Financial Stability Report

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Contents

List of charts

List of figures

Foreword

This is now the fourth Financial Stability Report (FSR) to be issued against the backdrop of the coronavirus (COVID-19) pandemic. The initial shock has gradually given way to uncertainty and, more importantly, to a common effort to better understand the pandemic's repercussions for financial institutions and their customers. It seems we are now more informed about how to live and work in this new environment. And there has also been a learning curve for banks and their customers.

I am therefore pleased to see that our worst fear of last year has gradually been transformed into good news. All the evidence suggests that the pandemic has not, for now, caused permanent scarring to the corporate sector. A combination of apposite public support measures and the fact that most firms were in relatively sound shape going into the pandemic crisis means that the corporate sector as a whole will manage to thrive. It is a similar story with households.

Every coin has two sides, however, and the economic situation is improving in parallel with a resurfacing of several trends and risks from the pre-pandemic period. Household indebtedness is again higher in Slovakia than in any other EU country; housing prices are rising faster than wages; and European sovereign debts are climbing to historical highs. Such a situation calls for vigilance, and Národná banka Slovenska must continue to keep a close eye on developments, especially in the credit and housing markets.

At the same time, we face entirely new challenges. Energy prices have recently been spiking, while supply bottlenecks have mounted amid global shortages of materials and labour.

These trends and risks, as well as several others, are all covered in this edition of the Financial Stability Report.

Overview

Short-term risks associated with the pandemic crisis are gradually dissipating

Although we cannot yet turn the page on the pandemic, we can say that the financial sector is coping with the crisis and that financial stability has not been disrupted by it. While Slovakia is facing a third wave of the pandemic, it has already seen a gradual recovery on the economic front. Throughout the pandemic, the financial sector has been able to maintain lending to the real economy and to provide other financial services. Thanks to their responsible dividend policies, banks' capital positions are actually stronger now than they were before the crisis. Nor has the crisis had a major impact on other segments of the financial market.

What is important is that the crisis has not so far caused any permanent scarring to the economy. Firms suffered revenue losses during the first and second pandemic waves. Only as the second wave gradually receded did the corporate sector start picking up, albeit with considerable heterogeneity. Public support measures proved effective in mitigating the impact of the crisis on firms' financial positions during 2020. Firms themselves have done much to offset revenue losses by cutting costs. Although many of them have reported a drop in profit compared with the pre-crisis period, the increase in loss-making firms has been only moderate. Corporate solvency has not deteriorate notably, and corporate liquidity has actually increased. Several large firms have already repaid loans they took out as a precautionary measure following the onset of the pandemic.

Fears of a surge in loan impairments have almost dissipated. A large proportion of the financial strains experienced by firms and households were only temporary and were mitigated effectively by means of statutory loan moratoria. Following the expiry of these moratoria, the vast majority of loans concerned are being repaid on schedule.

The loan impairment situation has also been favourably affected by banks' profitability. Their profitability, however, remains below the EU median. Several banks took the prudent step of recognising expected impairment losses back in 2020. Since the increase in loan impairments in 2021 has been lower than expected, impairment costs have been even lower in 2021 than they were before the crisis. As a result, the banking sector's profit has returned to growth after slumping last year.

The insurance sector has also seen its profit grow. The uptick has been driven by premium growth in non-life business. Another factor is that the loss ratio in non-life business declined during the crisis thanks to a fewer number of road accidents.

Nevertheless, some uncertainty about potential adverse developments persists. This is particularly the case among firms in the sectors of accommodation, food service activities, and recreation, which continue to face sizeable revenue losses. There have also been pandemic-induced changes in the commercial real estate sector, though their impact will only be assessable after some time has passed. As for the situation in loans to households following the expiry of loan moratoria, it cannot be ruled out the impairments may yet increase to some extent, particularly in the area of consumer credit.

Of longer-term significance are rising imbalances in the housing market and its financing

Housing financing is one of the areas that has been only marginally affected by the pandemic crisis. Neither housing prices, nor housing loans have recorded any significant slowdown in growth.

After the pandemic's second wave passed, mortgage loan growth surged again. The annual growth rate rebounded to double digits, after last reaching that level two years earlier. The rates of housing loan growth and housing price growth are now among the highest in the EU.

The sharp rise in housing prices is being driven mainly by strong demand. Certain factors have resulted in housing prices rising faster than household incomes, specifically a decline in interest rates to one of the lowest levels in Europe, an increase in savings as a result of the pandemic crisis, and an upturn in households' expectations in response to an improving labour market situation. Demand has been further supported by lower income households, which in recent years have experienced the highest increase in housing affordability. Nor has the rising affordability of housing been checked by gradual tightening of the debt service-to-income (DSTI) ratio limit.

The acceleration of housing prices is increasing the risk of valuations becoming stretched. The relatively high affordability of housing and household optimism about the future economic situation may contribute to an increase in purchases of real estate for investment purposes, as rising inflation causes real returns on several types of financial investments to turn negative. However, the combination of strong demand and expectations that strong price growth will be a long-term trend may lead to overvaluation of housing prices. The risk is increasing that the rapidly growing housing market will not decelerate in good time and will be at risk of a subsequent correction. Národná banka Slovenska believes there must also be discussion about the structural factors contributing to the current situation. These specifically include an underdeveloped rental housing market and the issue of low property taxation.

A corollary of rapid credit market growth is an acceleration of household indebtedness. In terms of the broad macroeconomic perspective, the aggregate household debt-to-income ratio is rising faster in Slovakia than in any other EU country, largely owing to an increasing share of indebted people in the total population. From a financial stability perspective, however, it is important that growth in new loans is largely commensurate with the growth in income of loan applicants. On the other hand, households that repeatedly increase their existing borrowing may face a greater risk.

Indeed, refinancing or top-up loans are in several respects riskier than other loans. Among those households that have increased their existing borrowing their loans, debt is rising more quickly than income and the aggregate DSTI ratio is also higher. Such additional borrowing is increasingly accompanied by an extension of the loan maturity, even until after the borrower's retirement age. Mortgage loans are also affected by this trend, and some borrowers will still be repaying their mortgage when they are well into their seventies.

The risks associated with increasing indebtedness are being largely mitigated by regulatory lending limits. This is clear from the break in loan riskiness that occurs at the thresholds of the limits introduced by Národná banka Slovenska in previous years. A particularly important step in this regard was the adjustment of the DSTI ratio limit that the Bank applied at the start of 2020. During the pandemic crisis, loans provided with a DSTI ratio above the limit have become distressed three times more often than have other loans. The Bank does not therefore see a need for a broad tightening of regulatory lending limits.

At the same time, the Bank is closely monitoring risks associated with rising indebtedness, in particular repeated increases in existing borrowing and the extending of maturities beyond the borrower's retirement age. What is important from the Bank's perspective is not only that people are able to purchase residential real estate, but also that they are able to continue living in their properties without falling into mortgage repayment difficulties. People whose repayments are due to continue into old age should bear in mind that their income will decline after they retire and they should prepare accordingly. If such borrowers save regularly and gradually build up a financial buffer that may eventually be used to pay off their loan, they can significantly reduce the prospect of financial difficulties in the future. Such behaviour is common in a number of EU countries in which loans due to mature after the borrower's retirement age make up a higher share of the loan book. On the other hand, the Bank sees a risk in borrowers taking advantage of income growth to increase their borrowing to the maximum permitted limit. If this risk continues to increase, the Bank stands ready to respond by adjusting its macroprudential policy settings.

Current trends in the corporate sector may also entail new risks. With the pandemic crisis gradually fading, firms are being confronted with new difficulties in the form of supply chain disruptions and sharply rising energy prices. Their ability to cope with these further challenges will depend mainly on how long these issues persist and on their severity. This situation is also affected by the demands of transitioning to a greener economy.

1 Macroeconomic environment and financial markets

1.1 The global economy is growing rapidly, but outlooks are coupled with risks

The rapid global recovery has recently run into problems on the supply side of the economy

The period since early spring of this year has been marked by a rapid recovery out of the severe pandemic-induced recession. In advanced economies in particular the impetus for activity growth was the gradual easing of pandemic containment measures, enabled to a large extent by the full roll-out of vaccination campaigns. The acceleration of economic growth was supported by the continuation of massive fiscal and monetary relief packages. Favourable macroeconomic conditions have been reflected in the preservation of financial stability and even in an improvement in certain key parameters, such as corporate solvency and the related soundness of the banking sector. On the other hand, there has been an increase in certain risks associated with the valuation of financial and non-financial assets, particularly real estate. In addition, a new risk has emerged in the form of rising inflation.

The optimism surrounding the economic upturn peaked around early summer, since when there has been a moderate deterioration in near-term outlooks. One reason for that was the spread of the new and highly contagious Delta variant of the coronavirus (COVID-19), which hampered the opening-up of economies or, in the case of countries with lower vaccination rates, led to a renewed tightening of containment measures. Amid subsequent plant shutdowns and production restrictions in certain emerging market economies, there have been shortages in supplies of selected key components, such as semiconductors used in the production chains of several major manufacturing industries. So, despite the presence of ample demand, the expansion of economic activity in the United States and Europe has run into obstacles on the production front. From Slovakia's perspective, it is unfortunate that such problems have had a significant impact on the German economy. Industrial production in Germany fell in August 2021 by 5% in year-on-year terms, mainly owing to a forced reduction in production in the automotive industry.

The risk of current supply price pressures spilling over into long-term inflation growth has increased markedly

The global shifts in demand and supply during the course of this year have resulted in inflation becoming the centre of attention in regard to future economic and financial developments. Virtually the world over, consumer price inflation has in recent months accelerated and reached its highest rates in more than a decade. The main cause of this trend has been a rebound in commodity prices following their decline during the depth of the recession. Among other factors behind rising inflation are the following: supply chain disruptions; underproduction of intermediate inputs or bottlenecks in their supply; rising prices of basic foodstuffs; and labour shortage–induced wage increases in certain industries. Another no less important factor, especially in advanced economies, has been a demand shock in the form of a surge in demand for durable goods, resulting from the considerable excess savings that households accumulated during previous lockdowns.

The risks to the inflation outlook are tilted to the upside. Institutions such as the ECB and the International Monetary Fund estimate that inflation is most likely to peak in late 2021/early 2022. Thereafter, inflation rates are expected to decline towards central banks' medium-term objectives. This scenario is supported by financial market–based inflation expectations. Although these have been pointing upwards since September, especially in respect of near-term horizons, they remain at levels consistent with price stability. Inflation expectations, not only of investors but also of real economy actors, will be crucial to further developments. Under certain assumptions, with current inflationary factors applying for a longer period and passing through more broadly into wage demands, inflation expectations could become unanchored. This prospect is a cause of increasing nervousness and uncertainty in financial markets. Central banks are saying moreover that the risks to the inflation outlook are tilted to the upside. Several of these banks, including the Federal Reserve, either have indicated there will be an earlier tightening of monetary policy or have already proceeded to tighten it.

Substantial risk appetite is causing a rise in imbalances, including price imbalances in both financial and non-financial asset markets

The further descent of real interest rates into historically low territory has stimulated an uptrend in risk-taking in financial markets. In the speculative-grade segment of credit markets, required yields have been fluctuating around all-time low levels despite record growth in issues. A large proportion of newly minted bonds are acquired by non-bank financial institutions, such as investment funds or insurance corporations. Hence the risk profile of asset portfolios in these sectors is increasing on several fronts, including through a decline in average credit quality, a falling share of the liquid component, and heightened interest rate sensitivity as a corollary of increasing durations. The prevailing trend in equity prices for the past approximately six months has been upward. Although the same period has also seen an improvement in profitability expectations, pricing models supported by fundamentals continue to indicate possible overvaluations, especially in US equity markets. Another recent feature of financial markets has been the increasing use of the leverage effect. Its application is evident, for example, in the high amount of debt-financed acquisition activities in the corporate sector, in the rising demand for asset position financing with borrowed funds, and in the elevated interest in equity market derivatives. Evidence of the increase in investor risk appetite is the considerable demand for cryptocurrencies, as reflected in the sharp rise in their prices.

Financial markets experienced a slight correction and increase in volatility during September 2021, as investors reacted to mounting uncertainty of future economic and inflation developments. Another cause was the credit difficulties enveloping a major Chinese property development company and the potential repercussions of this issue. Financial markets subsequently became calmer, but it still seems, however, that investors will remain highly sensitive to any unfavourable inflation signals and related unexpected changes in monetary policy settings. Such changes could have an upward impact on market interest rates and trigger a broader wave of repricing across riskier financial assets.

An entrenching of risk characteristics is also present in the property market. Contrary to original fears, residential real estate (RRE) has not been adversely affected by the pandemic-induced crisis. In fact, over the past year and a half housing prices in most advanced economies, including many euro area economies, have increased by 5% and more. While demand has been stoked by shifts in preferences towards larger flats and houses, by ongoing low interest rates and by the high availability of credit, the supply side has not managed to keep up with that demand, owing partly to the impact of the crisis and shortages of building materials. Hence a supply and demand mismatch has emerged. Since the current price growth is following a similar trend to that seen before the pandemic crisis, the RRE markets in several countries may be on a path that raises to an even greater extent the question of correction. A related risk factor is the rising indebtedness of households at a time when banks are easing mortgage credit standards.

Corporate balance sheets have remained relatively healthy, but at the expense of the public sector's financial position

The corporate sector's condition has been improving since early 2021. As economies opened back up and restrictions were lifted, corporate revenues and profitability rebounded to higher levels. This, together with the impact of still running public support schemes, has been reflected in a continuing drop in the non-performing loan ratio. After previously accelerating, net loan inflows to the Stage 2[1] asset category have slowed. Even within the cohort of less creditworthy firms issuing speculative-grade bonds, the bankruptcy rate has been falling in 2021, notwithstanding that the rate at which it peaked was lower than envisaged in even the optimistic scenarios. Firms reporting high solvency risk and liquidity risk still constitute a significant share in those sectors worst affected by the pandemic crisis.

High sovereign indebtedness represents a serious source of risk in the medium term. The crisis-induced increase in fiscal expenditure on health care and economic assistance to the private sector took a toll in the form a sharp rise in the government debt-to-GDP ratio for the euro area as whole, up to nearly 100%. Although the fiscal deficit has remained elevated this year, the debt-to-GDP ratio has stabilised on the back of rapid economic growth. The market for sovereign debt securities is currently showing no signs of nervousness, and spreads between bonds issued by different euro area countries are low; all of which supports low debt financing costs and the sustainability of such financing. This favourable sentiment may, however, start to change in subsequent years as economic growth settles at lower levels. Questions about sovereign debt sustainability may also arise in the scenario of rising interest costs, especially in the case of the ECB slowing its government bond purchases.

1.2 The Slovak economy is gradually recovering

The economy regained momentum after the pandemic's second wave, but prices are also rising sharply

As pandemic containment measures were gradually eased in late spring, the Slovak economy recovered quickly. As a result of the pandemic's second wave, economic growth almost came to a halt around the turn of this year and actually became negative in the first quarter of 2021.[2] With the onset of summer, however, the economy started recording relatively solid

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[1] Stage 2 loans are still performing but are assessed by banks to have experienced a significant increase in credit risk after origination.

[2] Real GDP fell by 1.4% in the first quarter compared with the previous quarter (figure adjusted for seasonal fluctuations).

growth.[3] A major factor behind that growth was household consumption, as consumer demand pent up during the lockdown was released. This increase in consumption was not, however, accompanied by a significant recourse to savings, as households sought to finance their consumption spending out of their disposable income. Another contributor to this year's upturn in economic growth has been investment. The bulk of investment activity growth has been in the public sector, while private firms have remained cautious about investment decisions given the climate of uncertainty. Production and exports were not dampened by the second wave as much as they had been by the first wave, although Slovak producers started to feel the impact of component supply bottlenecks across the world, notably in respect of semiconductors. Because of supply shortages, several Slovak firms, especially in the automotive industry, had to reduce and temporarily shut down production. This had a downward impact on exports, which, after starting the year brightly, decreased.[4] Producers have also had to start facing rising energy prices, which, especially in energy-intensive manufacturing industries, are now putting strong downward pressure on profitability. Nor are other industries, however, immune from the increase in input prices. The economy is therefore not expected to return to its pre-pandemic level until 2022.

The economic recovery is having a favourable impact on the labour market. Since peaking in April 2021, the number of registered unemployed has fallen by 20,000, to around 200,000. The unemployment rate has therefore dropped by 0.6 percentage points, to 7.4% in August 2021, correcting fully after its increase during the second wave. Job growth has been strongest in the recovering services and industry sectors. Despite the upturn, however, it will be years before the labour market situation returns to its pre-crisis level. After a somewhat faltering start to the year, the average wage increased in the second quarter of 2021.[5] Even so, the purchasing power of households did not increase significantly owing to the downward impact of rising prices. So although economic sentiment improved significantly from the start of the year, it corrected to some extent in early summer and has since remained at a stable level.

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3 Real GDP increased by 2% in the second quarter compared with the previous quarter, and its year-on-year increase for that quarter stood at 10.2% (figure adjusted for seasonal fluctuations).

4 In the first quarter of 2021, net exports increased by 0.9% year on year; in the second quarter, they declined by 2.6% (figures adjusted for seasonal fluctuations).

5 In the first quarter of 2021, the average wage declined by 0.1% year on year; in the second quarter, it increased by 0.9% (figures based on ESA 2010 methodology and adjusted for seasonal fluctuations).

Prices in the Slovak economy have surged because of the economic recovery and the situation in global markets. Since the start of this year, the annual inflation rate has been gaining momentum from month to month,[6] and in September it reached 4%, its highest level in nine years.[7] The main components of this increase have been energy and food prices, and there has also been upward pressure from manufacturing goods prices. Price growth gathered pace amid the gradual reopening of the economy following the pandemic's second wave, as supply responded sluggishly to a relative sharp resurgence in demand. At the same time, many service sector businesses saw the rebound in demand as an opportunity to raise prices and so offset previous revenue losses. Another factor behind inflation's acceleration has been a relatively strong rise in global prices of intermediate inputs and energy, with its pass-through to goods import prices. International transport prices have also contributed positively to inflation, given transport's failure to keep pace with buoyant demand. A combination of strong demand and supply-side constraints are expected to underpin marked price growth in the near term. Headline inflation is expected to peak in late 2021/early2022 and to moderate only gradually thereafter, as supply-side constraints dissipate and commodity price inflation moderates.[8]

A downside risk to the economic outlook is the possibility of a stronger than expected third wave of the pandemic, as well as the arrival of any further waves. The pace of economic recovery could also be slowed by ongoing bottlenecks in the supply of manufacturing inputs, including semiconductors, and in international transport. Another risk is that energy prices continue rising and weigh heavily on production, particular at energy-intensive manufacturing businesses.

6 In January, the non-seasonally adjusted HICP index increased by 0.7% year on year; in May, by 2%; and in September, by 4%.

7 The previous time that prices in Slovakia increased at a similar pace was in late 2012.

8 According to the economic outlook in NBS's autumn 2019 Medium-Term Forecast (MTF-2021Q3).

2 Financing of the economy

2.1 Corporate credit market trends are relatively heterogeneous

The corporate sector is gradually picking up, though questions remain about its situation going forward

The upturn in economic activity has been reflected in corporate revenues. After falling during the first and second waves of the pandemic, corporate sector revenues only started to rebound with the gradual receding of the second wave. Amid an easing of pandemic containment measures, firms' aggregate revenues increased sharply in the second quarter of 2021, by more than 25% year on year,[9] before their growth rate moderated to 4% during the summer months.

The situation, however, is relatively heterogeneous, with some sectors still not back to their pre-pandemic levels of performance. Although aggregate corporate revenues have rebounded to the level they were at in the pre-pandemic year of 2019, they have done so largely because of the performance of certain economic sectors. Those that have done well during the pandemic crisis include in particular the trade sector and information and communication activities. By contrast, the sectors hardest hit by the crisis, notably accommodation services and selected market services, have still not returned to their pre-pandemic performance. Nor, however, have the manufacturing sector, the construction sector and the automotive industry managed to increase their revenues back to 2019 levels. The pandemic moreover has still not ended, and some sectors remain exposed to the adverse impact of pandemic containment measures. Uncertainty is also evident from the economic sentiment indicator, which picked up after the pandemic's second wave but then fell back slightly in October.

Firms are also exposed to shortages of input supplies and sharply rising energy prices. The manufacturing segment of the economy is increasingly feeling the impact of supply chain disruptions that have led to component supply bottlenecks around the world. This has been reflected in both exports and imports, which declined in the third quarter of 2021. Firms are

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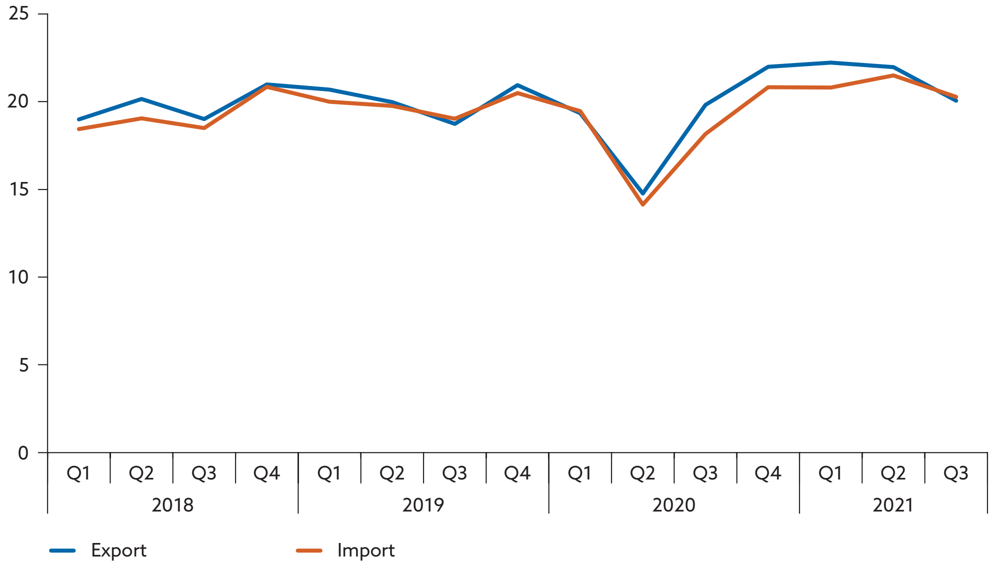
[9] Such high growth, however, stems from the low starting base. Corporate sector revenues recorded their largest decline and lowest level precisely during the second quarter of 2020, following the onset of the pandemic's first wave that resulted in a rapid and relatively broad shutdown of the economy.

reporting shortages mainly in semiconductors, input materials, energy and labour. The time needed to ship goods is getting longer, so costs are increasing. Firms in several sectors are struggling to meet the upsurge in demand that has come with the fading of the pandemic crisis. At the same time, firms are confronted with sharply rising energy prices. These are weighing most heavily on firms in energy-intensive industries, but are also hurting other firms, particularly those which have tight profit margins or are unable to pass on higher energy prices to product prices, for example because of competition pressures. The potential impact of rising energy prices on the corporate sector is analysed in more detail in Box 1. The construction sector is additionally dealing with marked increases in the prices of building materials and construction work.

Chart 1

International trade slowed down again in the third quarter of 2021

Value of exports and imports by quarter (EUR billions)



Source: SO SR.
Note: The data are not seasonally adjusted.

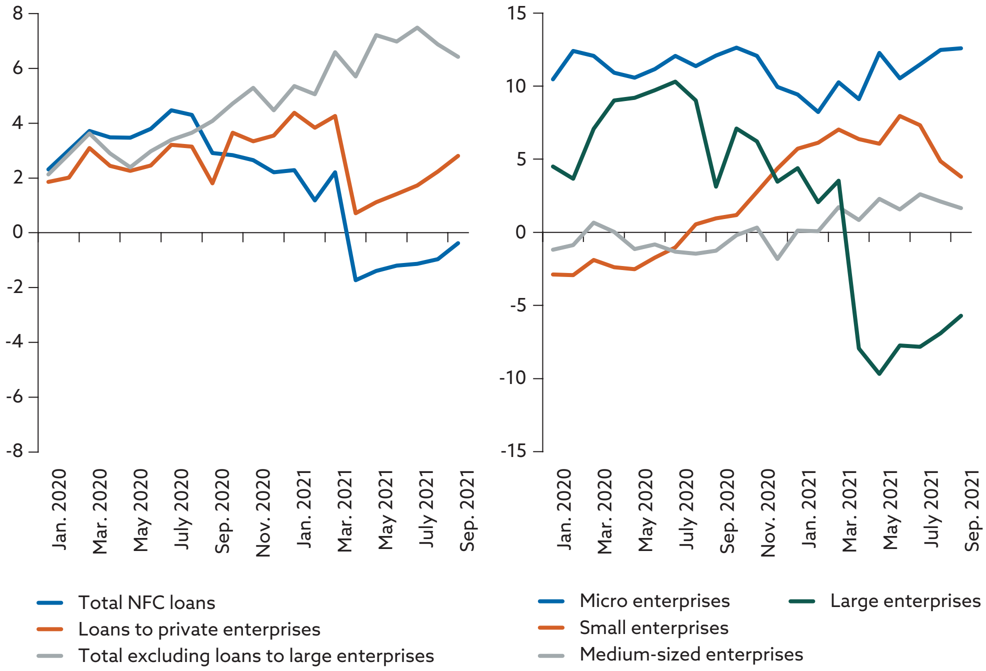
Corporate loan growth is heterogeneous and remains subject to some uncertainty

The amount of loans to non-financial corporations (NFCs) has remained stable in year-on-year terms, though there is considerable heterogeneity across segments. Annual growth in loans to NFCs stood at -0.4% in September 2021, but we cannot infer a broad stagnation from this figure.

Chart 2

Total loan growth is being affected by lending to large enterprises

Annual rate of change in total loans to NFCs (percentages, percentages)



Sources: NBS, and RBUZ.

Total lending to large enterprises has declined sharply in year-on-year terms.[10] This is because, in the early phase of the pandemic crisis, many of these firms took the precautionary step of increasing their borrowing (mainly through credit lines and revolving credit), but after the pandemic's second wave had receded, and with the crisis having had less impact on their liquidity than originally expected, several firms were sitting on excess liquidity and in April 2021 made an unscheduled repayment of part of the borrowed funds.

By contrast, annual growth in total loans to micro enterprises has increased and settled in double digits.[11]

Lending to small enterprises has also contributed significantly to total loan growth, though in August and September its growth recorded a relatively strong correction.[12] This slowdown stemmed partly from the gradual unwinding of public loan guarantee schemes. When lending under these schemes was at its height, government-guaranteed loans represent-

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[10] The annual rate of change in total loans to large enterprises slumped from 3.5% in March 2021 to -7.9% in April 2021. In consequence, the annual growth rate of total NFC loans also slipped into negative territory, falling from 2.2% in March to -1.7% in April.

[11] In September 2021, annual growth in loans to micro enterprises stood at 12.6%.

[12] Annual growth in loans to small enterprises peaked in June 2021 at around 8%, while its rate in September was less than half that figure (3.8%).

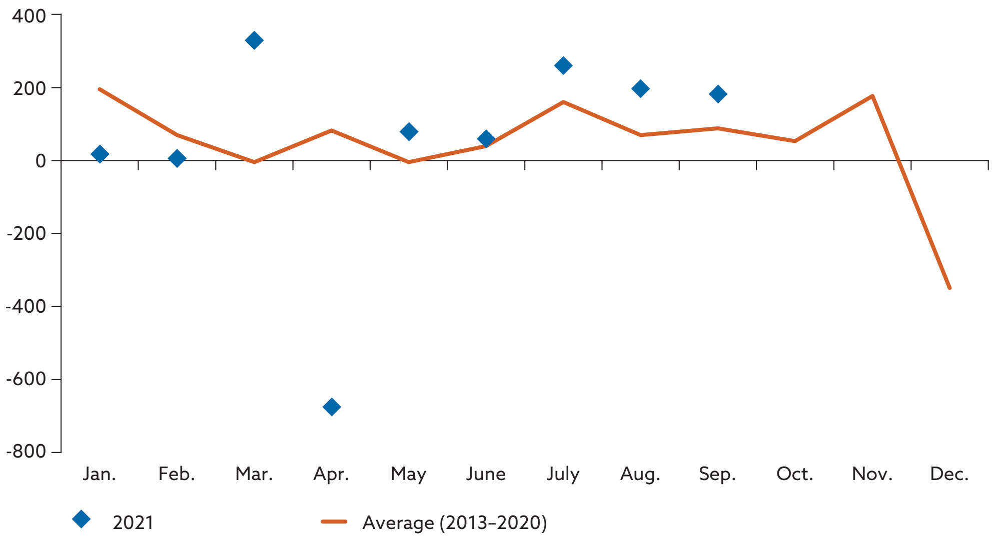
ed a significant part of new loans to small enterprises.[13] Once the schemes had ended, however, they were not replaced to the same extent by other types of loans.

Several EU countries have recorded a notable slowdown in corporate credit growth after the ending of government guarantee schemes. Recent months have seen annual growth in NFC loans fall sharply, even to below pre-pandemic levels. On the other hand, corporate credit growth in Slovakia is the third lowest in the central and eastern European region[14] and is quite far below the EU median.

Chart 3

Month-on-month increases stabilised after April at slightly above the average for previous years

Month-on-month increase in total NFC loans (EUR millions)



Source: NBS.
Notes: The chart compares the month-on-month increases with the average for the period 2013–2020.

From May 2021, however, growth in total loans to NFCs increased again. Their increase was driven mainly by growth in lending to private enterprises, which accelerated gradually from 0.7% in April to 2.8% in September.

Credit growth has also been partly supported by a recovery in the financing of investment activity, though firms remain cautious in this area. Investment loans fell quite sharply during the first and second waves of the pandemic. During this time, firms scaled back or shelved planned investments in production modernisation, innovation and streamlining. The

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[13] In the case of lending to small enterprises, government guaranteed loans accounted for as much as half of new loan origination in some months.

[14] Only Poland and Latvia reported lower figures.

gradual fading of the pandemic crisis has so far brought an upturn and gradual acceleration in the financing of medium-term investment activity.[15] The pick-up in corporate demand for investment financing in the third quarter was confirmed in the bank lending survey. As for longer-term investment financing, however, firms continue to take a cautious approach. Growth in investment loans with a maturity of more than five years remains subdued.[16] Another sign of firms' wariness is the uptake of traditional loans,[17] which since the outbreak of the pandemic has stagnated or declined.[18] The principal form of financing continues to be short-term credit line financing.

Credit growth has also been relatively heterogeneous across economic sectors. The main contributor to overall credit growth has been lending to the commercial real estate (CRE) and construction sectors. In the third quarter of 2021, lending to the trade sector also increased. The largest negative impacts on total NFC loans have come from the industry and selected market services portfolios. In the case of industry, it should be noted that this was the sector which in April of this year experienced the largest drop in total loans owing to the above-mentioned unscheduled partial repayments of short-term loans. Since May, however, lending to industrial firms has been gradually rebounding.[19]

2.2 Household loans are growing strongly

By the end of September household credit growth had accelerated to 8.0% year on year. After being on a decelerating path over recent years, total loans to households broke trend in March 2021. Indeed, the credit growth curve started rising relatively sharply, at its fastest pace since 2008. As a result, Slovakia recorded the fourth highest household credit growth in the euro area. Behind this growth, we can identify two quite distinct narratives – one for housing loans and another for consumer credit.

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15 In the months from April 2020 to December 2020, the amount of medium-term investment loans fell year-on-year, on average, by more than 6%. Since March 2021, however, this category of loans has been picking up, and in September its annual growth rate stood at 7.2%.

16 The annual growth rate for all investment loans with a maturity of more than five years slowed from 2.3% in March 2021 to 1.1% in September 2021.

17 The term 'traditional loans' here refers to loans other than credit lines and revolving credit.

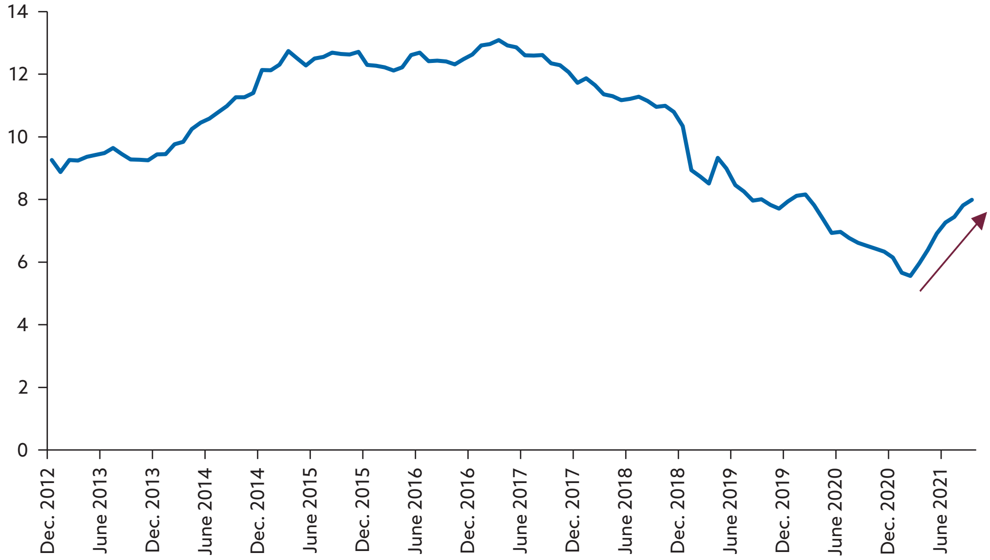
18 The subdued rate of change in traditional loans has continued even though the bulk of loans provided under public guarantee schemes, which had a large upward impact on total credit growth, fell into this category.

19 The annual rate of decline in loans to industrial firms was around one-half lower in September 2021 than in the previous April.

Chart 4

Household loan growth is the sharpest in a decade

Annual growth in loans to households (percentages)



Source: NBS.

Housing loan growth has gathered further momentum

Annual growth in housing loans accelerated to 10.7% in September 2021. Not even the global pandemic has had any significant decelerating impact on their growth, which in no small way has been buoyed by pandemic-related public support measures that prevented a major labour market deterioration and loan delinquencies. Another factor is that the repeated lockdowns have reduced people's spending opportunities. Many households that in the earlier part of the pandemic were afraid for their jobs have actually been able to start building up savings.

The post–second wave recovery has contributed to the uptick in housing loan growth. On the one hand, there has been strong demand supported by income growth, increasing savings and rising price pressures in the property market. The past year has seen both an increase in the average amount of housing loans, and a moderate growth in the income of households applying for loans. On the other hand – the supply side – banks concerns about the future situation have receded and they have become more willing to provide loans with certain riskier characteristics. This is evident, for example, from the application of exemptions to regulatory limits on the debt service-to-income ratio or on the loan-to-value ratio.[20] In the case of mortgage loans, exemptions have been applied mainly to younger appli-

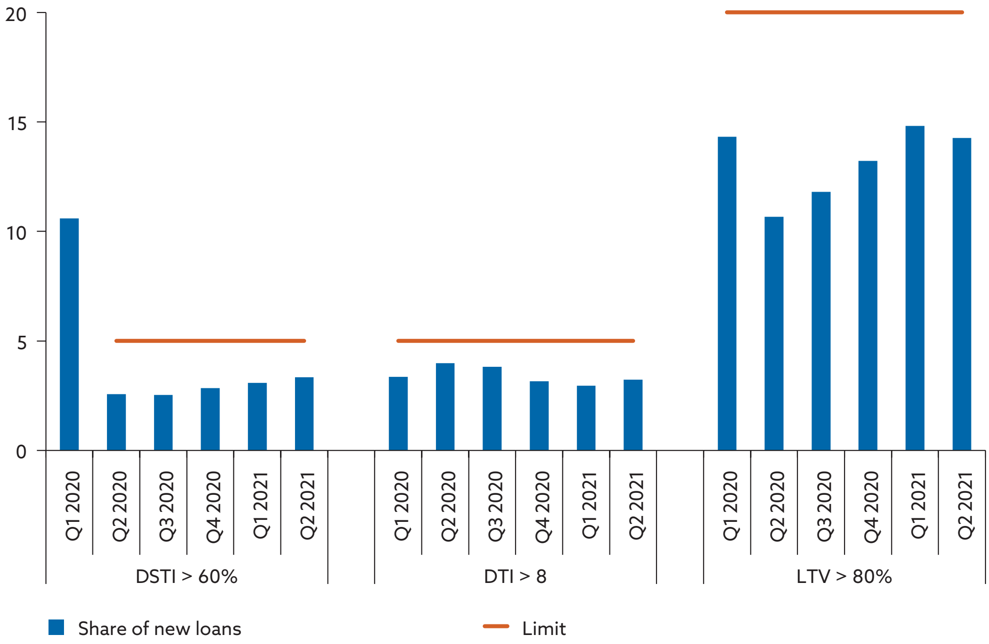
[20] This trend is described in the NBS Analytical Commentary entitled "Charakteristiky úverov domácnostiam v prvom polroku 2021" (Characteristics of household loans in the first half of 2021).

cants with higher education. High DSTI ratios are typical for lower income borrowers who apply for further consumer credit even while indebted. Competition pressure has also been mounting, as evidenced by further interest rate reductions.[21] In addition, the share of mortgages with a maturity of 30 years or more has been rising.

Chart 5

Increasing application of exemptions to regulatory lending limits

The share of loans taken up under exemptions applied on new loans (including significant increases in existing borrowing; percentages)



Source: NBS.
Note: DSTI – debt service-to-income ratio; DTI – debt-to-income ratio; LTV – loan-to-value ratio.

Housing loan debt growth has been increasingly contributing to the rise in borrowers' indebtedness. In the period from July 2020 to June 2021, mortgage increases and remortgages accounted for more than half of the increase in total mortgage loans, and their share of the total increased significantly in year-on-year terms.

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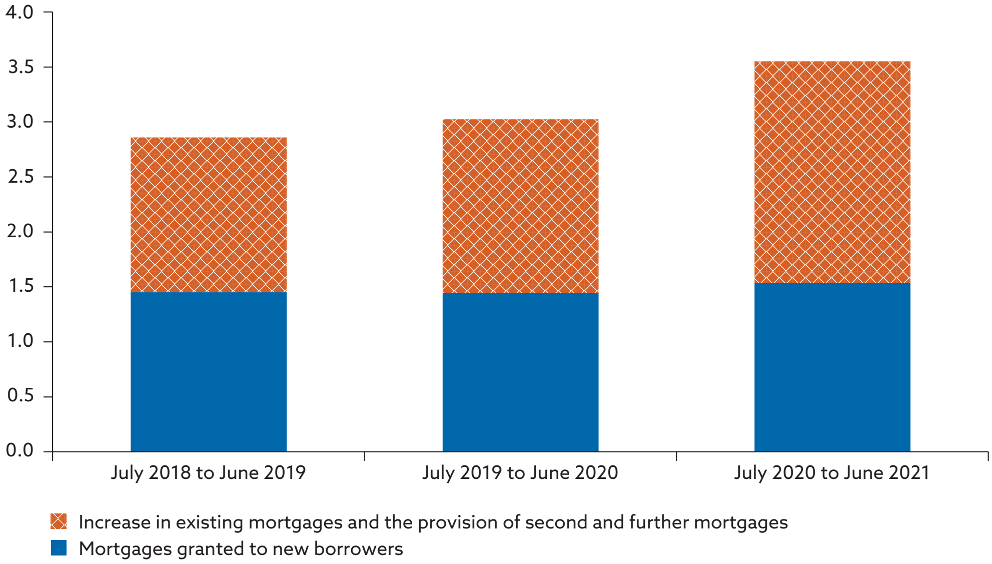
[21] The average interest rate on new housing loans has been falling slowly and dropped to 0.9% in September 2021. The average rate charged by medium-large and smaller banks, which traditionally compete with each other by reducing the cost of borrowing, was 0.5% in September. Compared with other euro area countries, Slovakia has long reported the third lowest interest rate on housing loans and has the second lowest annual percentage rate of charge.

Chart 6

The increase in the amount of new housing loans was driven mainly by an increase in the debt of existing borrowers

New housing loans originated in the given period (EUR billions)



Source: NBS.

Note: The amount of new housing loans is calculated as the difference between the amount of housing loans at the end of the period under review and the expected outstanding value of loans that were in the portfolio at the start of the period under review. This amount includes second and further mortgages as well as refinancings of consumer loans with housing loans.

After experiencing a pandemic-induced slump, consumer credit is gradually returning to a moderate rate of decline

The consumer credit market is gradually stabilising, with the annual rate of decline in total consumer credit standing at -6.9% in September 2021. Consumer lending plummeted following last year's outbreak of the pandemic, whose impact on indicators is still being felt. A major factor behind the slump was the actual pandemic containment measures, which reduced spending opportunities. After the second wave, the market began to strengthen, and since around June it has stabilised. The monthly declines in total consumer credit have fallen almost to zero, meaning that the amount of consumer credit repaid each month is only slightly more than the amount provided.[22] Credit card and overdraft loans have also steadied, and similar signs are present in the non-bank sector.

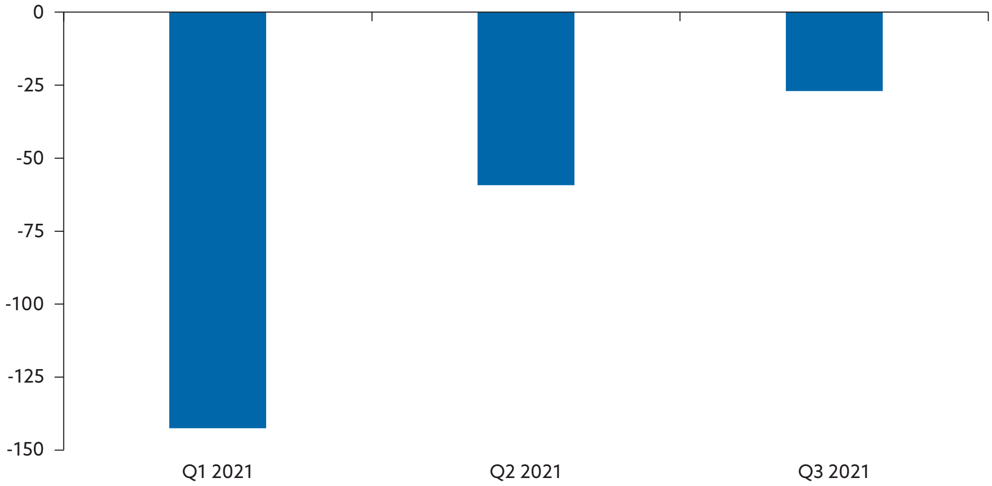
[22] If this trend is maintained, the annual rate of change in total consumer credit could stabilise at around -2.2% by mid-2022.

NÁRODNÁ BANKA SLOVENSKA EUROSYSTÉM

Chart 7

The decline in consumer credit has moderated sharply

Decline in the consumer credit portfolio by calendar quarter in 2021 (EUR millions)



Source: NBS.

The average interest rate on consumer credit was fluctuating close to 8.0% for around three years, before it decreased more sharply in September 2021, to 7.3%, owing to the impact of certain banks' marketing campaigns. Compared with Slovakia, around one-third of euro area countries have higher consumer credit interest rates.

3 Credit risk

3.1 The expiry of statutory loan moratoria has not caused any notable rise in the non-performing loan ratio

Since the expiry of pandemic-related statutory moratoria on loan repayments, the non-performing loan (NPL) ratio has remained more favourable than originally expected; however, the NPL ratio for retail[23] loans is still increasing

Statutory moratoria provided effective relief to firms and households whose financial position was temporarily undermined by the pandemic crisis. Since the expiry of the moratoria, most of the borrowers who took this option are now back to repaying their loans on schedule.

The NPL ratio for corporate loans that were under a statutory moratorium has gradually stabilised. By end of September 2021 this ratio was close to 3%, after ceasing to show any significant increase since June 2021. Non-performing post-moratorium loans make up around 0.3% of the total corporate loan book. But corporate loans that were not under a moratorium have also defaulted. From September 2020 to September 2021 the loans that defaulted and were not under a moratorium accounted for 0.6% of total NFC loans.

In the retail loan book, by contrast, the NPL ratio for loans that were under a moratorium is still increasing. As at September 2021 this ratio stood at 3.5%, representing 0.4% of the total retail portfolio. Nevertheless, this ratio is still slightly below the level that in late 2020 households themselves were expecting.[24] The increase in the NPL ratio for post-moratorium loans is accounted for largely by consumer credit, but also to some extent by housing loans. In the case of consumer credit, the increase stems mainly from a gradual deterioration in the situation among loans that emerged from moratoria at an earlier date, which is connected with an increase in the share of past due loans (17% as at September 2021). As for the gradually increasing NPL ratio for mortgage loans, it is partly caused by increasing

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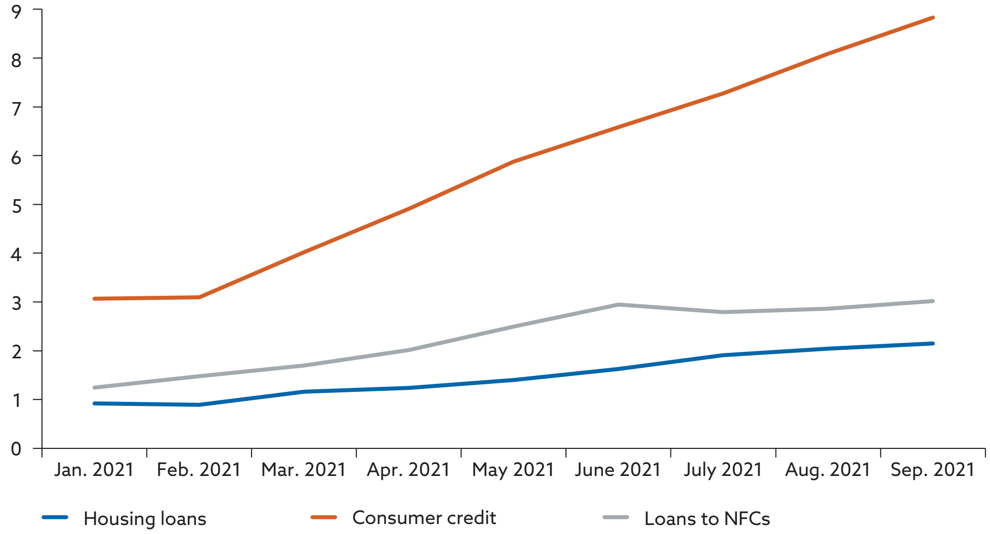
[23] For the purpose of this report, the retail sector comprises households, sole traders and non-profit institutions serving mostly households.

[24] According to a December 2020 survey of indebted households about the impact of the pandemic crisis on their financial situation, conducted for NBS by the agency FOCUS on a sample of around 1,000 respondents. The survey results are published in an NBS Analytical Commentary entitled "Prieskum zadlžených domácností – výsledky šiestej vlny" (Survey of indebted households – results of the sixth wave).

repayment difficulties among loans that emerged from moratoria in recent months, even though the total amount of such loans is low.[25] A significant proportion of these loans were under moratorium extensions agreed additionally between the borrower and bank following the expiry of the original statutory moratorium.

Chart 8
NPL ratio for loans that were under moratoria

NPL ratio for loans that were under statutory moratoria related to the pandemic crisis (percentages)



Source: NBS.

The overall NPL ratio for the banking sector's retail loan book has maintained its long-term downtrend. The NPL ratio for corporate loans is also falling, though after increasing slightly in the spring. For the banking sector's retail loans, the NPL ratio decreased to 2.1% by the end of September 2021, and for corporate loans it fell to 3.1%. In the portfolio of government-guaranteed loans to NFCs, the NPL ratio also remains low (0.6%). There are, however, some indicators pointing to possible repayment difficulties. For example, the net default rate for consumer credit has been rising slightly since June 2021, when it fell to its lowest level in eight years. In the corporate sector, the number of bankruptcy proceedings started in the first three quarters of 2021 was one-half higher compared with the same period of the previous year.

[25] The NPL ratio for mortgage loans that emerged from moratoria in August or September 2021, was 6.1%. However, the total amount of loans that ceased to be under moratoria in those months is relatively low (€105 million).

3.2 The pandemic crisis has not so far impaired corporate solvency to a significant extent[26]

Analysis has shown that although the pandemic crisis dented firms' profitability to some extent during 2020, it did not cause significant scarring to corporate solvency. That it did not do so was due mainly to firms' ability to offset a large part of their revenue losses by cutting costs. Public support measures also helped cushion losses. As a result, the share of loss-making firms increased only slightly compared with the pre-crisis period, and solvency was only marginally affected. Nevertheless, the crisis may yet have a lingering impact in the form of some further corporate defaults. It should also be noted that the analysis covers only developments in 2020, while some sectors may also have been scarred by developments in the subsequent period.

Pandemic-related public support measures were effective in mitigating the impact of the crisis on the corporate sector, in particular with respect to medium-sized and large enterprises. Without these measures, the impact on firms' profitability would have been one-half larger. Further showing that the crisis has not had a significant downward impact on corporate solvency is the fact that instruments to shore up firms' capital have not had to be employed to the same extent that they have in certain other EU countries.

These conclusions are analysed in further detail in the text below.

Firms offset much of their revenue losses by reducing costs and partly also by recourse to public support

In 2020 the pandemic crisis caused revenue losses across all categories of firm size. Most firms reported an annual decline in revenues of up to 10%, and a quarter of micro enterprises saw their revenues slump by more than one-half. Among small and medium-sized enterprises (SMEs) in particular there was a significant decline in revenues. Micro enterprises actually reported a smaller average decline in revenues, but in

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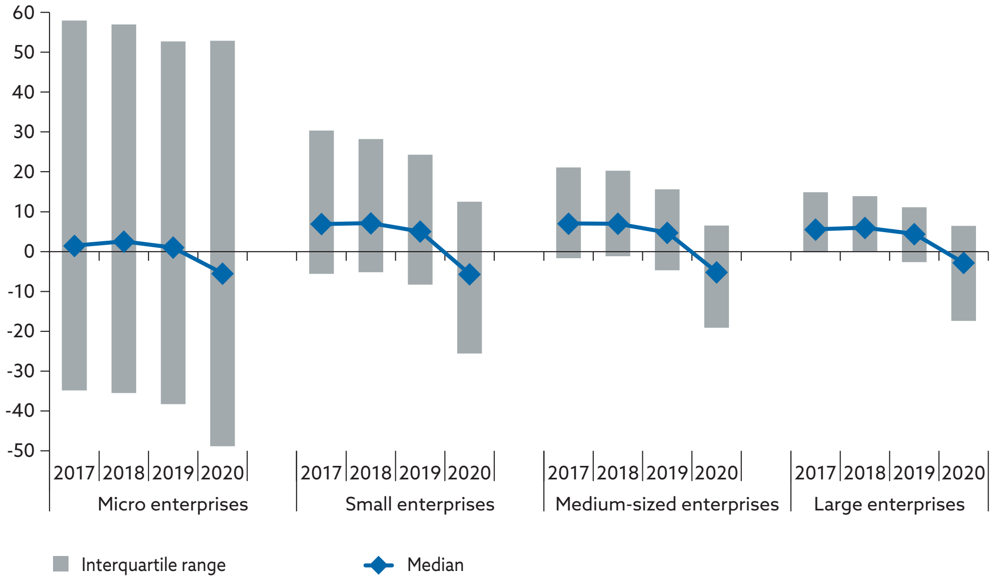
[26] This section contains an analysis of the impact of the crisis on the corporate sector. This analysis is based on detailed data from individual firms' financial statements as at end-2020. Two types of impacts in particular are analysed, according to the effect on profitability. If the firm remained profitable, the impact is deemed to be only short term (one-off). If, however, the crisis caused the firm to make a loss, the impact is treated as longer-term since the loss will lead to a deterioration in the firm's solvency (owing to a reduction in equity capital).

this segment the situation was more heterogeneous and revenue growth was already slowing even before the crisis.

Chart 9
SMEs experienced the largest decline in revenues

Distribution of annual rate of change in revenues by NFC size, and its evolution over time (percentages)



Source: BISNODE.

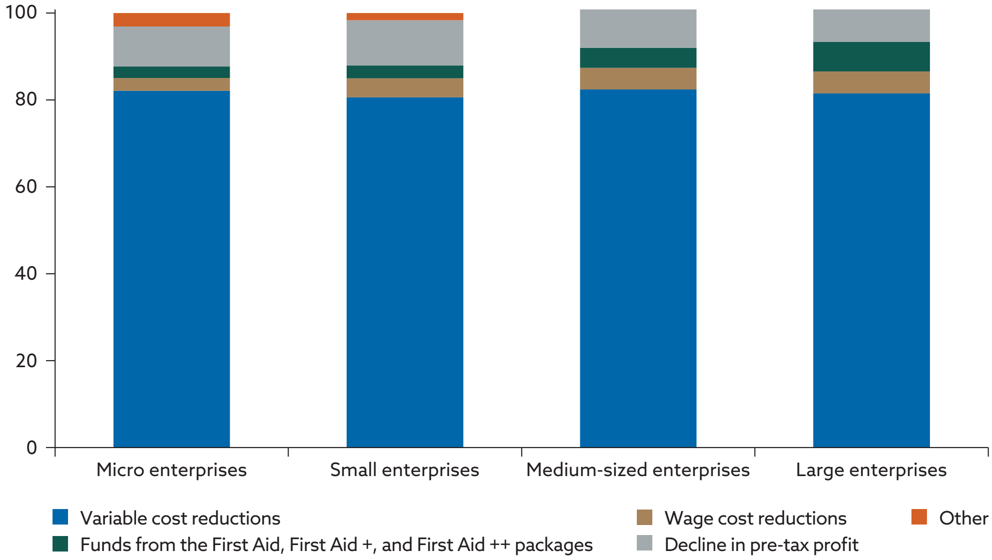
In 2020 firms were to a large extent able to offset revenue losses by cutting costs. Across different categories of firm size, this compensation rate ranged between 85% and 87%.[27] The savings were made largely in current variable costs, while wage cost reductions made a relatively small contribution. Financial assistance received from public support schemes (First Aid, First Aid +, and First Aid + +) allowed firms to offset between a further 3% to 7% of their revenue losses. The extent of revenue loss offset through cost-cutting and public support measures was highest among large and medium-sized enterprises. The remaining, non-offset share of revenue losses translated almost entirely into profit declines or losses.

[27] The offsetting of revenue losses by cost-cutting was far greater than we originally assumed for the November 2020 Financial Stability Report.

Chart 10

Firms largely offset revenue losses by cutting costs

Forms of revenue loss offset broken down by NFC size category (percentages)



Sources: BISNODE, Ministry of Labour, Social Affairs and Family of the Slovak Republic.
Note: The chart shows the share of each item in the total year-on-year decline in revenues in 2020.

Thanks to the significant offsetting of revenue losses, the pandemic crisis did not jeopardise corporate solvency or liquidity in 2020, but was reflected in lower profitability

In most firms, the non-offset part of their revenue losses had a downward impact on their profitability; nevertheless, this did not result in significant losses in the whole corporate sector. Since only around one tenth of firms' overall revenue losses were not offset, most firms remained profitable but with their profit having declined in year-on-year terms. The average return on equity (ROE) fell only slightly from 9.5% to 9.2%.[28] Revenue losses were more severe among firms that had lower profitability even before the outbreak of the crisis. But even after the pandemic-related slump, their median ROE was still positive at the end of 2020.[29]

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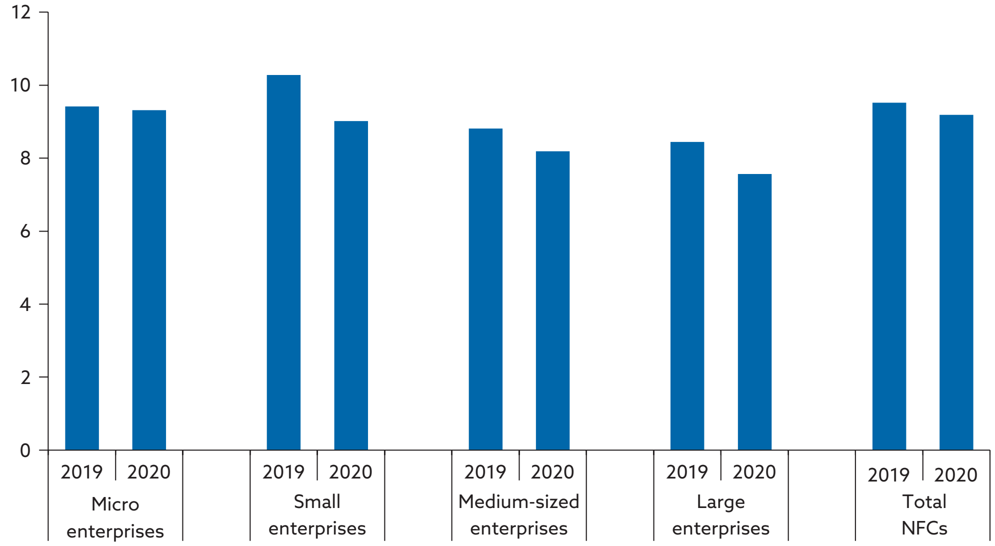
[28] The data relate only to firms that had positive equity.

[29] In 2020 the median ROE of firms whose revenues fell by more than 20% was 2% (in 2019 the median ROE of the same firms was 2.6%).

Chart 11

Corporate profitability has fallen only slightly during the crisis

Median ROE broken down by NFC size category (percentages)



Source: BISNODE.
Note: The median ROE calculation does not include firms with negative equity.

What is important from a longer-term perspective is that the pandemic crisis has not jeopardised most firms' solvency. For the majority of firms, the crisis has had only short-term effects, principally in the form of a decline in profit and the shelving of planned investments in production modernisation, innovation and streamlining. On the other hand, the crisis has not caused a longer-term deterioration in their situation (a decline in equity[30]). Compared with the pre-crisis period of 2019, the share of loss-making firms increased by only 2.2 percentage points in 2020.[31] The crisis moreover has not caused any significant increase in the number of firms with negative equity – their share increased by a marginal 0.3 percentage points in 2020.[32]

30 A firm's equity declines when it makes an overall loss.

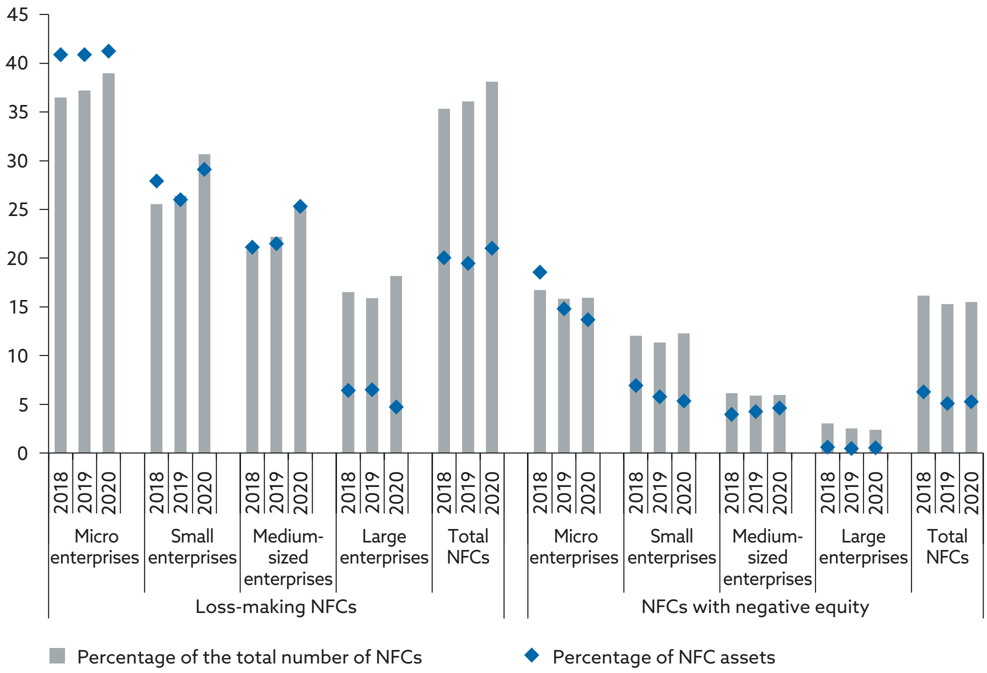
31 The share of firms that ended the year with a loss increased to 34.7% in 2020, from 32.5% in 2019.

32 On the other hand, the equity of loss-making firms decreased by around 10% overall, with individual declines of between 30% and 40% not being exceptional. Virtually the same effect, however, was seen 2019, so it cannot be directly attributed to the pandemic crisis.

Chart 12

Despite the pandemic crisis, the share of loss-making NFCs has increased only slightly

Loss-making NFCs and NFCs with negative equity as percentages of the total number of NFCs broken down by size category (percentages)



Source: BISNODE.

The pandemic crisis has therefore not so far caused permanent scarring to the corporate sector. The firms that ended 2020 with a loss were mainly those whose longer-term prospects had been questionable even before the crisis. Two-thirds of the firms that ended 2020 with a loss were already loss-making or reporting negative equity even before the crisis. Whereas these firms did not have a sufficient margin to offset revenue losses, firms that were profitable prior to the crisis did have some margin to do so. Even if these firms ended with a loss, their year-end losses were around half the level of those reported by firms that were loss-making before the crisis.

Among the firms hardest hit by the crisis, some that had previously been profitable suffered such revenue losses that they became loss-making in 2020. These firms were found mainly in the accommodation and food service activities sector and in the arts, entertainment and recreation sector. These sectors recorded the largest increase in loss-making firms. The firms in these sectors that became loss-making faced far greater revenue losses than did those that remained in profit.

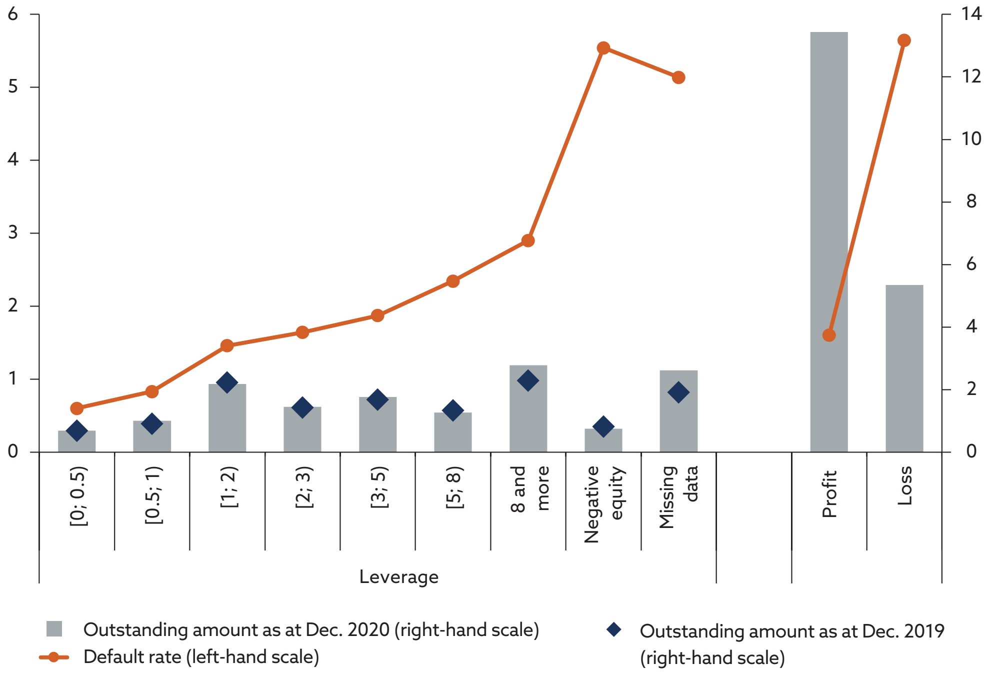
On a positive note, the debt-to-equity ratio[33] actually fell slightly during 2020.[34] This ratio is significant in regard to firms' debt servicing capacity. The only firms whose debt-to-equity ratio slightly increased were those that took out government-guaranteed loans. Most of these firms, however, took out guaranteed loans as a precautionary step, not because of a deterioration in their solvency.

The debt-to-equity ratio in conjunction with a balance sheet loss or negative equity was the main factor behind the higher loan default rate. Loans to firms that reported a loss at the end of 2020 constituted 28% of all NFC loans. Loans to firms with negative equity accounted for a low share (5%). Moreover, in the case of bank-financed firms, the crisis did not lead to a notable increase in the share of loans to firms with a higher debt-to-equity ratio. It should be noted that defaults on loans to NFCs can also arise with a certain lag. So although the crisis has not given rise to a significant deterioration in corporate solvency, it may yet have a tail effect in the form of additional corporate defaults.

Chart 13

The NFC loans that defaulted most frequently during the crisis have been loans to highly leveraged or loss-making firms

Gross default rate and outstanding amount of loans to NFCs in the respective category (percentage; EUR billions)



Source: BISNODE.

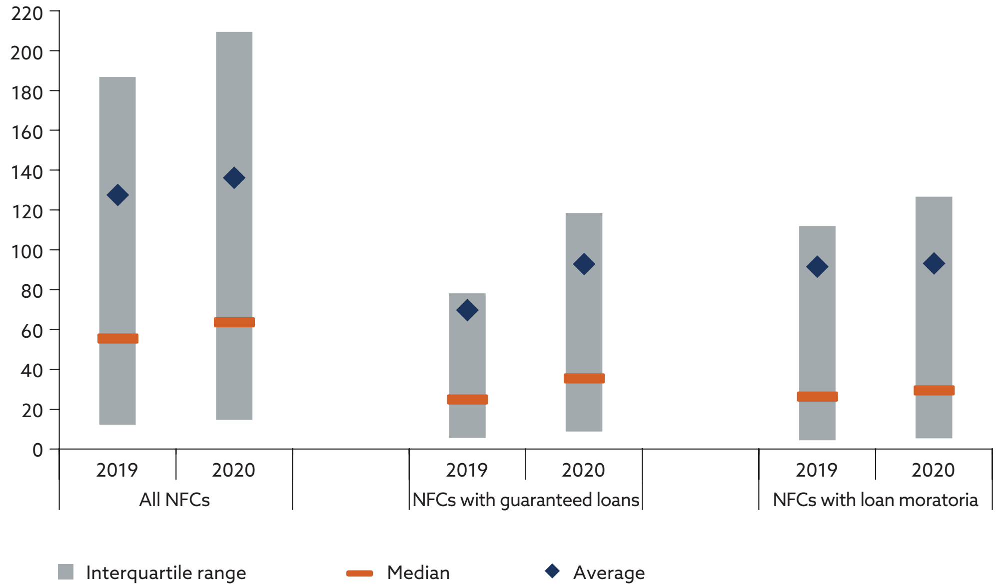
33 This is actually an indicator of leverage or indebtedness.
34 The median value of this ratio fell from 133% in 2019 to 126% in 2020.

Thanks partly to the significant offsetting of revenue losses, the pandemic crisis has not caused significant liquidity difficulties, either. On the contrary, corporate liquidity has actually increased during the crisis. In this regard, statutory loan moratoria and government-guaranteed loans have also played a significant role. Both of these options were taken up mainly by firms that were in weaker liquidity shape going into the crisis. As a result, these firms managed to maintain their liquidity positions. Firms that took out government-guaranteed loans even managed to slightly improve their liquidity, further confirming the fact that some of these firms took this option partly for precautionary reasons.

Chart 14

Corporate liquidity has increased despite revenue losses

Distribution of liquidity ratio values (percentages)



Source: NBS, and BISNODE.
Note: The liquidity ratio is defined as the ratio of financial assets (cash and bank deposits) to short-term liabilities.

Box 1
The impact of rising energy prices on firms' financial position

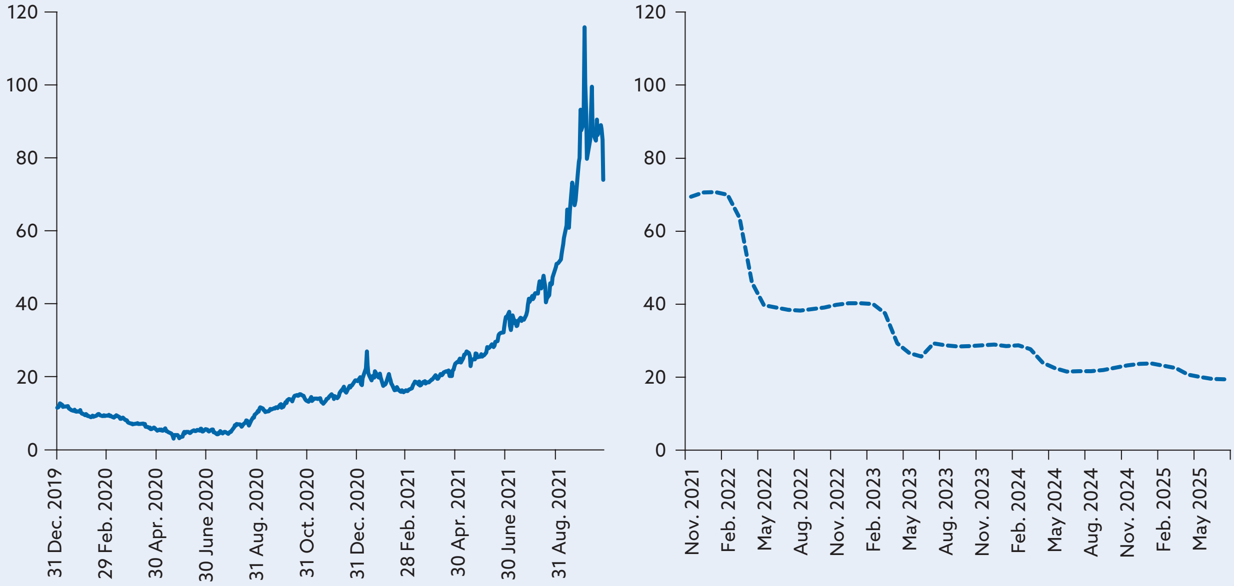
Energy prices have risen severalfold owing to both demand and supply factors

Energy prices on global markets have increased sharply during 2021. In Europe in particular, energy price increases and price volatility became extreme in September and October. Wholesale prices of gas and electricity for European consumers climbed to more than four times the level at which they started the year. This surge stems from an exceptional interplay of several structural and temporary factors.

Chart 15

Natural gas prices accelerated from late summer and are not expected to drop again until winter is over

Left-hand chart: Dutch TTF natural gas price (EUR/MWh)
Right-hand chart: Dutch TTF natural gas futures prices (EUR/MWh)



Source: Eikon.

The IMF expects[35] that high energy prices will be temporary, although a full reversion to pre-spike levels is not envisaged. Given the low natural gas inventories in European storage facilities and the approach of winter, gas prices are expected to remain elevated during coming months. With the onset of spring, however, prices of gas and of energy more broadly are projected to drop, as indicated by futures contracts maturing at around that time.

The initial impetus behind the energy price surge was rising demand for energy and the failure of supply to keep up with it because of several reasons. The principal demand- and supply-side causes of the price growth are shown in Figure 1. As regards EU electricity prices, their rate of increase has closely mirrored the natural gas price trend, owing partly to the specific regulation of price-setting (the so-called pay-as-clear system), in which the electricity price is derived from the marginal unit price of inputs, in this case the gas price. The rise in production costs of thermal power stations was accentuated by emission permit price increases.

[35] IMF Blog post entitled "Surging Energy Prices May Not Ease Until Next Year", 21 October 2021.

Figure 1

Main drivers of energy price growth

Demand factors	Supply factors
• Rapid economic recovery after the pandemic-induced recession • Below-average pre-winter gas inventories • Climatic factors – The northern hemisphere's severe winter cold and summer heat boosted heating and cooling demand. – Below-average wind generation in northern Europe had to be compensated for by thermal power generation.	• Declining investment in fossil fuel extraction in recent years due to falling fossil fuel prices and pressure to transition to green alternatives • Decline in gas production owing to exceptional shutdowns of technical infrastructure • Reduction in supplies from Russia

Source: IMF.[36]

The impact on firms will depend on the given firm's options for mitigating the effects of rising energy prices

The sharp rise in energy prices may adversely affect firms' financial position. This applies mainly to firms in energy-intensive industries, i.e. firms whose energy costs constitute a major part of their total costs. Such industries include in particular petroleum refining, the chemical industry and fertiliser manufacture, the metal industry (mainly the manufacture and processing of iron, iron alloys, steel and aluminium), the manufacture of paper, cement, glass, plastics and veneer sheets, and the food industry. But climbing energy prices may also weigh on firms in other industries, especially firms with lower margins or firms already hard hit by the pandemic crisis.

The adverse impact of rising energy prices can be partially mitigated by using hedging instruments. However, hedging instruments, by which an energy price can be agreed for a future point in time, are used mainly by some larger enterprises. Their effectiveness in cushioning the impact of the previous sharp rise in energy prices also depends on the specifics of the given contracts, in particular the conclusion date, the agreed price, and the contract expiry date. Contracts may be more effective where firms agree a lower price also for this approaching winter period, on the expectation that market energy prices will decline somewhat in the following spring.

The increase in energy costs can also be partially offset by increases in input prices. In this way, however, the adverse effects of rising energy prices can be passed on to other industries. An example of how this plays out in other economic sectors is how the price and availability of fertiliser can affect the agriculture sector. The ability to pass on energy cost increases to output prices depends on the type of industry and the position of firms in the given industry. Firms may find it difficult to raise output prices, particularly if they are operating in highly

[36] IMF Blog post entitled "Surging Energy Prices May Not Ease Until Next Year", 21 October 2021.

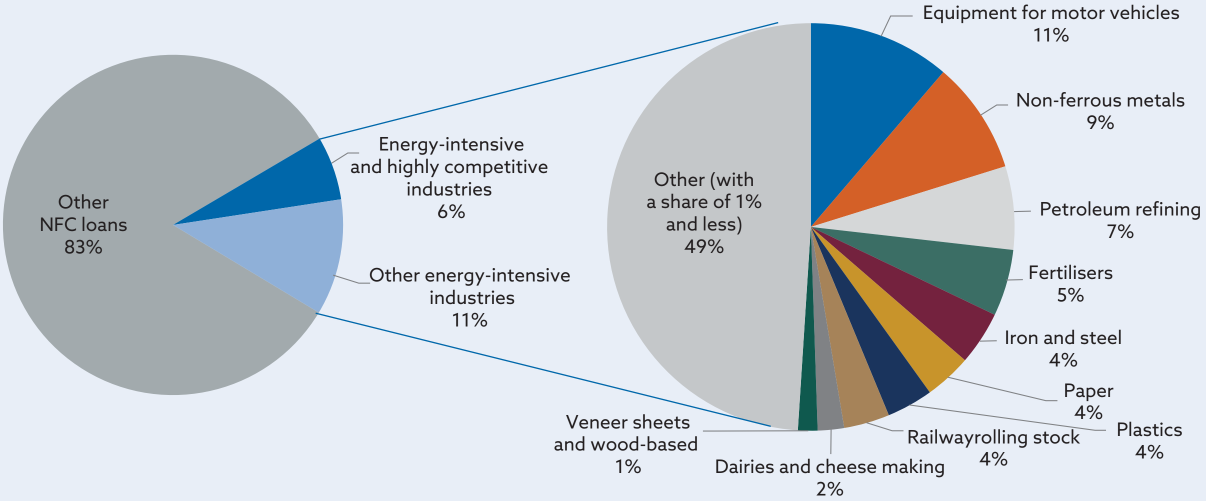
competitive industries. Another way for firms to soften the blow of surging energy prices may be to diversify their activities. This, however, may be more of a problem for firms operating in somewhat niche, energy-intensive areas of manufacturing.

Banks' direct exposure to firms that could be severely affected by sharply rising energy prices is relatively low. Loans to firms operating in industries that are both energy-intensive and highly competitive constitute 6% of total NFC loans. A further 11% of that total comprises loans to firms in energy-intensive industries in which the global level of competition is lower and therefore the option of passing on higher energy prices to output prices may be more feasible. At the same time, bank-financed firms in energy-intensive industries are not showing worse profitability compared with other bank-financed firms. Moreover, in excess of 80% of loans to energy-intensive firms are loans to medium-sized and large enterprises that are better able than smaller enterprises to respond to the evolving situation. Banks, however, may also be indirectly exposed to rising energy prices via lending to firms that have deep supplier relationships with firms in energy-intensive industries.

Chart 16

Loans to NFCs in energy-intensive industries

Left-hand chart: Loans to NFCs in energy-intensive industries as a share of total NFC loans (percentages)
Right-hand chart: Loans to NFCs in the most significant energy-intensive industries as a share of total loans to NFCs in energy-intensive industries (percentages)

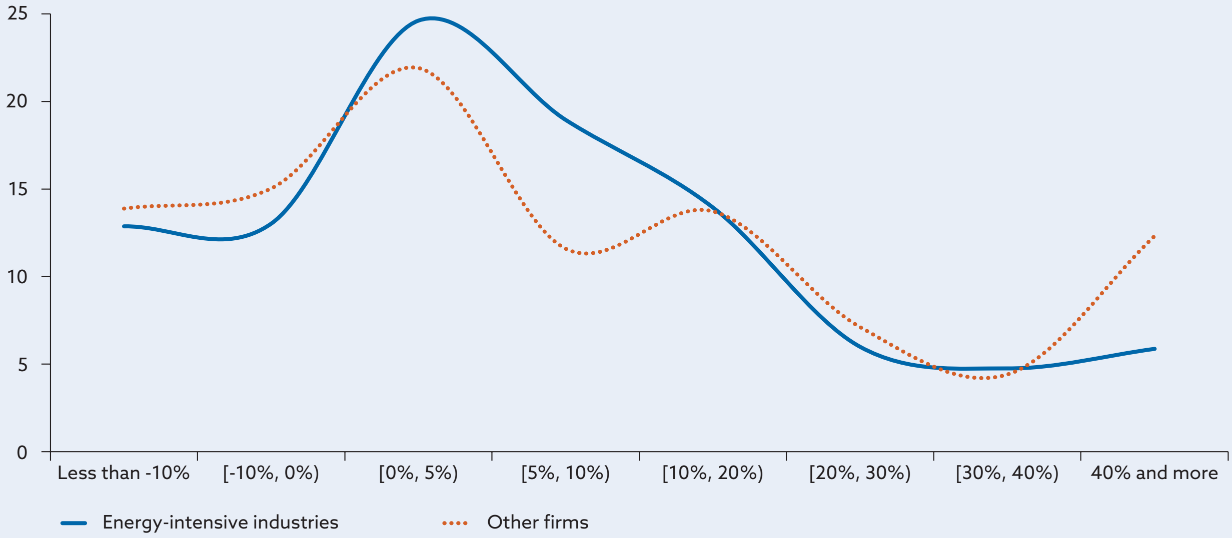


Source: NBS.
Note: The list of energy-intensive industries is provided in the European Commission's Guidelines on State aid for environmental protection and energy 2014-2020 (2014/C 200/01).

Chart 17

The profitability of NFCs in energy-intensive industries is not notably worse than that of other NFCs

Distribution by ROE values of loans to NFCs in energy-intensive industries and loans to other NFCs, as at December 2020 (percentages)



Sources: NBS, and BISNODE.
Note: The chart shows only loans to firms for which an ROE value was available, which accounted for 93.4% of total NFCs loans. The list of energy-intensive industries is provided in the European Commission's Guidelines on State aid for environmental protection and energy 2014-2020 (2014/C 200/01).

3.3 The pandemic crisis has also weighed on the commercial real estate (CRE) sector

Increased lending to the CRE sector

The CRE sector's leading position in the banking sector's corporate loan book strengthened further in the year to end-September 2021. By the end of that period, loans to the CRE sector represented nearly 24% of total NFC loans.[37]

At the same time, this sector is a potential source of significant credit losses. Both the sector itself and its financing are highly concentrated. The concentration is evident, on the one hand, in the relatively small number of large loans and, on the other hand, in the domination of the market by a few large participants. The CRE sector's performance is directly linked to

[37] Loans to the CRE sector increased strongly during the year, and their annual growth rate in the third quarter of 2021 was attacking 12%.

activity and sentiment in the corporate sector, which makes it relatively sensitive to adverse economic developments. During the global financial crisis, the CRE sector contributed significantly to the increase in non-performing loans.

The pandemic crisis has had a heterogeneous impact across CRE segments

The key concerns in the CRE sector relate to developments in the office segment, while the most favourable situation is in the industrial and logistics segment. Going forward, the CRE sector's performance will be affected mainly by the strength of the economic recovery.

Even during the pandemic crisis, the logistics and industrial segment has reported high demand. Demand for these types of premises has reflected mainly an increase in internet sales and an expansion of production capacities. Optimism has spilled over into new construction, including speculative activity, as well as into rental activity and prime yields.

By contrast, the retail segment is facing several challenges. As a consequence of the pandemic, online sales have increased their share of total sales. The structure of tenants is also changing, as some of them, owing to persisting uncertainty and the depletion of their financial reserves, have been forced to postpone or suspend expansion plans. Rental contracts are being renegotiated in order to keep tenants[38] and lessors are offering tenants financial support in the form of loans. There is also increasing investor demand for smaller development projects featuring a smaller number of tenants on longer-lasting contracts. Overall, the pandemic situation has led to a decline in rents, and how they trend going forward will depend on the impact of recently completed retail projects.[39]

In the office segment, the vacancy rate is gradually increasing. Against a backdrop of increasing remote working and suspended expansion plans, firms are tending to move into premises that are of higher quality but have a smaller area. The vacancy rate has risen above 12%, owing mainly to the completion of new, only partly leased development projects and generally subdued rental activity. A future impact of the pandemic may be the gradual renegotiation of older rental contracts. Several property developments currently under construction have an occupancy rate of less than 50%, which will put upward pressure on the vacancy rate. Amid subdued demand and ample supply, rental prices have fallen. Prime yields have maintained their level only in Bratislava's Central Business District and

38 The measures applied include, for example, turnover rents and phased increases in rents.

39 Nivy Station, and Eurovea 2.

in its centre, where there is a good mix of tenants and longer-term rental contracts. Elsewhere, the situation has deteriorated, as reflected in an increase in the prime yield. Non-prime projects in particular may prove to be riskier, since prime Class A properties have been attracting the bulk of new demand. Firms are gravitating towards properties that are modern, higher-end and ‘green certified’.

4 Household indebtedness

4.1 Household indebtedness is again accelerating

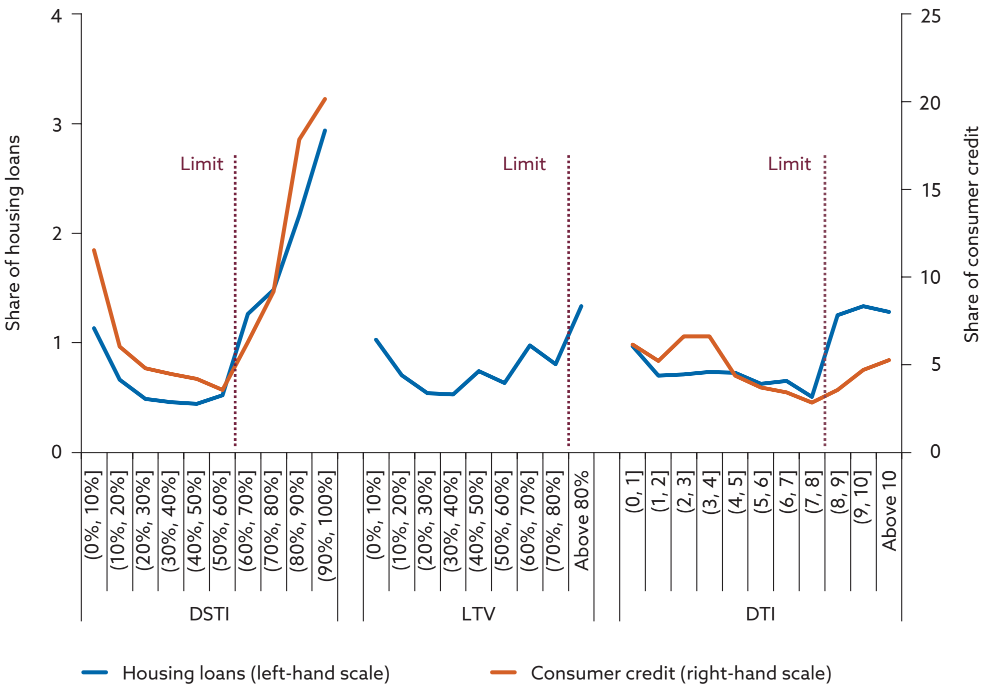
The risks associated with increasing indebtedness are being largely contained by regulatory lending limits

The rapid increase in Slovak households' indebtedness has long been identified by Národná banka Slovenska as one of the main risks to financial stability. Examples from other countries show that excessive credit growth can result in serious banking and economic crises. The key measure for mitigating the risk of excessive borrowing is to ensure that loans are originated in accordance with borrowers' financial situation. NBS has therefore phased in several limits and requirements in regard to banks' assessment of borrower creditworthiness.

Chart 18

Loan riskiness breaks right at the regulatory limit thresholds

Non-performing loans and loans past due by more than 30 days as a share of total housing (left-hand scale) or of total consumer credit (right-hand scale), broken down by DSTI ratio, LTV ratio and DTI ratio (percentages; percentages)



Source: NBS.
Note: DSTI – debt service-to-income ratio; DTI – debt-to-income ratio; LTV – loan-to-value ratio.

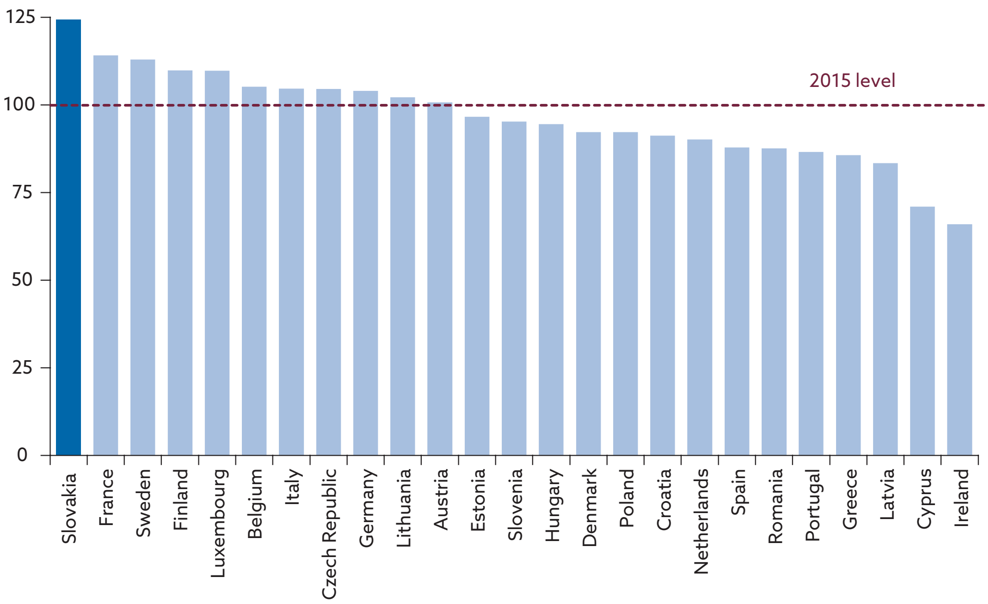
The pandemic crisis showed that the existing lending limits were, in general, well configured given the evolving situation. This is confirmed by the break in loan riskiness that occurs at the limit thresholds. Loans provided at conditions exceeding the regulatory limits[40] are far more likely to become distressed than are other loans. In the case of both mortgage loans and consumer credit, distress has been more common where loan repayments constitute a large part of the borrower's income. Shortly before the crisis broke out, NBS capped the DSTI ratio at 60% (with the income component of the ratio reduced by the minimum subsistence amount) and permitted only a small exemption to that limit. The crisis has proved the correctness of this step. Loans with a DSTI ratio above the regulatory limit are three times more likely to become distressed than are loans with a DSTI ratio below the limit.

With the gradual fading of the pandemic crisis, increasing household indebtedness has again come to the forefront of attention. In contrast to economic and labour market developments, the housing financing market has been only slightly affected by the pandemic crisis and, with the labour market rebounding, it has picked up sharply again since March 2021. In the post-crisis period, mortgage lending has returned to a double-digit level of growth (10.7% in August 2021) not seen since 2019. The aggregate debt of Slovak households has increased by 8% in a year. Household debt growth has for a long time been outpacing income growth.

Chart 19

The household debt-to-income ratio in Slovakia has recorded its sharpest rise in five years

Ratio of household debt to gross disposable income
(index: 2015 = 100)



Sources: ECB, and ESRB.

[40] The loans may have been provided under permitted exemptions to the limits or they may have been provided in the past when some of the limits were looser.

Slovak households' debt is increasing sharply also by international standards. Over the period from 2015 to 2020, the household debt-to-income ratio increased more markedly in Slovakia than in any other EU country. It was a similar story with the household debt-to-GDP ratio.

On a positive note, rapid credit growth is being partially driven by income growth

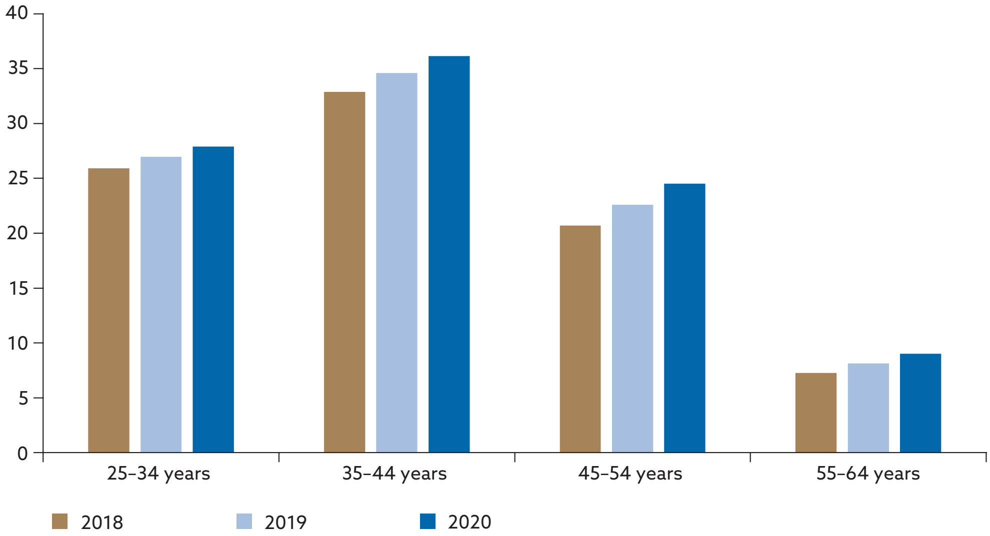
What is positive from a financial stability perspective is that income growth has been a significant factor behind the increase in household indebtedness.[41] Income growth can be seen as the most significant fundamental of sound growth in the credit market. According to our estimate, housing loan growth would be 1.5 percentage points lower if income were not increasing. Another key factor is property price growth.[42]

Household indebtedness is also under upward pressure from the increasing share of mortgage holders. This share has recently been increasing most sharply in the 45–54 age cohort.

Chart 20

The highest share of mortgage holders is in the 35–44 age cohort

Share of population repaying a housing loan broken down by age cohort (percentages)



Sources: NBS, and SO SR.

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[41] In the decomposition of credit growth, the impact of individual factors (income, property price, maturity, and interest rate) is estimated on the basis of the difference between the amount of the loan (or its increase) actually granted and the amount of the loan corresponding to the same DSTI and LTV values with no change in the factor amounts.

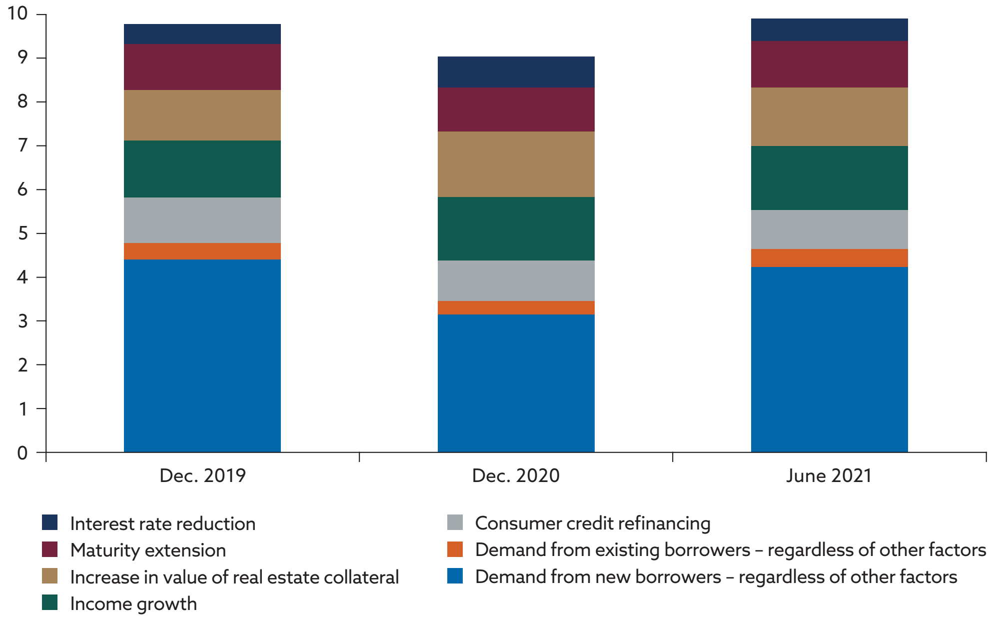
[42] A further factor that can help mitigate the risk associated with rising indebtedness is the increase in households' financial assets during the pandemic. On the other hand, the ratio of financial assets to financial liabilities of households in Slovakia is still one of the lowest in the EU.

On the other hand, the recent growth in refinancing loans has been higher than would be implied by income and property price increases per se and by the increase in the share of indebted households. This is particularly the case in regard to refinancing loans involving a principal increase. Other relatively significant factors behind the credit growth include refinancing loans involving a maturity extension, consumer credit refinancings, and, to a lesser extent, demand from existing borrowers. Absent these factors, mortgage loan growth would have been around 2.4 percentage points lower.

Chart 21

Mortgage loan growth has been strongly supported by increases in income and property prices as well as by refinancing loans involving a maturity extension

Decomposition of the annual growth in loans by individual factors (percentages)



Source: NBS.

Box 2

The impact of declining real interest rates on lending and of real financial asset returns on household borrowing

Strong housing loan growth has long been a prominent trend in both the household sector and the banking sector. It is closely related to increases in household indebtedness and in housing prices (see Section 5 for further details). These trends stem from a combination of several factors, beginning with the labour market and housing prices and including also the propensity for home ownership and household expectations about housing price developments. Representing a separate factor behind households' decision-making are interest rates and returns on households' savings and investments in the context of consumer price developments.

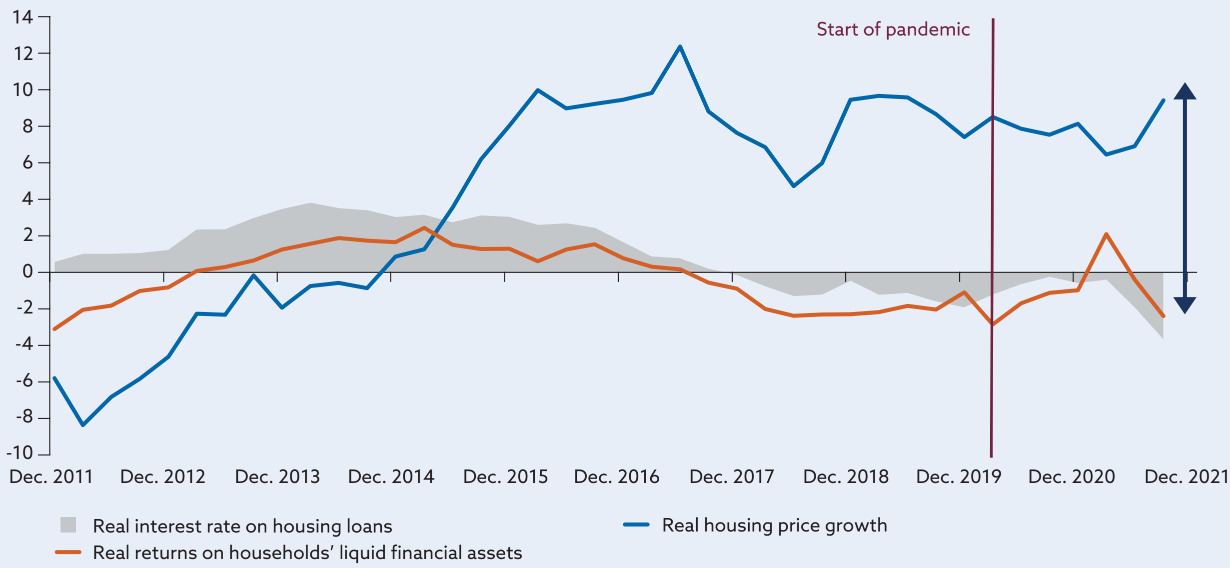
The predominant driver of housing loan demand in recent years has been falling interest rates. They have dropped amid accommodative monetary policy, strong interbank competition that accelerated the activities of financial intermediaries, and decreasing credit risk. Taking inflation into account, real interest rates on new housing loans have been negative since 2018. Hence housing loans have been increasingly advantageous in terms not only of the nominal interest rate, but also of the real interest rate. A similar trend has been seen in returns on households' liquid financial assets.[43] The inflation-adjusted weighted average interest rate on bank deposits and investment funds has been negative since back in 2017. On the other hand, the housing market's increasing momentum during this period has been a source of solid, real appreciation.

These trends in the evolution of lending rates and of real returns on household financial assets have become more pronounced during 2021, as inflation has gathered pace. In this time, the combination of negative real income from household financial assets and negative real interest rates on housing loans has contributed to households' growing appetite to borrow.

Chart 22

Returns on household savings and investments; interest rates on housing loans; and inflation-adjusted housing price growth

Inflation-adjusted interest rates on new housing loans; inflation-adjusted annual housing price growth; and inflation-adjusted annual return on households' liquid asset (percentages)



Sources: NBS, and SO SR.
Note: Households' liquid financial assets are counted as the weighted average of households' bank deposits and their investments in domestic and foreign investment funds.

[43] This analysis covers only bank deposits and investments in collective investment funds, not households' financial assets in the form of life insurance or pension savings. Nor are bank account maintenance fees taken into account.

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Also important is that housing loans are still being provided mainly to medium and higher income groups. This trend has become even slightly more pronounced over the past three years. Both in the population as a whole and in the segment of younger borrowers, a greater proportion of mortgage loans are provided to medium and higher income households. A greater proportion of consumer credit is provided to medium income households.

Chart 23

Housing loans are provided more to medium and higher income households

Distribution of new loans by income group (percentages)

Sources: NBS, and Social Insurance Agency.
Note: The chart shows the distribution in the number of loans provided in Q2 2021 and Q2 2018 by income decile in the whole population of employed people in the given quarter. In cases of two co-borrowers, each borrower is ascribed one-half of the loan. The calculation includes only borrowers who are in employment.

The debt service-to-income (DSTI) ratio is also not changing. In the period following the tightening of the DSTI ratio limit in early 2020, the distribution of DSTI ratio values was no longer changing to any significant extent. Not even the acceleration of credit growth in 2021 has yet put upward pressure on the share of loans with a higher DSTI ratio.

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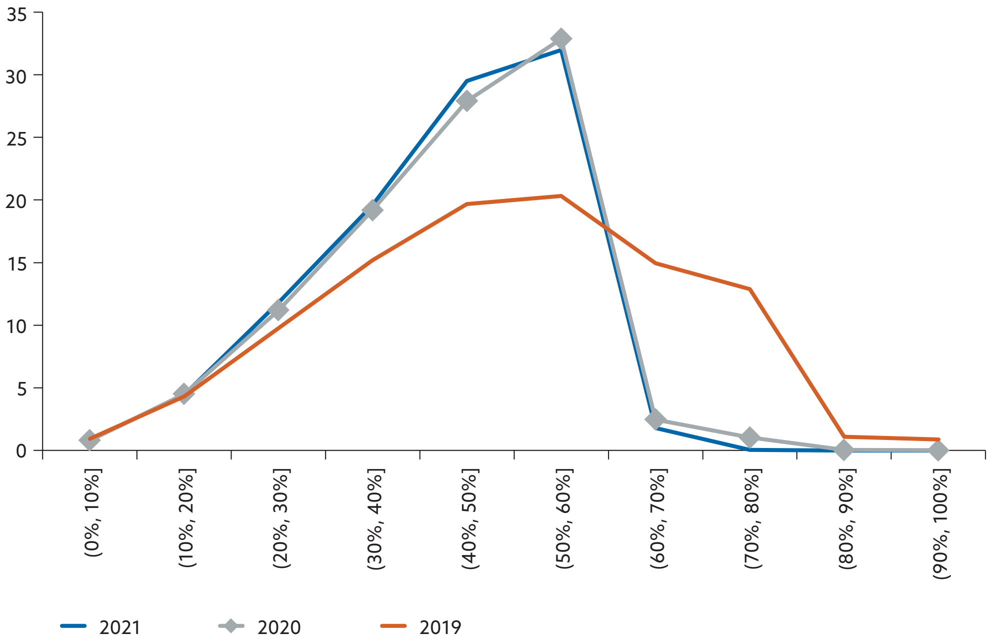
Chart 24

After the DSTI limit was tightened, the DSTI distribution no longer changed significantly

Distribution of new loans and refinancing loans involving a significant principal increase by year provided and DSTI ratio (percentages)



Source: NBS.
Note: DSTI – debt service-to-income ratio.

Risks must be examined in particular where households increase their indebtedness

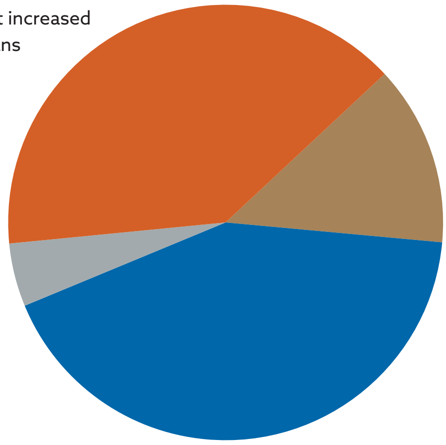
Households that are already indebted are also contributing to the increase in overall household indebtedness. More than 40% of households that had a mortgage as at June 2018 increased their debt over the next three years, by a median amount of €16,000. Besides increasing their borrowing, many households also extended the maturity of their loans, hence prolonging the debt burden. Almost one-third of new loans originated between June 2020 and June 2021 were provided to households that already had housing loan or consumer credit commitments. That share rises to 45% if we include refinancing loans involving a principal increase.

In the context of increasing household indebtedness, the most significant risks are precisely those associated with an increase in existing credit debt, particularly in regard to loan refinancing. Refinancings were already surging in the pre-crisis period and refinancing demand has continued to hold up. Today there is one loan refinancing for every new loan. One-half of loan refinancings involve an increase in the principal.

Chart 25

A large share of indebted households have increased their credit debt over the past three years

Indebted households broken down by type of loan repayment in the period from June 2018 to June 2021 (percentage of number of indebted households)



Source: NBS.
Note: The analysis was conducted at the household level in respect of housing loans and consumer credit. Full prepayment of credit debt includes all prepayments, including those made shortly before the loan maturity date.

Refinancing loans involving a principal increase are in several ways riskier than other loans. Unlike with new loans, growth in individual principal-increasing refinancing loans is outpacing growth in the borrower's income. Therefore, credit debt growth is not simply a corollary of rising income; households are also increasing their debt through maturity extensions, and to an increasing extent they are close to the DSTI ratio limit.[44] Principal-increasing refinancing loans are provided more frequently to lower income borrowers and are more often secured by more than one piece of real estate.[45]

The risks associated with increasing household indebtedness and the factors mitigating these risks are summarised in Figure 2.

[44] Among principal-increasing refinancing loans provided during the first half of 2021, the share of loans with a DSTI ratio of more than 50% was around 37%; among pure new loans, the corresponding share was only 32%.

[45] Among principal-increasing refinancing loans provided during 2020 and the first-half of 2021, 18% were secured by more than one piece of real estate; among pure new loans, the corresponding ratio was slightly lower (16%).

Figure 2
Summary of risks associated with increasing household indebtedness and factors mitigating these risks

Risk-mitigating factors

- ✓ Credit growth is confined to the mortgage segment, which is less risky than the consumer credit segment.
- ✓ Mortgage loans are still provided mainly to higher income borrowers.
- ✓ Growth in pure new loans is commensurate with income growth.
- ✓ A broad set of limits + the countercyclical capital buffer (DSTI limit tightened just prior to the crisis, not eased during the crisis).
- ✓ Property price growth is reducing potential losses on older loans.
- ✓ The characteristics of distressed loans confirms the correctness of the current calibration of policy instruments.

Risks associated mainly with increasing debt

- ❖ More than one-third of the loan inflow is provided to indebted households – a proportion of households are not amortising their debt.
- ❖ Growth in individual principal-increasing refinancing loans is outpacing growth in the borrower's income and is reliant on maturity extensions.
- ❖ In the case of loan increases, the DSTI is more often 'at the limit'.
- ❖ An increasing share of both new loans and refinancing loans are due to mature after the borrower has reached retirement age.
- ❖ Property price growth is potentially increasing losses on new loans; pressure on property valuations

Source: NBS.

Increases in existing borrowing are moreover associated with an extension of the loan maturity. As these borrowers become older, their indebtedness is increasing and often the maturities of their loans are being postponed until after the borrower is beyond retirement age. In the case of refinancing loans with a principal increase, the fastest rising share is that of loans with a maturity of 30 years or more.[46] The greater the increase in debt, the longer the extension of the maturity. One in every three of the mortgage loans provided today are due to mature after the borrower has reached retirement age.[47] It is already unexceptional to find borrowers who will be well into their seventies when their mortgage loans mature. Data from other countries indicate the share of loans that will mature when the borrower is a pensioner is even higher in Slovakia than in some European countries that have a higher level of household indebtedness. The risks associated with such loans were also pointed out in the May 2021 Financial Stability Report. Notable among them are risks related to a decline in income following retirement, health risks, and perhaps the risk of the borrower's social situation deteriorating in the event of being unable to service the loan after reaching retirement age.

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[46] Over the past two years, the share loans with a maturity of 30 years or more in total new loans and principal-increasing refinancing loans has increased from 44% to 50%.

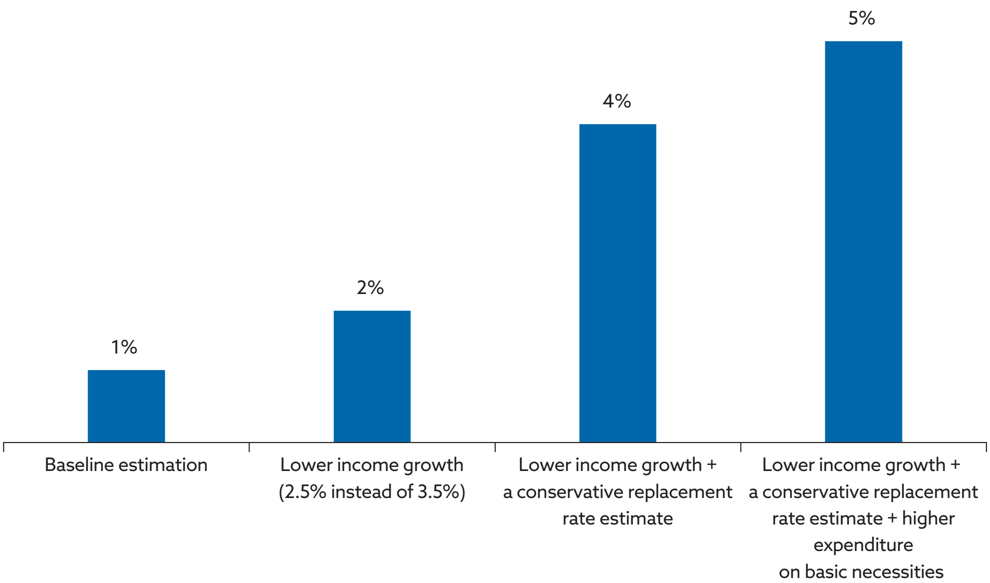
[47] This applies where the co-borrowers on a loan have both reached retirement age. Where only one co-borrower has reached retirement age, that share increases to 50%.

The risk exposure of loans maturing after the borrower's retirement age has been quantified using a microsimulation model.[48] Loans are deemed risky if the borrower's income after retirement age would fall to the point of not being able to cover both debt servicing costs and expenditure on basic necessities. A key assumption is the future increase in the borrower's income and the so-called replacement rate, representing the ratio between the borrower's pension entitlement and pre-retirement earnings.[49] The replacement rate for future pensioners is, however, associated with some uncertainty. We therefore work with two types of estimations. The basic estimation is based on the assumed setting of the pension system. The conservative estimation takes into account unfavourable demographic trends and assumes that these trends will not be offset by an increase in the contribution wedge.

Chart 26

The estimation of the share of loans at risk of default upon retirement depends on the assumptions about future developments

Loans at risk as a share of the total amount of new housing loans provided during the first half of 2021 (percentages)



Source: NBS.

48 This model simulates, on the one hand, the borrower's income growth from the provision of the loans to attainment of retirement age and, on the other hand, the reduction in income resulting from retirement.

49 The replacement rate depends mainly on two factors – current age and income. The amount of future income is estimated as the product of the average salary point, the pension insurance period (assumed to be 42 years) and the pension value. It is assumed that people who retire at a later date will have a lower replacement rate than will those retiring in coming years, owing to a proposal to make the indexing of the pension value slightly lower than average wage growth. Higher income is associated with a lower replacement rate – a result of the solidarity principle in the pension system. This is caused by the calculation of the average personal wage point, which increases more slowly than the average wage.

In the case of recently originated loans, the degree of risk is not elevated at present, but it is exposed to a high level of uncertainty and is heavily dependent on assumptions about future developments. The share of loans subject to the risk that the borrower's pension will not cover both debt servicing costs and expenditure on basic necessities increases strongly under a conservative estimation of the replacement rate and under a scenario of lower growth in the borrower's income. Another risk factor is a potential increase in costs,[50] for example related to medication and health care.[51] This is because relatively many households will have a financial buffer which, although positive, will be low. Borrowers who have a high DSTI ratio when their loan is originated are more likely to become at risk of loan delinquency.

Continuous future income growth is envisaged as one way to mitigate the risk of repayment difficulties among pensioner borrowers. This, however, is highly dependent on the way in which the borrower uses that income. Borrowers should bear in mind that their income will decline after they retire and that the amount of their pension entitlement over a ten-year period is relatively uncertain and will depend on several factors: the sustainability of the first pillar of the pension system, the returns on savings in the second and third pillars, etc. Repayment difficulties among pensioner borrowers can be significantly mitigated if borrowers save on a regular basis and gradually build up a financial buffer that may eventually be used to pay off their loan. Such behaviour is common in a number of EU countries in which loans due to mature after the borrower's retirement age make up a higher share of the loan book. An alternative could be to make unscheduled repayments and thereby repay the loan sooner. However, our analysis shows that unscheduled repayments are not at present very widespread – in recent years they have been made by only around 13% of indebted households (Chart 25). Borrowers more frequently opt for unscheduled repayments during times of higher interest rates and have little incentive to use them in the current low interest rate environment.

The risk of loan repayment difficulties for pensioner borrowers may, however, rise sharply in the future if borrowers use their future income growth to further increase their debt. Such risky behaviour is in fact seen among many indebted households and is often spurred by the activities of

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50 According to the SO SR's family accounts data, pensioners' average expenditure on items that may be designated as essential (food, non-alcoholic beverages, housing, water, electricity, gas, health care, transportation, post, telecommunications, and financial services) amounts to €258 per person per month, while the minimum subsistence amount is set at only €218.06 per person and €152.12 per additional adult household member.

51 According to the SO SR's family accounts data, healthcare costs are two times higher for pensioner than for working age people.

financial intermediaries. Some households are even taking on more debt than their income growth can cover, using the option to extend their loan maturity, sometimes in conjunction with an increase in their DSTI ratio. By increasing their future debt in this way, they may find themselves having insufficient income to cover their repayments.

Národná banka Slovenska is closely monitoring developments in household indebtedness. Not only is the increase in overall debt important, so too are the following: the debt's relationship with economic fundamentals; the identification of factors contributing to credit growth; and analysis of the risk characteristics of both borrowers and their loans. What matters from a financial stability perspective is that risk is being largely mitigated by measures now in place. It is also important that income growth is a significant driver of growth in loans to new borrowers. On the other hand, refinancing loans carry a greater degree of risk, particularly where the loan maturity is extended to beyond the borrower's retirement age. NBS sees some scope for setting clearer rules on how to assess the change in a borrower's income upon retirement. If the medium-term risks continue to increase, the Bank stands ready to respond by adjusting its macroprudential policy settings.

The surge in housing financing in Slovakia is also being supported by certain structural factors. These include in particular taxes and fees related to the purchase, sale and ownership of real estate, which are among the lowest in the EU. In an environment of low interest rates and rising inflation, purchasing real estate may seem to many households to be a sound investment. Another significant factor is underdevelopment of the rental housing market.

5 The housing market and housing affordability

5.1 Housing prices have risen, but housing affordability remains high

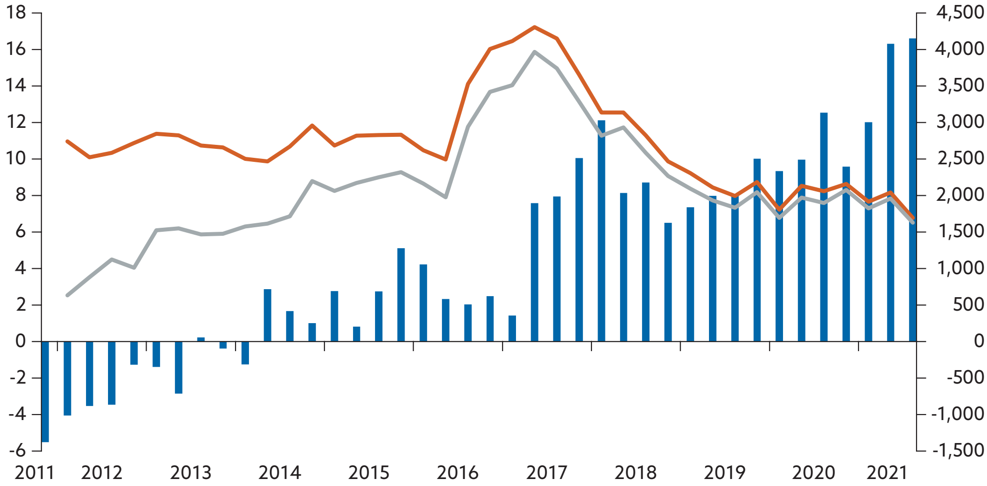
Housing price growth has continued to accelerate in 2021

Partly owing to the availability of housing loans, which are a significant segment of banks' loan portfolios, annual growth in housing prices accelerated to 18.4% in the third quarter of 2021. While this increase was driven by the house segment, it was also supported by growth in prices of flats. In the existing property market, price growth occurred in all regions and across all types of flats. The sizes of the flats sold did not change significantly. The number of existing flats on the market has fallen slightly during 2021.

Although Slovakia's housing market is heterogeneous, the good news from a financial stability perspective is that the market for flats in the main regional towns and cities is at present sufficiently liquid. This is particularly true of the capital city, Bratislava, where growth in prices of flats slowed somewhat during the tightening of pandemic measures, before accelerating again once the measures eased. Price growth also remained elevated in Bratislava's new-build market, standing at 16.6% year on year as at September 2021. Although the number of new-build flats on the market has not changed significantly over the past two years, the share of those still under construction has continued to increase. Since the end of 2020 that share has surpassed 95%, which may indicate that the new-build is picking up.

The housing rental market has also seen a recovery. After experiencing a pandemic-related decline last year, especially in Bratislava, rental prices have on average been increasing in 2021. Rental prices started picking up again in spring and summer, though they still remain at 2017 levels.

Chart 27
The new-build market in Bratislava
Annual growth rate and number of new-build flats in Bratislava (percentages; number)



Source: Lexxus.
Note: Flats under construction are a subset of total flats.

Box 3
Residential real estate price indices

The housing market is among the most significant factors affecting financial stability. That is doubly true in Slovakia, where the share of housing loans in the banking sector's loan book is the highest in the euro area and where these loans are the largest component of households' rapidly rising debt. The housing market is also highly significant from a long-term perspective, given the high rate of home ownership and consequent high share of flats and houses in the total assets of Slovak households. In the past decade, this situation has been further accentuated by loose monetary policy and by interbank competition amid increases in household income and in consumer prices.

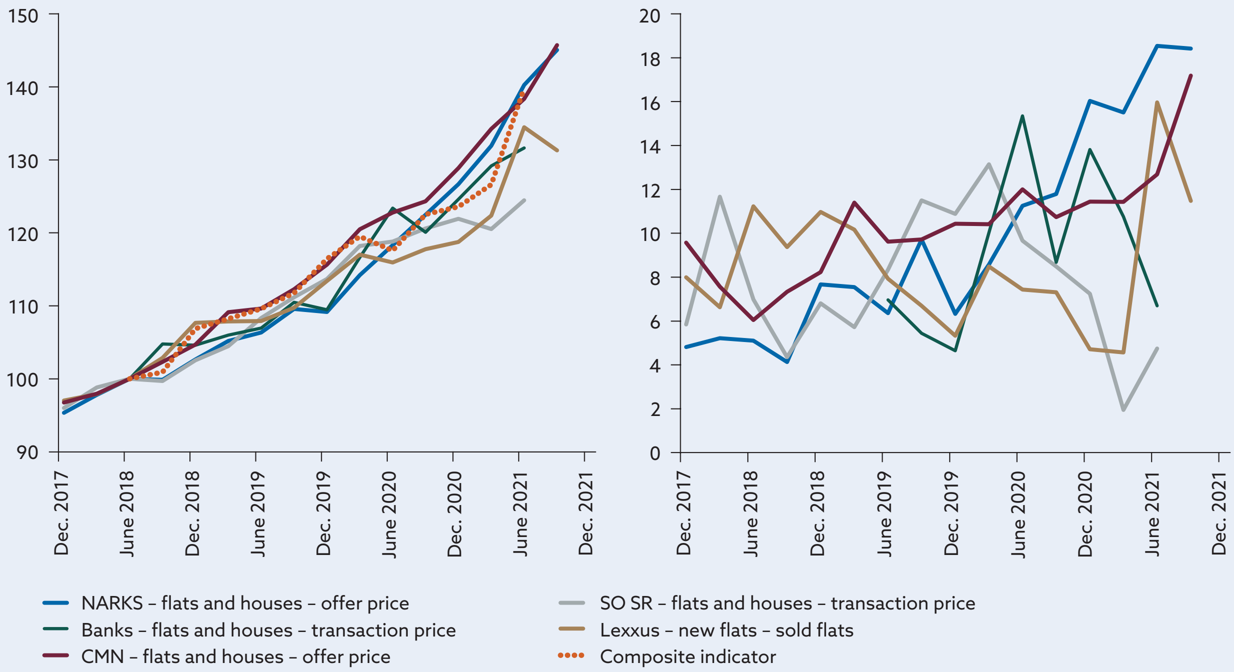
The level and evolution of housing prices over time are tracked using various data sources and indices constructed in different ways, usually resulting in different aggregated data on this market. The principal differences between price indices may stem from the market segments included therein. Some indices may track the existing or new-build market or the market for houses or flats; others may mix various statistics into common indices. Another notable difference in the data analysis is whether the index covers prices of properties that are on the market or have actually been sold, or even prices set by a professional appraiser. Other cross-index differences include the sources of housing market data, since such data may be collected, for example, in the Land Register, by various real estate agencies, or by mortgage-lending banks. This also has an impact on the size of the data sample size and the market coverage. A fourth key cause of differences in index results is the way in which data are processed. This, again, concerns a number of parameters, such as the processing method and the level of input data adjustment.

Adjustment thresholds may be set either statistically or expertly, and data can be adjusted to different coverage levels, from a district to the whole of Slovakia. Many possibilities are opened up by the actual aggregation, which is typically a weighted average of the observed values. The weights, however, may be static or dynamic (i.e. changing over time) and may pertain to different factors, for example the size of the local market, the labour market, the number of advertisements, the preferred or prevailing housing, etc. The different results across RRE price indices stem also from the weighting at the district or regional level and from how the relationship between the number of flats and houses is defined. An important methodological difference is price index frequency, particularly in the case of quarterly data, which can be worked with at the end of the given quarter or as an average value for that period. Price index developments are also much affected by the decision on whether to take unit or absolute prices as a basis.

Chart 28

RRE price indices based on different segments, sources and methodologies

Indices of the level and annual growth of residential real estate prices (index: Q2 2018 = 100; percentages)



Sources: NARKS, SO SR, Lexxus, and CMN.
Note: NARKS – Slovak National Association of Real Estate Agencies; CMN – Property Price Map.

But despite all these differences in data sources, choice of segment, and processing methodology, it is clear from all available metrics that housing prices in Slovakia are still rising sharply. The trend differences captured by the charts reflect the choice of parameters, sources and methodologies for the collecting and processing of data. These differences have widened since end of 2020. The largest downward deviation has been in transaction prices published by the Slovak Statistical Office, which may indicate that flats and houses are selling for less than advertised or that the lowest-priced flats are selling first.

It is only in recent years that housing prices started outpacing fundamentals

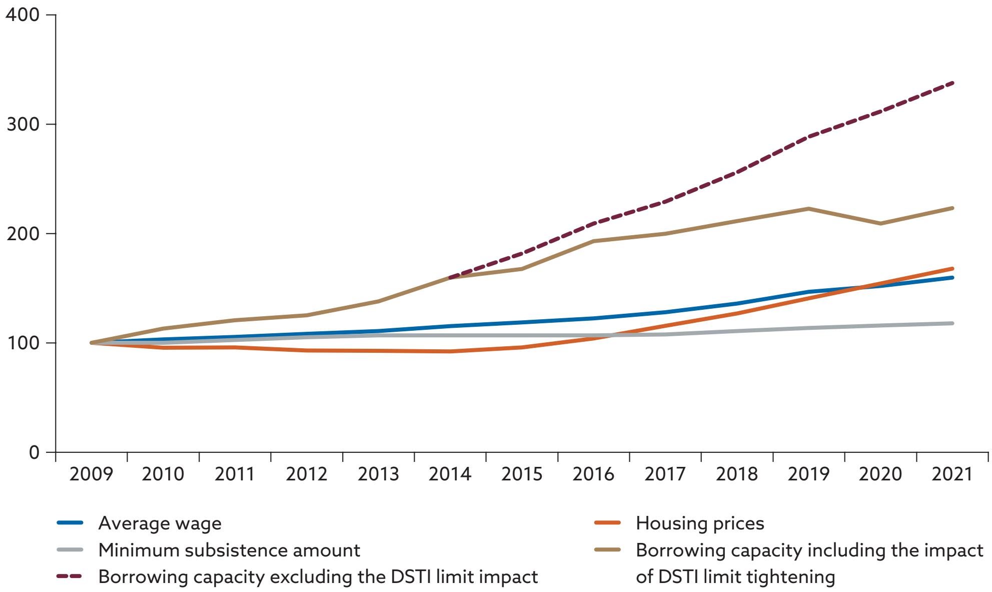
Prices of flats and houses have been rising alongside an uptrend in household income and a downtrend in interest rates. Over the period going back to 2009, household income and housing prices have increased at almost the same pace. Only in 2020 and 2021 has housing price growth pulled significantly ahead. A marked decline in interest rates on new housing loans has put strong upward pressure on household borrowing capacity. This impact has been partially mitigated by NBS measures, most notably the DSTI ratio limit. Yet even borrowing capacity, so circumscribed, has increased far faster than housing prices.

This relationship between housing prices and fundamentals is also shown by a model. In line with the main variable trends (Chart 29), prices of flats clearly started rising in 2015 after a period of strong growth in fundamentals, particularly the labour market. Gradually, however, prices caught up with fundamentals, and in 2021 they accelerated further. The significant impact of falling interest rates is also confirmed, as they have increased household borrowing capacity. The model therefore does not at present indicate an overvaluation of prices for flats but does imply that the continuation of current trends could lead to just that situation.

Chart 29

Housing prices vis-à-vis selected variables

Average housing price compared with selected variables (index: 2009 = 100)

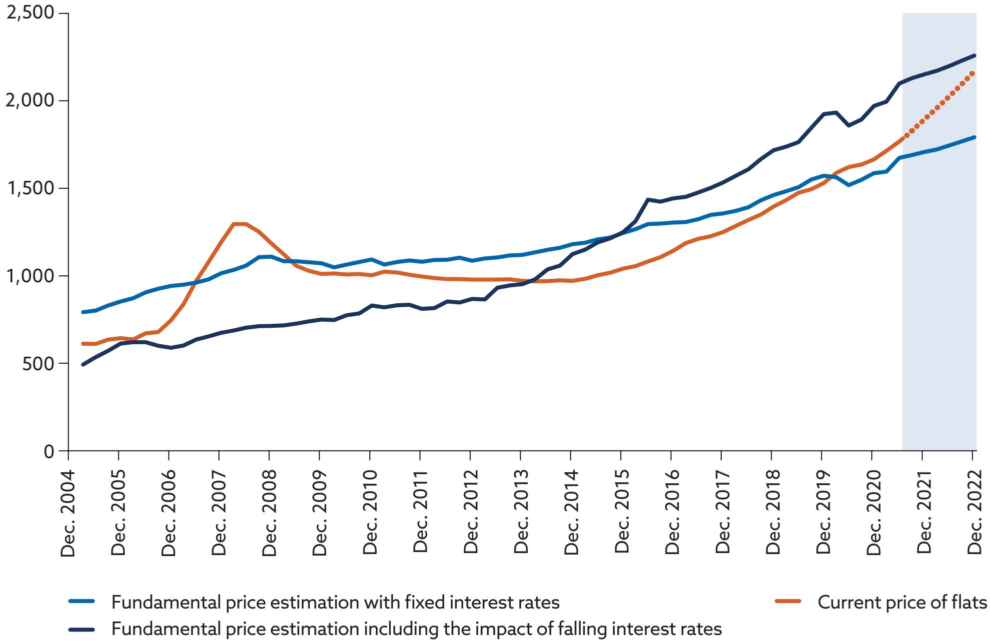


Sources: NBS, SO SR, and CMN.
Notes: Borrowing capacity denotes the largest loan amount available at the given disposable income. DSTI – debt service-to-income ratio.

Chart 30

Falling interest rates have a significant impact on the fundamental price estimation

Average observed and estimate prices for flats (EUR/m²)



Sources: NBS, CMN, and SO SR.
Notes: The light blue area of the chart denotes the simulated results. The current price of flats is simulated on the assumption that current trends are maintained.

Although lower income households have experienced the most marked increase in housing affordability, they can still afford to buy only relatively small flats

Housing affordability[52] in 2021 has been at one of its highest levels in the last 20 years. Since 2015 housing price growth has been outpacing average wage[53] growth, and housing therefore, despite falling interest rates, has become slightly less affordable for average wage earners. During this period, however, median income has been increasing faster than the average wage (the figure has been heavily affected by higher income households, as their income has recorded its lowest growth). Given also the environment of falling interest rates, housing affordability for median income earners has not been declining since 2015. An even more favourable picture is presented by median disposable income,[54] which has accelerated further because of the relatively slow increase in the minimum subsistence amount. Since net disposable income is a decisive factor for lenders, housing is now more affordable for median income earners than at any time in history. For 70% of working age people housing has become more affordable during this period.

52 Housing affordability is defined as the share of monthly income taken up by the instalment on a loan for the purchase of a flat.
53 The average gross wage according to the SO SR.
54 Disposable income is defined here as net income less the minimum subsistence amount and subject to the application of the DSTI ratio limit.

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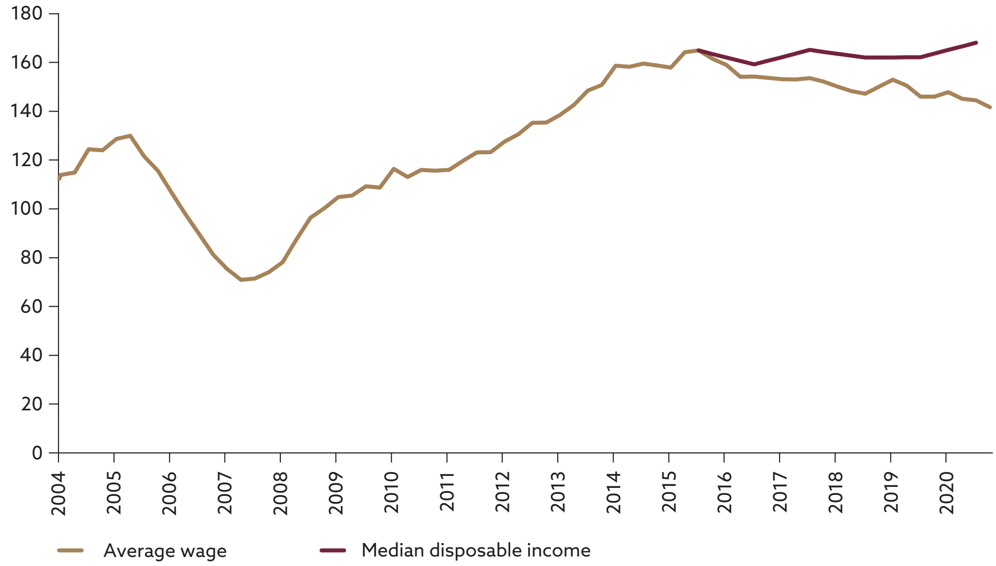
Chart 31

Housing affordability for the average and median disposable income

Housing affordability index (Dec. 2003 = 100)

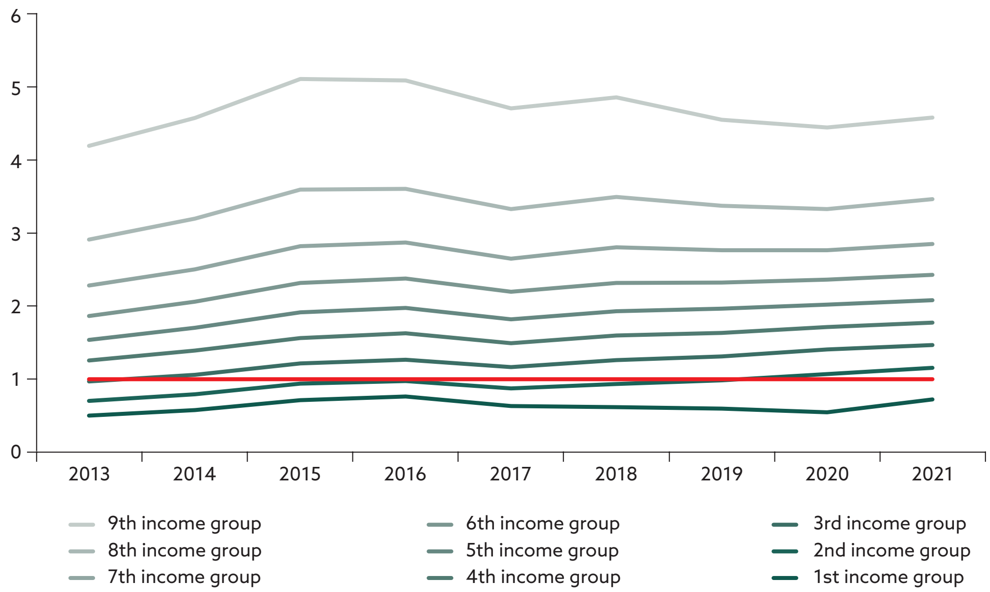


Sources: NBS, CMN, and SO SR.
Notes: The housing affordability index is calculated as the share of income taken up by the instalment on a loan for the purchase of a flat. Median disposable income is net income less the minimum subsistence amount and subject to the application of the debt service-to-income (DSTI) ratio limit. Housing affordability based on the median disposable income is linked to the housing affordability index based on the average wage in 2016.

Chart 32

Housing affordability for different income groups

Share of disposable income taken up by the instalment on a loan for the purchase of a flat



Sources: NBS, CMN, and Social Insurance Agency.
Notes: The income groups represent income deciles, i.e. working people categorised into ten groups by income. For example, the 1st income group (first decile) denotes the tenth of working people with the lowest income level.
The red line denotes the affordability of a two-room flat with an area of 50 m^2, where the household has two members and no children and the flat is purchased through a combination of a mortgage loan (covering 80% of the price), consumer credit (10%) and own savings (10%).

In general, housing affordability[55] appears to have increased most for lower income groups; nevertheless, its level has remained low compared with that for higher income households. This stems mainly from household income developments, as income growth has been relatively higher for lower income households than for higher income households. Lower income households can now afford larger flats than they could in previous years. These flats, however, are still far smaller than those affordable for higher income households, who, on the other hand, have experienced a slight decline in affordability in square metre terms. This disparity results from the high sensitivity of low income groups to expenditure on basic necessities, which constitutes the larger part of their income. While the income gap between the lowest and highest income group is fourfold,[56] the flats affordable for those in the highest income group are up to six time larger than those in the lowest group.

The question of housing affordability is particularly sensitive for young people, since in their case it typically concerns the purchase of a first home. It is therefore positive that housing affordability in the 25–35 age cohort has been similar to that in the whole population. This applies also to the growth trend in housing affordability for lower income households as well as to the level of affordability itself.

Personal savings play a crucial role in home purchases, since purchases financed solely through credit require not only a larger loan but often also a mortgage loan in combination with consumer credit. While housing affordability has increased in recent years, it has increased even more so for households that have personal savings. Median income borrowers able to meet 20% of their flat's purchase price with personal savings have been able to buy flats that are larger by around 34 m^2.

The tightening of regulatory lending requirements has had a stabilising effect; risks are related more to future developments

The tightening of regulatory lending requirements has also had an impact on housing affordability. In particular, the gradual reduction in debt service-to-income (DSTI) ratio limits has brought a reduction in actual DSTI ratios.[57] From a housing affordability perspective, falling DSTI ratios

55 For the purposes of this analysis, housing availability is calculated for a two-member household without children in respect of a two-room flat with an area of 50 m2.

56 The income groups represent income deciles, i.e. working people categorised into ten groups by income. For example, the 1st income group (first decile) denotes the tenth of working people with the lowest income.

57 The impact of reducing the DSTI ratio limit cannot be measured solely by the change in the DSTI limit, since actual DSTI ratios in the housing loan book have fallen only slightly in recent years. Whereas the DSTI limit was reduced from 100% in 2015 to 60% in 2020, the average DSTI fell from 60% to 43%.

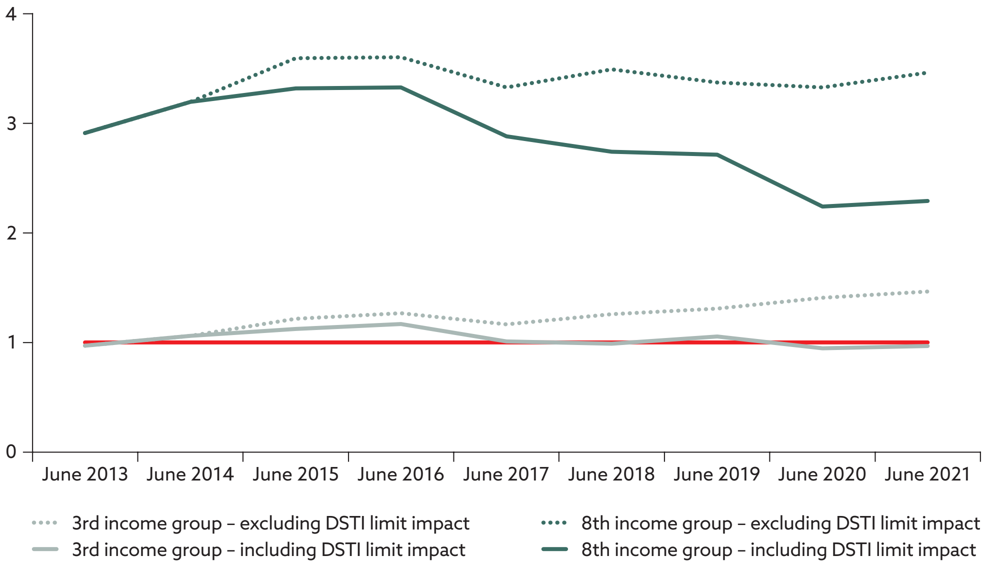
have partly countered the effect of rising income and decreasing interest rates. If the DSTI limit had not been tightened, demand capacity for residential real estate would have increased more markedly; a greater number of borrowers would technically have been qualified to purchase larger properties, and their capacity to purchase a second flat would also have increased.

The impact of regulatory tightening was not, however, heterogenous across all income groups. For example, a two-member household without children and with an income in the third decile has in recent years been able to buy a flat with an area of 50 m². In this case, the DSTI limit tightening was commensurate with rising income and falling interest rates relative to housing prices. This, however, was not the case with higher income households, since they have experienced a lower relative income growth, and therefore the tightening of the DSTI limit reduced their options in the housing market. Even so, these households can still buy flats with an area of more than 250 m². So, in respect of higher income groups, it cannot be said that housing affordability has fallen, but rather that their scope to take out a loan for the purchase of a second or third flat has diminished. Hence the tightening of the DSTI limit may have had a stabilising impact on the housing market.

Chart 33

Impact of DSTI limit tightening on various income groups

Share of disposable income taken up by the instalment on a loan for the purchase of a flat



Sources: NBS, CMN, and Social Insurance Agency.
Note: The red line denotes the affordability of a two-room flat with an area of 50 m². DSTI – debt service-to-income ratio.

Although several key factors in the housing market are currently in a certain balance, questions remain about their further development. The fact that the relationship between income, interest rates and housing prices is currently at its best ever level suggests there is little reason at present to consider housing prices overvalued. This is further confirmed by developments in recent years, when housing affordability has increased for the greater number of lower income households. That said, prices of flats and houses have accelerated in recent months and started to outstrip labour market developments, while interest rates have recorded only a slight decrease. Therefore, amid rising consumer prices, the relatively high affordability of housing may have an impact on households' expectations and may gradually move the situation into disequilibrium.

6 Financial sector resilience

6.1 Profitability growth in the banking sector

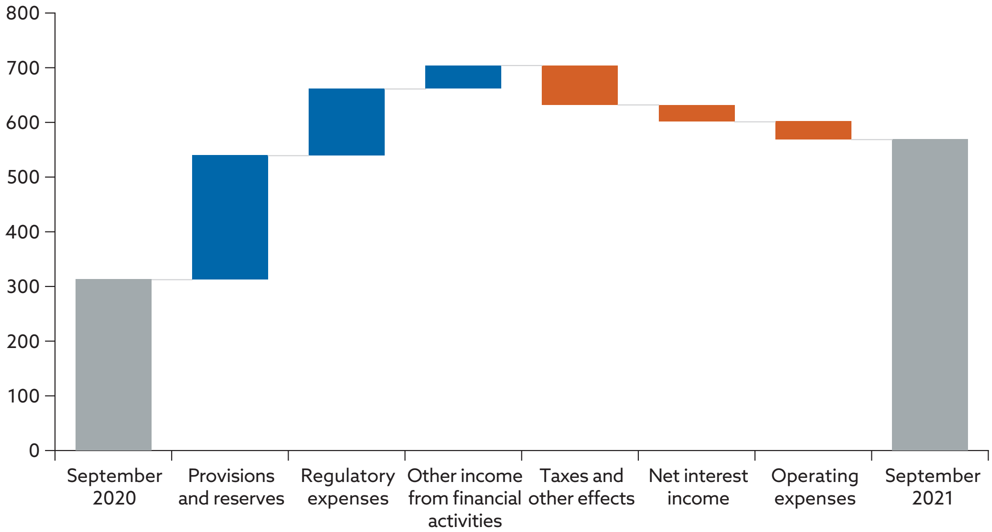
Banks' profitability supported by lower costs

The banking sector's net profit for the first nine months of 2021 increased by 82%, year on year, to €569 million.[58] This result is largely accounted for by substantial year-on-year decreases in credit costs and regulatory expenses, which respectively fell by €227 million and €122 million. From June, however, the annual rate of profit growth was gradually moderating, since it was in the second quarter of 2020 that loan loss provisioning accelerated and since the bank levy was abolished as of the end of June 2020.

Chart 34

The annual growth in banks' profit for the first nine months of 2021 was largely driven by savings on credit costs

Net profit and the most significant contributors to the change in its year-on-year increase (EUR millions)



Source: NBS.
Note: Regulatory expenses include the bank levy, contributions to the Resolution Fund and the Deposit Protection Fund, and supervisory fees. Other income from financial activities includes net fee and commission income, dividends received, and the revaluation of financial instruments fair valued through profit or loss.

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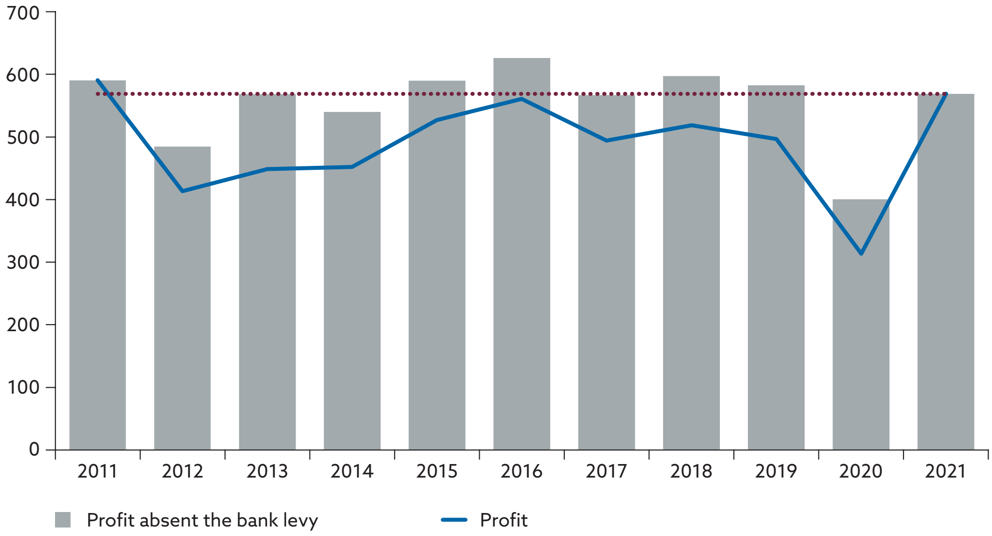
[58] Compared with the same period in the pre-pandemic year of 2019, this figure is higher by 15% (€72 million). The factor accounting for most of that difference is regulatory expenses in 2019. If regulatory expenses had been the same in both periods, the respective profits would have been on a par.

It seems at first glance that banks managed to increase their profit significantly in the first nine months of 2021. Although the allocation of credit costs in 2021 has been slightly lower than the average for the pre-pandemic period of 2017–19, it is in fact last year's abolition of the bank levy that is markedly skewing the banking sector's performance this year. Comparing the nine-month result with the corresponding figures for recent years (not including pandemic-affected 2020), while abstracting from the bank levy's application and making commensurate adjustments to the tax obligation, we see that the 2021 figure was not among the higher ones.[59]

Chart 35

Abstracting from the bank levy's impact, the banking sector's profit was at the level of the median for the period since 2011

The banking sector's net profit and its simulation for the first nine months of each year, abstracted from bank levy payments (EUR millions)



Source: NBS.
Note: The item 'profit absent the bank levy' denotes the profit abstracted from bank levy payment in the years from 2012 to 2020 and with commensurate adjustment to the tax obligation. The dotted line denotes the cumulative profit for the first nine months of 2021.

The allocation of credit costs in the banking sector has been far lower this year.[60] This results from the increase in the formation of loan loss provisions and reserves that occurred immediately after the pandemic broke out last year and from the subsequent gradual recovery of the economy. Amid diminishing uncertainty about loan servicing, loan loss provisioning for the first nine months of 2021 fell sharply, down to one-tenth of level for the same period in 2020 and to its lowest level (€41 million) since the first nine months of 2005. The drop in provisioning was most notable in

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59 Adjusted to exclude the bank levy's impact, the banking sector's profits for the years from 2013 to 2019 would have ranged between €540 million and €630 million.

60 The allocation of credit costs as at September 2021 was 80% lower, year on year, at €58 million. Compared with September 2019, credit costs were lower by almost 30%.

regard to provisions for household loans and less marked for NFC loans.[61] As for banks' approaches to the allocation of credit costs, it remains an area of considerable heterogeneity.

In regard to the IFRS 9 staging of loans, we are not seeing any deviation from recent trends. While the share of non-performing (Stage 3) loans in the banking sector's overall loan book has remained flat or decreased during the pandemic, the amount of performing loans that have shown a significant increase in credit risk since initial recognition (Stage 2 loans) has remained well above pre-pandemic levels.[62] As regards the provisioning rate, it has been stable throughout the pandemic for all stages.[63]

Net interest income has continued its downtrend, and its annual rate of decline as at September 2021 was 2.4%. Compared with a drop of 4.3% for the year from September 2019 to September 2020, the rate of decline appears to have slowed. In truth, however, the 2021 figure was significantly affected by the impact of targeted longer-term refinancing operations (TLTRO III). Not including net interest income from these operations, the rate of decline would have remained flat, at -4,4 %. Given that the amount of TLTRO III operations on the balance sheets of certain banks has been gradually increasing, their positive impact on the banking sector's profitability can be expected to increase in coming months.[64]

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[61] Net provisioning for household loans in the first nine months of 2021 was 14% of the figure for 2020 and 18% of the average figure for 2017–19; for NFC loans, the corresponding figures were 23% and 57%.

[62] At end-2019 the shares of Stage 2 and Stage 3 loans stood at 8.1% and 3.1% respectively; as at September 2021, the corresponding figures were 12.8% and 2.5%.

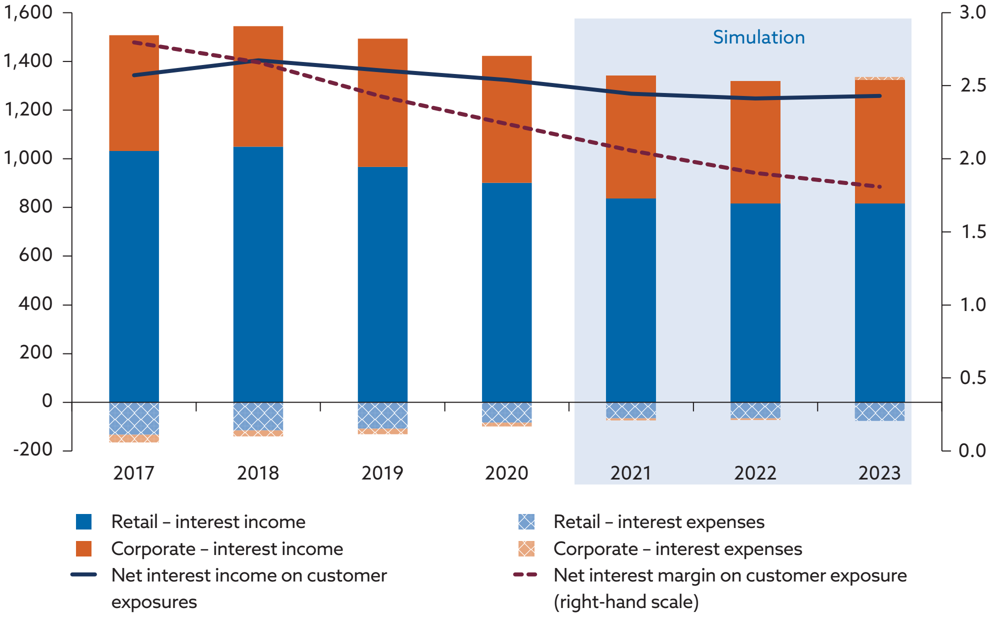
[63] For Stage 1 loans, it has ranged between 0.3% and 0.4%; for Stage 2 loans, between 3.9% and 4.6%; and for Stage 3 loans, between 66% and 68%. The corresponding figures as at September 2021 were 0.3%, 4.2%, and 67.5%.

[64] A risk for banks may be whether they continue to meet the conditions to qualify for a more attractive interest rate on their TLTRO III borrowings. Nor can it therefore be ruled out that some banks will opt to repay their borrowings under these operations earlier than the final maturity.

Chart 36

Net interest income on customer exposures expected to stop falling in 2022

Net interest income and the net interest margin on customer exposures (EUR millions; percentages)



Source: NBS.
Note: The corporate segment here comprises non-financial corporations, public sector entities, non-bank financial corporations, and non-residents. Customer exposures include only loans and deposits, not securities.

Based on a simulation of net interest income in coming years, the income's rate of decrease is expected to moderate gradually. Under the simulation scenario, the downtrend in the absolute amount of net interest income on the customer segment, dating back to 2018, is expected to end in 2022, before rising moderately in 2023.[65] This is expected to stem mainly from the stabilisation of interest rates on retail loans and from an ongoing growth in the amount of this portfolio.[66] In the simulation, interest income on the corporate segment remains stable owing to the level of interest rates and to year-on-year increases.[67] As for the net interest margin for the overall customer segment, it is expected to continue decreasing, year on year, albeit at a slower pace.[68]

65 During this period the portfolio of customer exposures is expected to increase from €52.8 billion (2018) to €69.4 billion (2023).

66 In the simulation, the average interest rate on the overall housing loan portfolio falls to 1.1% in 2023, with the portfolio recording average annual growth of 10.2%; the average interest rate on total consumer credit reaches 8.5% in 2023, with the outstanding amount of consumer credit recording an average annual decrease of 2.2%.

67 The stock of corporate loans (with an average annual growth rate of 0.01%) and its annual interest rate (2.2%) are estimated to stay at current levels.

68 The overall portfolio's net interest margin is estimated to decrease from 2.8% in 2017 to 1.8% in 2023, with the year-on-year decrease moderating from -23 basis points in 2018 to -9 basis points in 2023.

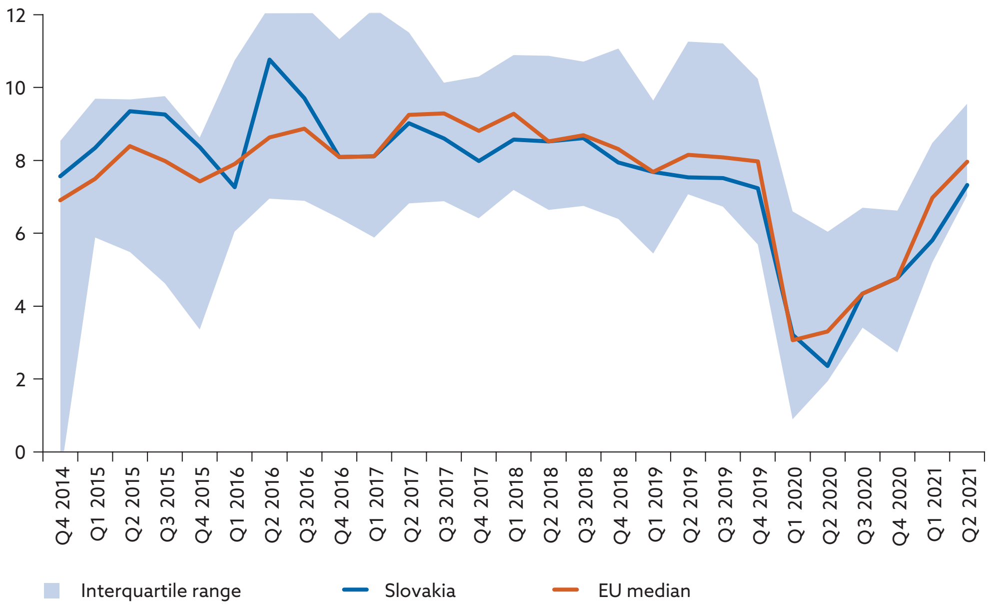
The banking sector's administrative expenses increased by 3.5%, year on year, in the first nine months of 2021. The increase stemmed from rising investment in information technology (up by 16%) related to an acceleration in depreciation expenses (up by 8%) as well as ongoing consolidation in the banking sector. After years of rising at a decelerating pace, the banking sector's wage expenses declined in the first nine months of 2021. This was due to digitalisation and cost optimisation in the sector, which translated into reductions in the sector's numbers of branches and employees, which by the end of September 2021 were at their lowest levels since 2008.

Compared with other EU countries, the profitability of banks in Slovakia is in the lower half. The annualised return on equity (ROE) of the Slovak banking sector has continued rising since the outbreak of the pandemic,[69] and its gap with the EU median has narrowed.[70] Another interesting fact is the profitability trend in other EU countries, as its interquartile spread recorded its lowest level since 2014.

Chart 37

Banks' profitability is returning to the pre-pandemic level

Annualised return on equity in banking sectors of EU Member States (percentages)



Sources: NBS, and ECB.

69 From the second quarter of 2020 to the same period in 2021, the ROE of banks in Slovakia increased from 2.4% to 7.3%. At the end of 2019, before the pandemic broke out, the sector's ROE stood at 7,2 %.

70 The median value of EU countries for the second quarter of 2021 was 8%.

6.2 Banks' capital position increased

Improvement in the banking sector's solvency

Although 2021 has also been a pandemic-affected year, the overall situation in the banking sector has improved, and its solvency is no exception. As at 30 June 2021 the sector's aggregate total capital ratio stood at 20.78%.[71] As for the highest quality component of the sector's capital, the Common Equity Tier 1 (CET1) capital ratio has also increased.[72] The average total capital ratio is slightly higher for less significant banks than for significant banks, which nevertheless recorded a ratio of more than 20.6% as at end-June.

Following the initial outbreak of the pandemic, banks responded cautiously to the new situation, as was particularly apparent from the increase in the amount of own funds. This year, like in 2020, banks have opted to retain the greater proportion of their earnings from the previous year.[73] This has contributed to a substantial build-up of their capital, which increased by more than 3.5 % during the first half of the year and was the main factor behind the increase in the sector's total capital ratio.

The overall strengthening of the banking sector's solvency has also been supported by a decline in the amount of banks' risk-weighted assets (RWAs). RWA developments have not been homogeneous across banks, though most banks have recorded a drop in RWA volumes. IRB banks[74] have had the greatest impact on the overall RWA trend, with most of them reporting a decline in risk weights for credit exposures. In the context of credit risk, the exposure classes in respect of which RWAs have declined are exposures to entrepreneurs and unsecured retail exposures.

Less significant banks have also recorded a drop in RWAs, mainly in respect of exposures to entrepreneurs (owing to a decline in corporate lending). These changes have even had a slight downward impact on the banking sector's aggregate RWAs, compared with their level at the end of 2020.[75] The decline in RWAs would have been greater but for an increase in retail loans secured by real estate.

71 The total capital ratio increased by more than one percentage point during the first half of 2021, from 19.70% as at the end of December 2020. Its level as at June 2020 was 19.55%.

72 The CET1 ratio increased to 18.1% as at end-June 2021, up from 17.1% as at end-December 2020.

73 This year the banking sector retained 62.6% of its earnings for 2020 (its earnings retention rate in 2020 was 83.3%).

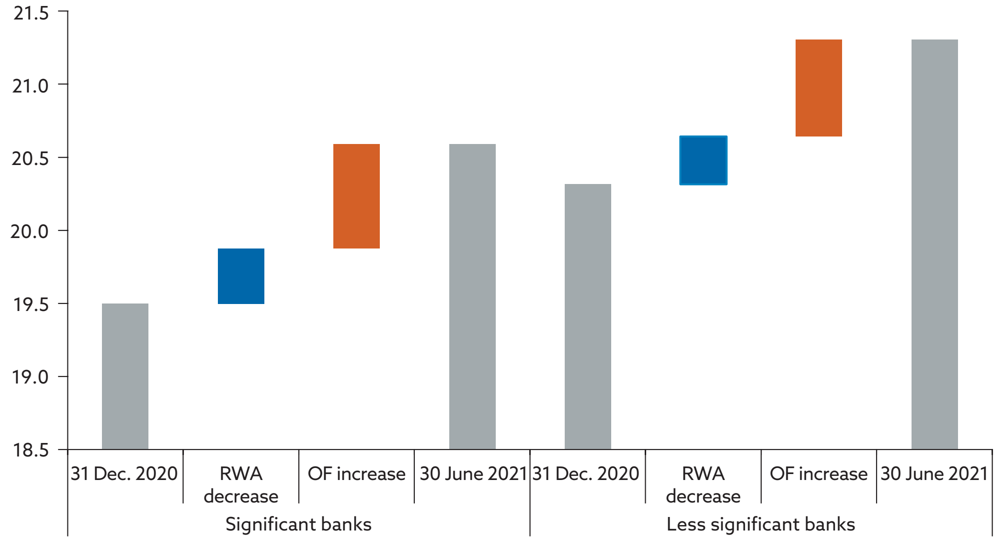
74 Banks using an internal ratings-based (IRB) approach to assess credit risk.

75 RWAs fell by more than 1.8 percentage points during the first half of 2021.

Chart 38

Changes in the total capital ratios of significant and less significant banks

(percentages)



Source: NBS.
Note: RWA – risk-weighted assets; OF – own funds.

Banks' capital adequacy remains at a very high level, supported partly by measures taken by regulatory authorities during the pandemic. In late 2020 the ECB prolonged its recommendation to banks to limit dividends, and Národná banka Slovenska followed suit by issuing its own recommendation.[76] In view of the current situation in the Slovak banking sector, with banks having sufficient available capital, NBS decided in September 2021 not to prolong its recommendation. The ECB had earlier decided not to further prolong its own recommendation.

The Slovak banking sector's available capital increased to €1.9 billion by the end of June 2021,[77]representing more than 5.3% of risk-weighted assets. At the same time, this capital is not limited by the leverage coverage ratio, which by the end of June 2021 stood at 8.1%.[78] Banks therefore have sufficient available capital to continue financing the economy as required[79] or to absorb potential losses. On the other hand, banks' available capital could be limited from the start of 2022 by the minimum requirement for own funds and eligible liabilities (MREL) for certain banks. This requirement,

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[76] Recommendation ECB/2020/62 of the European Central Bank of 15 December 2020 on dividend distributions during the COVID-19 pandemic and repealing Recommendation ECB/2020/35 (OJ C 437, 18.12.2020). Recommendation No 1/2021 of Národná banka Slovenska of 12 January 2021.

[77] Including the capital defined by the Pillar 2 Guidance (P2G), the sector's available capital would have stood at €2.3 billion.

[78] Excluding exposures to central banks, the leverage ratio would have stood at 9.69%.

[79] In accordance with a Memorandum of Understanding concluded between the Slovak Government and the Slovak Banking Association in June 2020.

however, can also be met with specific non-capital instruments which, because they are far less costly, should be economically more favourable for banks.

Box 4
The outlook for possible changes in the CCyB rate is gradually changing

A number of financial market trends are now changing, and the risk of imbalances building up is starting to rise again. Previously, there was widespread uncertainty about the pandemic's potential impact on the banking sector in regard to a potential surge in credit losses; now, however, that uncertainty has already abated significantly. The extent of bankruptcies and defaults resulting from the pandemic will apparently be far lower than originally envisaged, while concerns about the sustainability of short-term debt have been eased by favourable financing conditions. The pandemic-related risks to financial stability have therefore fallen significantly. However, because of the economy's relatively rapid recovery and the positive macroeconomic situation, the potential for a build-up of imbalances in the financial and credit markets has again increased. A combination of attractive financing conditions, the improving financial situation of firms and households, inflation rate movements, and the ongoing strong growth in property prices is providing a strong motivation to borrow. Hence credit growth has been gradually accelerating since the start of the year.

A further reduction in the countercyclical capital buffer (CCyB) rate is not necessary for the time being. The incipient financial cycle upturn and the current financial market conditions that incentivise borrowing tend to indicate that new risks related to the financial cycle could start building up in coming quarters. At the same time, the current level of the CCyB rate is sufficient to cover existing risks and does not at present need to be increased. Having regard to the NBS macroeconomic projections, it is expected that, going forward, the trends typical of a financial market expansionary phase will continue. This, in an environment of low interest rates, rising prices and favourable financing conditions, will buoy growth in borrowing, particularly by households. In other words, the risks already accumulated may be gradually joined by news risks associated with the credit and housing markets. It will therefore be necessary to focus attention on financing conditions and on the borrowers' capacity to service their debts even when conditions are unfavourable.

7 Other sectors

7.1 Profitability growth in the insurance sector

The pandemic's evolution has so far had a somewhat favourable impact on the financial performance of insurance corporations in Slovakia,[80] including during the first half of 2021. The sector's profit has increased; financial market turbulence has proved to be temporary; and the non-life segment has made substantial savings, mainly due to a fewer number of road accidents. The only notable downside has been a decline in premiums written in the life insurance segment, although that was already moderating in the first half of 2021 thanks to unit-linked business. Fears that there would be substantial surrenders of life policies have not materialised.

Insurers made a record profit despite the pandemic crisis

The sector's aggregate profit for 2020 was an all-time high, and its profit for the first half of 2021 increased by a further 24%.[81] All significant items of the profit and loss account contributed to the growth, including increases in the technical and financial results (both adjusted for returns on unit-linked business) and a lower share of tax and special levy payments[82] in the gross profit. The annualised ROE increased to 16.4%, the second highest level since the Solvency II regulatory framework was introduced in 2016.

Besides improving its profit, the sector also increased its solvency. After showing barely any change in 2020, the Solvency Capital Requirement (SCR) coverage ratio increased in the first half of 2021 from 192% to 203%. On the other hand, as a share of the sector's total capital, *expected profits included in future premiums (EPIFP)* remained elevated at 64%. A high EPIFP share implies that the sector is less resilient, since EPIFP can only cover certain losses. The risks associated with a high EPIFP share have been repeatedly covered in previous editions of the Financial Stability Report.

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80 The analysis does not include branches of insurers from other EU Member States, whose share of the market is estimated to be 22%.

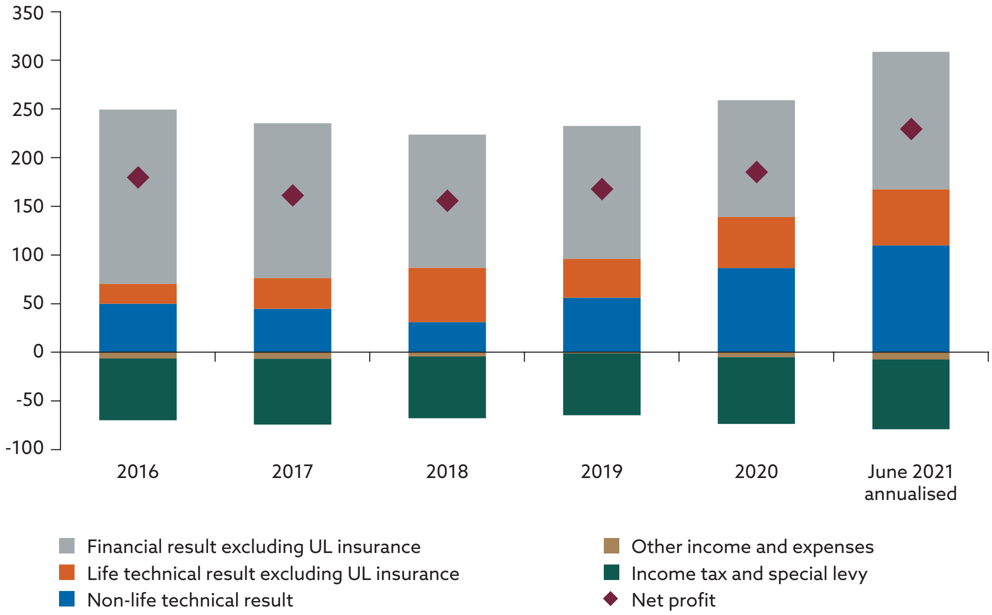
81 The same figure applies when comparing the first half of 2021 with the first half of 2020 and when comparing the annualised value for the first half of 2021 with the profit for the whole of 2020.

82 A special levy payable on business in regulated industries.

Chart 39

The profit for the first half of 2021 was a record

The profit and its components (EUR millions)



Source: NBS.
Notes: UL – unit-linked. The profit for the first half of 2021 was annualised by multiplying it by two.

Profit growth driven mainly by non-life insurance

The largest contributor to the insurance sector's profit growth in the first half of 2021 was the non-life segment, which saw an increase in premiums written and a drop in costs. Non-life premiums written as at June 2021 were 2.6% higher year on year, which was similar to their rise in the previous period. Motor insurance premiums mirrored the overall trend, while property insurance premium growth accelerated to 5.8%. In smaller insurance classes, premium growth was only modest.[83]

Premium growth, particularly in property insurance, is partly accounted for by the reviewing of older insurance contracts. Premiums written are increasing not only because the number of insured ('insurance penetration') is increasing, but also because premium payments are rising. Higher premiums may be partly a result of insurers' higher costs. Besides increasing policyholders' premiums, insurers are often also taking the opportunity to update very old insurance contracts that would otherwise lead to a situation of underinsurance.

83 In income insurance, premium growth was 1.6%; in general liability insurance, 1.3%. In the minor class of travel assistance insurance, including travel insurance, premiums written slumped by 30.1%.

Spot reviewing of older insurance contracts may also reflect insurers' experience of the insurance impact of natural disasters.[84] Another no less important contributor to growth in premiums written has been the increase in property prices and compulsory property insurance attached to mortgage loans.

Costs in the non-life insurance segment, particularly in motor insurance, were lower in the first half of 2021 than at any time since the introduction of the Solvency II regulatory framework in 2016. Not only did claim payments in motor insurance reach an all-time low, so did other (operating) costs in this insurance class.[85] Having been loss-making for a long period previously, motor insurance made a profit in 2020 and again in the first half of 2021. In property insurance,[86] the situation remained the same as in previous years, while other insurance classes had only a marginal impact on the overall profit.

Life insurance supported overall profit growth despite a decline in premiums

The life segment contributed to the insurance sector's overall profit growth not only through returns on investment, but also through insurance activity per se. The financial result for life business for the first half of 2021 represented a four-year high,[87] and it was achieved despite the low interest rate environment and the COVID-19 pandemic. Even without that result, however, the life segment would have been profitable owing to the technical result's continuing positive trend.

The amount of premiums written in life insurance has been declining for a long time. Although the year-on-year decrease moderated in the first half of 2021, it was still only at the level reported in 2018 and 2019. The largest decline occurred in traditional life insurance (-6.5%), which makes up almost two-thirds of all life business. By contrast, unit-linked life insurance re-established a moderate increase in premiums written (3.2%). The most successful insurance class was health insurance, though its growth rate of 10.0% was far more moderate compared with 2020.

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84 For example, the tornado that struck South Moravia in the Czech Republic on 24 June 2021. Its potential impact will appear only in data for the second half of 2021, which are not yet available.

85 The combined ratio for the motor insurance class was 84.7% as at March 2021 % (or 88.6% after factoring in domestic levy payments), and it then rose slightly to 87.3% as at June 2021 (or 91.3%).

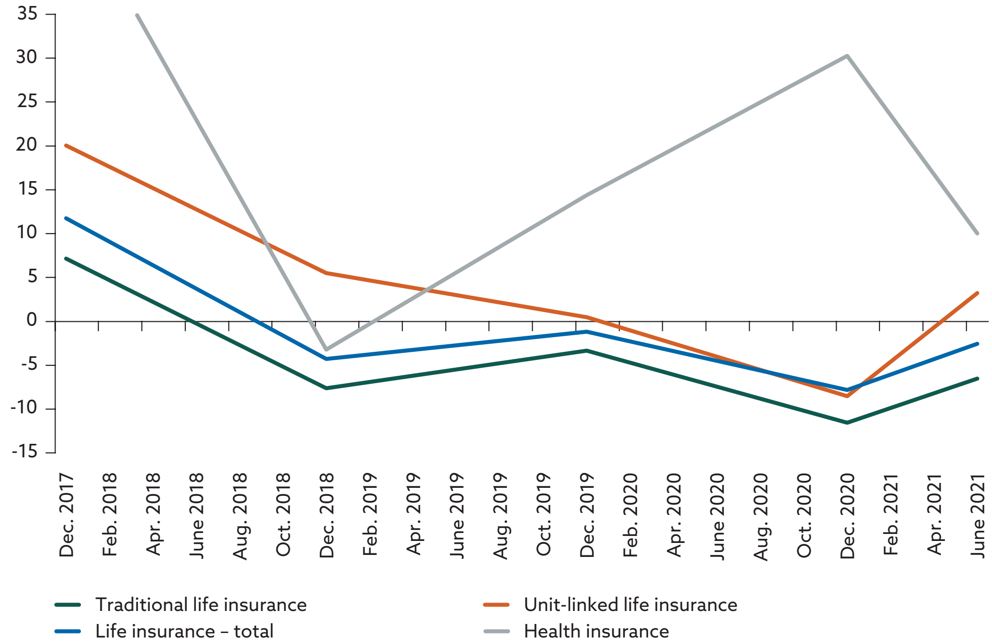
86 The combined ratio for property insurance has been around 85.2% since 2019, except for some moderate volatility.

87 €71 million for the first half of 2021.

Chart 40

Life insurance classes show heterogenous developments

Annual growth of premiums written in life insurance business lines (percentages)



Source: NBS.

Fears of a surge in life policy surrenders have not materialised. From the available quantitative and qualitative information, the surrender rate appears to have remained similar to its level of previous years.

Investment returns at the price of elevated risk

Insurers' favourable investment returns are related to changes in the risk profile of investments. In a low interest rate environment, it is increasingly demanding to earn required investment returns. One way of doing so is to purchase riskier assets. Although insurers still allocate some 80% of their investments[88] to bonds, the share of corporate bonds in their portfolio has for a long time been increasing at the expense of government bonds. During the pandemic, the share of unrated corporate bonds has increased from 5% (June 2020) to 16% (June 2021).

In unit-linked life insurance, the overall investment portfolio has also been showing signs of a declining share of higher-rated assets. Since, however, as much as 90% of total investments are placed in investment funds, ratings are available for only small part of the portfolio.

[88] After adjusting for unit-linked insurance.

Structural changes in the insurance market

Two trends in the Slovak insurance sector have for some time been having an impact on the market structure. The first is insurers' mergers and acquisitions, and the second is the transformation of domestic insurers into branches of insurers from other EU Member States. The risks related to these trends were pointed out in the May 2021 Financial Stability Report.

Both trends have become more notable in 2021. For a start, one domestic insurer, UNION, acquired another, Poštová poisťovňa. The risk that this would cause an increase in market concentration was, however, tempered by the establishment of a new insurer called Partners. As for the transformation of domestic insurers into branches, 2021 has produced two cases, with both Generali and UNIQA following this route. As a result, the number of domestic insurers will be reduced to ten, with their share of total premiums written estimated to be between 59% and 63%. The rest will operate as branches from other Member States, so they will be subject to NBS supervision only to a limited extent.

7.2 In sectors managing customer assets, some risk parameters have become more pronounced

Rapid asset growth in second pillar pension funds has been coupled with a moderate increase in investment risk

The net asset value (NAV) of funds in the second pillar of the Slovak pension system[89] increased at a record pace in the first nine months of 2021.[90] This was largely the result of a greater inflow of contributions, driven by the usual factors: increases in the number of savers, wages and the rate of mandatory contributions. Another reason for the NAV's acceleration was the above average aggregate performance of pension funds, which accounted for more than one-third of the aggregate asset growth. In terms of the type of pension fund, index pension funds accounted for more than half of the NAV growth. This is because of the ongoing trend of savers switching from guaranteed bond pension funds

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[89] The second pillar of the Slovak pension system – the old-age pension scheme – is a defined contribution scheme operated by pension fund management companies (PFMCs); enrolment is voluntary but savers may not leave the scheme after enrolment. The third pillar – the supplementary pension scheme – is a voluntary defined contribution scheme operated by supplementary pension management companies (SPMCs).

[90] The amount of assets under management in the sector increased by €1.1 billion from January to September 2021.

to index funds and bringing their accumulated pension savings with them.[91]

The asset portfolios of second pillar funds have become moderately more sensitive to any fluctuations in market factors. In the case of equity pension funds, the equity component of their aggregate portfolio increased from 75% at the start of 2021 to 81% at the end of September. A similar increase occurred in the equity holdings of mixed pension funds.

As for bond pension funds, the dominant bond component of their asset portfolio has undergone changes in its parameters in 2021. Their bond holdings' average residual maturity, and therefore sensitivity to market interest rate movements, increased from 6.6 to 7.3 years. The entirety of that increase occurred in the first half of 2021; the maturity stabilised during the next three months, apparently because of increasing uncertainty about the courses of inflation and interest rates.

The search for yield for participants in the third pension pillar has led to a further increase in equity investments

The amount of assets under management in the third pillar of the pension system increased by €265 million in the first three quarters of 2021. The growth rate of the assets was slightly faster compared with the same period of the previous year, reflecting the stronger performance of assets during the period under review. The NAV increase was largely concentrated in growth-focused third pillar funds, including the relatively new and rapidly expanding category of index funds.

In most third pillar funds, the equity component of their asset portfolio increased during the first nine months of 2021. In both the second pillar and third pillar, the increase in equity holdings reflected a combination of price effects and targeted increases in purchases of equities and equity-related financial instruments. Another relatively widespread change within third pillar funds, including decumulation funds, was a reduction in investments in bank deposits.[92]

[91] Of the overall assets managed in second pillar funds, the share held in index funds has now increased to more than 20%, while the share held in bond funds is decreasing towards the 60% level.

[92] The bank deposit component of the NAV fell from 9% to 4% during the first nine months of 2021.

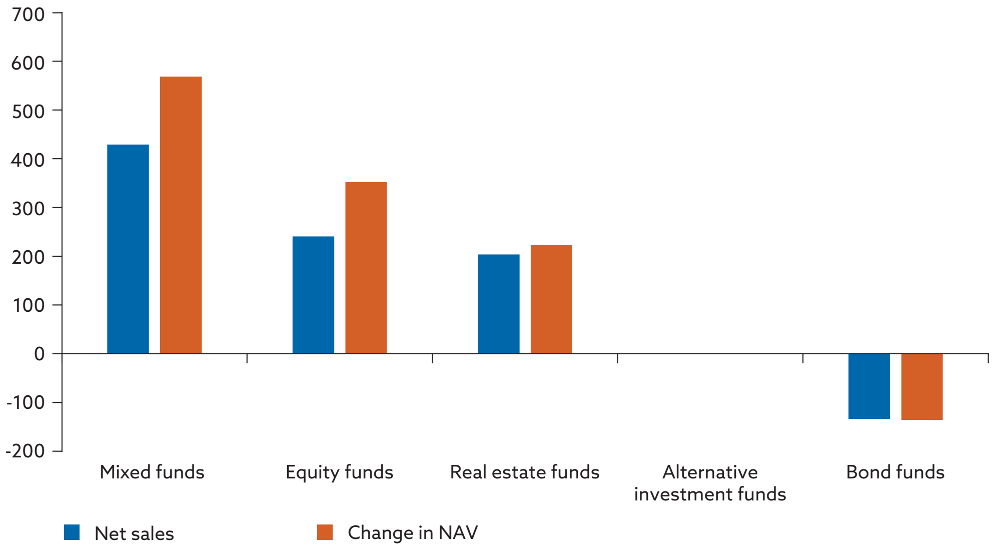
Overall high net issuance of investment fund shares/units driven by record inflows into domestic equity funds

Times are good for the investment fund sector in Slovakia. The NAV under management in domestic investment funds increased by one billion euro from January to September 2021. Assuming that the NAV does not turn sharply downwards in the last three months, this year will set a new growth record for the amount of assets managed in investment funds. Net issues of investment fund shares/units accounted for around three-quarters, €740 million, of the NAV growth in the first nine months. Another factor behind the growth was the on average relatively strong performance of investment funds.

Chart 41

Increase in investor demand for equity investment funds

Amount of net sales and change in NAV during the first three quarters of 2021 (EUR millions)



Source: NBS.
Note: NAV – net asset value.

The largest increase in NAV and the largest share of overall net sales were both accounted for by mixed investment funds, which for a number of years now have been the leading type of fund in the domestic investment fund market. Next behind them on both metrics were equity funds. Demand for these funds increased significantly compared with previous years, as investors, comprising mainly households, showed a shift in investment preferences and an increase in risk appetite. After being in second place in recent years for customer inflows, real estate funds dropped to third place during the period under review; nevertheless, the amount of their net sales continued to accelerate.

As regards the asset composition of domestic investment funds, the most notable feature during the period under review was a relatively large

drop in the share of bank deposits. This was a broad-based development across all types of funds.[93] In the case of mixed funds and bond funds, the same component also declined in the previous period. As a result of these changes, however, the overall asset portfolio saw a drop in liquid assets, i.e. the assets that in times of crisis can be used to finance a potential wave of redemptions.

Since the start of the pandemic, households' financial assets have increasingly been invested in equities via pension funds, investment funds and investment firms[94]

After falling sharply at the outbreak of the pandemic, the amount of financial assets that Slovak households invest in the two pension pillars, domestic investment funds, and instruments held through investment firms has been accelerating in comparison with the pre-crisis period. Consequently, despite that downward blip, the amount of household investments in these sectors was higher at the end of September 2021 than the level that would correspond to a continuation of the linear trend from 2019. This acceleration was in no small measure a 'passive' result of soaring prices of assets, in particular equities, and the upward impact of rising wages on the inflow of contributions into the two pension pillars. The stronger growth in household investments with entities managing customer assets was also, however, supported by households themselves directly deciding to invest a greater proportion of their funds.

Even more notable than the growth in household financial assets over the past year and a half has been the change in their aggregate composition in terms of the underlying asset classes. During 2019 the shares of individual components in the portfolio basically remained constant, but then they showed a gradually changing trend. The most marked shift has been in exposure to equity instruments. The share of direct and indirect equity investments increased from 20% at the start of 2020 to 30% as at September 2021. The reasons for this are the same as those explaining the overall growth in household assets, but they apply here to an even greater extent. Since prices of equities have been rising faster than prices of other types of assets, the relative share of equities in the asset portfolio has increased. Moreover, households have been showing a shift in preferences and an increase in risk appetite. This can be seen, for example, in the second pension pillar, where savers have been switching from bond funds to equity funds, and in the investment fund and investment firm sectors, where

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[93] The bank deposit component of the aggregate asset portfolio fell from 15% to 9% of NAV during the first nine months of 2021.

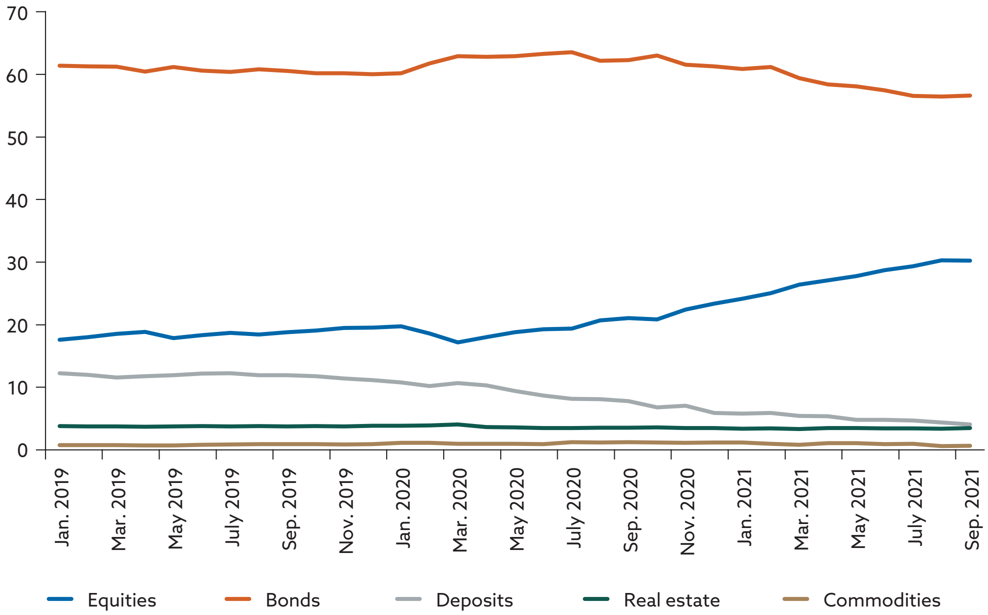
[94] The analysis concerns assets that households invest in second pillar and third pillar pension funds, in domestic investment funds, and through investment firms.

there has been rising demand for equity-focused investments. In addition, the financial corporations managing these assets have proactively sought to strengthen the equity component of their fund portfolios. The increase in equity holdings has occurred at the expense of holdings of bond instruments and bank deposits. During the period under review, the share of debt securities fell from just over three-fifths to less than 57%. It is also true, however, that the absolute amount invested in bonds has continued to increase and that the bond component remains the largest. In the case of bank deposits, by contrast, their share has slumped by two-thirds since 2019, down to 4% as at 30 September 2021, and their absolute amount has also dropped. This is evidence of the active rebalancing that has been occurring in fund portfolios. Exposures to the real estate market continue to rank among the more relevant components in the portfolio of household financial assets, and their share has remained at around 3.5% since 2019.

Chart 42

In the composition of household assets, the significance of equity positions has increased

(percentages)



Source: NBS.
Note: The composition of assets that households invest in second pillar and third pillar pension funds, in domestic investment funds, and through investment firms.

Abbreviations

CCyB	countercyclical capital buffer
CET1	Common Equity Tier 1 (capital)
CMN	Property Price Map / Cenová mapa nehnuteľností
DSTI	debt service-to-income (ratio)
DTI	debt-to-income (ratio)
ECB	European Central Bank
EPIFP	expected profits included in future premiums
ESA 2010	European System of Accounts 2010
ESRB	European Systemic Risk Board
EU	European Union
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
IRB	internal ratings-based approach
LTV	loan-to-value (ratio)
MREL	minimum requirement for own funds and eligible liabilities
NARKS	Slovak National Association of Real Estate Agencies / Národná asociácia realitných kancelárií Slovenska
NAV	net asset value
NBS	Národná banka Slovenska
NFC	non-financial corporation
NPL	non-performing loan
P2G	Pillar 2 Guidance
RBUZ	Register of Bank Loans and Guarantees / Register bankových úverov a záruk
ROE	return on equity
RWA	risk-weighted asset
SCR	Solvency Capital Requirement
SO SR	Statistical Office of the Slovak Republic
TLTRO III	third series of targeted longer-term refinancing operations