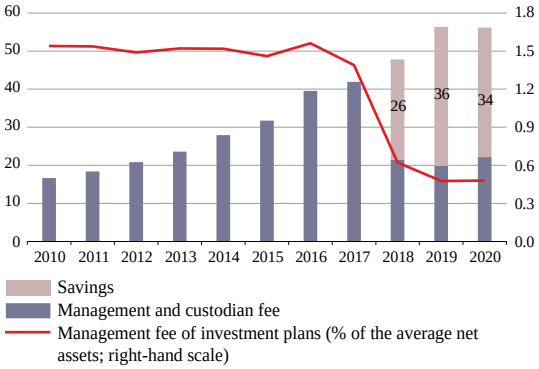
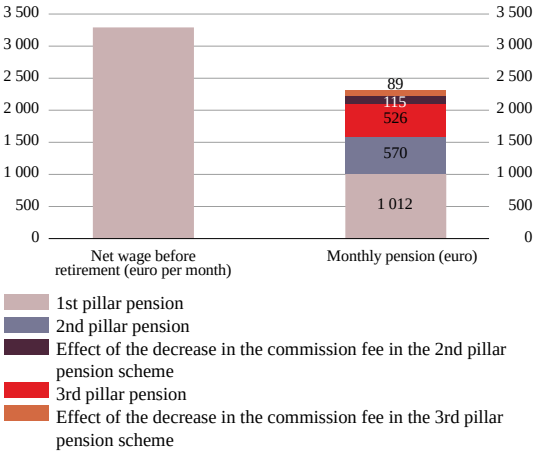


Chart 4.3
WAGE REPLACEMENT BY PENSION PILLAR, TAKING INTO ACCOUNT THE IMPACT OF THE REDUCTION OF THE PENSION PLAN MANAGEMENT FEES (INCLUDING THE CUSTODIAN AND ADMINISTRATION FEES)
(euro)



[133] The calculation is based on the assumption that a person who has started working at the age of 20, retires at the age of 65, his/her life expectancy is 80 years, his/her wage before taxes has initially been 1000 euro and increases by 3.5% per year, the person makes contributions (6%) to the 2nd pillar pension scheme, with the commission fee (0.18%) paid to the SSIA from each contribution. The return on the gross investment plan is 3.0%, and the commission fee decreases from 1.39% to 0.48% of net assets.

[134] The underlying assumptions of the calculations have been specified in the previous footnote, and it is additionally assumed that the monthly contributions to the 3rd pillar pension scheme account for 6% of the gross wage, the net wage before retirement is 70% of the gross wage, the contributions to the FCMC amount to 0.39% and the commission fee in the 3rd pillar of the pension scheme (including the administrative commission fee paid to the pension fund) decreases from 1.8% to 1.0% of the average net assets.

Insurance corporations

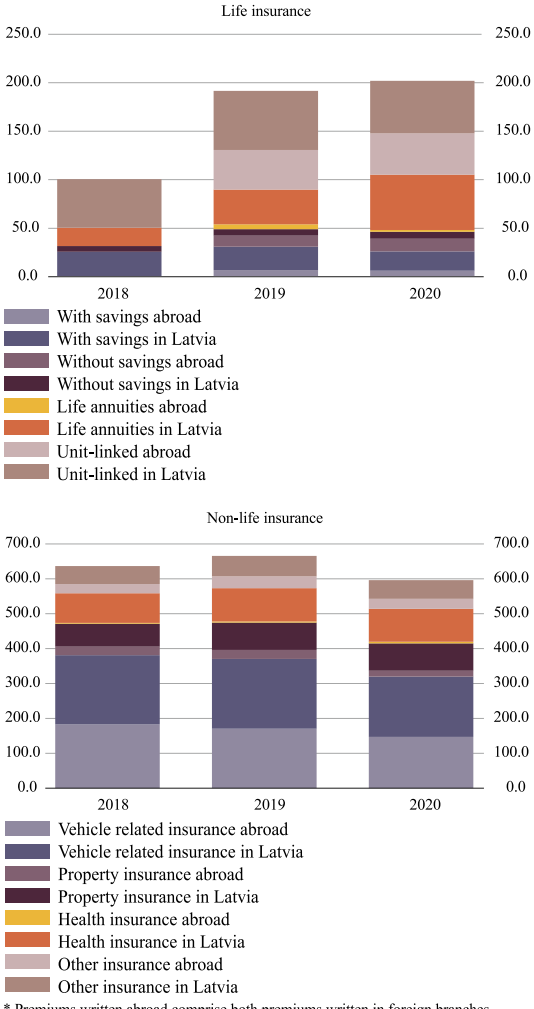
The current impact of the Covid-19 pandemic on the financial indicators of insurance corporations has been, overall, insignificant. The assets of insurance corporations have increased, and their solvency capital ratio has also[135] followed an upward trend and remains high. Both life and non-life insurers continue to ensure a positive return on assets and investment, reducing expenses and disposing investment (see Table 4.1). The increase in the non-life insurers' profit was partly attributable to the deceleration of the economic activity since, with economic activity contracting, compensations payable also decreased by 11.7% in 2020.

Table 4.1
KEY INDICATORS OF INSURANCE CORPORATIONS

Indicator	2018	2019	2020
Assets (millions of euro)	829.4	1408.9	1472.7
Return on assets of life insurers (%)	–1.9	1.1	0.4
Return on assets of non-life insurers (%)	2.5	3.8	7.3
Return on assets of life insurers (%)	–1.3	12.6	9.3
Return on assets of non-life insurers (%)	1.0	2.0	5.5

At the same time, changes in premiums written have been significantly affected by the Covid-19 pandemic. In 2020, non-life insurance premiums written decreased by 10.5% on account of both a decline in consumption and a drop in the prices of the compulsory civil liability insurance of owners of motor vehicles, **while life insurance premiums increased** by 5.4% mainly as a result of a significant rise in annuity insurance premiums. **Other European countries have witnessed an opposite trend – according to**

Chart 4.4
PREMIUMS WRITTEN BY LATVIAN INSURANCE CORPORATIONS AND BRANCHES OF FOREIGN INSURANCE CORPORATIONS
(millions of euro per year)



* Premiums written abroad comprise both premiums written in foreign branches and those written in accordance with the principle of freedom of provision of services.

EIOPA data[136], non-life insurance premiums written in the EEA posted a steep year-on-year increase of 8.6% in the first half of 2020, while the amount of life insurance premiums written declined somewhat (by 0.9% year-on-year).

At the same time, the amount of premiums written abroad remains high – 33.1% of non-life insurance premiums and 31.2% of life insurance premiums. This points to the small size of Latvia's insurance market and the insurers' efforts to gain additional income in foreign markets (see Chart 4.4).

[135] The available ratio of equity to the solvency capital requirement is expressed as a percentage. 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 model is calibrated according to VaR method, using a 99.5% confidence level over a one-year time horizon; see https://www.vestnesis.lv/op/2021/7.14.

[136] EIOPA's Report on Financial Stability of December 2020; see https://www.eiopa.europa.eu/sites/default/files/publications/20205804_eiac20002enn_pdf.pdf.

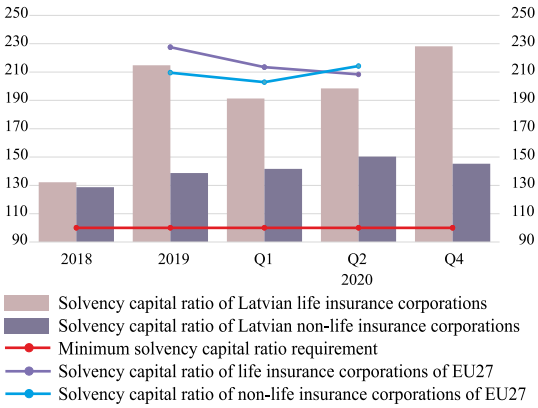
Mandatory vehicle insurance is the dominant type of insurance in Latvia; however, annuity policies become increasingly popular, with the share of annuity insurance rising by 60% in 2020. This can be explained by the increasingly growing number of those persons using the retirement options who opt for annuity insurance when retiring rather than add the 2nd pillar pension capital to the state funded pension capital. It should be noted that such a type of insurance with a fixed and guaranteed disbursement, along with the risks posed by the low interest rate environment, may cause problems to life insurers in the future.

The largest risks to the future operation of insurance corporations result from the potential persistence of the Covid-19 pandemic and the related secondary impact on the consumption structure of households and businesses. In the event that the crisis deepens further, customers may review their consumption basket and refuse from some insurance products. If insurance corporations cannot offset the turnover decline by other mechanisms or incompletely assess the risks written, they might face a higher solvency risk.

In the circumstances of the Covid-19 pandemic, Latvian insurance corporations have been able to improve their solvency capital ratio (see Chart 4.5). Moreover, none of Latvian insurance corporations uses and has started to use, due to the Covid-19 pandemic, the exemptions set out in the Directive to improve their solvency capital ratio[137].

Latvian non-life insurers have also adequately assessed the risk coverage. In 2020, they reduced their technical reserves by 10.4%, i.e. in the same amount as that of the decrease (of 10.5%) in premiums written. At the same time, **the balance sheets of Latvian insurers are relatively liquid** since cash and cash equivalents accounted for 8.1% of the total assets, while

Chart 4.5
SOLVENCY CAPITAL RATIO OF LATVIAN AND EU INSURANCE CORPORATIONS
(%)



the most illiquid assets – real estate and loans – only for 1.9% in 2020. The investment portfolio of the EU insurers is, on average, much more illiquid – in 2020, cash and cash equivalents accounted for 4.6%, while real estate and loans – for 7.4%[138] of the investment portfolio of the EU insurance corporations.

At the end of 2020, the value of the funds accumulated in the Fund for the Protection of the Insured amounted to 19.4 million euro (the minimum amount of funds for life insurance is 5 million euro (the current amount of funds – 5.7 million euro) and the minimum amount of funds for non-life insurance is 11 million euro (the current amount – 13.7 million euro)). The accumulated funds serve as an additional buffer in case of insolvency of the insurance corporation.

[137] Exemptions are used, for example, by Germany, Denmark, the Netherlands and Portugal. 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 reserves. In some countries, the impact of Covid-19 on the solvency of insurers has been so pronounced that several insurers applied for new exemptions consequently granted by their supervisory authorities.

[138] Data on the first quarter of 2020. EIOPA's Report on Financial Stability of December 2020; see https://www.eiopa.europa.eu/sites/default/files/publications/20205804_eiac20002enn_pdf.pdf.

APPENDIX 1. CLIMATE RISK EXPOSURES OF THE SECURITIES PORTFOLIOS HELD BY LATVIAN FINANCIAL SERVICE PROVIDERS

With the climate policy and public awareness of the climate change advancing, macroprudential institutions are paying increasingly more attention to the impact of the climate change on the sustainability of the financial sector. In its Financial Stability Report 2020[139] Latvijas Banka analysed the climate risk exposures of loans granted by Latvian credit institutions to NFCs. The conclusion was that the exposure is low mainly due to the insignificant share of the mining and energy industries in the overall loan portfolio.
To continue the ongoing work, in 2021 Latvijas Banka assessed the climate risk exposures of the securities portfolios reported by Latvian financial service providers[140] and identified the segments of securities holders that require more detailed analysis. It was concluded that the climate risk exposure of the financial sector's securities portfolio is overall low in Latvia; however, it varies considerably depending on the segment of the securities holder (e.g. security investments of households are less exposed to climate risks than those of NFCs).
It should be noted that, due to data limitations, the performed analysis is a pilot project and a more comprehensive study will be possible, once more extensive climate risk reporting obligations (reporting according to the NFRD[141] and the EU taxonomy of sustainable finance) are in place.

Data

The analysis is based on 2018–2020 data reflecting the securities portfolio's outstanding amounts by ISIN. Data are reported by the following financial service providers: credit institutions, insurance corporations, investment management companies, investment brokerage companies and AIFs. Credit institutions also provide data on the securities held both on their customers' (pension schemes, households, NFCs) and their own behalf. Therefore, Latvijas Banka took the opportunity to also assess the climate risk exposures of investment portfolios held by Latvian credit institutions on behalf of households and NFCs[142]. For the analysis of the pension schemes investment portfolio, the FCMC data, broken down by pension scheme, were used.

Chart A1.1
AMOUNT AND STRUCTURE OF SECURITIES OF LATVIAN FINANCIAL SERVICE PROVIDERS BY GROUP AND HOLDER AT THE END OF 2020
(in millions of euro)

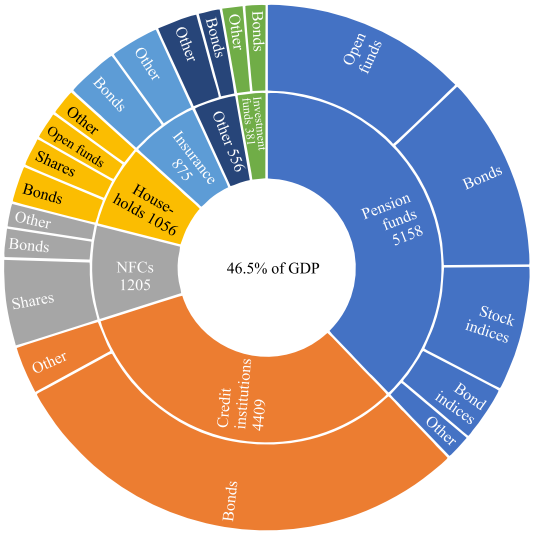


Chart A1.1 reflects the structure of the overall securities portfolio[143] broken down by group of securities and

[139] https://datnes.latvijasbanka.lv/fsp/FSP_2020_en.pdf
[140] For the purposes of this Appendix, climate risks are the transition risks arising from climate change. Other climate change-related risks, i.e. physical risks, are not covered in the present Appendix as their analysis requires other types of data and a different approach.
[141] Non-Financial Reporting Directive – Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, Official Journal of the European Union, L 330/1, 15.11.2014.
[142] In addition to these major groups, reporting also covers other groups of customers: non-governmental organisations, government, local governments and financial intermediaries. However, since the share of these other groups' portfolio in the total portfolio was only 4%, these groups were not treated separately, but rather as part of the overall portfolio.
[143] At the end of 2020, its value stood at 13.6 billion euro or 46.5% of GDP.

segment of securities holders. Credit institutions and pension funds are the largest securities holders, while bonds form the most significant group of securities.

Valuation

Currently, there is no globally accepted uniform methodological standard that could be used to assess the climate risks of securities; **therefore, each group of securities – corporate securities, government bonds and other financial instruments – have been assessed separately, based on different assessment criteria[144].**

The CO_2 equivalent in tonnes per 1 million US dollars of turnover[145] (hereinafter, CO_2pmUSD) produced by the issuer of securities was applied to corporate securities (shares and bonds) as a reference. Where possible, indicators reported by each issuer were used. Where no individual data were available, the industry average of CO_2 emissions was used, according to NACE Rev. 2 classification[146].

To assess the government bonds, the EPI[147] of each issuing country was used.

Morgan Stanley Capital International ESG Fund Rating or the average CO_2pmUSD of the firms included in the instrument (available on the Morgan Stanley Capital International database) were used for other financial instruments including various securities indices, investment fund shares or units and instruments where no assessment of the securities issuer is possible. Where several assessments of the issuer were available, the issuer's own reported CO_2pmUSD was used.

Considering that the data are incomplete, the climate risks can be assessed only approximately. For instance, firms representing sectors producing higher levels of the CO_2 equivalent, are potentially more exposed to climate risks since they are more affected by regulatory changes, consumer sentiment, investment policy and technologies.

To ensure that the climate risk-exposure assessments of different groups of securities are mutually comparable, **each group of securities was assessed separately on a scale from 1 to 10, where category 1 denotes securities with the highest exposure to climate risks and category 10 – securities with the lowest exposure**. According to the scale, each assessed group of securities is allocated the corresponding percentile interval (category 1 corresponds to an interval of 0–10%, etc.). It should be noted that corporate securities, which fall into the categories at the lower end of the scale, are more exposed to climate risks than government securities of the same categories. However, countries failing to mitigate climate risks will also face comprehensive consequences, and their securities will be subject to value adjustments. Table A1.1 illustrates the most typical examples of groups of securities in each climate risk category.

[144] Such distinction is made for the reason that the assessment is most accurate when performed for individual firms reporting their exposure to climate risks. This is because, similar to the credit risk assessment, the climate risk exposure of a firm largely reflects the above exposure to its security as well. Meanwhile, countries are currently the least assessed group in terms of their exposure to climate risks; therefore, they are assessed differently. Financial instruments not based on the climate risk profile of one issuer should be assessed by using a more complex approach; therefore, they are also assessed differently.

[145] Source: Reuters Refinitiv database.

[146] The industry average is based on the data of all the firms in the relevant sector that have reported their emissions. Agriculture, where no such firms were identified, is an exception, and its industry average was calculated based on the average of agricultural emissions in CO_2 equivalent per unit of gross agricultural production in US dollars in EU countries (Agricultural Statistics and Climate Change, September 2019; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835762/agriclimate-9edition-02oct19.pdf, p. 97).

[147] Environment Protection Index was developed by Yale University and Columbia University in collaboration with the World Economic Forum and the Joint Research Centre of the EC with a view to assessing the relative impact of national environmental policies (https://epi.yale.edu/).

Table A1.1
THE MOST TYPICAL EXAMPLES OF CLIMATE RISK CATEGORIES BY SECURITIES ISSUER AND INSTRUMENT

Category	Corporate securities	Government securities	Other financial instruments
1–4	Energy and manufacturing	Middle East and Latin America	Oil company funds
5–7	Financial sector	Some Eastern European countries (including Latvia)	European corporate debt funds
8–10	Technology sector and individual financial firms[148]	Some Western European countries	Euro area government indices, ESG funds

As shown in Chart A 1.2, the calculated global averages of individual economic sectors indicate that energy and mining have the highest CO_2pmUSD. They are followed by the water supply, transportation and manufacturing sectors. Moreover, the data for these sectors reveal a notable dispersion of observations as the level of emissions produced by the firms in these sectors varies greatly.

The developed methodology allows assessing 97.5% of the 2020 securities portfolio, 95.6% of the 2019 securities portfolio and 94.8% of the 2018 securities portfolio. In the charts, the unassessed share is denoted as category 0. The large share of the securities portfolio that is possible to assess suggests that the developed methodology is comprehensive. At the same time, however, it is also one-dimensional since a significant part of the securities portfolio investments are assessed according to the issuer's NACE2 sector which is a rather approximate indicator. The priority of this study was to cover the widest possible range of securities in order to identify the potential vulnerabilities.

Chart A1.2
AVERAGE CO_2pmUSD PRODUCED BY NACE 2 SECTORS ACCORDING TO REUTERS REFINITV ASSESSMENT
(grey rectangle – average 50% percentile; lines – 90% percentile; dot – average)

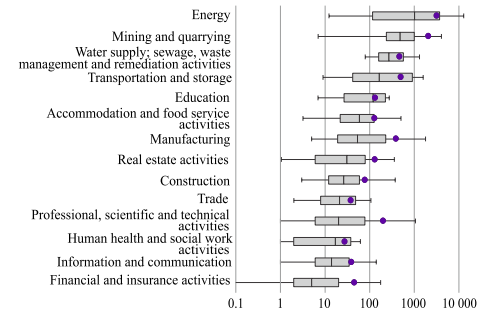
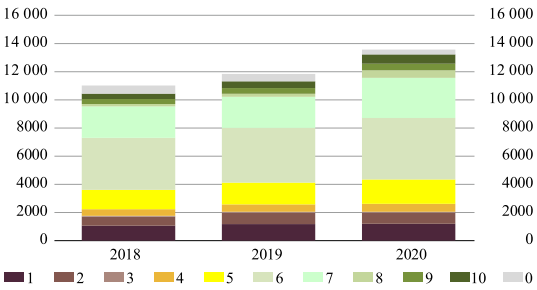


Chart A1.3
LATVIAN FINANCIAL SERVICE PROVIDERS' SECURITIES PORTFOLIO BY CLIMATE RISK EXPOSURE CATEGORY
(in millions of euro)



Results

The conclusion was that **the climate risk exposure of Latvia's financial sector is low since, at the end of 2020, the investments most exposed to such risks** (i.e. the securities falling into categories 1–4; hereinafter "brown" securities) **accounted for 2.6 billion euro or 19.8% of the total investment portfolio of the financial sector**. The "brownest" or category 1 securities accounted for 9.0% or 1.2 billion euro in the total securities portfolio. Moreover, since 2018 the share of the "brown" securities has decreased, while that of the securities least exposed to climate risks (categories 8–10) has expanded reaching 12.6% of the total securities portfolio in 2020. At the end of 2020, one third of the securities portfolio was made up of category 6 security investments (see Chart A1.3).

The securities portfolios of credit institutions and insurance corporations are, on average, less exposed to climate risks than those of other holders (see Chart A1.4), and the level of exposure has remained broadly stable. At the end of 2020, the average weighted category of the securities portfolio of insurance

[148] Indicators reported by firms may substantially differ from industry averages.

corporations was 6.55, and that of credit institutions – 6.40. Meanwhile, **the share of "brown" securities in the securities portfolio of NFCs increased**: in 2018, the average weighted category of the securities portfolio of NFCs was 4.35 but in 2020 it had already fallen to 3.06.

At the same time, **some securities portfolios have a high concentration risk** (see Chart A1.5). The securities holders whose portfolios are more diversified will most likely be able to make structural changes in their portfolios more easily, and these holders will be less exposed to the climate risks of a specific securities issuer. Meanwhile, the securities holders with higher concentration in their portfolios need to evaluate the respective issuers' exposure to climate risks. For instance, if it is only one firm, it should be evaluated whether its activity and, consequently, the value of the instrument will not be jeopardised by higher CO_2 emissions charges. Moreover, these new risks may not be taken into account in the traditional models, i.e. models based on historical data.

The credit institutions' securities portfolio is dominated by securities of categories 6 and 7 (in 2020, they accounted for 82.0%; see Chart A1.6). Meanwhile, the share of the "brown" securities has declined from 9.8% at the end of 2018 to 6.6% at the end of 2020. It should also be noted that, in absolute terms, the outstanding amount of the "brown" securities portfolio has remained broadly unchanged. Moreover, the share of the unidentified securities has also decreased.

The securities portfolio of Latvia's insurance corporations has, on average, less exposure to climate risks than Latvia's financial sector overall. At the same time, the quality of assessing the securities portfolio of insurance corporations is gradually improving. In 2020, the developed methodology enabled the assessment of 92.2% of the insurance corporations' securities portfolio (87.5% in 2018). **Insurance corporations are increasingly opting for securities less exposed to climate risks** (in 2020, such securities accounted for 14.8% of the securities portfolio). Meanwhile, they are also moving away from the "brown" securities (in 2020, such securities accounted for 5.4% of the securities portfolio). It is important for insurance corporations that

Chart A1.4
AVERAGE WEIGHTED CLIMATE RISK EXPOSURE CATEGORIES OF LATVIAN SECURITIES HOLDERS' PORTFOLIOS

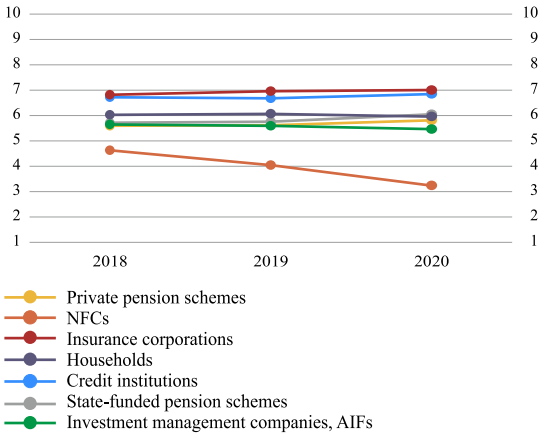


Chart A1.5
MOST COMMON INSTRUMENTS AND THEIR ISSUERS' CONCENTRATION IN SECURITIES PORTFOLIOS BY SECURITIES HOLDER SEGMENT AT THE END OF 2020

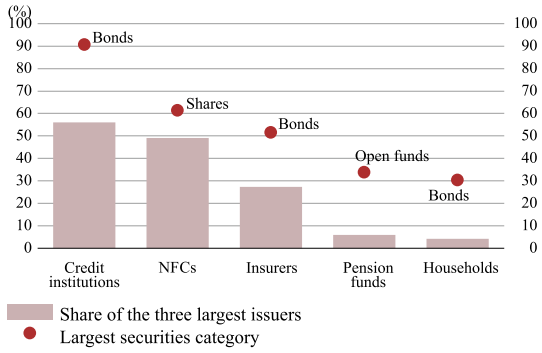


Chart A1.6
SECURITIES PORTFOLIO OF LATVIAN CREDIT INSTITUTIONS BY CLIMATE RISK EXPOSURE CATEGORY
(in millions of euro)

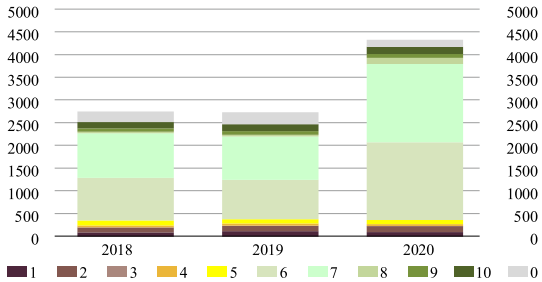
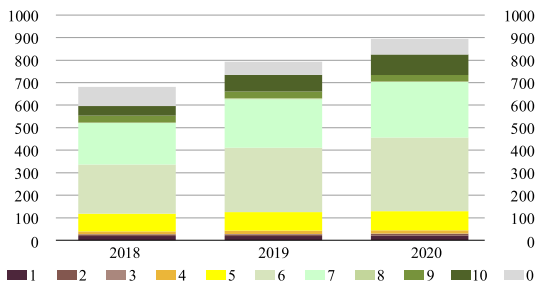


Chart A1.7
SECURITIES PORTFOLIO OF LATVIAN INSURANCE CORPORATIONS BY CLIMATE RISK EXPOSURE CATEGORY
(in millions of euro)



their securities portfolios are profitable for an extended period of time, and profitability is not facilitated by securities with higher exposure to climate risks.

The securities portfolio of the Latvian pension funds reveals twofold trends: **private pension funds, on average, have a higher share of "brown" securities** (at the end of 2020, 26.5% of the securities of private pension funds fell into categories 1–4, compared to 20.6% of the securities of the funds accumulated under the state-funded pension schemes). **However, the share of the securities less exposed to climate risks is also relatively high.** These results suggest that, at least private pension fund managers, are most likely giving higher priority to managing other risks, rather than climate risks. The securities portfolio of pension schemes could be assessed almost in its entirety (99.9% in 2020).

Chart A1.8
SECURITIES PORTFOLIO OF LATVIAN STATE-FUNDED AND PRIVATE PENSION SCHEMES BY CLIMATE RISK EXPOSURE CATEGORY
(in millions of euro)

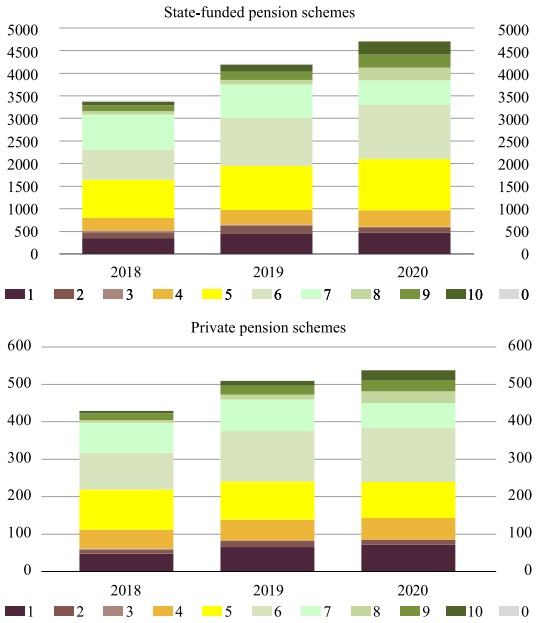
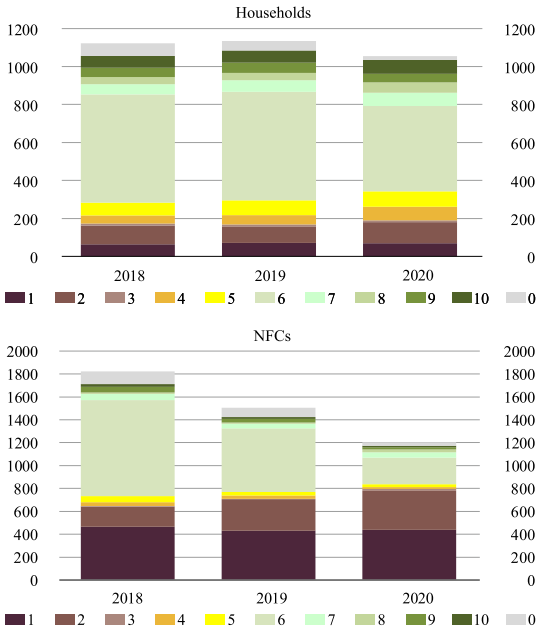


Chart A1.9
SECURITIES PORTFOLIO OF LATVIAN HOUSEHOLDS AND NFCs BY CLIMATE RISK EXPOSURE CATEGORY
(in millions of euro)



Investments of Latvian households are dominated by investments less exposed to climate risks, inter alia "clean" securities which fall into categories 8–10 and account for 16.7% of the securities portfolio. The bulk of the household portfolio consists of securities issued by various financial and technology firms typically less exposed to climate risks.

As to the securities portfolio of Latvia's NFCs, securities exposed to climate risks (categories 1–4) accounted for more than half of the portfolio (69.1% at the end of 2020). Moreover, only 4.9% of the securities portfolio consisted of the so-called "clean" securities (categories 8–10). Although NFCs are able to take on the risks of potential future value corrections in their "brown" securities, Latvia's NFCs should evaluate the vulnerabilities associated with their long-term holdings (see Chart A1.9).

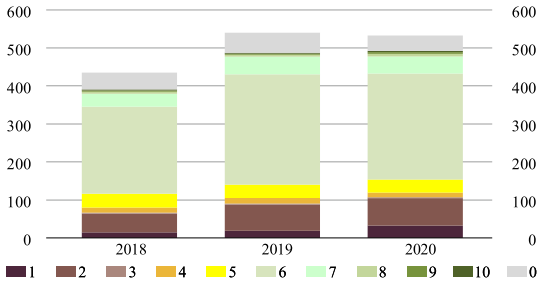
The securities portfolio of other investment service providers have more unassessed securities than other securities portfolios (at the end of 2020, they accounted for 7.6% of the total securities portfolio). This is partly due to a larger share of private investments. At the end of 2020, 24.2% of the assessed portfolio securities fell into categories 1–4 and only 2.9% of securities belonged to categories 8–10. Considering that the investment strategies of other service providers are focussed on riskier investments, their investment portfolios also reflect the ability or willingness of investors to take on higher climate risks (see Chart A1.10).

Conclusions

The climate risk exposure of the Latvian financial service providers' securities portfolio is relatively low.

The securities portfolio of the Latvian insurance corporations is least exposed to climate risks, followed by the securities portfolios of credit institutions and households. Meanwhile, **the securities portfolio of NFCs has the highest exposure to climate risks.** Moreover, a characteristic feature of NFC investments is high concentration which increases their exposure to climate risks.

Chart A1.10
SECURITIES PORTFOLIO OF LATVIAN INVESTMENT MANAGEMENT COMPANIES, INVESTMENT BROKERAGE COMPANIES AND AIFs BY CLIMATE RISK EXPOSURE CATEGORY
(in millions of euro)



After a more comprehensive implementation of the NFRD, the study should be repeated not only to improve the assessment accuracy but also to evaluate effects of the NFRD requirements on disclosing the climate risk exposure of the portfolio investments. The developed methodology allows assessing almost the entire (97.5%) investment portfolio, rather than the securities holdings of individual firms.

A substantial part of the analysis hinges on the use of the CO_2pmUSD industry averages. Taking into account the dispersion of observations, this indicator **may, for individual firms, suggest a higher climate risk exposure than is actually the case**. This could be avoided if firms, Latvian securities issuers in particular, reported their exposure to climate risks, inter alia their CO_2pmUSD. Such improved reporting would positively affect the Latvian firms that are raising funds as, already in the near future, they will also be evaluated by funding providers based on similar principles[149].

Recommendations

1. Market participants are recommended t**o evaluate the composition of their investment portfolios and the potential asset price overvaluation** associated with the implementation of the climate change adaptation policy (CO_2 emissions charge, restrictions on emissions, measures to facilitate sustainable economy).
2. Issuers exposed to higher climate risks due to their represented sector are invited to perform and publish an assessment of their **CO_2 emissions and electricity and fuel consumption** to ensure the availability of the firm's actual CO_2 emissions and electricity and fuel consumption data, rather than the industry's averages and, thus, become more attractive to potential investors.
3. Since information on CO_2 emissions and electricity and fuel consumption is important not only for investors, as it allows them to evaluate the sustainability of their securities and financial instruments, but also for credit institutions and non-bank lenders, **Latvian firms are urged to include in their annual reports at least the information on their annual electricity and fuel consumption.**
4. Latvian securities issuers **are recommended to make more active use of opportunities to obtain an internationally recognised climate risk assessment** (ESG Rating, conformity with the EU sustainability taxonomy, etc.), which would not only potentially reduce the costs of raising funds but would also make the security a more attractive investment to various groups of investors.
5. Latvian institutions are recommended to promote their inter-institutional cooperation in exchanging data to improve **the market participants' ability to assess the climate risk exposures of their investments.**

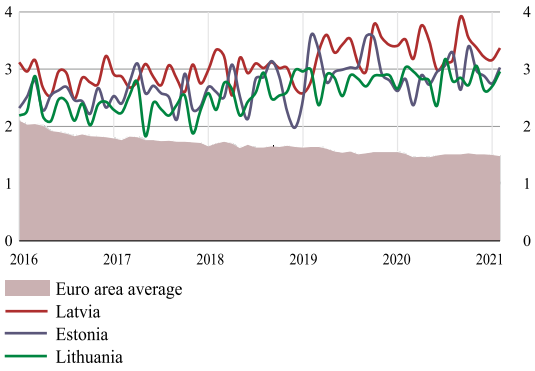
[149] The NFRD stipulates that the largest financial sector participants (including major Latvian credit institutions at the group level) will have to report their loan and securities portfolios' climate risk exposures as from 1 January 2022. Moreover, according to EBA recommendations, where no EU taxonomy-compatible indicators on the funding beneficiary are available, coefficients or approximations should be applied.

APPENDIX 2. INTEREST RATES ON NEW LOANS TO NFCs. EVIDENCE FROM LATVIJAS BANKA'S CREDIT REGISTER MICRODATA

Interest rates on loans granted to NFCs by credit institutions in Latvia are higher than in the other Baltic States and are increasing in contrast to trends in the euro area. Therefore, the factors which have the greatest impact on variation in interest rates on loans to NFCs have been examined. The conclusion was reached that there is a high degree of segmentation in the lending market. The factor providing the best explanation for the variation in the interest rate set on a loan is the loan-issuing credit institution. The most important borrower-specific factors are the size of the borrower (enterprise), the sector represented, and the type of interest rate fixation (a fixed or variable interest rate). Potential loan losses, a factor directly characterising credit risk, as it turns out, is less important when explaining the variation in lending rates. Real estate collateral does not significantly reduce the lending rate, as this is merely a precondition for granting a loan, at least in the SME segment.

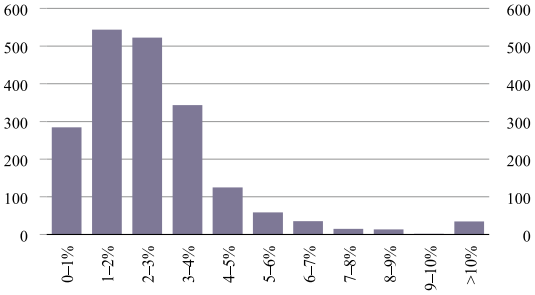
Interest rates on loans granted to domestic NFCs by Latvian credit institutions have been higher than in the other Baltic States for an extended period. Furthermore, in contrast to other countries in the euro area, where lending rates have tended to decrease since the introduction of the ECB's quantitative easing measures in 2015, in Latvia (and the other Baltic States too) they have been increasing (see Chart A2.1).

Chart A2.1
INTEREST RATES ON NEW LOANS GRANTED TO DOMESTIC NFCs BY CREDIT INSTITUTIONS
(%)

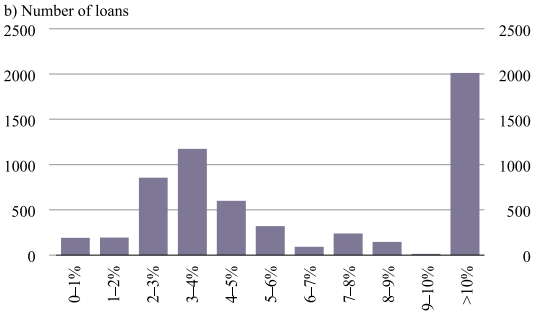


In this context, **it is important to gain an understanding about the factors which determine interest rates on loans granted by credit institutions in Latvia**. To answer this question, detailed microdata has been used from Latvijas Banka's Credit Register (loan-level data), which has also included information about lending rates since the second quarter of 2018. Various factors determining lending rates have been analysed, and a quantitative evaluation of the proportion of weighted interest rate variance explained by these factors has been provided, allowing to rank these factors according to their relative importance.

Chart A2.2
NEW LOANS TO NFCs BY INTEREST RATE
a) Amount of loans (in millions of euro)



b) Number of loans



Descriptive statistics

During the reporting period[150], the weighted average interest rate on loans was 2.7%, but interest rates vary widely. In terms of volume, for 86% of NFCs loans,

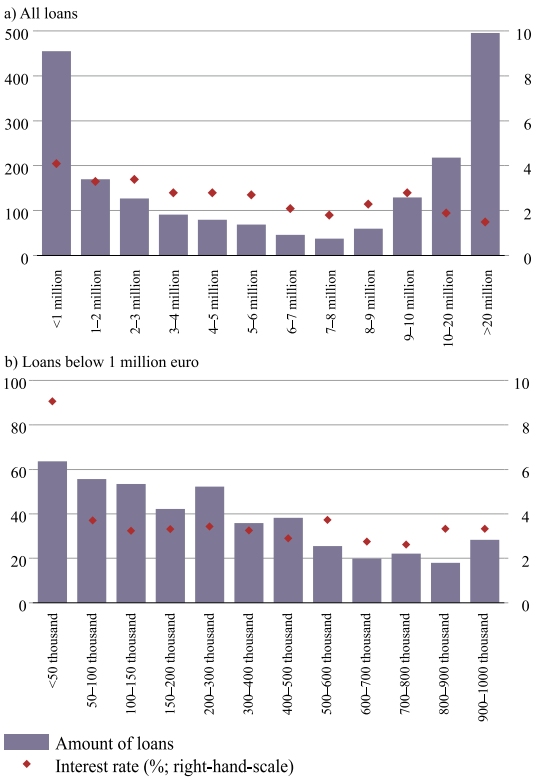
[150] Data on new loans to domestic NFCs from July 2018 to June 2020 were included (the data was selected by settlement date, i.e. the date on which the funds were disbursed to customers).

interest rates were lower than 4%, while for 41% of individual loans interest rates exceeded 10% (see Chart A2.2).

A large share of loans granted by credit institutions at an interest rate above 10% were payment card loans granted to NFCs. The weighted average interest rate on these loans was 17.9%, but in the reporting period, they accounted for only 0.8% of the total amount of new loans. Excluding these loans, the overall weighted average interest rate in this period would have been 2.6%.

There is strong competition between credit institutions for large loans, and interest rates on these loans are relatively low. At the same time, interest rates are high on smaller loans (below 1 million euro) and very small loans (below 50 000 euro).

Chart A2.3
INTEREST RATE DISTRIBUTION BY LOAN SIZE (NEW LOANS TO NFCs)
(in millions of euro)



In general, the interest rate on loans granted to NFCs depends on the size of the loan. This could be explained by the relatively lower costs for large loans:
– the share of very large loans (above 20 million euro) in the total amount of new loans to NFCs was 25%. During the reporting period, the weighted average interest rate for such loans was 1.5%;
– the share of loans below 1 million euro reached 23% of the total amount of new loans, and their weighted average interest rate was 4.1% (see Chart A2.3);
– in the range of loans between 50 000 and 1 million euro, the weighted average interest rates did not vary significantly depending on their size and, on average, were lower than 4%;
– the weighted average interest rate for the smallest loans (less than 50 000 euro) was the highest – 9.1% (excluding payment card loans, the share of which in the total amount of new loans was insignificant –6.2%).

Larger enterprises could expect lower interest rates. This relationship is relevant in the majority of sectors. Large enterprises tend to be more stable, so they are also more reliable than small and micro-enterprises. In the reporting period, the weighted average interest rate on new loans to large enterprises was 1.7%, while that on loans to micro-enterprises was 3.7%.

The energy sector had the cheapest loans (1.3%) amongst the sectors. In the reporting period, the share of total new loans granted by credit institutions to this sector was 22.1%. This can be explained by the large loans granted to public service providers, as these sectors are relatively stable and less exposed to business cycle fluctuations. The weighted average interest rates on loans to other sectors varied from 2.5% to 3.5%, but they were much higher for small and micro-enterprises (see Chart A2.4).

In the group of micro-enterprises, the lowest interest rates were set on loans to enterprises engaged in real estate activities (3.2%). It should be noted that the sector is dominated by micro-enterprises, as large borrowers in this field (real estate project developers) can often be classified as micro-enterprises due to the relatively small number of employees.

Interest rates vary widely across credit institutions, indicating high segmentation of the credit market. Two of the most active credit institutions in the loan market (A and E; see Chart A2.5) focus on lending to the largest and relatively safest customers, on average, offering them interest rates around 1%. The data for the third credit institution (B) show a greater tolerance of risk, as its new loans are not dominated by loans to large enterprises, and they are issued at higher interest rates. The interest rates for two other relatively active credit institutions (C and D) in the domestic NFCs loan market are significantly higher (on average, above 3%). The interest rates offered by other credit institutions were much higher (on average, above 4%), especially in the SME segment.

Chart A2.4
INTEREST RATES ON AND THE AMOUNT OF (REPRESENTED BY THE SIZE OF THE CIRCLE) NEW LOANS TO NFCs BY COMPANY SIZE AND SECTOR
(%)

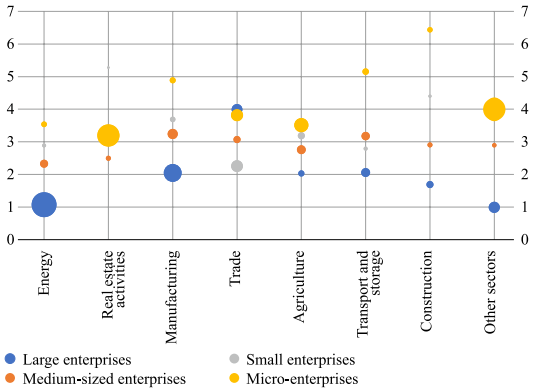


Chart A2.5
INTEREST RATES ON AND THE AMOUNT OF (REPRESENTED BY THE SIZE OF THE CIRCLE) NEW LOANS TO NFCs BY COMPANY SIZE AND BY CREDIT INSTITUTION, EXCLUDING PAYMENT CARD CREDIT
(%)

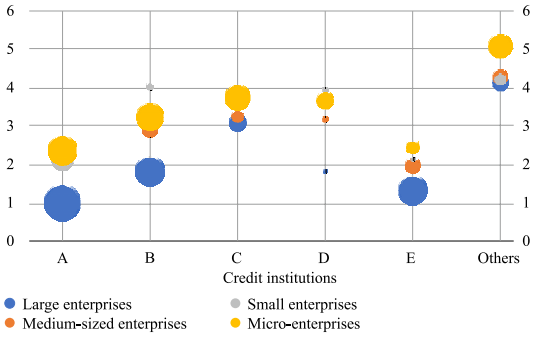
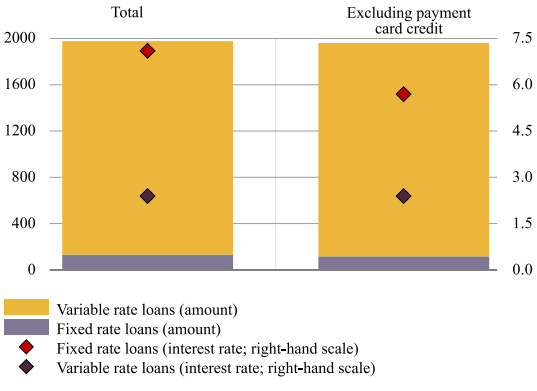


Chart A2.6
NEW LOANS TO NFCs BY INTEREST RATE FIXATION
(in millions of euro)



The large variations in the interest rates on loans provided by various credit institutions can be explained by credit institution-specific factors: differences in their funding, capital and other operational costs, which affect their operational strategy and degree of risk tolerance. The segmentation of the supply side of the credit market means that the availability of competitive offers to borrowers is actually more limited than it may seem. This especially affects borrowers in the SME group – those companies which do not qualify for the credit terms at the two credit institutions with the lowest interest rates, can receive loans from other credit institutions, but already at significantly higher interest rates. The increasing segmentation associated with the reduction[151] in the credit portfolio of an important market participant –Luminor Bank AS – is one of the factors which caused an increase in interest rates in 2019.

Even though the share of fixed-rate loans is relatively small, the interest rates on these loans are very high. Therefore, they also affect the weighted average interest rate quite significantly. Fixed-rate loans account for only 7% of the total amount of new loans (6%, if payment card loans, which have fixed and very high interest rates, are excluded from the calculation). Latvian credit institutions demand a relatively high premium for the opportunity to fix the rate: the weighted average interest rate on fixed-rate loans, even after the exclusion of payment card loans, was 5.7% (see Chart A2.6) in the reporting period. This interest rate also is affected by the practices of credit institutions and type of credit product. According to ECB statistics too, interest rates in Latvia on loans with

[151] Latvijas Banka's 2020 " Financial Stability Report" mentions that due to changes in the funding structure of credit institutions, the portfolio of domestic loans to NFCs shrank significantly in 2019 in Latvia as well as in the other Baltic States.

an interest rate fixation period of more than one year are much higher than in other euro area countries (see Chart A2.7). The weighted average interest rate for loans issued by the NFS, excluding fixed-rate loans, would be 2.4%.

The interest rate does not depend significantly on the type of collateral, but the majority of SMEs need real estate collateral to receive a loan. The lowest interest rates are for unsecured loans which have been issued to the largest and thus relatively safest borrowers. The share of unsecured loans issued to large enterprises was 44%, but to SMEs – much smaller (9%). Interest rates on unsecured loans, and loans with real estate and other type of collateral granted to large enterprises are significantly lower than the corresponding interest rates on loans to SMEs (see Chart A2.8). This also confirms that the size of an enterprise is a very important factor in determining the applicable interest rate. Credit institutions required real estate collateral for the majority (63%) of loans to SMEs to mitigate potential losses due to a higher probability of loss.

Chart A2.7
INTEREST RATES ON NEW LOANS TO NFCs WITH INTEREST RATE FIXATION OVER ONE YEAR
(%)

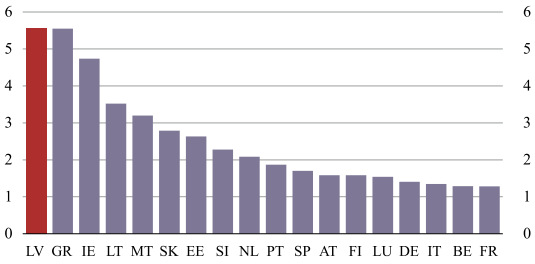
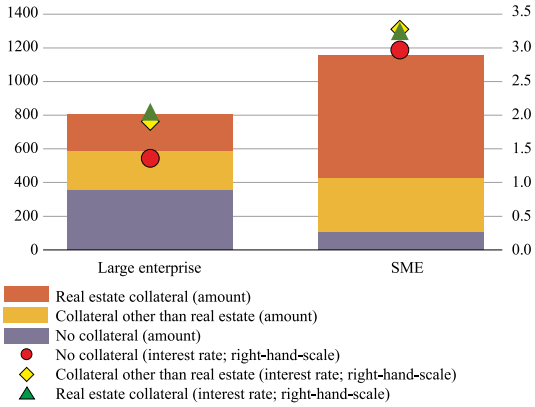


Chart A2.8
INTEREST RATES ON AND LOAN AMOUNTS OF NEW LOANS TO NFCs BY TYPE OF COLLATERAL AND SIZE OF THE BORROWER
(in millions of euro)



What are the most important factors? Dominance analysis of determining factors

In order to determine the significance of the impact of various factors on interest rates, a dominance analysis was conducted based on multiple regression.[152]

For the reporting period, the Credit Register of Latvijas Banka contains data on 5815 new loans to NFCs[153]'. The following information was available on each loan: loan amount, the currency in which the loan was issued, the type of loan, the lender credit institution, inception date and loan agreement expiration date (based on which the maturity is calculated), loan collateral as well as information on various interest rate aspects: interest rate, type of interest rate (fixed or variable), interest rate ceiling, interest rate floor and reference rate. Information on the size of NFC (large, medium, small enterprise, micro-enterprise) and its main business sector is obtained from state registers. Interest rate analysis was performed by weighted regression, using the loan amount as a weight. Regression-based dominance statistics and the variable ranking are shown in Table A2.1.

The most important variable explaining the variation in interest rates was the credit institution which issued

[152] In the case of multiple regression, a dominance analysis determines the relative importance of an explanatory variable, based on the contribution of the variable to the overall measure of model fit (coefficient of determination R2). Dominance analysis is an ensemble method in which the explanatory power of a variable is determined by calculating the average value of the marginal contributions of this variable to the coefficient of determination in all models in which the variable is included by estimating all possible combinations with p independent variables. (see, for example, [1]). A useful feature of general dominance statistics is that they sum up to the coefficient of determination of the full model (see, for example, [2]).

[153] The analysis was conducted at the individual loan level. Each loan in the sample corresponds to one observation irrespective of the number of borrowers.

the loan[154]. This variable includes the differences in credit institution loan policy, operational costs and risk appetite.

Table A2.1
DOMINANCE ANALYSIS RESULTS

Explanatory variables	All types of loans		All types of loans except credit cards		IRB credit institutions[155], excluding credit cards	
	Dominance statistics	Rank	Dominance statistics	Rank	Dominance statistics	Rank
Lender	21.6%	2	29.6%	1	4.6%	7
Type of interest rate (fixed/variable)	13.7%	3	11.6%	2	5.5%	5
Business sector	5.8%	4	7.5%	3	16.8%	1
Enterprise size	5.6%	5	6.6%	4	11.5%	2
Loss rate	X	X	X	X	7.5%	3
Loan amount	3.5%	6	4.6%	5	6.7%	4
Time dummies	2.6%	7	3.8%	6	5.2%	6
Type of credit	21.9%	1	3.0%	7	1.7%	9
Real estate collateral	0.6%	8	0.9%	8	3.3%	8
Maturity	0.4%	9	0.1%	9	0.2%	10
Total (R^2)	**75.7%**		**67.7%**		**63.0%**	

Interest rates on payment card loans are much higher than interest rates on other types of loans, and therefore, in performing regressions with all loan types, the type of loan explains the greatest part of the interest rate variation – 22% (see column 1 in Table A2.1). Excluding payment card loans from the analysis, the explanatory power of this variable shrank to 3%, and the credit institution that issued the loan became the main explanatory variable. This variable explains almost 30% of the weighted interest rate variation (see column 2 in Table A2.1).

The type of interest rate is also a significant factor[156] – interest rates on fixed-rate loans are considerably higher than those on other loans. It is true though that the share of loans with a fixed interest rate in the total amount of loans issued to NFCs is quite small (only 6% when excluding loans on payment cards).

The sector and the size of the enterprise are the next most important factors that have a fairly high explanatory power in the model .

The loss rate[157] explains only 7.5% of weighted interest rate variation in the case of the IRB credit institutions. Taking into account the fact that IRB credit institutions also provide data to Latvijas Banka's Credit Register on the evaluation of the probability of a default (PD) and loss given defaults (LGD) of a loan, separate regressions were performed, using data from these two credit institutions only, to determine the impact of credit risk parameters on credit pricing. As the explanatory power of loss rate was higher than of the PD alone, the results were reflected, including the loss rate in the regressions as an explanatory variable. This variable is highly significant in the regression model, but it explains only 7.5% of the weighted interest rate variation, whereas the explanatory power of both sector and enterprise size is much higher. **This indicates that the interest rates applied by credit institutions are influenced more by the sector represented by**

[154] Factor variable, the values of which are credit institution codes. In regressions, these are reflected as credit institutions' dummy variables.
[155] Credit institutions which use an internal ratings-based approach in credit risk assessment.
[156] Indicator variable, which shows whether the specific loan interest rate is, or is not, fixed for the entire loan period.
[157] The loss rate is the product of the PD and LGD.

the borrower and the size of the enterprise, rather than the individual credit risk indicators of the borrower (see column 3 of Table A2.1).

The direct impact of real estate collateral on the interest rate is weak. This is also confirmed by the results of the dominance analysis.

Impact of additional borrower-specific indicators

– In this section, analysis was performed at the level[158] of the individual borrower. Latvijas Banka's Credit Register does not contain information on an enterprise's financial indicators, and furthermore the micro-data available for the analysis are anonymized, not allowing companies to be identified. However, the information available did allow for the creation of some indicators which better describe the borrower or its relationships with credit institutions:
– the length of an enterprise's credit history (in years);
– the number of credit institutions at which a borrower has active loans;
– the number of loans at a specific credit institution prior to the issue of the new loan;
– existence of historical payment defaults[159];
– the number of loans at a specific credit institution on the loan's inception date, including the loan to be issued.

The results of the dominance analysis are shown in Table A2.2.

Table A2.2
RESULTS OF DOMINANCE ANALYSIS WITH ADDITIONAL BORROWER-SPECIFIC VARIABLES

All type of credit excluding credit cards loans		
Explanatory variables	**Dominance statistics**	**Rank**
Lender	27.1%	1
Type of interest rate (fixed/variable)	11.3%	2
Business sector	7.1%	3
Enterprise size	4.7%	4
Loan amount	4.7%	5
Time dummies	3.6%	6
Length of enterprise's credit history (in years)	3.5%	7
Type of loan	2.7%	8
Number of loans at the specific credit institution prior to the new loan	1.6%	9
The number of credit institutions in which the borrower has active loans	1.5	10
Real estate collateral	0.9	11
Maturity	0.1%	12
Total (R^2)	**68.8%**	

[158] For some loans in the previously examined data, there were two borrowers in total. In this section, each borrower in the sample is examined separately where their common information about a loan (interest rate or size of loan) is repeated. Its regression is corrected with corresponding weights.
[159] Indicator variable which shows, that in the last five years, a borrower has delayed payments for more than 60 calendar days, and the customer's delayed payments total, including penalty payments and any contract penalty, are equal to or exceed 150 euro. This information is available to a credit institution on Latvijas Banka's Credit Register prior to the issuing of loans to a potential borrower.

The only additional indicator considered in this appendix, which was found to have a material explanatory power, was the length of the credit history. Despite its statistical significance, it was only able to explain 3.5% of the variation in interest rate.

The existence of historical defaults in payments could potentially also be a very important variable, however, it did not turn out to be useful for the analysis, as credit institutions very rarely grant new loans to borrowers with an insufficiently sound credit history (there were only 135 such observations in the sample, and of these, only 92 were unique borrowers).

Conclusions

There is a high degree of market segmentation in the NFCs lending market. Therefore, the availability of competing offers for borrowers is more limited than it may seem, bearing in mind the relatively large number of credit institutions in Latvia. This particularly affects borrowers in the SME group. The credit institution which grants the specific loan is the main determinant of the lending rate. This factor encompasses the lending policy, cost of operations and differences in risk appetite of the credit institutions.

The size of the enterprise, the sector which it represents and the type of interest rate fixation are the next most significant factors, which determine the differences in interest rates. Loss rate[160] is a less important factor influencing interest rates.

Real estate collateral does not significantly decrease the loan interest rate. In the SME segment, it is rather a necessary precondition for the issuing of a loan.

The length of an enterprise's credit history is the most significant additional borrower-specific factor, but the explanatory power of this indicator is lower than that for the size of the enterprise and the sector in which the enterprise is operating.

REFERENCES

[1] Azen, R., & Budescu, D. V. (2003). The dominance analysis approach for comparing predictors in multiple regression. Psychological Methods, vol.8, issue 2, pp. 129–148.

[2] Grömping, U. (2007). Estimators of Relative Importance in Linear Regression Based on Variance Decomposition. The American Statistician, vol. 61, pp. 139–147.

[160] For credit institutions on which this information is available.

APPENDIX 3. MONEY MARKET BENCHMARK REFORMS CONTINUE

Currently, global financial markets are in a transition to introducing more reliable benchmark rates and are preparing the most appropriate alternative reference rates in case the existing benchmark rates become unavailable. LIBOR's administrator has already announced the end of publication in a foreseeable future. EONIA will be replaced by €STR, whereas the future of EURIBOR remains unclear. Any changes with regard to EURIBOR and other reference rates would have a significant effect on the operation of Latvia's credit institution system, considering that most of the loans granted by Latvia's credit institutions use EURIBOR or another money market benchmark as a reference rate.

Most of the loans granted by Latvia's credit institutions use EURIBOR or another money market benchmark as a reference rate when estimating the interest rate and the respective amount to be paid in relation to a financial instrument or a contract. As at the end of 2020, 76% of outstanding loans to households were referenced to EURIBOR, 16% were fixed rate loans and only a small fraction of all loans was linked to interest rate benchmark in other currencies (see Chart A3.1). The prevalence of EURIBOR in the NFC segment was even higher: EURIBOR was used as a reference rate for 90% of the credit institution loans outstanding in the NFC sector (see Chart A3.2).

Chart A3.1
CREDIT INSTITUTION LOANS TO HOUSEHOLDS BY REFERENCE RATE
(%)

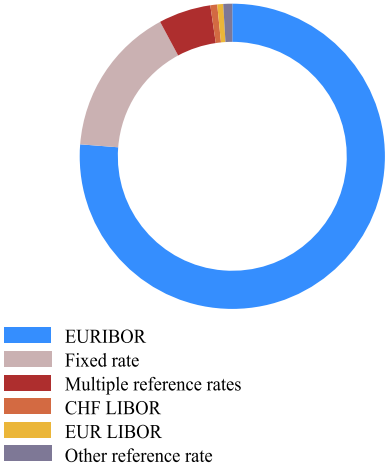
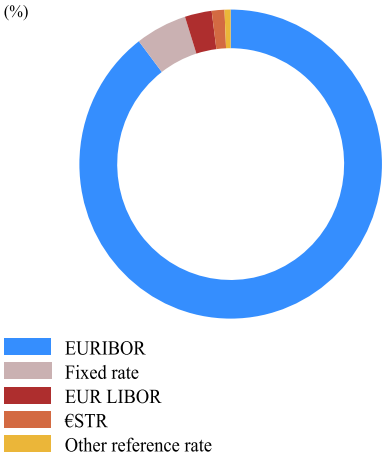


Chart A3.2
CREDIT INSTITUTION LOANS TO NFCs BY REFERENCE RATE
(%)



Benchmark rates or indices used for reference when setting the interest rates and calculating the respective amounts payable in relation to financial instruments or contracts have an important role in financial markets. Many financial instruments, including deposits, debt securities and financial derivatives, are linked to their values. Benchmark rates have been in the focus of market participants and regulators already since 2008, when The Wall Street Journal published an article[161] voicing suspicions over possible manipulations with the LIBOR rates. Over the following years, several banks on the LIBOR panel were found guilty of manipulations and faced impressive fines. Subsequently, it was discovered that the EURIBOR was also subject to manipulations. There is a recent tendency for the number of banks on reference rate panels, particularly on those involved in scandals, to decrease. A lower number of banks increases the panel's concentration and may impair the representativeness of the benchmark rate.

[161] https://www.wsj.com/articles/SB120831164167818299

Soon after the above-mentioned financial market developments, it became clear that the benchmark rates could not survive long in their existing format and they required reforming. In 2013, IOSCO published Principles for Financial Benchmarks[162]. These principles comprised governance, quality and accountability requirements with regard to financial benchmarks. Among other principles, it was also advised that benchmarks should be based firmly on market transactions. In 2016, EU Regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds[163] (hereinafter, Regulation on indices) was published, which is applicable as of 2018. EONIA and EURIBOR were classified as critical benchmarks pursuant to this Regulation. In their original form, these benchmarks were inconsistent with the IOSCO principles for financial benchmarks; therefore, it was decided to replace EONIA by €STR and use a new methodology for EURIBOR calculation. LIBOR, widely used for other currencies, also was reformed, and, at the turn of 2020, its administrator ICE (Intercontinental Exchange) announced the intention to cease the publication of certain LIBOR settings after 31 December 2021[164].

The EURIBOR rates are also subject to the risk of cessation; therefore, the EU Regulation on indices and the IOSCO recommendations provide that any contracts referencing to a benchmark should nominate alternative or substitute benchmarks.

The methodology for calculating EONIA changed on 2 October 2019, when the ECB started publishing the new euro money market benchmark €STR; EONIA is now calculated as the €STR plus 8.5 basis points, and its publication is scheduled for discontinuation as of 3 January 2022. **Market participants are advised to replace the previously used reference to EONIA in their new contracts with a reference to the new euro short-term rate €STR and to phase in the €STR in legacy contracts valid beyond 3 January 2022[165].** According to the methodology review conducted in 2020[166], the €STR is based on a sufficient volume of transactions and correctly reflects the short-term money market dynamics. Latvia's credit institutions have already referenced some of their new loan contracts with NFCs to the €STR. As at the end of 2020, loans referenced to the €STR accounted for 1.6% of all outstanding loans to NFCs granted by Latvia's credit institutions.

The working group on euro risk-free rates, established by the ECB, the Belgian Financial Services and Markets Authority (FSMA), the European Securities and Markets Authority (ESMA) and the EC, continues working on an action plan should the EURIBOR rates no longer be available. Recommendations for replacement of the EURIBOR rates with the most suitable alternative or substitute benchmarks across various asset classes are due for publication in 2021. Part of credit institutions have already expressed their interest in incorporating fallback provisions in their loan contracts and their number is likely to increase following the said publication.

In the meantime, to support the transition to the €STR also in contracts referenced to a longer-term reference rate, the ECB started publishing compounded €STR average rates and compounded index based on the €STR as of 15 April 2021. The compounded €STR average rates and the index are based entirely on historical €STR rates, which are publicly available. The rates and the index are published on the ECB's website on a daily basis, providing unrestricted public access. The compounded €STR average rates cover 1-week, 1-month, 3-month, 6-month and 12-month tenors, same as the current EURIBOR rates, thus providing robust substitute benchmarks for contracts referenced to the EURIBOR rates. In addition, the compounded €STR index enables the derivation of compounded rates for any non-standard tenor.

[162] https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf
[163] https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02016R1011-20210213&qid=1618320549605&from=EN
[164] https://www.theice.com/iba/libor
[165] https://www.ecb.europa.eu/paym/interest_rate_benchmarks/WG_euro_risk-free_rates/html/transition.en.html
[166] €STR annual methodology review (europa.eu)

Like the ECB, other major central banks also play a significant role in benchmark reforms and provide maximum contribution to ensuring new benchmark replacements. The US Alternative Reference Rates Committee has named the secured overnight financing rate (SOFR) as the preferred alternative for the US dollar LIBOR index. In order to smooth the transition from the US dollar LIBOR, data on indicative SOFR compound averages for various tenors and the SOFR index are published as of March 2020. In addition to that, the development of the market for financial derivatives referenced to the SOFR is encouraged, thereby supporting the evolution of forward-looking reference rates. The overnight money market rate SONIA for the British pound sterling is the benchmark recommended by the risk-free reference rates working group as an alternative for the LIBOR GBP. In order to support the transition, the publishing of SONIA compounded index started already in August 2020.

APPENDIX 4. INCREASING RELEVANCE OF CYBERSECURITY RISK

In the context of the COVID-19 pandemic, the importance of remote work has increased considerably and, thus, also the relevance of cybersecurity risks. Attempts to trick users into giving out their information have increased on a global scale. Moreover, several major cyber attacks have taken place, albeit with no direct impact on the financial system. At the same time, measures are taken to reduce the cybersecurity risk in the EU: in September 2020, the EC proposed Regulation on digital operational resilience for the financial sector.

With remote work becoming more important, the cybersecurity vulnerabilities of users increase as a rising number of employees perform their duties from home, without the presence of their colleagues and the backing of support staff, inter alia IT specialists, and often without the protection of corporate computer networks. As a result, the cybersecurity risk increases not only for the individual employees, but also for their employers. According to CERT.LV, the number of cyber attacks on households rose by 15–30% at the beginning of 2020 compared to the pre-pandemic period[167]. Therefore, the importance of cybersecurity literacy of users has grown considerably.

In 2020, several major cybersecurity incidents were reported around the world. For instance, in August 2020 the New Zealand stock exchange was hit by a distributed denial-of-service attack[168] which seriously affected its ability to service customers as they were denied access to one of its information systems two days in a row. The incident reveals that the operation of systemically important financial institutions may be affected by the relatively long-known distributed denial-of-service attack.

Possibly, the most serious cybersecurity incident of the last decade was detected at the end of 2020. The software updating system of the US-based company SolarWinds[169] was compromised, i.e. customers downloaded and installed software solutions modified by attackers, thus making their information systems vulnerable to attacks. Since the software is relatively widely used, more than 18 thousand customers, including several US government institutions, were affected. Considering that the attackers accessed the company's systems via a widely used software, an attack of this scale has a potential to create a systemic impact, inter alia on the financial system. As indicated in the previous Financial Stability Report[170], it is important to pay particular attention to the cyber resilience of widely used country- or region-specific software, as such products may be used as channels to access information systems of various businesses and institutions, potentially, with systemic consequences.

The above incidents confirm: when it comes to cybersecurity, the question is not whether there will be a successful attack, but rather – when it will happen and what will be the consequences. Therefore, it is important that contingency plans are developed in a timely manner and they specify the course of action in the event of a successful cyber attack as well as ways to reduce the damage caused by the attack, prevent a prolonged interruption of operation and ensure data security and recovery where the data have been compromised. This is particularly important for financial institutions as their information systems are very complex and often incorporate outdated systems. Moreover, the pandemic may have hindered their modernisation[171].

---

[167] CERT.LV Annual Report 2020 (https://cert.lv/en/2021/05/cert-lv-annual-report-2020)

[168] New Zealand stock exchange halted by cyber-attack. 26 August 2020 (https://www.bbc.com/news/53918580)

[169] CERT.LV "Apjomīgā incidenta "SolarWinds" ietekme uz Latvijas kibertelpu" (The impact of the SolarWinds incident on Latvia's cyberspace; https://cert.lv/lv/2021/01/apjomiga-incidenta-solarwinds-ietekme-uz-latvijas-kibertelpu)

[170] Latvijas Banka's "Financial Stability Report 2020", Appendix 3 "Cybersecurity risk: current digital reality" (https://datnes.latvijasbanka.lv/fsp/FSP_2020_en.pdf)

[171] ECB Financial Stability Review, May 2021, p. 63 (https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr202105~757f727fe4.en.pdf).

To facilitate the resilience to cybersecurity risks in the EU, in September 2020 the EC proposed Regulation on digital operational resilience for the financial sector[172] (DORA) which forms part of the Digital finance package[173]. The proposal envisages a more comprehensive and coherent approach for cybersecurity risk management in the EU financial sector. The most significant changes proposed for the financial sector include the oversight of the outsourced critical service providers, threat-led penetration testing, more coherent and efficient reporting of cybersecurity incidents as well as closer cooperation among the supervisors of financial institutions, European Supervisory Authorities (EBA, EIOPA and IOSCO) and institutions responding to information systems security incidents (e.g., CERT.LV in Latvia). The draft regulation has not been completed yet, its entry into force may take more than a year and, after that, it will be supplemented with secondary legislation; nonetheless, it is considered to be a very important step towards improving the region's cyber resilience. This proposal will certainly create the need for financial sector supervisors to develop their capacity to ensure the performance of their new tasks as well as for financial institutions to make further contributions to ensure cybersecurity. These contributions are necessary to ensure the security and continuity of financial services, and they will help mitigate systemic risks.

The cybersecurity risk remains a significant threat to both individuals and businesses, inter alia a potential systemic threat to the financial system. Moreover, this risk is becoming more and more relevant as businesses are increasingly moving their activity to the digital environment. Nonetheless, it is possible to join forces in mitigating the risk and its potential negative impact. This means that individuals should educate themselves in matters related to cybersecurity[174] and financial literacy[175], whereas businesses should pay particular attention to the security of their information systems and the cybersecurity literacy of their employees. Meanwhile, financial institutions, in cooperation with the supervising authorities, should continue to strengthen their cybersecurity resilience, based on all the available information on the best practices.

[172] Proposal for a Regulation of the European Parliament and of the Council (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0595)

[173] Digital finance package: the Commission sets out a new, comprehensive approach to facilitate responsible innovation for the benefit of consumers and businesses (https://ec.europa.eu/latvia/news/digit%C4%81l%C4%81-finans%C4%93juma-pakete-komisija-izkl%C4%81sta-jaunu-v%C4%93rien%C4%ABgu-pieeju-lai-veicin%C4%81tu-atbild%C4%ABgu_lv)

[174] https://www.esidross.lv/

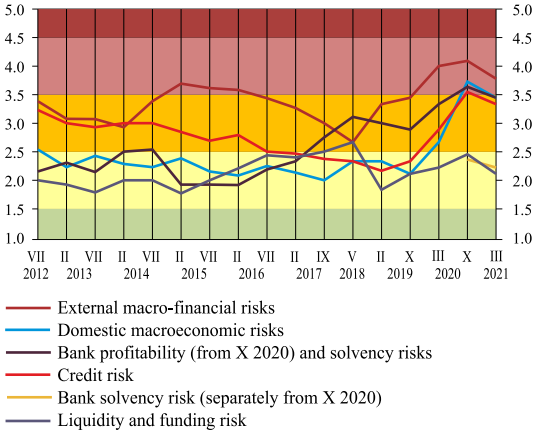
[175] https://www.finansupratiba.lv/

APPENDIX 5. CREDIT INSTITUTION SURVEY ON RISKS

Risk factors

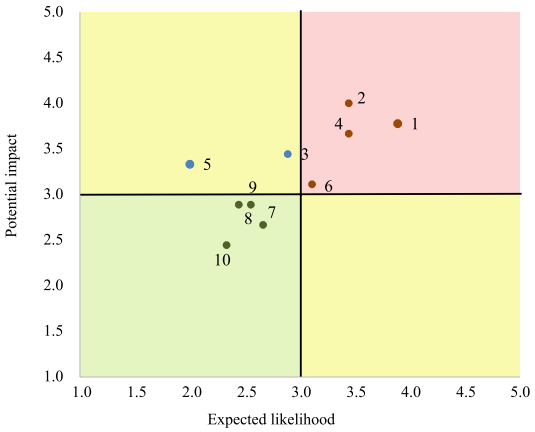
1 Deterioration of Latvia's economic situation on account of domestic factors and the Covid-19 pandemic.
2 Negative impact of significant deterioration of external macro-financial environment on Latvian economy.
3 Deterioration of household creditworthiness.
4 Deterioration of NFCs creditworthiness.
5 Substantial changes in residential real estate prices.
6 A significant fall in demand in commercial real estate market.
7 Rising risks in parent credit institutions of the largest Latvian credit institutions or in their home countries (including rising macro-financial risks in their economies or increase in funding risks in the parent credit institutions).
8 IT security risks for Latvia's financial system.
9 Reputation risks and other risks related to developments in AML/CFT requirements in Latvia and Nordic countries.
10 Effect of climate change physical and transitional risks on Latvia's financial system (unlike other risks, these are assessed over a medium term (5–7 years) horizon).

Chart A5.1
CREDIT INSTITUTION* ASSESSMENT OF THE KEY RISK CATEGORIES IN TERMS OF RISK LEVEL (CONSIDERING THE EXPECTED LIKELIHOOD OF A RISK AND THE POTENTIAL NEGATIVE EFFECT)

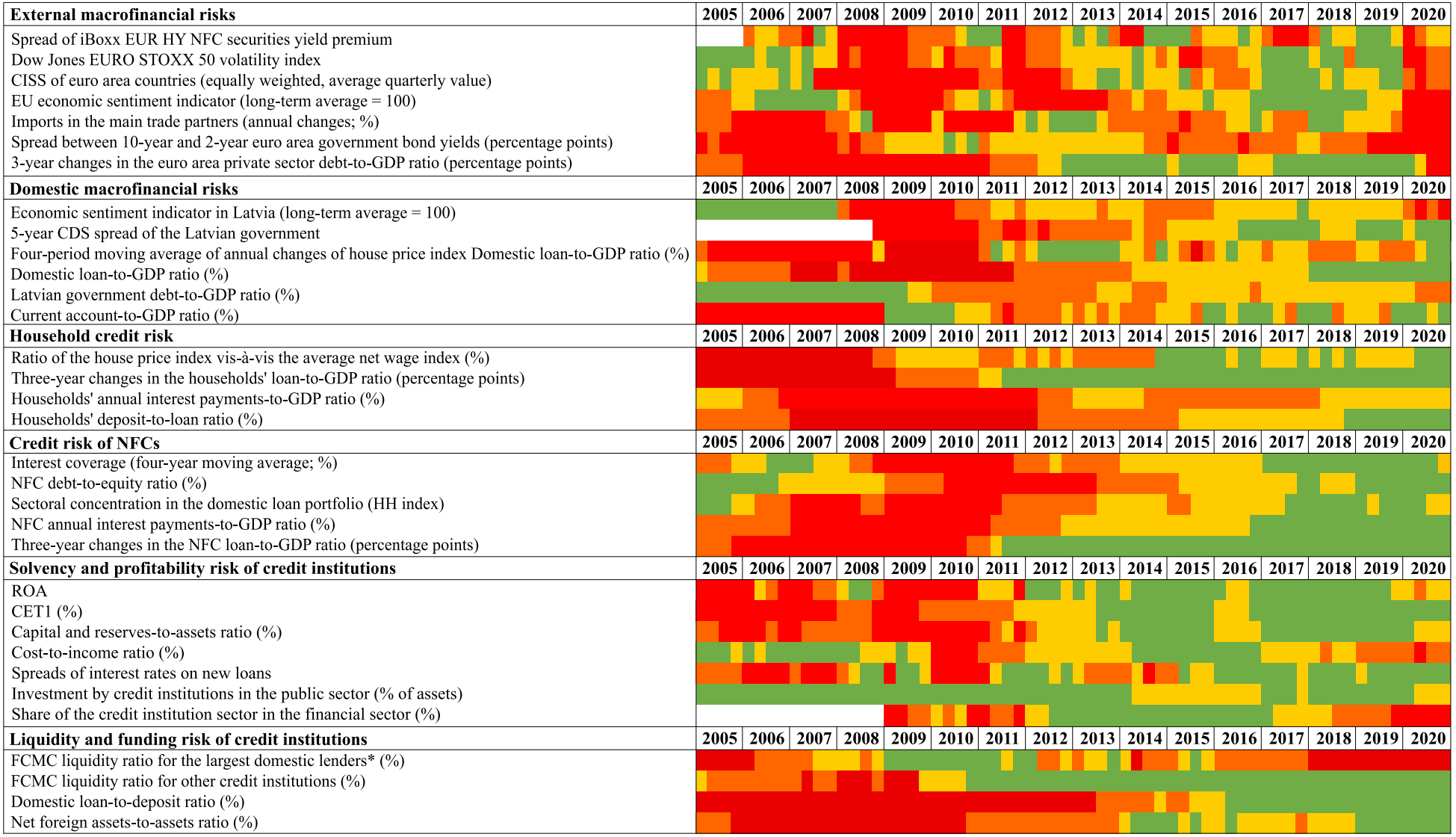


* In March 2021, Latvijas Banka conducted a credit institution survey regarding their assessment of risks to Latvia's financial system. The survey respondents were Swedbank AS, AS SEB banka, Latvian branch of Luminor Bank AS, AS Citadele banka, AS BlueOrange Bank, AS Expobank, AS Reģionālā investīciju banka, AS LPB Bank and Signet Bank AS.

Chart A5.2
CREDIT INSTITUTION ASSESSMENT OF RISK FACTORS (DATA FOR MARCH 2021)



APPENDIX 6. HEATMAP OF EARLY WARNING INDICATORS



* 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 the group level. Although the support provided by the parent bank reduces liquidity risk and the FCMC liquidity ratio is not a mandatory supervisory requirement for these credit institutions, the FCMC liquidity ratio is employed for risk monitoring.

Notes. 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 arising from the ratio of the indicator to its average historical benchmark is indicated by colour: **low** **medium** **medium high** **high**

Comments about the 2020 results of the heatmap of early warning indicators

External macrofinancial risks. The global economy and economic sentiment continue to evolve in waves, mirroring the development of the pandemic and the associated containment measures. Financing of support measures results in higher levels of sovereign debt and also partly contributes to larger corporate and household indebtedness. Uncertainty and volatility have increased since the start of the pandemic.

Domestic macrofinancial risks. In 2020, economic activity decelerated and confidence deteriorated in Latvia under the impact of the Covid-19 pandemic. Government support and other types of aid improved the economic resilience. As at the end of 2020, the government deficit and debt stood at the highest levels since the previous crisis; nevertheless, the sustainability of public finances has remained unchallenged. The financing conditions of both private sector and government have overall remained favourable. The negative effect of the Covid-19 pandemic on the housing market has been temporary.

Household credit risk. The Covid-19 pandemic had a significant effect on the part of population employed in the sectors hit hard by the pandemic. Nevertheless, the financial soundness of households remains overall resilient: the aggregate level of debt and the interest burden are low, the payment discipline has not deteriorated. Gross savings and wage bill of households increased; moreover, the average wage growth outpaced that of the housing prices.

Credit risk of NFCs. The crisis implications for the NFCs solvency were mitigated by the government support and measures to eliminate the fallout from the pandemic, and the financial vulnerability of a major part of NFCs has not increased significantly. Nevertheless, the vulnerability and solvency risks in sectors directly affected by the crisis are extremely elevated. The number of NFCs facing solvency problems most probably will grow along with the narrowing and withdrawal of the government's pandemic support measures.

Solvency and profitability risk of credit institutions. At the onset of the pandemic, credit institutions built up precautionary savings as well as suffered losses from trading and revaluation of financial instruments, which reduced their ROA and increased the cost-to-income ratios. At the same time, the spreads remained stable, because the borrowers' ability to keep up with at least their interest payments remained broadly unchanged due to the government support measures and moratoria on loan repayments.

Liquidity and funding risk of credit institutions. The largest credit institutions have low FCMC liquidity ratios, as these are mostly subsidiaries of Nordic banks with centralised liquidity management and access to additional liquidity from their parent banks. Other credit institutions maintain large liquidity buffers. Overall, credit institutions are fully capable of funding their domestic loans from the collected domestic non-bank deposits.

APPENDIX 7. PERFORMANCE INDICATORS OF CREDIT INSTITUTIONS

Indicator	2015	2016	2017	2018	2019	2020	March 2021
Balance sheet items							
Number of credit institutions and subsidiaries of foreign credit institutions	27	23	21	20	19	16	16
Total assets (millions of euro)	31 937.7	29 496.1	28 387.7	22 870.5	23 202.9	24 558.1	25 642.3
Share of loans in total assets (%)	46.0	51.3	50.9	59.3	58.1	52.7	54.5
Annual growth rate of domestic loans (%)	–1.5	3.1	–2.8	–4.1	–1.5	–3.3	6.0
Share of deposits in total liabilities (%)	72.8	72.4	71.4	71.4	74.2	76.0	76.3
Annual growth rate of deposits received from domestic customers (%)	1.0	12.6	0.0	6.6	7.3	8.4	14.0
Domestic loan-to-deposit ratio (%)	114.6	104.9	101.9	91.7	84.1	73.8	76.0
Profitability[176]							
ROE (%)[177]	10.7	13.9	6.3	9.7	3.1	5.4	7.5
ROA (%)[178]	1.2	1.4	0.7	1.2	0.3	0.5	0.7
Cost-to-income ratio (%)[179]	51.2	53.2	58.1	60.0	65.2	64.5	63.2
Capital adequacy[180]							
Own funds (millions of euro)	3184.9	2910.2	3063.7	2697.3	1936.8	2315.4	2325.4
CET1 capital (millions of euro)	2764.5	2471.0	2732.0	2454.2	1802.6	2219.5	2232.2
RWA (millions of euro)	14 583.8	14 269.0	14 844.3	12 091.3	9188.8	8633.5	9398.5
Total capital ratio (%)	21.8	20.4	20.6	22.3	21.1	26.8	24.7
CET1 ratio (%)	19.0	17.3	18.4	20.3	19.6	25.7	23.7
Leverage ratio (%)	9.4	9.2	9.6	10.4	9.3	10.1	9.7
Liquidity (%)[181]							
Liquid assets relative to total assets (%)[182]	40.2	33.8	37.4	31.8	32.1	35.6	33.0
LCR (%)	–	342.7	313.4	252.9	286.3	353.7	301.0
NSFR (%)[183]	148.2	148.5	146.0	138.2	144.9	155.9	142.1
Asset quality[184]							
Ratio of provisions for NPLs in the loan portfolio (%)	5.2	4.2	3.7	3.1	3.3	1.9	1.7
Share of loans past due over 90 days in the loan portfolio (%)	6.3	4.7	4.2	4.0	3.9	2.3	1.9
Share of NPLs in the loan portfolio (%)	10.2	9.3	8.5	7.5	7.1	4.7	4.5

[176] Indicators for 2016–2021 have been calculated based on FCMC consolidated-level data, but indicators for 2015 – based on ECB consolidated bank statistics. The one-off effects referred to in Chapter 2 "Development and Risks of the Credit Institution Sector" have not been excluded from profitability ratios.
[177] Annualised profit/loss ratio to average capital and reserves of the reporting period (excluding data of foreign credit institution subsidiaries).
[178] Annualised profit/loss ratio to average assets of the reporting period.
[179] 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.
[180] Data are shown at the consolidated level.
[181] Data are presented at the level of individual credit institutions.
[182] 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).
[183] Latvijas Banka's estimate.
[184] The loan quality indicators for 2016–2020 have been calculated based on consolidated data for the credit institutions subject to consolidated supervision and individual credit institution data for other credit institutions and branches of foreign banks (for 2015 based only on consolidated data for the credit institutions subject to consolidated supervision, for the first quarter of 2021 – based on individual credit institution data). 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".