



# Macroprudential Commentary

June 2023



NÁRODNÁ  
BANKA  
SLOVENSKA  
EUROSYSTEM

## Summary

- The financial cycle has slowed down. The residential property market has seen the most pronounced cooling, and the credit market has also moderated. This trend is likely to persist for some time.
- Rising interest rates, increasing living costs, and heightened uncertainty have made households less inclined to take on debt. Demand for mortgages remains subdued, though its rate of decline has eased significantly. Mortgage market slowdown is, however, being seen across the EU.
- There is also weaker growth in the corporate loan portfolio, most notably in financing needs related to fixed investment but also in short-term working capital financing.
- The most marked changes have occurred in the residential property market, where, amid sagging demand, prices declined in the first quarter of 2023 for a second successive quarter.
- Banks remain well capitalised and able to generate profit. The improvement in their financial results has been driven mainly by interest income.

### Also in this edition:

Mortgage demand still subdued	2
Bank deposits stagnating	2
Slowdown in corporate loan growth	3
Housing prices continue falling	4
Banks remain solvent	4

### No change in the CCyB rate

The financial cycle is now in a decelerating phase. Loan growth is slowing, and people are less inclined to take on debt. The shift in attitude is largely explained by rising interest rates, persistently increasing living costs and a climate of mounting uncertainty. This has been reflected in the housing market, where prices have turned downwards after nine years of growth. Firms' demand for external financing is also softening, as a result of rising input prices and uncertainty. With costs rising, however, they continue to need short-term working capital financing. Non-performing loan (NPL) ratios are not increasing so far. At the same time, a rising share of new loans to households have riskier attributes (higher DSTI ratios). Banks, for their part, remain sufficiently capitalised to cope with potential losses and with risks related to the turning of the financial cycle.

**At the same time, the countercyclical capital buffer (CCyB) rate remains scheduled to increase from 1% to 1.5% as of 1 August 2023.<sup>1</sup> In the current environment, no further increase in the buffer rate is required. Nor, considering the low level of banks' losses and persisting economic uncertainty, do we see any need to reduce the rate.**



### Expectations for the CCyB rate in the next quarter

Národná banka Slovenska (NBS) does not envisage having to adjust the countercyclical capital buffer rate in the next quarter.

The financial cycle is expected to continue slowing, since loan growth remains dampened by elevated interest rates, inflation and uncertainty.

CCyB rate  
**1.50%**  
as of  
1 August 2023

<sup>1</sup> Under NBS Decision No 8/2022 of 20 June 2022.



## Mortgage demand remains subdued, though its rate of decline has eased significantly

After falling sharply in the second half of 2022, new mortgage lending decreased at notably slower pace in the first quarter of 2023. New mortgage production in the first quarter of 2023 was more than one-third lower compared with the 2020-22 average.<sup>2</sup> A similar trend was observed in other euro area countries. New mortgage production declined far more moderately in early 2023 and even increased in March. With mortgage origination decreasing, annual growth in the mortgage portfolio has continued to slow. From July 2022 to April 2023 the growth rate dropped from 12.8% to 8.4%, and if that trend continues, it will be below 4% by the end of the year.

**The main factor behind the weakening of mortgage market activity has been reduced demand in response to sharply rising interest rates.** The median interest rate on new mortgages stood at 4.1% in March 2023, up from 1.1% a year earlier. In the first quarter of 2023, however, the rate of increase in mortgage rates slowed slightly.

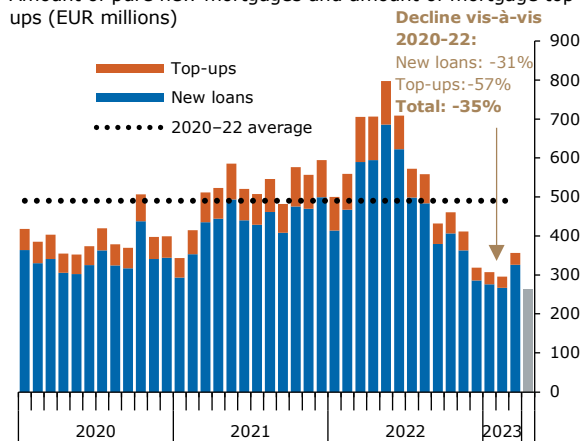
**Mortgage rates<sup>3</sup> have increased faster in Slovakia than in other euro area countries.** Domestic mortgage rates were hiked most sharply in the first half of 2022, when they climbed from low levels to around the euro area median. They continued to increase, albeit at a more moderate pace. Since March 2023 the average mortgage rate in Slovakia has been the fourth highest in the euro area.

**New loans continue to carry more risk.** The share of new mortgages that have a debt service-to-income (DSTI) ratio at the regulatory limit remains at one-fifth, three times higher than a year ago. Most of these loans have a maturity of thirty years. It is, however, good news that the share of new mortgages that are higher risk has stopped increasing in recent months.

**Consumer credit, unlike mortgage loans, is accelerating** Annual growth in consumer credit accelerated to 3.6% in April 2023. This is largely because the mortgage market slowdown has resulted in lower uptake of debt consolidation mortgages. Another important factor, however, is that consumer credit production, unlike new mortgage lending, is stable and has not been falling. This stems in part from average interest rates on consumer credit, which have risen far more moderately than mortgage rates and have remained virtually flat since early 2023.

### Chart 1 The decline in mortgage demand has eased

Amount of pure new mortgages and amount of mortgage top-ups (EUR millions)

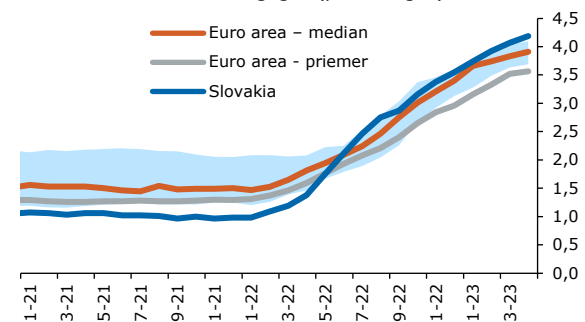


Source: NBS.

Note: The value for April 2023 is estimated. For this month, the breakdown of mortgage production between new mortgages and mortgage top-ups is not yet available.

### Chart 2 Mortgage rates in Slovakia are among the four highest in the euro area

Interest rates on new mortgages (percentages)



Source: ECB.

Note: The blue band represents the interquartile range for euro area countries.



## Household deposits are not growing, primarily due to a decline in deposits of customers with higher savings

**Households' deposits have been virtually stagnating for almost two years, though the composition of their savings has changed.** The sharpest decline in deposits has been in those held by households with higher savings.<sup>4</sup> Their deposits fell most markedly when inflation was accelerating. This implies that a key cause of the decline was households' efforts to prevent the depreciation of their savings in an inflationary environment. On the other hand, households with lower deposits saw their volume continue to increase, albeit more moderately than in past.

**Interest rates on new time deposits remain above the euro area average.** Although time deposit rates are not keeping pace with market interest rates, Slovakia in this respect is no exception among euro area countries.

By contrast, Slovakia is in the upper quartile of euro area countries in terms of interest rates on new time deposits. Higher deposit rates are associated with specific types of products, largely with time deposit products that include an investment fund component or with bank products with an explicit investment focus.

<sup>2</sup> The amount of new mortgages fell by 31%, and the amount of refinancing mortgages, by as much as 65%.

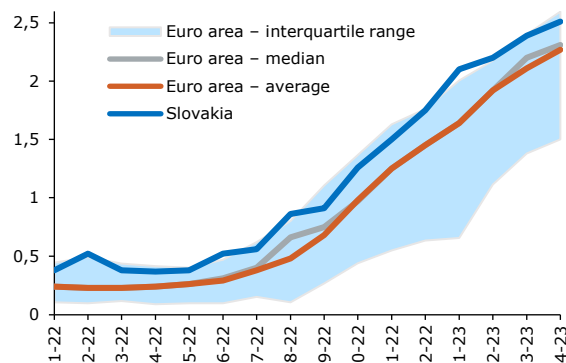
<sup>3</sup> The interest rates compared are those on so-called pure new loans, i.e. new loans excluding renegotiated loans.

Statistics on new loans are problematic from a methodological perspective. In the case of loan renegotiations not involving a change in interest rate (for example, those involving only a maturity extension), the loan agreement is included in the statistical category of 'new loans' for the given month. But since the original interest rate still applies, it distorts the average interest on loans originated in the given month. By contrast, the category of 'pure new loans' does not have this problem.

<sup>4</sup> The analysis is based only on data for households with a loan and only from the banks that provided the loan. These households' deposits represent around 30% of the total volume of deposits.

### Chart 3 Deposit rates remain slightly higher in Slovakia than in other euro area countries

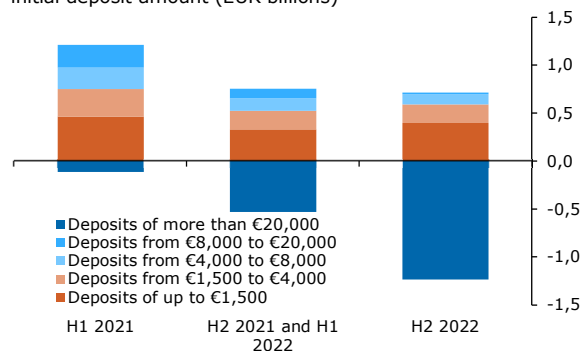
Interest rates on new time deposits (percentages)



Source: ECB.

### Chart 4 The decline in deposits was sharpest among those held by households with the highest savings

Change in stock of deposits per half-year, broken down by initial deposit amount (EUR billions)



Source: ECB.

Note: The chart shows only data for households with a loan and only from the banks that provided the loan. These households' deposits represent around 30% of the total volume of deposits. The chart also partially includes investment fund investments.



### Lending to the corporate sector has also slowed

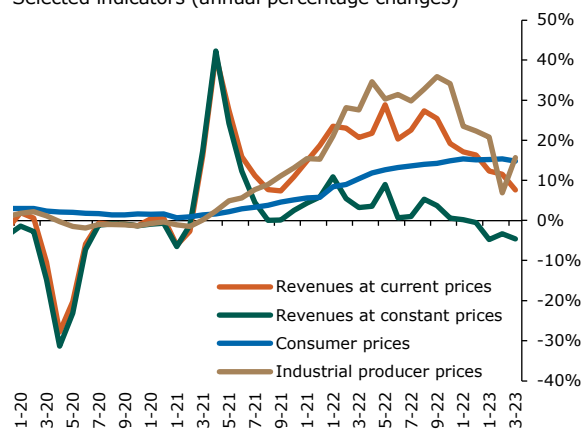
Annual growth in firms' real revenues has turned negative in 2023.<sup>5</sup> In nominal terms, revenues of non-financial corporations (NFCs) are slowing relatively quickly.<sup>6</sup> That deceleration is due in part to a slowdown in industrial price inflation. In recent months, however, corporate revenues have been clearly affected by weakening economic activity. Households' declining purchasing power has weighed on firms' revenues, as has the slowdown in foreign demand. In most economic sectors, revenues have taken an adverse turn.<sup>7</sup>

In 2022 the financial situation of firms was affected by falling profitability,<sup>8</sup> though the share of loss-making firms did not increase. Firms faced sharply rising costs in 2022, and the situation across the corporate sector showed heterogeneity. The larger the increase in costs, the greater was the decline in profitability. The proportion of profitable firms did not decrease between 2021 and 2022, although firms used their profit margins to cushion the impact of sharply rising costs. The corporate sector's liquidity also declined in 2022, with firms using part of their liquid assets to cover rising unit input costs. Corporate indebtedness remained unchanged year-on-year.

Lending to the corporate sector is gradually slowing. Annual growth in NFC loans has been steady at 9.6% so far in 2023. Among EU countries, Slovak ranks in the third quartile on this metric, while among central and eastern European (CEE) countries, it ranks at the median. This level of loan growth was achieved only because of significant borrowing by certain large enterprises, mainly in the energy supply sector. Excluding the increase in their borrowing, annual NFC loan growth fell from 7.4% in December 2022 to 5.9% in April 2023.<sup>9</sup> Nor was the year-on-year slowdown in loan growth prevented by the relatively strong increase in lending in April, which surpassed the cumulative increases for the first three months of the year.

### Chart 5 Gradual slowdown in revenue growth

Selected indicators (annual percentage changes)

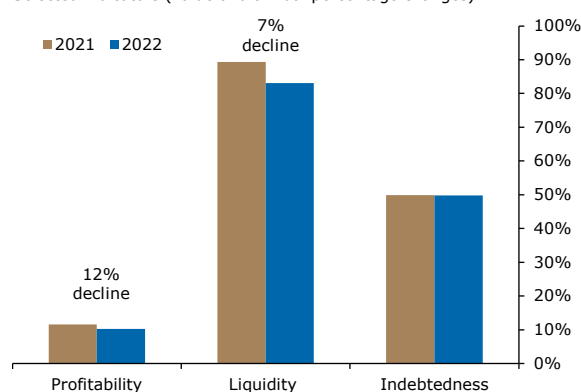


Source: NBS.

Note: Industrial producer prices are output transaction prices in the primary market between producers and their first buyers. They include energy supply prices, but not prices of agricultural products and construction materials.

### Chart 6 Rising costs have weighed on firms' profitability and liquidity

Selected indicators (value and annual percentage changes)

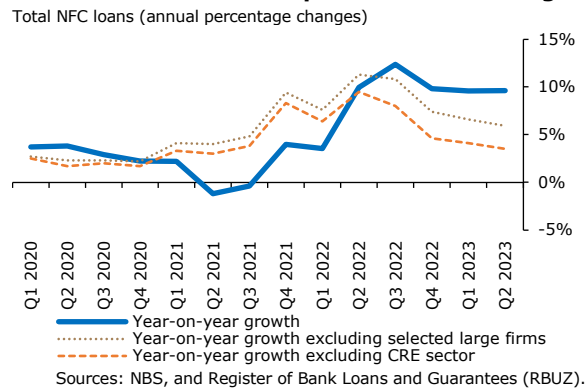


Sources: NBS, SO SR, and FinStat.

<sup>5</sup> In real terms, revenues at end-March 2023 decreased by 4.6% year-on-year. The average annual decline during the first three months was 4.2%.  
<sup>6</sup> In nominal terms, revenues at end-March 2023 increased by 7.5% year-on-year, significantly below the growth rate in December 2022 (16.3%) and in September 2022 (25%).  
<sup>7</sup> The sectors experiencing the largest drop in real revenues have been retail trade, services, energy supply, and construction. By contrast, in industry and the information and communication sector, real revenues have continued rising. In the case of industry, however, revenue growth has been driven by only certain manufacturing segments, primarily the automotive industry. Elsewhere in manufacturing industry, revenues have also been falling.  
<sup>8</sup> The financial situation is assessed in respect of firms for which financial accounts data for 2022 are available, i.e. around half of the entire corporate sector.  
<sup>9</sup> Loan growth peaked in mid-2022 at around 11%.

The slowdown in lending activity has been broad-based, while its magnitude has varied. Long-term loans<sup>10</sup> account for most of the slowdown,<sup>11</sup> followed by short-term working capital loans,<sup>12</sup> whose lower growth has coincided with an increase in wholesale prices. Looking at the lending slowdown in terms of the size of borrowing firms, it is most pronounced among medium-sized and large firms. As for economic sector contributors to NFC loan growth, commercial real estate (CRE) has long been the largest,<sup>13</sup> but here too the loan portfolio is growing at a slower pace.

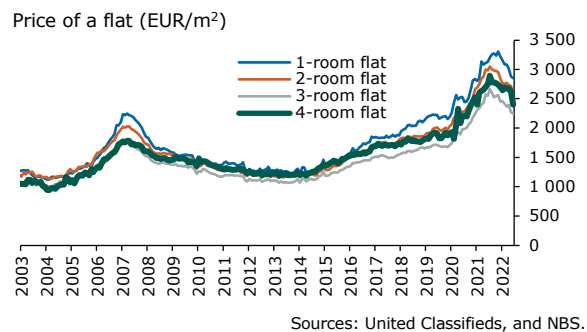
**Chart 7 Slowdown in corporate sector lending**



### Cooling of housing market

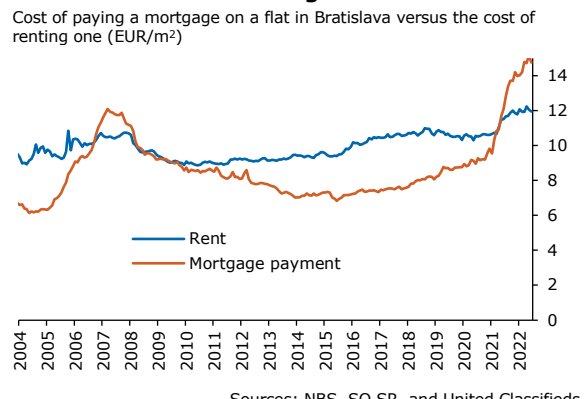
**Housing prices continued declining in May.** Prices of houses and flats therefore fell for a seventh successive month,<sup>14</sup> bringing them closer to their level at the start of last year. The price downtrend is seen across market segments, with flats in all regions and of all sizes falling in price. The downward pressure on prices continues to come primarily from weak demand, stemming mainly from rising interest rates, increasing living costs and the consequent heightened uncertainty about future developments, as well as from expectations about future price movements. The number of flats listed for sale has remained largely the same, nor has the month-on-month pace of price decline changed.

**Chart 8 Prices of flats continue their broad-based decline**



**In the market for flats, the velocity of sales has slowed and the position of buyers has improved.** It is no longer the case that properties will be sold relatively soon after going on the market. At the same time, the gap between the cost of paying a mortgage and the cost of renting a comparable property has increased.

**Chart 9 The monthly cost of paying a mortgage on a flat is affected by interest rates far more than is the cost of renting a flat**



Because of rising interest rates, it has become notably more economical to rent a flat in the Slovak capital Bratislava than to make monthly mortgage payments on the same property. Depending on the property buyer's level of savings and the overall way in which the property purchase is financed, the price difference in favour of renting can be up to 20%.

**Changes are also evident in the new-build market.** The supply of new-build flats has come to a halt, and new-build sales have fallen sharply.<sup>15</sup> Prices of new-build flats remained steady in the first quarter of 2023 for a third successive quarter.<sup>16</sup> Property developers are stalling the construction of new projects in order to complete the sale of properties already under construction.

Note: The mortgage payment and rental payment amounts are calculated as the unit price per square metre of a flat in Bratislava. The monthly payment for a mortgage on a flat is calculated for a mortgage covering 90% of the purchase price.



### Banks are maintaining profitability and capital strength

**The favourable trends in banks financial performance continued in the first months of 2023.** The banking sector's net after-tax profit for the first four months increased by half, year-on-year, to almost €329 million.<sup>17</sup> Banks continue to benefit primarily from rising interest rates, which have resulted in their net interest income rising by more than one-quarter year-on-year.<sup>18</sup> Banks are also helped by the fact they have managed to maintain loan growth in a high interest rate environment. That growth, however, is now far lower than it was a year earlier, as is partly reflected in the slowdown of fee income, to around one-fifth of the pace it was at last year.<sup>19</sup>

<sup>10</sup> Loans with a maturity of more than five years. Their growth has slowed from more than 6% to 1.9%.

<sup>11</sup> Compared with the September 2022 peak.

<sup>12</sup> Loans with a maturity of up to one year. Their growth has slowed to 5.3%, after frequently hitting double digits during 2022.

<sup>13</sup> Annual NFC loan growth excluding the CRE portfolio and selected large firms would have been 3.5% in April 2023.

<sup>14</sup> In the fourth quarter of 2022 the average square metre price of properties listed for sale fell by 1.9% over the previous quarter, while in the first quarter of this year it dropped by 3.9%.

<sup>15</sup> The number of new flats sold in the first quarter of 2023 was only a quarter of the number sold in the same period of the previous year.

<sup>16</sup> Their price in Bratislava is around €4,900 per square metre.

<sup>17</sup> The aggregate profit increased by 51% (€111 million) year-on-year.

<sup>18</sup> Net interest income for the first four months of 2023 increased by 28.5% (€155 million) year-on-year.

<sup>19</sup> Annual growth in net fee income was 2.7% (€7 million) for the first four months of 2023 in comparison to 16.2% in April 2022.

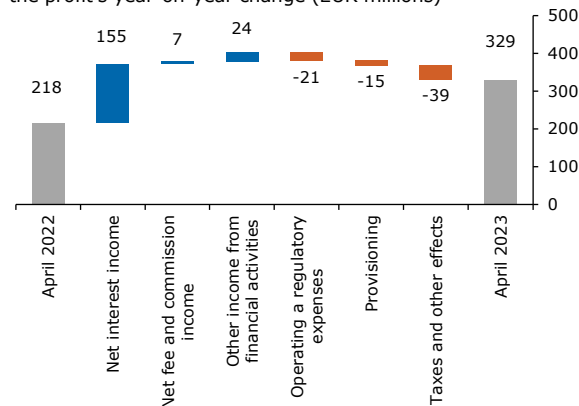


**Banks' net provisioning in the first four months of this year was slightly higher than the pre-pandemic norm**, and in the month of April it was around one-third higher.<sup>20</sup> There was also an increase in the amount of provisions allocated to loans whose credit risk has increased significantly since initial recognition (so-called Stage 2 loans), which reflects banks' increasing risk perceptions.

**Banks in Slovakia remain sound in terms of solvency. Thanks to their retention of earnings from the previous year,<sup>21</sup> banks are maintaining the voluntary capital buffers that enable their lending to the real economy and coverage of potential risks.** The banking sector's total capital ratio at the end of the first quarter of 2023 stood at 19.7%,<sup>22</sup> of which as much as 17 pp comprised highest quality CET1 capital. While systemically important banks had an aggregate total capital ratio of 19%, less significant banks had a ratio of 22.6%. The sector's capital headroom, i.e. surplus of capital resources above minimum regulatory requirements, edged up by 0.1 pp in the first quarter of 2023, to 3.95%. Its level will, however, fall by 0.5 pp as of August this year, owing to the raising of the countercyclical capital buffer rate. Despite challenging financial market conditions, banks are still comfortably meeting the minimum requirement for own funds and eligible liabilities (MREL) and the leverage ratio requirement.<sup>23</sup>

**Chart 10 Improvement in bank profits driven mainly by interest income**

The banking sector's net after-tax profit and contributions to the profit's year-on-year change (EUR millions)



Source: NBS.

**Liquidity indicators remained stable in the early part of this year.<sup>24</sup>** Nevertheless, caution is still needed regarding the funding structure of banks. In absolute terms, the increase in customer deposits remained lower than loan growth, despite the latter slowing down.<sup>25</sup> The composition of deposit growth can also be seen in negative terms, with highly volatile short-term deposits of general government accounting for more than two-thirds of the total. The situation has been stabilised to a significant extent by banks' new issues of securities, in particular covered bonds.<sup>26</sup> Even so, risks in respect of issued securities include not only higher interest expenses, but also their deteriorating maturity profile, as their concentration and refinancing risk are accentuated in the period from 2026 to 2028.



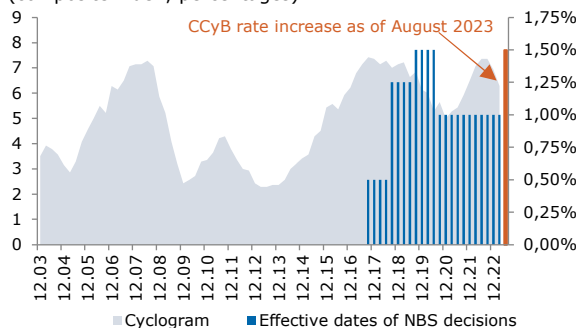
### The financial cycle has turned

**The financial cycle is undergoing a major slowdown, according to the Cyclogram, NBS's composite indicator of the cycle.** Notably weaker lending growth and declining housing prices have had a downward impact on the Cyclogram, which models financial cycle developments. The easing of expansionary trends is similar to that observed during the pandemic crisis and only slightly more moderate than during the global financial crisis. Compared with previous episodes, however, the cycle-slowness factors are different.

**Rising interest rates, ongoing increases in living costs and manufacturing input prices, and the related heightening of uncertainty are reducing the borrowing appetite of households and firms.** The Cyclogram's readings have therefore moderated to the levels seen in late 2021. As a guide to the setting of the CCyB rate, the Cyclogram-based benchmark buffer rate does not now indicate any need to further raise the CCyB rate. The only upward pressure on the financial cyclical in the early part of this year came from the ongoing downtrend in non-performing loan ratios and a short-lived improvement in economic sentiment.<sup>27</sup>

**Chart 11 The easing of expansionary trends is similar to that seen during the pandemic crisis**

(composite index; percentages)



Sources: NBS.

Note: Higher index values imply an intensive build-up of imbalances.

**The period ahead is expected to see a continuation of the trends now in place,** though the financial cycle slowdown should already be moderating. The credit market is expected to contribute the most to that slowdown, as current monthly loan production dampens annual growth in lending. For now, expected macroeconomic developments should not slow the financial cycle to any significant extent, given the assumed stability of the labour market.

<sup>20</sup> In the years from 2015 to 2019 the cumulative amount of provisioning over the first four months averaged €56 million; in 2023, it amounted to €76 million.

<sup>21</sup> The retention rate for 2022 earnings is 51%, which is 4 pp higher than the retention rate for 2021 earnings.

<sup>22</sup> It remained virtually unchanged compared with its level at the end of 2022 (19.6%).

<sup>23</sup> The leverage ratio of the Slovak banking sector was 7.5% at the end of the first quarter of 2023, well above the 3% regulatory minimum requirement.

<sup>24</sup> The banking sector's liquidity coverage ratio (LCR) increased by 3 pp from December 2022 to April 2023, to 183%; its net stable funding ratio at end-March 2023, was unchanged quarter-on-quarter, at 130%.

<sup>25</sup> Customer deposits increased by €1 billion over the first four months of 2023, while loans to customers rose by €1.3 billion over the same period.

<sup>26</sup> The issuance conditions for new benchmark covered bonds (with the minimum amount set at €500 million) were, however, significantly worse than a year earlier. While this year's issues had an average initial maturity of 3.2 years and an annual coupon of 3.5 %, the corresponding figures for last year's issues were 5.1 years and 1.9%.

<sup>27</sup> According to the European Commission's Economic Sentiment Indicator for Slovakia, sentiment improved in the first quarter of 2023, before deteriorating again in April and May.



## Who holds sovereign debt and why it matters

This topic is addressed in a Bank for International Settlements (BIS) working paper.<sup>28</sup> The authors construct a dataset of sovereign debt holdings of foreign and domestic investors, disaggregated into private banks, other private investors that they term 'non-banks', and other entities, for 95 countries over twenty years. According to their findings, non-banks, mainly in the form of investment funds, hold a greater share of sovereign debt than do banks. In the case of non-banks, however, their demand elasticity is far greater than that of banks and is highly sensitive to yield. Counterfactual analysis of emerging market sovereigns shows that a 10% increase in debt leads on average to a 6.7% increase in costs, but an out-sized 9% increase if non-bank investors are absent. Thus, the behaviour of non-bank investors is crucial for understanding sovereign debt sustainability. The authors also concluded that if inflation increased by 1%, the required yield for emerging market debt would increase by 2.5%.

## Can macroprudential instruments dampen financial shocks?

The authors of a recent BIS working paper<sup>29</sup> sought the answer to this question by examining the experience of 38 emerging markets between 2000 and 2019. During this time, emerging markets were exposed to highly volatile global financial conditions, driven by large swings in US policy rates, global risk aversion, and capital inflows. The authors conclude that macroprudential regulation can considerably enhance emerging markets' resilience to global financial shocks. More specifically, a tighter level of regulation reduces the sensitivity of GDP growth to movements of the VIX volatility index and capital flow shocks. A broad set of macroprudential tools contribute to this result, including measures targeting bank capital and liquidity, foreign currency mismatches, and risky forms of credit. According to the authors, macroprudential regulation increases monetary policy independence by enabling a more countercyclical policy response to global financial shocks. They also find no evidence that tighter capital controls are as beneficial as tighter macroprudential regulation in increasing emerging markets' resilience to the global financial cycle.

## ECB liquidity lines

A recent IMF working paper<sup>30</sup> examined the impact of the ECB's use of liquidity lines. These tools are used to ensure market liquidity, so that episodes of liquidity shortage do not turn into financial stability problems. In line with this objective, the ECB expanded considerably its network of swap lines during the global financial crisis and the COVID-19 crisis. The study finds that the announcement of an ECB euro liquidity line decreases the premium paid by foreign agents to borrow euros in FX markets relative to currencies not covered by these facilities by 51 basis points on average. At the same time, euro area banks that make most use of liquidity lines benefit the most from the announcement; they experience a relative increase in their equity prices of about 1.75% in a four-day window around the announcement, as the market expects an increase in their profitability. According to the study, the ECB euro liquidity lines have mainly targeted central banks in non-euro area EU countries; in other words, unlike the Federal Reserve, the ECB has acted more like a regional lender of last than a global one.

The June 2023 Macroprudential Commentary was discussed by the NBS Bank Board on 20 June 2023. The publication has not been copy-edited. Reproduction is permitted provided that the source is acknowledged.

<sup>28</sup> Fang, X., Hardy, B. and Lewis, K.K., "Who Holds Sovereign Debt and Why It Matters", *BIS Working Papers*, No 1099, Bank for International Settlements, May 2023.

<sup>29</sup> Bergant, K., Grigoli, F., Hansen, N.-J. and Sandri, D., "Dampening global financial shocks: can macroprudential regulation help (more than capital controls)?", *BIS Working Papers*, No 1097, May 2023.

<sup>30</sup> Albrizio, S., Kataryniuk, I., Molina, L. and Schäfer, J., "ECB Euro Liquidity Lines", *IMF Working Papers*, No 2023/096, International Monetary Fund, Washington DC, May 2023.