

# Financial Stability Review

October 2022



Issued by: Banka Slovenije Slovenska 35

1505 Ljubljana

Tel: +386 1 4719000 Fax: +386 1 2515516

The Financial Stability Review is based on figures and information available at the end of June 2022, unless otherwise explicitly stated.

Editors: Damjana Iglič, Aleš Kavrečič

Other contributions by:

Marko Bračković (UK), Vida Bukatarević, Dr Jelena Ćirjaković, Dr Marija Drenkovska, Romana Jager, Aleš Kavrečič, Mitja Lavrič, Dr Črt Lenarčič, Goran Obradović, Dr Selcuk Ozsahin (Switzerland), Borut Poljšak, Franc Remšak, Dr Iskra Sokolovska, Grega Torkar

The figures and text herein may only be used or published if the source is cited.

ISSN 1581-9760 (online version)

FINANCIAL STABILITY REVIEW



#### Foreword to the Financial Stability Review



More than seven months have passed since the outbreak of the Russian military aggression against Ukraine, which has plunged Europe, if not the whole world, into a new period of uncertainty, in a societal sense, and in an economic and financial sense. During the first few days of the Russian military aggression this uncertainty was felt in Slovenia in a loss of confidence in one of the banking institutions, which necessitated the use of the European bank resolution framework in practice for the first time since its establishment in Slovenia. With all the stakeholders working together in exemplary and effective fashion, the case was brought to a successful conclusion for the Slovenian economy and the customers.

Seven months later we find the uncertainty to be far from over. The war, as we can now call the military aggression, is still ongoing, and its consequences are having a major impact on our present and our future. Even at the end of last year and during the early part of this year our analysis had identified the economy in Slovenia and further afield as cooling, while forecasting inflation to exceed our medium-term target of around 2%. The geopolitical

and economic uncertainty that followed the outbreak of the war has only exacerbated these developments.

Various factors mean that GDP growth in Slovenia will be relatively favourable this year, but the outlook for next year and for 2024 is worse, and above all uncertain.

Inflation is of course a particular focus, and is a key part of our mandate. Thanks to the interplay of various factors, it was clear even last year that inflation would surpass our inflation target after years of trailing it. But before the outbreak of the war it appeared that after a temporary rise it would begin returning relatively quickly to the 2% target. The geopolitical tensions cast aside these expectations, and now it is a fact that inflation in Slovenia (and further afield) will be significantly higher than originally thought, and that it will take significantly longer to return to the bounds established by our monetary policy. Our current assessment is that inflation in Slovenia will only approach the 2% target towards the end of 2024.

Developments across the region will of course be similar. Economic growth is expected to continue in 2023, albeit more weakly, and the risk of recession is rising under the more adverse scenarios. Inflation reached 9.1% in the euro area in August (and 11.5% in Slovenia), and the expectations for next year are not on target. The geopolitical tensions are driving up food prices, while the situation in the energy sector is extremely tense and unfavourable, and EU governments are trying to mitigate high energy prices through a number of measures. The disruptions to supply chains that were driving inflation even before the war have continued.

In light of this situation, we have also begun to make adjustments to monetary policy. The Governing Council of the ECB thus decided at its June meeting to continue normalising monetary policy. The decisions taken at that time related to the ending of net purchases of securities under the APP, the finding that the conditions under the forward guidance policy had been met, and the intention to raise interest rates, which was met in July (a hike of 50 basis points), with a further hike (of 75 basis points) following in September. The interest rate hikes and their impact on the financing conditions will prevent current inflation expectations from extending over the medium term. As far as inflation is concerned, it is vital that various strands of economic policy work together well, as pressures on the supply side cannot be effectively addressed by monetary policy alone.

The developments described above have of course had an impact on the financial sector, which is the focus of the Financial Stability Review. If we were anticipating the gradual normalisation of the situation in the financial system as the end of the pandemic approached, the Russian military aggression changed the thinking on the risks that the financial system is currently facing, and those that it will face in the near future. In general it can be said that the geopolitical tensions in our broader environment, and thus in Slovenia, are



being reflected in elevated risks to financial stability, although compared with the pandemic period the focus of the elevated risks has shifted slightly, with other risks to financial stability coming to the fore.

Of course, an assessment of the stability of the financial system cannot overlook the (renewed) increase in the risks coming from the uncertainty in the economic environment in which financial institutions, banks in particular, do their business. Our assessment is that there are several channels and indirect pathways via which a deterioration in the economic situation might spill over into a deterioration in the financial system, and macroeconomic risk is therefore still assessed as elevated. Moreover, the continued worsening of the economic situation could see this risk strengthen in the future.

The risk inherent in the real estate market remains at a similar level: in the wake of their recent intensive growth (Slovenia is currently in the top quarter of EU Member States in terms of the year-on-year rate), residential real estate prices have now entered the zone of overvaluation relative to fundamentals in our assessment. It should not be ignored that housing loans have contributed to the strong demand on the real estate market seen over the last year, which supply is still having difficulty in keeping pace with. The stock of housing loans has more than doubled in Slovenia since the outbreak of the global economic and financial crisis, which has completely changed the investment side of the Slovenian banking system's balance sheet.

But it is not just the structure of bank investments in terms of customer type that has changed. The nature of housing loans means that the aforementioned change has also changed the maturity breakdown of bank investments (housing loans are typically of longer tenor than loans to non-financial corporations) and the nature of remuneration (housing loans have driven a large rise in fixed-rate lending by the banks in recent years). If the rise in consumer financing in recent years is also taken into consideration, then the result is clear. Interest rate risk in the banking system has therefore strengthened significantly in recent months. The repricing gap had remained more or less constant over the last few years, but has lengthened in recent months. Interest rate risk thus remains elevated, and our assessment is that the banks' exposure to interest rate risk will actually increase in the future.

The aforementioned changes in the structure of the banking sector's investments are also being reflected in a gradual increase in the maturity gap: bank assets have lengthening maturities, while the rise in the share of sight deposits has entailed a shortening of the average maturity of the banking system's liabilities. This structure is raising funding risk, although our analysis suggests that sight deposits are a relatively stable source of bank funding.

The pandemic brought a sharp rise in credit risk in the banking system, which has not (yet) been realised, thanks to economic policy measures and adjustments by banks and, not least, bank customers. Conversely, the NPL ratio has been declining steadily in recent years in Slovenia, similarly to the broader region. However it cannot be denied that the geopolitical tensions will have an adverse impact on bank customers and the banking system. Slovenian banks have relatively low exposure to the countries involved in the conflict, but an indirect impact can be expected. Banks in Europe have already responded by reclassifying certain existing loans to the stage with increased credit risk (Stage 2 under IFRS 9), while this share is still declining in Slovenia. This means that in general banks in Slovenia have not yet recognised the elevated credit risks, and will have to adapt over the coming months.

In the risk context our finding is that the outlook for income generation in the banking system is slightly better now than in recent months and years. Insofar as the banks succeed in continuing their current loan pricing policy amid the restrained growth in interest rates on deposits, and maintain favourable trends in generating non-interest income, there could be expectation of an improvement in the conditions for generating income. This naturally raises the question of how the future need to create impairments and provisions will evolve, this having been a major factor determining bank performance in recent years.

It is therefore vital that the banking system retains sufficient robustness. As far as liquidity is concerned, there are no particular cautionary messages. But there remain three facts of note with regard to solvency: i) the total capital ratio in Slovenia is lower than in the broader environment (the EU), ii) capital ratios have been falling for some time now as a result of faster growth in lending, while revisions made because of the falling value of securities holdings have accelerated the decline, and iii) there are considerable differences between banks in Slovenia. Although the macroprudential measure that targeted capital retention in the banking system (i.e. it restricted profit distributions) expired in September of last year, capital management needs to be one of the priorities for the commercial banks during these renewed uncertain times.



Macroprudential policy in Slovenia otherwise addresses risks to financial stability. The changes put in place several months ago in the area of household lending will be augmented at the beginning of next year by the introduction of a sectoral systemic risk buffer. The current situation has once again given rise to deliberation about the suitable rate of the countercyclical capital buffer, which aims to protect the banking system from any losses resulting from excessive credit growth. Approximately a third of EU Member States have strengthened the robustness of the banking system in recent years by introducing a positive countercyclical capital buffer. The current rates range from 0.5% to 1%. Seen comparatively, our macroprudential policy is currently neutral in the assessment of the ESRB (neither notably tight nor loose), and the potential introduction of the buffer would not alter this assessment. Our decision over the coming months will depend above all on the economic situation, developments in credit activity, and the situation in the real estate market.

Dr Primož Dolenc



## CONTENTS

EX	ECUTIVE SUMMARY	1
1	KEY RISKS TO THE BANKING SYSTEM	4
	1.1 Macroeconomic risk	4
	1.2 Risk inherent in the real estate market	8
	1.3 Funding risk	12
	1.4 Interest rate risk	15
	1.5 Credit risk	20
	1.6 Income risk	25
2	RESILIENCE OF THE BANKING SYSTEM	31
	2.1 Solvency and profitability	31
	2.2 Liquidity	34
3	HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS	37
	3.1 Households	37
	3.2 Non-financial corporations	40
4	NON-BANK FINANCIAL INSTITUTIONS	45
	4.1 Leasing companies	45
	4.2 Insurers	45
	4.3 Mutual funds	48
5	MACROPRUDENTIAL POLICY FOR THE BANKING SYSTEM AND	LEASING
	COMPANIES	50
6	APPENDIX	56

### Boxes

Box 1.1	Certain significant effects of the rise in interest rates on the banking system's income statement	18
Box 1.2	Digital transformation and use of fintech in the banking system	28
Box 3.1	Indebtedness and debt servicing capacity of non-financial corporations	43
Box 5.2	Decomposition of climate risk indicators	53



## **EXECUTIVE SUMMARY**

The general level of systemic risks to financial stability in Slovenia remains elevated. The continuing Russian military aggression against Ukraine and the resulting shocks represent the greatest risk to future economic growth. This has been reflected in the assessment of macroeconomic risk, which remains elevated in the third quarter (see Table 1.1.1), despite the encouraging economic growth achieved in the first half of this year. A further deterioration in the assessment over the horizon of one year is not ruled out, given that soaring inflation, the disruptions to supply chains, and declining confidence are worsening the macroeconomic situation. The risk inherent in the real estate market remains elevated, as a result of the continuing surge in residential real estate prices and strengthened housing lending. In April we therefore made adjustments to our macroprudential measures to limit the transfer of risks from the real estate market to the banking system and to strengthen bank resilience in the event of any realisation of risks. The further rise in fixed-rate long-term housing loans is additionally increasing the banks' interest sensitivity. Interest rate risk thus remains elevated, with the potential for a further deterioration over the horizon of one year. Indicators of asset quality have improved further, but the uncertainty means that the assessment of credit risk remains elevated in the third quarter. In light of the deterioration in the macroeconomic outlook and amid high inflation, our assessment is that this will adversely impact the performance of customers and their debt servicing capacity in the future. The outlook for income risk, which has remained elevated for a long time now, is gradually improving. The rise in lending means that the accompanying positive quantity effects are being reflected in growth in net interest income, while the overall negative growth from price effects is diminishing. In the wake of a gradual rise in interest rates, additional positive effects on income generation at banks can also be anticipated. The resilience of the banking system and its capacity to absorb the adverse effects of any realisation of systemic risks remains unchanged, and is assessed as medium in the solvency and profitability segment, and high in the liquidity segment.

					Risk a	shboard	rd		
	Q4 2020		Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Trend c chang
Systemic risk									
Macroeconomic risk									Î
Risk inherent in the real estate market									$\implies$
Funding risk in the banking system									$\Longrightarrow$
Interest rate risk in the banking system									Î
Credit risk in the banking system									Î
Income risk in the banking system									Ī
Risk inherent in leasing companies									$\Rightarrow$
Resilience to systemic risks									
Solvency and profitability									Ţ
of the banking system Liquidity of the banking system									Ţ
	igh rerv low								~

 Table 1.1
 Banka Slovenije's risk and resilience dashboard for the Slovenian financial system

Note: The colour code in the risk and resilience dashboard relates to the assessment for up to one quarter in advance. The arrow illustrates the expected change in risk or resilience in the scale (up or down) over a slightly longer horizon of around one year. For risks, an up arrow means an increase in risk, and vice-versa, while for resilience it means strengthening, and vice-versa. The risk and resilience dashboard is based on analysis of key risks and resilience in the Slovenian banking system, and is defined as the set of quantitative and qualitative indicators for defining and measuring systemic risks and resilience.
 Source: Banka Slovenije

Macroeconomic risk is still assessed as elevated with a trend of increase, which in the future might be adversely reflected in the performance of the banking system via a number of channels. Following the relatively high growth in the second quarter, the performance of the domestic economy remained



encouraging going into the third quarter, but the outlook for the second half of the year deteriorated significantly as economic sentiment worsened. Borrowing costs rose amid high inflation, which became broad-based, hikes in the ECB's key interest rates, and uncertainty surrounding growth prospects. A future deterioration in the macroeconomic and financial situation could have negative implications for the banking sector and the broader financial sector.

The risks to financial stability inherent in the real estate market continue to be assessed as elevated, amid the ongoing rise in housing lending and high growth in residential real estate prices. Residential real estate has become overvalued relative to fundamentals according to our assessments. The elevated risks to financial stability inherent in the real estate market could reduce the resilience of the banking system alongside the elevated credit risk and interest rate risk. In April Banka Slovenije therefore made adjustments to the macroprudential measures to limit the transfer of risks from the real estate market to the banking system, and to strengthen bank resilience in the event of any realisation of risks. Certain changes to the macroprudential restrictions on household lending entered into force on 1 July 2022, while 1 January 2023 sees the introduction of two sectoral systemic risk buffers.

The rise in share of sight deposits and the simultaneous increase in long-term loans has further widened the relatively large maturity gap between assets and liabilities, and accordingly our assessment funding risk remains moderate. Deposits by the non-banking sector remained a stable source of funding in the first half of 2022, despite the high inflation and the short-term difficulties faced by one of the banks in Slovenia as a result of the Russian military aggression. A seasonal effect and more cautious behaviour by savers with disposable income amid rising prices helped drive a more substantial inflow of household deposits over the spring. By contrast, inflation and the continuing disruption to supply chains encouraged non-financial corporations to spend their savings at banks.

Bank exposure to interest rate risk increased significantly during the first half of the year as the share of fixed-rate loans rose considerably. Interest rate risk is thus assessed as elevated, with a trend of increase. Amid high credit growth, banks significantly expanded their loans to the non-banking sector on the asset side of the balance sheet in the first half of this year, while sight deposits strengthened further on the liability side. During the period of low interest rates the rise in the share of fixed-rate loans and the share of sight deposits significantly shifted the structure of banks' assets and liabilities, exposing them to elevated interest rate risk as interest rates rise. We again emphasise that great caution is required by banks when entering into new fixed-rate loans that additionally expose them to interest rate risk, together with adequate advance hedging of larger exposures.

Our assessment is that the banks' total credit risk is elevated, with a trend of further increase, despite the persistently favourable indicators of asset quality. The indicators of asset quality improved further in the first half of this year, despite the worsening economic growth forecast and the increased uncertainty in the domestic and international environments. NPE ratios have remained low, and the breakdown of the portfolio into credit risk stages improved in the majority of customer segments, even as the reclassification of the portfolio to the stage with increased credit risk picked up pace in a number of other EU Member States. Here our assessment is that the more far-reaching indirect consequences of the geopolitical tensions will have an adverse impact on the performance and debt servicing capacity of the majority of bank customers.

**Income risk is assessed as elevated but stable over the short term.** The conditions for generating income have improved this year, and the banking system is seeing a rise in income driven by increased lending activity. Amid the ongoing rise in interest rates, positive effects on income generation at banks can also be anticipated. Over the longer term the international situation and the macro environment could gradually give rise to adverse effects from rising funding costs for banks, a decline in debt servicing capacity on the part of bank customers, and rising operating costs.

Our assessment is that the banking system's current resilience to systemic risks in the area of solvency and profitability remains medium, but could deteriorate over the longer term. Here we should reiterate that there are still considerable differences between banks in the level of their capital surpluses and their ability to cover potential losses. Given the uncertainty surrounding the sustainability of the current high profitability that would allow the banks to maintain or strengthen their capital adequacy in the future, careful capital management will therefore be vital, particularly at banks with smaller capital surpluses.

The banking system's resilience to systemic risks in the liquidity segment remained high in the first half of 2022, despite a deterioration in certain liquidity indicators. The decline in primary liquidity reduced the banking system's liquidity coverage ratio, but it remains well in excess of the regulatory minimum. There remain considerable variations between banks in the size of their liquidity surpluses, and thus in their resilience to systemic risks. Careful monitoring of the competition in the sector and the current geopolitical



situation therefore remain a vital part of liquidity management, particularly for banks with smaller liquidity surpluses.

The financial position of households and non-financial corporations remained sound in the first half of 2022. Household indebtedness remains below the euro area average, and the sector's net financial assets have further increased over the last year. Consumer pessimism is being driven above all by high inflation, which has reduced household purchasing power, hitting the households with lowest income hardest of all. The tightening of monetary policy means that households that hold existing variable-rate loans will be under additional pressure, and higher interest rates will increase future borrowing costs. Non-financial corporations sharply increased their debt financing after the rebooting of the economy last year and in the first half of this year, but indebtedness indicators nevertheless remained favourable. The disruptions to supplies of energy and commodities that arose during the pandemic and were exacerbated by the Russian military aggression are pushing non-financial corporations to increase their borrowing to secure adequate inventories, which is being evidenced in increased demand for loans for current operations. The risks are increasing in the corporate sector as a result of surging energy and commodity prices, and the anticipated rise in interest rates.

The risks inherent in the performance of leasing companies remain moderate for now, with robust economic growth making a positive contribution to performance, despite the uncertainties surrounding the Russian military aggression. A slowdown in economic growth, a rise in borrowing costs, and a decline in real household income might however cause a downturn in the performance of leasing companies in the future.

*The insurance sector remained well-capitalised in the first half of this year. Insurers will face an increasingly challenging business environment in the future as inflation remains high, particularly amid any slowdown in economic growth.* 

The domestic mutual funds did not suffer any liquidity difficulties as a result of the heavy selling pressure on global stock markets, as net inflows remained positive. By contrast, investment funds in the euro area overall have been recording net outflows since February. The net outflows were particularly notable in the case of bond funds, which were also the only class of funds to record net outflows in Slovenia.

Given the increased uncertainty in the macroeconomic and financial environment in Slovenia and further afield, there is growing risk of the materialisation of (cyclical and structural) risk in the Slovenian financial system. Banka Slovenije has addressed these risks by adjusting the macroprudential measures, which aim not only to limit excessive credit growth and excessive exposure, but also to increase the resilience of the banking system and thus to act as a buffer to financial cycles. The Regulation on macroprudential restrictions on consumer lending adopted in May brings a number of changes that will improve loan accessibility for retail customers, while also addressing the growing risk inherent in the real estate market.



## 1 KEY RISKS TO THE BANKING SYSTEM

JPMorgan PMI for the global economy

### 1.1 Macroeconomic risk

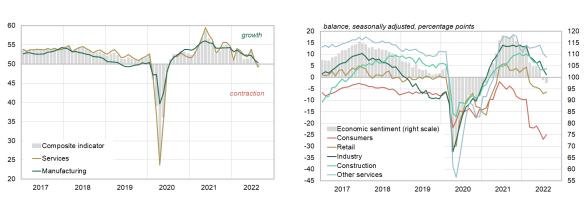
Macroeconomic risk is still assessed as elevated with a trend of increase, which in the future might be adversely reflected in the performance of the banking system via a number of channels. The global and European economies have faced several shocks in 2022 in the wake of the post-pandemic recovery, which have further raised inflation, slowed economic growth and worsened the economic outlook. Following the relatively high growth in the second quarter, the performance of the domestic economy remained encouraging going into the third quarter, but the outlook for the second half of the year deteriorated significantly as economic sentiment worsened. Borrowing costs rose amid high inflation, which became broad-based, hikes in the ECB's key interest rates, and uncertainty surrounding growth prospects. Higher interest rates could have a positive impact on interest income and improve profitability of banks over the short term, but will also entail higher funding costs over the medium term and long term. The deterioration in the macroeconomic situation while inflationary pressures persist might be reflected in a weaker financial position for firms and households, and in a decline in their debt servicing capacity. This could weaken the asset quality, and worsen profitability as additional impairments and provisions are created. The downward pressure on profitability could also potentially come through higher operating costs for banks as high inflation persists.

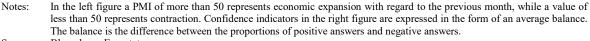
#### International environment

**Following the post-pandemic recovery, global economic growth slowed sharply in 2022 amid numerous negative risks, while the economic outlook worsened.** One of the major factors now being reflected in weaker economic growth and even in a decline in economic activity in August is the higher-than-expected inflation, which is largely being driven by high growth in energy and food prices caused by the war in Ukraine and the sanctions imposed on Russia. The slowdown in global growth is also being driven by a slowdown in the Chinese economy as a result of new coronavirus outbreaks and the stringent containment measures, and a slowdown in the US economy. Global GDP in the second quarter contracted for the first time since the pandemic,<sup>1</sup> and the latest figure of less than 50 for the JPMorgan PMI points to further contraction (see ). The latest IMF forecasts from July have cut the projected figures for global economic growth in 2022 and, in particular, in 2023, although they remained positive.<sup>2</sup> However, the figures are exposed to the risk of poor realisation.

Figure 1.2

Confidence indicators in the euro area





Sources: Bloomberg, Eurostat

Figure 1.1

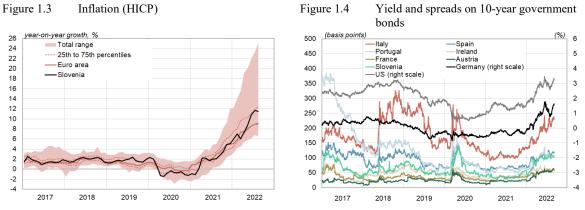
The economic outlook has also worsened in the euro area, whose heavy dependence on Russian energy, natural gas above all, leaves it particularly exposed to supply disruptions. Economic sentiment as measured by the economic sentiment indicator worsened over the first eight months of the year, with all confidence indicators recording a decline (see Figure 1.2). There has been a particularly sharp decline in

<sup>&</sup>lt;sup>1</sup> IMF estimate, July 2022.

<sup>&</sup>lt;sup>2</sup> IMF, July 2022 (2022: 3.2%; 2023: 2.9%).



consumer confidence since the outbreak of the war in Ukraine, which might become reflected in slower growth in the future via weaker private consumption. The decline in optimism in the corporate sector since the beginning of the year and the increased reluctance to invest in industry also point in the same direction. The PMI for the euro area also points to weaker growth: it declined in August for the fourth consecutive month, moving into the territory signalling contraction. Growth in the euro area was otherwise solid in the first half of the year, but the outlook for the second half of the year is worse. The ECB's latest forecast from September for economic growth of 3.1% this year is up slightly on the June forecast, but down on the March forecast, while the forecast of 0.9% for next year is significantly lower.<sup>3</sup>



Note: The spread in the right figure is calculated as the difference between the yield on the 10-year government bond and the yield on the benchmark (German bond) on a daily basis, and reflects the additional risk that the markets ascribe to the country in question.

Sources: Eurostat, Bloomberg, Banka Slovenije calculations

**Euro area inflation has strengthened sharply this year, albeit with big differences between countries.** Year-on-year growth in the HICP reached 9.1% in August, while the rates in the Baltic countries have averaged more than 20% for several months now (see Figure 1.3). A number of countries are trying to use various measures to mitigate high inflation, but it has continued to strengthen. The war in Ukraine and the resulting sanctions against Russia have driven a pronounced rise in energy and food prices this year, which together account for two-thirds of headline inflation. The pronounced energy price inflation is also increasingly being reflected in higher growth in prices of other goods and services and in food prices. According to the ECB's latest forecasts from September, which have been revised upwards on the previous forecasts, inflation will hit 8.1% in 2022, before slowing to 5.5% in 2023.<sup>5</sup> Whether the forecasts are realised, is highly dependent on the evolution of the war and the future movements in energy prices.

Amid the high inflation central banks are raising their key interest rates, while stock markets have fallen significantly this year. To support efforts to return inflation to its target level,<sup>4</sup> the Governing Council of the ECB raised its key interest rates by 0.5 percentage points at its July meeting<sup>5</sup> and then by a further 0.75 percentage points at its September meeting,<sup>6</sup> and announced that it would pursue the continuing normalisation of interest rates at future meetings. Government bond yields have risen significantly this year, with the spreads of euro area government bonds over the German benchmark remaining moderate, although the differences in spreads between countries increased (see Figure 1.4). The financing conditions in the euro area have thus become less favourable since the beginning of the year. With the decline in economic growth forecasts and the reduced liquidity, the worsening situation on the bond markets is also being evidenced in increased volatility. Meanwhile the main stock markets have fallen significantly since reaching record highs at the end of last year, amid high volatility.

#### Economic situation in Slovenia

The domestic economy saw relatively high growth in the first half of the year, despite the uncertainties in the international environment. GDP growth actually strengthened in the second quarter, and outpaced the euro area.<sup>7</sup> The largest contribution to the year-on-year GDP growth (of 8.2%) came from private

<sup>&</sup>lt;sup>3</sup> ECB staff macroeconomic projections for the euro area, September 2022 (europa.eu).

<sup>&</sup>lt;sup>4</sup> The medium-term inflation target is 2%.

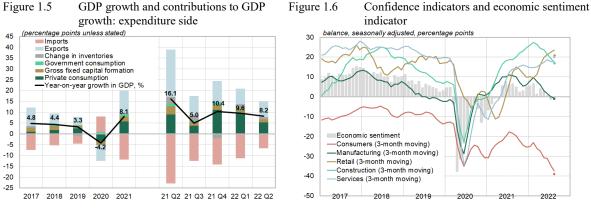
<sup>&</sup>lt;sup>5</sup> All three ECB key interest rates were raised by 50 basis points (Monetary policy decisions).

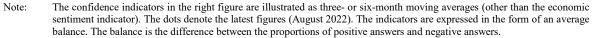
<sup>&</sup>lt;sup>6</sup> All three ECB key interest rates were raised by 75 basis points (Monetary policy decisions).

<sup>&</sup>lt;sup>7</sup> According to seasonally and calendar-adjusted figures, GDP was up 0.9% on the previous quarter (compared with 0.8% in the euro area overall), and up 8.3% in year-on-year terms (compared with 4.1% in the euro area overall).



consumption, which was supported by the high employment rate, the growth in the wage bill in the private sector along with large household savings, and a favourable start to the summer season in the tourism sector (see Figure 1.5). The rise in services exports, most notably in travel services, strengthened year-on-year growth in aggregate exports, which outpaced growth in imports for the first time in four quarters. The trade balance thus made a positive contribution to GDP growth. Investment also strengthened, and was strongly supported by the favourable financial position of firms, and the sharply negative real interest rates amid high inflation, while a significant contribution also came from government investment amid the implementation of the recovery and resilience plan and the impact of the electoral cycle this year. Following the high economic growth in the first half of the year and the anticipated deterioration in the economic situation, the latest economic growth forecasts for this year are better than the previous, while those for 2023 are significantly worse.<sup>8</sup>





Sources: SORS, Banka Slovenije calculations

The sentiment in the domestic economy deteriorated significantly over the first eight months of this year, and points to a slowdown in economic growth in the second half of the year. The economic sentiment indicator hit its lowest value in a year and a half in July, having again moved into the zone of contraction, where it remained in August as well (see Figure 1.6). The deterioration was seen in all segments. The manufacturing confidence indicator has declined gradually but visibly since the outbreak of the war in Ukraine and amid the increased uncertainty in the international environment. Firms have reported a deterioration in the trends with regard to future output, order books and employment expectations, and an increase in limiting factors, particularly in the form of insufficient demand. Consumer confidence has declined sharply over the last year, with consumers expressing concern for the financial situation in the household amid high inflation and a decline in purchasing power, and also a negative outlook with regard to the economic situation in the country. Since the beginning of the year the construction confidence indicator has fallen from its highest value in many years amid declining expectations with regard to activity and order books, while the retail confidence and services confidence indicators remained high in the wake of the strong start to the summer holiday season. The dynamics in the aforementioned indicators suggest a gradual slowdown in activity in the third quarter.

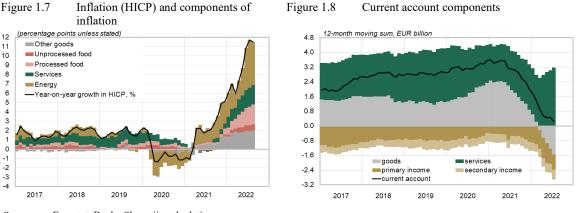
**Consumer price inflation has strengthened sharply this year.** Year-on-year inflation as measured by the HICP has risen sharply this year, reaching 11.5% in August, 2.4 percentage points above the euro area average (see Figure 1.3). Energy prices made the largest contribution of 4.6 percentage points (see Figure 1.7), having recorded a year-on-year rise of 36.6%, which is increasingly being reflected in higher inflation in other categories in the consumer basket. Food price inflation has risen sharply as well (a year-on-year rate of 12.2%), with food production costs being driven strongly by the rise in energy prices alongside the rising prices of agricultural produce. Core inflation<sup>9</sup> also recorded strong growth at 6.3%, with rises in prices of services and other goods. Firms' and consumers' expectations of future price trends have eased, but remained high relative to their long-term average.

<sup>&</sup>lt;sup>8</sup> IMAD, September 2022 (2022: 5.0%, 2023: 1.4%, 2024: 2.6%), European Commission, July 2022 (2022: 5.4%, 2023: 1.0%), Banka Slovenije, June 2022 (2022: 5.8%, 2023: 2.4%, 2024: 2.5%).

<sup>&</sup>lt;sup>9</sup> HICP excluding energy, food, alcohol and tobacco.



**Employment has continued to rise, thus supporting high domestic demand, which together with strong price pressures from the international environment has been reflected in a goods trade deficit.** The current account surplus has narrowed sharply this year amid high growth in import prices (see Figure 1.8). The strengthening services trade surplus saw the 12-month current account surplus widen slightly in June, but it then fell to its lowest value of the last few years in July. The labour market has hit a new high for the workforce in employment, and employment growth was broad-based across economic sectors. Firms are continuing to address the shortage of domestic labour largely by hiring foreign nationals. Year-on-year growth in the average gross wage was solid over the first half of the year in the private sector, but remained negative in the public sector under the effect of the ending of pandemic-related bonuses.<sup>10</sup>



Sources: Eurostat, Banka Slovenije calculations

The fiscal position is improving as growth in revenues outpaces growth in expenditure. The general government deficit in the first quarter narrowed to 3.1% of GDP, and the consolidated general government position improved further in the second quarter, although the 12-month position remained negative. Consolidated general government debt had declined to 75.1% of GDP by the end of the first quarter, following the strong recovery from the pandemic. The rise in government bond yields (see Figure 1.4) has slightly increased the cost of government borrowing, but Slovenia's sovereign ratings at the main rating agencies were unchanged, with a stable outlook.<sup>11</sup>

The probability of a systemic crisis in the next 12 months estimated for Slovenia by means of a realtime early warning model<sup>12</sup> has once again been below the signalling threshold since mid-April.<sup>13</sup> For the majority of countries<sup>14</sup> this risk has remained above the threshold since the outbreak of the war in Ukraine, and is continuing to rise. Before it returned to below the threshold, the majority of the increase in the risk for Slovenia had come from developments on the stock market, where the index fell by 15% between mid-February and mid-March. Recently it rose slightly, but remained below its peak of mid-February. While the early warning model places systemic risk for Slovenia below the signalling threshold, the potential risks of financial contagion in the highly integrated European financial environment demand the diligent monitoring of risks with a supranational perspective.

<sup>&</sup>lt;sup>10</sup> The negative year-on-year growth in the public sector was attributable to a high base effect from last year's payments of pandemicrelated bonuses.

<sup>&</sup>lt;sup>11</sup> S&P Global Ratings: AA-, stable outlook; Fitch Ratings: A, stable outlook; Moody's: A3, stable outlook; DBRS Morningstar: A, stable outlook.

<sup>&</sup>lt;sup>12</sup> The probability of a crisis is estimated by means of a logistic early warning model. The model variables include: non-financial private sector debt service ratio (annual change, with a two-quarter lag due to publication lags), consumer confidence indicator (European Commission survey, with a one-month lag), government bond spread (interest rate spread on 10-year government bonds relative to the euro area average), annual growth in equity prices, realised volatility in equity prices over the last month, and the risk-free yield curve slope. Equity price growth and volatility as measured by stock indices are combined into the category of "stock prices" in the presentation of results. Data on stock prices, yield slope and government bond spreads is daily. The sample covers the period of January 2004 to August 2021. The identification and dating of systemic financial crises are based on the ECB/ESRB public database of financial crises.

<sup>&</sup>lt;sup>13</sup> The signalling threshold is a compromise between false alarms occurring and the possibility of missing serious crisis events, with a higher weight assigned to preventing a serious crisis event from being overlooked. It should be noted that the risks assessed by the model are based on past data. Since the global financial crisis and the euro area debt crisis there have been major improvements in the microprudential and macroprudential frameworks in Slovenia and in the euro area, which are only slowly feeding into the model estimates.

<sup>&</sup>lt;sup>14</sup> The sample encompasses 18 euro area countries, Denmark and Sweden.

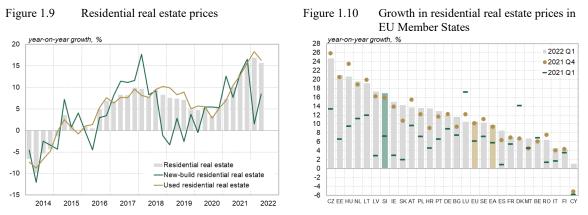


## 1.2 Risk inherent in the real estate market

The risks to financial stability inherent in the real estate market are assessed as elevated on account of the high growth in residential real estate prices, which according to our assessments are now overvalued relative to fundamentals, and high growth in housing loans. Furthermore, borrowers' debt servicing capacity might diminish, as rising consumer prices reduce household disposable income on one hand, while interest rates and debt financing costs rise on the other. This could reduce demand for housing loans, which many banks are now expecting. The rising risks to financial stability inherent in the real estate market could reduce the resilience of the banking system alongside the elevated credit risk and interest rate risk. Banka Slovenije therefore introduced macroprudential measures in connection with household lending in July of this year to limit the transfer of risks from the real estate market to the banking system, and to strengthen bank resilience in the event of any realisation of risks. For more information about these measures, see the section on macroprudential policy.

### Residential real estate prices

Residential real estate prices in Slovenia have been rising sharply since the beginning of 2021, nominal year-on-year growth reaching 15.6% in the second quarter of this year (see Figure 1.9). It is mainly used flats that have seen rising growth in prices; growth in prices of houses declined slightly. Despite the overall growth in prices of used flats, there are considerable differences between towns and cities in Slovenia. The median price of used flats in 2021 was highest in Ljubljana and on the coast, at EUR 3,410 per m<sup>2</sup> and EUR 3,050 per m<sup>2</sup> respectively, but was significantly lower in Maribor and Celje, at EUR 1,620 per m<sup>2</sup> and EUR 1,690 per m<sup>2</sup> respectively. Growth in prices of new-build real estate slowed in the first quarter of this year, to stand at 1.5% in year-on-year terms. Year-on-year growth in residential real estate prices in Slovenia outpaced the euro area average of 9.8% in the first quarter of this year (see Figure 1.10). High inflation meant that real price growth came to an end in the first quarter of this year after many years of rises. Prices were up 44.5% on 2015 in real terms.

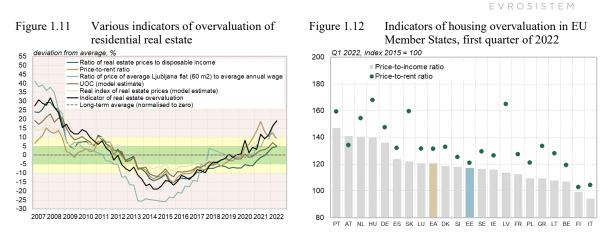


Note: The data for Portugal, the Netherlands, Germany, France and Lithuania in the right figure is for the final quarter of 2021. Sources: SORS, Eurostat, ECB SDW

The indicators of relative overvaluation of residential real estate<sup>15</sup> were already showing in the autumn of 2021 that prices had become overvalued relative to fundamentals, and the gap with the long-term equilibrium widened in the first quarter of this year, and remained high in the second quarter. Continued growth in real estate prices could further increase the overvaluation (see Figure 1.11). Despite Slovenia's recent high price growth, its overvaluation of residential real estate is still slightly smaller than the euro area average (see Figure 1.12), judging by the price-to-income ratio and the price-to-rent ratio.

<sup>&</sup>lt;sup>15</sup> The indicators are showing relative overvaluation, where the dynamics in residential real estate prices are compared with developments in other fundamentals such as income (e.g. GDP, disposable income), prices (e.g. general inflation, rents) or costs (e.g. construction costs, interest rates on housing loans). The advantage in calculating relative overvaluation rather than absolute overvaluation is that relative overvaluation can be assigned a specific reference point (the fundamental in the numerator). With absolute overvaluation there is no reference point; instead it is the subjective perspective of the buyer or vendor that is important. Absolute overvaluation from the perspective of the buyer can differ considerably from that from the perspective of the vendor.

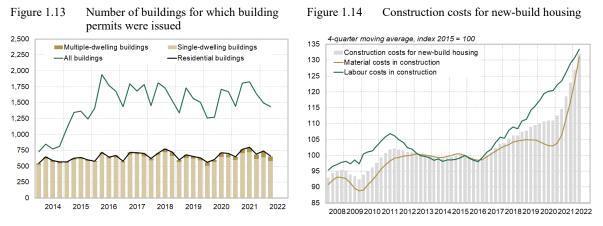




Note: In the left figure the indicators of housing price alignment with fundamentals are normalised around their own long-term averages, which are assigned a value of zero. Each indicator's deviation from the long-term average illustrates the overvaluation or undervaluation of residential real estate.
 Sources: Eurostat, SORS, SMARS, ECB SDW, OECD

#### Supply and demand on the residential real estate market

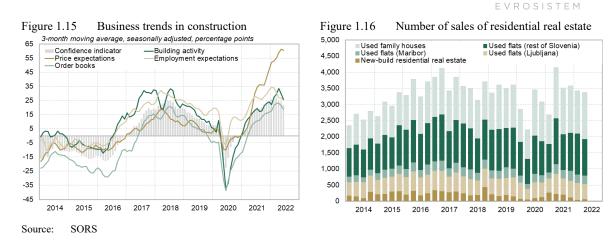
**Construction costs for new-build housing have continued to rise, which could further feed through into even higher residential real estate prices (see Figure 1.14).** The number of buildings for which building permits were issued in 2021 was up on the previous year (6,727 versus 5,918), but declined slightly in year-on-year terms in the first half of 2022 (see Figure 1.13). There were 163 building permits issued for multi-dwelling buildings in the first half of this year, significantly more than the average of 113 in the years between 2014 and 2019. There were 4,032 completed dwellings in 2021, the highest figure of recent years, but still down more than a half on 2008 and 2009.



Source: SORS

The confidence indicator in the construction sector remains relatively high despite declining with regard to order books and building activity, while expectations of price rises are high (see Figure 1.15). The construction confidence indicators deteriorated slightly in the second quarter of this year, and order books, building activity and employment expectations all declined. The amount of construction put in place in the first half of this year was nevertheless up 23.2% on the same period last year. The ratio of gross investment in housing to GDP remained at 2.2% in 2021, significantly lower than the EU average of 5.6%. The number of residential real estate sales in 2021 was up 20% on the previous year at 13,440 and reached its pre-pandemic level, but the year-on-year change in the second quarter of this year was negative in the amount of 18.9% (see Figure 1.16). Despite the strong growth in residential real estate prices, the slower year-on-year growth in sales also meant that sales of residential real estate were down 8.5% in value terms in the second quarter of this year. Sales of residential real estate had amounted to EUR 1,683 million in 2021, the highest figure of the last eight years.

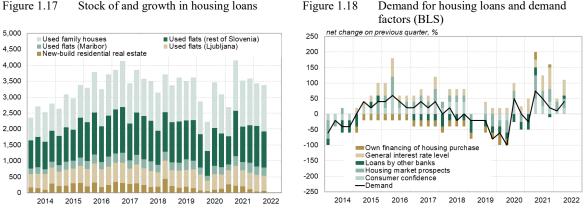


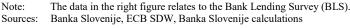


#### Residential real estate market and the banking system

Growth in housing loans strengthened sharply in the first half of this year amid high growth in real estate prices, but housing lending might slow in the third quarter. Growth in housing loans was already rising in the second half of 2021, but had reached 11.9% in year-on-year terms by June of this year (see Figure 1.17), while the proportion of new loans that were fixed-rate rose sharply.<sup>16</sup> The increased demand for housing loans in the second quarter of this year was attributable to several factors, which is confirmed by banks in the BLS, who highlighted the general interest rate level and housing market prospects, while own financing of housing purchase no longer represented a limiting factor as it had in previous years (see Figure 1.18). Half of the banks in the June 2022 BLS thought that demand for housing loans would decline in the third quarter.

Stock of and growth in housing loans Figure 1.17



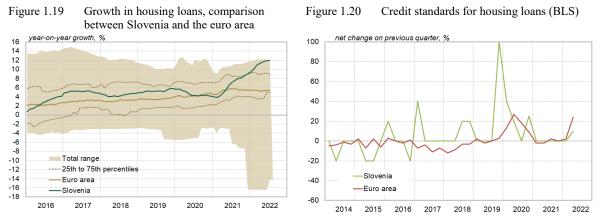


Slovenia saw one of the highest rates of growth in housing loans in the euro area (see Figure 1.19), but its ratio of housing loans to GDP remains one of the lowest. The stock of housing loans and the proportion of total loans to the non-banking sector accounted for by housing loans have increased sharply over the last decade. Housing loan stock amounted to EUR 7.8 billion in June 2022, or 29.5% of total loans to the nonbanking sector, compared with a figure of around 8% in 2005.17 The figure was also driven upwards by the large decline in loans to non-financial corporations over this period. The ratio of housing loan stock to GDP has increased slightly over the last three years, but at 14.2% in 2021 it was still significantly lower than the EU average of 45.0%, in part because of the high rate of owner occupation in Slovenia (74.6%). According to the BLS, credit standards for housing loans tightened slightly over the first half of this year (see Figure 1.20), as a result of a deterioration in the general economic situation and in housing market prospects.

<sup>&</sup>lt;sup>16</sup> For more on developments in interest rates on housing loans, see the section on interest rate risk.

<sup>&</sup>lt;sup>17</sup> The figure relates to bank balance sheet data, i.e. the ratio of the net value of bank loans to households (individuals and sole traders) to the total of all bank loans to the non-banking sector.





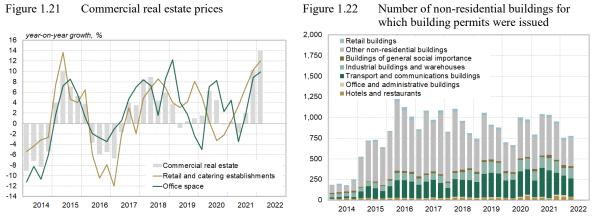
Note: The data in the right figure illustrates the net percentage of credit institutions in the sample recording a tightening of credit standards. A positive net change indicates a tightening of credit standards, while a negative net change indicates an easing of credit standards.

Sources: Banka Slovenije, ECB SDW, Banka Slovenije calculations

Borrowers' debt servicing capacity might decline by rising consumer prices, which are reducing household disposable income on one hand, while interest rates and debt financing costs rise on the other. This could reduce demand for housing loans, as suggested by the aforementioned expectations of half of the banks. These developments could also act to slow the high growth in residential real estate prices, which are still being pressurised by rising construction costs. The rising risks to financial stability inherent in the real estate market could reduce the resilience of the banking system alongside the elevated credit risk and interest rate risk. Banka Slovenije therefore introduced macroprudential measures in connection with household lending in July of this year to limit the transfer of risks from the real estate market to the banking system, and to strengthen bank resilience in the event of any realisation of risks. For more information about these measures, see the section on macroprudential policy.

#### Commercial real estate market and the banking system

Prices on the commercial real estate market have been rising for almost a year. They were up 17.2% in year-on-year terms in the second quarter of this year, with retail and catering establishments and office space both recording rising price (see Figure 1.21). Slovenia's commercial real estate market is small, with large volatility in volume and prices, and the rental market is also highly competitive. The number of issued building permits in the first half of this year was down slightly on the first half of 2021, but a larger share of the construction of commercial real estate was intended for own use (see Figure 1.22).

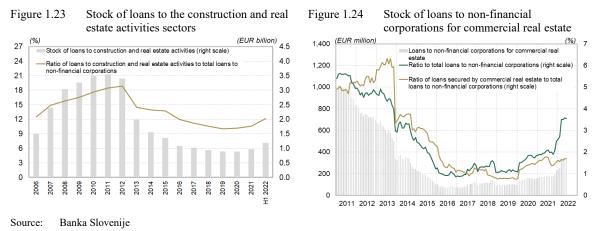


Source: SORS

The stock of loans to the sectors of construction and real estate activities has increased slightly over the last two years, but remains lower than in previous years, and rising interest rates will increase the debt financing burden. The proportion of total loans to NFCs accounted for by the two aforementioned sectors had increased to 12.2% by June of this year, down significantly on the figure of around 19% in 2012. The loan stock of EUR 1.2 billion was down significantly on its peak of EUR 3.5 billion in 2011 (see Figure 1.23). The indebtedness of NFCs is also lower than more than a decade ago and before the pandemic, although it is highest in the sectors of construction and real estate activities. The stock of loans for



commercial real estate has also increased recently, reaching EUR 348 million in June of this year, almost double the figure a year earlier (see Figure 1.24). The majority of these loans are variable-rate, with almost half having a tenor of up to five years.



## 1.3 Funding risk

The rise in sight deposits and the simultaneous increase in long-term loans has further widened the relatively large maturity gap between assets and liabilities, and accordingly our assessment funding risk remains moderate. Deposits by the non-banking sector remained a stable source of funding in the first half of 2022, despite the high inflation and the short-term difficulties faced by one of the banks in Slovenia as a result of the war in Ukraine. A seasonal effect and more cautious behaviour by savers with disposable income amid rising prices helped drive a more substantial inflow of household deposits over the spring. By contrast, inflation and the continuing disruption to supply chains are encouraging NFCs to spend their savings at banks. In addition to financing investment, firms have also earmarked funds for building up inventories to ensure no disruption to operations in the future. Our prediction is that savers will remain cautious in managing their savings at banks, despite high inflation reducing the real value of their savings, and no major withdrawal of bank deposits is likely, at least over the short term. Given the unstable situation on the financial markets and the deteriorating economic outlook, switching savings into higher-yielding but higher-risk assets could weaken their future financial position. The rise in interest rates on deposits, which might be very gradual in our assessment, could additionally encourage households to keep their savings with banks.

### Bank funding

Growth in deposits by the non-banking sector slowed amid the rise in private consumption and growth in investment, but they remain the most important source of funding for Slovenian banks, accounting for 78.4% of total liabilities, and dependence on other sources is low. Year-on-year growth in deposits by the non-banking sector had slowed to 5.2% by June 2022, down almost a half on a year earlier (see Figure 1.25). Because the inflow of deposits by the non-banking sector of EUR 0.5 billion in the first half of this year was just a third of the increase in loans to the non-banking sector, the LTD ratio rose to 70.4% after several years of decline (see Figure 1.26). Similar developments in loans and deposits caused the LTD ratio to rise in the majority of other euro area countries, but the figure in Slovenia is still one of the lowest. Slovenian banks therefore financed their increased lending activity not only through an increase in deposits, but by making use of built-up liquidity holdings with the central bank. For this reason they had no need for additional borrowing on the wholesale markets, and thus their funding remains less exposed to the transmission of any adverse impacts from foreign financial markets. Only one bank increased its holdings of debt securities in the first half of this year, which it issued for the purposes of meeting its MREL requirements. This is also the most likely reason for any future issuance.



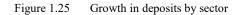
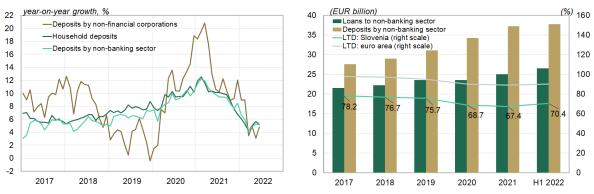


Figure 1.26 LTD ratio for non-banking sector



Note: Wholesale funding comprises liabilities to banks in the rest of the world and issued debt securities. Source: Banka Slovenije

Monthly inflows of household deposits increased significantly in the second quarter of 2022, but the year-on-year rate of growth nevertheless hit its lowest value of the last six years. The easing of all limiting factors and the encouraging economic environment drove up private consumption, and reduced saving at the banks in the second half of 2021 in particular. The increase in household deposits was also minimal in the first quarter of this year, partly as a result of the difficulties suffered by one of the banks in Slovenia as a result of the war in Ukraine. The quick, effective normalisation of its operations helped retain savers' confidence, and no major instability in the funding of the banking system occurred. With inflation soaring and strong private consumption persisting, the trend of slowing growth in household deposits might have been expected to continue, but it reversed in the second quarter of this year. Household deposits increased by EUR 1,037 million in the second quarter alone, which was actually more than in the same quarters of the two previous years, when inflows were very high because of the pandemic (see Figure 1.27). Although year-on-year growth in household deposits increased slightly as a result of the aforementioned inflows, its rate of 5.2% in June of this year was down almost a half on a year earlier. In addition to a seasonal effect (payment of leave allowance), the large inflows of household deposits might also be attributable to greater caution in the spending of household income in light of the uncertainty amid rising prices and the rising cost of living, and the anticipated adverse impact on their financial situation in the future.

As in Slovenia, growth in household deposits over the last year has slowed in almost all other euro area countries. After seeing faster growth in household deposits during the pandemic, Slovenia is ranked in the top third of countries where the year-on-year rate has slowed the most over the last year. It nevertheless remained higher than the euro area average of 3.7% in June of this year (see Figure 1.28).

Despite high inflation, we do not anticipate any major outflow of deposits from the banking system over the short term, as given the uncertain evolution of the geopolitical situation and hence the economic situation, savers are probably less inclined to take up new risks by investing their savings in alternative assets. With interest rates on deposits at close to zero, the high inflation is reducing the real value of savings, but for the moment has not triggered any significant switching of household deposits from banks into higher-yielding alternative assets (capital markets, mutual funds, etc.). Conversely households' net inflows into domestic mutual funds over the first half of 2022 were down 60% on the same period last year.<sup>18</sup> Rising prices and the rising cost of living will be among the factors on which the size of future inflows of bank deposits depends, as they reduce disposable income, which in turn reduces the ability to save should private consumption remain high.

<sup>&</sup>lt;sup>18</sup> For more, see the section on mutual funds.



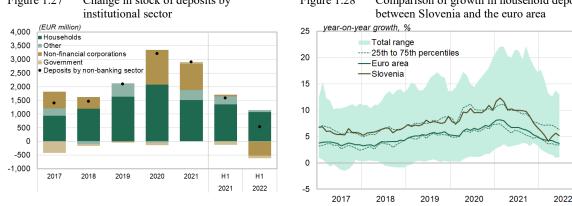


Figure 1.27 Change in stock of deposits by

Figure 1.28 Comparison of growth in household deposits

Banka Slovenije, ECB SDW, own calculations Sources:

Following substantial inflows of deposits by NFCs during the first two years of the pandemic (2020 and 2021), they declined by EUR 0.5 billion over the first half of 2022. This further reduced the year-on-year rate of growth, which had begun to slow in 2021, and reached 4.8% in June of this year. As expected NFCs directed their bank deposits into expanding investment, particularly after the lifting of all containment measures and the normalisation of the economy. They also used their bank savings to finance inventories to ensure no disruption to future operations, particularly in light of the continuing disruptions to supply chains and rising prices. This kind of trend in deposits by NFCs can also be expected in the future, given that they hold EUR 8.5 billion of savings with banks. Similarly to Slovenia, growth in deposits by NFCs slowed during 2021 and the first half of 2022 in the majority of other euro area countries, the year-on-year rate of growth averaging 5.7% in June of this year.

#### Deposit maturity and maturity gap between assets and liabilities

Sight deposits have continued to strengthen, with low interest rates and the uncertainty of geopolitical developments deterring savers from fixing their deposits. The proportions of total deposits by NFCs and total household deposits accounted for by sight deposits had increased to 83.2% and a record 88.9% respectively by June of 2022, while the proportions of short-term and long-term deposits were down. Other euro area countries have also seen a rise in sight deposits, particularly since the outbreak of the pandemic. Slovenia is notable for its high ratios of deposits by households and NFCs to the balance sheet total, and is simultaneously one of the countries with a prevalence of sight deposits (see Figure 1.29). Slovenian banks' high dependence on household deposits and deposits by NFCs in particular exposes them to greater funding risk in the event of any increase in the instability of this funding compared with banks in countries where the ratios of this deposits are lower.

The trend of increase in sight deposits could be slowed by a rise in interest rates on deposits, which is likely to occur very gradually. Following the hikes in key interest rates in June of this year with the aim of gradually normalising interest rates and returning inflation to its 2% target level,<sup>19</sup> banks in Slovenia have also begun to adjust by making changes to their business. They raised interest rates on loans, but given the slower but moderate growth in deposits by the non-banking sector it is difficult to expect them to rush any rise in interest rates on deposits. The banks still have large holdings of liquidity in accounts at the central bank, which in the event of any decline in inflows of deposits by the non-banking sector could be used to finance rising lending activity, thereby holding down interest expenses for some time longer. All banks have now withdrawn the custody fees on large balances in personal accounts that were introduced in 2021.

<sup>&</sup>lt;sup>19</sup> For more, see Monetary policy decisions (https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220721~53e5bdd317.en.html) or the Governor's statement following the ECB's monetary policy meeting (https://www.bsi.si/en/media/1883/izjava-guvernerja-pomonetarni-seji-sveta-ecb).



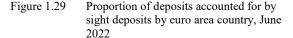
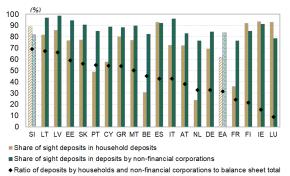


Figure 1.30 Weighted average maturity of assets and liabilities, and maturity gap





Note: The left figure illustrates consolidated data, in order of the ratio of deposits by households and NFCs to the balance sheet total.

Sources: Banka Slovenije, ECB SDW, own calculations

After narrowing for two years, the relatively wide maturity gap between assets and liabilities widened in the first half of 2022, thereby increasing the risk of greater instability in the funding of the banking system, which comes from this gap. The significant decline in demand liquidity assets held in accounts at the central bank and the increase in long-term loans to the non-banking sector increased the weighted average maturity of assets. Because the weighted average of liabilities increased at the same time amid a renewed increase in sight deposits, the maturity gap widened by three months to 4.9 years. This gap was thus 17 months wider than at the beginning of the rapid growth in sight deposits in 2013 (see Figure 1.30). A sudden substantial withdrawal of deposits from the banking system or large-scale switching of deposits between banks as a result of an unexpected stress event could give rise to instability in the funding of certain banks. Our finding is nevertheless that savers retain confidence in the functioning of the Slovenian banking system: deposits by the non-banking sector remained a stable source of bank funding even during the economic shock at the outbreak of the pandemic and during the geopolitical tensions following the outbreak of the war in Ukraine. Diligently monitoring the economic situation and adjusting business to handle competition in a timely fashion thus remain vital to maintaining funding stability.

## 1.4 Interest rate risk

Bank exposure to interest rate risk increased significantly during the first half of the year as the share of fixed-rate loans rose considerably. Interest rate risk is thus assessed as elevated, with a trend of increase. Amid high credit growth, banks significantly expanded their loans to the non-banking sector on the asset side of the balance sheet in the first half of this year, mostly via fixed-rate loans, while sight deposits strengthened further on the liability side, increasing as a share of the balance sheet total. The relatively large maturity gap between assets and liabilities thus widened further. During the period of low interest rates the rise in the share of fixed-rate loans and the share of sight deposits significantly shifted the structure of banks' assets and liabilities, exposing them to elevated interest rate risk as interest rates rise. The repricing gap widened significantly. Given the large stock of fixed-rate loans on the asset side, banks will for some time continue receiving interest income on loans concluded at very low interest rates. Amid persistently high inflation, rises in market interest rates, more expensive funding and a potential decline in lending activity, this could have an adverse impact on real net interest income over the longer term. Some of the more-exposed banks have to a certain extent used derivatives hedges against interest rate risk, while a number of those that have not are gradually removing fixed-rate loans from their product offerings, and reducing the range of these products. We again emphasise that great caution is required by banks when entering into new fixed-rate loans that additionally expose them to interest rate risk, together with adequate advance hedging of larger exposures.

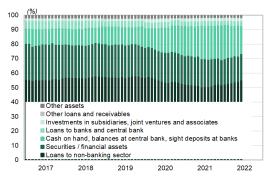
### Interest sensitivity

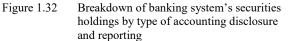
The large increase in the share of fixed-rate loans and continued rise in the share of sight deposits by the non-banking sector saw the banking system's interest sensitivity rise considerably in the first half

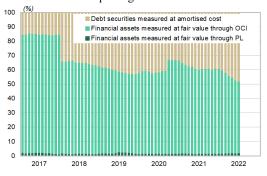


of this year, thereby increasing its exposure to interest rate risk.<sup>20</sup> The share of the asset side of the balance sheet accounted for by loans to the non-banking sector increased (see Figure 1.31), reaching 55% in June (up from 52% in December 2021), and new fixed-rate loans were a major factor in this increase. Conversely the share of highly liquid assets, such as cash in hand, balances at the central bank and sight deposits at banks, declined significantly, reaching 19% by June of this year (down from 24% in December 2021). The aforementioned dynamics in the structure of bank assets had a significant impact on the average repricing period for asset interest rates, which lengthened considerably in the first half of the year compared with previous years (see Figure 1.34). Banks will thus continue receiving interest income on loans concluded at very low interest rates for an extended period, with this income being even lower in real terms as high inflation persists.

Figure 1.31 Breakdown of banking system's assets

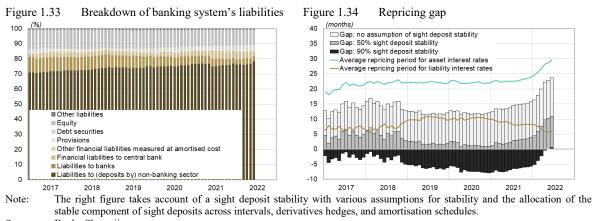






Note: OCI: other comprehensive income; PL: profit or loss. Source: Banka Slovenije

The breakdown of securities holdings is shifting significantly on the asset side of the banking system's balance sheet. They have not changed significantly as a share of the balance sheet total (see Figure 1.31), with a figure of 18% in June of this year, but the breakdown in terms of classification and the accounting methods used for disclosure in accordance with the IFRS has changed (see Figure 1.32). Securities measured at fair value through other comprehensive income prevail in the Slovenian banking system, and their downward revaluation amid higher market interest rates was reflected in a decline in equity at the banks in the first half of this year. Banks have reduced their exposure to these securities since the beginning of the year (they accounted for 50% of total securities holdings in June, compared with 59% in December 2021), while exposure to debt securities measured at amortised cost has increased. These accounted for 48% of total securities holdings in June (compared with 39% in December 2021), and are not subject to revaluation for changes in fair value, given that banks generally hold them to maturity. This reduces the banks' exposure to changes in the fair value of securities amid further rises in market interest rates, and also the future negative effects on equity on this account.<sup>21</sup>



Source: Banka Slovenije

Certain significant effects of the rise in interest rates on the

<sup>&</sup>lt;sup>20</sup> Interest rate risk comes from the maturity mismatch between assets and liabilities that have a fixed interest rate, and from the repricing gap between assets and liabilities.

<sup>&</sup>lt;sup>21</sup> For more on the effects on securities, see the box entitled Box 1.1 banking system's financial statement.

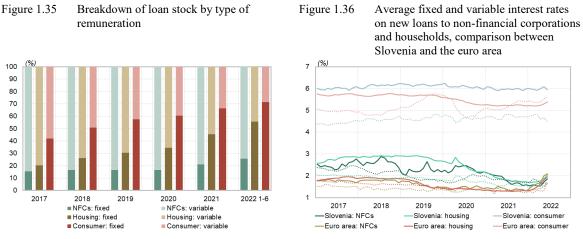


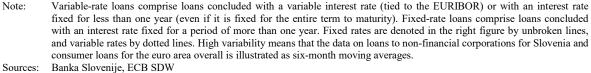
Liabilities to the non-banking sector increased slightly over the first half of this year, while liabilities to the central bank declined significantly. The share of the balance sheet total accounted for by deposits by the non-banking sector, which represent the majority of the banking system's total liabilities (see Figure 1.33) had increased to 78% by June (up from 77% in December of last year). Fully 84% of these were sight deposits, this figure also having risen. The average repricing period for liability interest rates shortened noticeably over the first half of the year (see Figure 1.34) as the share of sight deposits increased and the average repricing period for issued securities declined.

The repricing gap widened considerably. Under the assumption of high stability in the core component of sight deposits (90% stability), which represents a realistic assessment of the core component under normal market conditions, the gap was small but positive. Under more conservative assumptions of stability, it was significantly larger than at the end of the previous year (see Figure 1.34). In light of the positive gap, banks could potentially face negative effects on net interest income in the event of a fast and large rise in market interest rates, should the adjustment to rising interest rates be faster on the liability side than on the asset side. Given individual banks' varying exposures to interest rate risk, there is still a need for caution in approving fixed-rate loans, which raise exposure to interest rate risk, and for adequate derivatives hedges in the case of large exposures.

#### Dynamics of changes in share of fixed-rate loans, loan maturity, and interest rates

The share of fixed-rate loans increased further over the first half of this year as lending activity additionally strengthened. Fixed-rate loans are prevalent in household lending, in housing loans and consumer loans alike, as they both accounted for fully 91% of new loans in the first half of the year. This continued the trend of increase in the share of loan stock accounted for by fixed-rate loans (see Figure 1.35). Meanwhile average maturities of new fixed-rate loans remained stable, at around 18 years for housing loans, and just over 6 years for consumer loans.<sup>22</sup> The trend of increase in the share of fixed-rate loans also continued in loans to NFCs, as they accounted for 39% of total new loans to NFCs in the first half of the year. Variable-rate loans continue to prevail in the NFC portfolio, although the share of fixed-rate loans increased significantly over the first six months of the year. There was a lot of variation in the maturities of new loans to NFCs, but the average over the last 12 months was broadly unchanged at around 6.5 years.





Interest rates on new loans to the non-banking sector have begun to rise this year from their record low levels. In contrast to the euro area overall, where interest rates on certain types of loan began rising in the early part of this year, notable rises in the Slovenian banking system came in the second quarter. Given the developments in interest rates in previous years and current high inflation, financing conditions for the non-banking sector remain very favourable despite the interest rate rises. NFCs are continuing to mostly finance

<sup>&</sup>lt;sup>22</sup> The data for the average maturity of housing loans and consumer loans has been obtained by means of a different data capture methodology, which means that the data on average maturity differs slightly from that reported in the April 2021 issue of the Financial Stability Review, and earlier issues.



themselves via variable-rate loans, the rates on which showed no significant rise yet over the first half of the year (see Figure 1.36). Amid great variation, they averaged 1.7% over the first half of the year,<sup>23</sup> and can be expected to increase in the future as market interest rates rise. There was also great variation in fixed interest rates, which rose significantly in May, bringing the trend of decline to an end. Having averaged 1.6% in the first quarter, they averaged 2.1% in the second quarter.

**Fixed interest rates on housing loans rose in the household segment.** They averaged 2.1% on new loans in June, up 0.4 percentage points on December 2021 (see Figure 1.36). Meanwhile there was no significant change in variable interest rates, which account for only a small share of new loans. With this year's dynamics interest rates on new housing loans have almost entirely equalised with the euro area average. There was no significant change over the first half of the year in interest rates on new consumer loans, where fixed rates also prevail, while the euro area averages for both types of remuneration rose slightly (see Figure 1.36).

## *Box 1.1* Certain significant effects of the rise in interest rates on the banking system's financial statements

Banks' interest sensitivity increased in the first half of this year, primarily as a result of increased long-term exposure to fixed interest rates, thereby increasing interest rate risk. Banks still have extensive sources of financing available at favourable cost that can be used to finance their long-term investments. Taking account of the core component of sight deposits, which is usually allocated to longer maturity buckets by banks in their management of interest rate risk, a rise in interest rates could have a positive impact on interest income. The effect on the economic value of equity and net interest income is largely dependent on this allocation. Given the current structure of and trend of change in the banking system's interest-sensitive positions, the risk is greater in the event of a fast and strong rise in interest rates, which could be reflected in the rise in the cost of short-term funding outpacing the rise in income from long-term assets, which are largely tied to fixed interest rates over the long term.

## Analysis of the interest gap and changes in the economic value of equity and net interest income in the event of a rise in interest rates

The banking system's open long-term net interest-sensitive position<sup>24</sup> increased significantly in the first half of this year (see Figure 1.37). This reflects the increase in long-term assets, loans in particular, that are tied to fixed interest rates. It increased by 25% in the first half of this year, and by 40% over the 12 months to June 2022, when it amounted to EUR 13.0 billion.<sup>25</sup> On the liability side of the balance sheet there was a simultaneous increase in sight deposits, which rose by 10% over the 12 months to June to reach EUR 31.1 billion.<sup>26</sup>

Interest rate risk in the banking book (IRRBB) is primarily measured via analysis of the change in the economic value of equity (EVE<sup>27</sup>) and net interest income (NII<sup>28</sup>). This is conducted on the basis of the Basel guidance for managing interest rate risk in the banking book.<sup>29</sup> Under the assumption of a standard parallel shift of 200 basis points in the yield curve excluding the assumption of allocation of the core component of sight deposits across maturity buckets, the value of the net open position declines by more than in the previous periods as a result of discounting at a higher interest rate. The net open position would thus

<sup>&</sup>lt;sup>23</sup> Interest rates refer to average contractual interest rates.

<sup>&</sup>lt;sup>24</sup> It is based on interest-sensitive positions in matrix reporting for assets and liabilities. Items are allocated to buckets on the basis of repricing or maturity. The net positions are calculated as the difference between interest-sensitive assets and interest-sensitive liabilities.

<sup>&</sup>lt;sup>25</sup> Excludes the allocation of the core component of sight deposits to longer maturity buckets.

<sup>&</sup>lt;sup>26</sup> Allocated to the first maturity bucket in the calculation.

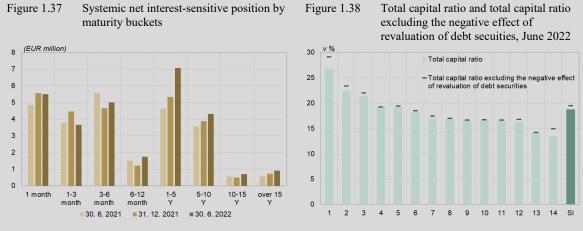
<sup>&</sup>lt;sup>27</sup> The EVE (economic value of equity) is based on the discounting of net open positions within gap analysis. The method is based on the run-down balance sheet, where transactions are amortised and not replaced by new transactions. The change in net present value depends on the maturity and size of the open position, and the size of the change in interest rates. A comparison is made between the baseline scenario and the stress scenario, where the open positions are first discounted at the baseline interest rate, and then at the modified interest rate. The rate aims to capture the volatility in bank asset values in response to changes in the yield curve. Although in reality changes in interest rates are only recognised immediately in items measured at fair value, the method is useful to supervisors mainly for the purpose of making a comparison between individual banks, and for establishing benchmarks of interest sensitivity. The result is normalised by the bank's capital (CET1), and represents the opportunity cost of the particular portfolio structure with regard to a change in the yield curve.

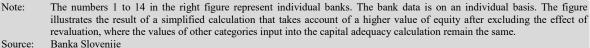
<sup>&</sup>lt;sup>28</sup> NII represents the difference between the income from interest-sensitive assets and the cost of servicing interest-sensitive liabilities. Compared with EVE, banks primarily use the NII approach in the management of interest rate risk in the banking book (IRRBB), as the latter is directly reflected in the operating result. In contrast to EVE, NII is based on a static balance sheet, where the assumption is that old transactions are replaced by new transactions (assumption of zero balance sheet growth or contraction).

<sup>&</sup>lt;sup>29</sup> Interest rate risk in the banking book (bis.org).



decline by EUR 1.3 billion in June 2022, which entails an increase in the effect of the interest rate rise of 8% compared with the beginning of the year, and 18% compared with June of last year. The increased negative effect of revaluation in the wake of a rise in interest rates is attributable to a change in the structure of interest-sensitive positions and the increased risk inherent in larger open long-term positions. If the core component of sight deposits is taken into account and used to close a large part of these positions, the effect of the parallel shift in the yield curve remains positive. Under the assumed distribution of the core component of sight deposits, which takes account of the Basel guidance,<sup>30</sup> there is an increase in interest income in the wake of a parallel rise in interest rates. The positive effect had declined to EUR 226 million by June of this year, down 28% on the beginning of the year and down 34% on a year earlier, as a result of the aforementioned increase in the share of fixed-rate loans.





### Effects from revaluation of debt securities measured at fair value

The rise in interest rates was already being negatively reflected in certain categories in bank financial statements in the first half of 2022. The rise in interest rates on the financial markets was not yet evident in an increase in net interest income during the first half of the year;<sup>31</sup> the increase was instead mainly driven by an increase in loans. Conversely the rise in interest rates and the fall in prices of securities on the financial markets has already been strongly reflected this year in a decline in the value of financial assets measured at fair value and a decline in bank equity. The stock of debt securities measured at fair value through other comprehensive income has declined by EUR 0.57 billion this year at system level, amid an overall increase of EUR 0.37 billion in the total stock of securities and financial assets on bank balance sheets. The first is the result of revaluation caused by the aforementioned fall in prices or an actual decrease as a result of maturity or sale,<sup>32</sup> whereby the decline in value as a result of revaluation in the first half of this year corresponds to one-third of the decline in the stock of debt securities measured at fair value.

The negative effects of the revaluation of debt securities were reflected in a decline in bank equity via accumulated other comprehensive income. Banks recorded a negative result of EUR 144 million in the component of equity where the aforementioned effects are included,<sup>33</sup> while the change from the positive accumulated balance of EUR 47 million in December 2021 amounted to EUR 191 million. The negative revaluation effects also reduced the banking system's regulatory capital, and thus capital adequacy. A

<sup>&</sup>lt;sup>30</sup> Represents the threshold under the Basel guidance based on which the core component of sight deposits is allocated across buckets such that the average duration is between 4 and 5 years.

<sup>&</sup>lt;sup>31</sup> See also the section on income risk. Despite an improvement in the trends and the positive growth in net interest income, the decline is still small for now. Net interest income in the Slovenian banking system this year is up 4.3% or EUR 13.3 million on the same period last year.

<sup>&</sup>lt;sup>32</sup> The stock of debt securities at fair value on bank balance sheets declined by EUR 572 million over the first half of this year, while the change from the accumulated stock of securities of this type, which reflects revaluation effects, amounted to EUR 191 million. Banks held EUR 910 million more debt securities measured at amortised cost on their balance sheets, which was the largest factor in the overall increase in the stock of securities, which amounted to EUR 374 million.

<sup>&</sup>lt;sup>33</sup> The category is Accumulated other comprehensive income in connection with holdings of debt financial instruments measured at fair value through other comprehensive income, which is part of *P.XIII Accumulated other comprehensive income*, i.e. a component of equity. See Reporting by monetary financial institutions on the Banka Slovenije website (13\_Priloga\_REKAPITULACIJA\_UL.pdf).



simplified calculation shows that, excluding the aforementioned effect, the banking system's total capital ratio on an individual basis at the end of June 2022 would be 0.75 percentage points higher than the observed figure (see Figure 1.38). Given a further rise in interest rates in the second half of the year, additional negative effects from the same source can be expected amid the revaluation of bank assets of this type.<sup>34</sup>

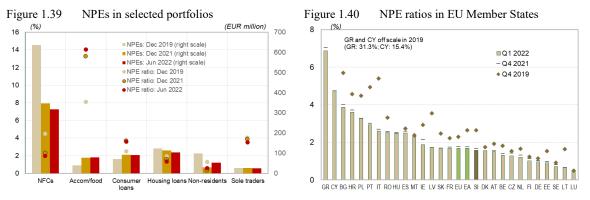
**Conversely, a relatively fast increase in net interest income can also be expected this year even in the event of a slowdown in current growth in bank lending activity.** Following the rise in interest rates at the ECB and on international financial markets, an immediate effect on interest income can be expected in the most liquid forms of assets that banks held until recently in excess reserves. It is a similar case with loans tied to variable interest rates, while the effects will also gradually be reflected in higher interest income on securities. Conversely, interest expenses from deposits by the non-banking sector remain minimal, which is attributable to the exceptionally high share of sight deposits and the low interest rates.

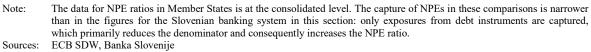
## 1.5 Credit risk

The indicators of asset quality improved further in the first half of this year, despite the worsening economic growth forecast and the increased uncertainty in the domestic and international environments. NPE ratios have remained low, and the breakdown of the portfolio by credit risk stages improved in the majority of customer segments. By contrast the allocation of exposures to the stage with increased credit risk picked up pace in a number of other EU Member States. The quality of the banking system's exposure to the countries involved in the war worsened, but these exposures account for only a small share of the portfolio. The far-reaching indirect consequences of the pandemic and the geopolitical tensions will have an adverse impact on the performance and debt servicing capacity of the majority of bank customers. Our assessment is that the banks' total credit risk is elevated, despite the persistently favourable indicators of asset quality. The elevated risk has not yet been reflected in increased coverage of the performing segment of the portfolio by impairments and provisions, although the first half of this year saw net creation of impairments and provisions.

#### Non-performing exposures at banks

The banking system's NPEs stayed at low levels in the first half of this year, as economic growth remained robust, but credit risk remains elevated on account of the downgrading of economic forecasts. The NPE ratio held at 1.2%, ranking Slovenia slightly below the EU average. Slovenia had declined to the EU average in terms of this indicator by June 2021, and to 0.1 percentage points below the average by the end of last year (see Figure 1.40). There was no discernible increase in NPEs in any other EU Member States in the first quarter of this year. In light of the continuation of the war in Ukraine and the sanctions against Russia, and also China's zero-covid policy and the resulting additional disruptions to supply chains and inflation, economic forecasts for the second half of the year have been downgraded for Slovenia and for the international environment (see the section on the macro environment). Despite the current favourable asset quality, a rise in non-performing exposures can be expected in the future.





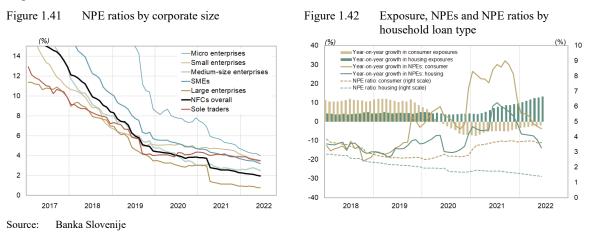
<sup>&</sup>lt;sup>34</sup> For the moment these effects are not being directly (materially) evidenced in the income statement itself or in earnings, which would only occur when the securities in question are sold or mature. The effects are disclosed more broadly, and are evidenced in the statement of comprehensive income and in equity.



The greatest improvement in asset quality in the first half of this year, and also over the entire period since the outbreak of the pandemic, came in the corporate portfolio, but the negative factors in the macro environment can be expected to have a relatively large impact in this sector. The NPE ratio in the NFCs portfolio declined by 0.3 percentage points over the first half of this year (to 2.0%), with larger declines concentrated among smaller firms: it was down 0.8 percentage points in the micro enterprises portfolio, and 0.7 percentage points in the small enterprises portfolio. The sole traders portfolio also saw an above-average decline of 0.4 percentage points. All of the aforementioned categories of firms are still notable for higher NPE ratios, compared with medium-size and large enterprises (see Figure 1.41), and compared with other customer segments. Accommodation and food service activities was the sole sector to see a deterioration over the first half of the year, the NPE ratio standing at 14.0% in June, although the rise came to an end in the second quarter. The lifting of all containment measures was reflected in much-improved performance in accommodation and food service activities,<sup>35</sup> but subsequent developments in the sector will be affected by labour shortages, which are increasingly evident as a long-term problem. The high headline inflation, and the high inflation in commodity and energy prices in combination with disrupted access, are reducing firms' income and increasing the debt servicing burden, which could increase the probability of default. The disruptions to supply chains are requiring firms to increase their financing of inventories to ensure no disruption to business, which is also associated with increased costs. Firms that are still facing a downturn in turnover compared with before the pandemic will be in a more difficult position.

For the corporate sector as a whole, an additional risk of deterioration in asset quality comes from the high share of variable-rate loans in their bank debt, and the consequent increase in the debt servicing burden. Despite the rise in fixed-rate lending to NFCs last year and this year, variable-rate loans are prevalent in the portfolio, accounting for 74% of the total at the end of June (see Figure 3.25). The figure is similarly high in the sole traders portfolio, at just under 70%. This risk is partly mitigated by exposures for which the banks have concluded interest rate hedges, which is generally done for large loans and large enterprises. Credit risk from this source is lower in the household portfolio, given the prevalence of fixed-rate loans in the total stock of bank debt (see the section on interest rate risk).

After rising from late 2020, the NPE ratio in the consumer loans portfolio has begun to slowly decline over recent months, while the NPE ratio in the housing loans portfolio has shown a trend of decline for several years.<sup>36</sup> The rise in NPEs in the consumer loans portfolio followed its rapid expansion between 2017 and 2019: the NPE ratio had reached 3.7% by the halfway point of 2021, and then remained at that level for the second half of the year before falling to 3.6% by the second quarter of this year. The improved financial position of households, as evidenced in rising disposable income, brought an increase in debt servicing capacity, including the debt for whom a moratorium had been approved until the end of 2021 under the emergency legislation. The inflow of new NPEs consequently slowed. The NPE ratio in the housing loans portfolio declined as a result of a fall in the stock of NPEs and also as a result of the strong growth in housing loans (the denominator). The NPE ratio had fallen to just 1.3% by the end of June. Due to inflation and the resulting decline in disposable income the credit risk in the household sector is also elevated, particularly in respect of borrowers in lower income brackets.

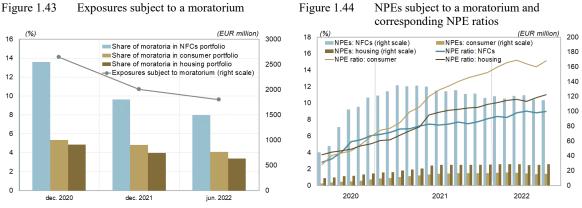


<sup>&</sup>lt;sup>35</sup> For example, see June 2022 issue of the Review of macroeconomic developments, April 2022 issue of Semi-annual overview of economic and financial developments.

<sup>&</sup>lt;sup>36</sup> The data for bank exposure by loan type is available from October 2016.



The inflow of new NPEs has also come to an end in the portfolio segments where moratoria were approved during the Covid-19 pandemic, while their relative importance to total bank exposure is small and still diminishing. The above-average NPE ratios in the exposures subject to a moratorium are confirmation that this portfolio bears increased credit risk. This portfolio segment also saw great uncertainty with regard to the ability of these customers to recover their pre-pandemic level of turnover, and a risk of greater transitioning to non-performing status. After increasing in 2020 and the first half of 2021, the stock of NPEs in the NFCs exposures subject to a moratorium began to decline (see Figure 1.44), as a result of the economy opening up and the customers being reclassified as non-defaulters, and partly as a result of the banks' own regular activities to reduce NPEs. The NPE ratio in this segment nevertheless continued to rise as a result of a decline in the stock of exposures (the denominator) following the expiry of the moratoria. The NPE ratio in the exposures to NFCs subject to a moratorium thus reached 9.0% by June of this year. A similar trend, albeit with higher NPE ratios, can be seen with regard to households, in both the consumer loans portfolio and the housing loans portfolio subject to a moratorium (NPE ratios of 15.1% and 11.0% respectively). The share of the exposures with a moratorium approved during the pandemic to total exposure declined from its peak of 5.4% at the end of 2020 to 3.4% in June of this year. The NPE ratios declined in all major segments of the portfolio subject to a moratorium (see Figure 1.43).



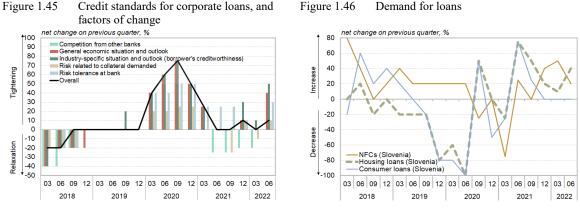
Note: Exposures subject to a moratorium include all exposures for which a moratorium was approved during the pandemic, irrespective of whether the moratorium has already expired or is still active (still the case to a lesser extent with bilateral moratoria), and that were still in bank portfolios in the month in question.
 Source: Banka Slovenije

Amid increased demand for loans from NFCs<sup>37</sup> and households (see Figure 1.46), the banks slightly tightened their credit standards in the second quarter, and a further tightening is expected in respect of NFCs in the third quarter. According to the BLS,<sup>38</sup> the banks highlighted the general economic situation and the industry-specific situation as factors driving the tightening of credit standards for NFCs, given the adverse impact on the creditworthiness of debtors (see Figure 1.45). Competition from other banks, which was a factor driving looser credit standards over the preceding four quarters, is no longer being cited as such, in light of the anticipated rise in interest rates. The standards were tightened slightly more for consumer loans. After minor changes in the first quarter, banks in the euro area overall tightened credit standards in all three loan segments, by slightly more than Slovenia in the NFCs and housing loans segments, and by less in the consumer loans segment. In their survey responses of June of this year, banks in Slovenia were expecting a particular tightening of credit standards for NFCs in the third quarter, while banks in the euro area overall were expecting tightening in similar numbers to the second quarter.

<sup>&</sup>lt;sup>37</sup> Demand for loans based on the annual survey of demand for loans is examined in the section on non-financial corporations.

<sup>&</sup>lt;sup>38</sup> As of 2022 a total of ten credit institutions report for Slovenia in the BLS, with the first data for the final quarter of 2021. This is six more banks than previously. They accounted for 84.1% of the banking system in terms of the balance sheet total at the end of December 2021 (compared with 60.5% in June), and for 79.1% of loans to NFCs (up from 51.1%), 90.4% of housing loans (up from 64.5%), and 79.7% of consumer loans (up from 60.4%). The shares are calculated on the basis of data reported to Banka Slovenije on an individual basis.



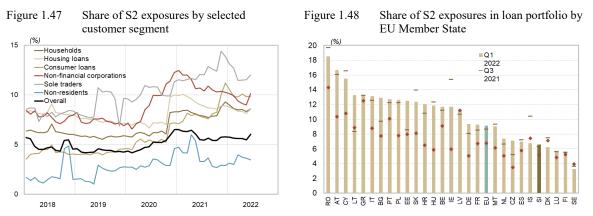


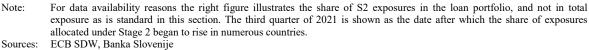
Source: Banka Slovenije

**Credit risk from exposures to customers from the countries involved in the war in Ukraine remains high, although the actual exposure is relatively small.** Slovenian banks' direct exposure to customers from Russia, Ukraine and Belarus declined from EUR 90 million at the outbreak of the war to EUR 78 million by the end of June, equivalent to just 0.15% of their total exposure. The banks reclassified 23% of these exposures as non-performing in June, which raised the NPE ratio in the non-residents portfolio to 0.6%. The remaining exposures to the three countries in question were almost all reclassified to the stage with increased credit risk (Stage 2 under the IFRS), and their potential reclassification to non-performing status would raise the NPE ratio at system level by an additional 0.1 percentage points.

#### Credit risk stages<sup>39</sup>

The shifts in the breakdown of the portfolio by credit risk stages in the first half of this year were still indicative of the favourable assessment of credit risk by Slovenian banks. The share of exposures allocated under Stage 2 declined over the first half of the year (see Figure 1.47) and stood at 6.1% in June.<sup>40</sup> The figure in June was lower than at the beginning of the year in the majority of customer segments. The cuts in economic growth forecasts and the declining confidence among businesses and consumers could once again alter the banks' perceptions of credit risk, and encourage reallocation of exposures to higher-risk stages.





Stage 2 allocation has been rising in numerous EU Member States since the final quarter of 2021, which was reflected in the higher average share of Stage 2 exposures in the EU overall (see Figure 1.48). The data is only available up to the first quarter, just a month after the outbreak of the war in Ukraine, and does not capture all of the banks' responses to the increase in geopolitical risks, which led to subsequent downward corrections in economic growth. In terms of the share of Stage 2 exposures in the total loan

<sup>&</sup>lt;sup>39</sup> For an explanation of the credit risk stages, see footnote 35 of the April 2022 issue of the Financial Stability Review.

<sup>&</sup>lt;sup>40</sup> The share of Stage 2 exposures at system level declined from 5.8% to 5.5% over the first five months of the year, before rising again to 6.1% in June as a result of major reallocation at one large bank.

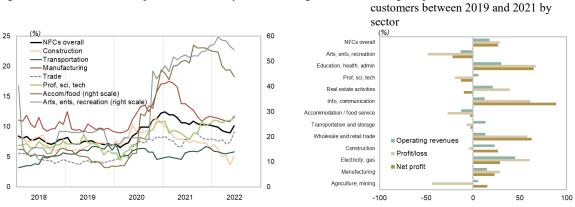


Change in performance of NFCs as bank

portfolio, Slovenia has one of the lowest figures (6.6%, compared with the EU average of 9.1%), but it should be noted that there is considerable variation in this indicator at banks in Slovenia, and the change in the indicator is more significant that its actual level.

Figure 1.50

Figure 1.49 Share of S2 exposures to NFCs by sector



Note: The sectoral data in the right figure relates solely to non-financial corporations that were bank customers as at 30 June 2022. Sources: AJPES, Banka Slovenije, own calculations

The direction of reallocation of exposures to NFCs between credit risk stages thus varies between sectors, but the prevailing impact on the portfolio as a whole is coming from the decline in share of Stage 2 exposures in manufacturing. Since the beginning of the economic recovery in the first quarter of 2021, the banks have made net reallocations of exposures to manufacturing firms to lower-risk stages. A significant decline in the share of Stage 2 exposures to customers in accommodation and food service activities and arts, entertainment and recreation only arrived this year. These sectors saw a sharp increase in turnover in 2021, but it was still down on its pre-pandemic level of 2019 (see Figure 1.50). Customers in professional, scientific and technical activities and administrative and support service activities were also performing worse than two years earlier, and have been identified as higher risks by the banks since the second half of 2021, with renewed reallocations of their exposure to Stage 2. All of these sectors were among those hit hardest by the containment measures in 2020 and 2021.

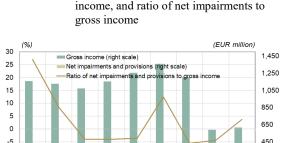
### Impairments and provisions, and coverage by impairments and provisions and by collateral

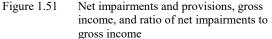
The banking system saw the trend of net release of impairments and provisions come to an end in the first half of this year. The net creation of impairments and provisions at system level began in March, as a result of the worsening situation in the international environment. Net impairments and provisions still accounted for a very low proportion of the disposal of gross income in the first half of the year (less than 4%, compared with the long-term average of more than a fifth). A comparison with EU Member States in the first quarter of this year in terms of the ratio of impairments of financial assets to the balance sheet total<sup>41</sup> shows a similar trend in Slovenia and in the EU overall. With two exceptions, all EU Member States recorded impairments of the aforementioned financial assets over the first three months of this year, the overall and median values of the indicator thus rising.<sup>42</sup>

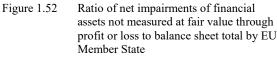
<sup>&</sup>lt;sup>41</sup> Impairments of financial assets not measured at fair value, which account for the largest component of impairments, where the available quarterly data (for the first quarter of 2022) has been annualised. Source: ECB SDW (Consolidated Banking Data).

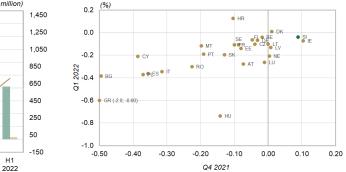
<sup>&</sup>lt;sup>42</sup> The overall EU figure had risen to 0.17% (measured against the balance sheet total) by March (up from 0.14% in December of last year), while the median figure for EU Member States had risen to 0.137% (up from 0.084%). The figure for Slovenia at the end of the first quarter was lower, at just 0.04%.











Negative values in the left figure represent the net release of impairments and provisions. The data for the Slovenian banking Note: system comes from balance sheet figures on an individual basis. The right figure illustrates impairments of financial assets not measured at fair value through profit or loss. The values for the first quarter of 2022 are restated on an annual basis. Negative values denote net creation, while positive values denote a net release of impairments (includes consolidated banking data).

H1

2021

Sources: Banka Slovenije, ECB SDW (CBD)

-10

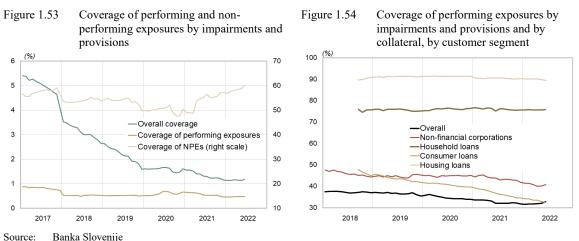
-15

-20

-25

2015 2016 2017 2018 2019 2020 2021

Coverage of NPEs by impairments and provisions increased further in the first half of this year, while coverage of performing exposures was unchanged. Coverage of NPEs by impairments and provisions reached 60.1% in June of this year (see Figure 1.53), the sixth-highest figure in the EU (see Figure 1.54). As in 2021, the increase in coverage of NPEs was seen in all customer segments, and in the majority of economic sectors. The stock of impairments did increase slightly in the performing segment of the portfolio, but the strong growth in lending meant that there was no significant change in coverage: the figure ranged from 0.46% to 0.47% between December and June. After rising temporarily during the first year of the pandemic, coverage of performing exposures has this year fallen below its pre-pandemic level (0.50% at the end of 2019).



#### 1.6 Income risk

Income risk is assessed as stable over the short term. Developments in income categories improved over the first half of this year. Year-on-year growth in net interest income moved into positive territory in the early part of the year, as a result of quantity effects amid increased bank lending activity. The negative impact from price effects declined. Despite the improved trend, the changes in net interest income still relatively small, but are gradually increasing gross income. Having slowed last year, the decline in the net interest margin came to an end, and the ratio stabilised at 1.40% in the months till June. The banking system's net non-interest income in the first half of the year was up on the same period last year, as were gross income and net income. The conditions for generating income have improved this year, and the banking system is seeing a rise in income driven by increased lending activity. Amid the ongoing gradual rise in interest rates, positive effects on income generation at banks can also be anticipated. Over the slightly longer term the



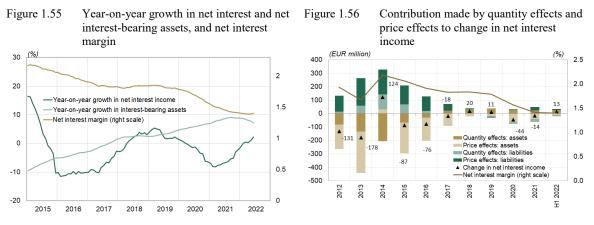
international situation and the macro environment could gradually give rise to adverse effects from rising funding costs for banks, a decline in debt servicing capacity on the part of borrowers, and rising operating costs. The situation thus remains complicated and uncertain.

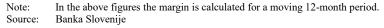
#### Gross income and net income

The Slovenian banking system has seen an increase in income this year, with both gross income and net income rising. Increased lending growth means that the conditions for generating income have improved, while an additional gradual increase in net interest income can be expected amid the rise in interest rates. At the same time there is uncertainty surrounding the future growth in loans, given the international situation and the economic environment. Having improved for several consecutive quarters, income generation at the banks improved again in June following a temporary year-on-year deterioration in April and May (owing to a base effect from high non-interest income driven by one-off factors, namely revaluation effects from spring of last year). Gross income in the first half of this year was up 4.8% in year-on-year terms, while net income was up 4.7%. Developments in net interest, growth in net fees and commission, and last year's still-moderate growth in operating costs. The income and cost categories have driven an improvement in profit this year relative to last year.<sup>43</sup> Despite the improvement in income, it is necessary to once again highlight the uncertainty caused by the ongoing Russian invasion of Ukraine and the related risks in the macro and international environments.

#### Net interest margin and net non-interest margin

The decline in the net interest margin came to an end in the first half of this year. The decline in net interest income was already slowing last year, and the negative growth turned positive again in the early months of this year, the year-on-year rate reaching 4.3% in June. The decline in the net interest margin began to slow sharply in the second half of last year, primarily as a result of the gradual increase in lending to the non-banking sector.<sup>44</sup> The decline in the margin had come to an end by the end of the second quarter of this year, with the figure rising minimally till June to reach 1.40%. Overall yield on assets, which had declined continually in recent years as a result of the long period of low interest rates, rose again in June. This was attributable to several factors: a renewed increase in loans, also in interest-bearing assets this year, a decline in the share of low-yielding or even negative-yielding assets on the balance sheet, and a rise in returns on debt securities held on the balance sheet. The change in margin in recent years has mainly been driven by changes on the asset side. The liability side had seen a sharp decline in interest expenses as a result of the pronounced rise in the share of sight deposits and the low interest rates, but our expectation is nevertheless that even here the near future changes will also be relatively slow and small.





## The increase in net interest income over the first half of this year was primarily attributable to quantity effects on the asset side, while the contribution by price effects was still negative. The main

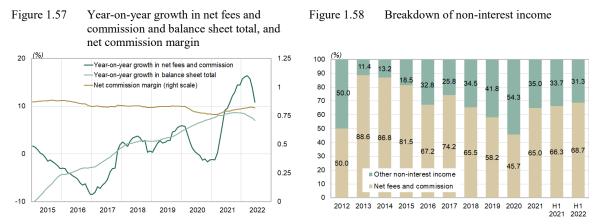
<sup>&</sup>lt;sup>43</sup> See the section on profitability and solvency, which examines the differences in the amount of pre-tax profit in 2021 and 2022, which can be explained by changes in income and cost categories and in net impairments and provisions.

<sup>&</sup>lt;sup>44</sup> For example, the net interest margin declined by 0.22 percentage points in 2020 to 1.57%, and then to 1.41% in 2021. The net interest margin declined by only 0.01 percentage points over the first half of this year.



factor in the increase in interest income was the positive quantity effects from loans, while price effects from loans were still acting to slightly reduce net interest income (see Figure 1.56). The negative price effects slightly outweighed the quantity effects on the liability side. Other liabilities (primarily to the ECB) acted to increase net interest income, while the holdings of excess reserves at the central bank acted to reduce it.

This year's higher growth in net interest income is primarily attributable to an increase in lending growth. The rise in interest rates will also contribute to the increase in net interest over the short term. Net interest remains the largest and most stable component of bank income. The dynamics in (net) interest income are being determined above all by the increased lending activity, which has been the largest factor in the stabilisation of net interest income this year. An additional rise in net interest can be expected in the second half of this year,<sup>45</sup> as a result of the sharp increase in loans to the non-banking sector, rising interest rates, and changes in asset structure. This is also being reflected in a gradual increase in growth in interest income from securities. The ending of the negative interest rate on the ECB's deposit facility in July of this year means that the particular segment of claims against the central bank held by the banks in the form of excess reserves no longer reduced net interest. From mid-September the particular segment of claims are increasing net interest thanks to the positive interest rate on the deposit facility. The banking system's interest expenses have undergone minimal change at the same time as a result of the very high share of sight deposits and the interest rates of virtually zero offered on deposits.



Note: In the left figure the net commission margin is calculated for the preceding 12 months. Source: Banka Slovenije

Non-interest income in the first half of this year was up in year-on-year terms, as a result of increases in net fees and commission, and in dividend income. The banks also saw an increase in non-interest income last year, particularly in the net fees and commission segment, which is the largest and most stable component of non-interest income. The net commission margin stabilised at 0.82% in the second quarter of this year, while the aggregate net non-interest margin stood at 1.24% at the end of June, comparable to the end of last year. The banks saw a seasonal rise in dividend income in May and June, which was absent in the same period last year. The increase was an important factor in the positive growth in non-interest income amid this year's year-on-year decline in non-interest income from revaluations.<sup>46</sup>

### **Operating costs**

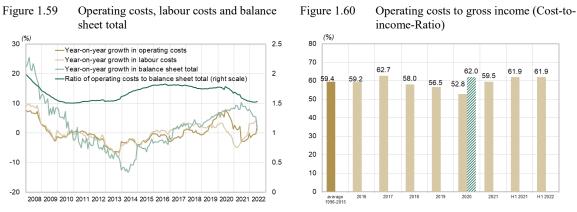
**Operating costs increased in the first half of this year, but the rate of growth was comparable to the growth in income.** It should be reiterated that they have recorded minimal growth over the last two years, in the past year, however, they decreased. The ratio of operating costs to the balance sheet total stood at 1.53%

<sup>&</sup>lt;sup>45</sup> While net interest over the first half of the year was up 4.3% in year-on-year terms, the quarterly developments reveal that net interest income at system level in the second quarter was up 5.6% in year-on-year terms. The increased growth is being driven primarily by growth in loans, which in the first half of the year were up 8.7% on the same period last year (compared with 1.9% in 2021); loans account for around 85% of the banks' interest income. Growth in interest income from loans had risen to 4% by June. Growth in interest income from securities is also gradually increasing, and had reached 8% by June. The abolition of negative interest rates on some of the excess reserves will have an immediate impact in reducing the interest expenses resulting from negative interest rates on excess reserves held at the ECB. For example, they amounted to EUR 31 million in 2021, and EUR 16 million in the first half of 2022.

<sup>&</sup>lt;sup>46</sup> Last year saw an increase in non-interest income caused by the revaluation of the loan portfolio and securities portfolio at several banks. The category of *Net gains/losses on non-trading financial assets mandatorily at fair value through profit and loss* recorded a gain of EUR 50.8 million in the first half of last year at system level, compared with a loss of EUR 2.8 million this year, which was a major factor acting to reduce aggregate non-interest income.



in June (see Figure 1.59), comparable to the figure at the end of last year. The CIR has risen to 61.9% this year, slightly above its long-term average, and above the average of the last five years (see Figure 1.60). Operating costs over the first six months of this year were up 4.8% in year-on-year terms. The rate of growth is gradually increasing (it stood at -0.2% in December of last year). Growth in labour costs remained lower than growth in aggregate operating costs, at 2.6%.



Note: The right-hand-side CIR for 2020 in the right figure excludes the effect of the merger of two banks. Source: Banka Slovenije

#### Comparison of income and cost indicators with EU Member States

A comparison of the income and cost indicators relative to the balance sheet total for the Slovenian banking system in 2021 shows the values to be mostly similar or better than those recorded by the group of banks of comparable size in the EU overall. The Slovenian banking system recorded a net interest margin, a net non-interest margin and, in particular, a net commission margin that were slightly higher than the EU median. At the same time the ratio of operating costs to the balance sheet total and the CIR were higher. A comparison of the Slovenian banking system with banks of a similar size (small banks in the EU) is notable for the former's slightly higher net interest margin. The figures for net non-interest margin and net commission margin were comparable, while banks in Slovenia were notable for the slightly lower values for the ratio of operating costs to the balance sheet total and the CIR.<sup>47</sup>

### Box 1.2 Digital transformation and use of fintech in the banking system

Digitalisation and new financial technologies (fintech) are having an increasing impact on the banks' performance and business models. Appropriate digital transformation and using fintech gives banks an initial a competitive advantage in the banking and non-banking markets, but later becomes a prerequisite for survival. As part of the SSM<sup>48</sup> Banka Slovenije conducted a survey of Slovenian banks in July of this year on the digital transformation and the use of fintech, to gain insight and overview into (i) the banks' approach to the digital transformation and the use of fintech, (ii) how the banks are monitoring and measuring progress in the digital transformation, and (iii) the state of digitalisation in the banking sector.<sup>49</sup> In the survey<sup>50</sup> banks were asked about their strategy in the area of digital transformation. The survey results show that Slovenian banks<sup>51</sup> are cautious in their use of fintech, and that there are no discernible differences in the use of fintech compared with the results of previous surveys. In the area of digital transformation they are mainly aiming to adapt their strategies and business models to the new situation in the banking market. There is also a growing collaboration between banks and fintech firms with regard to the digital transformation.

<sup>&</sup>lt;sup>47</sup> The compared values relate to the whole of 2021 (ECB SDW). See the section of the appendix entitled Comparison of selected indicators of the Slovenian banking system with EU banking systems in 2021.

<sup>&</sup>lt;sup>48</sup> The Single Supervisory Mechanism is the new system of banking supervision in Europe. It consists of the ECB and the national supervisory authorities of the participating countries.

<sup>&</sup>lt;sup>49</sup> The survey was drawn up by the SSM, and sent to all systemically important banks. Banka Slovenije also sent the survey to all the other commercial banks that are not systemically important.

<sup>&</sup>lt;sup>50</sup> Survey of digital transformation and fintech at banks, July 2022. The survey covered all banks and savings banks (excluding branches).

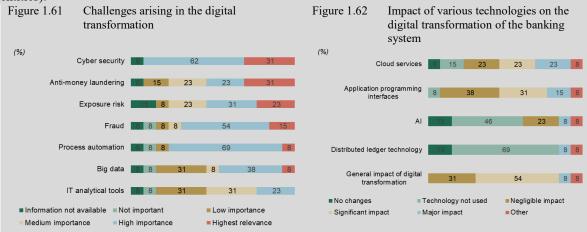
<sup>&</sup>lt;sup>51</sup> Financial Stability Review, October 2021. Available online at <u>https://bankaslovenije.blob.core.windows.net/publication-files/fsr\_oktober\_2021\_en.pdf</u>.



### Digital transformation of the banking system

Based on the results of the survey on digital transformation, it is clear that Slovenian banks are increasingly including the digital transformation in their strategies and business plans. The banks typically do not have separate resources for digitalisation, but integrate them in their existing IT resources, and the same applies to strategy. The banks are typically hiring external consultants and service providers to undertake the digital transformation. Digital transformation objectives in banking focus on: (i) costs, (ii) income, and (iii) risks. The results of the survey show that in the digital transformation the banks are focusing most on income, which means that they want to improve their income flows. The use of big data also allows for better risk management (e.g. for credit risk). In the cost realm they aim to use the digital transformation to reduce human resources, and to improve business processes optimisation and the range of services. Banks want to improve their income through digitisation by offering new or improved banking products, services and contactless transacting. From the perspective of financial stability, the digital transformation could bring increased risks relating to cyber security, dependency on external ICT service providers, and the potential loss of customers (see Figure 1.61).

The challenges brought to Slovenian banks by the digital transformation can be divided into the following areas: (i) managing the costs of external ICT service providers, (ii) shortage of staff with the requisite digital and cyber skills, (iii) dealing with overly restrictive regulations, and (iv) ensuring adequate cyber security. Similarly to previous years (2019 and 2021), the banks say that there is a lack of staff with the requisite skills on the market, and also a lack of suitable service providers (IT firms) able to offer high-quality solutions to banks. The findings in the area of legislation are also similar to previous surveys, with the banks reiterating that the regulatory environment for banking in Slovenia is overly restrictive when it comes to the use of fintech, while lower standards apply to the competition (non-bank entities).



Source: Banka Slovenije

More than half of Slovenian banks report that cloud services and application programming interfaces are having a significant impact on the digital transformation of the banking system. Other technologies such as AI and distributed ledger technology are not having a significant impact on the digitalisation of the banking system (see Figure 1.62).<sup>52</sup> The digital transformation of the banking system is primarily being influenced by business processes and activities that improve external and internal business processes, such as open banking/API,<sup>53</sup> AML/CFT monitoring, payments settlement, and data quality. Slovenian banks are increasingly focusing on digital projects in the area of mobile and online banking, and the search for additional digital channels to increase competitiveness and profitability.

<sup>&</sup>lt;sup>52</sup> Similar assessments of the impact of fintech on the digital transformation are also evident in the initial results of the survey at SSM level.

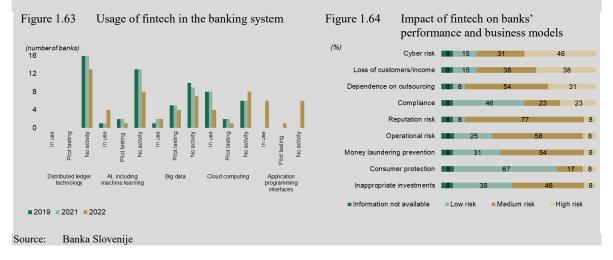
<sup>&</sup>lt;sup>53</sup> Under the EU's new payment services directive (the PSD2), banks are required to provide their customers with greater oversight of their own data, new services and an improved user experience. The main aim of the directive is to improve the security of payments and to ensure greater security for payment service users, while encouraging payment service providers to compete with one another and to innovate in the financial sector. On this basis banks have embarked on the development of open banking, which enables various stakeholders from the financial industry, such as third-party providers and other financial institutions, to work together. One feature of open banking is its incorporation of fintech.



### Usage of fintech in the banking system

Banks are investing more and more to develop new products based on fintech, but still on a limited scale. The banks report that they primarily use tried and tested fintech in their operations, such as cloud services and application programming interfaces. Similarly to previous years, the banks are not investing in fintech such as distributed ledger technology, smart contracts, big data and AI. They do see added value in these technologies, but do not yet include them in their business models (modelling, customer management, payments, etc.). The banks remain conservative in their introduction of fintech, which means that they make a thorough assessment of the added value of the technology before deciding to implement it. There has been no major shift in the use of fintech at Slovenian banks over the last years (see Figure 1.63). The results of the survey show that banks are making limited use of fintech in their business processes and their services for customers (currently only a fifth of the banks use at least one financial technology in their business models). Currently they are not considering the use of other fintech, and do not see any added value in it.

Fintech is having an impact on the banks' performance and business models, particularly from the perspective of increasing income and competitiveness. The banks report that fintech is having a significant impact on the automation of business processes. Fintech such as machine learning is being used by certain banks in particular in areas such as cyber security and anti-money laundering. The banks report that the use of cloud services is allowing for the use of advanced analytical tools and big data processing. Similarly to previous years, our assessment is that the banks are making a thorough assessment of the added value of new fintech before deciding to implement it (see Figure 1.64).





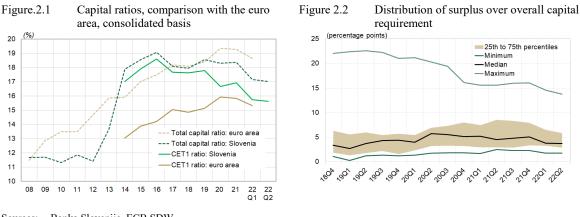
# 2 RESILIENCE OF THE BANKING SYSTEM

# 2.1 Solvency and profitability

The banking system's solvency remained solid in the first half of this year. Capital ratios declined relative to the end of last year, as a result of an increase in risk-weighted assets and a decline in regulatory capital. The increase in risk-weighted assets was driven by an increase in lending to firms and households, and was not a reflection of a deterioration in asset quality. Regulatory capital declined as a result of the revaluation of bond holdings. The fall in value of the latter was attributable to selling pressure on the financial markets, where yields are rising. As a result of the huge uncertainty in the macroeconomic environment, inflation, and the rise in interest rates, which will reduce the solvency of the majority of bank customers, the banking system could see a deterioration in asset quality in the future, which would lead to further declines in capital ratios. A deterioration in asset quality could have an impact on earnings and on other comprehensive income via the additional creation of impairments and provisions or downward revaluations, consequently reducing the banks' ability to strengthen regulatory capital. Our assessment is that the banking system's current resilience to systemic risks in the area of solvency and profitability remains medium, but could deteriorate over the longer term. Here we should reiterate that there are still considerable differences between the banks in the level of their capital surpluses and their ability to cover potential losses. Given the uncertainty surrounding the sustainability of the current high profitability that would allow the banks to maintain or strengthen their capital adequacy in the future, careful capital management will therefore be vital, particularly at banks with smaller capital surpluses.

#### Solvency

The banking system's total capital ratio on a consolidated basis declined in the first half of this year. The decline was attributable to an increase in risk-weighted assets and a decline in regulatory capital. Risk-weighted assets increased as a result of the rise in lending activity, which has followed on from last year, while the rise in items with higher risk levels accounted for just under a tenth of the total increase in risk-weighted assets. Despite a relatively large strengthening from retained earnings,<sup>54</sup> the banking system's regulatory capital declined as a result of the revaluation of securities not measured through profit or loss. The total capital ratio on a consolidated basis (see Figure 2.1) declined by 1.4 percentage points over the first half of this year to 17.0%, while the common equity Tier 1 capital ratio (CET1) declined by 1.3 percentage points to 15.6%. The total capital ratio was 1.4 percentage points below the euro area average<sup>55</sup> (18.6%), while the CET1 was 0.3 percentage points higher (15.3%). The total capital ratio on an individual basis declined by 1.3 percentage points over the first half of this year to 18.7%, while the CET1 declined from 18.3% in December 2021 to 17.1% in June.



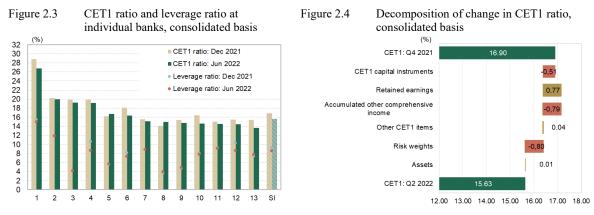
Sources: Banka Slovenije, ECB SDW

<sup>&</sup>lt;sup>54</sup> Retained earnings are a component of common equity Tier 1 capital, and in addition to profits brought forward from previous years also include interim profits, subject to the prior consent of the supervisory authority, provided that the conditions set out in Article 25(2) of the CRR are met. One factor in the increase in retained earnings in the first half of the year was the inclusion of interim profits of one of the banks, which also included gains made during the purchase of the bank.

<sup>&</sup>lt;sup>55</sup> The data for the euro area relates to the first quarter of 2022.



The Slovenian banking system's total capital ratio has declined over the longer term, while the euro area average has increased. Between 2014, when the recapitalisation of individual banks was carried out, and the first quarter of 2022 the total capital ratio in Slovenia declined by 0.7 percentage points, while the euro area average increased by 2.7 percentage points. The reason is that Slovenia is one of the countries with high growth in regulatory capital over the aforementioned period (in the amount of 30%), but at the same time it is notable for the highest growth in risk-weighted assets (36%), well in excess of the rise in the euro area average (10%). In addition to the merger of individual banks and, recently in particular, the rise in lending, one of the main factors in the higher growth in risk-weighted assets is the prevailing use of the standardised approach for the assessment of credit risk. This contributed to the average risk weight being higher than when IRB approaches are used, as is more common in other euro area countries. The standardised approach is used to estimate 84% of risk-weighted assets in Slovenia, while the euro area average figure is almost a half lower. Consequently the average risk weight of the Slovenian banking system stood at 56%, 21 percentage points higher than the euro area average. Although the average risk weight in Slovenia is higher, this does not necessarily entail lower asset quality; rather it is indicative of the greater conservativeness of Slovenian banks and of their robustness in the event of the realisation of potential economic shocks.



Source: Banka Slovenije

The majority of banks saw their total capital ratios on a consolidated basis decline in the first half of this year. The decline lay within the interval of 0.39 to 2.02 percentage points at most of the banks, while two banks saw an increase. The developments in risk-weighted assets and regulatory capital also had an impact on capital surpluses. The surplus by which the total capital ratio exceeds the overall capital requirement<sup>56</sup> has declined by 1.32 percentage points this year at the level of the banking system to 3.75 percentage points (equivalent to a decline in capital surplus of EUR 343 million to EUR 1.2 billion). Capital surpluses declined at almost all of the banks, but as in the past their sizes still vary considerably from bank to bank, and thus their capacity to absorb any shocks. The leverage ratio has also declined this year, by 0.8 percentage points to 8.5%, and remains lowest at the small banks (see Figure 2.3).

**Regulatory capital was reduced by losses incurred by the banks from the revaluation of securities.** The decline in regulatory capital was smaller than it would otherwise have been, as the banks used profits brought forward from the previous financial year and other reserves to strengthen regulatory capital. Interim profit including the gains<sup>57</sup> from the acquisition of another bank was used by one of the banks to strengthen regulatory capital, after obtaining permission from the supervisor to do so at the end of the first half of the year. Regulatory capital on a consolidated basis has declined by 2.7% this year to reach EUR 5.4 billion. The majority of the change in regulatory capital was driven by common equity Tier 1 capital (see Figure 2.4), while the changes in other capital components were negligible. Strengthening capital through earnings and by issuing eligible capital instruments not only strengthens a bank's resilience, but also allows it to meet the MREL requirement for own funds and eligible liabilities (MREL).<sup>58</sup> The banks will have to fully meet the MREL requirements as of 1 January 2024. Not all banks have met the MREL target to date, but our assessment is that they will not have difficulty in meeting these requirements by the prescribed deadlines, all of them having met the intermediate MREL targets as at 1 January 2022.

<sup>&</sup>lt;sup>56</sup> The overall capital requirement encompasses the Pillar 1 and Pillar 2 capital requirements and the capital buffers, but not the Pillar 2 guidance.

<sup>&</sup>lt;sup>57</sup> Relates to negative goodwill.

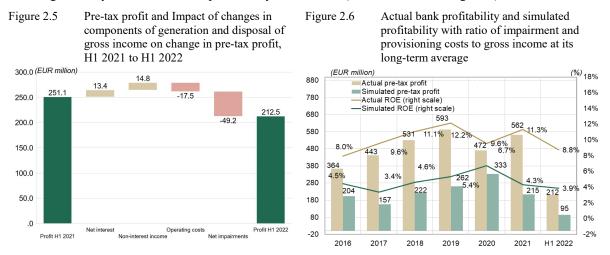
<sup>&</sup>lt;sup>58</sup> Banks can issue instruments that are eligible for meeting MREL requirements, but not for strengthening regulatory capital.



The recent increase in risk-weighted assets is primarily attributable to an increase in lending to NFCs and households. The banking system's risk-weighted assets on a consolidated basis have increased by 5.0% this year to stand at EUR 31.8 billion. The increase in risk-weighted assets was driven by exposures to corporates, exposures secured by real estate, and exposures in default and exposures associated with particularly high risk, which despite the increase account for a low share of total risk-weighted assets. Risk-weighted assets for exposures in default and exposures associated with particularly high risk could further worsen in the future in the NFCs and non-residents portfolios as a result of the adverse effects of the war in Ukraine and the general macroeconomic environment in the EU. Risk-weighted assets could consequently increase through higher risk weights, which would have an adverse impact on capital adequacy.

# Profitability

**Pre-tax profit over the first half of this year was down 15.4% in year-on-year terms.** Despite an increase of EUR 10.6 million in net income,<sup>59</sup> this year's decline in profit was attributable to the renewed, albeit small, creation of impairments and provisions. This amounted to EUR 23 million, compared with a net release of impairments and provisions in the amount of EUR 26 million in the first half of last year (see Figure 2.5). Nine of the 16 banks have seen the net creation of impairments and provisions this year. Given the deterioration in the international situation and the macro environment, a further deterioration in the asset quality can be expected in the future, with the creation of additional impairments and provisions. They accounted for just 3.7% of the disposal of gross income in the first half of the year (compared with the long-term average of 22.7%). Pre-tax ROE stands at 8.8% this year, down on the same period of last year (10.6%) and 2021 as whole (11.3%). Had the ratio of impairment and provisioning costs to gross income been at its long-term average, pre-tax profit would merely have been less than a half of that actually observed (see Figure 2.6). Although the current conditions for income generation remain good, it should be highlighted that the potential renewed increase in net impairments and provisions could significantly reduce the banks' profitability in the future (over the medium/long term).



Note: The simulated profit and ROE reflect the long-term average of the ratio of net impairments and provisions to gross income. This takes into account that impairments and provisions accounted for 22.7% of the banks' disposal of gross income between 1996 and 2021, where 2012, 2013, and 2014, when impairment and provisioning costs were far above average, are excluded. Similarly excluded are 2017, 2018, 2019 and 2021, when the banks recorded a net release of impairments and provisions. Profit and ROE in both figures are pre-tax, on an individual basis.

Source: Banka Slovenije

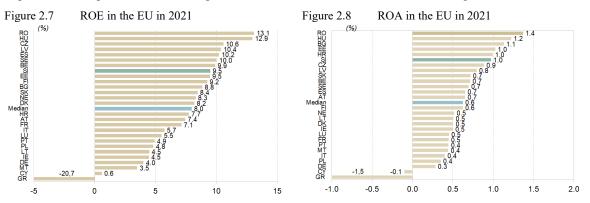
**Profitability in the banking system remains relatively solid.** In the wake of the weakening of net interest income, the high profitability of the Slovenian banking system in previous years was attributable to its low assessments of credit risk, which at system level were mostly reflected in a net release of impairments and provisions,<sup>60</sup> to the banks' efforts to generate non-interest income and, on occasion, to one-off factors. The growing economy and the increase in lending to households and firms are currently having a positive impact on net interest income, while additional positive effects are anticipated from the rise in interest rates. At the same time, given the great uncertainty in the international situation and the macro environment as a result of

<sup>&</sup>lt;sup>59</sup> See the section on income risk, which addresses the generation of income by the banks, and their operating costs.

<sup>&</sup>lt;sup>60</sup> The net release of impairments and provisions was the dominant factor at the level of the Slovenian banking system between 2017 and 2021, with the exception of 2020.



soaring inflation and the deterioration in the asset quality, higher operating costs and increased creation of impairments and provisions can be expected to be seen over the medium term and long term.



Note: The indicators are calculated on the basis of the ECB SDW's consolidated banking data. This data differs slightly from the figures based on balance sheets on an individual basis. The ROE and ROA figures for EU Member States are calculated on the basis of available data, after tax.

Sources: Banka Slovenije, ECB SDW

Slovenia was ranked in the top third of EU Member States in terms of ROE in 2021, outperforming the mean and the median. ROE in the Slovenian banking system stood at 9.5% in 2021 (according to the ECB's consolidated banking data), and exceeded the EU median (see Figure 2.7) and the average for banks of comparable size across the EU (5.2%). The gap in ROE between Slovenia and the EU average narrowed compared with the end of last year, with ROE declining slightly in the Slovenian banking system, but increasing in the EU overall as a result of a decline in net impairments and provisions. The Slovenian banking system was also ranked highly in terms of ROA (see Figure 2.8): its figure of 0.97% was above the EU median, and the ROA at banks of comparable size across the EU (0.65%).

The figures for the first quarter of this year show a deterioration in profitability in the EU. The median ROE in the EU declined to 7.7% (from 8.0% last year), while ROE also declined sharply this year at banks of comparable size. Slovenia was ranked markedly higher in terms of this figure (on a consolidated basis), as a result of a one-off effect (negative goodwill) at the largest bank in connection with the acquisition of another bank in early March. Even excluding this effect, the profitability of the Slovenian banking system would still have exceeded the weighted EU average and the EU median.

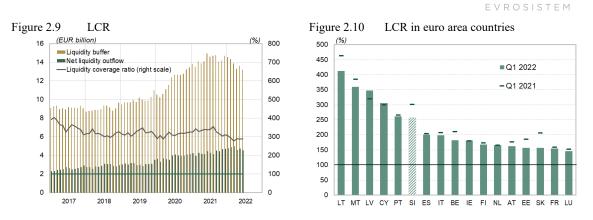
# 2.2 Liquidity

The banking system's resilience to systemic risks in the liquidity segment remained high in the first half of 2022, despite a deterioration in certain liquidity indicators. The decline in primary liquidity<sup>61</sup> reduced the banking system's liquidity coverage ratio, but it remains well in excess of the regulatory minimum. Here it should be noted that there are considerable variations between banks in the size of their liquidity surpluses, and thus in their resilience to systemic risks. The banks still have a significant stock of unencumbered assets on their balance sheets that could be used to gain access to additional liquidity with the Eurosystem, should it be needed. Careful monitoring of the competition in the sector and the current geopolitical situation therefore remain a vital part of liquidity management, particularly for banks with smaller liquidity surpluses.

The capacity to cover net liquidity outflows over a short-term stress period remained high at system level, despite a decline in the liquidity coverage ratio (LCR). The LCR declined by 22 percentage points over the first half of this year to 290%, but remains well above the regulatory requirement of 100% (see Figure 2.9). The spending of liquid assets held in accounts at the central bank helped to reduce the size of the liquidity surplus over the regulatory requirement consequently declined to EUR 8.7 billion, but remained almost a quarter larger than before the outbreak of the pandemic, when liquid assets began to build up significantly on bank balance sheets. Despite the decline in the LCR, which was also seen in most other euro area countries, Slovenia is still ranked in the top third according to this indicator (see Figure 2.10).

<sup>&</sup>lt;sup>61</sup> Primary liquidity comprises cash on hand, balances at the central bank and sight deposits at banks.

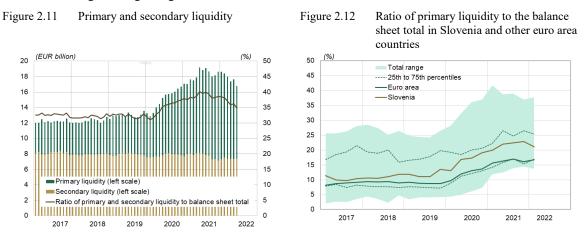


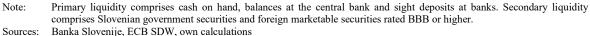


Note: The horizontal line denotes the minimum requirement for the LCR in accordance with the CRR (100%). The right figure illustrates consolidated data. Sources: Banka Slovenije, ECB SDW

Amid the smaller inflow of deposits by the non-banking sector, the banks began directing their builtup primary liquidity into their rising lending activity, but the share of the balance sheet total accounted for by primary liquidity remains high. After a significant increase in primary liquidity (see Figure 2.11) over the first two years of the pandemic (2020 and 2021), it declined by EUR 2.1 billion in the first half of 2022, but at EUR 9.4 billion still accounted for almost a fifth of the balance sheet total. Another factor in the decline in primary liquidity, particularly in the balances at the central bank, was the partial early repayment of liabilities to the Eurosystem (TLTRO-III). Similarly to Slovenia, the ratio of primary liquidity to the balance sheet total also declined in more than half of the other euro area countries in the first quarter of this year<sup>62</sup> (see Figure 2.12). The inflow of deposits by the non-banking sector and the volume of new lending will also have a significant impact on developments in primary liquidity in the future.

The stock of secondary liquidity<sup>63</sup> has remained relatively stable. It increased by 3.7% in the first half of 2022 to EUR 7.4 billion. Similarly to previous years, the banks reduced their holdings of Slovenian government securities, and in the quest for higher returns redirected the money into purchases of foreign marketable securities rated BBB or higher. This asset diversification is continuing to reduce the concentration of secondary liquidity: the share of secondary liquidity accounted for by Slovenian government securities declined to 37.1%, less than half of the peak figure from early 2014. This reduced the banks' exposure to the risk of a sovereign downgrading for Slovenia.





The banking system retained good ability to fund its liabilities over a one-year period, despite the slight decline in the net stable funding ratio (NSFR). The growth in loans to the non-banking sector increased required stable funding, which reduced the NSFR by 2.6 percentage points over the first half of 2022 to 159.1% as the available stable funding remained unchanged. The banking system nevertheless held available

<sup>&</sup>lt;sup>62</sup> Data for the second quarter of this year was not available at the time of writing.

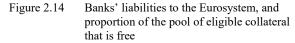
<sup>&</sup>lt;sup>63</sup> Secondary liquidity is the sum of Slovenian government securities and foreign marketable securities rated BBB or higher.

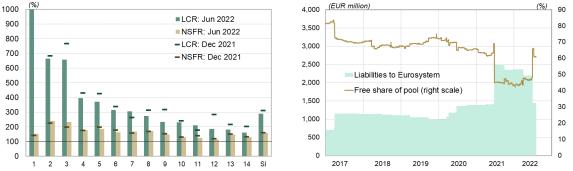


stable funding on its balance sheet that was EUR 14.5 billion or just over 59% in excess of the required stable funding over a one-year period.

The resilience to systemic risks remained relatively high at the majority of the banks, although the variation between banks is still considerable. The decline in primary liquidity reduced the LCR at the majority of banks in the first half of 2022 (see Figure 2.13), but only at three banks it was lower than double the regulatory requirement of 100%. The NSFR also declined over the first half of the year, primarily as a result of the rise in lending and the associated increase in required stable funding, but the majority of the banks still had available stable funding that was at least 50% higher than their required stable funding over a one-year period. Careful monitoring of competition in the sector and diligent liquidity management remain vital, particularly at banks with smaller liquidity surpluses, which in the event of any realisation of funding risk would find it harder to deal with the consequences. As in previous years, it is mainly the banks under majority foreign ownership that hold lower liquidity surpluses, as they most likely expect assistance from the parent bank in the event of liquidity difficulties. This exposes them to greater risk should they be unable to secure this assistance.







Note: The horizontal line in the left figure denotes the minimum requirement for the LCR and the NSFR in accordance with the CRR (100%). For the sake of clarity, one bank is not illustrated in the left figure: its LCR in June 2022 was 8,904%. Source: Banka Slovenije

The proportion of the pool of eligible collateral for Eurosystem operations that is free increased, and with it the banks' access to liquidity should they need it. The partial repayment of liabilities to the Eurosystem from the TLTRO-III increased the aforementioned proportion by more than a third to 66% (see Figure 2.14), well above the euro area average (23%). The banks still held EUR 5.2 billion of free eligible collateral for Eurosystem operations on their balance sheets that could be mobilised for the pool, and thus used to increase access to liquidity at favourable terms with the Eurosystem. Given their large stock of primary liquidity, for now the banks have no need for additional borrowing with the Eurosystem, and the pool of eligible collateral therefore remains unchanged.

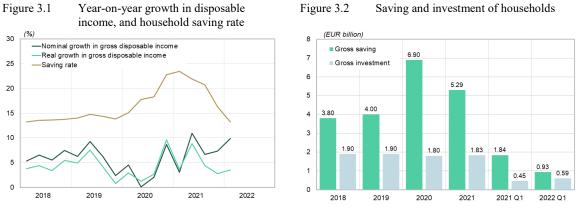


# **3** HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS

# 3.1 Households

Consumer mood worsened sharply in the first half of the year, the consumer confidence indicator declining to its lowest level since April 2020. The decline in consumer confidence was driven by worsening expectations with regard to the financial situation in the household, and with regard to the general economic situation. Consumer mood was also hurt by soaring inflation, which has reduced household purchasing power overall. Because the high inflation is mainly being driven by energy and food prices, it is the lowestincome households that have been hit hardest. The financial position of Slovenian households remains favourable overall: household indebtedness remains below the euro area average, and the sector's net financial assets have further increased over the last year. The net financial assets of Slovenian households nevertheless remain below the euro area average. Gross disposable income continues to rise, but the high inflation means that the gap between nominal growth and real growth is widening, having begun to increase in the middle of last year. Households increased their final consumption expenditure in the first quarter, while reducing their savings. The reduction in savings brought a sharp decline in the saving rate, which reached its pre-pandemic level. The tightening of monetary policy means that households that hold existing variable-rate loans will be under additional pressure, and higher interest rates will increase future borrowing costs for households and firms.

The high level of expenditure earmarked for consumption is reducing savings, and with them the household saving rate. Household final consumption expenditure in the first quarter of this year was up 29.6% in year-on-year terms. The high growth was attributable to a base effect: growth in consumption expenditure was negative in the first quarter of 2021. The household saving rate declined sharply as a result of the decline in savings, and stood at 11.4% over the first quarter of this year, down 13.4 percentage points on the same period last year (see Figure 3.1) but the same as before the pandemic. Households increased their gross investment by 31.1% in year-on-year terms, which drove a significant narrowing of the saving-investment gap (see Figure 3.2). Gross disposable income is continuing to rise amid the buoyant labour market. Gross household disposable income in the first quarter of this year was up 9.9% in nominal terms on the same period last year, but the high inflation is driving a gap between nominal growth and real growth, which began to widen in the middle of last year.



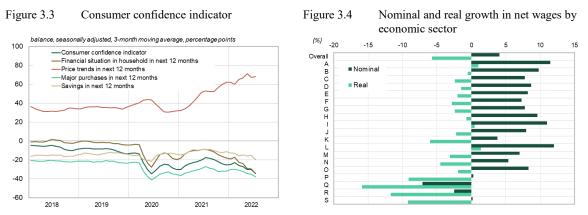
Source: SORS

The survey indicators of consumer opinion show that the mood of Slovenian consumers worsened over the first half of the year, and is now very pessimistic.<sup>64</sup> The consumer confidence indicator in July of this year was down 15 percentage points on December 2021, having reached its lowest level since April 2020 (see Figure 3.3). All four components of the indicator were down on the end of last year: expectations of the financial situation in the household, expectations of the general economic situation in the country, the current financial situation in the household, and expectations of major purchases. The indicator of expectations of the financial situation in the household fell to a record low for the entire observation period. The indicator of price trends over the next 12 months has strengthened sharply over the last year. High inflation is

<sup>&</sup>lt;sup>64</sup> Survey data obtained by the SORS. The data is based on the consumer opinion survey conducted between 1 and 17 July 2022, with 831 respondents.

BANKA **SLOVENIJE** EVROSISTEM

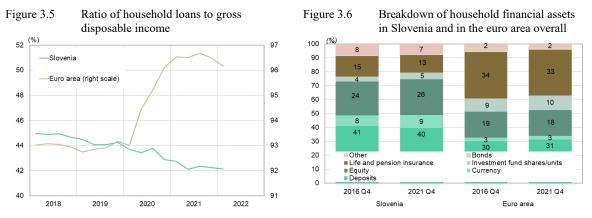
significantly reducing household purchasing power: the average net wage in June of this year was down 5.7% in real terms on the same month last year (see Figure 3.4).

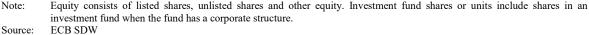


Note: The right figure illustrates the change in the monthly net wage in June 2022 since the same month of the previous year. Economic sectors according to SCEA 2008: A: agriculture, forestry and fishing; B: mining and quarrying; C: manufacturing; D: electricity, gas, steam and air conditioning supply; E: water supply, sewerage, waste management and remediation activities; F: construction; G: wholesale and retail trade, repair of motor vehicles and motorcycles; H: transportation and storage; I: accommodation and food service activities; J: information and communication; K: financial and insurance activities; L: real estate activities; M: professional, scientific and technical activities; N: administrative and support service activities; O: public administration and defence, compulsory social security; P: education; R: arts, entertainment and recreation; S: other service activities. SORS

Source:

The growth in disposable income and the low level of borrowing mean that the overall financial position of Slovenian households remains stable. Household financial liabilities amounted to EUR 15.8 billion at the end of the first quarter of this year, up EUR 1.1 billion in year-on-year terms. Loans accounted for almost 90% of total liabilities, and were up EUR 945 million at EUR 14 billion, of which 84% were with banks and 10% were with other financial intermediaries. As a result of the general growth in income, the ratio of loan borrowings to gross disposable income has been falling for several years at Slovenian households, which is not the case for the euro area overall (see Figure 3.5). Household financial assets amounted to EUR 68.8 billion at the end of the first quarter of this year, up EUR 4.8 billion or 7.5% in yearon-year terms. The breakdown of household financial assets in Slovenia differs considerably from that in the euro area overall (see Figure 3.6). Currency and deposits prevail in Slovenia, and account for almost half of total household financial assets. The proportion accounted for by equity is also notable. Currency and deposits are also prevalent in the euro area, but the proportion that they account for is much lower, and more assets are held in the form of life insurance and pension insurance, and investment fund shares/units, and significantly less in the form of equity.





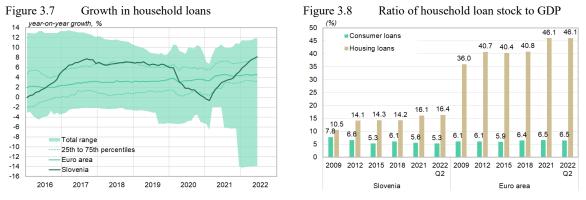
Slovenian households remain resilient to financial shocks thanks to their favourable financial position, but inflation is reducing their purchasing power. Slovenian households' net financial assets amounted to EUR 53 billion or around 100% of GDP at the end of the first quarter of this year, up EUR 3.7 billion in year-on-year terms. Soaring inflation is currently a major issue for households, and is outpacing growth in net wages. Because inflation is being strongly driven by energy and food prices (see Figure 1.7 in the section on

#### FINANCIAL STABILITY REVIEW



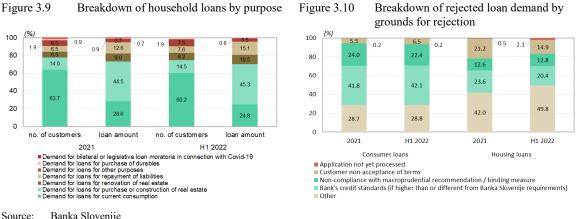
macroeconomic risk), low-income households are being hit the hardest, with the share of income that they spend on the most basic consumer essentials rising. This could lead to difficulties in servicing existing debt, particularly for excessively indebted households whose loan instalments eat up a large proportion of their income. Under an adverse scenario, higher input costs and disruptions to supply chains could force firms to cut jobs, which could lead to a rise in unemployment. Additional pressure on households and firms will also come from rising borrowing costs, which are being driven up as monetary policy is tightened (see Figure 1.36 in the section on interest rate risk).

Despite high growth in household borrowing via bank loans, Slovenian households remain less indebted than households in the euro area overall, albeit with lower net financial assets. Growth in household loans was outpacing the euro area average at the end of 2021, and had reached the 75<sup>th</sup> percentile by the second quarter of this year (see Figure 3.7). The largest factor in the aggregate growth in household loans is housing loans, growth in which outpaced the euro area average in 2021, and moved past the 75<sup>th</sup> percentile in the early part of the year (see Figure 1.19 of the section on risks inherent in the real estate market). Growth in consumer loans in Slovenia outpaced the 75<sup>th</sup> percentile of the euro area in 2016. In light of the high credit growth, the macroprudential recommendation in connection with housing loans was extended to consumer loans in 2018, and a binding macroprudential measure was introduced in 2019. Following the introduction of the measure, growth in consumer loans began to fall, reaching its low at the end of 2020 and the early part of 2021. Year-on-year growth in consumer loans is currently still negative, and below the euro area average. The ratio of housing loan stock to GDP had increased slightly over recent years, but is still well below the euro area average, in part because of the high rate of owner occupation in Slovenia.



Sources: Banka Slovenije, ECB SDW

The banks report in the survey of demand for loans that most demand from households still comes for loans for current consumption (see Figure 3.9). In terms of loan amount, the highest demand is for loans for the purchase or construction of real estate and for current consumption. There was no significant change in the breakdown of demand by loan purpose compared with 2019 and 2020. The share of demand accounted for by the repayment of bank debt in the first half of this year was up slightly on the previous years. Judging by the survey, the main grounds for the rejection of household loans are the banks' credit standards and undefined "other" reasons (see Figure 3.10). For housing loans, the banks also give slightly greater prominence to the non-acceptance of terms by customers. Conversely, rejection on the grounds of noncompliance with a macroprudential measure is more evident for consumer loans than for housing loans, but does not constitute the primary grounds for rejection for either type of loan.



Source:

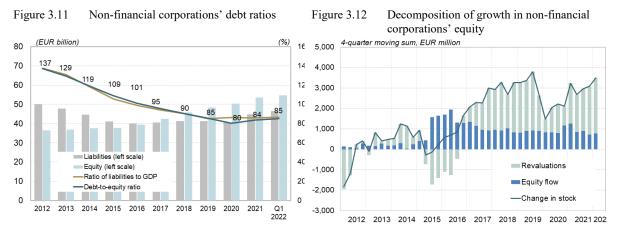


# 3.2 Non-financial corporations

Non-financial corporations (NFCs) sharply increased their debt financing after the rebooting of the economy last year and in the first half of this year, but indebtedness indicators nevertheless remained favourable. The cooling expectations with regard to economic growth and NFCs' caution with regard to borrowing for investment could in the future slow the current high growth in loans. The disruptions to supplies of energy and commodities that arose during the pandemic and were exacerbated by the war in Ukraine are pushing NFCs to increase their borrowing to secure adequate inventories, which is being evidenced in increased demand for loans for current operations. The risks are also increasing in the corporate sector as a result of surging energy and commodity prices, and the anticipated rise in interest rates. After the lifting of all measures and the expiry of moratoria related to the pandemic, there was no increase in the number of bankruptcy proceedings initiated in the NFCs sector overall, but several economic sectors saw a deterioration.

#### Financing and indebtedness of non-financial corporations

The increased level of borrowing by NFCs seen in the previous year continued in the first quarter of this year, but the indebtedness indicators remained similar to their pre-pandemic levels. NFCs supported their increased activity in 2021 and 2022 with a sharp rise in borrowing. NFCs' financial liabilities increased by 14.7% overall in 2021 and the first quarter of 2022, but the simultaneous GDP growth meant that their debt-to-GDP ratio only increased slightly over the same period, by 0.2 percentage points to 86.6% (see Figure 3.11). Leverage, which measures NFCs' debt against their equity, increased to 85.2% in the wake of slightly lower growth in equity over this period. At the end of the first quarter of this year the two indicators were at similar levels to 2019. NFCs saw their capital base strengthen further via an inflow of new equity, and to an even greater extent via revaluation. Revaluations have accounted for fully two-thirds of the increase in NFCs' equity as of 2020, and for 77% in the first quarter of this year (see Figure 3.12). In conjunction with action to mitigate the impact of containment measures during the pandemic, the low indebtedness of NFCs was a major factor in their ability to successfully deal with its impact, and it remained favourable in the first quarter of this year despite all the challenges.

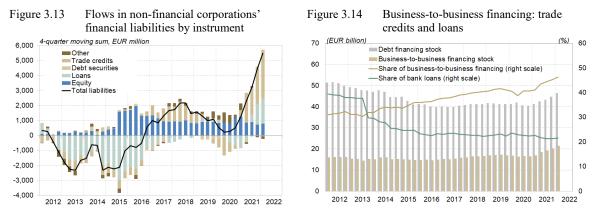


Source: Banka Slovenije

**Growth in debt financing at NFCs was driven by a sharp rise in trade credits, and by increased growth in loans (see Figure 3.13).** The importance of business-to-business financing (with Slovenian and foreign firms alike) further increased: it accounted for 46.4% of NFCs' total debt by March of this year (see Figure 3.14). The trade credits raised have coincided with general economic growth and growth in foreign trade. A trend of high growth was evident in trade credits raised and granted, and with domestic and foreign business partners alike. In the loan financing segment there was also a notable increase in loans raised at domestic banks and in the rest of the world (see Figure 3.16), particularly at parent undertakings (see Figure 3.15). Further evidence of the general increase in demand for financing comes from the growth in loans in the majority of economic sectors. Judging by the slowdown in economic activity indicators and confidence indicators in recent months, growth in the financing of NFCs can also be expected to slow in the future. Conversely, further growth in corporate loans might be driven by the trend of rising interest rates, which could maintain increased demand for debt financing at the current relatively favourable terms.

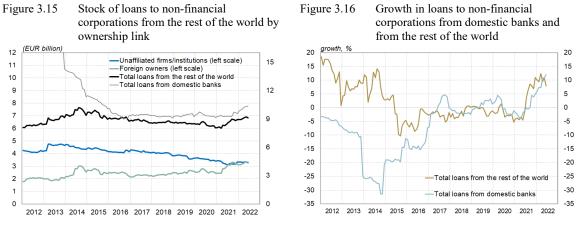


EVROSISTEM



Note: In the right figure business-to-business financing includes all loans between firms, and trade credits received from Slovenian and foreign firms alike. The figures are calculated as a share of NFCs' total debt.
 Source: Banka Slovenije

The increased borrowing at domestic banks over this period was supported by sufficient supply of loans at banks under favourable terms. Credit standards for corporate loans were not tightened in 2021 and the first quarter of 2022 (for more, see the section of credit risk). The banks are reporting<sup>65</sup> broad access to bank loans for NFCs, mainly via support for sound projects and creditworthy firms. After two years of pandemic, the financial solidity of NFCs remained at the levels reached previously, in the assessment of the banks. Bank loans are less accessible for the firms that were hit hardest by the pandemic and have not yet regained their lost revenues. Amid fierce competition between banks, interest rates are still favourable (see the section on interest rate risk). In light of the rise in the Euribor and the anticipated general rise in interest rates in the future, demand for loans from NFCs accounted for by loans for refinancing increased from 6.8% in 2020 to 15.3% in the first quarter of this year. Firms with long-term variable-rate loans are exposed to interest rate risk, which in cases of higher leverage and a failure to reach agreement on debt refinancing entails elevated credit risk for their creditors.



Source: Banka Slovenije

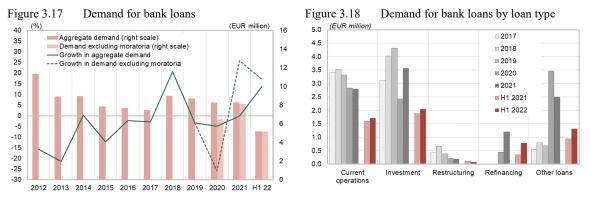
In addition to the encouraging conditions on the supply side, this year's high growth in bank loans is also attributable to increased demand for loans, albeit with greater caution with regard to loans for investment. According to the findings of the survey of demand for loans, after falling sharply in the first year of the pandemic, NFCs' demand for loans rose again in 2021 and the first quarter of 2022 (see Figure 3.17).<sup>66</sup> There was pronounced growth in demand for loans for investment last year (see Figure 3.18). This was pentup demand following the outbreak of the pandemic and the deferral of investment plans. Demand continued to rise in the first half of this year, but the banks nevertheless assess that there is a reluctance on the part of NFCs to raise long-term loans for investment on account of the increased uncertainty in the economic environment. In light of a qualitative assessment of this type, the large increase in demand can partly be

<sup>&</sup>lt;sup>65</sup> Survey of demand for loans, August 2022.

<sup>&</sup>lt;sup>66</sup> There was a pronounced decline in demand in 2020, if demand for loan moratoria approved during that year under the Act Determining Emergency Measures to Contain the Covid-19 Epidemic and Mitigate its Consequences for Citizens and the Economy is excluded. These loans do not represent new demand, but merely a change in the terms of existing loans.



attributed to loan applications being lodged with multiple banks with the aim of finding the most favourable borrowing terms.<sup>67</sup>



Note: Loans in the right figure include loans approved in connection with the Covid-19 pandemic (demand for loan moratoria and demand for liquidity loans). Loans for refinancing have been reported as a separate category since 2020, and were included under other loans before.

Sources: Banka Slovenije, Bank survey of demand for loans

Growth in demand for loans for current operations strengthened in the first half of this year, particularly for the purpose of building up inventories. The disruptions to supply chains seen over the last two years have as of the second quarter of this year been joined by disruption to energy supply and surging energy and commodity prices. This has given rise to increased demand for loans for working capital, particularly for the purpose of building up sufficient inventories to ensure no disruption to business. Firms whose commodity and energy costs account for a significant proportion of their operating costs and who did not succeed in consolidating their operations after the fall in revenues during the pandemic will be particularly vulnerable, which could limit their access to bank financing.

#### Non-financial corporations' bankruptcies

The number of bankruptcy proceedings initiated at NFCs continued to fall in the first half of this year, but a rise is evident in certain sectors. The low number of bankruptcies over the two previous years of the pandemic was related to the moratoria on initiation of bankruptcy<sup>68</sup> and the loan moratoria. The robust economic activity after the expiry of these measures entailed good conditions for growth for the majority of firms, and a reversal of the previous adverse trends in performance. The number of bankruptcy proceedings initiated at NFCs fell further in the first half of this year, and was down 9.0% in year-on-year terms (see Figure 3.19). A rise in bankruptcy proceedings can be discerned in certain sectors this year, namely construction, transportation and storage, information and communication, and arts, entertainment and recreation (see Figure 3.20). In accommodation and food service activities, the sole sector that saw rising numbers during the pandemic (in 2020 and the first half of 2021), the rise in bankruptcies has come to an end.

<sup>&</sup>lt;sup>67</sup> The banks lack data about simultaneous demand at other banks, which given their large sums and longer maturities is more common for investment loans than for loans for current operations. Demand from a single firm can be reported by several banks.

<sup>&</sup>lt;sup>68</sup> The measures with regard to bankruptcy proceedings in cases when the firm's insolvency was attributable to the declaration of the epidemic pursuant to the Act Determining Emergency Measures to Contain the Covid-19 Epidemic and Mitigate its Consequences for Citizens and the Economy (ZIUZEOP and ZIUPOPDVE) were in force until 30 September 2021 after extension.



EVROSISTEM

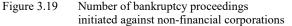
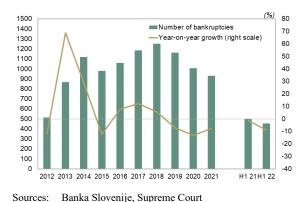
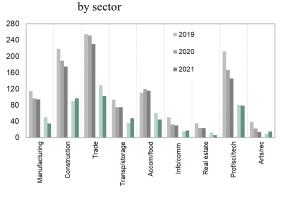


Figure 3.20 Number of bankruptcy proceedings initiated against non-financial corporations

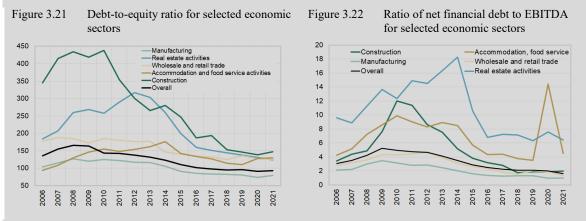




#### Box 3.1 Indebtedness and debt servicing capacity of non-financial corporations

This box examines the indebtedness of NFCs and their capacity to regularly service their debt. NFCs' indebtedness has declined sharply over the last decade, while their debt servicing capacity has increased, thus strengthening their resilience to the rising interest rates and increased debt servicing costs. The debt financing burden has declined in recent years as a result of favourable interest rates and lower debt levels, but is set to be driven up again by rising interest rates.

NFCs' indebtedness increased slightly in 2021, but remains significantly smaller than during the global financial crisis more than a decade ago. Their leverage at the end of 2021 was up 2 percentage points on the previous year at 93.3%.<sup>69</sup> Leverage was considerably higher in certain sectors, and increased further over the course of the pandemic. In accommodation and food service activities, which was one of the sectors hit hardest by the pandemic, leverage stood at 130%, higher than before the pandemic but lower than before 2016. Construction and real estate activities continued to record some of the highest figures for leverage (147.5% and 124.2% respectively), although the figures were down significantly on a decade ago. Indebtedness in manufacturing remains low (79.9%).



Note: In the left figure leverage is measured as the ratio of debt to equity. In the right figure the net financial debt to EBITDA indicator is measured as the ratio of financial liabilities, less cash and cash equivalents, to cash flows from operating activities, and indicates a firm's capacity to regularly service debt (interest and principal), and reveals how many years the firm will be able to service its debt and interest through the cashflows that it generates (assuming no change in net debt or EBITDA). The lower the ratio, the lower is the risk in the repayment of the firm's liabilities.

Sources: AJPES, Banka Slovenije calculations

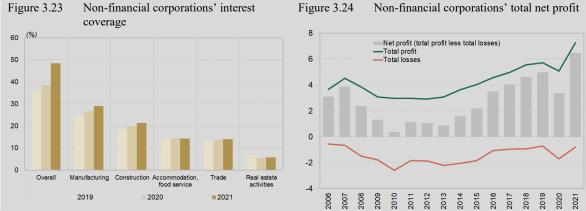
NFCs' debt servicing capacity is significantly better than at the time of the global financial crisis more than a decade ago, and is even slightly better than before the pandemic, which means that their resilience to a rise in interest rates is also greater. The ratio of net financial debt to EBITDA declined from

<sup>&</sup>lt;sup>69</sup> The debt-to-equity ratio differs slightly from that disclosed in Figure 3.11, which illustrates the ratio of debt to equity in corporate financing on the basis of financial accounts data (the differences are the result of the differences in the methodology of data capture). The analysis presented in this box is based on data from NFCs' closing accounts filed with AJPES.



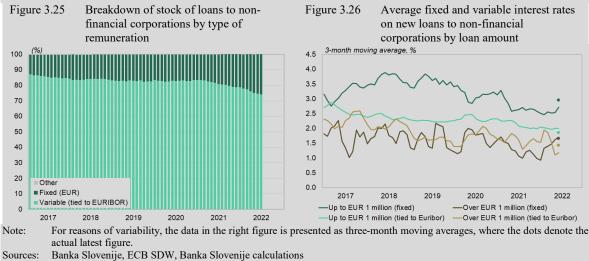
2 in 2020 to 1.6 in 2021, having stood at 5.2 in 2009 (see Figure 3.22). The ratio improved to 4.5 in the sector of accommodation and food service activities, which had suffered losses in 2020, and remained unchanged at 2 in construction, while the highest figure of 6.4 was recorded by real estate activities. NFCs' resilience to rising interest rates and increased debt servicing costs remained greater than in the past. Their net profit in 2021 amounted to EUR 6.5 billion, almost double that in the previous pandemic-hit year. The share of total assets held in the form of cash increased sharply in 2020 in almost all sectors (with the exception of accommodation and food service activities) and continued to increase in 2021.

The share of financial debt that firms are finding it difficult to finance because of low interest coverage is relatively low, but is expected to increase in the future as interest rates rise. The share of firms with a low level of interest coverage (an ICR of less than 1) fell from 23.6% in 2020 to 18.5% in 2021. The share was highest in accommodation and food service activities, at 28.3%, but was down more than a half on the previous year. The financial debt of these firms declined by 2.6 percentage points in 2021 to 5.3% of NFCs' total financial debt. The average ICR in 2021 was up fully 10 percentage points on the previous year at 48.5%, primarily as a result of a large rise in free cashflow from operating activities. In the low interest rate environment of the last decade, the ratio of interest to EBITDA also declined sharply, from 13% to 2.1%, but will increase again in the future as interest rates rise.



Note: The interest coverage ratio is measured as the ratio of EBITDA to finance expenses for interest. The interest coverage ratio at which the firm has difficulty in financing its debt is defined as an ICR of less than 1.
 Sources: AJPES, Banka Slovenije calculations

NFCs are continuing to predominantly borrow at banks via variable-rate loans at very favourable interest rates. The share of these loans declined discernibly during the first half of this year, but they still accounted for fully 74% of the loan stock at banks in June (see Figure 3.25). Variable interest rates remained at record low levels over the first six months of the year, at less than 2% on loans of up to EUR 1 million, and less than 1.5% on loans of more than EUR 1 million (see Figure 3.26). NFCs were thus borrowing at extremely favourable terms in the recent past, as soaring inflation made real interest rates highly negative. In light of rising interest rates, the prevalence of variable-rate loans entails a certain refinancing risk to NFCs in the future, but this risk is limited on average, given the relatively low indebtedness and improvement in debt servicing capacity relative to previous years, and the corresponding increase in resilience to increased debt servicing costs.



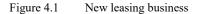


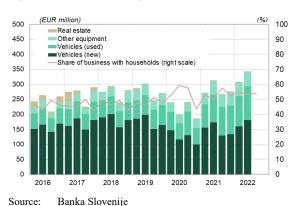
# 4 NON-BANK FINANCIAL INSTITUTIONS

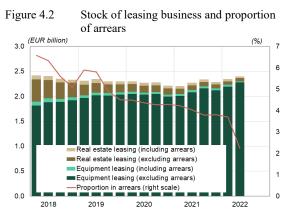
# 4.1 Leasing companies

The risks inherent in the performance of leasing companies remain moderate for now, with robust economic growth making a positive contribution to performance, despite the uncertainties surrounding the war in Ukraine. Leasing companies saw a year-on-year increase in their total profits in the first half of this year, and strengthened their business with households. The growth in new business was reflected in an increase in the balance sheet total, and a decline in non-performing claims. A slowdown in economic growth, a rise in borrowing costs, and a decline in real household income could cause a downturn in the performance of leasing companies in the future.

Leasing companies strengthened their leasing activities in the first half of this year, with finance leasing prevailing.<sup>70</sup> Leasing companies approved 11.2% more new business in the first half of the year than in the first half of last year (see Figure 4.1). Equipment leasing accounted for the majority of the business, most notably car leasing business (63.2%) and leasing business for commercial and goods vehicles (22.5%). The stock of leasing business stood at EUR 2.4 billion at the end of the second quarter, up 5% in year-on-year terms. The growth in new business was reflected in an increase of 11.4% in leasing companies' balance sheet total to EUR 2.7 billion. Despite the rising labour costs and material costs, leasing companies' total profit in the first half of this year amounted to EUR 25.9 million, up fully 38.7% on the same period last year. The increase in total profit was largely attributable to finance income from finance leasing and finance income from reversals of impairments of finance leases. Leasing companies' non-performing claims declined further in the first half of this year.







The banks also increased their financing of firms and households via finance leasing in the first half of this year. Their new business amounted to EUR 172.3 million over the first half of the year, up 27.6% on the same period last year. Households accounted for more than half of the new business, in which leases with an original maturity of 5 to 7 years were prevalent. The stock of leasing business amounted to EUR 549.5 million at the end of the second quarter, up 9.3% in year-on-year terms. Leasing business with households is the prevalent form. The banks' direct involvement in finance leasing business remains low: three banks remain active in this area, and the majority of their business consists of equipment leasing.

# 4.2 Insurers

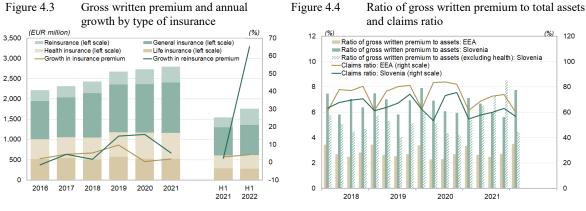
The insurance sector remained well-capitalised in the first half of this year. Following the outbreak of the pandemic, profitability improved sharply at insurance corporations and reinsurance corporations in 2021, before declining slightly at insurance corporations and increasing sharply at reinsurance corporations in the first half of this year. While insurance corporations' gross written premium increased only slightly, driven primarily by general insurance, there was a sharp increase in reinsurance corporations' gross written premium. Insurers will face an increasingly challenging business environment in the future as inflation

<sup>&</sup>lt;sup>70</sup> The leasing activities of leasing companies comprise finance leases, operating leases, and lending.



remains high, particularly amid the potential slowdown in economic growth and the rise in interest rates over the remainder of the year. The risks inherent in the growing impact of climate change also need to be addressed.

Insurance corporations generated slightly more gross written premium in the first half of this year than in the same period last year, while year-on-year growth in the reinsurance corporations' gross written premium recorded a notable rise. Gross written premium at insurance corporations amounted to EUR 1.4 billion in the first half of this year, up 4.3% in year-on-year terms (see Figure 4.3). The growth in gross written premium was driven primarily by general insurance, while in the life insurance segment it remained almost unchanged from its level of the previous year, and in the health insurance segment it rose slightly. The growth in gross written premium in general insurance was primarily attributable to an increase in real estate insurance against fire and other natural disasters, and motor vehicle insurance (alongside health insurance). In the life insurance segment there was a slight year-on-year decline (of 5.4%) in gross written premium for life insurance with a profit-sharing plan, while unit-linked life insurance, which accounts for half of all life insurance, remained at the same level as the previous year. Gross written premium at the reinsurance corporations amounted to EUR 400 million in the first half of this year, up 65.2% in year-on-year terms. The two reinsurance corporations mainly increased their gross written premium in the area of insurance/reinsurance against fire and other natural disasters.



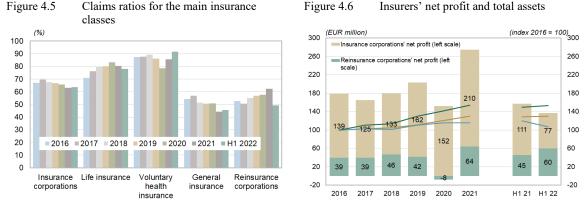
Note: The data for gross written premium and the claims ratio is based on aggregate statistical reports until 2017 inclusive, and on Solvency II reporting after 2017. The calculation of the claims ratio takes account of the cumulative data for gross claims paid and gross written premium at the end of each quarter. Changes in prices of supplementary health insurance also had a significant impact on gross written premium in the health insurance segment in Slovenia, for which reason changes excluding this effect have also been shown. The data for the EEA is available to Q1 2022 inclusive.

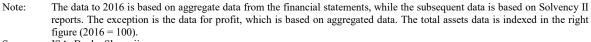
Sources: ISA, EIOPA, Banka Slovenije, own calculations

The ratio of gross written premium to total assets at insurance corporations in the first quarter of this year was up on the previous quarter in Slovenia, but down in the EEA overall. The ratio of gross written premium to total assets at insurance corporations stood at 7.8% in Slovenia in the first quarter of this year, or 4.5% excluding supplementary health insurance, compared with 3.5% in the EEA overall (see Figure 4.4). The claims ratios at insurance corporations stood at 56.9% in Slovenia, and 60.2% in the EEA overall. The claims ratio at insurance corporations in the first half of this year stood at 63.5%, 0.4 percentage points worse than the same period last year (see Figure 4.5), following a deterioration of 1.4 percentage points to 45.6% in the general insurance segment and an improvement of 2.3 percentage points to 78.0% in the life insurance segment. The claims ratio in the health insurance segment rose again, by 5.8 percentage points to 91.5%. The reinsurance corporations' gross claims ratio improved by 13.0 percentage points in 2021 to 49.3%.



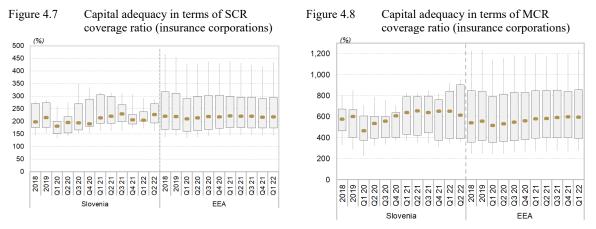
EVROSISTEM





Sources: ISA, Banka Slovenije

Following the outbreak of the pandemic, profitability improved sharply at insurance corporations and reinsurance corporations in 2021, before declining slightly at insurance corporations and increasing sharply at reinsurance corporations in the first half of this year. Insurance corporations' profit declined by almost a third in year-on-year terms to EUR 77 million (see Figure 4.6), following falls in profit in the general insurance and life insurance segments (of 48.9% and 43.9% respectively), while there were increases in income from assets in the form of dividend income and other profit distributions at undertakings in the group. The two reinsurance corporations increased their profit by almost a third in the first half of this year to EUR 60 million, thanks to an increase in income on assets in the form of dividend income and other profit distributions at undertakings in the group. Insurance corporations' total assets at the end of June 2022 were down 10.8% in year-on-year terms at EUR 7.4 billion, while the reinsurance corporations' total assets were up 2.1% in year-on-year terms at EUR 1.3 billion.



Note: The  $10^{\text{th}}$  and  $90^{\text{th}}$  percentiles are taken as the upper and lower limits. The data for the EEA is available to Q1 2022 inclusive. Sources: EIOPA, ISA, Banka Slovenije

The capital adequacy of insurance corporations in Slovenia remained high in the first half of this year, and above its pre-pandemic level. The median SCR (solvency capital requirement) coverage ratio at insurance corporations operating in Slovenia stood at 226.7% at the end of the second quarter of 2022, up 1.8 percentage points on a year earlier (see Figure 4.7), while the median SCR coverage ratio in EEA countries declined slightly over the same period. The median MCR (minimum capital requirement) coverage ratio in Slovenia had declined slightly to 611.5% by the end of June 2022, but remains above the EEA median (see Figure 4.8).

The risks and challenges faced by insurance corporations and reinsurance corporations come from the macroeconomic environment, geopolitical tensions, climate change and other factors. Insurers will face an increasingly challenging business environment in the future as inflation remains high, particularly amid the potential slowdown in economic growth and the rise in interest rates over the remainder of the year. The exposure of Slovenian insurers and pension funds to Russia, Ukraine and Belarus is very low: the

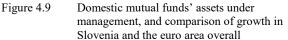


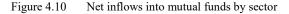
aforementioned countries accounted for less than 0.4% of their investments (EUR 38 million) at the end of 2021, a very low share of their total assets (EUR 10 billion).<sup>71</sup> The direct risks are low, but the indirect impact could also be transmitted to insurers and pension funds. The risks inherent in the growing impact of climate change also need to be addressed, particularly the rising frequency of natural disasters.

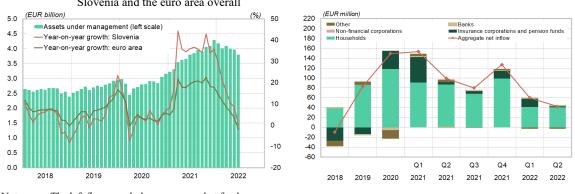
# 4.3 Mutual funds

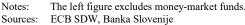
The domestic mutual funds' assets under management declined over the first half of this year, as a result of heavy selling pressures on global exchanges. The selling pressures were driven by the deterioration in international relations, which gave rise to uncertainty with regard to exports of energy and other commodities from Russia and Ukraine, which in turn led to rising commodity prices. The high inflationary pressures raised the markets' expectations of a faster rise in interest rates, which drove a significant rise in bond yields in Europe and the US. The increased uncertainty surrounding the implications of the war in Ukraine and rising interest rates led to falls in global share markets. The uncertainty on the financial markets eased in the second half of May. The domestic mutual funds did not suffer any liquidity difficulties, as net inflows remained positive, despite the increased volatility and high level of uncertainty. By contrast, investment funds in the euro area overall have been recording net outflows since February. The net outflows were particularly notable in the case of bond funds, which were also the only class of funds to record net outflows in Slovenia.

The domestic mutual funds' assets under management declined in the first half of the year as a result of a fall in share indices and a rise in bond yields in Europe and the US. Assets under management amounted to EUR 3.8 billion at the end of June, down 11.4% on the end of last year, but unchanged in yearon-year terms (see Figure 4.9). The largest factor in the decline was revaluations at equity funds, which account for 65% of the domestic mutual funds' total assets under management. Despite the increased volatility and high level of uncertainty on the financial markets, net inflows into the domestic mutual funds remained positive in the first half of the year (see Figure 4.10), but this was not true of investment funds in the euro area overall, which have been recording net withdrawals since February. Net inflows into the domestic mutual funds in the first half of this year were down almost 60% on the same period last year. Households accounted for the majority (80%) of the net inflows of EUR 101.7 million in the first half of the year, with equity funds seeing the largest inflows (75% of the total). There was a discernible shift to safer assets by investors in the first half of the year: net inflows into money-market funds were positive, in contrast to last year. The only class of funds in Slovenia to record net outflows in the first half of the year was bond funds. The net withdrawals from bond funds were attributable to the strong inflationary pressures driven by rising commodity prices following the outbreak of the war in Ukraine. The high inflationary pressures are leading to the faster withdrawal of accommodative monetary policy and to interest rate hikes, which has driven up bond yields (see Figure 1.4).









The domestic mutual funds hold most of their assets in equity and investment fund shares/units. Compared with the euro area overall, where a significantly higher proportion of assets is held in debt

<sup>&</sup>lt;sup>71</sup> Press release (in Slovene): Agency activities in the context of elevated risks as a result of the war in Ukraine on the ISA website.



securities, the domestic mutual funds are more exposed to changes in share indices. The domestic mutual funds' equity holdings have their largest exposure to public limited companies in the US and in euro area countries. Public limited companies in Russia and Ukraine account for less than 2% of total equity exposure. Holdings of debt securities account for 16.3% of the domestic mutual funds' assets under management, and mainly focus on euro area countries (70.8% of the total).



# 5 MACROPRUDENTIAL POLICY FOR THE BANKING SYSTEM AND LEASING COMPANIES

Given the increased uncertainty in the macroeconomic and financial environment in Slovenia and further afield, there is also a growing risk of the materialisation of (cyclical and structural) risks in the Slovenian financial system. Banka Slovenije has addressed these risks by adjusting the macroprudential measures, which aim not only to limit excessive credit growth and excessive exposure, but also to increase the resilience of the banking system and thus to act as a buffer to financial cycles.

**Certain changes to the existing macroprudential restrictions on household lending entered into force on 1 July 2022, while 1 January 2023 sees the introduction of two sectoral systemic risk buffers.**<sup>72</sup> Macroprudential action, which falls under Banka Slovenije's remit, currently encompasses four sets of active macroprudential instruments (see Table 5.1): restrictions on household lending, the countercyclical capital buffer, the O-SII buffer, and the two sectoral systemic risk buffers.<sup>73</sup>

 Table 5.1
 Macroprudential instruments currently in force in Slovenia

	1	2			ASSESSMENT OF
MACROPRUDENTIAL	YEAR OF			description	ATTAINMENT OF OBJECTIVE
Macroprudential restrictions on household lending		to mitigate and prevent excessive credit growth and excessive leverage	no limit	to limit growth in consumer loans and housing loans and to establish minimum credit standards for new household loans	growth in consumer loans is no longer excessive, and credit standards have improved in the approval of consumer loans and housing loans
Countercyclical capital buffer	2016	to mitigate and prevent excessive credit growth and excessive leverage	no limit	to protect the banking system against potential losses when these would come from an increase in risks in the system as a result of excessive growth in lending, thereby directly increasing the resilience of the banking system and preventing excessive growth in lending	the buffer rate remains at zero, given the state of the credit cycle and financial cycle
O-SII buffer	2016	to limit the systemic impact of misaligned incentives with a view to reducing moral hazard	no limit	to increase the resilience of O-SIIs and consequently the entire banking system	higher resilience as a result of higher requirements for common equity Tier 1 capital, which for now are not binding on the banks
Sectoral systemic risk buffers	2022*****	<ul> <li>(a) to mitigate and prevent excessive credit growth and excessive leverage</li> <li>(b) to limit direct and indirect exposure concentrations</li> </ul>	no limit	to slow and limit excessive growth in housing loans, and to increase the resilience of the banking system amid an increase in exposure in defined lending segments	1

Notes: \* Earlier in 2016 Banka Slovenije had introduced a recommendation with regard to LTV and DSTI for housing loans. \*\* In 2018 it expanded the macroprudential recommendation to consumer loans, to which a cap on maturity also applied alongside the cap on DSTI.

\*\*\* The caps on DSTI and maturity became binding in 2019.

\*\*\*\* In response to the Covid-19 pandemic, adjustments were made to the cap on DSTI in 2020, allowing the banks under certain conditions to exclude the temporary loss of income during the pandemic when calculating DSTI.

\*\*\*\*\* Additional changes to the existing restrictions on household lending entered into force on 1 July 2022.

\*\*\*\*\*\* Two sectoral systemic risk buffers were introduced in 2022, and enter into force on 1 January 2023.

Source: Banka Slovenije

The Regulation on macroprudential restrictions on consumer lending (Official Gazette of the Republic of Slovenia, No. 60/22) adopted by Banka Slovenije in May brings a number of changes that will improve loan accessibility for retail customers, while also addressing the growing risk inherent in the real estate market. The conditions for approving allowed exemptions from the cap on DSTI have changed. Previously when exemptions were allowed there was a restriction that the consumer should be left with at least 76% of the gross minimum wage plus the amount for any maintained family members after debt servicing costs have been met. Under the new approach this restriction on exemptions is abolished, but the condition that the DSTI may not exceed 67% still remains. The regulation also set out other changes. Bridge loans secured by financial instruments (also known as Lombard loans) are excluded from the cap on DSTI. These operations will not apply to credit agreements for residential real estate backed by government guarantee. An alternative approach to calculating creditworthiness is being introduced for those working as

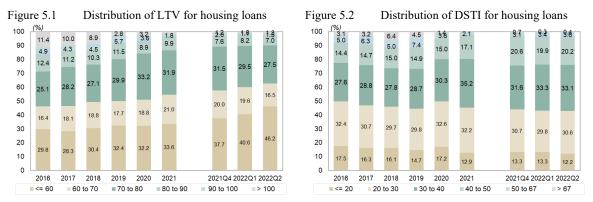
<sup>&</sup>lt;sup>72</sup> For more on the changes to macroeconomic measures, see the May 2022 issue of the Financial Stability Review.

<sup>&</sup>lt;sup>73</sup> The capital requirements need to be met as of 1 January 2023.



sole proprietors with standardised/normalised business expenses and who apply for loans as consumers, on the basis of actual revenues and expenses cited in financial statements (if available), minus taxes and contributions. The new regulation also changed the approach to calculating the quota of allowed exemptions. This will be calculated with regard to operations that comply with the macroprudential restrictions and were approved in the previous quarter (not the current quarter any longer).

The macroprudential restrictions on household lending helped to establish stable credit standards in recent years: the average LTV for new housing loans stood at 60.0% in the second quarter of this year, down fully 17.9 percentage points on 2016. The share of housing loans with an LTV of up to 70% as recommended by the macroprudential measure (or up to 80% for purchasers of a primary residence) had risen to 62.6% by the second quarter of this year (see Figure 5.1), compared with a figure of around 50% in 2019 and 2020. The share of housing loans with the highest LTVs also declined: the share with an LTV of 90% or more stood at 9.9%, down 18.8 percentage points on 2016. The NPE ratio in the housing loans portfolio has similarly been declining since 2016. The NPE ratio in the consumer loans portfolio also declined over this period, but only until 2020. It increased by 1 percentage point during the pandemic in early 2021. The NPE ratio in the consumer loans portfolio has nevertheless been stable in 2022.



Note: In the left figure the loan-to-value is the ratio of the value of a housing loan to the value of the residential real estate pledged as collateral. In the right figure the debt-service-to-income ratio is the ratio of the annual debt servicing costs to the borrower's annual income when the loan agreement is concluded.

Source: Banka Slovenije

The DSTI averaged 31.5% in the second quarter of this year, while the share of loans with a DSTI of more than 50% was relatively low, having fallen to 3.9% from 8.1% in 2016. The cap on DSTI in force as a recommendation as of 2016 and as a binding measure as of 2019 stipulates that the DSTI may not exceed 50% for net monthly income that is no more than double the gross minimum wage, or 67% for the portion of net monthly income in excess of double the gross minimum wage.

Article 242 of the Banking Act (Official Gazette of the Republic of Slovenia, Nos. 92/21 and 123/21 [ZBNIP]) stipulates that at least once a year Banka Slovenije should verify the fulfilment of O-SII criteria and the appropriateness of O-SII buffer rates.<sup>74</sup> The score achieved in the assessment of systemic importance is the main decision-making criterion in setting the O-SII buffer rate and classifying banks to categories that are assigned the same buffer. Banka Slovenije follows the EBA methodology in its identification of O-SIIs.

Banka Slovenije also conducts quarterly assessments of cyclical risks in Slovenia.<sup>75</sup> Based on the indicators of imbalances in the banking system, our assessment is that cyclical risks in Slovenia are gradually rising, and consequently the need for the possible activation of the countercyclical capital buffer is also rising. Given the uncertainty surrounding the macroeconomic outlook, the countercyclical capital buffer rate currently remains at zero, but future changes are not ruled out.<sup>76</sup> The purpose of the buffer, which is generally set at a rate of zero to 2.5% of risk-weighted exposures, is to protect the banking system against potential losses insofar as these are related to an increase in risks in the system as a result of excessive credit growth. The buffer thus directly increases the resilience of the banking system, and prevents excessive credit growth.

<sup>&</sup>lt;sup>74</sup> For more on O-SIII buffers, see: Capital buffer for other systemically important institutions on the Banka Slovenije website.

<sup>&</sup>lt;sup>75</sup> For more on the assessment of cyclical risks, see <u>Countercyclical capital buffer</u>: 2<sup>nd</sup> <u>quarter of 2022</u> on the Banka Slovenije website.

<sup>&</sup>lt;sup>76</sup> Banka Slovenije introduced the macroprudential measure of a countercyclical capital buffer pursuant to a resolution passed by the Governing Board of Banka Slovenije at its 546<sup>th</sup> meeting of 8 December 2015. The measure has been effective as of 1 January 2016.



On 1 January 2023 two sectoral systemic risk buffers enter into force, with the aim of addressing the risks inherent in the real estate market and the increase in household lending, and covering the exemptions deriving from the Regulation on macroprudential restrictions on consumer lending. Sectoral systemic risk buffers are thus being introduced for: (i) all retail exposures to natural persons secured by residential real estate, with a rate of 1.0%, and (ii) all other exposures to natural persons other than the aforementioned, with a rate of 0.5%.

In light of the increased risks in European economies, particularly those inherent in developments on real estate markets in Europe (EEA countries), more and more countries are opting to tighten macroprudential policy in the form of restrictions of household lending and the activation of various capital buffers (see Table 5.2). Bulgaria will gradually raise its countercyclical capital buffer from 0.5% to 1.5% by the end of the year, and Denmark and Sweden will raise theirs from zero to 2% next year. A similar process is underway in Czechia and Norway, which will raise their countercyclical capital buffers to 2.5% by April 2023. One-off rises in the countercyclical capital buffer from zero were also opted for by Germany (0.75% as of 1 February 2023), Romania (0.5% as of 17 October 2022), Croatia (0.5% as of 31 March 2023), Estonia (1% as of 7 December 2022), Iceland (2% as of 29 September 2022), France (0.5% as of 7 April 2023), the Netherlands (0.5% as of 25 May 2023) and Ireland (0.5% as of 15 June 2023). The countercyclical capital buffer addresses broadly defined cyclical systemic risks, so to address the risks inherent in the real estate market Lithuania decided in 2021 to introduce a sectoral systemic risk buffer of 2% for exposures to household loans secured by real estate. A sectoral systemic risk buffer of 2% for exposures to household loans secured by real estate has also been announced for 2023 by Germany. Estonia and Liechtenstein have done the same. Belgium has decided to introduce a sectoral systemic risk buffer in the amount of 9% to replace the implementation of Article 458 of the CRR for exposures calculated under the IRB approach.



#### Table 5.2 Macroprudential instruments in European countries

Restrictions on lendin	er capital measures	Othe	buffer associated with real estate risk	Sectoral systemic risk w	cal capital buffer	Countercycli	
	Application of Article 458 of CRR for risks inherent in	secured by f					
Type of measure***	real estate market	residential real	ate of introduction	Rate D	te of introduction		Country
Cap on maturity, DSTI, LT					01.01.2016	0%	Austria
LT	X***		01.05.2022	9.0%*	01.04.2020	0%	Belgium
					01/04/2020	0.5%	Bulgaria
					01/10/2022	1.0%	
					01/01/2023	1.5%	<b>C</b>
DSTI, LT					01.01.2016	0%	Cyprus
Cap on maturity, DTI, DSTI, LTV, loa					01/07/2020	0.5%	Czechia
amortisatio					01/07/2022	1.0%	
					01/10/2022 01/01/2023	1.5% 2.0%	
					01/04/2023	2.5%	
LTV, LT					30/09/2022	1.0%	Denmark
217,21					31/12/2022	2.0%	Dominant
Cap on maturity, DSTI, LT	Х		01.07.2022	2.0%	07.12.2022	1.0%	Estonia
LT					16.03.2015	0%	Finland
Cap on maturity, DS					07.04.2023	0.5%	France
					01.01.2016	0%	Greece
		X**			31.03.2022	0.5%	Croatia
LTV, LT					15.06.2023	0.5%	Ireland
DSTI, LT					29.09.2022	2.0%	Iceland
					01.01.2016	0%	Italy
Cap on maturity, DSTI, LTV, LT					01.02.2016	0%	Latvia
LTV, loan amortisatio		Х	01.05.2022	1.0%	01.07.2019	0%	Lichtenstein
Cap on maturity, DSTI, LT			01.07.2022	2.0%	01.04.2020	0%	Lithuania
LT					01.01.2021	0.5%	Luxembourg
DSTI, LT					01.01.2016	0%	Hungary
Cap on maturity, DSTI, LT		Х			01.01.2016	0%	Malta
			01.02.2023	2.0%	01.02.2023	0.75%	Germany
Cap on maturity, LT					25.05.2023	1.0%	Netherlands
LTV, DTI, loan amortisation, exemption	X**				13/05/2020	1.0%	Norway
from cap					30/06/2022	1.5%	
					31/12/2022	2.0%	
Con an motority DOTULT		X**			31/03/2023	2.5%	Deland
Cap on maturity, DSTI, LT Cap on maturity, DSTI, LT		λ			01.01.2016	0%	Poland Portugal
Cap on maturity, DSTI, LT					17.10.2022	0.5%	Romania
Cap on maturity, DTI, loan amortisatio					01/08/2020 01/08/2023	1.0% 1.5%	Slovakia
Cap on maturity, DSTI, LT		Х	01.01.2023	0.5% (consumer loans)	01.01.2016	0.0%	Slovenia
				1.0% (other loans)	01.01.2016	1.0%	Spain
LTV, loan amortisatio	Х				29/09/2022	1.0%	Sweden

Notes: \* The buffer replaces the measure under Article 458 of the CRR that allows a rise in risk weight in the event of a real estate bubble.

\*\* Higher risk weights are also applied to exposures to commercial real estate.

\*\*\* The measure was active until 30 April 2022, and as of 1 May 2022 was replaced by the sectoral systemic risk buffer.

\*\*\*\* Includes binding measures and recommendations. The measures cited apply to consumer loans and to housing loans.

Source: ESRB

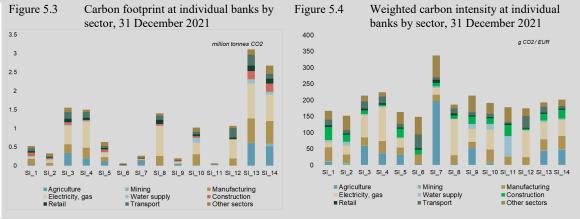
# Box 5.2 Decomposition of climate risk indicators

Changes in climate indicators that reflect the link between emissions and financial indicators can be driven by several factors, such as changes in emissions, revenue, and portfolio size and structure. Transition risks are monitored through the indicators of carbon footprint, carbon intensity and carbon loan intensity. The carbon footprint reflects the emissions that are co-financed by the bank. The carbon intensity shows the carbon footprint relative to revenue in each economic activity, and therefore reflects the exposure to transition risk to a greater extent, particularly by weighting the emission intensity by the size of the exposure to that economic activity. The carbon loan intensity reflects the bank's emissions per unit of exposure. A change in the carbon footprint indicator over time can reflect changes in weights in the composition of the portfolio and/or changes in emissions, in addition to a change in revenue for the weighted carbon intensity, and a change in exposure size as an additional determinant of carbon loan intensity. The decomposition of climate risk indicators and their changes between 2018 and 2021 are shown below.



VROSISTEM

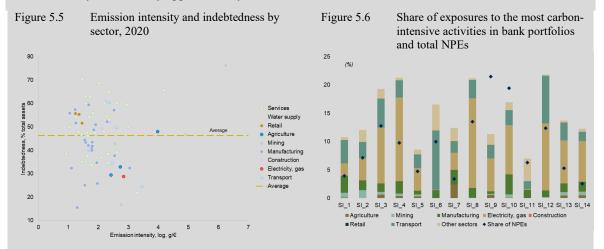
results illustrate the importance of addressing climate risks at the sectoral level and structural changes in reducing transition risks to financial stability.

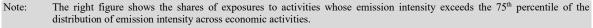


Note: In the left figure the decomposition is based on the sectoral assigning of emissions based on the market share of financing of the sector. The estimation is based on emissions with a one-year lag. In the right figure the decomposition is based on the sectoral assigning of emissions based on the market share of financing of the sector. The estimation is based on emissions with a one-year lag, the weight is the share of exposures to a particular sector in the bank's own portfolio.

Sources: Eurostat, Banka Slovenije

The decomposition of the indicators across sectors shows that the higher values mainly reflect exposures to the sectors of electricity supply and agriculture. For some banks, the higher values of carbon footprint and carbon loan intensity also reflect exposure to manufacturing. This represents a relatively low risk from the perspective of financial stability, given a lower than average indebtedness of the electricity supply and agriculture sectors compared with other sectors (see Figure 5.3). In addition, NPEs in the most carbon-intensive activities account for up to 22% of NPEs at the bank level (see Figure 5.4), and 9% of total NPEs (according to data from end-2021), which is indicative of the concentration of risks in individual sectors, and generally the importance of addressing climate risks at the sectoral level.<sup>77</sup> Carbon footprint and carbon loan intensity declined by approximately a fifth for most banks between 2018 and 2021, while the weighted carbon intensity increased by approximately 14% at more than half of the banks.





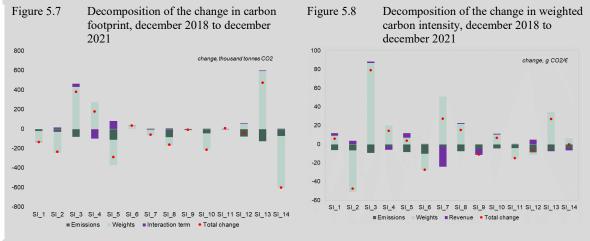
Sources: left figure: AJPES, Banka Slovenije; right figure: Eurostat, Banka Slovenije

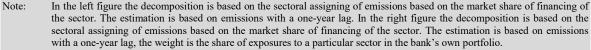
The changes in the indicators through time are primarily attributable to a weight effect, but there is also an emissions effect for almost all banks (see Figure 5.5 and Figure 5.6). The weight effect reflects the change in the indicator resulting from the change in the portfolio structure, with other factors remaining the same, while the emissions effect reflects the change in the indicator resulting from the change in emissions, keeping portfolio structure and revenue fixed. The emissions effect reduced banks' footprint by an

<sup>&</sup>lt;sup>77</sup> The most carbon-intensive activities are defined as activities whose emission intensity exceeds the 75<sup>th</sup> percentile of the distribution of emission intensity across economic activities.



average of 4.7% for the carbon footprint indicator, compared with an average reduction of 3.5% for the weighted carbon intensity indicator. This is a reflection of the reduction in emissions, particularly in 2020 as a result of the pandemic crisis. The decline in revenue increased the emissions intensity at the majority of the banks by an average of 1.3%. The largest changes for the carbon loan intensity indicator were driven by an increase in exposure, with the majority of the banks recording a decline in carbon loan intensity of 17% on average.





Sources: Eurostat, Banka Slovenije

Weighted emission intensity increased at the majority of the banks over the three years of 2018 to 2021, although this is partly a reflection of the increase in emission intensity in the majority of activities during the pandemic. The revenue of the total economy declined by approximately 6.2% in 2020, while emissions in the non-financial corporations sector declined by 3.1% at the same time. Emission intensity increased across most activities by an average of 23%, which reflects the relative size of the effect of the change in revenue despite the decline in emissions. Emissions actually increased in some activities, which also increased emission intensity. Revenue declined in activities generating more than half (76%) of total emissions, while emissions increased in the majority of these activities, which account for 41% of total emissions. The increase in emissions despite a reduction in output (cyclical factors) during the pandemic crisis is indicative of the greater importance of structural factors.

The business cycle has a smaller impact on changes in emissions than structural changes. This is also shown by the decomposition of the change in emissions into cyclical and structural changes.<sup>78</sup> The estimates show that the actual changes in emissions in the activities generating the majority of emissions are smaller than the changes in emissions due to cyclical factors. The latter indicates an inelasticity of structural emissions. Emissions actually increased in activities accounting for 55% of total emissions. Emissions declined significantly in certain activities, which reflects both cyclical and structural changes. This shows the importance of structural changes for portfolio decarbonisation and a reduction of transition risks in the banking system. A significant reduction of transition risks going forward will require greater focus on decarbonising business activities, for example by increasing green loans.

<sup>&</sup>lt;sup>78</sup> The cyclical change in emissions reflects the changes in emissions resulting from the change in revenue, fixing emission intensity to 2019 levels, while the structural change in emissions is calculated as the difference between the actual and cyclical change in emissions.



# **6** APPENDIX

Risk and resilience dashboard	Description	
Macroeconomic risk	Macroeconomic risk is the risk of weak economic growth, economic stagnation or a decline in economic activity.	There are several main indicators for monitoring, and their individual significance depends on the risk level that the individual indicator indicates, and on the area from which the risk comes. The main indicators are GDP growth, economic sentiment and confidence indicators, indicators of price developments, indicators of developments on the labour market, indicators of the fiscal position, and indicators of individual areas for the international environment.
Risk inherent in the real estate market	The risk inherent in the real estate market primarily relates to high rates of growth in real estate prices, which increase the banking sector's exposure, and also the possibility of a large negative revaluation of real estate collateral during a crisis.	
Funding risk	Funding risk is the risk of the potential instability of funding or the sudden outflow of individual classes of funding from the banking system, and depends on the maturity of the funding.	Funding structure, developments in deposits by the non-banking sector, particularly household deposits and deposits by non-financial corporations, LTD, changes in the maturity breakdown of deposits by the non-banking sector, residual maturity gap between assets and liabilities.
Interest rate risk	Interest rate risk is the risk of investment losses as a result of changes in interest rates, and comes from the maturity mismatch between assets and liabilities that have a fixed interest rate, and from the repricing gap between assets and liabilities.	The main indicator for monitoring interest rate risk is the repricing gap betweer asset and liability interest rates, where the most important factor for liability interest rates is the assumption about the stable component of sight deposits. Other indicators are: the average repricing period for asset interest rates, the average repricing period for liability interest rates, the share of new loans and existing loans accounted for by fixed-rate loans, and the average maturity of new loans and existing loans.
Credit risk	Credit risk is the risk of loss resulting from the failure of a debtor to settle their liabilities to the creditor, and comes from the debtor's inability to meet their financial liabilities by the agreed deadline, which may be temporary (illiquidity) or permanent (insolvency).	The main indicators are NPE ratios, the breakdown of exposures into credit risk stages, credit parameters (default rates, probabilities of default, transition rates), and coverage of NPEs and performing exposures by impairments, provisions and collateral. Moratoria and arrears in settlement of past-due instalments previously subject to a moratorium are also significant indicators in the current pandemic.
income risk	Income risk is the risk to the generation of adequate income by banks, and is based on developments in components of income generation and cost control.	The main indicators follow the generation and disposal of income, to the point of net income: net interest margin, net non-interest margin, net commission margin, gross income, developments in operating costs, CIR, developments in net income.
Risk inherent in leasing companies	The risk inherent in leasing companies is the risk of the generation of operating losses caused by a decline in turnover, the build-up of arrears of more than 90 days, and the potential spillover of adverse consequences into other sectors.	
Solvency and profitability of the banking system	Resilience from the perspective of the capital position is the ability to absorb adverse effects or losses that would occur during a stress event, while from the perspective of profitability it is a sustainable source of capital adequacy.	Total capital ratio and CET1 ratio (both ratios on an individual and a consolidated basis), leverage ratio, capital surplus over the overall capital requirement (as a percentage of RWA), contribution of individual components to the change in the total capital ratio and CET1 ratio, ROE, ROA, ratio of impairment and provisioning costs to gross income and ratio of impairment and provisioning costs to net income.
Liquidity of the banking system	Resilience from the perspective of liquidity is the ability to repay all due liabilities, and the ability to absorb the adverse effects that would follow in the event of the realisation of funding risk.	LCR, developments in the ratio of primary and secondary liquidity to the balance sheet total, proportion of the pool of eligible collateral at the Eurosystem that is free.

# Table 6.1Risk and resilience dashboard (description of risks, resilience and factors)

Source: Banka Slovenije



EVROSISTEM

#### Table 6.2 Slovenian banking system balance sheet for selected time snapshots (2004 to June 2022)

				Sto	ck, EUR mil	lion unless st	ated					Increase, I	EUR million		Dec 2021	Jun 202
	2004	Breakdown	2008	Breakdown	2013	2020	2021	Breakdown	H1 2022	Breakdown	2019	2020	2021	H1 2022	year-on-	year chang
		(%)		(%)				(%)		(%)					(%	%)
Assets																
Cash on hand, balance at central bank	592	2.5	1,250	2.6	2,452	8,825	11,495	23.8	9,374	19.5	1,070	3,042	2,671	-2,121	30.3	-15
Loans to banks	2,156	9.1	4,101	8.6	3,986	1,492	1,544	3.2	1,497	3.1	-5	-100	52	-47	3.5	1
Loans to non-banking sector	12,947	54.4	33,718	70.3	24,359	23,561	25,045	51.9	26,544	55.2	1,283	42	1,484	1,499	6.3	10.
of which to non-financial corporations	8,147	34.2	20,260	42.3	11,508	8,750	9,300	19.3	10,119	21.0	407	-127	550	819	6.3	13.
of which to households	3,262	13.7	7,558	15.8	8,467	10,712	11,263	23.3	11,730	24.4	625	9	551	467	5.1	8.
Financial assets / securities	7,013	29.4	7,307	15.2	8,318	8,958	8,355	17.3	8,729	18.1	-32	120	-603	374	-6.7	-6.
Other	1,112	4.7	1,572	3.3	1,229	1,815	1,811	3.8	1,977	4.1	120	335	-4	166	-0.2	6
Equity and liabilities																
Financial liabilities to Eurosystem	0	0.0	1,229	2.6	3,727	1,380	2,344	4.9	1,423	3.0	-109	397	964	-921	69.9	-42
Liabilities to banks	4,719	19.8	18,168	37.9	7,729	2,378	1,716	3.6	1,746	3.6	-372	-443	-663	31	-27.9	-27
of which to domestic banks	435	1.8	2,065	4.3	2,381	799	649	1.3	637	1.3	-2	-57	-150	-12	-18.8	-18
of which to foreign banks	4,254	17.9	16,098	33.6	5,348	1,579	1,066	2.2	1,109	2.3	-370	-386	-513	43	-32.5	-31
Liabilities to non-banking sector (deposits	14,906	62.6	20,883	43.6	22,550	34,281	37,185	77.1	37,716	78.4	2,091	3,212	2,904	530	8.5	5.
of which to non-financial corporations	2,667	11.2	3,728	7.8	4,196	8,031	8,998	18.6	8,479	17.6	-31	1,273	967	-519	12.0	4
of which to households	9,904	41.6	13,407	28.0	14,365	22,437	23,953	49.6	25,030	52.0	1,631	2,072	1,516	1,077	6.8	5.
Debt securities	973	4.1	1,276	2.7	1,657	1,058	1,250	2.6	1,543	3.2	452	458	191	293	18.1	30.
Provisions	0	0.0	176	0.4	306	186	151	0.3	147	0.3	-16	-2	-34	-4	-18.4	-14.
Shareholder equity	1,896	8.0	4,010	8.4	3,670	4,805	5,061	10.5	4,866	10.1	237	-158	256	-195	5.3	-2.
Other	1,326	5.6	2,206	4.6	704	564	545	1.1	681	1.4	154	-25	-19	136	-3.3	6.
Balance sheet total	23,820		47,947.9	100.0	40,343.6	44,651	48,252	100.0	48,122	100.0	2,437	3,438	3,600	-130	8.1	0.

Source: Banka Slovenije

# Table 6.3Slovenian banking system income statement, 2018 to June 2022

	Amount, EUR million				Year-on-year growth, %					Ratio to gross income, %						
	2018	2019	2020	2021	H1 2022	2018	2019	2020	2021	H1 2022	2014	2018	2019	2020	2021	H1 2022
Net interest	672	683	639	625	324	3.0	1.6	-6.4	-2.2	4.3	60.7	58.2	54.4	47.0	51.9	52.3
Non-interest income	482	573	721	580	295	14.1	19.1	25.7	-19.5	5.3	39.3	41.8	45.6	53.0	48.1	47.7
of which fees and commission	315	334	330	377	202	0.6	5.8	-1.2	14.4	9.0	29.2	27.3	26.6	24.2	31.3	32.7
of which net trading gain/losses	13	12	16	18	20	-56.0	-6.9	31.8	10.8	64.2.	2.8	1.1	1.0	1.2	1.5	3.2
Gross income	1153	1256	1360	1206	618	7.4	8.9	8.3	-11.4	4.8	100.0	100.0	100.0	100.0	100.0	100.0
Operating costs		-709	-718	-717	-383	-0.6	5.9	1.3	-0.2	4.8	-62.7	-58.0	-56.5	-52.8	-59.5	-61.9
labour costs	-390	-401	-386	-398	-198	2.2	2.8	-3.6	3.0	2.6	-35.5	-33.8	-31.9	-28.4	-33.0	-32.1
Net income	484	547	642	489	235	20.8	13.0	17.3	-23.9	4.7	37.3	42.0	43.5	47.2	40.5	38.1
net impairments and provisions	47	46	-170	74	-23	10.1	-2.8	-470.8	-143.4	-187.7	4.0	4.1	3.6	-12.5	6.1	-3.7
of which at amortised cost	68	60	-133	72	-20		-12.9	-323.8	-153.8	-171.5	0.0	5.9	4.7	-9.8	6.0	-3.2
Pre-tax profit		593	472	562	212	19.8	11.6	-20.3	19.1	-15.4	41.3	46.0	47.2	34.7	46.6	34.4
corporate income tax		-62	-22	-37	-22	93.4	73.9	-65.0	70.1	-11.5	-1.7	-3.1	-4.9	-1.6	-3.1	-3.5
Net profit		531	450	525	191	16.6	7.1	-15.1	16.6	-15.8	39.5	42.9	42.2	33.1	43.6	30.8

#### Table 6.4Selected bank performance indicators for the Slovenian banking system, 2011 to June 2022

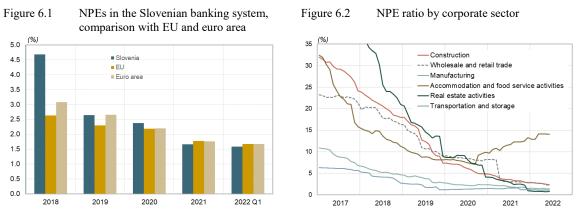
(%)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	H1 2022
ROA	-1.06	-1.60	-7.70	-0.27	0.42	0.99	1.19	1.38	1.48	1.10	1.20	0.89
ROE	-12.54	-19.04	-97.30	-2.69	3.63	7.96	9.60	11.07	12.16	9.57	11.33	8.77
CIR	53.68	47.43	66.04	55.80	59.26	59.19	62.68	58.05	56.47	52.82	59.48	61.91
Net interest margin on interest-bearing assets	2.13	1.93	1.68	2.18	2.06	1.91	1.83	1.84	1.79	1.57	1.41	1.43
Interest margin on total assets	2.02	1.83	1.59	2.09	1.96	1.82	1.75	1.75	1.70	1.49	1.34	1.35
Non-interest margin	0.85	1.40	0.85	1.01	1.09	1.23	1.13	1.26	1.43	1.67	1.24	1.24
Gross income / average assets (FIM)	2.87	3.23	2.44	3.10	3.05	3.05	2.88	3.01	3.13	3.16	2.58	2.59

Note: The figures for H1 are calculated cumulatively, i.e. for a period of six months. ROE and ROA are calculated before tax. FIM is the financial intermediation margin.

Source: Banka Slovenije

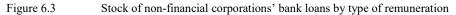


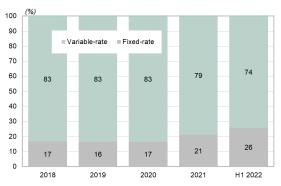
#### Credit risk



Note: The data for NPE ratios in Member States is at the consolidated level. The capture of NPEs in these comparisons is narrower than in the figures for the Slovenian banking system in this section: only exposures from debt instruments are captured, which primarily reduces the denominator and consequently increases the NPE ratio.

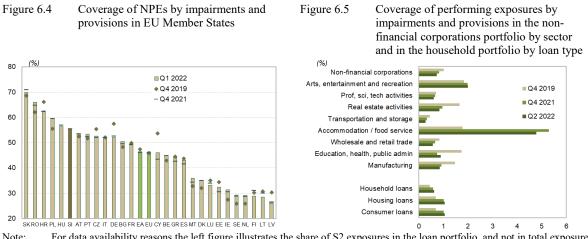
Sources: ECB SDW, Banka Slovenije





Note: For data availability reasons the left figure illustrates the share of S2 exposures in the loan portfolio, and not in total exposure as is standard in the section in question.

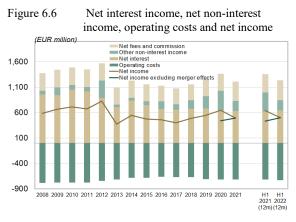
Sources: ECB SDW, Banka Slovenije

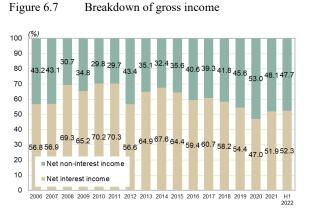


Note:For data availability reasons the left figure illustrates the share of S2 exposures in the loan portfolio, and not in total exposure<br/>as is standard in the section in question.Sources:ECB SDW, Banka Slovenije

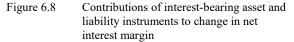


#### Selected income statement categories and indicators for the Slovenian banking system

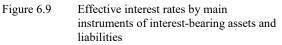


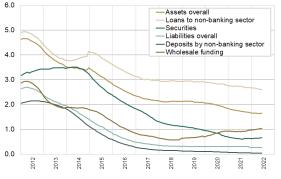


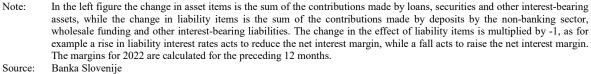
Source: Banka Slovenije





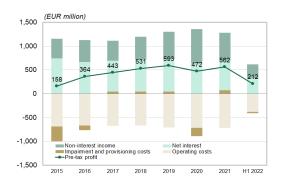




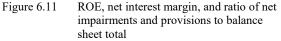


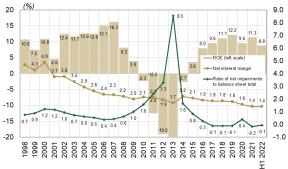
Source:

Figure 6.10 Gross income, operating costs, net impairments and pre-tax profit



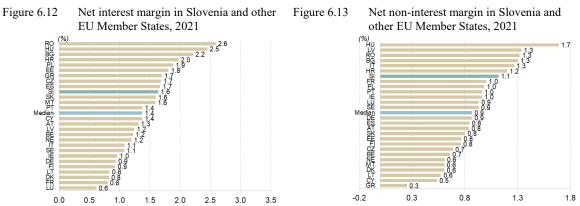
Source: Banka Slovenije



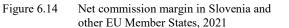


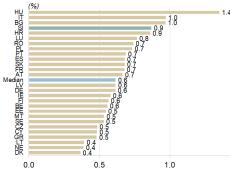


#### Comparison of selected indicators of the Slovenian banking system with EU banking systems in 2021



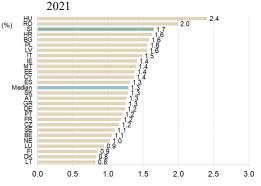
The indicators are calculated on the basis of the ECB SDW's consolidated banking data. This data differs slightly from the Note: figures based on balance sheets on an individual basis. Sources: Banka Slovenije, ECB SDW







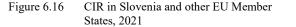
Ratio of operating costs to balance sheet total in Slovenia and other EU Member States,

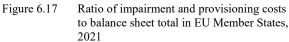


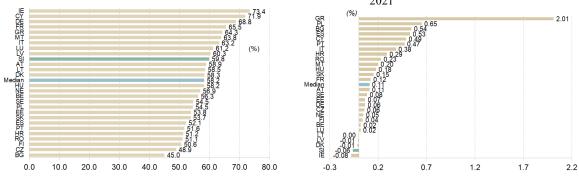
Note: The indicators are calculated on the basis of the ECB SDW's consolidated banking data. This data differs slightly from the figures based on balance sheets on an individual basis. Banka Slovenije, ECB SDW Sources:

1.5









The indicators are calculated on the basis of the ECB SDW's consolidated banking data. This data differs slightly from the Note: figures based on balance sheets on an individual basis. The indicators in the left figure are annualised from the data to the third quarter of 2021, while CIR in the right figure is taken directly from the data to the third quarter. Sources: Banka Slovenije, ECB SDW



#### Default rates and transition matrices for non-financial corporations

(%)	Micro, small and medium-size enterprises	Large enterprises
DR 2016-2017	4.1	1.9
DR 2017-2018	6.3	3.1
DR 2018-2019	5.1	2.3
DR 2019-2020	5.1	4.5
DR 2020-2021	4.1	3.3

 Table 6.5
 Default rates for micro, small and medium-size enterprises, and large enterprises

 Micro, small and

Note: The calculation of one-year default rates is based on the following assumptions:

 Unit of observation: in the calculation of default rates the unit of observation is customer-date. Only one piece of data is taken into account for each customer, even if the customer has exposures at various banks. Banks and savings banks are included in the calculation. All customers whose classified claims measured at amortised cost are positive on the initial date are included in the calculation.

2. Defaulter is defined according to the EBA definition of non-performing exposure at the customer level.

3. Calculation of default rate:

The numerator of the default rate is defined as the number of customers who were non-defaulters on the initial date (end of year T) and have become defaulters at any time in the following year (T+1), where it is not necessary that they remain defaulters at the end of year T+1.

The denominator of the default rate is defined as the number of customers who were non-defaulters on the initial date (end of year T).

Each customer is taken into account in the calculation only once, even if the customer has exposures at various banks. A conservative approach has been used, where a customer who has been a defaulter at any bank at least once during the observation period is classed as a defaulter.

# Table 6.6Transition rates between ratings of micro, small and medium-size enterprises, and large<br/>enterprises (transition matrices) 79

	Mic	ro, small	and medi	um-size er	nterprise	s			L	.arge ente	rprises		
			dec 2	021						dec 20	021		
		Α	в	С	D	E			Α	в	С	D	Е
	А	74.1	19.7	4.4	1.1	0.6		Α	90.2	8.4	1.2	0.1	0.0
120	В	11.4	74.4	10.9	1.9	1.3	2020	В	11.8	83.9	3.6	0.7	0.0
dec 2020	С	6.8	21.6	62.1	7.4	2.1	c 20	С	4.8	20.6	68.3	6.3	0.0
de de	D	1.7	3.2	4.6	78.5	12.0	dec	D	0.0	0.0	12.0	84.0	4.0
	Е	0.7	0.2	2.6	7.6	88.8		Е	0.0	0.0	1.4	4.2	94.4

Note: The calculation of one-year transition rates is based on the following assumptions:

1. Unit of observation: in the calculation of transition rates the unit of observation is bank-customer-date. Each customer is taken into account in the calculation with regard to the number of exposures at various banks in the banking system. Banks and savings banks are included in the calculation. Customers whose data was in the credit register data at the beginning of the year in question are taken into account. The figure for the end of the period takes account of the final data available for the customer during the year. All customers whose classified claims have a positive amortised cost and who have a particular rating at the beginning of the observation period, and who were included in Sector S.11 in the business register on the date in question, are included in the analysis.

2. Calculation:

The numerator of the transition rate from ratings i to j is defined as the number of customers who had rating i on the initial date (end of year T), and whose latest available rating in year T+1 was j, where it is not necessary that they still held that status at the end of year T+1.

The denominator of the transition rate from ratings i to j is defined as the number of customers who had rating i on the initial date (end of year T).

<sup>&</sup>lt;sup>79</sup> The transition matrices for past periods are published in the appendix to the October 2020 issue of the Financial Stability Review (Table 6.2 on page 86) and in the appendix to the October 2021 issue of the Financial Stability Review (Table 7.3 on page 100).



# Abbreviations:

AJPES	Agency of the Republic of Slovenia for Public Legal Records and Related Services
ISA	Insurance Supervision Agency
GDP	Gross domestic product
BLS	Bank Lending Survey
BoS	Banka Slovenije
CB	Central bank
CCyB	Countercyclical capital buffer
CET1	Common equity Tier 1 capital
CRR	Capital Requirements Regulation
DSTI	Debt-service-to-income ratio
EBA	European Banking Authority
EBITDA	Earnings before interest, taxes, depreciation and amortisation
ECB	European Central Bank
EEA	European Economic Area
EMU	European Monetary Union (euro area)
ESRB	European Systemic Risk Board
EU	European Union
EURIBOR	Interbank interest rate at which representative banks in the euro area offer deposits to one another
Eurostat	Statistical Office of the European Communities
Fed	Board of Governors of the Federal Reserve System
SMARS	Surveying and Mapping Authority of the Republic of Slovenia
HICP	Harmonised Index of Consumer Prices
LCR	Liquidity coverage ratio
LTV	Loan-to-value ratio
MCR	Minimum capital requirement
IMF	International Monetary Fund
IFRS	International Financial Reporting Standards
NFCs	Non-financial corporations
NPEs	Non-performing exposures
NSFR	Net stable funding ratio
OECD	Organisation for Economic Co-operation and Development
PMI	Purchasing Managers' Index
P2G	Pillar 2 guidance
ROE	Return on equity
S&P	Standard and Poor's
SCR	Solvency capital requirement
SDW	Statistical Data Warehouse
SORS	Statistical Office of the Republic of Slovenia
TLTRO	Targeted longer-term refinancing operation
RWA	Risk-weighted assets
ZBan-3	Banking Act



# Figures and tables

# Tables

Table 1.1	Banka Slovenije's risk and resilience dashboard for the Slovenian financial system	1
Table 5.1	Macroprudential instruments currently in force in Slovenia	50
Table 5.2	Macroprudential instruments in European countries	53
Table 6.1	Risk and resilience dashboard (description of risks, resilience and factors)	56
Table 6.2	Slovenian banking system balance sheet for selected time snapshots (2004 to June 2022)	57
Table 6.3	Slovenian banking system income statement, 2018 to June 2022	57
Table 6.4	Selected bank performance indicators for the Slovenian banking system, 2011 to June 2022	57
Table 6.5	Default rates for micro, small and medium-size enterprises, and large enterprises	61
Table 6.6	Transition rates between ratings of micro, small and medium-size enterprises, and large enterprises	
	(transition matrices)	61

#### Figures

<b>F'</b> 11		
Figure 1.1	JPMorgan PMI for the global economy	4
Figure 1.2	Confidence indicators in the euro area	4
Figure 1.3	Inflation (HICP)	5
Figure 1.4	Yield and spreads on 10-year government bonds	5
Figure 1.5	GDP growth and contributions to GDP growth: expenditure side	6
Figure 1.6	Confidence indicators and economic sentiment indicator	6
Figure 1.7	Inflation (HICP) and components of inflation	7
Figure 1.8	Current account components	7
Figure 1.9	Residential real estate prices	8
Figure 1.10	Growth in residential real estate prices in EU Member States	8
Figure 1.11	Various indicators of overvaluation of residential real estate	9
Figure 1.12	Indicators of housing overvaluation in EU Member States, first quarter of 2022	9
Figure 1.13	Number of buildings for which building permits were issued	9
Figure 1.14	Construction costs for new-build housing	9
Figure 1.15	Business trends in construction	10
Figure 1.16	Number of sales of residential real estate	10
Figure 1.17	Stock of and growth in housing loans	10
Figure 1.18	Demand for housing loans and demand factors (BLS)	10
Figure 1.19	Growth in housing loans, comparison between Slovenia and the euro area	11
Figure 1.20	Credit standards for housing loans (BLS)	11
Figure 1.20	Commercial real estate prices	11
Figure 1.21	Number of non-residential buildings for which building permits were issued	11
Figure 1.22 Figure 1.23	Stock of loans to the construction and real estate activities sectors	12
-		12
Figure 1.24	Stock of loans to non-financial corporations for commercial real estate	
Figure 1.25	Growth in deposits by sector	13
Figure 1.26	LTD ratio for non-banking sector	13
Figure 1.27	Change in stock of deposits by institutional sector	14
Figure 1.28	Comparison of growth in household deposits between Slovenia and the euro area	14
Figure 1.29	Proportion of deposits accounted for by sight deposits by euro area country, June 2022	15
Figure 1.30	Weighted average maturity of assets and liabilities, and maturity gap	15
Figure 1.31	Breakdown of banking system's assets	16
Figure 1.32	Breakdown of banking system's securities holdings by type of accounting disclosure and reporting	16
Figure 1.33	Breakdown of banking system's liabilities	16
Figure 1.34	Repricing gap	16
Figure 1.35	Breakdown of loan stock by type of remuneration	17
Figure 1.36	Average fixed and variable interest rates on new loans to non-financial corporations and households,	
	comparison between Slovenia and the euro area	17
Figure 1.37	Systemic net interest-sensitive position by maturity buckets	19
Figure 1.38	Total capital ratio and total capital ratio excluding the negative effect of revaluation of debt secuities,	
	June 2022	19
Figure 1.39	NPEs in selected portfolios	20
Figure 1.40	NPE ratios in EU Member States	20
Figure 1.41	NPE ratios by corporate size	21
Figure 1.42	Exposure, NPEs and NPE ratios by household loan type	21
Figure 1.43	Exposures subject to a moratorium	22
Figure 1.44	NPEs subject to a moratorium and corresponding NPE ratios	22
Figure 1.45	Credit standards for corporate loans, and factors of change	23
Figure 1.46	Demand for loans	23
Figure 1.47	Share of S2 exposures by selected customer segment	23

# BANKA SLOVENIJE

EVROSISTEM

Figure 1.48	Share of S2 exposures in loan portfolio by EU Member State	23
Figure 1.49	Share of S2 exposures to NFCs by sector	24
Figure 1.50	Change in performance of NFCs as bank customers between 2019 and 2021 by sector	24
Figure 1.51	Net impairments and provisions, gross income, and ratio of net impairments to gross income	25
Figure 1.52	Ratio of net impairments of financial assets not measured at fair value through profit or loss to	
	balance sheet total by EU Member State	25
Figure 1.53	Coverage of performing and non-performing exposures by impairments and provisions	25
Figure 1.54	Coverage of performing exposures by impairments and provisions and by collateral, by customer	
	segment	25
Figure 1.55	Year-on-year growth in net interest and net interest-bearing assets, and net interest margin	26
Figure 1.56	Contribution made by quantity effects and price effects to change in net interest income	26
Figure 1.57	Year-on-year growth in net fees and commission and balance sheet total, and net commission margin Breakdown of non-interest income	27 27
Figure 1.58 Figure 1.59	Operating costs, labour costs and balance sheet total	28
Figure 1.60	Operating costs to gross income (Cost-to-income-Ratio)	28
Figure 1.61	Challenges arising in the digital transformation	29
Figure 1.62	Impact of various technologies on the digital transformation of the banking system	29
Figure 1.63	Usage of fintech in the banking system	30
Figure 1.64	Impact of fintech on banks' performance and business models	30
Figure.2.1	Capital ratios, comparison with the euro area, consolidated basis	31
Figure 2.2	Distribution of surplus over overall capital requirement	31
Figure 2.3	CET1 ratio and leverage ratio at individual banks, consolidated basis	32
Figure 2.4	Decomposition of change in CET1 ratio, consolidated basis	32
Figure 2.5	Pre-tax profit and Impact of changes in components of generation and disposal of gross income on	
	change in pre-tax profit, H1 2021 to H1 2022	33
Figure 2.6	Actual bank profitability and simulated profitability with ratio of impairment and provisioning costs	~~
F. 07	to gross income at its long-term average	33
Figure 2.7	ROE in the EU in 2021	34
Figure 2.8 Figure 2.9	ROA in the EU in 2021 LCR	34 35
Figure 2.9	LCR in euro area countries	35
Figure 2.11	Primary and secondary liquidity	35
Figure 2.12	Ratio of primary liquidity to the balance sheet total in Slovenia and other euro area countries	35
Figure 2.13	LCR and NSFR at individual banks	36
Figure 2.14	Banks' liabilities to the Eurosystem, and proportion of the pool of eligible collateral that is free	36
Figure 3.1	Year-on-year growth in disposable income, and household saving rate	37
Figure 3.2	Saving and investment of households	37
Figure 3.3	Consumer confidence indicator	38
Figure 3.4	Nominal and real growth in net wages by economic sector	38
Figure 3.5	Ratio of household loans to gross disposable income	38
Figure 3.6	Breakdown of household financial assets in Slovenia and in the euro area overall	38
Figure 3.7	Growth in household loans	39
Figure 3.8	Ratio of household loan stock to GDP	39
Figure 3.9 Figure 3.10	Breakdown of household loans by purpose Breakdown of rejected loan domand by grounds for rejection	39 39
Figure 3.10	Breakdown of rejected loan demand by grounds for rejection Non-financial corporations' debt ratios	40
Figure 3.12	Decomposition of growth in non-financial corporations' equity	40
Figure 3.13	Flows in non-financial corporations' financial liabilities by instrument	41
Figure 3.14	Business-to-business financing: trade credits and loans	41
Figure 3.15	Stock of loans to non-financial corporations from the rest of the world by ownership link	41
Figure 3.16	Growth in loans to non-financial corporations from domestic banks and from the rest of the world	41
Figure 3.17	Demand for bank loans	42
Figure 3.18	Demand for bank loans by loan type	42
Figure 3.19	Number of bankruptcy proceedings initiated against non-financial corporations	43
Figure 3.20	Number of bankruptcy proceedings initiated against non-financial corporations by sector	43
Figure 3.21	Debt-to-equity ratio for selected economic sectors	43
Figure 3.22	Ratio of net financial debt to EBITDA for selected economic sectors	43
Figure 3.23	Non-financial corporations' interest coverage	44
Figure 3.24	Non-financial corporations' total net profit	44
Figure 3.25	Breakdown of stock of loans to non-financial corporations by type of remuneration	44
Figure 3.26	Average fixed and variable interest rates on new loans to non-financial corporations by loan amount	44
Figure 4.1	New leasing business	45 45
Figure 4.2 Figure 4.3	Stock of leasing business and proportion of arrears Gross written premium and annual growth by type of insurance	45 46
Figure 4.4	Ratio of gross written premium to total assets and claims ratio	46
Figure 4.5	Claims ratios for the main insurance classes	47
-		



EVROSISTEM

Figure 4.6	Insurers' net profit and total assets	47
Figure 4.7	Capital adequacy in terms of SCR coverage ratio (insurance corporations)	47
Figure 4.8	Capital adequacy in terms of MCR coverage ratio (insurance corporations)	47
Figure 4.9	Domestic mutual funds' assets under management, and comparison of growth in Slovenia and the	
C	euro area overall	48
Figure 4.10	Net inflows into mutual funds by sector	48
Figure 5.1	Distribution of LTV for housing loans	51
Figure 5.2	Distribution of DSTI for housing loans	51
Figure 5.3	Carbon footprint at individual banks by sector, 31 December 2021	54
Figure 5.4	Weighted carbon intensity at individual banks by sector, 31 December 2021	54
Figure 5.5	Emission intensity and indebtedness by sector, 2020	54
Figure 5.6	Share of exposures to the most carbon-intensive activities in bank portfolios and total NPEs	54
Figure 5.7	Decomposition of the change in carbon footprint, december 2018 to december 2021	55
Figure 5.8	Decomposition of the change in weighted carbon intensity, december 2018 to december 2021	55
Figure 6.1	NPEs in the Slovenian banking system, comparison with EU and euro area	58
Figure 6.2	NPE ratio by corporate sector	58
Figure 6.4	Coverage of NPEs by impairments and provisions in EU Member States	58
Figure 6.5	Coverage of performing exposures by impairments and provisions in the non-financial corporations	
	portfolio by sector and in the household portfolio by loan type	58
Figure 6.6	Net interest income, net non-interest income, operating costs and net income	59
Figure 6.7	Breakdown of gross income	59
Figure 6.8	Contributions of interest-bearing asset and liability instruments to change in net interest margin	59
Figure 6.9	Effective interest rates by main instruments of interest-bearing assets and liabilities	59
Figure 6.10	Gross income, operating costs, net impairments and pre-tax profit	59
Figure 6.11	ROE, net interest margin, and ratio of net impairments and provisions to balance sheet total	59
Figure 6.12	Net interest margin in Slovenia and other EU Member States, 2021	60
Figure 6.13	Net non-interest margin in Slovenia and other EU Member States, 2021	60
Figure 6.14	Net commission margin in Slovenia and other EU Member States, 2021	60
Figure 6.15	Ratio of operating costs to balance sheet total in Slovenia and other EU Member States, 2021	60
Figure 6.16	CIR in Slovenia and other EU Member States, 2021	60
Figure 6.17	Ratio of impairment and provisioning costs to balance sheet total in EU Member States, 2021	60