

Financial Stability Report

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Foreword



The stability of the domestic financial system has faced several challenges in recent years, including the pandemic, supply chain disruptions, high inflation, elevated interest rates, and the war in Ukraine. I am pleased that in this edition of the Financial Stability Report, we can now also mention the reduction of some risks. Inflation is on a sound trajectory, and I believe we are nearing the point where the ECB starts cutting interest rates again. With real household incomes returning to growth and the corporate sector also reporting good results, the outlook for the domestic economy is improving.

Even so, a number of issues remain present. Most prominent among them is geopolitical uncertainty, with the suffering in Ukraine and the Middle East as intense as ever. Protectionist moves are on the rise, acting as a drag on world trade. There is also an upward trend in cyber attacks. Additionally, societal polarisation, not only in Slovakia, is already bearing its bitter fruit.

As regards the Slovak financial sector, it is in very good shape. Banks have seen strong year-on-year growth in their profitability. Despite the challenges of recent years, firms and households have remained highly reliable in servicing their loans. We see positive trends in other sectors as well. Nevertheless, we must not lose sight of some of the risks still lurking in our banks' portfolios. The main one is exposure to the commercial real estate sector, where some segments currently face a combination of adverse trends.

On the positive side, commercial banks together with Národná banka Slovenska have been preparing for these risks for a long time. They have, among other things, ensured sufficient liquidity and built up the capital buffers that today stand as an important pillar of our financial system.

Peter Kažimír
Governor

Overview

Financial stability risks have decreased but remain elevated

The risks to financial stability from the external environment have decreased slightly in a number of areas since the previous edition of the Financial Stability Report. Inflation has been brought down to a close-to-target level. As for the recent period of rising interest rates, it is expected to be followed by gradual rate cuts. This will to some extent alleviate pressure on borrowers and support confidence levels in the euro area economy, which have been stagnating for two years. We can now say that the Slovak financial sector has navigated the episode of rising interest rates without significant issues. Although banks' borrowers have felt the impact of rising interest costs, most of them have coped without serious difficulties. The recent period has seen a sharp rise in banks' profits. Although the credit and real estate markets have been cooling amid rising interest rates, they can be said to have had a soft landing given their previous rapid growth rates.

Despite this positive news, some risks remain at elevated levels. The main source of potential risks going forward continues to be geopolitical developments. Should the situation worsen, an economic downturn coupled with rising inflation and possibly an increase in interest rates cannot be ruled out. Such a scenario could also lead to asset price corrections in financial markets. Even as the situation stands, some segments of borrowers remain more affected by higher debt servicing costs, and any additional interest rate hikes would further complicate their situation.

In Slovakia, additional risks related to the long-term sustainability of public debt are also coming to the fore. In 2023 Slovakia had one of the highest fiscal deficits in the European Union. Should Slovakia suffer a rating downgrade or be perceived negatively by investors owing to insufficient fiscal consolidation, the risk premia on Slovak government bonds could start rising, potentially leading to higher interest rates for households, corporates and banks, as well as to slower economic growth.

Higher interest rates have dampened lending and resulted in a decline in household and corporate indebtedness

Mortgage origination remains subdued but stable. Its current level is about one-third lower compared with the period before the upturn in interest rates. A slowdown in mortgage lending is to be expected when interest rates are rising, and in the light of the previous decade's strong loan growth, it is beneficial for both the mortgage and housing markets. But al-

though growth has eased, it still remains higher than the EU median. Consumer credit is on an upward trend with its growth gradually accelerating. This is caused mainly by the impact of inflation, which is encouraging consumers to spend sooner rather than later, as well as by a gradual improvement in households' financial situation, which is supporting demand for borrowing.

Corporate loan growth has also almost halted on a year-on-year basis, and firms' borrowing was lower in the first quarter of 2024 than in previous years. The slowdown in lending to firms has been most pronounced in the commercial real estate sector and in part of the large corporates portfolio. The main factor behind this slowdown has been lower demand rather than any tightening of credit standards by banks.

Elevated interest rates should not lead to a significant increase in non-performing loans unless the economic situation deteriorates

So far, despite facing higher debt servicing costs, borrowers have continued to repay their loans without major difficulties. Although non-performing loan (NPL) ratios are not falling as they were before, they have not recorded any notable increase either. Almost all corporate loans have already felt the impact of interest rate hikes, but this has not yet resulted in repayment problems. Nor have mortgage payment increases caused credit distress among households, although less than one-fifth of the overall portfolio has so far been repriced to current mortgage rate levels above 3%. On the other hand, the mortgage portfolio's sensitivity to potential negative shocks has increased over the past two years. This is due to a decline in the value of mortgaged properties, a fall in real incomes and an increase in the share of new loans with a higher DSTI ratio.

The corporate sector's relative soundness is also indicated by firms' financial situation. Although the profitability of corporates fell moderately in 2023, the share of them that reported a loss or negative equity decreased slightly. Only in certain sectors, notably agriculture, has there been some deterioration.

The sector most exposed to rising interest costs is commercial real estate. In particular in the office segment, where vacancy rates have been rising, the level of risk is higher. The challenging situation in the office segment is also confirmed by firms' preliminary financial data for 2023, while other CRE segments seem to be on a positive track. According to in-depth analysis, the CRE sector should not be a source of significant losses unless higher interest rates are accompanied by adverse economic developments and a further increase in office and retail vacancy rates.

The Slovak banking sector shows high resilience to potential risks

Banks' improved resilience is seen in their increasing capacity to generate profit and their stronger capital positions. The aggregate annual profit of banks in Slovakia was 46% higher in 2023 than in 2022, with the growth largely accounted for by higher net interest income. This component is expected to continue growing in the coming years, albeit at a slower pace. At the same time, however, Slovakia's bank levy will weigh on banks' profitability, though we do not foresee it impinging on their resilience or lending capacity. This assumption largely depends on the bank levy rate being phased down as planned and on the continued positive evolution of the main profitability components.

Banks used the increase in their profits primarily to bolster their capital adequacy, with the sector's total capital ratio rising to 20.5%.

Banks have sufficient capital to absorb losses in the event of an adverse economic scenario. This is confirmed by the results of stress testing, which simulated a scenario combining an economic slump, a doubling of the unemployment rate, and a fall in real household income. Even in the event of a sharp downturn in economic activity, banks would remain stable and would be able to continue lending.

NBS macroprudential policy settings remain unchanged. Given where the financial cycle now stands as well as the ongoing geopolitical risks, Národná banka Slovenska must keep its macroprudential instruments at their current settings. The countercyclical capital buffer (CCyB) is currently set at a rate commensurate with the riskiness of the banking sector's loan portfolio. Maintaining the CCyB at current levels is also important in view of the risks present in the household and commercial real estate sectors.

Banks' liquidity positions have also improved, owing to renewed growth in household deposits. Although facing a long-term trend of funding structure deterioration related to a rising loan-deposit ratio, domestic banks have seen their liquidity risk exposure ease over the recent period. Their resilience to potential deposit outflows has also increased slightly, as confirmed by stress testing.

Other financial market segments show favourable developments

Like the banking sector, the insurance sector has seen its profitability increase. The profit growth is largely accounted for by the life insurance sector. At the same time, insurance companies have demonstrated a high level of resilience in stress testing.

The performance of both pension funds and investment funds has improved, mainly owing to upward trends in financial markets in general and equity markets in particular. Across the pension and investment fund sectors, the asset mixes of most equity and mixed funds have been rebalanced towards equity investments. Problems in the commercial real estate market property market have not adversely affected real estate investment funds, but there is no room for complacency in this regard.

1 Macroeconomic environment and financial markets

Several risks from the external environment remain present

The inertial effect of elevated interest rates has been weighing on global economic activity since the second half of last year. Despite initial concerns, this slowdown has not been dramatic and inflation is receding. It is thus reasonable to expect a ‘soft landing’ in the business cycle, from where economic growth could gradually rebound to higher rates. After almost two years of stagnation, the euro area should also recover, albeit relatively slowly. The expected onset of monetary easing from the second half of 2024 is expected to further spur economic activity. Nevertheless, financial stability risks remain high, not least because of persistent geopolitical tensions around the world.

In 2023 the euro area saw significant progress in slowing inflation¹ from previously double-digit levels, although the pace of disinflation has recently moderated. The prospects for stabilising inflation at low levels are favourable, but a degree of uncertainty remains present. Nominal wage growth will be a very important factor, but although it is already showing signs of slowing, it would be premature to speak of a clear trend consistent with the inflation target. Concerns about a new wave of inflationary pressures have been raised by the recent upturn in oil prices and increase in container shipping costs, owing to the situation in the Red Sea and the Middle East. Recent months have brought complications with inflation convergence in the United States.

Since the end of last year, financial markets have turned optimistic amid expectations that inflation will be tamed and that a phase of monetary policy easing is forthcoming. Although investors’ have tempered their estimates about when central banks will start reducing interest rates and about the pace of rate cuts, their general sentiment remains positive, as reflected in strong demand for riskier assets, risk premia compression, and an increase in asset prices. With asset pricing so high, there is increasing vulnerability to a sudden drop in prices in the event of a new shock to the economy, such as an escalation of geopolitical tensions. A scenario of pro-

¹ The most recent annual inflation print, for March 2024, shows a rate of 2.4%, while the latest annual rate for core inflation stands at just below 3%.

longed high inflation and the associated need for a more restrictive monetary policy stance could also provide impetus for downward repricing in financial markets. The systemic impact of market turbulence on financial stability would pose a threat mainly if it intensified and spread, as it could do through those parts of the (largely non-bank) financial system where imbalances are present in the form of excessive leverage or liquidity mismatches.

The financial position of euro area firms and households has remained relatively robust despite the impact of inflation and rising interest rates.

This is evidenced by the only gradual increase in credit events concerning their financial liabilities. However, as elevated interest rates are gradually transmitted to more borrowers and as their duration is prolonged, debt servicing difficulties could become more pronounced. Among the firms most at risk of credit distress are those in the commercial real estate sector.

A downside of supporting the financial health of real economy actors through government transfers has been a substantial increase in public sector indebtedness. Coupled with higher interest rates and what is projected to be no more than slow economic growth, the euro area may once again reach a point where the debt sustainability of some of the more vulnerable countries could be in doubt, especially if the reality of fiscal consolidation deviates significantly from original plans.

The euro area banking sector had a successful year in 2023, but it will likely face various challenges going forward. In a higher interest rate environment, banks have enjoyed a surge in net interest income, with the result that the sector's profitability as measured by return on equity has reached its highest level since the global financial crisis. The credit quality of banks' loan portfolios has only marginally deteriorated, though banks themselves expect an increase in non-performing loans. The anticipated easing of monetary policy is likely to cause a downward correction in interest margins, and hence also in profitability.

Slowdown in Slovakia's economy and inflation

Slovakia's economy grew by 1.6% in 2023, which, outside of the pandemic-induced downturn, was its weakest growth rate in a decade.² Early in the year, domestic carmakers were the main driver of strong export growth, but as the year wore on they gradually started feeling the impact

² As a result of the COVID-19 pandemic and related containment measures, the Slovak economy contracted by 3.3% in 2020.

of weakening global demand. Domestic demand reflected households' financial cautiousness and consequent slowdown in their consumption. Thus, investment became the main component of economic growth in the latter part of the year. Despite the economy's sluggishness, the Slovak labour market remains stable.³ The number of advertised job vacancies has not changed significantly for about a year and a half and remains close to historical highs. The good news is that price growth in Slovakia has also slowed down considerably.⁴

Concerns about the sustainability of Slovak public finances have recently increased. Although its public debt remained at 56% of GDP over 2023, the fact that Slovakia is currently running one of the highest fiscal deficits⁵ among EU countries is a particular cause for concern. Elevated budget deficits are significantly impairing the sustainability of Slovakia's public finances.⁶ These concerns have already been reflected in investors' demanding higher risk premia for Slovak government bonds. Investors' increasing sensitivity to high budget deficits is, however, a global trend and not unique to Slovakia.⁷

How risk premia on Slovak bonds evolve in the short term will be largely determined by how convincing the Slovak government will be in its commitment to deficit reduction. Longer-term fiscal consolidation is also necessary, as the effects of demographic changes and the costs associated with an ageing population in Slovakia will be among the most significant in the EU.⁸

³ At the outset of 2023, more than 2.4 million people were working in the economy and another 172,000 were looking for work. The unemployment rate fell to 5.14% in February.

⁴ At the outset of 2023 annual goods and services inflation was running at more than 15%, but by February it had already dropped to 3.8%. Food prices in particular contributed to inflation's slowdown, though other major items of the consumption basket, including energy and net inflation, also decelerated.

⁵ In 2023 Slovakia, like Malta, will run a budget deficit of 4.9% of GDP, the joint 6th worst among EU countries.

⁶ More than one-fifth (around €15 billion) of Slovakia's outstanding sovereign debt is due to mature by the end of 2026, so as it is rolled over in a higher interest rate environment, the cost of servicing public debt will rise. Taking into account the increase in required yields on Slovak bonds and the similar structure of new debt issuance, the rolled-over public debt will be more than 70% costlier to service than was the maturing debt.

⁷ Global Financial Stability Report, IMF, April 2024.

⁸ Debt Sustainability Monitor 2023, European Commission, April 2024.

Box 1

Macroeconomic scenarios for modelling adverse effects

One of the main objectives of the Financial Stability Report is to examine the financial sector's resilience to different scenarios of future developments. It is particularly important to be aware of the sector's resilience in adverse, or 'stress', scenarios. To this end, we modelled two economic scenarios. The baseline scenario assumes smooth developments in line with the assumptions of NBS's most recent macroeconomic forecast; in the stress scenario, by contrast, the economy is envisaged to suffer a shock that adversely affects GDP and the labour market, thereby weighing on the financial sector as well.

In the baseline scenario of economic developments,⁹ the economy is assumed to start picking up again after slowing down in 2023. Its gradual acceleration is underpinned by recovery in both global demand and Slovak household consumption, with the result that the output gap closes and the economy operates at close to potential. The unemployment rate decreases further, but not significantly so, given the impact of a tight labour market and shortages of skilled labour. Wage growth is maintained, so with inflation receding, it has an upward impact on households' disposable income. At the same time, corporate revenue growth moderately outpaces inflation, and firms' costs, other than expenditure on wages and compensation, consistently rise more slowly than inflation.

Under the stress scenario, global demand cools as geopolitical conflicts escalate and have an adverse impact on international trade and transport. The Slovak economy slows sharply in the first year of the stress scenario and stagnates in the following years. This is reflected in the unemployment rate, which rises to double its 2023 level. Low demand and an economic downturn translate into an easing of inflation, while rising unemployment means firms no longer face strong upward wage pressures. By the same token, household disposable income declines over the entire stress scenario horizon. Corporate revenues decline in first year of the simulation and then remain flat until the end of the horizon. Because inflation is more moderate, firms' costs are lower in the stress scenario than in the baseline scenario. The economic downturn further increases pressure on public finances. As a result, the spread of Slovak bonds over German Bunds is projected to widen by 0.7 pp compared with the baseline scenario.

⁹ The baseline scenario is based on the assumptions of [NBS's spring medium-term forecast \(MTF-2024Q1\)](#).

Table 1 Macroeconomic scenarios

	Actual data	Baseline scenario			Stress scenario		
	2023	2024	2025	2026	2024	2025	2026
Assumptions for macroeconomic indicators and for the simulation of household loans at risk							
Real GDP (change)	2.1%	2.9%	3.1%	1.5%	-5.7%	2.7%	1.7%
Unemployment rate (level)	5.6%	5.3%	5.3%	5.3%	8.0%	10.3%	11.6%
Nominal wages (change)	10.8%	4.2%	5.5%	4.6%	-0.4%	3.5%	3.2%
Real disposable income (change)	1.1%	2.5%	1.5%	0.7%	-4.4%	-0.3%	-0.6%
Inflation (change)	7.1%	2.5%	3.8%	3.7%	1.7%	2.6%	2.5%
Mortgage rate (level)	4.6%	4.5%	4.4%	4.3%	4.5%	4.5%	4.5%
Assumptions for the simulation of firms at risk							
Growth in revenues (change)	3.1%	1.4%	5.4%	4.4%	-15.0%	3.0%	2.4%
Unit costs (change)							
... inputs and goods		3.1%	1.9%	2.0%	3.3%	1.2%	1.4%
... services		3.0%	2.5%	2.5%	1.6%	0.6%	0.8%
... employees		5.2%	5.6%	4.7%	0.6%	3.6%	3.3%
Three-month EURIBOR (average)	3.4%	3.5%	2.9%	2.7%	3.3%	2.4%	2.2%

Source: NBS.

Notes: In the rows of the table where the 'change' in the indicator value is shown, the figures represent the year-on-year growth rate for the fourth quarter of the respective year. The unemployment rate is given as a percentage of the economy's labour force as at the fourth quarter of the respective year. For the three-month EURIBOR, the figures represent the average rate in the respective year. The mortgage rate figure is not based on the forecast; it is a technical assumption made for the purposes of this analysis and based on current trends.

2 Financing of the economy

2.1 Private sector debt growth has slowed owing to higher interest rates

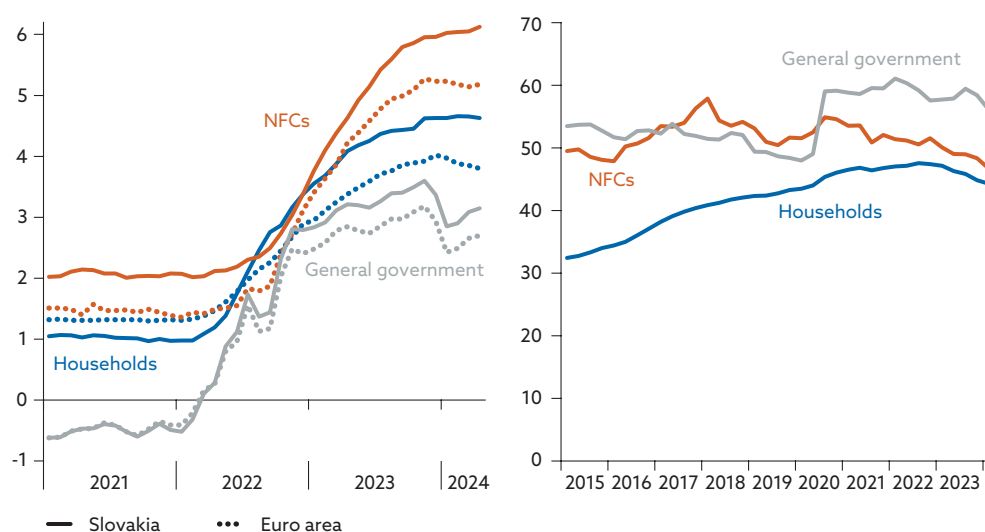
The financing of the economy has undergone a significant change due to the tightening of monetary policy over the past two years. In 2022 public sector borrowing costs soared, shortly preceding an increase in the cost of financing for households and firms. At the same time, the 2022 rise in public sector borrowing costs was larger in Slovakia than in other euro area countries, hence a widening of the spread between the Slovak government bond yield and the median yield on euro area sovereign bonds. Mortgage costs reflected this situation as well as a lower intensity of competition in the mortgage market. In the initial phase of their increase, mortgages costs were rising faster in Slovakia than elsewhere in the euro area, climbing gradually from being the second lowest to the fifth highest.¹⁰ Likewise, for firms in Slovakia, the cost of borrowing has risen more than in other euro area countries.

Chart 1

Indebtedness and the cost of borrowing by sector

Left-hand panel: Cost of new borrowing by sector (percentages)

Right-hand panel: Debt-to-GDP ratio by sector (percentages)



Sources: NBS, ECB, and Reuters.

Notes: In the left-hand panel, the solid line shows the evolution in Slovakia; the dotted line, the evolution in the euro area (average value for firms and median values for households and general government). For households, the median interest rate on new mortgages is shown. The methodology used to calculate the cost of borrowing for firms is described in an ECB methodological note entitled 'Cost-of-borrowing indicators'.

¹⁰ Over the same period, Slovak government bond yields rose from the level of the euro area median to the second highest. A combination of higher government bond yields and less intensive competition in the mortgage market meant that while the average cost of housing financing fell slightly in the euro area in the first quarter of 2024, it remained relatively flat in Slovakia.

Higher borrowing costs have dampened demand for loans, so the debt-to-GDP ratios of both households and firms have dropped. With interest rates turning upwards, household indebtedness in Slovakia started to decline for the first time ever from early 2022. Among corporate borrowers, the decline in indebtedness has been part of a longer-term trend. In the general government sector, by contrast, indebtedness has not declined, so elevated interest rates imply higher debt servicing costs.

While previous interest rate increases have been almost fully transmitted to the corporate loan portfolio, most households have yet to see the impact on their mortgage payments. Rate hikes have been fully passed on to around 95% of loans to firms, with most corporate loans being pegged to the three-month EURIBOR. Since the EURIBOR reached a likely peak (4%) in the third quarter of 2023, it has been falling gradually and is expected to decline further in the coming period. The average interest rate on the outstanding corporate loan portfolio should therefore decrease slightly over time, though a return to the levels of two years ago is not anticipated.¹¹ The situation is different for mortgages. Of the mortgages constituting the portfolio as of 2021, only 17% had seen their interest rate increased to more than 3% by the end of 2023. For a large proportion of mortgages, payments will only start increasing in the period ahead. On the positive side, real household incomes have already started to rise again and should therefore mitigate the adverse impact on future higher mortgage payments.

2.2 Mortgage origination has stabilised

The mortgage market remains steady after its slowdown in the second half of 2022

Mortgage origination remained at around the same level throughout 2023 and in early 2024, which was about one-third lower compared with the previous period.¹² This trend stemmed largely from rising interest rates, a cooling housing market, and lower housing affordability.

The mortgage portfolio's annual growth moderated gradually down to 2.9% in April 2024, and no further significant slowdown is expected.¹³

¹¹ By the end of 2025, even after a slight decline in interest rates, around half of the corporate loan portfolio will be subject to an interest rate that is higher by at least 3 pp compared with 2021.

¹² A slight slowdown observed in late 2023 and early 2024 was probably due to seasonality, as typically fewer new mortgages are granted at this time of the year.

¹³ Banks are also taking the view that the market has stabilised. According to a survey of commercial banks, credit standards did not budge in the second half of 2023 or in the first quarter of 2024.

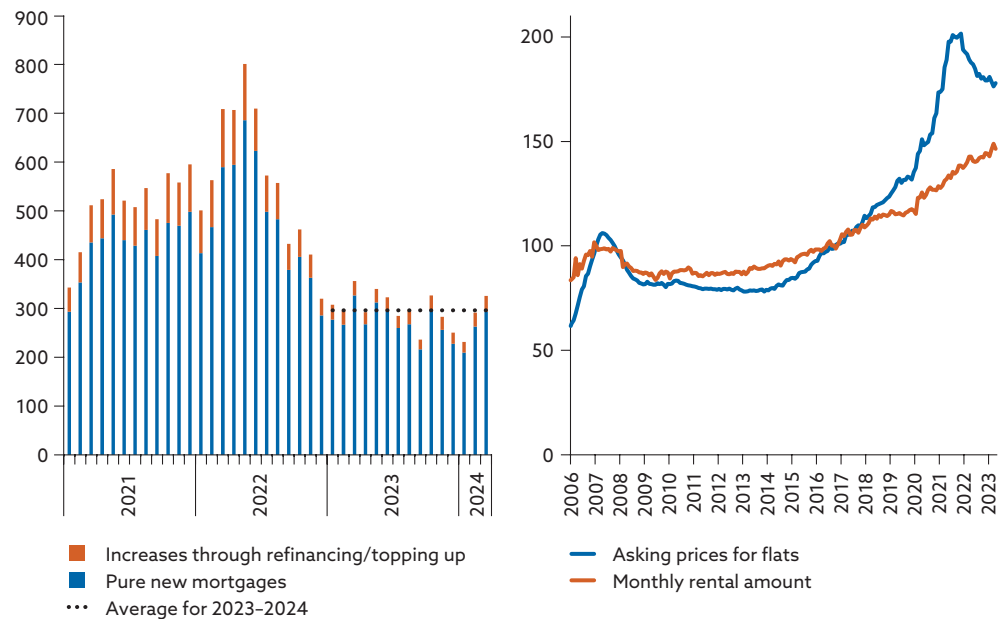
Annual mortgage growth has been decelerating across the EU, while Slovakia has remained above the EU median on this metric. As for interest rates on pure new mortgages, the rate in Slovakia has alternated between the fourth and fifth highest in the euro area.¹⁴

Chart 2

Stabilisation of both the mortgage and housing markets after their cooling in 2022

Left-hand panel: Amount of pure new mortgages and mortgage increases through refinancing/topping up (EUR millions)

Right-hand panel: Indices of prices and monthly rents (2007 = 100)



Source: NBS.

Source: United Classifieds.

Along with the slowdown in mortgage growth, activity in the housing market also declined, before gradually stabilising during 2023. After undergoing a sharp but necessary correction in the second half of 2022, housing prices continued to fall moderately, before more or less stabilising since the summer of 2023. Neither the number nor the types of flats on the market have changed significantly. All regions of Slovakia continued to see either stagnation or a slight decline in housing prices also in 2024, and this trend applied to most types of housing.¹⁵ Prices of flats are currently around 10% lower than they were in the summer of 2022. As there are fewer prospective buyers in the housing market, there is currently no upward pressure on housing prices.

¹⁴ The average interest rates on pure new mortgages peaked in January 2024 (at 4.66%) and fell very slightly by the end of March 2024 (to 4.59%). For now, the trend can be described as stagnating rather than decreasing.

¹⁵ There are some outliers, including, for example, the market in Bratislava and prices of new-build and off-plan flats.

Key loan characteristics have remained stable since mid-2023. The shifts in interest rates and inflation from early 2022 had a deleterious impact on new lending, as DSTI ratios worsened, maturities lengthened, and the proportion of new loans with co-borrowers increased. Since around the second quarter of 2023, however, these indicators have largely stabilised. As regards the DSTI ratio, there has even been a slight drop in the share of loans with a ratio close to the regulatory limit.¹⁶ Loan-to-value (LTV) ratios have not changed significantly.

As the proportion of young people in the general population is in long-term decline, so the proportion of young borrowers has been falling

The share of new mortgages granted to younger borrowers is in a slow decline that stems largely from demographic trends. The share of 20-34 year olds in the active population has fallen by 10% over the past five years, while the share of mortgages granted to younger borrowers has dropped by 13%.¹⁷ It is yet to be shown that young people's access to mortgages has been limited by higher interest rates and their own greater sensitivity to a decline in real income. While the share of younger borrowers (aged under 35) in new mortgages has decreased, this decline is in line with the previous long-term trend. At the same time, the evolution of the average mortgage amount has been similar for younger and older mortgage applicants.

¹⁶ The share of pure new loans with a DSTI ratio of 55% or higher peaked in the first quarter of 2023, at 37%, before declining slightly to 34%. Its level before interest rates started rising in 2022 was typically around 16-17%.

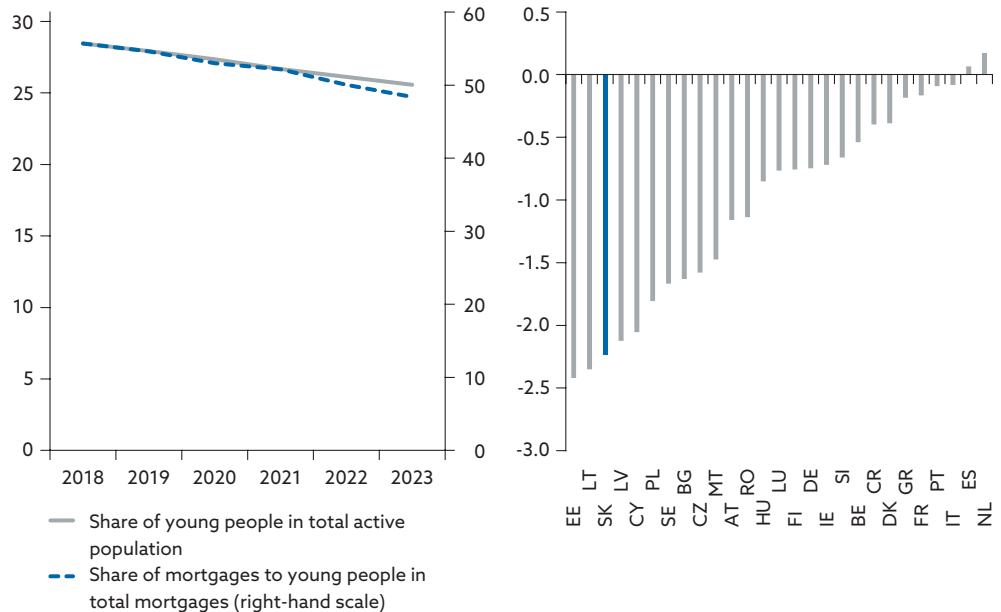
¹⁷ For the purposes of this comparison, the active population is defined as the population aged 20 to 64. The 20-34 age group as a share of the active population in Slovakia has fallen from 44% to 29% over the last 40 years, with two-thirds of that decline occurring since 2006.

Chart 3

The share of new mortgages granted to young borrowers is falling along with the proportion of young people in the population, the latter decline being among the highest in the EU

Left-hand panel: Share of people aged 20–34 in the population aged 20–64 and share of pure new mortgages granted to people aged 20–34 in all mortgages granted in the given year (percentages; percentages)

Right-hand panel: Absolute change in the share of people aged 20–34 in the total population between 2018 and 2023 (percentage points)



Source: NBS.

Source: Eurostat.

Consumer credit has partly replaced mortgage dynamics

The consumer credit portfolio has seen an increase in flows of new lending. As a result, annual growth in total consumer credit has gradually increased, to around 8%.¹⁸ Banks have even indicated an increase in demand for consumer credit.¹⁹ Like mortgages, consumer credit has increased above the EU median. In the process, it has accounted for almost one-third of the retail portfolio's growth – its highest share in ten years. The average interest rate on pure new consumer loans has stopped rising.²⁰

The accelerated growth in consumer credit has been due mainly to the impact of inflation and a gradual improvement in the financial situation

¹⁸ After peaking at 8.4% in February 2024. In April 2024 consumer credit growth stood at 7.9% year-on-year.

¹⁹ In a survey about their credit standards in the second half of 2023, banks reported no change in their standards and an increase in demand for consumer credit linked to spending on durable goods. In the first quarter of 2024, there was no change either in credit standards or in credit demand.

²⁰ After peaking at 10.2% in December 2023, it dropped to 9.6% by the end of April 2024. Given the structure of the market, this is more a case of volatility than a trend. Consumer credit in Slovakia remains among the most expensive in the euro area.

of households.²¹ Elevated inflation has been incentivising consumers to make purchases sooner rather than later, to avoid further price increases. For this purpose, consumers have been taking out consumer credit from banks to an increasing extent. More recently, the improvement in households' financial situation – especially their real incomes – has created room for further borrowing. Despite concerns to the contrary, there has not been an increasing trend of households in financial difficulties using consumer credit to compensate for insufficient income. Such a trend would have inevitably been reflected in a deterioration in the risk characteristics of the credit provided, which has not occurred.

The consumer credit portfolio's growth has to lesser extent been supported by a lower uptake of debt consolidation mortgages. Such mortgages were particularly popular at times when the interest rate differential between the two products was large. With the change in the interest rate environment from 2022, this differential has narrowed, and there has been less incentive to consolidate consumer credit into mortgages.

2.3 Slowdown in lending to non-financial corporations

Flows of loans to non-financial corporations (NFCs) were lower in the first quarter of 2024 than in previous years

Annual growth in loans to NFCs has continued to decline, falling to 0.6% as at March 2024. This trend, however, largely reflects developments in lending to particular sectors. Moreover, a slowdown in corporate lending is also occurring in other EU countries.²²

Lending flow trends have been adverse in the commercial real estate (CRE) sector and among a cohort of large corporates. In month-on-month terms, lending to the CRE sector was negative throughout the first quarter of 2024. The flow of loans was the CRE portfolio's worst since at least 2019, and translated into negative growth rates on both a quarterly and semi-annual basis.²³ The large corporates portfolio has also showed a negative trend, due to developments in lending to the largest enterprises, particularly in the energy sector. Across the rest of that portfolio there has been a slight recovery,²⁴ especially in the sectors of industry, trade, and transportation and storage.

²¹ An analysis of the accelerated growth in consumer credit can be found in NBS Discussion Note No 136, 'Čo stojí za oživením spotrebiteľských úverov?' (in Slovak only).

²² Annual growth in loans to NFCs is on par with that in other EU countries. Among EU countries, Slovakia is at the median, while among CEE countries, it is below the median.

²³ The flow of loans to the CRE sector has fallen by 1.4% over the last six months. The annual growth rate is still in positive territory, but only due to strong loan growth in the second and, to a lesser extent, third quarters of last year.

²⁴ The largest quarterly increase since the third quarter of 2022.

Lending activity in other segments of the NFC portfolio²⁵ has been stable. The quarterly flow is at the average of recent years and significantly higher compared with 2023, while the annual growth rate remains stable at 5.5%. The sector with the strongest loan growth has been industry.

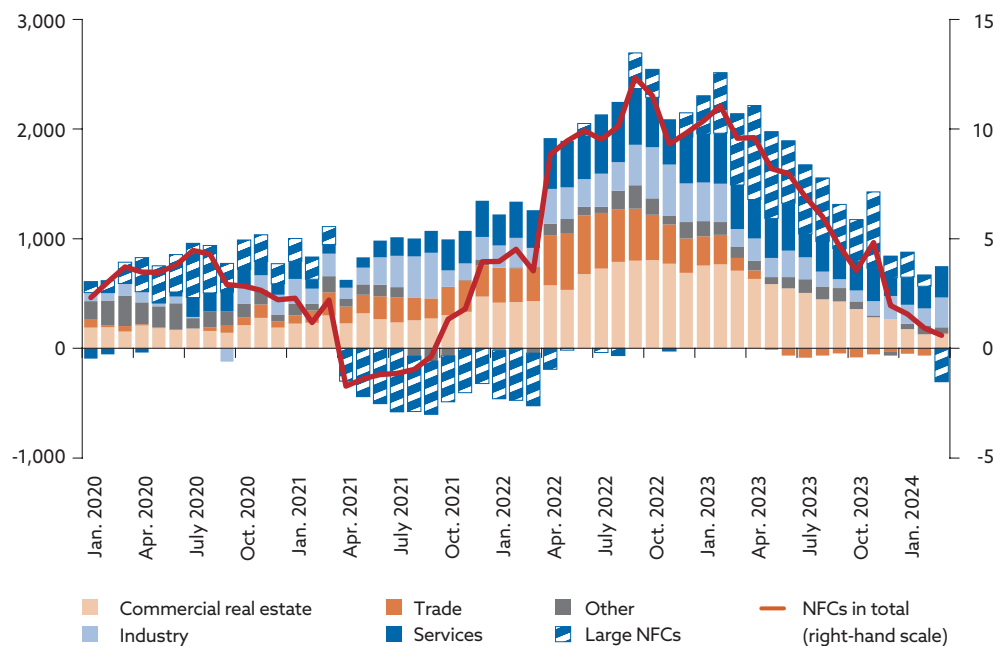
The slowdown in lending is largely due to lower demand²⁶ rather than to financing conditions, which banks have so far not been tightening. This is confirmed by a surveys of banks²⁷ as well as by market trends. Although lending rates have peaked for most firms, interest margins remain unchanged. Banks have shown willingness to support lending to firms that made a loss in 2023, particularly firms in the sectors of agriculture, energy supply, trade, and selected market services.²⁸

The slowing trend in lending became more pronounced in April. The outstanding amount of NFC loans fell by 2.6%. In addition to those sectors in which lending slowed in the previous period, industry also recorded lower lending growth in April.

Chart 4

Annual NFC loan growth gradually slowing

Year-on-year change in NFC loans by economic sector and year-on-year growth in total NFC loans (EUR millions; percentages)



Sources: NBS, and Register of Bank Loans and Guarantees (RBUZ).

²⁵ Excluding large corporates and the commercial real estate sector.

²⁶ According to the regular bank lending survey, there are signs of a weakening demand for loans to firms, reflecting mainly lower demand for working capital financing.

²⁷ According to the regular bank lending survey. In the first quarter of 2024, there was no change in credit standards, nor in the individual factors that affect the level of credit standards.

²⁸ In these sectors, lending growth was higher among firms that ended the year with a loss than among profitable firms.

3 Financial situation of households and firms

3.1 Most households can cope with loan payments even at higher interest rates

Households' financial situation is gradually improving

With inflation gradually receding, households have started to see real wages rise again. Since around mid-2023, wages have been rising faster than costs. The financial situation of households has been further improved by state support, in particular through child allowances and child tax credits and through compensation for high energy prices. The upturn on the real income front has also been reflected in household deposits, which after stagnating for two years, started to grow again in early 2024. Consumption has also revived slightly, although so far only for everyday goods.

From a financial stability perspective, it is important that the recent period of falling real wages has not translated into an increase in non-performing loans (NPLs). NPL ratios for both mortgages and consumer credit remain at long-term lows.²⁹

Higher mortgage payments are not leading to increased risk

For mortgages with increased payments, credit quality has not significantly deteriorated so far. The mortgage portfolio is seeing a gradual increase in payments. By the end of 2023, the interest rate on 17% of the portfolio had increased to at least 3%. In the fourth quarter of 2023, when the standard interest rate on new mortgages was already above 4%, the average increase in mortgage payments was €81, not in excess of previous expectations.

Some households are also taking advantage of a new government subsidy towards the cost of higher mortgage payments. The mortgage subsidy, payable to mortgage borrowers who satisfy certain conditions, has been disbursed since the beginning of the year by the Central Office of Labour, Social Affairs and Family. By the end of March 2024, a total of 6,343 households had been approved for the subsidy. The share of mortgages with increased payments still remains relatively low. Given that the mortgage

²⁹ For the mortgage portfolio, the NPL ratio was 1.1% as at 31 March 2024; for the consumer credit portfolio, it was 6.9%.

subsidy has only recently been introduced and that the law has been changed to extend its availability, the uptake of the subsidy can be expected to grow in the coming period. The average amount of the subsidy for the period January–March was €87. The subsidy covers 75% of the mortgage payment increase, which means that mortgage borrowers in receipt of it have experienced an average payment increase of €116. Households facing an above-average increase in payments were therefore more likely to apply for the subsidy.

Only with rising unemployment would there be a risk of a significant increase in NPLs

The potential evolution of loan portfolio quality over the next three years was estimated in two scenarios.³⁰ Households' debt servicing capacity is most significantly affected by labour market developments. The baseline scenario assumes a slight decline in the unemployment rate and an increase in real household disposable income, while the stress scenario envisages a sharp rise in the unemployment rate and consequent downturn in real disposable income throughout the scenario horizon. In addition, each scenario reckons on a reduction in current state support, with the stress scenario anticipating the more severe cutbacks on public expenditure.³¹

In the baseline scenario, the risk level remains close to the level of previous years. In the stress scenario, over the three-year simulation horizon, the percentage of mortgage-paying households that may become at risk of financial distress³² is estimated at 4.7%, while among households repaying consumer credit, the share is 9.4%.³³ The main source of risk is the normal fluctuation in household incomes, meaning that, even in normal times, some households experience declines in income that could be a source of financial distress. The results also confirm that an increase in mortgage payments due to a higher interest rate environment should not lead to

³⁰ These scenarios are described in more detail in Box 1.

³¹ As regards energy price compensation measures, we assume they will not remain in effect beyond 2024, and their absence in 2025 and 2026 will cause a 4% reduction in household income. The child allowance and child tax credit are assumed to be reduced from 2025. Under the baseline scenario, these reductions are in line with current legislation, while in the stress scenario they are more severe, with both the allowance and tax credit being halved. On the other hand, the government subsidy towards higher mortgage payments is assumed to remain in place throughout the stress test period.

³² Households at risk of financial distress are here defined as households whose loan payments and basic living expenses exceed their income and recourse to savings. The simulation methodology is described in detail in NBS's [May 2022 Financial Stability Report](#). The analysis includes only indebted households.

³³ In the baseline scenario, the share of mortgages and consumer credit that may become at risk of default are, respectively, 2.6% and 8.8%.

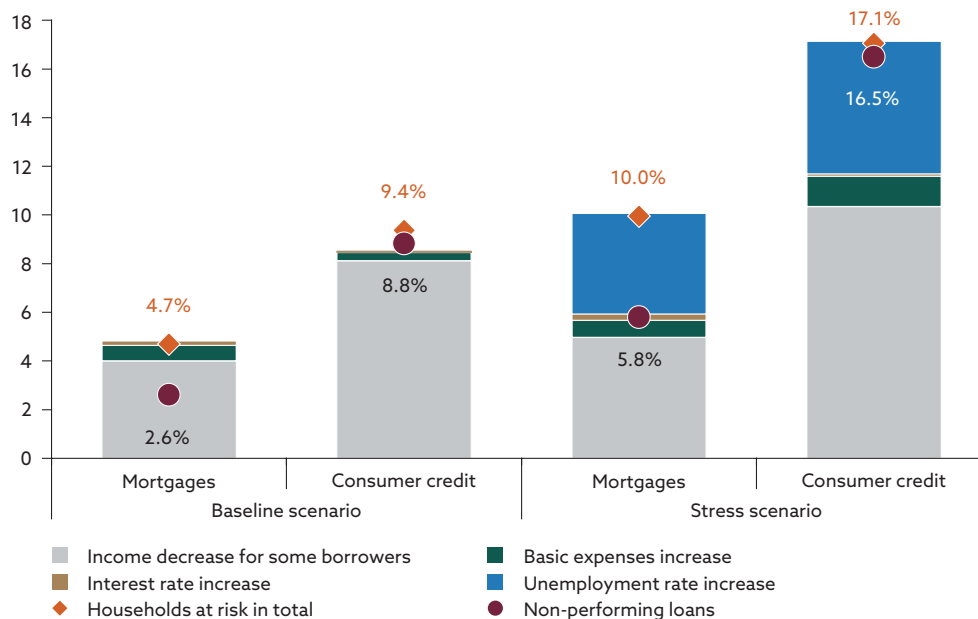
a material increase in risk. Inflation-related risk has also fallen compared with the past.

There could, however, be a more pronounced increase in risk resulting from an adverse labour market situation, as simulated in the stress scenario. In this scenario, 10% of mortgage-paying households and 17% of households with consumer credit may become at risk.³⁴ The main reason that risk is higher in the stress scenario than in the baseline scenario is that the stress scenario assumes a larger rise in the unemployment rate. Yet even in this scenario, the impact of inflation and rising mortgage payments is low. In the stress scenario, the assumed partial reduction of state support measures, owing to the need for public finance consolidation, also has an impact. If the child allowance and tax credit were not further reduced (beyond the tax credit cut currently planned from 2025) and energy price compensation remained at current levels, then among both households with mortgages and households with consumer credit, the share at risk would be around 2 pp lower.

Chart 5

Impacts of different shocks on household loans at risk

Share of household loans that may become at risk, by type of shock (percentages)



Source: NBS.

Notes: The increase in at-risk loans in the period from June 2023 to June 2026 is simulated using the scenarios described in Table 1. Households at risk are here defined as households whose loan payments and basic living expenses exceed their income and accumulated savings. The income decline of certain borrowers refers to the standard fluctuation in household incomes, which, even in periods of increasing average nominal incomes, may rise for some households and fall for others.

³⁴ The increase in the NPL ratio is estimated to be around twice as high in the stress scenario as in the baseline scenario. In the stress scenario, it is estimated that 5.8% of mortgages and 16.5% of consumer loans may become at risk of default.

Inflation and falling housing prices have increased the riskiness of the mortgage portfolio

The mortgage portfolio's sensitivity to a potential economic downturn is greater now than it was two years ago, for two reasons. The first, less significant factor is that, for existing loans, the payment burden relative to real incomes has increased. Between early 2022 and mid-2023, real wages fell slightly (by 0.4%), while payments on some loans increased. The average current level of the DSTI ratio,³⁵ taking into account the evolution of real incomes, gradually declined between the start of 2020 and mid-2022, from 50% to 45.3%. From mid-2022 to the end of 2023, it edged back up from 45.3% to 45.7%. For share of new loans with a DSTI ratio close to the regulatory limit, the average ratio has increased. If economic conditions deteriorated, high-DSTI loans (both new and existing) would be more sensitive to default risk. On the other hand, with real wages having gradually returned to a growth trend since mid-2023, the riskiness of the loan portfolio has started to gradually decrease again.

The second, weightier reason is the decline in housing prices and its impact on the level of potential losses. The downtrend in housing prices between mid-2022 and mid-2023 was reflected in an increase in loan-to-value (LTV) ratios.³⁶ Hence, there has been an increase in the share of mortgages where, in the event of default, the foreclosure of the real estate collateral (including an element of discounting) may not cover the outstanding mortgage debt.

Higher riskiness thus translates into higher expected losses,³⁷ with a major factor being the aforementioned decline in housing prices. Although the value of expected losses remains relatively low, its increase from 2022 to 2023 was relatively rapid and brought a return to its 2018 level. The slow-down in lending has therefore not yet had a mitigating effect on the mortgage portfolio's riskiness. On the contrary, previous negative trends in real incomes and housing prices have accentuated the level of risks currently accumulated in the portfolio.

³⁵ The debt service-to-income (DSTI) ratio is the ratio of a borrower's loan payments to income less the minimum subsistence amount.

³⁶ The loan-to-value (LTV) ratio expresses the ratio of a loan's amount to the value of the property used as collateral for the loan.

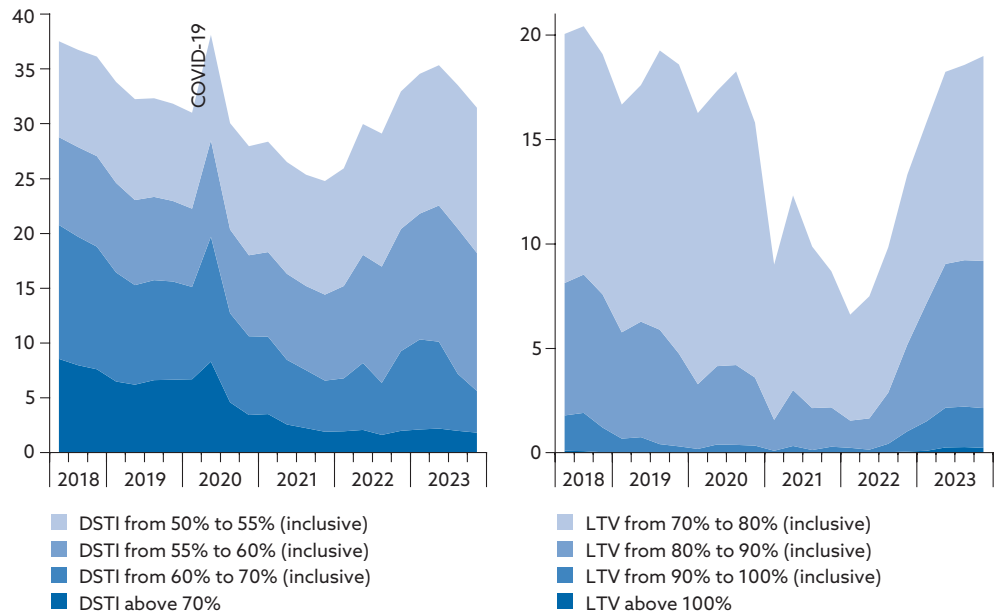
³⁷ The amount of expected losses is related to the probability of loan default (linked to DSTI ratios) and the loss given default rate (linked to LTV ratios).

Chart 6

Worsening of mortgage portfolio risk parameters since 2021

Left-hand panel: Share of mortgages with a higher current DSTI ratio (percentages)

Right-hand panel: Share of mortgages with a higher current LTV ratio (percentages)



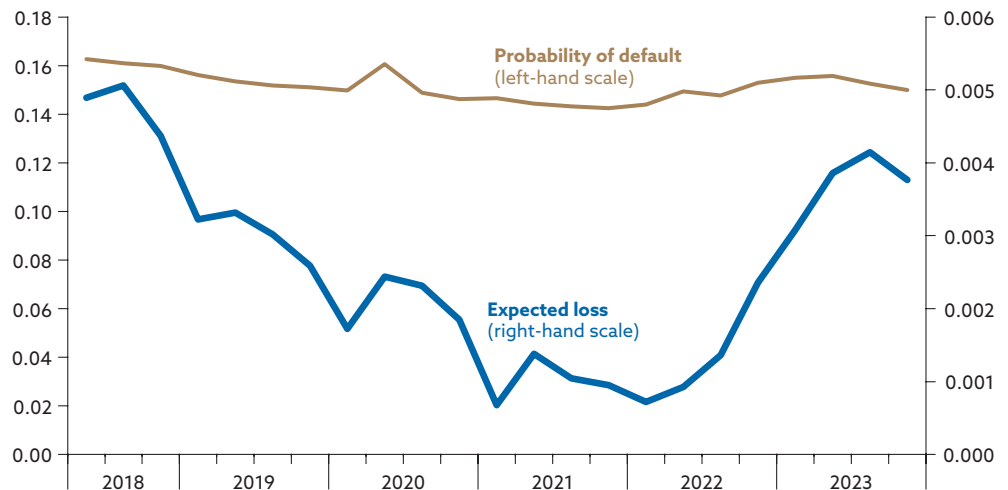
Source: NBS.

Notes: LTV – loan-to-value (ratio); DSTI – debt service-to-income (ratio). The current LTV ratio is calculated as the ratio of the current outstanding amount of the loan to the current value of the real estate collateral indexed according to a region-by-region real estate price index. The current DSTI ratio is calculated as the ratio of the current cost of loan payments (applying an interest rate stress test) to the difference between the borrower's income and the minimum subsistence amount, with this difference being indexed by the real wage growth index.

Chart 7

Mortgage portfolio facing increasing risk of losses

Probability of default and expected loss (percentages; percentages)



Source: NBS.

Notes: Both the probability of default and the expected loss rate correspond to an annual time period. The probability of default estimate is based on the evolution of the current DSTI value and the empirical relationship between the current DSTI value and the default rate observed in the data for the period 2022–2023 (with the default rate rising as the current DSTI value increases). The expected loss estimate is based on the current LTV value and the assumption that if the real estate collateral is foreclosed, it will be at a 30% discount.

3.2 Firms' financial situation has remained stable

Corporate profitability in 2023 was slightly down year-on-year

With prices rising more slowly in 2023, firms were unable to do what they had done in the previous year: use sharply rising prices to boost profit margins.³⁸ While cost growth has slowed noticeably, revenue growth has moderated even more so. In addition, the rise in interest costs (varying from firm to firm according to indebtedness and thus more difficult to pass on to prices) has also contributed quite significantly to cost growth. Despite having pushed up total interest costs by as much as two-thirds year-on-year, the relatively sharp rise in interest rates has not had a significant impact on the financial position of most firms. Since a majority of firms have a low ratio of interest costs to total revenues, the increase in these costs caused only a 0.3% reduction in corporate revenues in 2023.³⁹ This did, however, translate into a slight decline in corporate profitability in that year. Aggregate ROE fell by 1.1 pp year-on-year, while if interest costs had remained at their 2022 level, that decline would have been only half as large.

Firms' riskiness, however, has not increased significantly. On the contrary, the share of loss-making firms and firms with negative equity has slightly decreased. Corporate liquidity has remained stable compared with 2022. These trends have been reflected in the evolution of the aggregate NPL ratio. Although its long-term downtrend came to a halt in mid-2023 (at 2.4%), its subsequent increase in the period to March 2024 was very slight (up to 2.7%).

Although the evolution of firms' financial situation in 2023 was heterogeneous across sectors, the only marked deterioration was in agriculture.⁴⁰ This sector saw the largest decline in ROE (from 9.6% to 3.5%) Falling prices of agricultural products contributed to a 1.1% year-on-year decline in revenues in 2023, while the sector's costs continued to rise (by 3.5%). Liquidity in the agricultural sector, which has long been half that in the rest of the corporate sector, continued to decline in 2023, due in part to delays in pay-

³⁸ This section is based on NFC financial statements as at the end of 2023, which, however, were available for only part of the NFC sector: around 29% of all firms, accounting for approximately 21% of total revenues.

³⁹ This conclusion holds across almost all sectors. Only in the commercial real estate sector was the increase in interest costs higher than 0.6% of revenues. Compared with other segments of the corporate sector, the CRE sector is around eight times more sensitive to rising interest costs. In 2023 the increase in CRE interest costs equated to 2.3% of the sector's revenues. This report therefore devotes a separate subsection (3.3) to this sector.

⁴⁰ This comparison omits the commercial real estate sector, which is the subject of a separate subsection (3.3).

ments from the Agricultural Paying Agency. The worsening situation did not, however, translate into a higher NPL ratio for loans to the sector; in fact, the ratio continued to decrease. Moreover, from the point of view of banks, agriculture is not a systemically important sector, as it accounts for only 5% of all NFC loans.

The NPL ratios for loans to the sectors of industry, construction, and trade all increased moderately in 2023. Each of these sectors also saw a slight decline in corporate profitability. The rise in NPL ratios was more pronounced for loans to SMEs than for loans to large corporates. By contrast, the situation in the accommodation and food services sector continued to improve. This was the sector hardest hit by the pandemic crisis, but it has since recovered almost completely. Half of the firms in this sector made a loss in the pandemic year of 2021, but in 2023 the sector's median ROE increased to 6.8%.

Firms could be weakened by a potential economic downturn

The potential evolution of corporate sector riskiness over the next three years was simulated in two scenarios for revenue and cost developments.⁴¹ In the baseline scenario, firm's unit costs are assumed to slow sharply, with staffing costs remaining as the highest-rising component. Corporate revenues, by contrast, accelerate slightly. In the stress scenario, the main source of risk is a relatively marked decline in firms' revenues. This is assumed to be partly offset by a slightly slower increase in costs and a moderately faster decline in interest rates.

In the baseline scenario, corporate profitability is estimated to remain stable or even increase slightly, while in the stress scenario, up to half of all firms make a loss. In the baseline scenario, the assumed recovery in revenues and slower increase in costs have a slightly downward impact on ROE, and the share of loss-making firms is around the same at the end of the three-year scenario horizon as it is today. In the stress scenario, on the other hand, the sharp decline envisaged for revenues in 2024 results in a significant decrease in ROE. The share of loss-making firms is estimated to rise to more than 50%, before partially decreasing thereafter; the share of firms with negative equity more than doubles.

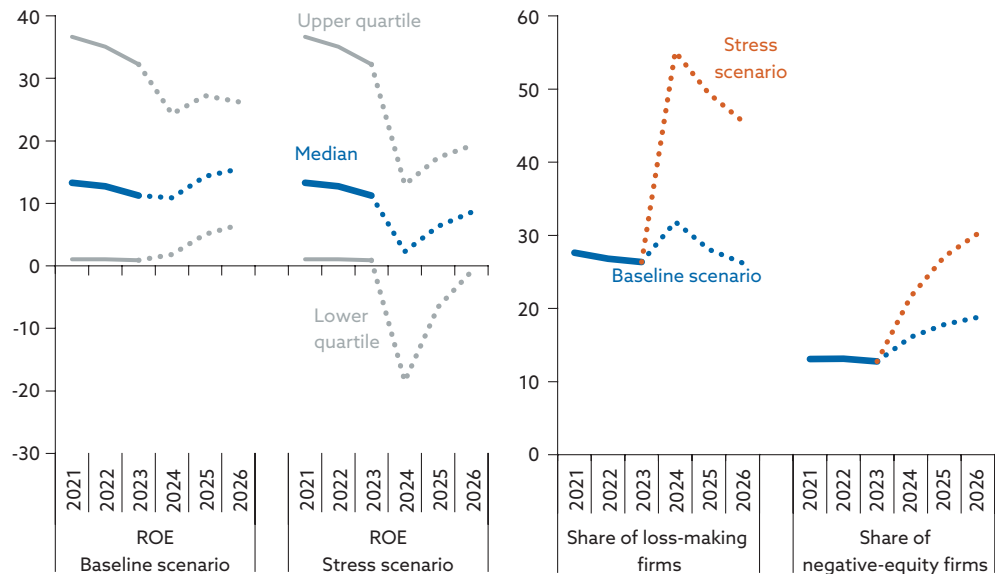
⁴¹ These scenarios are described in more detail in Box 1.

Chart 8

Current and expected evolution of corporate sector profitability

Left-hand panel: ROE in the baseline and stress scenarios (percentages)

Right-hand panel: Share of loss-making and negative-equity firms in the NFC sector in the baseline and stress scenarios (percentages)



Sources: SO SR, and FinStat.

Notes: The shares of firms are expressed according to their number. The data are calculated only for those firms for which data for 2023 were available. The calculation included data only for firms which had non-zero revenues in 2021 and 2022 and revenues of at least €1,000 in 2023. The data are based on financial statements as at end-2023 for firms representing 29% of all NFCs and accounting for around 21% of total NFC revenues. The chart shows all firms for which data are available, regardless of whether they have been granted a loan or not.

Reduced debt servicing capacity, especially in the stress scenario

In the baseline scenario, around 6.5% of NFC loans are estimated to become at risk⁴² over the three-year simulation horizon. The main source of risk in this scenario is the fact that a proportion of firms are assumed to see a worse trend in revenues than in cost growth.⁴³ Even at times of economic growth, it is normal for some firms' revenues to increase more slowly than their costs. On the other hand, demand and interest rate movements have only a minor impact on the share of loans at risk. Interest rates are assumed to fall slightly, while the interest rates on most NFC loans have already been reset to today's higher levels.

⁴² We consider loans at risk to be loans to firms that are at risk of severe financial distress (i.e. firms that ended up with negative equity) at the end of the three-year horizon.

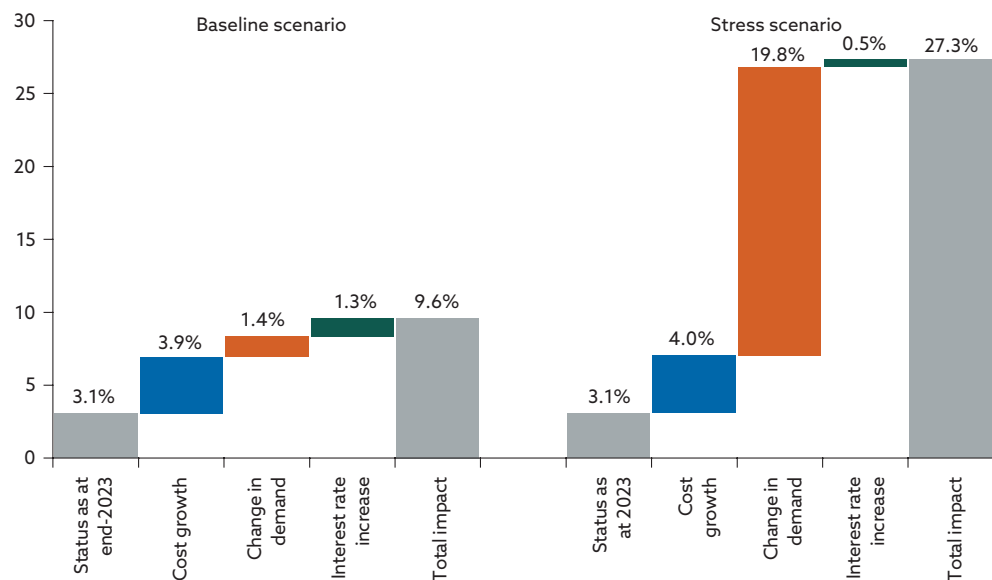
⁴³ This assumption is based on the statistical distribution of revenue changes observed in the past and takes into account heterogeneity across firms.

In the stress scenario, the share of NFC loans estimated to become at risk is around 18 pp higher compared with the baseline scenario. The main cause of the difference is the assumed decline in revenues. Although firms are expected to seek to offset this decline by implementing cost-saving measures, they have only partial success. The adverse impact of economic developments is particularly pronounced in sectors that are more exposed to business cycle changes – in particular, industry, trade, transport, and accommodation and food services.⁴⁴

How the situation actually develops will depend to a large extent on the ability of individual firms to respond to rising costs, especially if there is a recession.⁴⁵

Chart 9 NFC loans at risk

Share of loans at risk in the total NFC loan portfolio and factors affecting this share (percentages)



Sources: NBS, SO SR, and FinStat.

Notes: The chart shows the share of loans at risk at the end of the three-year simulation horizon (i.e. in 2026). The chart does not include data for the CRE sector, which is analysed separately.

⁴⁴ In the baseline scenario, 3.3% of NFC loans are estimated to default, while the corresponding figure in the stress scenario is twice as high.

⁴⁵ Their responses may include, for example, cutting costs more aggressively, increasing operational efficiency or, if necessary, increasing capital. At the same time, we assume that large firms have a greater capacity to react to a worsening of their financial situation than do smaller firms; hence, the probability of default is lower for large firms than for small firms, including in the event of financial distress.

3.3 Commercial real estate faces heightened risks

Commercial real estate (CRE) has been one of the sectors hardest hit by the current uptrend in interest rates. Moreover, CRE firms faced a relatively sharp rise in operating costs in 2022 and, to a lesser extent, 2023.

The higher level of risk concerns mainly the office segment

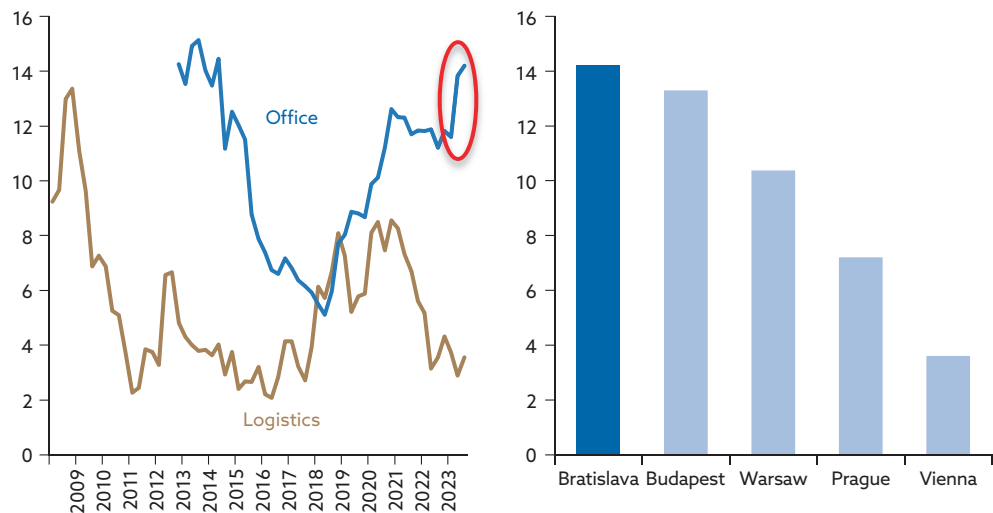
The area of commercial real estate most exposed to risks is the office segment. In Bratislava, the office vacancy rate increased further in the second half of 2023, reaching 14.2%, a rate higher than any seen in neighbouring countries during that period. The risk of higher vacancy rates is greater for older and more energy-intensive office buildings, as a number of large tenants are opting to relocate to new modern premises. At the same time, an increase in remote working is reducing demand for office space. The risk has been exacerbated by announced staff cuts at some large firms in the shared services sector.⁴⁶ On the other hand, the risk of a further vacancy rate increase is partly mitigated by a significant decline in the expected supply of new office space in 2024 and 2025.

Chart 10

Further rise in office vacancy rate

Left-hand panel: Office vacancy rate in Slovakia (percentages)

Right-hand panel: Office vacancy rates in the Visegrad Four countries as at 31 December 2023 (percentages)



Sources: Cushman & Wakefield, and EHL.

⁴⁶ This sector accounts for approximately 29% of the total area of leased office space. The staff cuts are intended to increase operational efficiency. Looking further ahead, this trend may also be supported by increasing use of generative AI in some sectors.

So far, however, the risks have not had an adverse impact on the credit quality of the CRE loan portfolio. The NPL ratio for CRE loans remains low (0.5%).⁴⁷

The challenging situation in the office segment is also confirmed by firms' preliminary financial data for 2023, while other CRE segments are on a positive track. Although data for 2023 are available for only about a quarter of CRE firms, they provide a partial picture of the differences between segments of the CRE market in terms of the evolution of their financial situation. The office segment has seen a quite significant decline in gross margins. The main issue has been very low growth in rental income, which has been weaker compared with other segments and insufficient to offset rising costs. Despite facing a higher increase in costs, firms in the retail segment have managed to fully offset it through growth in rental income. Across the rest of the CRE sector, rising interest expenses have weighed slightly on gross margins. On the positive side, however, the increase in operating costs has been lower than expected.

Table 2 Evolution of firms' financial situation during 2023 (percentages)

	Gross margin		Rental income (year-on-year change)	Operating costs (year-on-year change)	Interest expenses (year-on-year change)
	2022	2023	2023	2023	2023
Office	34%	26%	3%	0%	30%
Retail	49%	51%	14%	13%	107%
Other firms with outstanding loans of more than €5 million	45%	38%	10%	1%	74%
Other firms with outstanding loans of up to €5 million	45%	39%	4%	8%	51%

Sources: NBS, and FinStat.

Note: The table shows data only for firms for which financial data for both 2022 and 2023 were available. The share of firms for which data for 2023 were available is 26% in the office segment, 19% in the retail segment, 18% among other firms with outstanding loans of more than €5 million, and 40% among other firms with outstanding loans of up to €5 million.

The CRE sector could be a source of higher losses if higher interest rates are coupled with an increase in vacancy rates

Using two scenarios, we analysed how the riskiness of loans to the CRE sector may evolve.⁴⁸ Both scenarios assume that the rate of increase in

⁴⁷ This is also in line with the general trend in the euro area, where, despite rising very slightly in 2023, the aggregate NPL ratio remains close to its lowest level since the global financial crisis of 2008–2010.

⁴⁸ Given the relatively low number of firms for which data for 2023 were available, the simulation of the financial situation evolution was based on data for 2022 and was carried out for the period from 2023 to 2025.

operating cost will gradually slow and that interest rates fall moderately after peaking in 2024. Where the scenarios differ is in their assumptions for rental income. In the baseline scenario, rental income growth fully offsets the increase in operating costs, though for indebted firms, it may not be sufficient to cover higher interest expenses. In the stress scenario, the evolution of rental income is assumed to depend on the quality of the specific property development project. Where the project is of higher quality, rental income growth is the same as in the baseline scenario; where it is of lower quality, rental income gradually declines. In this scenario, adverse economic developments are assumed to have an upward impact on the vacancy rate, more so in respect of lower quality projects. As the vacancy rate is higher, so operating costs are slightly lower.

As long as higher interest rates are not coupled with an increase in vacancy rates, the banking sector should not incur significant losses on its CRE portfolio, despite borrowers facing elevated interest and operating costs and lower profits. In the baseline scenario, the simulation indicates that although firms' average gross margin declines by one-quarter (from 40% to 30%), the share of loans at risk⁴⁹ rises only slightly (from 6% to 8%). Moreover, these losses should be fully covered by existing macroprudential capital buffers. The simulation confirms that the office segment is the riskiest part of the CRE portfolio and that the riskiness of other segments is far lower.

Table 3 Assumptions for the simulation of loans at risk (percentages)

	Baseline scenario			Stress scenario		
	2023	2024	2025	2023	2024	2025
Rental income growth						
... higher quality projects	10%	6%	4%	10%	6%	4%
... lower quality projects	10%	6%	4%	-10%	-6%	-4%
Rise in operating costs						
... higher quality projects	7%	5%	3%	7%	5%	3%
... lower quality projects	7%	5%	3%	5%	3%	2%
Rise in borrowing costs	5.4%	5.8%	4.7%	5.4%	5.8%	4.7%

Source: NBS.

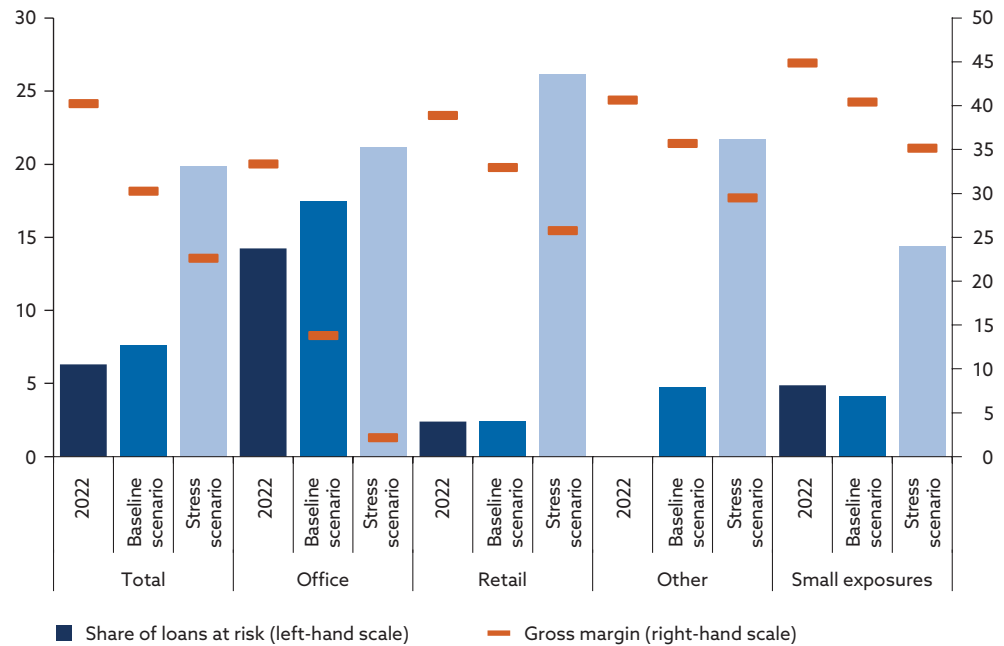
Note: Lower quality projects are considered to be those that already had a lower gross margin (below 30%) in 2022.

⁴⁹ Loans are considered to be at risk where the borrowing firm's rental income does not even cover current operating and interest costs, i.e. its gross margin is negative.

Chart 11

Evolution of the gross margin and share of loans at risk by CRE segment

Share of loans at risk and gross margin (percentages; percentages)



Sources: NBS, and FinStat.

Notes: The figures for the baseline and stress scenarios correspond to the simulation for 2025. Exposures not exceeding €5 million are considered small exposures. The gross margin is calculated as the ratio of rental income (less operating and interest costs) to total rental income. The chart does not show the logistics segment, for which the share of loans at risk in 2022 is zero in both scenarios. The chart does not include projects under construction or projects that have been certified for occupancy for less than two years and therefore may not yet be capable of fully generating rental income.

In the stress scenario, in which higher interest rates coincide with an increase in the vacancy rate, gross margins are estimated to almost halve on average (to 23%), while the share of loans at risk rises from 6% to 20%. In this case, the NPL ratio for the CRE portfolio climbs to 13%. Besides the office segment, all other CRE segments apart from logistics are also a source of credit losses under the stress scenario. To ensure a sufficient degree of resilience to losses that could occur under a stress scenario in the CRE sector therefore requires maintaining macroprudential capital buffers at their current level until the risk of losses subsides or materialises.⁵⁰

⁵⁰ A more detailed treatment of this issue from the perspective of the calibration of macroprudential instruments is provided in subsection 4.4.

4 Banking sector profitability and resilience

4.1 Profitability growth buoyed mainly by interest income

Bank profitability reaches historically high levels

For the Slovak banking sector, 2023 was its most successful year ever in terms of profit. The sector reported an annual profit of €1.23 billion, representing a year-on-year increase of 46%.⁵¹ Since the ECB started tightening monetary policy, net interest income has been virtually the only driver of profitability. Net interest income growth itself has been largely dependent on the NFC segment.⁵² Other profit components have not changed significantly in volume terms.⁵³

Besides interest income, a year-on-year decrease in net provisioning also supported the banking sector's profit growth. Although credit costs were running higher year-on-year until autumn 2023, developments in the latter part of the year ensured that their total for 2023, €112 million, was far lower than in 2022. The overall decline reflected lower provisioning for both the NFC and retail⁵⁴ loan portfolios.⁵⁵ Besides lower gross provisioning, the main factor behind the decline in net provisioning was reversals of loss rates and provisions for performing loans. This was reflected in a de-

⁵¹ The retention rate for 2023 earnings across banks subject to capital adequacy requirements stood at 46%, an increase of 7 pp year-on-year. The retention rate for 2022 earnings was, however, adversely affected by some banks' additional distribution of earnings from previous years.

⁵² Net interest income increased by 28% (€0.5 billion) with the net interest margin rising from 1.59% to 1.91%. In terms of annual growth in interest income, the NFC segment recorded the highest figure and far outperformed the retail segment, with an increase of €431 million (72%) versus €97 million (11%). NFC business accounted for 46% of overall net interest income, while retail business accounted for 44%, a lower share compared with the previous year.

⁵³ Regulatory costs declined (by €36 million; 45%), as a result of the banking sector meeting target levels of the Deposit Guarantee Fund and the Single Resolution Fund. Owing to elevated inflation, administrative costs increased (by €106 million; 8%). Profitability growth increased banks' tax liability (by €118 million; 53%).

⁵⁴ For the purpose of this report, the retail sector comprises households, sole traders and non-profit institutions serving mostly households.

⁵⁵ Total net provisioning decreased, year-on-year, by €87 million or 44%. Net provisioning for the NFC portfolio in 2023 stood at just €1.3 million, far lower than in 2022 (€47 million) and 2021 (€32 million). For the retail portfolio, net provisioning amounted to €123 million in 2023, which was less than 2022 (€155 million) but more than in 2021 (€83 million).

cline in provisioning for Stage 1 loans, and a drop in both the volume of Stage 2 loans and the provisioning for them.

Credit quality indicators from mid-2023 onwards suggest, however, that some trends are changing. In the recent past, owing to the pandemic crisis and a worsened economic situation, there was a gradual increase in the amount of Stage 2 exposures and an ongoing decline in Stage 3 exposures. From the second quarter of 2023, however, total Stage 2 loans declined by around 10%,⁵⁶ while total Stage 3 loans increased by almost 5%.⁵⁷ These trends continued in early 2024.⁵⁸

The profitability trend seen in 2023 has continued in 2024. The banking sector's net profit for the first four months of 2024 was €363 million.⁵⁹ This increase was due largely to strong growth in income from financial activities, which continued to reflect mainly catch-up growth in net interest income.⁶⁰ Unlike in 2023, however, the ongoing net interest income growth stemmed largely from positive results in the retail segment (almost cancelling out the impact of the NFC segment's declining contribution) and an increase in the profitability of interbank operations resulting from a higher volume of excess liquidity in the banking sector.⁶¹ Cost item developments were heterogeneous in the first quarter.⁶²

Banks' profitability in the coming years will be significantly affected by the bank levy. In 2024 the levy will be charged at 30% of pre-tax profits, bringing the effective tax rate for banks to almost 45%.⁶³ Banks advance

⁵⁶ Total Stage 2 loans decreased from €10 billion in 2022 to €9 billion in 2023, while their share of the total loan portfolio fell from 13% to 11%. The Stage 2 coverage ratio increased from 4.7% to 5.1%.

⁵⁷ Total Stage 3 loans increased by €110 million in 2023, to €1.65 billion, and their share of the overall portfolio edged up from 1.96% to 2.04%. The Stage 3 coverage ratio decreased from 65% to 58%.

⁵⁸ In the first quarter of 2024, total Stage 2 loans decreased by a further 10%, while total Stage 3 loans increased by 4%. The provisioning coverage ratio did not change significantly.

⁵⁹ The net profit increased by 7% year-on-year. From a structural point of view, however, it should be noted that the increase was driven exclusively by foreign bank branches, whose aggregate profit surged by 86%, to €55 million. As for banks established in Slovakia, their aggregate profit fell, year-on-year, by €1 million, or 0.3%.

⁶⁰ Income from financial activities grew by 12% (€125 million), with net interest income rising by 16% (€110 million) and net fee and commission income going up by 11% (€27 million).

⁶¹ In the first four months of 2024, net interest income from the retail segment amounted to €336 million, €13 million more than the comparable average for 2023, while income from the NFC segment amounted to €341 million, €1 million less. Net interest income from interbank operations amounted to €95 million, €61 million higher than the comparable average for 2023.

⁶² While regulatory and credit costs contributed to the year-on-year increase in profitability, administrative costs moderated the increase. Regulatory costs decreased by almost two-thirds (€31 million) year-on-year, and credit costs almost halved (falling by €32 million). Administrative costs increased by 7% (more than €32 million) year-on-year.

⁶³ The levy rate is due be reduced until 2028 and then remain at 4.356% per annum.

payments towards their levy bill amounted to an estimated €178 million in the first four months of 2024.⁶⁴ Yet despite the levy, banks' profits should remain at a sufficient absolute level in the years ahead; hence, we do not foresee any impairment of banks' resilience or their ability to lend. This assumption largely depends on the bank levy rate being phased down as planned and on the continued positive evolution of the main profitability components in the coming years. Key factors will be interest income and credit loss developments.

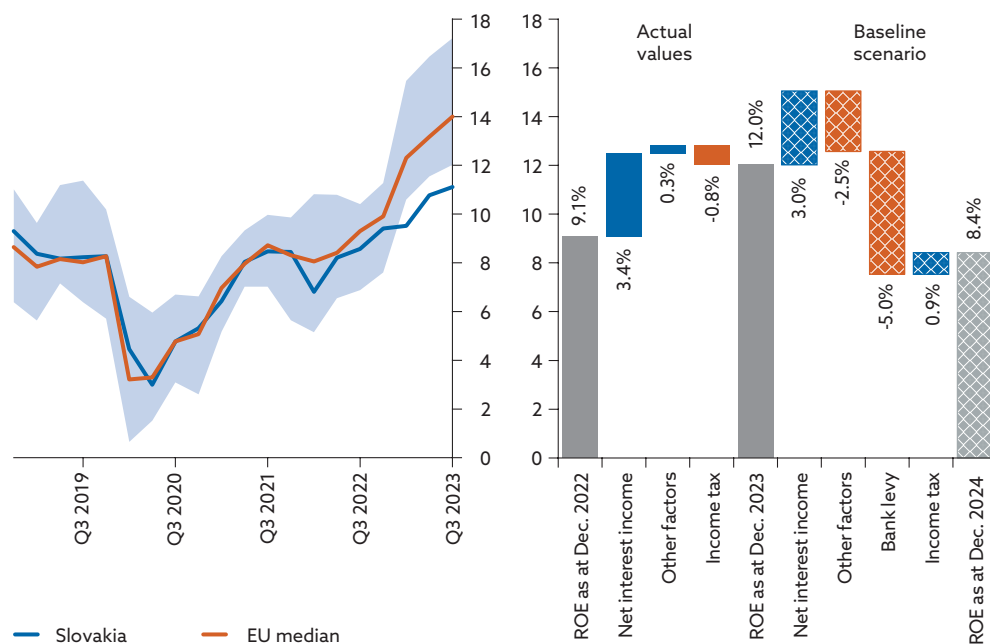
The Slovak banking sector has also improved in terms of return on equity (ROE), i.e. how effectively equity is used to generate profits. On this measure, however, it continues to underperform relative to other European countries. Moreover, the bank levy will accentuate this gap, especially in 2024 when banks are subject to the highest levy rate.

Chart 12

The new bank levy will return ROE to below its 2022 level

Left-hand panel: ROE in the European Union (percentages)

Right-hand panel: Decomposition of the change in ROE (percentages)



Sources: NBS, and ECB.

Notes: ROE - return on equity. Left-hand panel: Data are as at 30 September 2023; the light blue background denotes the interquartile range of ROE in EU countries. Right-hand panel: 2024 data are based on the baseline scenario results of the banking sector stress test for the period 2024-2026.

⁶⁴ Banks' levy and income tax payments in the first four months of 2024 amounted to almost €232 million, representing a year-on-year increase of €133 million or 135%. The bank levy, as a tax deductible expense, caused a reduction in the sector's tax base, so income tax payments declined €45 million year-on-year.

Net interest income is expected to continue growing, albeit more slowly than in 2023

Favourable trends in net interest income are expected to continue over the next three years, thus bolstering the banking sector's resilience. Net interest income is expected to increase not only as a result of growth in the volume of assets, but also in the interest margin per se. At the same time, there is decreasing uncertainty about the future evolution of interest income. The main source of uncertainty in the previous period was the trend in the share of time deposits in total deposits. This, however, has slowed considerably in recent months⁶⁵ and now appears unlikely to accelerate significantly.⁶⁶

What is positive from a financial stability perspective is that net interest income is expected to continue increasing even in the stress scenario of future developments.⁶⁷ On the one hand, compared with the baseline scenario, the stress scenario shows slower growth in lending and therefore also in interest income; on the other hand, slower loan growth translates into a lower need to issue bonds to fund lending, hence into lower interest expenses. As a result, net interest income growth under the stress scenario may not be appreciably lower than under the baseline scenario.

⁶⁵ While the share of time deposits in NFC deposits rose from 15% to 32% between the beginning of 2022 and March 2023, it increased to only 37% in the following 12 months. In the household sector, the share of time deposits has been growing at a roughly steady pace, rising gradually from 23% in mid-2022 to 28% in March 2024. In a simulation for the 2024–2026 period, the shares of time deposits in NFC and household deposits are assumed to maintain their current growth rates.

⁶⁶ Given the expected gradual change in monetary policy, longer-term interest rates have started to decline, gradually reducing the incentive for significant transfers of funds to time deposits. At the same time, banks currently have ample liquidity, so competition in the time deposit market is not expected to increase significantly.

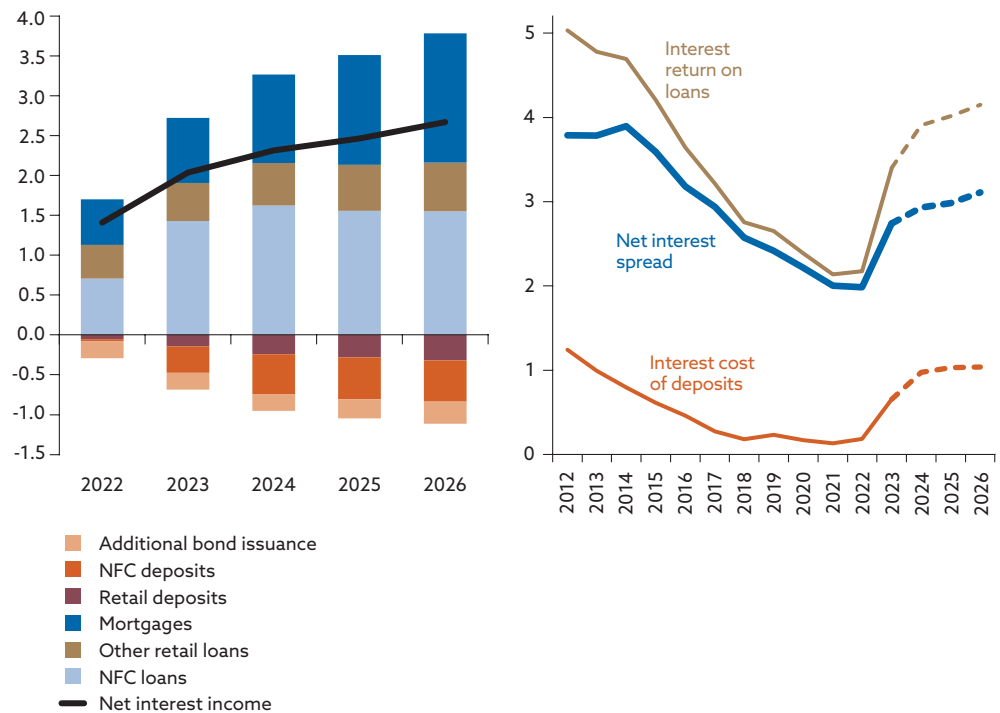
⁶⁷ In the baseline scenario, net interest income is 31% higher in 2026 than in 2023, while in the stress scenario, it is 28% higher.

Chart 13

Net interest income expected to continued growing

Left-hand panel: Estimated evolution of net interest income in the baseline scenario (EUR billions)

Right-hand panel: Actual and estimated evolution of returns on loans, cost of deposits, and the net interest spread (percentages)



Source: NBS.

Notes: 'Net interest spread' is the difference between the interest return on loans and the interest cost of deposits. 'Interest return on loans' is calculated as the ratio of interest income from loans and the average outstanding amount of loans in the given period. 'Interest cost of deposits' is the ratio of deposit interest expenses to the average outstanding amount of deposits. 'Additional bond issuance' takes into account the need to fund new lending, which stems from the expected increase in the spread between loans and deposits.

The banking sector's capital resilience has increased

The Slovak banking sector's total capital ratio increased in 2023, ending the year at 20.5%.⁶⁸ The ratio's year-on-year rise of 0.84 pp⁶⁹ was largely due to capital growth,⁷⁰ primarily driven by banks' retained earnings from 2022 and, to a lesser extent, from 2023. On the risk-weighted asset side, the key factor was the absolute increase in credit exposures, yet the riskiness of these exposures rose only marginally. The sector's voluntary capital buffer improved from 3.9% to 4.05% between end-2022 and end-2023, despite

⁶⁸ This figure represents the capital adequacy of banks on a standalone basis. On a consolidated basis, the total capital ratio ended 2023 at 20.1%, with a year-on-year increase of 0.54 pp.

⁶⁹ For the group of significant banks, the total capital ratio increased by 1.2 pp year-on-year, to 20%, while for the group of less significant banks, it increased by a more modest 0.34 pp, to 22.5%.

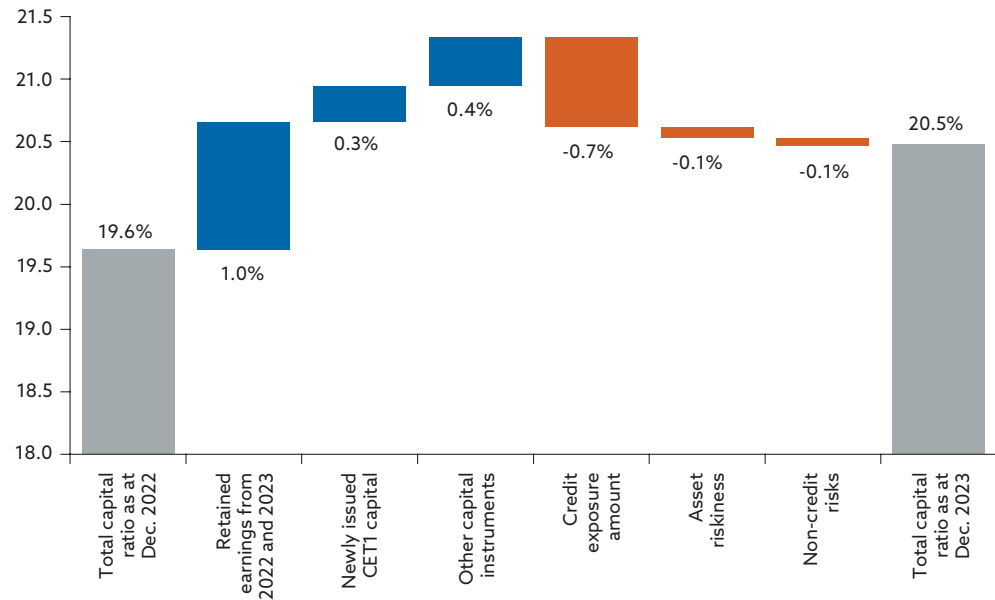
⁷⁰ The sector's total capital grew by €693 million (8.6%), while its risk-weighted assets increased by €1.64 billion (4%).

the countercyclical capital buffer (CCyB) rate being hiked in August 2023. The leverage ratio was not a constraint on banks in 2023, ending the year at 7.6%. The trends seen in 2023 continued in the first quarter of 2024, further strengthening the banking sector’s resilience.⁷¹

Chart 14

Banks’ resilience significantly supported by their retained earnings

Decomposition of the year-on-year change in the total capital ratio (percentages)



Source: NBS.

Notes: CET1 – Common Equity Tier 1 (capital). ‘Other capital components’ includes mainly changes in the amounts of CET1 prudential filters, Additional Tier 1 capital instruments, and Tier 2 capital instruments. ‘Non-credit risks’ includes market risk, operational risk, settlement/delivery risk, and credit valuation adjustment risk.

The completion of the phasing-in of the minimum requirement for own funds and eligible liabilities (MREL) at the end of 2023 did not cause difficulties for the banks required to meet MREL targets. Because of capital growth and a marked increase in eligible liabilities, banks’ capital headroom declined only slightly in 2023, from 3.45% to 3.22% of risk-weighted assets, despite the ending of the MREL transition period.

⁷¹ By the end of March 2024, banks’ aggregate total capital ratio stood at 20.8% on a standalone basis and 20.4% on a consolidated basis; their aggregate leverage ratio was up to 7.9%, and their voluntary capital buffer had risen to 4.28% of risk-weighted assets.

4.2 Stress testing confirms the banking sector's resilience

The banking sector is sufficiently strong to withstand even significant risks

Stress testing results have confirmed that the profitability of the Slovak banking sector should remain strong and that banks should be able to withstand even a significant economic shock. Although risks in the banking sector are not currently at a high level, it is important to know how sensitive banks are to different scenarios of future developments, especially scenarios involving the escalation of multiple risks. As part of the stress test, we assessed the impact on banks' financial situation of a baseline scenario that assumes the continuation of existing trends. In addition, we assessed the impact of a stress scenario involving a significant downturn in the economy, a doubling of the unemployment rate and a decline in real household income.⁷²

In the baseline scenario, virtually all Slovak banks⁷³ remain in profit. The banking sector's gross profit increases gradually over the three-year horizon,⁷⁴ mainly due to the assumed growth in net interest income resulting from higher interest margins. Provisioning is estimated to rise to more than two and a half times last year's level.⁷⁵ In addition to their income tax liability, banks have to pay the new bank levy for the first time in 2024. Hence, in this scenario, the sector's net profit falls by more than a quarter in 2024. On the positive side, however, the sector's ROE gradually increases as a consequence of rising interest income and the planned phasing-down of the bank levy rate. Thanks in part to this, the sector's total capital ratio remains close 21%.

In the stress scenario, not even the Slovak economy's assumed contraction of more seven per cent threatens the stability of the domestic banking sector. In this scenario, the economic downturn results in a decline in loans to NFCs in the last two years of the simulation period, while lend-

⁷² The stress test of the Slovak banking sector was carried out on data for the sector as at 31 December 2023. The simulation had a horizon of three years, until the end of 2026. The stress test simulated two scenarios: a baseline scenario and a stress scenario. Further details about the scenarios' assumptions are provided in Box 1.

⁷³ Only one bank is an exception.

⁷⁴ As banks have already met their MREL targets, as well as their target levels for contributions to the Deposit Guarantee Fund and the Single Resolution Fund, maintaining their compliance does not significantly weigh on their financial performance over the stress test horizon. In both scenarios, this cost does not exceed 3% of the sector's gross profit.

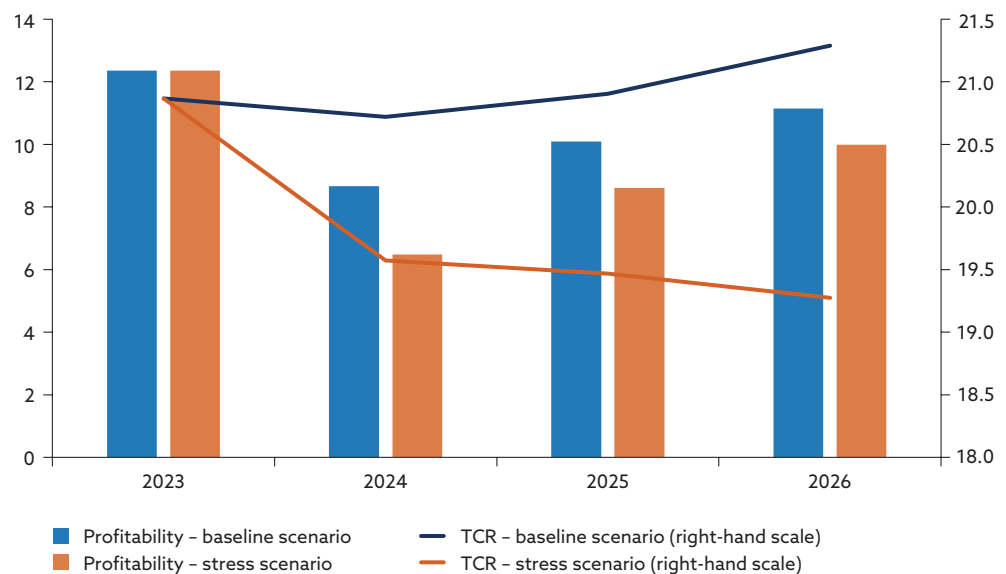
⁷⁵ The estimated increase in provisioning in the baseline scenario is mainly due to the sector's level of provisioning in 2023, which was the second lowest in the last 11 years.

ing to households maintains moderate two per cent growth. Where banks mainly feel the headwinds is in a slowdown in interest income growth and a greater increase in credit losses. The banking sector's net profit after income tax and bank levy payments is almost one-half lower in 2024 than it was in 2023.⁷⁶ The sector's ROE returns to the 6.5% level last seen during the pandemic crisis. Once the initial effects of the economic shock have dissipated, banks' profits start gradually to improve, mainly owing to a gradual reduction of credit losses and sustained growth in interest income. As regards maintaining capital strength, it is important that banks can continue to operate at a profit even in the stress scenario.⁷⁷ In this scenario, however, increased credit losses and reduced profit-generating capacity translate into a decline in the banking sector's capital adequacy, with the total capital ratio dropping by 1.6 pp over the three-year horizon, to 19.3%.

Chart 15

Banking sector solvency developments significantly affected by profit-generating capacity

(percentage of own funds; percentage of risk-weighted assets)



Source: NBS.

Notes: Profitability is expressed through return on equity (ROE). The total capital ratio (TCR) also takes into account profits made in the year in question.

In the stress scenario, credit losses are the heaviest burden on banks' financial performance. They increase as much as sixfold, owing to economic headwinds and a proportion of banks' borrowers falling into credit distress. Approximately two-thirds of the estimated credit losses are on loans

⁷⁶ It declines by 45% year-on-year, from €1.1 billion in 2023 to €0.6 billion in 2024. In this scenario, too, one bank operates at a loss.

⁷⁷ In this scenario, too, one bank operates at a loss.

to households. Since most ⁷⁸ loans to households are mortgages, the bulk⁷⁹ of retail loan losses comprise mortgage default losses. The rest of the overall credit losses are on loans to the NFC sector, with losses on the CRE portfolio accounting for a relatively large share.⁸⁰ Thus, the need for loan-loss provisioning reaches historically high levels in the stress scenario.

4.3 Bank liquidity has improved

Revival of household deposit inflows

Liquidity ratios have benefited from a renewed inflow of household deposits. In late 2023/early 2024 both regulatory indicators reached their highest level⁸¹ since the second half of 2021, when household deposit inflows started to slow amid continued loan growth. At that time, banks maintained liquidity positions through NFC deposit growth and through funds obtained by issuing bonds.⁸² From November 2023, however, households' improving financial position started to have a significant upward impact on deposit growth, which, in an environment of subdued credit demand, greatly strengthened banks' liquidity.⁸³ Not even some banks' repayment of a large part of their outstanding targeted longer-term refinancing operations (TLTROs)⁸⁴ at the end of the first quarter of 2024 posed a threat to the liquidity position of individual banks.

⁷⁸ Up to 85%.

⁷⁹ Approximately 60%.

⁸⁰ Approximately 38%.

⁸¹ The sector's liquidity coverage ratio (LCR) was 189% as at March 2024, up from 185% a year earlier, while the net stable funding ratio (NSFR) was 132%, up from 130%. The EU median for the LCR ratio as at September 2023 was 183%, while for the NSFR, it was 136%.

⁸² The €14 billion growth in total bank lending between June 2021 and October 2023 was funded by an €8.5 billion increase in non-retail deposits and a €5 billion increase in the stock of bonds issued by banks. Retail deposits grew by €0.2 billion over that period.

⁸³ Over the period from October 2023 to April 2024, total retail deposits grew by €2.1 billion, while total non-retail deposits increased by €0.6 billion and outstanding issued bonds fell by €0.1 billion. Total loans increased by €0.3 billion.

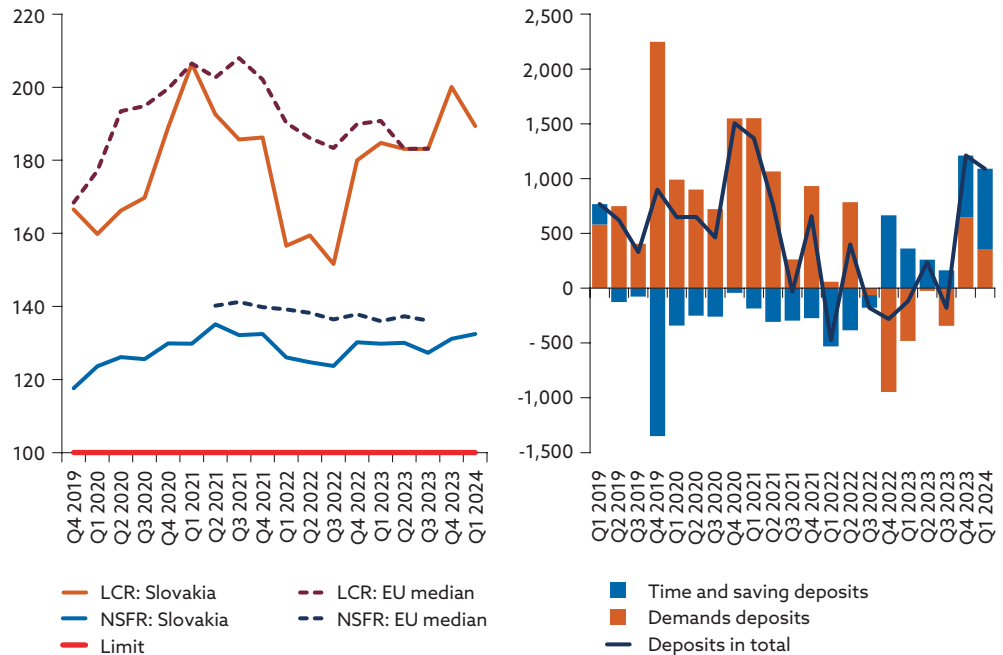
⁸⁴ The banking sector's outstanding TLTRO borrowings amounted to €3.8 billion at the end of 2023, of which €3.2 billion had been repaid by the end of March 2024. The TLTRO repayments were made with funds held with Národná banka Slovenska. Although these funds constituted part of banks' liquidity buffer, the repayments released collateral used for the TLTROs, thereby boosting the liquidity buffer. In some banks, however, the increase in the liquidity buffer relative to the TLTRO repayment was smaller, as the collateral in the form of their own covered bonds was not eligible for the buffer.

Chart 16

Liquidity position still at the EU median

Left-hand panel: Evolution of the LCR and NSFR (percentages)

Right-hand panel: Quarter-on-quarter change in retail deposits (EUR millions)



Sources: NBS, and ECB.

Notes: LCR – liquidity coverage ratio; NSFR – net stable funding ratio. NSFR values are reported by banks from 30 June 2021; values before this date are implicitly imputed by NBS on the basis of bank-reported items. EU country median values are reported up to 30 September 2023.

The liquidity position of Slovak banks is not expected to change significantly in the coming period. Households’ improving financial position implies a continuation of the uptrend in their deposit holdings. Given, however, the evolution of market interest rates, banks are expected to confine their issuing activity to the rolling over of maturing debt. Even a potential recovery in credit demand should not pose a significant liquidity challenge for banks.

The results of reverse stress testing confirm the strong liquidity position of Slovak banks. The aim of the testing was to assess banks’ ability to cope with a sudden withdrawal of customer deposits. While complying with the liquidity coverage ratio, banks are able to cover a relatively substantial outflow of customer deposits.

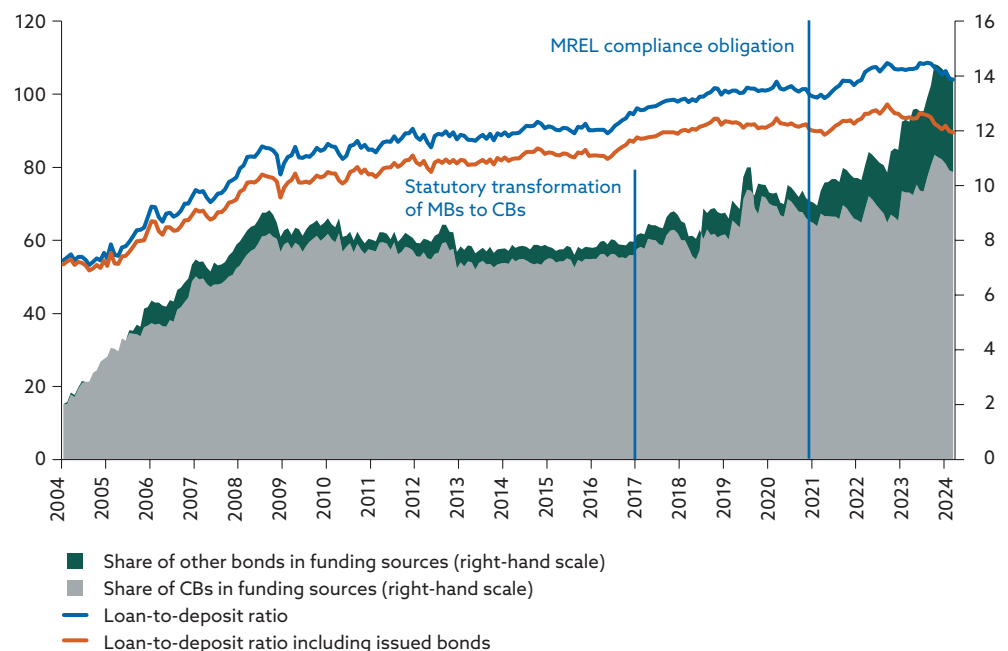
Although loan-to-deposit ratios have improved, banks face new challenges from the changing structure of liabilities

The Slovak banking sector's loan-to-deposit ratio is among the highest in the euro area.⁸⁵ Its increase over the last two decades has been driven mainly by rapid growth in mortgages.⁸⁶ Although this growth has notably increased households' investment in real estate, it has slowed long-term growth in their financial assets, including bank deposits. Hence, the deteriorating liquidity position of households has to some extent affected the banking sector. Overall, firms and households have been accumulating more debt than financial assets, as has been partly reflected in the external trade balance.

Chart 17

Loan-to-deposit ratio growth moderated by bond issues

(percentages)



Source: NBS.

Note: MREL – minimum requirement for own funds and eligible liabilities, which facilitates more efficient resolution; MBs – mortgage bonds; CBs – covered bonds.

⁸⁵ The sector's loan-to-deposit ratio as at 29 February 2024 was 106%, the second highest in the euro area and well above the euro area median of 81%.

⁸⁶ The loan-to-deposit ratio for the NFC sector has been tending to trend downwards, thus mitigating the increase in the ratio of total loans to total deposits. Even so, the LTD ratio for firms remains higher than that for households.

The banking sector's primary way of dealing with the rising loan-to-deposit ratio has been the issuance of covered bonds, especially since 2018.⁸⁷ A number of banks have gradually stepped up their issuance of covered bonds, finding them to be a stable, albeit far costlier, source of funding. Since 2021 banks have also been issuing MREL debt instruments, thus further increasing the importance of bond financing for banks. Bond issuances have proven very important in the last two years, when banks faced a conjunction of retail deposit stagnation and rising interest rates. Indeed, the share of bonds in banks' funding sources⁸⁸ increased quite rapidly above 14%.

Although retail deposit growth picked up in late 2023, banks are still challenged by the overall change in the structure of their liabilities. In addition to the increasing issuance of bonds, banks have also seen a rise in their stock of non-retail deposits, in particular corporate deposits. Retail deposits have thus declined as a share of banks' overall funding structure, while the shares of non-retail deposits and bonds have increased, thereby presenting new challenges to the banking sector. The first of these is cost, which is higher for bond liabilities and corporate deposits than for household deposits (Chart 18). Hence, any decline in the weight of retail deposits impinges on banks' net interest income.⁸⁹ Moreover, bond servicing costs may be affected locally by risk premia on Slovak government bonds, which have recently been marked by increased volatility. Additional uncertainty stems from investment strategies, as foreign investors in particular often take into account geopolitical risks and may be more sensitive to the geographic proximity of the war in Ukraine. Another new challenge is the concentration of refinancing risk in respect of covered bonds, as the bulk of these liabilities are due to be rolled over within the next three years.

⁸⁷ Act No 483/2001 on banks (and amending certain laws), as amended.

⁸⁸ For this purpose, all customer deposits and bond issuances are considered as sources of funding.

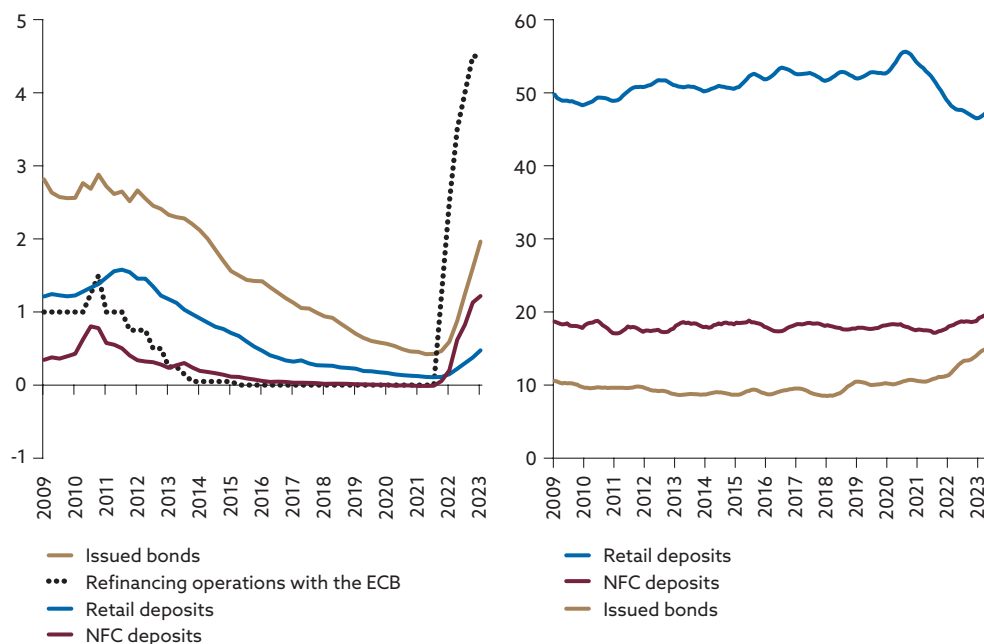
⁸⁹ The overall impact of the changing funding structure on banks' profitability is considered in Section 4.2.

Chart 18

Banks' interest costs affected by their changing funding structure

Left-hand panel: Interest costs for selected types of funding (percentages)

Right-hand panel: Shares of selected types of funding in the balance sheet net of interbank transactions total (percentages)



Source: NBS.

Notes: The chart shows weighted averages for the categories. The left-hand panel does not reflect the generally much longer contractual maturity of covered bonds. The balance sheet total is net of interbank transactions. The share is expressed as a six-month moving average.

4.4 NBS macroprudential policy calibrations remain unchanged

Macroprudential capital buffer levels in Slovakia are appropriately calibrated to current risks

The current rate of the countercyclical capital buffer (CCyB) is commensurate with the riskiness of the banking sector's loan portfolio. Despite a slowdown in lending to both households and firms in 2023 and the ongoing downswing of the financial cycle, the level of risks accumulated in banks' portfolios has not decreased. Loans to households are exposed to rising interest rates and real wage volatility, while the value of real estate collateral has declined. As for the NFC sector, riskiness has not risen, but firms' profitability has fallen slightly, and certain sectors, most notably commercial real estate, remain vulnerable.

The risks present in the CRE and household loan portfolios necessitate keeping the CCyB rate at its current level. In general, it holds that the CCyB rate can be reduced in two scenarios. The first is where there is an extraordinary increase in credit risk losses or an extraordinary increase in loan-loss pro-

visioning, as witnessed during the pandemic crisis. The second scenario is where the riskiness of the loan portfolio gradually declines, typically owing to the repayment of riskier loans or an improvement in the financial situation of firms and households. Neither of these scenarios are currently in play. Given the above-mentioned risks present in the household and CRE sectors, Národná banka Slovenska does not yet see any scope for cutting the CCyB rate.⁹⁰

The CCyB's calibration also has an impact on the calibration of the systemic risk capital buffer (SyRB). In the recent period we have specifically analysed the riskiness of the mortgage portfolio and the CRE loan portfolio. In each case, we examined whether the capital allocated to the portfolios was sufficient to cover the losses that would arise in a stress scenario. For now, there is no need to introduce a separate capital requirement for these portfolios, since a large part of their stress losses can be absorbed by the CCyB.

As regards the capital buffers applied to 'other systemically important institutions' (O-SIIs) in Slovakia, there will be some adjustment as from 2025. The list of banks designated as O-SIIs will be reduced by one as from next year, when the bank in question will no longer be subject to an O-SII⁹¹ buffer requirement. Among the remaining O-SIIs, one will have its O-SII buffer rate reduced by 25 bp with effect from 1 January 2025.⁹² These adjustments are, however, basically administrative and will not adversely affect the banking sector's overall resilience, nor its ability to lend to firms and households.

No adjustment to the interest rate stress test is currently necessary

The expected reduction in interest rates raises the question of whether mortgage-granting processes should still involve the application of a stressed interest rate. Before granting a mortgage, banks are currently required to test the applicant's ability to service the mortgage at an interest rate two percentage points above the rate offered, up to a maximum level of 6%. With mortgage rates now averaging 4.6%, applicants need only be tested against a stressed rate that is 1.4 pp higher. When interest rates start to turn down, the stressed rate will automatically tighten back to two percentage points.

The main aim of the stressed interest rate is to test a mortgage applicant's ability to repay the loan in the long term, even at interest rates higher than

⁹⁰ In its Staff Report for the Slovak Republic published in March 2024, the IMF also calls on the authorities in Slovakia to consider adding to their macroprudential toolkit measures targeted at the CRE sector. Complete data on firms' financial situation for 2023 should be available in July 2024, so it will then be possible to update the analysis of risks in CRE sector, as well as the sector's sensitivity to a potential adverse scenario.

⁹¹ NBS Decision No 1/2024 of 22 April 2024 on the designation of other systemically important institutions.

⁹² NBS Decision No 2/2024 of 22 April 2024 on the setting of O-SII buffer rates.

the one set at origination. A mortgage is a long-term commitment and interest rates may rise again.⁹³ Hence, the currently expected fall in interest rates is not a reason to abolish the interest rate stress test. While monetary policy is inherently cyclical, the setting of lending standards is largely structural in nature. The interest rate stress test therefore does not change with shifts in the short-term forecast or the with business cycle developments.

Mortgage rate developments are affected by many factors, not just the expected path of monetary policy. Financial markets' confidence in the sustainability of Slovakia's public finances has a significant impact, as it is reflected in the cost of sovereign borrowing. Geopolitical risks also play an important role. It therefore cannot be ruled out that mortgage rates will rise further, owing to a renewed tightening of monetary policy or an increase in credit spreads on Slovak government bonds. This risk is reduced only where the interest rate is fixed for a sufficiently long period. In such a case, however, current regulation already allows for the application of a less stringent interest rate stress test.⁹⁴

Without the interest rate stress test, lending would be significantly riskier. If a mortgage were originated with a DSTI ratio of 60% without any test being applied, the ratio could rise to between 75% and 80% on a subsequent 2 pp increase in rates, thereby increasing the probability of default by up to half.⁹⁵

Although the turnaround in interest rates is also affecting other countries, the interest rate stress test remains a standard part of the regulatory toolkit and virtually no country has moved to abolish it.⁹⁶ Although the test has been partially relaxed in two countries, it still remains stricter in those countries than in Slovakia.⁹⁷ In several countries, the test uses a minimum interest rate that is not lowered even when market rates decrease.⁹⁸

⁹³ It is important to recall that in 2015, when the stressed interest rate was introduced, no forecasts envisaged a 200 bp rise in interest rates. Yet now we see that even this test did not fully cover the rate increase (from 1% to 4.6%) that recently took place.

⁹⁴ When fixing the interest rate for a period longer than 10 years, it is sufficient to apply an interest rate stress test of only 1 pp above the rate at origination (but not lower than 6%).

⁹⁵ There is a further risk that if the interest rate stress test were relaxed, the resulting wider availability of credit could translate into higher housing prices. Customers would therefore be able to buy a comparably sized property, but with a riskier loan.

⁹⁶ The only exception is the Czech Republic, which has abolished regulatory lending limits altogether.

⁹⁷ In Norway, until the end of 2022, repayment ability was tested with a stressed interest rate of 5 pp above the actual interest rate. From January 2023, the stressed rate was eased to 3 pp above the actual rate, but not lower than 7%. In Estonia, until the end of March 2024, the stressed interest rate was set at 2 pp above the actual rate, but not lower than 6%. Since 1 April 2024, the stressed rate has been fixed at 6%.

⁹⁸ This minimum stressed interest rate for testing repayment ability is set at 7% in Norway, 6% in Estonia and Finland, 5.5% in Iceland, and 5% in Lithuania.

5 Other sectors

5.1 Insurers' profits have risen

The aggregate profit of insurers' in Slovakia⁹⁹ was higher in 2023 than in the previous year, with its growth largely due to life insurance business and to insurers' investment activities (excluding investments under unit-linked contracts). The sector's net profit, expressed according to IFRS 17 for both 2022 and 2023, rose by 10.1% year-on-year, to €193 million.¹⁰⁰ The growth stemmed mainly from increases in life insurance production¹⁰¹ and in the sector's investment result.

The line of business that contributed the most to life insurance growth in 2023 was health insurance, with year-on-year premium growth of 23.4%. The importance of this insurance class has been on a long upward trend; over the past seven years, its share in total life insurance premiums has climbed from 4% to 18%.¹⁰² By contrast, the conventionally significant classes of traditional and unit-linked life insurance recorded an overall decline in premiums written in 2023.¹⁰³ In life insurance business as a whole, premiums written increased by 2.2% year-on-year in 2023.

The non-life insurance result was unchanged year-on-year. Premiums written increased by 5.6% in 2023, pushed up mainly by increases in property insurance and comprehensive motor insurance. The average premium per non-life contract rose only slightly.¹⁰⁴ The only exception was in motor third party liability (MTPL) insurance, where policyholders, on average, paid slightly less per contract than they did in 2022. The share of reinsured contracts remained virtually unchanged. The reported combined loss and

⁹⁹ The analysis covers all nine domestic insurance undertakings, accounting for around two-thirds of premiums written in the Slovak market.

¹⁰⁰ Return on assets (ROA) increased by 0.2 pp, to 3.5%, and return on equity (ROE) rose by 0.5 pp, to 14.0%. The figures published in previous editions of the Financial Stability Report were based on the IFRS 4 accounting standard, so cannot be directly compared with the latest figures.

¹⁰¹ Profits on individual contracts are spread gradually over the over the life of the insurance contract. The change in profit is therefore primarily related to the change in production, and secondarily to the change in the assumptions used, such as those for expected benefits paid or for interest rates.

¹⁰² Around half of the increase corresponds to organic growth; the other half represents re-classifications.

¹⁰³ Traditional business increased by 2.3%, while unit-linked business fell by 11.2%, with these results being affected, however, by reclassification between the two segments. Without this adjustment, they would both have shown a year-on-year decline.

¹⁰⁴ The estimate of the average premium trend is based on a comparison of premium volume (with a 5.6% year-on-year increase under Solvency II reporting for domestic insurers) and the number of insurance contracts (with a 3.4% year-on-year increase, according to SLASPO data for its members).

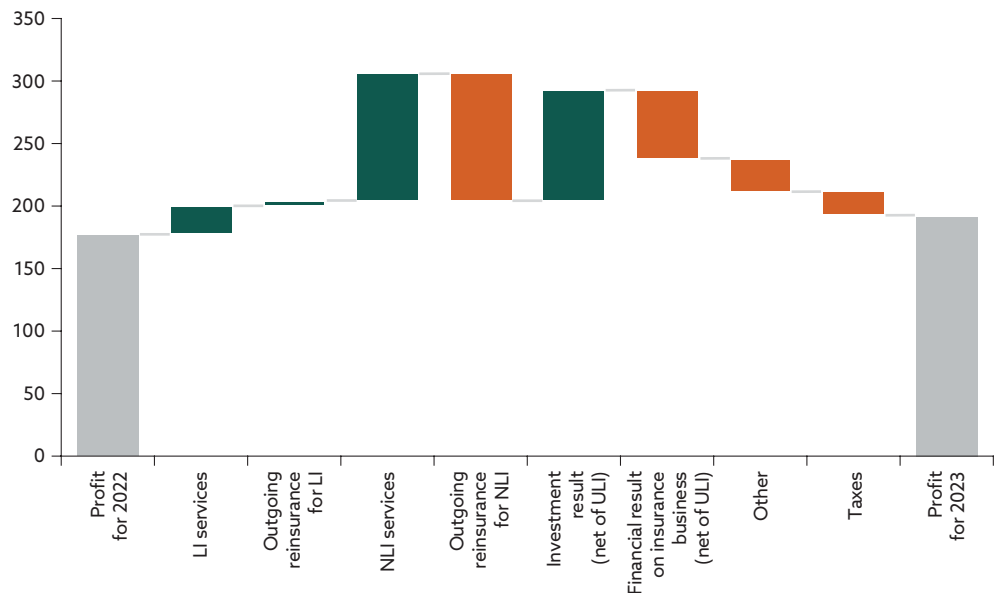
expense ratio for motor insurance¹⁰⁵ declined slightly year-on-year, owing to the reversal of provisions by a few insurers that together have a significant market share. For the other insurers in this market, the aggregate combined ratio increased from 96% to 108%.

Although non-life business grew in 2023, the stagnation in revenues from this segment was mainly due to lower revenues from reinsurers. The volume of claims paid increased sharply in the previous year, i.e. 2022. The extraordinary costs in that year were borne almost entirely by reinsurers. In 2023 claims costs decreased to some extent, but the amount passed on to reinsurers fell more sharply still. The result was an increase in the net claims costs borne by domestic insurers.

Chart 19

Profit growth driven mainly by life insurance and the investment result

Breakdown of the year-on-year change in the aggregate profit of domestic insurers (EUR millions)



Source: NBS.

Notes: LI – life insurance; NLI – non-life insurance; ULI – unit-linked insurance. LI and NLI services include net insurance income, i.e. mainly premiums, claims costs and administrative costs. Outgoing reinsurance for LI and NLI includes net reinsurance income, i.e. mainly premiums ceded to reinsurers and claims borne by reinsurers. Green bars denote a year-on-year increase in net income in the given category; orange bars indicate a year-on-year decrease in net income.

The insurance sector’s capital adequacy increased in 2023. The average Solvency Capital Requirement coverage ratio rose from 195% to 205%, and the average Minimum Capital Requirement coverage ratio went up from 500% to 520%. Although capital requirements have increased, insurers’ eligible own funds have risen even more significantly. As a share of available own funds, the component of expected profits included in future premiums (EPIFP) increased by 2 pp in 2023, to 64%.

¹⁰⁵ The full combined ratio for motor insurance includes, in respect of MTPL insurance, a levy payable to the Slovak Interior Ministry and a contribution to the Slovak Insurers’ Bureau.

5.2 Growth trends in asset management sectors

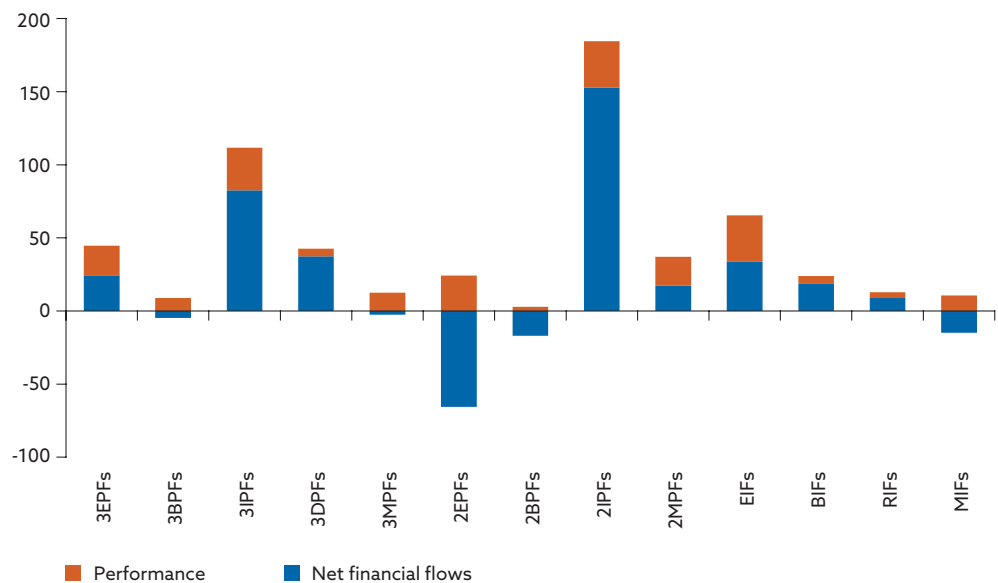
Funds' asset growth has been greatly supported by their performance

After 2022 saw a decline in assets under management in the second and third pillars of the Slovak pension system and in the domestic investment fund sector, the situation started to improving markedly in 2023. Between January 2023 and the end of March 2024, the aggregate net asset value (NAV) of all pension and investment funds increased by €5.3 billion, or more than 22%. The main factor behind this change was a turnaround in global financial markets, as a climate of pessimism was replaced with a growth trend. Returns on funds' investment assets, averaging 14%, themselves accounted for around €3.5 billion of aggregate NAV growth.¹⁰⁶ In the second and third pension pillars, funds' NAV growth was also significantly supported by the stable inflow of new funds from regular contributions. In the investment fund sector, cumulative net issuances of shares/units were basically negligible for most of last year. Only since December have there been signs of an uptrend in demand for investment in domestic investment funds.

Chart 20

NAV growth concentrated mainly in equity and index funds

Breakdown of the change in NAV between 31 December 2022 and 31 March 2024 (percentages)



Source: NBS.

Note: 2BPFs – second pillar bond pension funds; 2MPFs – second pillar mixed pension funds; 2EPFs – second pillar equity pension funds; 2IPFs – second pillar index pension funds; 3EPFs – third pillar equity-oriented pension funds; 3BPFs – third pillar bond-oriented pension funds; 3IPFs – third pillar index pension funds; 3MPFs – third pillar mixed pension funds; 3DPFs – third pillar decumulation pension funds; RIFs – real estate investment funds; BIFs – bond investment funds; MIFs – mixed investment funds; EIFs – equity investment funds.

¹⁰⁶ It should be noted, however, that this appreciation mostly only offset the previous similarly large decline associated with the fall in financial asset valuations during 2022. At the same time, double-digit inflation had a notable negative impact on the real value of returns.

The bulk of the growth in assets under management occurred in funds focused on equity investments. Besides higher nominal appreciation compared with other fund types, there were also other factors supporting their asset growth. One was a recent law change requiring the assets of younger pension savers to be switched from bond pension funds to index pension funds. By the end of the year, index pension funds had thus become the largest fund type by asset volume and have since further solidified that position. In the investment fund sector, too, unit-holders were gravitating towards equity investment funds during 2023, likely because of favourable equity market trends as well as customers' efforts to protect their savings from inflation. The second-best-selling fund category during the period under review was real estate funds. Demand for these investment funds has remained strong in recent months, even though the value of their shares/units stopped growing around the turn of 2024 and began to decline slightly. In an elevated interest rate environment and with inflation already receding, bond funds started recording net issuances from mid-2023, which marked a sea-change after several years of net redemptions. Among mixed funds, by contrast, net redemptions accelerated further.

Across the pension and investment fund sectors, the asset mixes of most equity and mixed funds were rebalanced towards equity investments. The increase in the equity component's share was partly a by-product of its relative outperformance of the rest of the portfolio over the period under review. At the same time, however, fund managers' moderate rebalancing of portfolios towards equity instruments also had an impact.¹⁰⁷

When interest rates were rising most sharply, the bond portfolios of pension and investment funds experienced a general prevailing trend of decreasing residual maturity and duration. With the onset of 2023 and the gradual slowdown and eventual cessation of monetary policy tightening, different sectors and fund categories started to be heterogeneous in their response to this trend. In bond funds in the second pension pillar and the investment fund sector, the sensitivity of the debt component to interest rate movements has continued to decline. Meanwhile, in second-pillar mixed and equity pension funds, the average residual maturity of bond holdings has started to lengthen again.¹⁰⁸

¹⁰⁷ In some portfolios, the resulting increase in the share of equity holdings represented no more than a reversal of its decline in 2022. In other cases, for example second-pillar mixed pension funds and equity investment funds, the equity component's share rose to new highs.

¹⁰⁸ Across the other fund categories over the past year and a quarter, these parameters have stabilised at levels that are relatively low by historical standards.

As regards assets managed for domestic real economy agents by investment firms and by banks authorised to provide investment services (both here referred to as ‘investment firms’), their volume has increased quite sharply. The value of the securities portfolio climbed from €12 billion at the start of 2023 to €14.9 billion at the end of March 2024. Households held around four-fifths of these securities and also accounted for a major part of the portfolio growth. The rest of the portfolio was held mostly by non-financial corporations. Slovak households’ equity securities held under the management of investment firms amounted to around €7.5 billion at the end of March 2024. A significant part of these holdings comprises shares/units issued by domestic investment funds (complemented by investments in global ETF products) and, to a lesser extent, shares in domestic firms. Households’ holdings of debt securities under the management of investment firms were also mostly domestic issues, whether issued by banks or NFCs. The only significant non-domestic component of this portfolio was bonds issued by Austrian banks. The bulk of the above-mentioned volumes was reported by banks authorised to provide investment services, with dedicated investment firms accounting for only a minority share.

Problems in the commercial real estate market have not weighed on real estate investment funds, but there is no room for complacency in this regard

Investment funds focused on real estate investments have enjoyed several years of stable customer inflows and their importance in the domestic investment fund sector has been increasing. Recently, however, these funds have become a focal point of the discussion on potential risks. The primary cause of concern and uncertainty is the close interconnection between real estate funds and the domestic CRE sector. This sector currently faces a number of challenges, including cyclical ones, like elevated interest rates, and a structural decline in demand, particularly in the office segment. Hence, equity holdings in real estate firms – the mainstay of real estate investment fund portfolios – may come under downward valuation pressure.

One characteristic of real estate investment funds which deepens their vulnerability is the significant liquid transformation they undertake. The share of highly illiquid CRE-financing assets in the sectoral real estate fund portfolio has been close to 80% of the portfolio’s NAV over the past year, which is relatively high compared with the EU average. These funds also have a layer of liquid assets for the purpose of paying outgoing unit-holders. This liquid component’s share in the portfolio’s NAV has oscillated around 13% since the beginning of 2023, representing a slight

decrease from the past, yet still the above the statutory minimum of 10% of NAV.

In the EU generally, real estate investment funds are also characterised by another structural risk: high leverage through credit sources. In Slovakia, however, the financial leverage of real estate investment funds is minimal.¹⁰⁹ There is, however, indirect leverage risk in these funds, as the real estate companies in which they have equity holdings also use external borrowing to finance real estate construction (for more details, see Subsection 3.3 on commercial real estate).

In terms of their participant base, domestic real estate investment funds differ markedly from real estate funds in the rest of Europe. In other countries, financial institutions are the major investor in real estate investment funds. In Slovakia, by contrast, domestic real estate funds are predominantly oriented towards households, including ordinary retail clients, so they may be susceptible to mass redemptions if there is any sign that the fund is in difficulty or if there is a general cooling of demand for real estate investments. Another risk for domestic real estate investment funds is their relatively low asset diversification. It is quite common for half of a fund's assets to be exposed to only a few counterparties (projects). Most such investments are in Slovak real estate, which, on the one hand, reduces geographic diversification, but, on the other hand, protects the domestic fund from the direct impact of a potential shock from abroad.

5.3 Stress testing of non-bank entities

Non-bank entities subjected to stress testing with a focus on market risks

The results of our latest stress testing exercise confirm what we know from both previous exercises and actual past developments: the susceptibility of asset management entities to asset value fluctuations is directly proportional to the share of the equity component in their asset portfolios. Index pension funds stand out in this regard, as their portfolios are almost entirely composed of equity exposures. In the stress scenario,¹¹⁰

¹⁰⁹ There is no synthetic leverage through derivatives with these funds.

¹¹⁰ A hypothetical scenario of market turbulences, assuming mainly a 35% decline in the value of equity indices and a widening of credit spreads on both government and corporate bonds. In this scenario, risk-free interest rates were simulated to decline by almost 2 pp, especially at short maturities, while the long end of the yield curve decreased only marginally over the entire three-year simulation horizon. Exchange rate movements of selected currencies were also included in the scenario assumptions, within the range applied in the EBA's stress test of EU banks.

the NAV of these funds undergoes an average (weighted) decrease of almost one-quarter. The next largest declines, some way behind but still just above 10%, are recorded by equity investment funds and unit-linked products. For second-pillar equity pension funds, second-pillar mixed pension funds, aggregate investment funds and aggregate third-pillar pension funds, the simulation showed declines ranging from 7% to 8%. Given the expected decline in the risk-free component of the yield curve, the portfolios that have a significant bond component (non-unit-linked insurance portfolios, second-pillar bond pension funds, bond investment funds) exhibit a low degree of vulnerability, not exceeding 2% of the NAV of the respective group.

All insurers would withstand the stress scenario

In the stress scenario, no insurer's SCR coverage ratio falls below the regulatory minimum of 100% over the stress test horizon. The insurance sector was tested not only for the financial losses described above, but also for an increase in the non-life loss ratio and a rise in life insurance surrenders.¹¹¹ In the baseline scenario, the sector's SCR coverage ratio drops from 205% to 193% in 2024, before rebounding back to its original level in 2025. In the stress scenario, the coverage ratio falls to 170% in the first year, and returns back to its original level (202%) by the end of 2026.

¹¹¹ In non-life insurance, the non-life loss ratio is assumed to increase in the first year of the three-year simulation horizon by 15 pp over insurers' long-term average ratio. The calibration roughly corresponds to a scenario where the loss ratio in each line of business increases to the highest level observed since 2016. It is also assumed that the entirety of additional claims costs are borne by domestic insurers, with none of the costs being passed on to reinsurers.

In life insurance, one-off surrenders of 20% are assumed in the first year of the three-year simulation horizon. They are expressed as half of the gross SCR for mass surrender risk, which insurers' regularly calculate and report to NBS. The SCR is then reduced by the life insurance contracts surrendered, i.e. by 20% of the total life insurance underwriting risk.

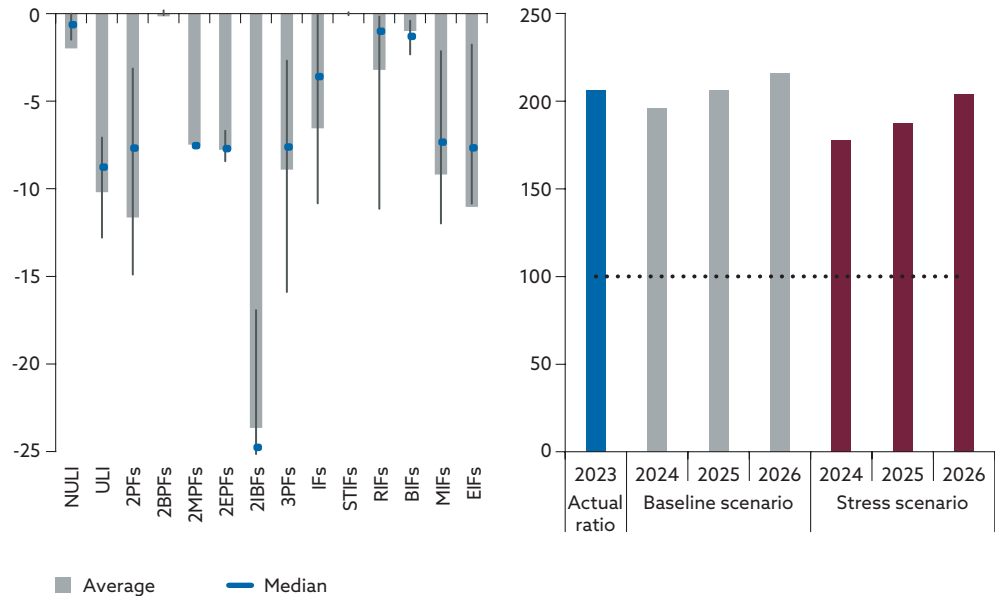
Where an insurer makes an annual profit, it is assumed that half of the profit will be distributed as dividends.

Chart 21

Stress scenario shows equity-oriented funds faring worst while insurers remain resilient

Left-hand panel: Distribution of the change in asset value/NAV by type of institution/fund in the stress scenario (percentage of assets/NAV)

Right-hand panel: SCR coverage ratio of Slovak insurers in the baseline and stress scenarios (percentages)



Sources: NBS, and own calculations.

Notes: The vertical lines in the left-hand panel denote the interquartile range. NULI – non-unit-linked insurance; ULI – unit-linked insurance; 2PFs – second pillar pension funds; 2BPFs – second pillar bond pension funds; 2MPFs – second pillar mixed pension funds; 2EPFs – second pillar equity pension funds; 2IPFs – second pillar index pension funds; 3PFs – third pillar pension funds; IFs – investment funds; STIFs – short-term investment funds; RIFs – real estate investment funds; BIFs – bond investment funds; MIFs – mixed investment funds; EIFs – equity investment funds; NAV – net asset value; SCR – Solvency Capital Requirement.

Box 2

Interconnectedness in the Slovak financial sector

The aim of this box is to highlight the structure of interlinkages in the Slovak financial sector, assess their stability over time, and examine their vulnerability to contagion among entities.

The interconnectedness of entities through exposures shows a relatively simple pattern that replicates two types of relationships in particular. The first is ownership relationships in bank-led groups, and the second is the orientation of asset managers towards depositories that are also banks. Interbank market deposits represent another significant block of linkages. The centrality of the banking system in Slovakia is reflected not only in its dominant size and role in the economy, but also in its linkages. Within the financial system, banks act mainly as recipients of funds. Clusters, as they are known, form particularly around the more significant banks. Within such a cluster, typically interconnected pension funds and investment funds hold part of their liquid assets in the form of domestic bank deposits or purchase

domestic bank bonds. Investment funds and pension funds acquire shares/units issued by other investment funds under the same management company or under a subsidiary of the same parent company.

Besides the fact that the network of linkages is relatively sparse in terms of their quantity, mutual exposures are also limited in terms of their size. At the end of 2023, all positions between domestic financial entities amounted to €6 billion, or around 4% of the financial sector's balance sheet; however, the median value for entities was slightly higher, around 10%. These indicators have barely fluctuated over the last five years. The linkages between specific entities are also stable over time, which is a natural consequence of the basis on which they are established. This is numerically expressed by the fact that year-on-year shifts in exposures typically (at the median) do not exceed 2% of entities' assets.¹¹²

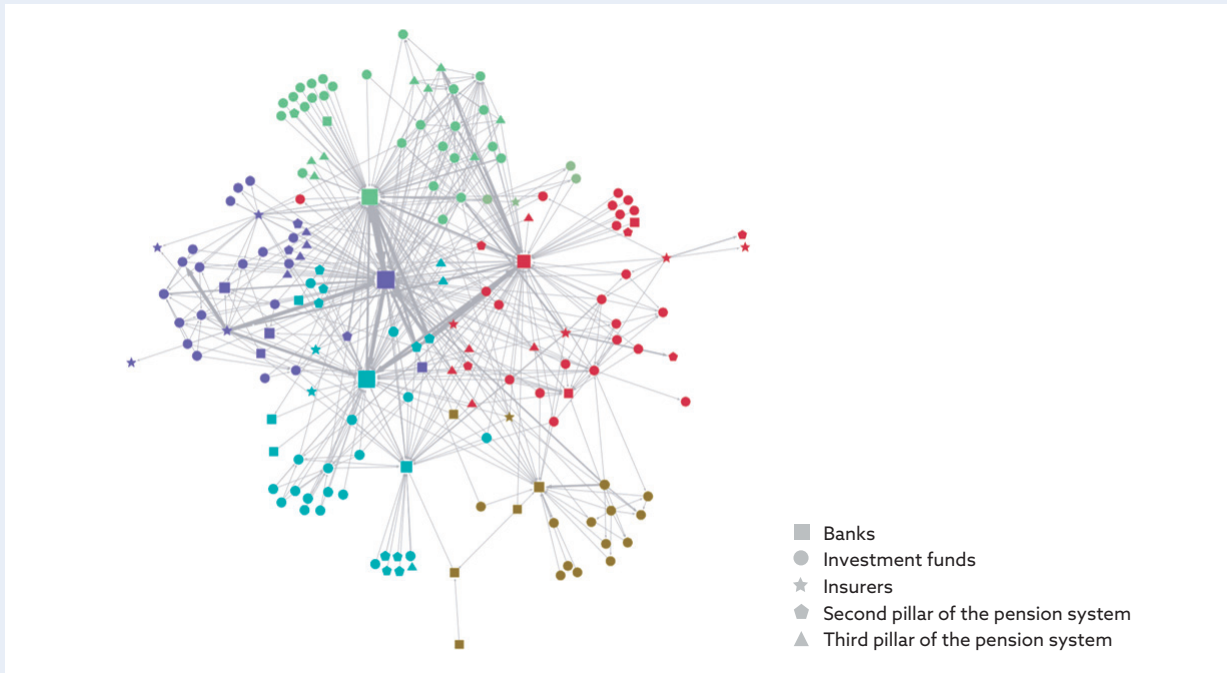
Owing to the above characteristics, contagion risk within the financial sector is relatively low. Another factor helping this situation is the absence of significant exposure chains, which if present at all, usually do not exceed the intra-group boundaries. On the other hand, the direct channel of contagion through exposure losses is not the only way in which turbulence spreads across the financial system.¹¹³

¹¹² From the perspective of a particular entity, these shifts are measured as the sum of absolute year-on-year changes in exposures to individual counterparties, expressed as a percentage of assets. The median value across entities has been consistently low over time (for the last five years), ranging from 1% to 2%.

¹¹³ An indirect form that may come into play is the reactions of customers from outside the financial sector to an institution's problems, such as their withdrawing funds from other related entities within the group or from other entities within the same sector.

Chart 22

Illustration of interlinkages between Slovak financial sector entities



Source: NBS.

Notes: The thickness of the lines represents the magnitude of the mutual exposures. Colours represent clusters of entities with stronger interlinkages (Louvain algorithm).

Abbreviations

bp	basis point(s)
CCyB	countercyclical capital buffer
CET1	Common Equity Tier 1 (capital)
CRE	commercial real estate
DSTI	debt service-to-income (ratio)
EBA	European Banking Authority
ECB	European Central Bank
EPIFP	expected profits included in future premiums
ETF	exchange-traded fund
EU	European Union
EURIBOR	euro interbank offered rate
GDP	gross domestic product
IFRS	International Financial Reporting Standard
IMF	International Monetary Fund
LCR	liquidity coverage ratio
LI	life insurance
LTD	loan-to-deposit (ratio)
LTV	loan-to-value (ratio)
MREL	minimum requirement for own funds and eligible liabilities
MTF	medium-term forecast
MTPL	motor third party liability (insurance)
NAV	net asset value
NBS	Národná banka Slovenska
NFC	non-financial corporation
NLI	non-life insurance
NPL	non-performing loan
NSFR	net stable funding ratio
O-SII	other systemically important institution
pp	percentage point(s)
RBUZ	Register of Bank Loans and Guarantees / Register bankových úverov a záruk
ROA	return on assets
ROE	return on equity
SCR	Solvency Capital Requirement
SLASPO	Slovak Insurance Association / Slovenská asociácia poisťovní
SMEs	small and medium-sized enterprises
SO SR	Statistical Office of the Slovak Republic
SyRB	systemic risk buffer
TLTRO	targeted longer-term refinancing operation
ULI	unit-linked insurance