



SLOVAK REPUBLIC

FINANCIAL SYSTEM STABILITY ASSESSMENT

March 2025

This paper on the Slovak Republic was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on February 28, 2025.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: <http://www.imf.org>

International Monetary Fund
Washington, D.C.



SLOVAK REPUBLIC

FINANCIAL SYSTEM STABILITY ASSESSMENT

February 28, 2025

KEY ISSUES

Context: The Slovak Republic FSAP took place amidst an economic recovery and tighter financial conditions, despite the start of an accommodative cycle and signs of overvaluation in real estate markets. The financial system remains predominantly bank-centered, highly concentrated, with significant foreign ownership and no material direct interconnections within the system. Banks rely on a domestically oriented traditional business model and maintain high capital buffers and ample liquidity.

Findings: The systemic risk analysis focused on the banking, non-financial corporate, and real estate sectors. Key risks to financial stability stem from external factors coupled with potential corrections in residential and commercial real estate valuations. The stress tests found the banking system resilient to severe macro-financial shocks with all banks meeting minimum capital requirements and most banks remaining liquid against adverse shocks. The capital impact from the interplay between liquidity and solvency risks is limited. The largest corporate borrowers appear relatively resilient.

Policy advice: The main recommendations centered on:

- *Macprudential framework and policies.* Further fostering the institutional framework, formally adopting a positive neutral CCyB framework when the level of profitability is healthy and/or voluntary buffers are available, and refining the borrower-based measures and removing the possibility to circumvent LTV limits.
- *Supervision and regulation of less significant institutions.* Strengthening supervisory powers to ensure operational independence; Streamlining off-site supervisory activities to align with risk classification; and strengthening on-site inspections for key risk areas.
- *Financial safety nets and crisis management.* Ensuring adequate resources for the national resolution authority; Strengthening resolution execution powers and enforcement of legal protection; and conducting a comprehensive reform of deposit insurance system.

Approved By
**May Khamis and Oya
Celasun**
Prepared By
**Monetary and Capital
Markets Department**

This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited the Slovak Republic in June and September 2024. The FSAP findings were discussed with the authorities during the Article IV consultation mission in January 2025.

- The FSAP team was led by Sumiko Ogawa and included Joelle El Gemayel (Deputy Mission Chief), Salim Dehmej, Angelica Lizarazo, Julia Otten, Danilo Palermo, Francisco Vazquez (all MCM), Shinya Kotera (EUR), and Geraldine Low (External Expert). Ivana Rossi (LEG) conducted a desk review of Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT). MCM support was provided by Zoltan Jakab, Ruy Lama, Jaunius Karmelavičius, Wei Shi (modelling), Mohamad Nassar, Kiran Sastry (research), and Vanessa Guerrero and David Ramirez (editorial). Eduard Hagara (OEDEC) accompanied the FSAP mission.
- The mission met Governor Kažimir and officials from the Národná banka Slovenska (NBS), officials from Ministry of Finance of the Slovak Republic (MoF), Ministry of Justice, Statistical Office, Fond Ochrany Vkladov (FOV), and European Central Bank (ECB). The mission also met representatives from the Slovak banking association, banks, and other financial sector experts.
- FSAPs assess the stability of the financial system as a whole and not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- The Slovak Republic is deemed by the Fund to have a systemically important financial sector according to SM/10/235 (9/16/2010), and the stability assessment under this FSAP is part of bilateral surveillance under Article IV of the Fund's Articles of Agreement.

CONTENTS

Glossary	5
EXECUTIVE SUMMARY	7
BACKGROUND	10
A. Macrofinancial Context	10
B. Financial Sector Landscape and Recent Developments	16
C. Progress Since the last FSAP	21
SYSTEMIC RISK ASSESSMENT	22
A. Risks and Vulnerabilities	22
B. Banking Sector Resilience	24
FINANCIAL SECTOR OVERSIGHT	32
A. Systemic Risk Oversight and Macroprudential Framework	32
B. Banking Supervision and Regulation	34
C. Financial Integrity	35
FINANCIAL SAFETY NET AND CRISIS MANAGEMENT	36
AUTHORITIES' VIEWS	37
FIGURES	
1. Real Sector Developments	12
2. Credit Developments	13
3. Residential Real Estate Developments	14
4. RRE-Prices at Risk	15
5. Banks' Direct Exposures to the Real Estate Sector	16
6. Interconnectedness	17
7. Banking Sector Balance Sheet and Liquidity	19
8. Financial Soundness Indicators	20
9. Nonbank Financial Sector	21
10. Developments in the CRE Sector	23
11. Stress Test Scenarios	25
12. Solvency Stress Test Results	26
13. Sensitivity Analysis Results	27
14. LCR and NSFR Results	29
15. Cash-flow Analysis	30
16. Liquidity to Solvency Interaction Results	30
17. Corporate Stress Test	31

TABLES

1. Key Recommendations	9
2. Selected Economic Indicators (2020-2030)	38
3. Financial Soundness Indicators (2018-2024Q2)	39
4. Structure of Financial System	40
5. Composition of Banking Sector	40
6. Key Recommendations from the 2007 FSAP Update	41
7. Recent Article IV Recommendations Related to the Financial Sector	45
8. Risk Assessment Matrix	47

APPENDICES

I. Current Macroprudential Settings	49
II. Banking Sector Stress Testing Matrix (STeM)	51
III. Quantifying the Effect of BBMs on Credit and House Price Growth in Slovakia	56

Glossary

AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
BBM	Borrower-Based Measure
CCoB	Capital Conservation Buffer
CCyB	Countercyclical Capital Buffer
CEE	Central and Eastern Europe
CET1	Common Equity Tier 1
COREP	Common Reporting
CRD	Capital Requirements Directive
CRE	Commercial Real Estate
CRR	Capital Requirement Regulation
D/E	Debt to Equity
DSTI	Debt Service to Income
DTI	Debt to Income
ECB	European Central Bank
ELA	Emergency Liquidity Assistance
EA	Euro Area
ESRB	European Systemic Risk Board
EU	European Union
FIU	Financial Intelligence Unit
FINREP	Financial Reporting
FOV	Fond Ochrany Vkladov (Deposit Protection Fund)
FSAP	Financial Sector Assessment Program
FSD	Financial Stability Department
FTB	First Time Buyer
FTT	Financial Transaction Tax
FX	Foreign Exchange
GDP	Gross Domestic Product
G-RAM	Global Risk Assessment Matrix
HQLA	High-Quality Liquid Asset
ICR	Interest Coverage Ratio
IFRS	International Financial Reporting Standards
IT	Information Technology
IRRBB	Interest Rate Risk in the Banking Book
LCR	Liquidity Coverage Ratio
LSI	Less Significant Institution
LTV	Loan to Value
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MREL	Minimum Requirements for Own Funds and Eligible Liabilities
NAV	Net Asset Value
NBFI	Non-Bank Financial Institutions

NBS	Národná banka Slovenska
NFC	Non-financial Corporate
NFCI	Net Fees and Commissions Income
NII	Net Interest Income
NPL	Non-performing Loan
NRA	National Resolution Authority
NSFR	Net Stable Funding Ratio
O-SII	Other Systemically Important Institutions
PD	Probability of Default
pnCCyB	Positive-neutral Countercyclical Capital Buffer
RAM	Risk Assessment Matrix
RRE	Residential Real Estate
RRP	Recovery and Resolution Plan
ROA	Return on Asset
ROTA	Return on Total Assets
SI	Significant Institution
SRF	Single Resolution Fund
SREP	Supervisory Review and Evaluation Process
SSM	Single Supervisory Mechanism
STB	Second Time Buyer
STeM	Stress Test Matrix
SyRB	Systemic Risk Buffer
WC/TA	Working Capital over Total Asset
WEO	World Economic Outlook

EXECUTIVE SUMMARY

The Slovak Republic's Financial Sector Assessment Program (FSAP) is taking place amid economic recovery, although there are downside risks to the outlook. The economy is prone to external shocks, given its reliance on Russian fossil fuels, significant integration in global value chains, and export dependence. A slowdown in external demand could negatively impact economic activity and labor markets. An intensification of regional conflicts may push up energy and commodity prices, leading to a tighter-for-longer monetary cycle. A failure to rein in the fiscal deficit, amplified by the effect of tighter financial conditions and an economic slowdown, could result in rating downgrades and trigger an increase in risk premia.

The FSAP assessed the risks facing the banking sector given existing vulnerabilities. The financial sector remains dominated by banks and highly concentrated, with a significant share of foreign ownership and no material direct interconnections among banks and between banks and non-bank financial institutions (NBFIs). Main risks to financial stability stem from external factors, coupled with potential corrections in residential and commercial real estate valuations. Despite recent cooling amid declining real wages and rising mortgage rates, house prices remain elevated and appear overvalued by some measures. A slowdown in economic activity and/or tighter financial conditions may lead to a correction in real estate prices with adverse effects on the quality of bank credit portfolios, particularly given banks' large exposure to residential mortgages. Further depression of prices of the highly leveraged and interest-sensitive commercial real estate (CRE) sector poses a potential source of risk given the direct and indirect exposures of banks, investment funds, and households to this sector. Finally, loans to globally integrated non-financial corporates (NFCs) could amplify the impact triggering higher credit losses.

Stress tests indicate that the Slovak banking system appears resilient to severe macro-financial shocks. The FSAP assessed Slovak banking system resilience to severe but plausible shocks based on solvency, liquidity, and corporate stress tests, in addition to sensitivity analyses. Under the adverse scenario, all banks continue to meet the minimum capital requirements, supported by high initial levels of capital buffers and an increase in net interest income (NII), which mitigates the impact of credit impairments and lower revenue generation from net fees and commissions income (NFCI). The corporate stress test indicates that the largest corporate borrowers appear relatively resilient under the adverse scenario. On the liquidity side, the system exhibits strong resilience against severe stress scenarios cushioned by ample buffers, with both the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) remaining above the threshold for the aggregate banking system, and for most of the banks. The sensitivity analysis on the interplay between liquidity and solvency risks indicates a limited impact on capital.

Notwithstanding the resilience of the banking sector, the NBS' systemic risk assessment framework could be further enhanced by (i) strengthening its stress testing to assess the resilience of the banking sector to adverse macro-financial shocks and expanding the sensitivity analyses, (ii) strengthening the monitoring of expected losses from emerging risks, and (iii) integrating the cash-flow analysis into the liquidity stress testing framework. A more systematic

publication of the results of the liquidity stress tests, along with the solvency stress tests, in the Financial Stability Report would increase transparency.

Refining the macroprudential policy framework and tools can further help mitigate cyclical and structural risks in the future. The NBS, as the designated macroprudential authority, has made steady progress in implementing and advancing the macroprudential policy framework. The institutional framework could be further fostered through (i) the publication of a macroprudential strategy, and (ii) the extension of the NBS' information-collection powers to include loan-level data from regulated financial institutions and data from unregulated financial institutions. A formal adoption of a positive-neutral countercyclical capital buffer (pnCCyB) framework would safeguard the availability of releasable capital. Remaining leakages in the Borrower-Based Measures (BBMs) should be closed. Furthermore, the recent availability of real estate transaction data by borrower segment provides an opportunity to revise the framework with a stronger focus on mitigating the procyclicality of credit and house price growth. Lastly, the NBS should stand ready to activate the systemic risk buffer (SyRB) before risks become systemic and should maintain close oversight of the real estate funds.

The corrective powers and overall effectiveness of banking supervision across several key risk areas can be further strengthened. The NBS has harmonized its requirements and approach for Less Significant Institutions (LSIs) supervision with the Single Supervisory Mechanism (SSM) approach adopted for Significant Institutions (SIs) with some caveats for proportionality. The NBS' supervisory powers should be strengthened to ensure operational independence by (i) confining banks' appeal powers to finalized supervisory prudential decisions and corrective measures, and (ii) enhancing the legal protection of the supervisor and staff against lawsuits for actions taken and/or omissions made while discharging their duties in good faith. Moreover, the NBS should align its off-site activities with LSIs' impact and overall risk profile, while enhancing on-site inspections to increase its overall effectiveness of supervision across several key risk areas such as credit, liquidity, interest rate risk in the banking book (IRRBB), and IT risk. The risk profile and classification of an LSI should be updated when material deficiencies are discovered.

Slovakia has taken steps to strengthen its AML/CFT framework and should continue enhancing its effective implementation. The authorities should continue to review the criteria for the application of sanctions to ensure that dissuasive sanctions are applied. Given the supervisory roles of both the NBS and Financial Intelligence Unit (FIU), collaboration should be strengthened, including through the adoption of an updated Memorandum of Understanding (MoU). Beyond the compilation of the information, the authorities should consider incorporating mechanisms for the verification of the beneficial ownership information provided by the entities and sanctioning the submission of inaccurate information.

The financial safety nets and crisis management framework should be strengthened with a better resourced national resolution authority (NRA), more assurances for non-reversal and swift execution of resolution decisions, and enforcement of legal protection for staff and resolution council members, and a comprehensively reformed deposit insurance system.

Table 1. Slovak Republic: Key Recommendations			
Recommendations	To be Adopted by	I/ST/MT¹	Priority
Cross-cutting			
Augment resources in the areas of financial stability and key risk areas (e.g., liquidity, IRRBB, IT and AML) to ensure technical capabilities (¶28, 37)	NBS	I	H
Enhance the legal protection for the supervisors; ensure that the legal protection framework for the Resolution Council and NBS staff involved in resolution is enforced (¶36, 40)	Government, NBS, NRA and Resolution Council	I	H
Systemic Risk Analysis			
Strengthen stress tests to assess the resilience of the banking sector to adverse macro-financial shocks by (i) incorporating the IFRS 9 approach into Credit Risk Monitoring, and (ii) complementing the adverse scenarios with sensitivity analyses on key macro variables (i.e., interest rates) (¶15, 17-18).	NBS	ST	H
Strengthen the monitoring for expected losses from emerging risks, especially in vulnerable segments including the CRE sector. (¶24).	NBS	I	H
Integrate the cash-flow analyses in the liquidity stress testing framework (¶22).	NBS	ST	H
Publish more systematically the results of liquidity stress tests, along with the solvency stress tests in the Financial Stability Report (¶19-21).	NBS	I	M
Regulation and Supervision of LSIs			
Confine banks' appeal powers to finalized supervisory prudential decisions and corrective measures (¶36).	MoF/NBS	MT	H
Streamline off-site supervisory activities (including SREP) to align them with risk classification and update the risk profile/classification of an LSI after material deficiencies are discovered (¶37).	NBS	I	H
Strengthen on-site inspections for key risk areas of credit, liquidity, IRRBB, IT and AML (¶37).	NBS	I	H
Macroprudential Framework and Policies			
Publish a macroprudential strategy document including objectives, communication, risk monitoring framework, and available toolkit (¶26).	NBS	I	M
Expand information collection powers to cover loan-level data from both banks and non-banks and data from unregulated entities (¶27).	Government and NBS	MT	M

Table 1. Slovak Republic: Key Recommendations (Concluded)			
Maintain the availability of releasable capital in normal times by moving to a positive neutral CCyB framework (¶131).	Government and NBS	MT	H
Refine the borrower-based measures and remove the possibility to circumvent LTV limits with consumer loans (¶132-33).	NBS	MT	H
Financial Integrity			
Strengthen the AML/CFT implementation by reviewing the criteria for the application of the sanctions by the NBS, enhancing collaboration between the NBS and the FIU and incorporating mechanisms for the verification of the beneficial ownership and sanctioning the submission of inaccurate information at the central register (¶139).	NBS, FIU and Statistical office	C	H
Financial Safety Nets and Crisis Management			
Ensure that the resolution authority has adequate resources, staff, and organizational structure, capable of taking decisions quickly and in close cooperation with supervisors (¶140).	Government & NBS	I	H
Amend the Resolution Act to (i) restrict the Judiciary's powers to suspend or reverse resolution decisions; and (ii) ensure that resolution decisions are enforceable from the moment they are taken rather than from when affected parties are notified (¶141).	Government, NBS and Resolution Council	I	H
Reform the Slovak deposit insurance framework to improve its governance by removing active bankers from its boards; expand its mandate; strengthen the financial position; and enhance the inter-agency cooperation (¶143, 46).	Government FOV & Resolution Council	ST	H
¹ In terms of priorities, H, M, and L stand for high, medium and low. In terms of time frame, I, ST, MT and C stand for immediate (within one year), near-term (within 2–3 years), medium-term (within 3–5 years), and Continuous.			

BACKGROUND

A. Macrofinancial Context

1. Growth in the Slovak economy is recovering and inflation has declined from record-highs, but the outlook is dominated by downside risks. Economic growth in 2024 reached 2.0 percent (1.4 percent in 2023), supported by a recovery of private consumption and an increase in public consumption, while EU-funded public investments slowed down from record highs in 2023 and net exports remained weak (Figure 1, Table 2). The fiscal consolidation from 2025, however, will put downward pressure on growth, and inflation is projected to rise temporarily in the near term before approaching the 2 percent target towards early 2027. The outlook is clouded by risks associated with global slowdowns, intensifying trade policy uncertainty, commodity price volatility, and potential delays in structural reforms and fiscal consolidation.

2. Tighter financial conditions dampened credit growth and housing market dynamics, but the financial cycle is showing signs of turning recently. Private sector credit growth slowed due to rising lending rates (linked to ECB rising policy rates) and tighter financial conditions until

end-2023 (Figure 2). Loan demand from non-financial corporates (NFCs) weakened, while mortgage growth stabilized and consumer loan growth increased. Financial conditions became more accommodative as the ECB cut key rates starting in June 2024, and the NBS' composite financial cycle indicator started to turn in recent quarters. The NBS did not fully release the countercyclical capital buffer (CCyB) during the COVID pandemic and raised it back to 1.5 percent in August 2023 as mortgage and house price growth accelerated.¹

3. The corporate sector has a relatively strong debt repayment capacity (Figure 2). NFC loan growth shifted to a downward trend in 2023 reflecting rising interest costs and weakening customer demand. The NFC-debt-to-GDP ratio dropping to 66 percent in Q3 2024 (about ¼ to real estate NFCs), from 78.5 percent in Q4 2022. The number of bankruptcies remains stable, and firms have a relatively high capacity to meet interest and debt repayment costs.

4. Despite recent cooling, there are some signs of lingering downside risks to residential real estate (RRE) prices. Residential property prices have more than doubled since 2007, mainly fueled by ultra-low interest rates and supply constraints, and the housing-price-to-income ratio has steadily increased until 2022 (Figure 3). Despite recent cooling amid declining real wages and rising mortgage rates, house prices remain elevated and appear overvalued by some measures.² An RRE-price-at-risk analysis suggests that house prices could fall by 12.9 percent by 2025Q1 with a chance of 10 percent, although the uncertainty is exceptionally high (Figure 4).

5. The NBS has made proactive use of BBMs to counter growing household indebtedness and emerging vulnerabilities in the RRE sector. The share of mortgage portfolios in total bank loans increased to 59 percent in May 2024, doubling since 2007. Home ownership is high at around 90 percent but only 27 percent of households have mortgage debt. Since the introduction in 2014, BBMs were continuously tightened through binding decrees (Appendix I). Although BBMs helped limit the mortgage portfolio's riskiness, lately the interest payment burden for new loans and LTV ratios for the whole portfolio have crept up somewhat, due to interest rate increases and lower house prices (Figure 5).

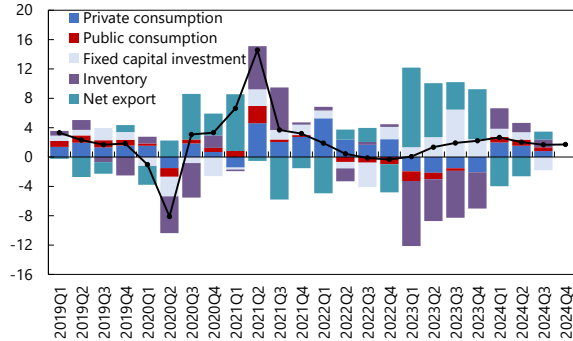
¹ The CCyB is guided by the position in the financial cycle, as estimated by the Cyclogram, between 0 and 2.5 percent calibrated based on losses observed during the Great Financial Crisis.

² Staff estimates show an average overvaluation of 12 percent in 2023Q4, ranging from a 30 percent overvaluation to an 11 percent undervaluation (Figure 3).

Figure 1. Slovak Republic: Real Sector Developments

Growth in recent years has been supported by EU-funded public investment and a recovery of consumption.

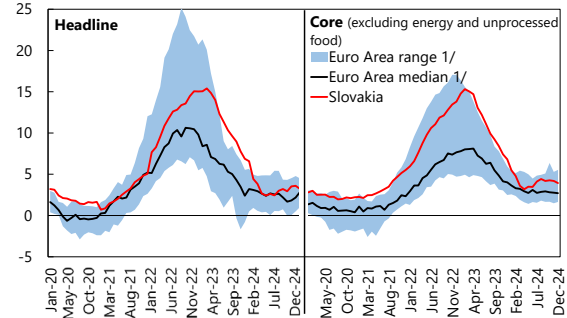
Contribution to Real GDP Growth
(Percentage points, annualized, 4-quarter moving average)



Sources: Haver Analytics and IMF staff calculation.

Inflation fell to close to the euro area median in 2Q 2024, but both headline and core inflation have picked up recently.

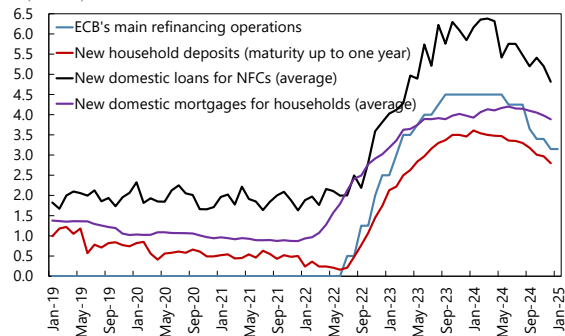
Inflation Rate Across Euro Area Countries
(Year-one-year percent change)



1/Euro Area range and median exclude Slovakia.
Sources: Eurostat and IMF staff calculations.

Deposit and lending rates have increased ...

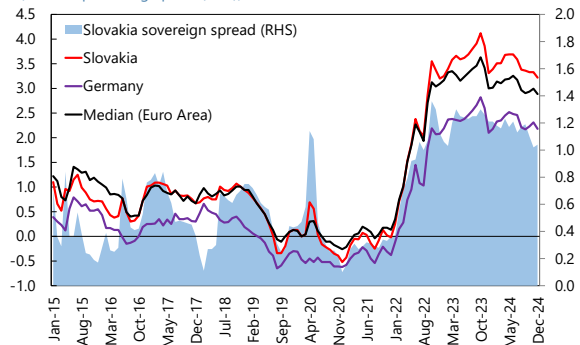
Interest Rate
(Percent)



Source: National Bank of Slovakia.

...and the yield on government bonds has moved in line with other countries in the euro area.

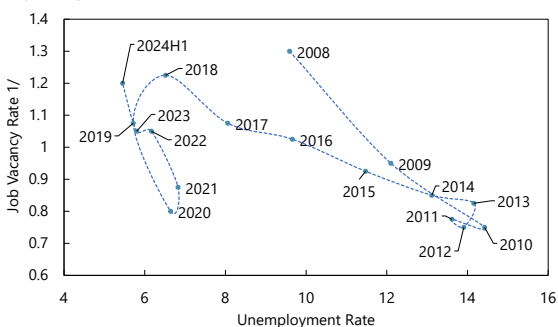
10 Years Government Bond Yield
(Percent, percentage point (RHS))



Sources: CEIC and IMF staff calculations.

The unemployment rate decreased to an all-time low of 5.3 percent...

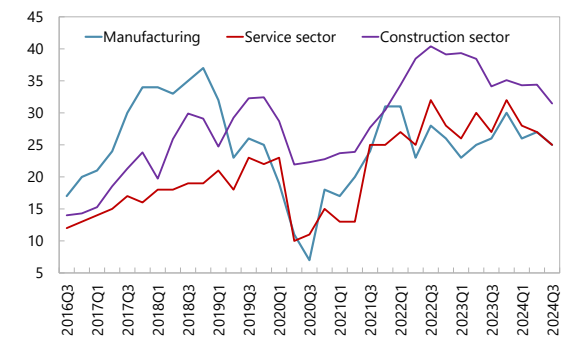
Beveridge Curve
(Percent)



1/ Number of job vacancies / (Number of occupied posts+Number of job vacancies).
Source: Haver Analytics.

...and labor shortages are particularly acute in the construction sector.

Firms Reporting Labor Shortage
(Percent balance, SA)



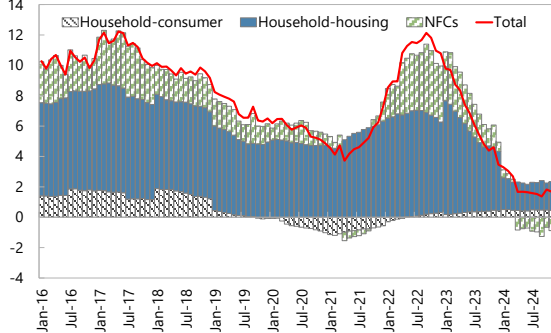
Sources: Haver Analytics and IMF staff calculations.

Figure 2. Slovak Republic: Credit Developments

Private credit growth started to decelerate in mid-2022, with household loan growth having stabilized recently.

Contribution to Private Sector Credit Growth

(Year-on-year percent change, percentage points)

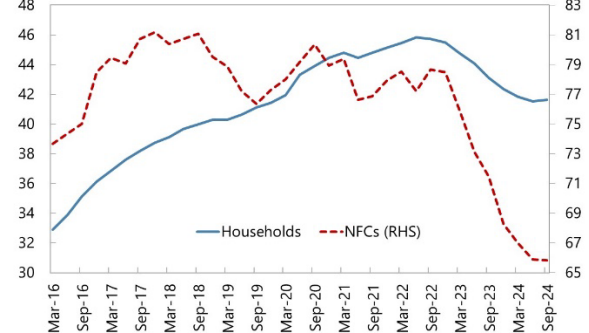


Sources: Haver Analytics and IMF staff calculations.

Both household and corporate debts have moderated and stand at 42 and 66 percent of GDP in 2024Q3, respectively.

Debt to GDP

(In percent)

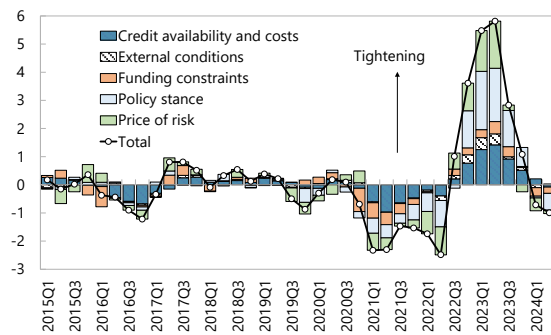


Sources: NBS and ECB

Following the tightening in 2023, financial conditions turned accommodative in 2024 Q1...

Financial Condition Changes

(contribution to quarter-over-quarter first difference of the unscaled FCI)

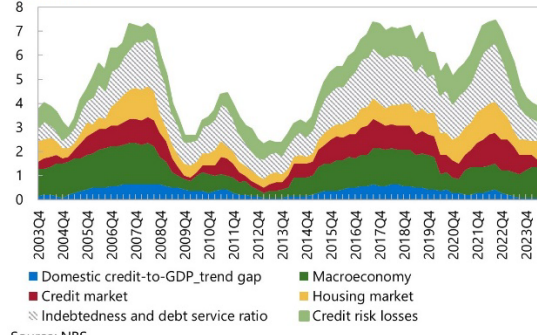


Sources: Borraiccia, G. et al. (2023)

...and the NBS's composite indicator of the financial cycle (Cyclogram)¹ showed slight upturn.

Cyclogram, by Component

(Indicator)

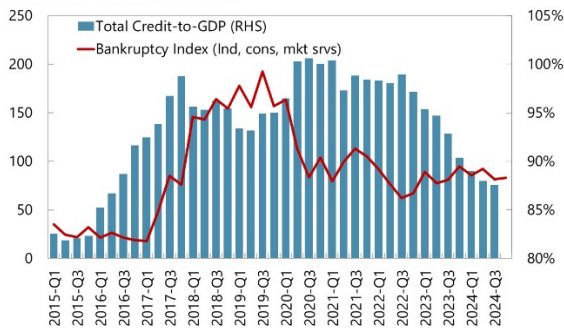


Source: NBS.

Bankruptcies remain below the pre-pandemic level...

Bankruptcy Index and Credit-to-GDP

(Index, 2021 = 100, Percent (RHS))

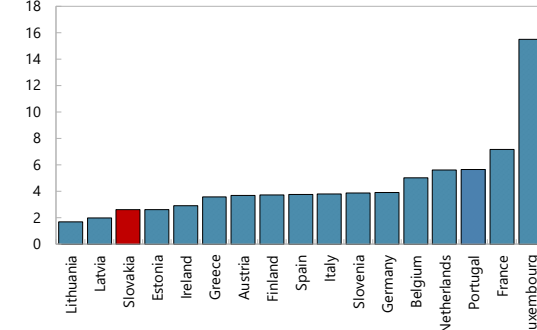


Sources: EuroStat, NBS.

...and corporates have a relatively high capacity to meet debt payments compared to other euro area countries.

Debt to Surplus, 2022

(Ratio)



Source: OECD

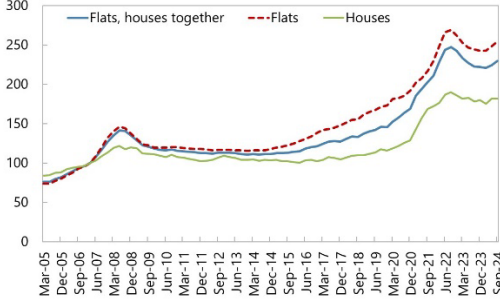
¹ The NBS uses a composite indicator (Cyclogram), as credit-gap measures face interpretation challenges due to short time series, structural changes, and GDP volatility. Cyclogram includes the domestic-credit-to-GDP gap and other indicators capturing credit market risks, macroeconomic risks, and risks in the housing market.

Figure 3. Slovak Republic: Residential Real Estate Developments

House prices have corrected by about 10 percent between mid-2022 and mid-2023 but have since stabilized...

Housing Price Development

(Index, 2007Q1=100)

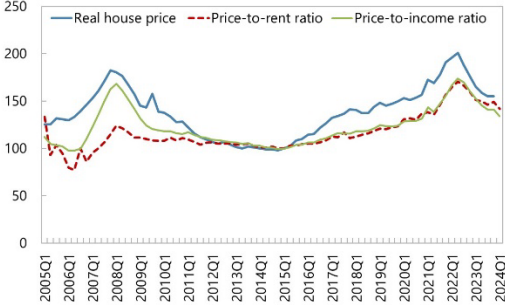


Source: NBS

...mirrored by a decline in house prices ratios that has also bottomed out during 2023.

House Price Ratios

(Index, 2015 = 100)

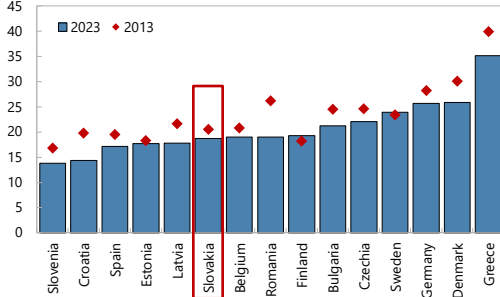


Source: NBS

Housing costs still account for close to 20 percent of disposable household income...

Housing Affordability

(Percent)

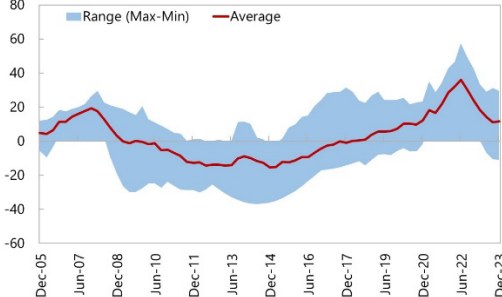


Note: Share of housing costs in disposable household income
Source: Eurostat

...and house prices still appear to be overvalued.

Statistical Overvaluation

(Percent)



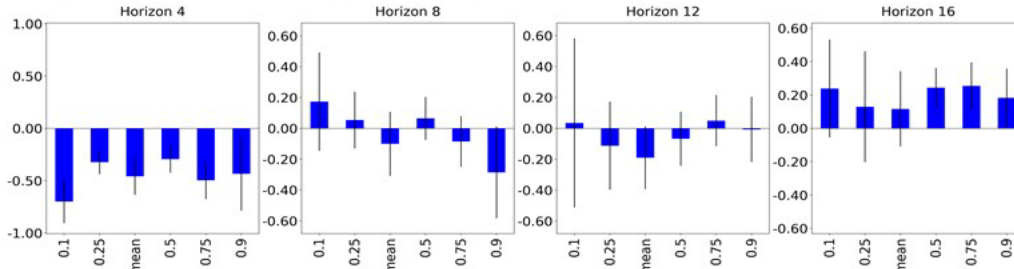
Source: NBS and IMF staff estimates.

Note: House price overvaluation estimates were derived based on real house prices, price-to-rent and price-to-income ratios using the cyclical components extracted from the Hodrick-Prescott, Hamilton, and Christiano-Fitzgerald filters, to ensure robustness and provide a comprehensive view of the underlying cyclical dynamics.

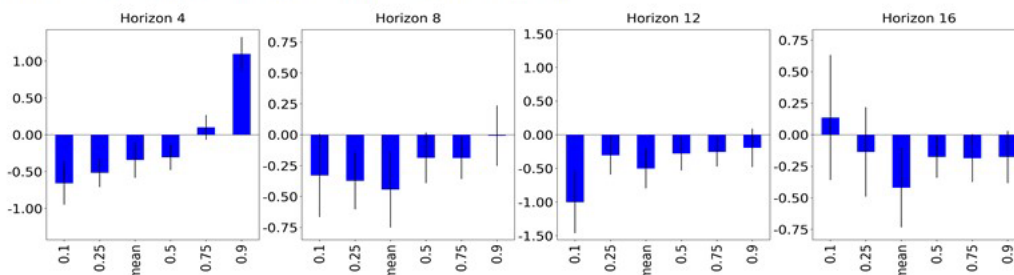
Figure 4. Slovak Republic: RRE-Prices at Risk

RRE-price-at-risk analysis examining the non-linear relationships between RRE prices and key determinants indicates that the downside risks to RRE prices is associated with deteriorating household income in the near term, and tighter financial conditions over longer horizon, particularly at the higher end of the price distribution.

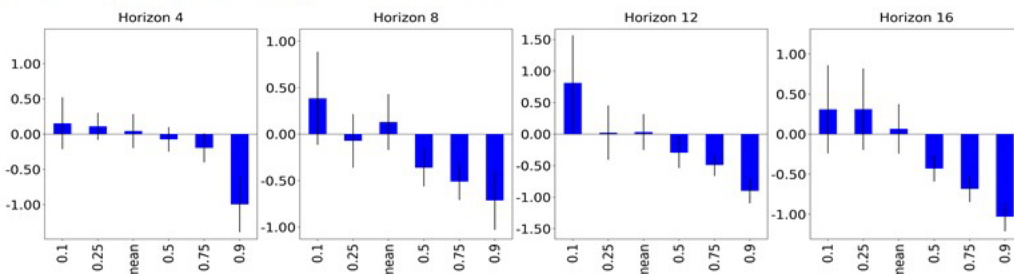
Income growth (+ indicates worsening income growth)



General domestic financial conditions (+ indicates tightening)

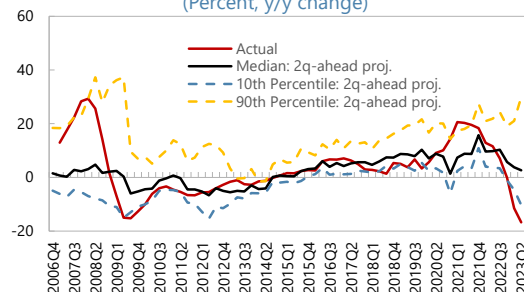


Household financial situation (+ indicates tightening)



The model qualitatively captures the downside risks of the recent episode of price correction but misses the severity.

Real RRE Price, 2006Q4-2023Q2
(Percent, y/y change)



Sources: NBS, Statistical Office of the Slovak Republic, Haver Analytics, Financial Sector Analytical Data, ECB, Bloomberg, and IMF staff estimates.

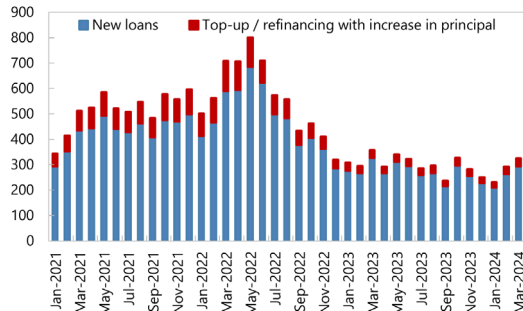
Notes: Downside risks to house prices are characterized by the fitted values of the lower percentiles by fitting a skewed T-distribution to the predicted values of the quantile regressions over pre-specified time horizon. Underlying variables have been categorized into three groups, which are represented by their first principal component. Data used in this analysis cover 2006Q1 to 2024Q1. The forecasting horizon is 4 quarters.

Figure 5. Slovak Republic: Banks' Direct Exposures to the Real Estate Sector

Demand for new mortgage loans weakened as financial conditions tightened but has stabilized recently.

New Mortgage Loans

(EUR Millions)

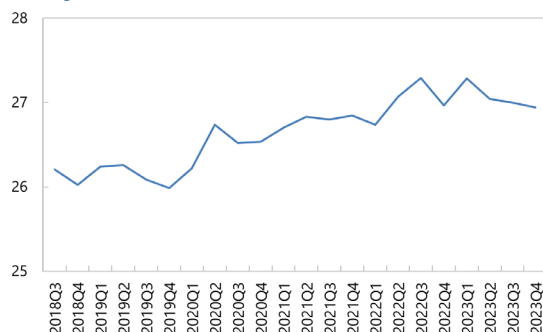


Source: NBS.

...while average loan sizes dropped, and maturities extended to comply with the DSTI limit.

Maturity of New Mortgages at Origination

(Average, Years)

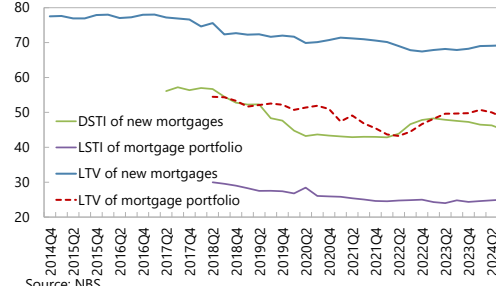


Source: NBS.

The rise in interest rates increased DSTI ratios of new mortgages and lower house prices drove up LTV ratios of the whole portfolio...

DSTI/LSTI and LSTI of Mortgage Portfolio and New Mortgages at Origination

(Percent)



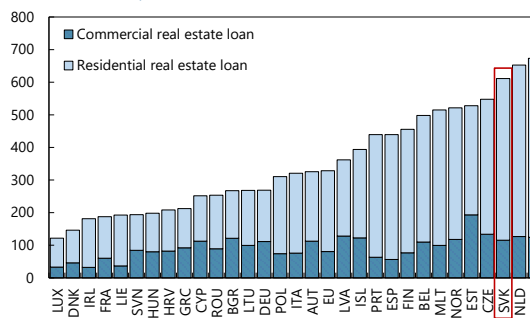
Source: NBS.

Note: For the whole portfolio, only the LSTI is available.

In addition to the high exposures to residential real estate loans, Slovak banks are also exposed to commercial real estate sector.

Bank Credit Exposure to Real Estate

(Percent of Tier 1 Capital, 2024Q2)



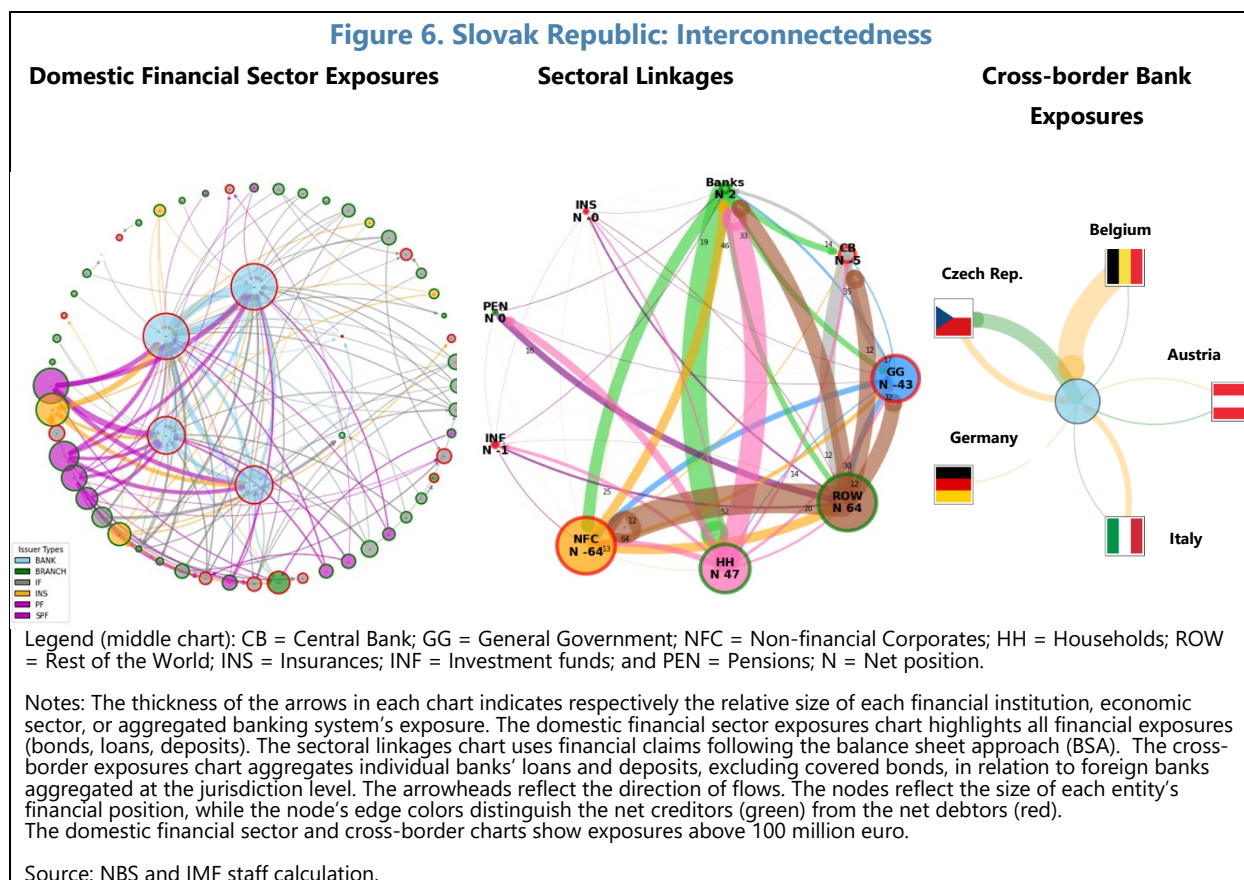
Sources: European Banking Authority and IMF staff calculations.

B. Financial Sector Landscape and Recent Developments

6. The financial sector size relative to GDP has been increasing since the 2007 FSAP Update and the sector remains largely dominated by banks. Total system assets were at 1.25 times of GDP, with the banks representing 79 percent at end-2023 (Table 4). The structure has remained broadly stable, with a marginal increase in NBFIs participation. Direct contagion risks within the financial sector, interbank market, and cross-border banking operations are relatively low (Figure 6).³

³ Potential indirect contagion risk through common exposures could arise.

Figure 6. Slovak Republic: Interconnectedness



7. The banking sector withstood the multiple shocks of the Covid-19 pandemic and the war on Ukraine well (Figures 7, and 8, Table 3). The banking sector is highly concentrated and primarily foreign owned, with the four largest banks (all SIs and part of large European banking group under ECB direct supervision) accounting for 71 percent of banking sector assets (Table 5). Banks are domestically oriented, relying on a traditional business model, with little dependence on financial markets and a moderate exposure to the sovereign (around 10 percent of total assets).

- **Regulatory capital** stayed stable throughout the pandemic, standing at 20.5 percent of risk-weighted assets at end-2023 (20 percent for SIs and 22.5 percent for LSIs).⁴ The non-performing loan (NPL) ratio has steady declined from a peak of 5.8 percent in 2010 to 2 percent at end-2023 despite the withdrawal of pandemic-related support measures. Loan-loss coverage declined to pre-pandemic levels, falling below 60 percent and approaching the euro area (EA) median.

⁴ All banks are subject to a capital conservation buffer (CCoB) of 2.5 percent, a counter-cyclical buffer (CCyB) currently set at 1.5 percent, while 6 banks (all SIs and two LSIs) are subject to O-SII buffer (0.25-2 percent). Specific Pillar 2 requirements and Pillar 2 guidance are defined as part of SREP process and set at institution basis.

- **Profitability**, mainly associated with traditional lending and driven by higher net interest income, reached a record high in 2023. However, the bank levy,⁵ if not unwound as planned, will reduce banks' profitability.
- **Liquidity** seems ample, with the LCR for the Slovak banking system at 200 percent (192 percent for SIs and 282 percent for LSIs), with Level 1 assets representing 98 percent of high-quality liquid assets. The NSFR remained at 131 percent for both SIs and LSIs. With a predominant reliance on stable funding from households and corporates, the loan-to-deposit ratio is structurally high at 105 percent. However, it has been decreasing recently due to the slowdown in credit growth, the dynamics of deposit collection, and the diversification of funding structure through the issuance of covered bonds.⁶

8. The NBFIs sector, comprising pension funds, insurance companies, and the asset management industry, is relatively small (Figure 9).

- **Pension funds** have been growing since the pension system reform in 2005 (14 percent of GDP). While pension funds have been diversifying their assets more into equities away from government bonds since the adoption of the default savings investment strategy based on life-cycling in July 2023, medium- to long-term sustainability relies on a higher contribution rate to fill the pension gap.
- **The insurance sector** is dominated by European groups operating via branches and subsidiaries. The sector remains small and sluggish, with total assets representing less than 5 percent of GDP. The median solvency ratio for the sector has been stable at around 180 percent since the implementation of Solvency II in 2016.
- **The asset management sector** is largely dominated by a handful of key players that are subsidiaries of foreign-owned financial groups. Total assets under management represent about 11 percent of GDP, with retail investors accounting for roughly 80 percent of the funding. Real estate funds, representing about ¼ of the sector's net asset value (NAV), hold 76 percent of their assets in equity shares and debt exposures to real estate companies, out of which 85 percent is CRE.

9. The Bratislava Stock Exchange lacks depth and scale relative to other exchanges in a competitive region. Stock market capitalization is less than 2 percent of GDP and liquidity is undermined with delisting in recent years. The larger and more established bond market has a

⁵ The levy, introduced in January 2024, is set at 30 percent of profits in 2024, scheduled to be decreased steadily to 4.356 percent in 2028.

⁶ Covered bonds are close to 11 percent of funding, backed by RRE loans and primarily held by foreign investors with low cross-ownership between banks in Slovakia. Assets encumbrance is on average at 20 percent. Liquidity mitigants (EU Directive No 2019/2162), limited interbank crossholdings, and adequate counterbalancing capacity help contain the implications of covered bond funding. As of December 2023, only few banks have a large share of covered bonds in their funding. Going forward, a heavier reliance on covered bonds would merit closer attention as it could reduce funding flexibility in the future and may subject banks to heightened liquidity risks or higher cost of funding.

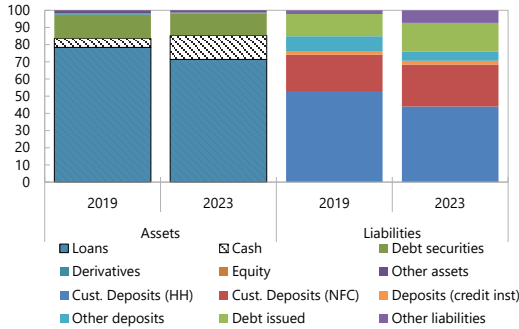
market value of 60 percent of GDP, with public bonds representing about 75 percent of the outstanding as of 2024Q3.

Figure 7. Slovak Republic: Banking Sector Balance Sheet and Liquidity

The Slovak banking sector is highly concentrated, with the largest five institutions accounting for about ¾ of the sector’s assets. Banks are domestically focused and rely on a traditional business model, with loans and household and corporate deposits accounting for a large part of their asset and liabilities.

Slovak Banks - Balance Sheet Structure

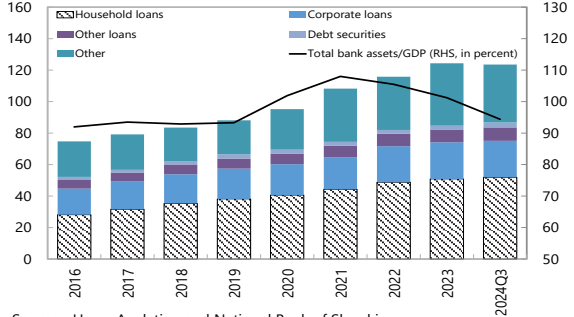
(Percent of total)



Source: European Banking Authority

Slovak Bank Assets by Loan Type

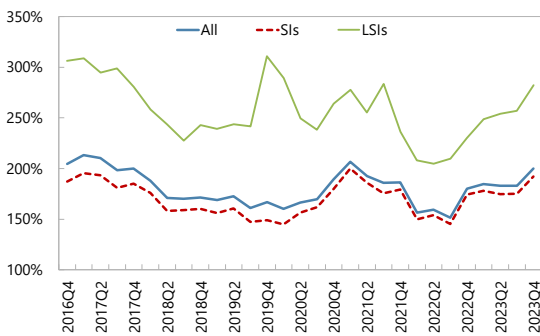
(In billions of EUR, end of period)



Sources: Haver Analytics; and National Bank of Slovakia.

Liquidity Coverage Ratio

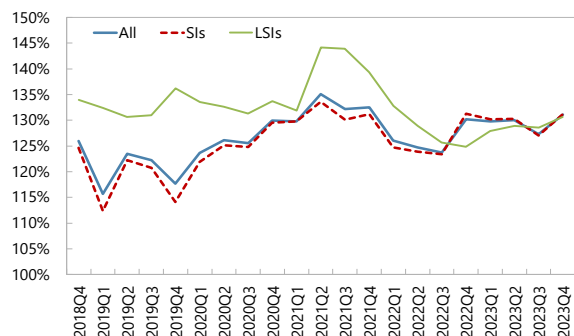
(Percent)



Source: NBS

Net Stable Funding Ratio

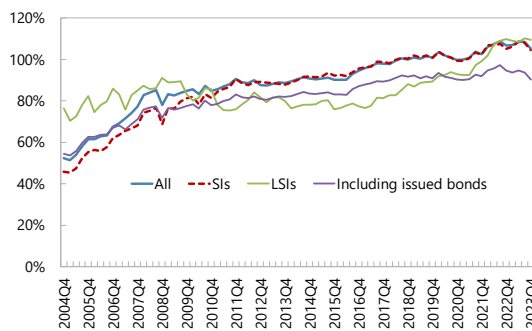
(Percent)



Source: NBS

Loan-to-Deposit Ratio

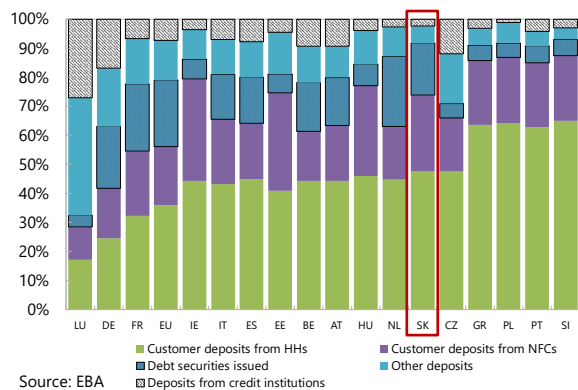
(Percent)



Source: NBS

Composition of Liabilities

(Percent of total liabilities, 2023Q4)



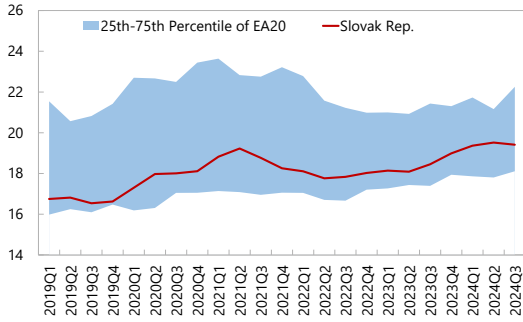
Source: EBA

Figure 8. Slovak Republic: Financial Soundness Indicators

The Slovak banking system's capital buffers remain high and broadly in line with European peer countries. Asset quality has steadily improved, especially for corporate loans, with provisions currently in line with the median of European peers. Profitability has recovered driven by interest income, but stands towards the lower end of the European peers' spectrum.

Tier 1 Capital Ratio (EA20)

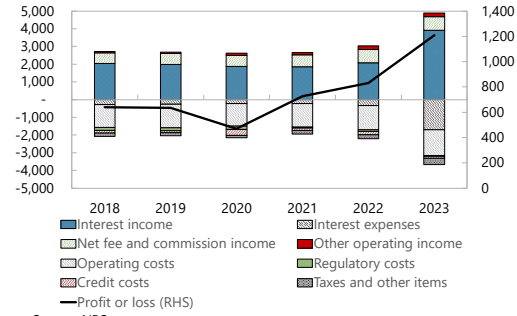
(Percent)



Source: IMF, Financial Soundness Indicators database.

Slovak Banks - Income and Expenses Breakdown

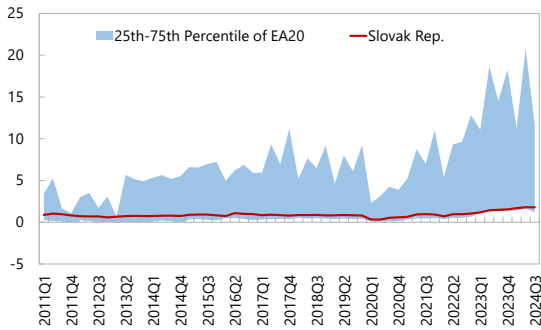
(EUR millions)



Source: NBS

Net Income (EA20)

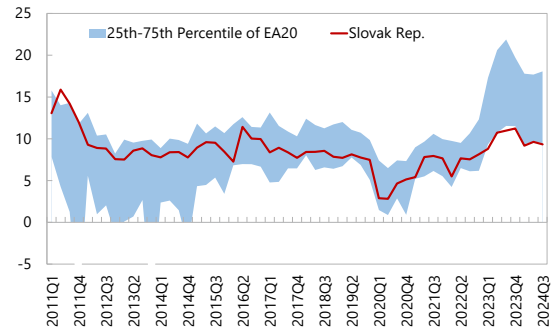
(Bil. EUR)



Source: IMF FSI

Return on Equity (EA20)

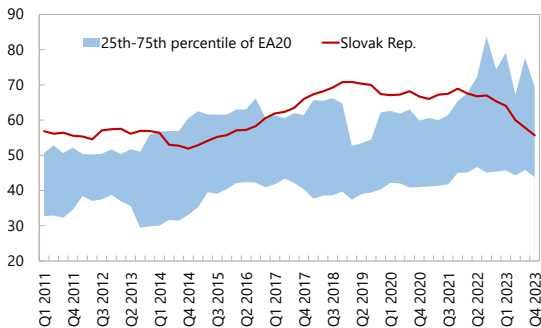
(Percent)



Source: IMF FSI

Provisions to NPLs (EA20)

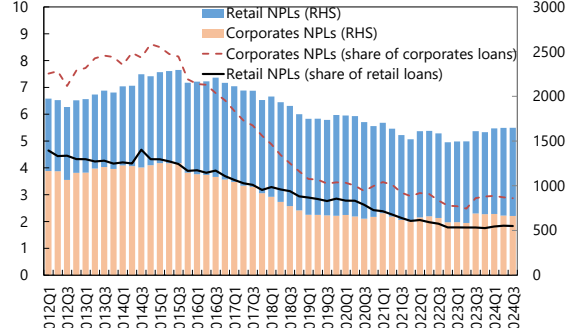
(Percent)



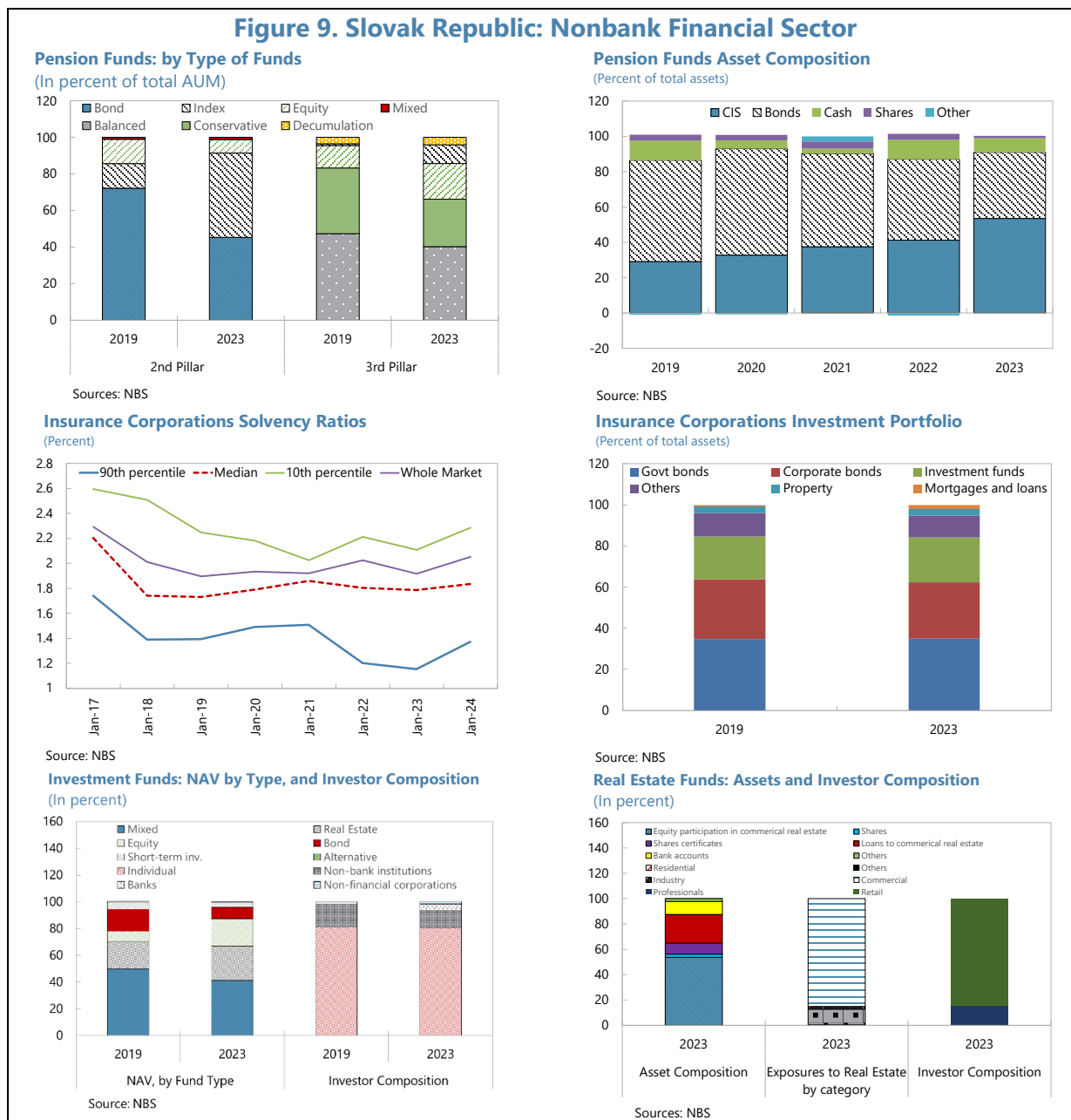
Source: IMF FSI

Non-Performing Loans by Sector

(Percent, million euro (RHS))



Sources: Haver Analytics, National Bank of Slovakia and IMF staff calculations.

Figure 9. Slovak Republic: Nonbank Financial Sector

C. Progress Since the last FSAP

10. Financial sector oversight has improved since the 2007 FSAP (Table 6). The supervision of significant banks has been transferred to the ECB following the creation of the Single Supervisory Mechanism (SSM) in 2014, which helped strengthen home-host collaboration. Monitoring of prudential indicators and banks' credit standards is conducted on a regular basis in addition to the Comprehensive Supervisory Review and Evaluation Process (SREP). Fit and proper criteria were also transposed for LSIs, NBFIs, and insurance companies.

SYSTEMIC RISK ASSESSMENT

A. Risks and Vulnerabilities

11. The main risks stem from external factors, including an abrupt global slowdown and further escalation of regional conflicts (Table 8). The Slovak economy is prone to external shocks, given its reliance on Russian fossil fuels, significant integration in global value chains, and export dependence. A slowdown in external demand could negatively impact economic activity and labor markets. This may lead to a correction in real estate prices with adverse effects on the quality of bank credit portfolios. An intensification of regional conflicts may push up energy and commodity prices, leading to a tighter-for-longer monetary cycle. A failure to rein in the fiscal deficit, amplified by the effect of tighter financial conditions and an economic slowdown could result in rating downgrades and trigger an increase in risk premia.

12. The high mortgage exposures and loans to globally integrated NFCs are potential sources of vulnerabilities. The high concentration in mortgage lending could trigger higher credit losses if economic activity slows down, financial conditions tighten, and housing prices decline. Most mortgages have a medium-term interest rate fixation, and a big portion of the portfolio will be repriced in the next one to three years.⁷ Although this could have a positive impact on bank profitability, a higher debt service burden could lead to household defaults. Banks with a large corporate loan portfolio, especially in sectors vulnerable to geopolitical risks (e.g., auto sector), could be more susceptible to NFC credit losses.

13. In addition to the RRE market, the CRE sector entails a source of risk that merits closer analysis (Figure 10). Banks, investment funds, and households⁸ are directly and indirectly exposed to the highly leveraged and interest-sensitive CRE sector. In the office segment, about 20 percent of CRE loans, demand has structurally declined, with the vacancy rate reaching 14 percent and interest expenses making up 20–30 percent of rental income. Higher-for-longer interest rates and weaker occupier demand could further depress property values and increase the riskiness of loans in this sector. CRE firms' profits have recovered in 2022, and most recent NPL rates fell to near pre-pandemic levels. Currently, Slovakia has not introduced any macroprudential tools to address CRE risk, emphasizing the need to scrutinize banks' CRE portfolios and closing data gaps to enhance oversight.

⁷ As of June 2024, approximately 11 percent of the mortgage portfolio has an interest rate reset by the end of the year and 31 percent by end 2026.

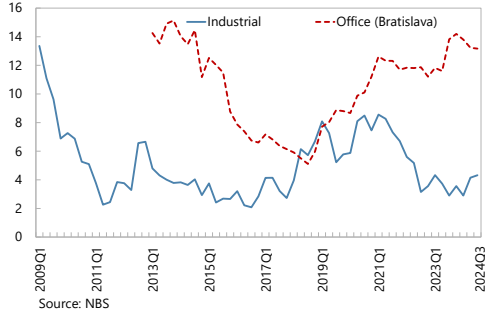
⁸ Banks' loans to the CRE sector represent about 8 percent of total loan portfolios and make up 90 percent of all CRE-related loans. Households are indirectly exposed to CRE through real estate investment funds, which as of end 2023, relied up to 85 percent on the retail investors and had 65 percent exposure to CRE through equity and debt.

Figure 10. Slovak Republic: Developments in the CRE Sector

Vacancies have been increasing in the office sector, with other sectors having stabilized.

Vacancies in The CRE Sector

(Percent of supply)

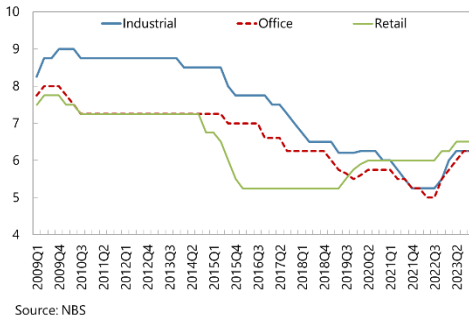


Source: NBS

Rental yield indicators have picked up recently, after having decreased for most sectors during the pandemic.

Rental Yield Indicator

(Percent)

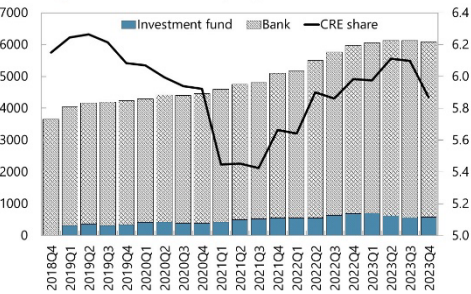


Source: NBS

The CRE loan stock has been constant since beginning of 2023, with banks holding about 90 percent of all CRE loans...

CRE Loans by Lender

(Mil EUR, percent of total bank loans (RHS))

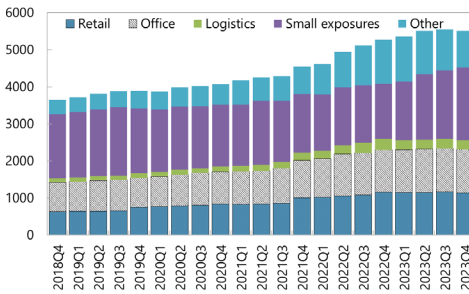


Source: NBS

...and the exposure to the office sector having been constant at around 20 percent since the beginning of 2022.

CRE Loans by Type

(Mil EUR)

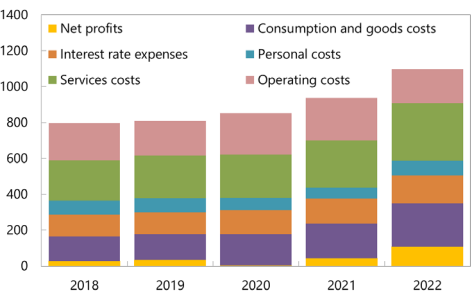


Source: NBS

CRE firms' profits have recovered in 2022, enabling them so far to stem higher interest rate costs...

Firms' Profits in CRE sector

(Millions of m2)

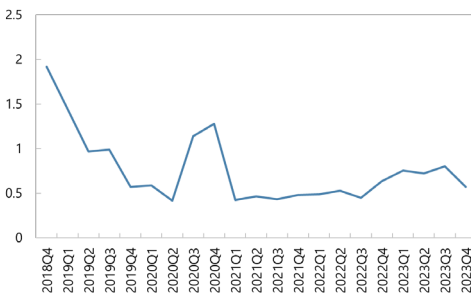


Source: NBS

...with NPLs remaining relatively low.

CRE Loans NPLs

(Percent)



Source: NBS

B. Banking Sector Resilience

14. The stress tests focused on banking system solvency and liquidity resilience, considering the bank-centric structure and the lack of a systemic role of NBFIs. Concurrently, the team assessed the NFC and household vulnerability to inform the credit risk assessment of banks' loan portfolios.

Bank Solvency Stress Tests

15. The FSAP's top-down solvency stress test covered four SIs and five LSIs accounting for 86 percent of the banking sector assets.⁹ The exercise excluded foreign branches and was based on the IMF's internally developed solvency stress-testing framework (Appendix II). The stress tests used a baseline scenario aligned with the April 2024 World Economic Outlook (WEO) projections and an adverse scenario that reflects the main risks in the risk assessment matrix (Table 8, Figure 11). The adverse scenario assumes GDP shocks equivalent to a cumulative 2.6 standard deviation from the baseline during the first two years, prolonged higher policy rates, and deterioration in financial conditions as a result of a weak fiscal situation. Property prices are assumed to drop by a cumulative 17 percent by 2026 before stabilizing (comparable to the correction observed in 2008-14). Economic growth is assumed to remain below potential, causing unemployment to rise to about 10.5 percent by 2025. The assessment considers a comprehensive set of risks, including credit and market risk and IRRBB. Credit risk incorporates the probability of default (PD) projected by the corporate stress testing exercise.

16. The Slovak banking system has high capital buffers and banks appear resilient to severe macrofinancial shocks (Figure 12). Under the adverse scenario, the aggregate total capital ratio declines to 16 percent at end-2025 (by 3.8 and 4.6 percentage points compared to the baseline and the starting point, respectively). The capital decline is more pronounced for SIs (4.5 ppt at end-2025 compared to the baseline). The decline in the capital ratio is mainly a result of credit impairments¹⁰ and lower revenue generation from NFCI compared to the baseline scenario. Despite the interest rate shock (350 basis points on average), market risk losses are contained due to the limited size of the fair value investment portfolio.¹¹ All banks meet the minimum capital requirements, including the Capital Conservation Buffer (CCoB) and the other systemically important institutions (O-SII) buffer.

17. The sensitivity analyses indicate that a higher shock on the auto and real-estate-related sectors, combined with the adverse scenario, has the largest impact on the aggregate capital ratio (Figure 13). The combined impact of such a shock, along with the adverse scenario impact, results in a decline in the aggregate capital ratio of 4.5 percentage points by the end of

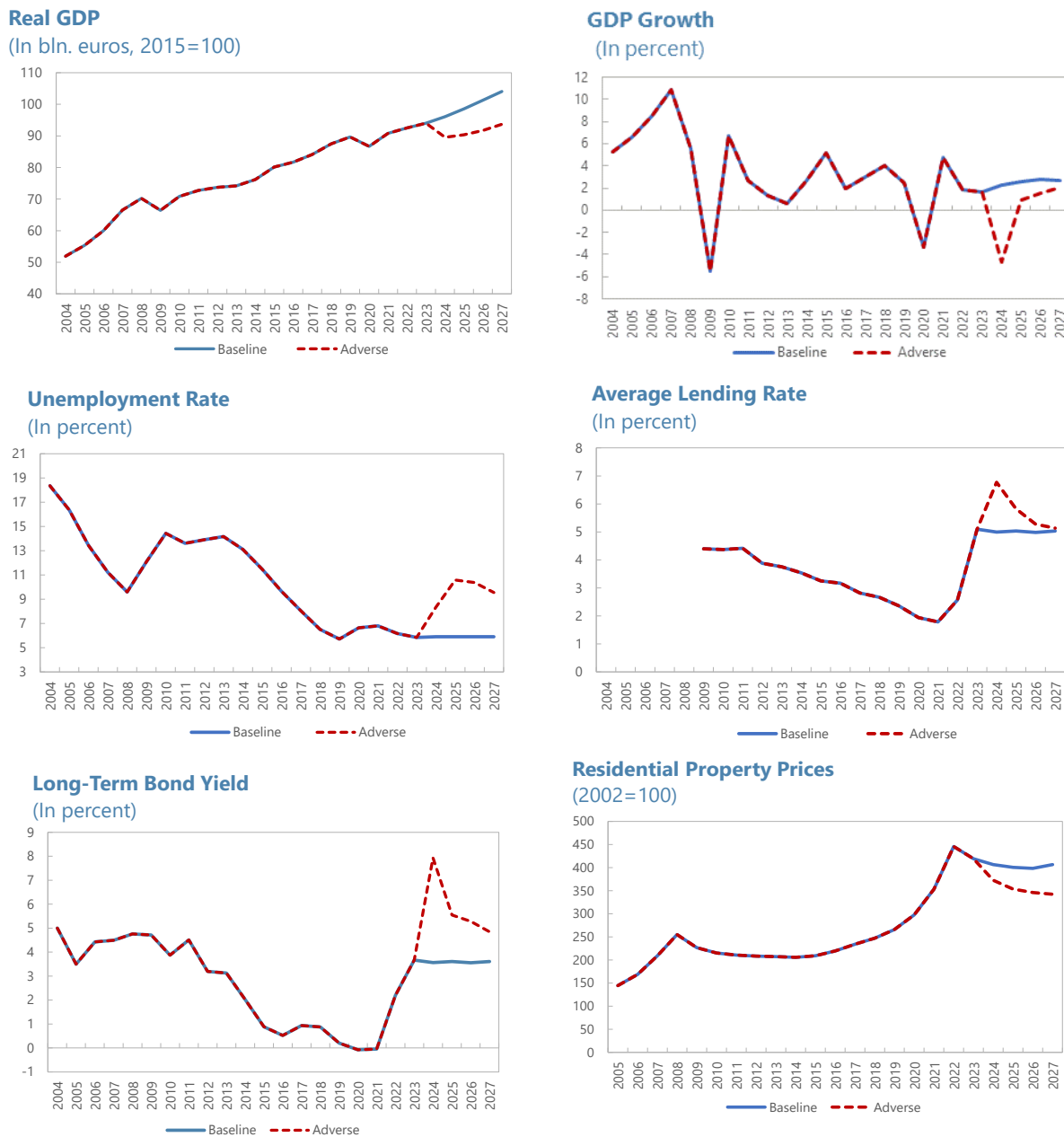
⁹ Data cut-off as of December 2023 and over a three-year horizon (2024-2026).

¹⁰ In 2024 household impairments under the adverse (baseline) scenario account for 50 (66) percent of total loan losses, while NFC and government/financial exposures account for 42 (34) and 8 (0) of loan losses, respectively.

¹¹ Amortized cost bonds accounts for 88.3 percent of the aggregate bond portfolio for Slovak banks and 13.4 percent of total assets.

2025. While all banks meet the minimum capital requirements, one bank fails to meet its CCoB/O-SIIB. Different stand-alone shocks to the macro variables underpinning the household vulnerability model as well as the sensitivity analysis to NFCI have a lower impact on capital ratios.

Figure 11. Slovak Republic: Stress Test Scenarios



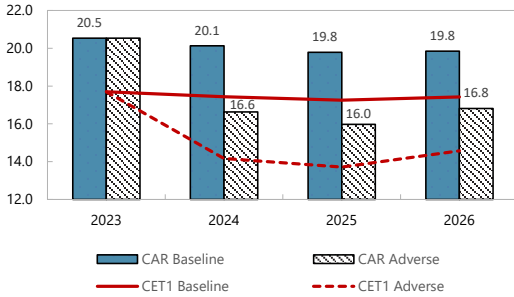
Sources: Haver and IMF staff calculations.

Figure 12. Slovak Republic: Solvency Stress Test Results

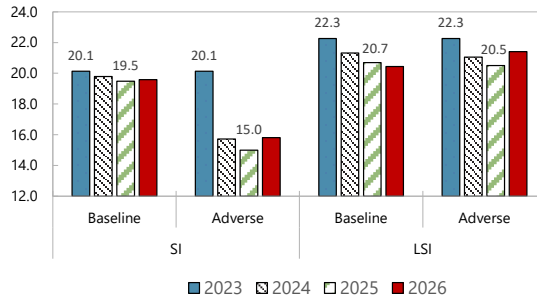
All banks are highly capitalized at the start of the stress test. Total capital and CET1 capital sufficiently cover losses under the adverse scenario.

Capital decline is more pronounced for SIs compared to LSIs.

Capital Ratios
(percent)



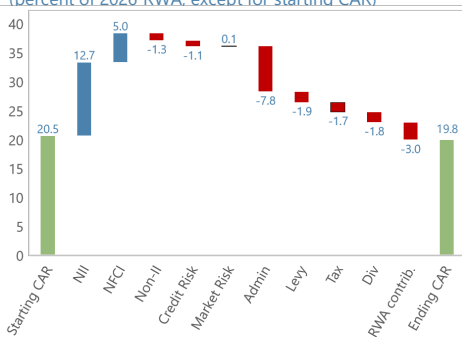
Capital Ratio - SI vs LSI
(percent)



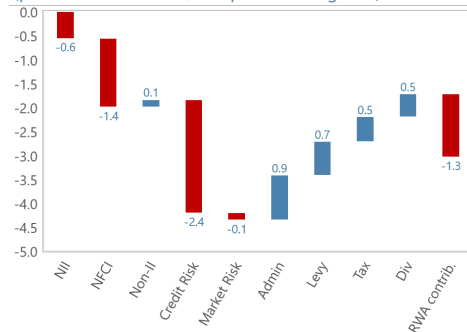
The total capital ratio is on a downward trajectory in the baseline scenario, mainly due to the impact of the newly implemented bank levy and higher loan losses

Credit impairments are the key factor underpinning the profitability decline in the adverse scenario.

Baseline: cumulative impact up to Year 3
(percent of 2026 RWA, except for starting CAR)



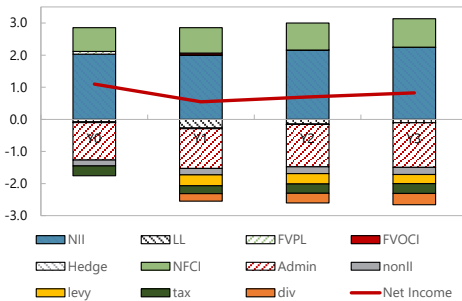
Adverse - Baseline: cumulative impact
(percent of 2026 RWA, except for starting CAR)



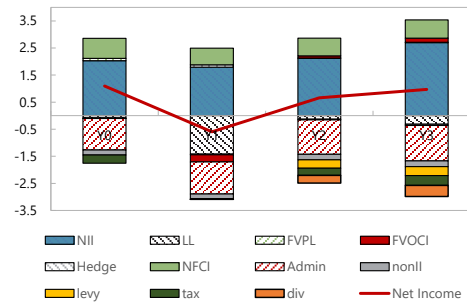
High NII keeps supporting income generation for the banking system under the baseline scenario.

Banks record losses in the first year of the adverse scenario but have a subsequent recovery.

P&L: Main Contributors - Baseline
(EUR billion)



P&L: Main Contributors - Adverse
(EUR billion)

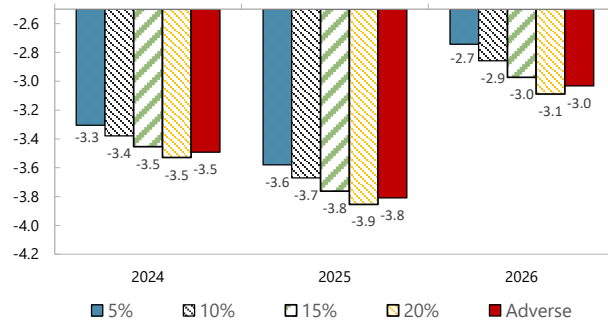


Note: NII: net interest income, LL: loan losses, FVTL: fair value through profit and losses, FVOCI: fair value through other comprehensive income, NFCI: net fee and commission income, nonIL: non-interest income. The hurdle rate applied in the stress test accounts for Common Equity Tier 1 (CET1) regulatory minimum of a 4.5 percent Pillar 1 requirement, bank-specific Pillar 2 requirements, the Capital Conservation Buffer (CCoB) of 2.5 percent and the bank specific O-SII buffers. For the leverage ratio the hurdle rate of Pillar 1 requirement was considered, corresponding to 3 percent.

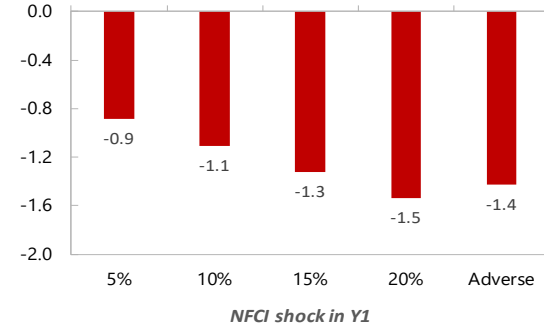
Source: IMF staff calculations.

Figure 13. Slovak Republic: Sensitivity Analysis Results

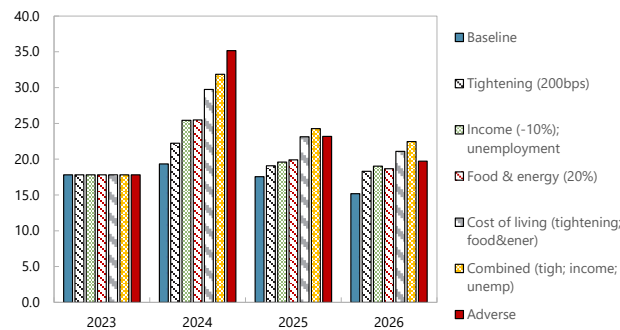
Adverse - Baseline: Impact on Capital Ratio with Different Shocks to NFCI
(percentage points)



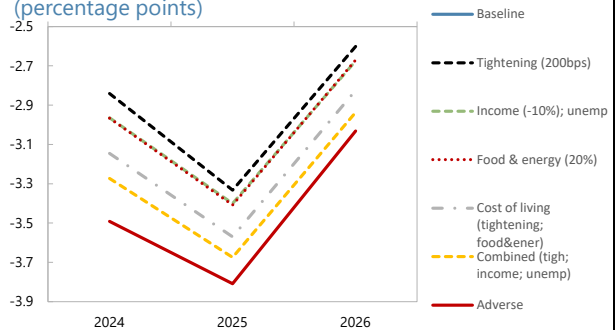
Adverse - Baseline: NFCI Cumulative Capital Impact
(percent of 2026 RWA)



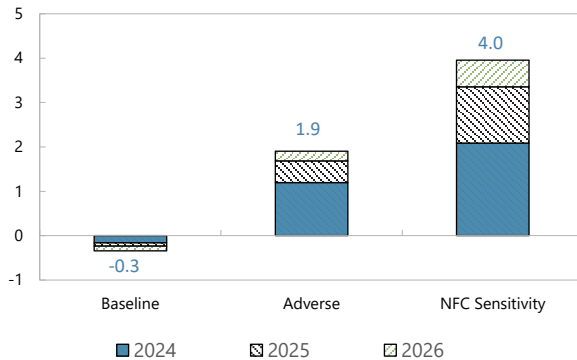
Share of Debt at Risk: HH Sensitivity Analysis
(share of HH with DSTI +essential >=70%, percent)



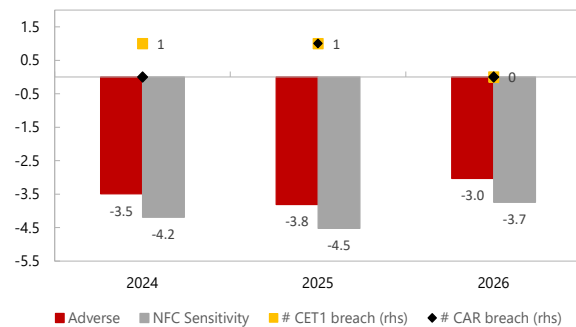
Adverse - Baseline: Capital Impact HH Sensitivity Analysis
(percentage points)



Increase in PDs: NFC Sensitivity Analysis
(percentage points)



Adverse - Baseline: Capital Impact NFC Sensitivity Analysis
(percentage points)



Source: IMF staff calculations.

18. The NBS should continue to assess and incorporate the potential impact from emerging risks and changing macroeconomic environment in its stress tests. While the bank

levy's impact is absorbed by NII under the baseline scenario, it could have larger and longer-lasting implications if it is not phased out as scheduled and becomes more permanent. Furthermore, the recently announced financial transaction tax (FTT)¹² could affect banks through its impact on activities and behavioral changes of bank clients. Future stress tests should incorporate a changing macroeconomic environment and assess its potential impact on financial stability in a timely manner.

Liquidity Stress Tests

19. The LCR stress tests reveal that Slovak banks have strong euro liquidity positions, both under normal and stressed conditions. The aggregate LCR stands at 205 percent and remains above 100 percent even under the most severe scenario, which combines both market and outflow shocks. Only a few banks experience a fall below the 100 percent threshold, but all banks maintain a level above 80 percent.

20. Banks have a robust NSFR of 132 percent, which remains above the regulatory limit even under the extremely severe stress scenarios. In a targeted reverse stress test focusing on the stable retail deposits with a maturity below six months, the NSFR reaches the threshold for two banks only when the run-off rate increases to 40 percent, while the overall NSFR remains above 100 percent (Figure 14).

21. In the cash-flow analysis, the banking system maintains a positive funding position throughout all maturities. Under the baseline scenario, only one bank shows a funding gap at the six-month maturity bucket. In the most severe scenario, one bank has a funding gap after one month and a second one after two months (Figure 15). These funding gaps are small relative to the banks' total assets. Reverse stress testing, with increasing severe haircuts in the counterbalancing capacity and runoff rates on outflows, reveals additional banks with liquidity shortfalls and at shorter maturities.

Liquidity to Solvency Interaction

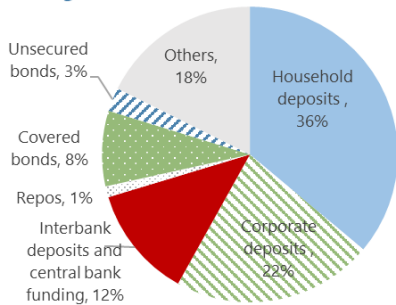
22. The sensitivity analysis of the interplay between liquidity and solvency risks indicates a limited impact on capital on aggregate. Results suggest that the liquidity to solvency interactions would have an additional impact on the aggregate capital ratio of 0.5 percentage points in the baseline scenario and 0.9 percentage points in the adverse scenario. However, there is heterogeneity at the individual bank level with one bank being significantly more affected (Figure 16).

¹² FTT is expected to be levied on NFCs transactions using banks (e.g., transfers, ATM withdrawals and card transactions).

Figure 14. Slovak Republic: LCR and NSFR Results

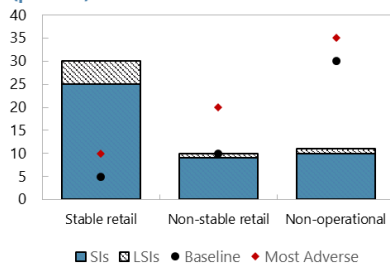
Banks' funding is diversified and stable...

Funding Structure of the Slovak Banking Sector, 2023Q4



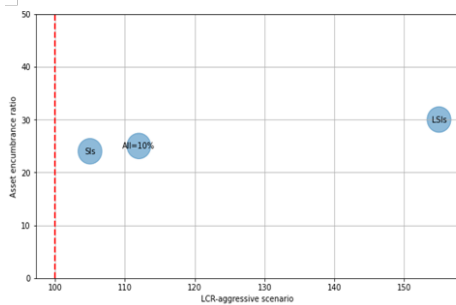
Stable retail deposits have lower run-off rates under stress.

Deposit Decomposition (Bil. EUR) and Average Assumptions for Run-off Rates (percent)



Assets encumbrance ratio is relatively low at 25 percent, while stressed-LCR is high especially for LSIs.

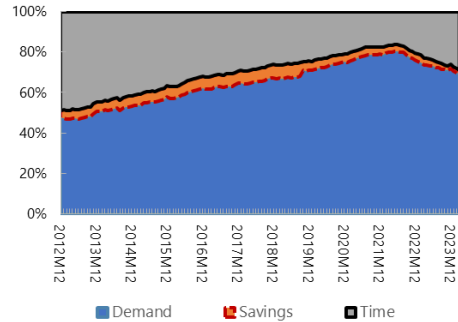
LCR, Asset Encumbrance Ratio, and Share of Covered Bonds in Liabilities (bubbles)



Source: NBS and ECB. IMF staff calculations.

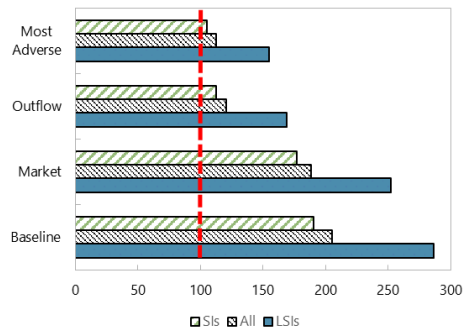
...with demand deposits dominating the composition of deposits by product.

Evolution of Households and Corporates Deposits by Product



On aggregate, SIs and LSIs satisfy the regulatory LCR under both baseline and stressed scenarios.

LCR Stress Tests by Scenario



On aggregate, SIs and LSIs satisfy the regulatory NSFR under severe outflows of stable retail deposits.

NSFR Reverse Stress Test by Severity of Run-off Rates (Stable Retail Deposits < 6 months)

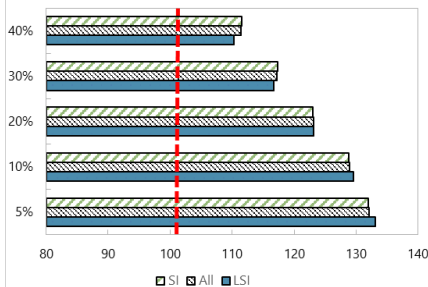
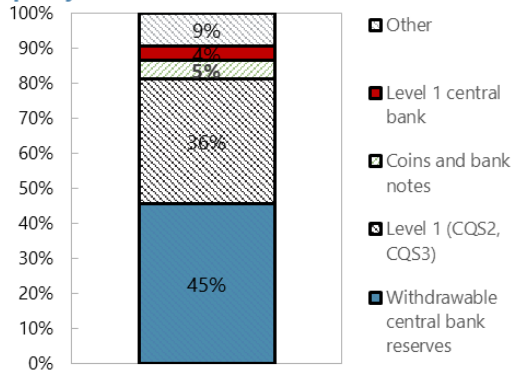


Figure 15. Slovak Republic: Cash-flow Analysis

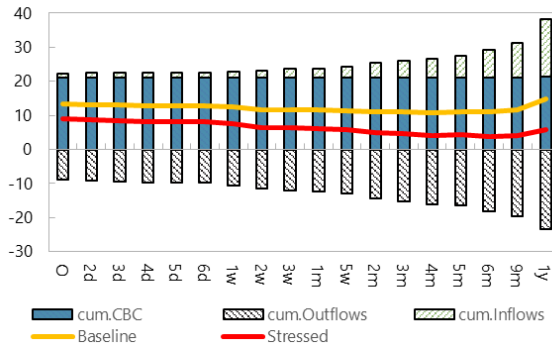
Banks counterbalancing capacity is strong and diversified.

On aggregate, banks remain liquid under both baseline and stress scenarios...

Composition of the Counterbalancing Capacity



Cash-Flow Analysis under Baseline and Aggressive Scenarios (Bil. EUR)



... but few banks have liquidity shortfalls below 3 months in the adverse scenario, or when the stress severity increases further by a scalar factor of 15 percent relative to baseline.

Number of Banks with Funding Gap by Scenario

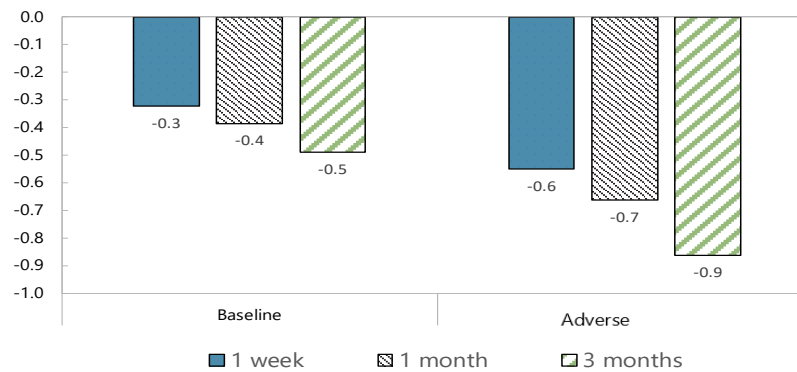
	Scenario	Maturity	Maturity					
			0	1w	1m	3m	6m	1y
Stress test	Baseline		0	0	0	0	1	1
	Aggressive		0	0	1	2	1	1
Reverse stress test (increasing the severity)	10%		1	2	2	3	3	1
	15%		2	3	3	3	3	4
	20%		3	4	5	7	7	5
	25%		6	6	6	7	7	8

Note: O= overnight, d= days, w= weeks, m=months, y= years.
Source: NBS and ECB. IMF staff calculations.

Figure 16. Slovak Republic: Liquidity to Solvency Interaction Results

Impact on Capital Ratio: Selling AC bonds to cover Liquidity Shortfalls

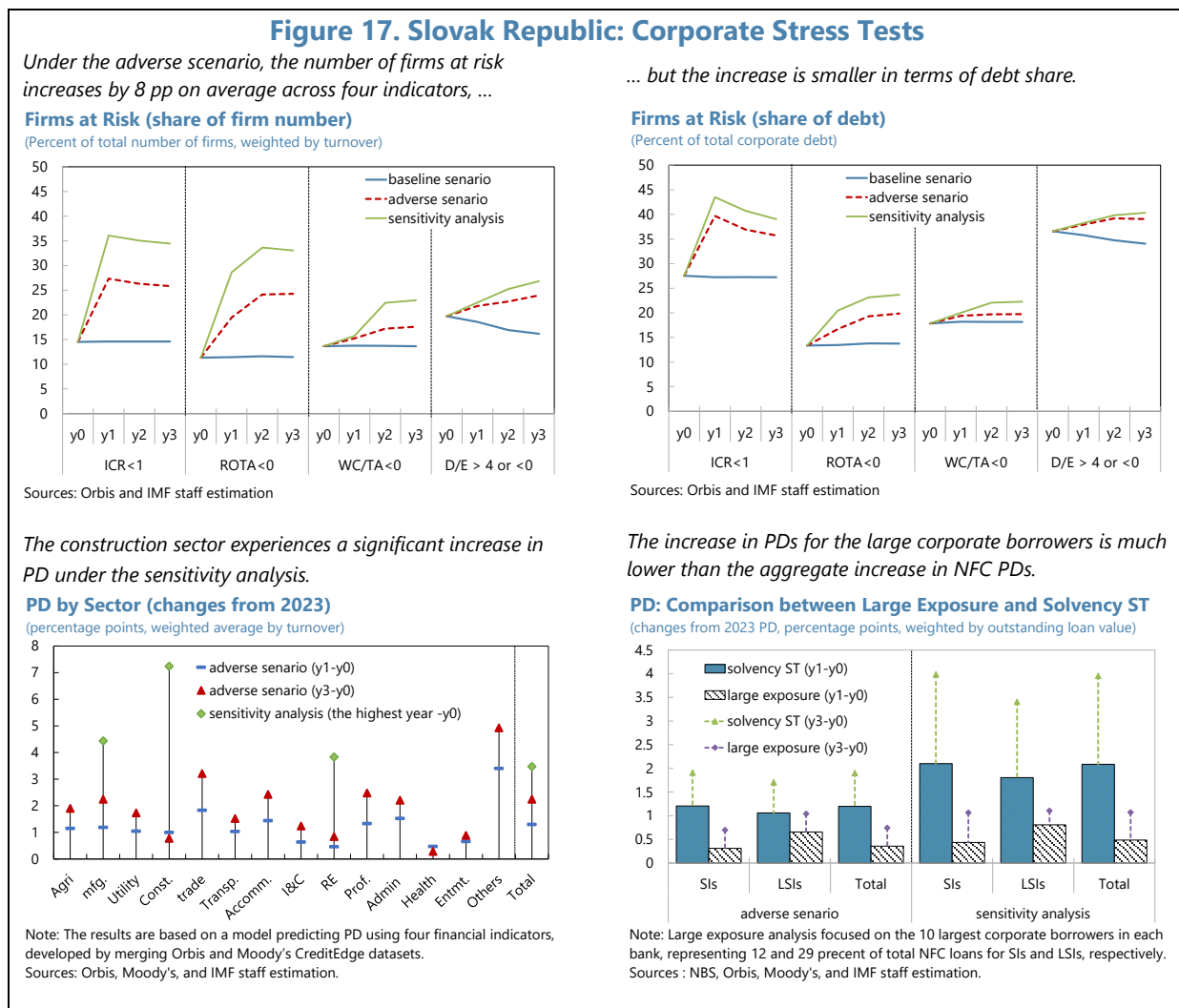
(percentage points)



Source: IMF staff calculations

Nonfinancial Corporate Sector

23. The overall rise in risky firms remains relatively limited under the adverse scenario used in the bank solvency stress test (Figure 17). NFC analysis, representing 90 percent of NFCs by sales based on Orbis data, indicates that the number of firms at risk¹³ increases by 8 percentage points on average from 2023 to 2026 (5 percentage points on average in terms of debt share). The sensitivity analysis assuming more severe negative shocks to the auto and real-estate-related sectors (construction and real estate activities) show similar results, with a limited impact in terms of debt share (an additional 2 percentage points deterioration).



¹³ Defined as those breaching the threshold for each of the four indicators: interest coverage ratio (ICR), return on total assets (ROTA), working capital over total asset (WC/TA), and leverage (debt to equity, D/E). Thresholds are set based on the widely used ratios and the regression analysis.

24. The PDs increase moderately under the adverse scenario, with some service sectors being more vulnerable. The average estimated PD for all firms, increases by 2.2 percentage points over three years under the adverse scenario, and 3.5 percentage points in the sensitivity analysis. The construction sector experiences a significant increase in the PDs in the sensitivity analysis, highlighting the importance of close monitoring of existing risks in the CRE sector and adequate provisioning.

25. The large corporate borrowers appear relatively resilient to shocks. The PDs for the 10 largest corporate borrowers in each bank, estimated using the result of this analysis, show much smaller increase compared to the aggregate NFC PDs used in the solvency stress test, suggesting risks from large exposure in NFC loan portfolios are lower.

FINANCIAL SECTOR OVERSIGHT

A. Systemic Risk Oversight and Macroprudential Framework

Institutional Framework

26. Willingness to act could be further fostered by adopting a macroprudential strategy and including external advisors in the policy-making process. To enhance legitimacy and significance, the macroprudential objectives should be published as part of a broader macroprudential strategy that includes areas such as communication, the available toolkit, and the mapping of risks to instruments. The macroprudential decision-making process could be further improved by opening the Macroprudential Committee's membership to external advisors from academia or subject-matter experts.

27. Information-collection powers are enshrined in the law and are far-reaching but should be extended. There is no specific law granting NBS access to data on loans to households, which is used to calibrate BBM measures. Current access to banks' retail loan data is ad-hoc and time-consuming. The right to access loan-level data from both banks and NBFIs should be legislated promptly to ensure continued access. Information-collection powers should also be preemptively expanded for supervisory data from unregulated institutions to ensure any emerging risks are captured, enshrining these powers in the law.

Operational Capacity

28. The Financial Stability Department (FSD) has a wide range of tasks but limited resources. The staffing of the FSD should be increased to limit turnover risk and to ensure that responsibilities continue to be fulfilled, including expanding into new areas that will shape future policymaking.

29. The NBS should continue its effort on closing data gaps in the RRE and CRE sectors and on further improving the monitoring frameworks. Obtaining high-quality data will be crucial to assess the vulnerabilities in each borrower segment, which could be used to calibrate BBMs more

effectively. The NBS uses different models to assess the RRE market situation. Having a clearer narrative on house price developments, at least internally, would aid in more forward-looking risk assessment. In the CRE sector, the NBS should continue working on deepening cross-border coverage.

30. The NBS should regularly perform ex-post evaluation of BBMs, including using a model with a macrofinancial angle. The NBS has a range of stress-testing models for different sectors producing a comprehensive picture of the resilience of the banking sector. The household model, which is based on loan-level data, additionally serves as a calibration device for BBMs. A complementary macrofinancial model, focusing on the feedback loop between households, banks, and the real economy, would strengthen the ex-post evaluation of BBMs, which should be performed regularly.

Countercyclical Capital Buffer

31. Adopting a positive-neutral CCyB (pnCCyB) framework would safeguard the availability of releasable capital. While the NBS clearly communicates the arguments behind its CCyB decisions, actual CCyB rates have lately diverged from rates guided by cyclical indicators reflecting legacy risk in the housing sector and seem akin to rates implied by a pnCCyB framework. A formal adoption of a pnCCyB would increase the predictability of CCyB decisions, safeguard the availability of releasable capital at any stage of the cycle, including in the event of shocks unrelated to the financial cycle, and give the NBS more time to assess whether there is a buildup of vulnerabilities, enabling a more gradual adjustment of buffers if higher levels are deemed necessary.¹⁴ A healthy level of profitability and/or availability of voluntary buffers would greatly help facilitate a smooth introduction of a pnCCyB. Ongoing discussions at the European level may result in European regulators providing a clearer stance on the pnCCyB, which would facilitate any necessary legal action to address permissibility under Slovak National Law.

Borrower-Based Measures

32. The BBM package has contributed to containing household credit risk and is comprehensive but should be refined to close leakages. The current regulation allows co-financing a mortgage with a consumer loan, which constitutes a non-negligible leakage of LTV regulation of a 15 percent uptake. While debt-to-income (DTI) and debt-service-to-income (DSTI) limits have partly mitigated this circumvention in practice, the NBS should prohibit co-financing a mortgage with a consumer loan and ensure enforcement, including by adding non-bank consumer loans to the credit register.

33. The new availability of transaction data presents an opportunity to revise the BBM package with a stronger focus on limiting the procyclicality of credit and house price growth. High house price growth can constitute a systemic risk, and a sufficiently tight BBM package could

¹⁴ CCyB rates are published quarterly, with any change to be announced at least one year in advance, and this additional reaction time would be particularly valuable.

mitigate it (Appendix III). The NBS should use the newly available transaction data from the land register to refine the speed limits of the BBM package along first- and second-time buyer (FTB, STB), Investor, and Top-up categories from current age-based differentiation. Implementing tighter macroprudential limits for investors and top-ups can be expected to reduce the procyclicality of credit and house price growth. Such an alignment would take into account cross-country evidence on the contribution of different borrower segments to systemic risk.

Other Macroprudential Measures

34. The NBS should stand ready to activate the systemic risk buffer (SyRB) before risks in the CRE sector become systemic or other risks emerge. NBS sensitivity analysis on the CRE sector based on 2022 data indicates a need for small additional CRE-related buffer under adverse scenario¹⁵. While the CRE sector has developed more favorably than anticipated in 2023, the NBS should continue to closely monitor developments in the sector and remain prepared to activate the SyRB for exposures to this sector.

35. The real estate funds sector should continue to be closely monitored. While the size of real estate funds is still limited with low leverage and risks are addressed by liquidity requirements for asset management funds, there is a non-negligible liquidity gap. With the transposition of the Alternative Investment Fund Managers Directive and its 2019 amendment, the NBS has the power to enact additional measures such as leverage limits and aligning redemption limits with asset liquidity if risks build up.

B. Banking Supervision and Regulation¹⁶

36. Although the NBS' range of corrective powers is broad, there are a few areas where supervisory powers can be strengthened to ensure the NBS' ability to act independently. Slovak Republic laws enable banks to challenge the NBS' prudential decisions (e.g., on-site inspection reports, certain corrective measures). The NBS' operational independence would be strengthened by removing the ability of banks to challenge or appeal prudential supervisory decisions and sanctions, until after such decisions are final. Further, laws need to be enhanced to ensure adequate legal protection of the supervisors and staff against lawsuits for actions taken and/or omissions made while discharging their duties in good faith. In addition, the NBS needs to: a) update its regulations and prudential requirements to broaden the definition of a related party transaction and other related prudential requirements; b) develop notification and reporting protocols to ensure LSIs effectively deal with Cyber risk events; and, c) take into account excessive concentration risk to include a broader range of exposure types (e.g., sovereign risk concentration) when setting Pillar 2 capital requirements.

¹⁵ While losses would not be fully covered by the sSyRB, banks have other buffers.

¹⁶ The FSAP conducted a targeted assessment of the effectiveness of banking regulation and supervision in the Slovak Republic focusing on LSIs.

37. The NBS needs to streamline some of its off-site activities while enhancing on-site inspections to increase effectiveness of LSI supervision across several key risk areas. The NBS' SREP, carried out annually, treats all LSIs equally regardless of classification. However, the depth, breadth, and frequency of off-site activities (including SREP) should align with the LSIs' impact and overall risk profile. This includes engaging with independent board members and heads of control functions periodically, updating the risk profile/classification of an LSI when material deficiencies are discovered, including making use of formal corrective measures and powers when needed. Lastly, the NBS needs to enhance its on-site inspections to assess LSI's risk management practices in certain key risk areas, such as credit, liquidity, interest rate risk in the banking book (IRRBB), and IT risk.

38. The NBS undertakes on-site inspections and off-site monitoring of LSIs' compliance with AML/CTF regulatory and supervisory requirements. The NBS has an effective off-site monitoring tool to address certain aspects of AML/CTF risks in LSIs. The NBS, however, should re-assess the frequency of LSIs' on-site inspections as well as communicating with independent board members when necessary. Further, the NBS should ensure that material AML/CTF non-compliance deficiencies have an impact on the overall view of the risk profile of the LSI.

C. Financial Integrity

39. Slovakia has taken steps to strengthen its AML/CFT system and should continue enhancing its effective implementation. The third update to the AML/CFT national risk assessment is expected to be finalized by February 2025. The NBS has taken steps to strengthen AML/CFT supervision incorporating a risk-based approach and new AML/CFT supervision procedures, which expand the risk factors and areas for ML/TF risk assessment and incorporates a new IT tool for automatic data processing. The NBS AML/CFT risk-based approach includes an analysis of cross-border financial flows transactions volume, number, and direction as input to identify bank's risks categories. Fit and proper measures have also been strengthened to prevent criminals or their associates from holding a significant control of financial institutions. Slovakia should continue considering the criteria for the application of sanctions to ensure that dissuasive sanctions are applied to address violations of AML/CFT obligations. Given the supervisory roles of both the NBS and Financial Intelligence Unit (FIU), the authorities should continue strengthening coordination and cooperation, including the adoption of an updated MoU between the two authorities to eliminate any overlap of duties. The central register of beneficial ownership of legal entities is administered by the statistical office and the authorities report that 94 percent of the companies have filed their information. Ensuring accurate, adequate, and up-to-date beneficial ownership information is mandated in EU (6AMLD) and FATF requirements. The authorities should consider incorporating mechanisms for the verification of the beneficial ownership information provided by the entities, such as cross-referencing with other governmental databases and with banking data, and discrepancy reporting upon identifying inconsistencies in the customer due diligence process. The authorities should also sanction the submission of inaccurate information, as it can hamper the ability to combat corporate abuse.

FINANCIAL SAFETY NET AND CRISIS MANAGEMENT

40. Slovakia's National Resolution Authority (NRA) needs a stronger organizational setup and improved legal protection for its staff and council members. Slovakia, an early adopter of the EU Bank Recovery and Resolution Directive, established an NRA separate from the NBS, but there are shortcomings in implementation. The authorities should (i) allocate sufficient resources to enhance the NRA's operational independence,¹⁷ (ii) operationalize legal protection through mechanisms to fund the legal costs of court proceedings and enhanced enforcement of existent legal protection provisions, and (iii) streamline decision-making processes.

41. The Resolution Act allows courts to suspend decisions taken by the Resolution Council. Legislation should be amended to prevent suspension or reversal of resolution decisions, with grievances resolved through financial compensation. Furthermore, resolution decisions must be enforceable upon issuance, regardless of prior notification, to ensure timely proceedings.

42. Banks present recovery plans regularly, and the NBS prepares resolution plans for all LSIs. The NBS establishes minimum requirements for own funds and eligible liabilities (MREL) for banks earmarked for resolution. All required banks are MREL-compliant, and the NBS did not identify any major deficiencies or impediments to resolvability at the end-2023 recovery and resolution plan (RRP) cycle.

43. Adequate resolution funding mechanisms are needed. Given the uncertainty about the EU Single Resolution Fund (SRF), the MoF should be prepared to support the capitalization of bridge banks, and mechanisms to fund resolution through industry contributions—e.g., via the Deposit Protection Fund (FOV)—should be in place. The absence of a dedicated budget for the Resolution Council also hinders initial resolution phases. Finally, Slovakia needs an adequate bank insolvency regime.¹⁸

44. The operational readiness to use resolution powers should be strengthened. Coordination protocols within the NBS' different areas and inter-agency cooperation arrangements need to be in place. Additionally, Slovakia should implement a multi-year crisis simulation exercise program, including for concurrent bank failures and for quick-fail resolutions.

45. The NBS is responsible for providing Emergency Liquidity Assistance (ELA), but preparedness is untested. The ELA framework has adequate safeguards but lacks testing. The NBS should conduct domestic and cross-border simulation exercises.

46. The FOV's mandate is limited to depositor compensation, warranting comprehensive reforms. In addition, the FOV's governance structure should exclude active bankers from its

¹⁷ The Resolution Council, with no staff or budget, lacks *de facto* autonomy and depends on the NBS' operational support to implement its decisions.

¹⁸ If it is not feasible in the short term, at a minimum, the corporate bankruptcy act needs to be amended to align bank insolvency triggers with those for resolution.

governance bodies to avoid conflicts of interest. Moreover, the FOV must reassess funding needs and enhance operational capacity.

AUTHORITIES' VIEWS

47. The authorities concurred with the FSAP assessment of the key risks and vulnerabilities in the banking sector. The FSAP and the NBS recognized that Slovak banks possess adequate buffers to endure external shocks, particularly those originating from external factors that propagate through domestic real sector channels. The FSAP stress testing exercise was welcomed as a valuable complement to the NBS' own analysis, which utilizes granular micro data. Furthermore, the NBS highlighted that they are closely monitoring risks, including in the residential and commercial real estate sectors.

48. Divergent views emerged regarding the macroprudential framework and policies, particularly concerning the adoption of a pnCCyB and addressing the loophole associated with mortgage co-financing. The NBS emphasized its robust track record in macroprudential policy, which has effectively mitigated the accumulation of risks and increased resilience. The NBS currently deems the risk of potential leakage from mortgage co-financing to be effectively mitigated by the existing mixture of BBMs, but nevertheless continues to monitor it thoroughly. Any prohibition of co-financing would need to be implemented in an enforceable manner, which would however unproportionally restrict access to unsecured credit. Once reliable data become available, the NBS stands ready to explore potential benefits of expanding the existing toolkit of BBMs by adding a new dimension reflecting a different setting for FTBs/STBs. The NBS believes that the current CCyB framework is well communicated and understood by the industry, adequately reflecting risks accumulated during previous build-up phases. Although they don't see an immediate necessity for changes, the NBS considers the pnCCyB as one potential option for safeguarding releasable buffers and is actively participating in discussions at the European level.

49. The authorities welcomed the FSAP recommendations on enhancing the regulation and supervision of LSIs and improving the crisis management framework. The NBS acknowledged that LSI supervision has significantly benefited from harmonization with practices for SIs. While recognizing that there is room to better align supervisory activities with inherent risks, the NBS believes that current approaches adequately reflect risk profiles and facilitate timely actions in general. The recommendations to bolster operational readiness across financial safety nets and crisis management, and ensure legal protection for staff were well received. The NBS appreciated the insightful discussions surrounding resolution mechanisms.

Table 2. Slovak Republic: Selected Economic Indicators (2020-2030)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
					Estimate		Projections				
	(Annual percent change, unless otherwise indicated)										
Output/Demand											
Real GDP	-2.6	5.7	0.4	1.4	2.0	1.8	2.1	2.5	2.5	2.1	2.0
Domestic demand	-4.1	6.4	1.7	-5.5	3.9	1.8	1.5	2.3	2.3	2.0	1.8
Public consumption	-0.9	3.7	-2.9	-3.0	3.3	1.2	0.2	0.6	1.3	1.0	1.1
Private consumption	0.4	3.0	5.2	-3.1	2.3	0.7	0.9	1.6	1.7	1.6	1.5
Gross fixed capital formation	-9.6	5.1	-1.9	16.6	-0.8	2.5	1.6	3.6	3.1	2.5	2.2
Exports of goods and services	-6.5	10.6	2.9	-0.2	1.0	3.0	3.8	3.6	3.4	3.4	3.4
Imports of goods and services	-8.0	11.6	4.4	-7.1	2.2	3.1	3.3	3.5	3.3	3.3	3.3
Potential Growth	0.6	1.1	1.7	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.0
Output gap	-2.7	1.8	0.6	-0.1	-0.3	-0.7	-0.8	-0.4	-0.1	0.0	0.0
Contribution to Growth (Percent)											
Domestic demand	-4.0	6.4	1.7	-4.8	2.9	1.7	1.5	2.2	2.2	1.9	1.7
Public consumption	-0.2	0.8	-0.6	-0.6	0.6	0.2	0.0	0.1	0.2	0.2	0.2
Private consumption	0.2	1.7	2.9	-1.8	1.3	0.4	0.5	0.9	0.9	0.9	0.8
Gross fixed capital formation	-2.1	1.0	-0.4	3.2	-0.2	0.5	0.4	0.8	0.7	0.5	0.5
Inventories	-2.0	2.9	-0.2	-5.6	1.2	0.6	0.6	0.4	0.4	0.3	0.3
Net exports	1.4	-0.7	-1.3	6.2	-0.9	0.1	0.6	0.3	0.3	0.2	0.3
Prices											
Inflation (HICP)	2.0	2.8	12.1	11.0	3.2	4.1	3.1	2.0	2.0	2.0	2.0
Inflation (HICP, end of period)	1.7	5.1	15.0	6.6	3.2	3.2	2.9	2.0	2.0	2.0	2.0
Core inflation	2.4	3.4	10.4	11.4	4.1	4.3	2.3	2.0	2.0	2.0	2.0
Core inflation (end of period)	2.3	5.6	13.9	6.9	4.0	3.4	2.0	2.0	2.0	2.0	2.0
GDP deflator	2.4	2.2	7.5	10.1	3.6	3.8	3.2	2.3	2.2	2.0	2.0
Employment and Wages											
Employment	-1.9	-0.6	1.8	0.3	-0.2	0.0	-0.1	-0.2	-0.3	-0.3	-0.3
Unemployment rate (Percent)	6.7	6.8	6.2	5.8	5.4	5.5	5.6	5.5	5.4	5.4	5.4
Nominal wages	3.7	6.8	7.8	9.6	6.9	5.8	4.5	4.1	4.0	4.0	4.0
Public Finance, General Government (Percent of GDP)											
Revenue	39.0	39.5	40.6	42.7	41.2	43.2	42.4	41.7	41.1	41.0	41.0
Expenditure	44.3	44.6	42.2	47.9	47.0	48.3	47.2	46.4	46.4	46.5	46.6
Overall balance	-5.3	-5.1	-1.6	-5.2	-5.8	-5.0	-4.8	-4.7	-5.3	-5.5	-5.5
Primary balance	-4.3	-4.2	-0.9	-4.5	-4.9	-3.9	-3.5	-3.3	-3.7	-3.8	-3.8
Structural balance (Percent of potential GDP)	-2.3	-2.5	-1.0	-3.2	-4.9	-3.9	-4.3	-4.3	-5.3	-5.5	-5.5
General government debt	58.3	60.1	57.6	56.0	58.0	59.5	62.9	65.9	68.7	71.5	74.3
Monetary and Financial Indicators (Percent)											
Credit to private sector (Growth rate)	4.8	7.6	10.2	3.2	2.7	4.2	4.4	4.7	4.9	5.2	5.5
Mortgage lending rates	1.1	1.0	2.0	3.8	4.1	...	...	...	...	...	...
Government 10-year bond yield	-0.1	0.0	2.2	3.7	3.5	3.3	3.3	3.4	3.4	3.5	3.5
Balance of Payments (Percent of GDP)											
Trade balance (goods)	1.1	-0.5	-6.0	1.3	0.0	0.6	1.0	1.0	1.0	1.0	1.0
Current account balance	0.5	-2.4	-8.1	-1.6	-2.7	-1.6	-1.1	-1.0	-1.0	-1.0	-1.1
Gross external debt	118.5	131.9	105.4	96.0	99.5	97.9	96.3	95.5	94.6	94.3	94.2
Saving and Investment Balance (Percent of GDP)											
Gross national savings	20.7	20.3	15.0	17.8	15.7	16.4	18.0	19.3	19.9	20.3	20.6
Private sector	22.6	22.3	13.5	18.5	18.1	17.2	19.1	20.6	21.9	22.5	22.9
Public sector	-1.9	-2.0	1.5	-0.7	-2.4	-0.8	-1.1	-1.4	-2.0	-2.2	-2.2
Gross capital formation	20.2	22.7	23.2	19.4	18.4	18.1	19.1	20.3	20.8	21.2	21.7
Memo Item											
EU grants (Percent of GDP)	1.2	1.2	1.3	3.2	1.4	1.6	1.7	1.2	1.0	1.0	1.0
Nominal GDP (Millions of euros)	94,321	101,960	110,089	122,919	129,962	137,447	144,766	151,818	158,984	165,628	172,319

Sources: National Authorities; and IMF staff estimates and projections.

Table 3. Slovak Republic: Financial Soundness Indicators (2018-2024Q2)

	2018	2019	2020	2021	2022	2023	2024Q2
Core FSIs for Deposit Takers							
Regulatory capital to risk-weighted assets	18.3	18.2	19.7	19.8	19.6	20.5	20.8
Tier 1 capital to risk-weighted assets	16.6	16.6	18.1	18.3	18.0	19.0	19.5
Nonperforming loans net of provisions to capital	9.0	9.5	8.3	6.7	6.7	8.8	8.2
Common Equity Tier 1 capital to risk-weighted assets	...	...	...	17.0	16.9	17.6	18.2
Tier 1 capital to assets	7.4	7.3	7.3	7.6	7.3	7.6	8.2
Nonperforming loans to total gross loans	3.1	3.0	2.6	2.1	1.9	2.0	2.0
Loan concentration by economic activity	...	...	...	56.1	54.8	65.5	67.8
Provisions to nonperforming loans	70.8	67.4	66.7	68.9	65.3	55.7	56.8
Return on assets	1.1	1.0	0.7	0.9	1.0	1.3	1.5
Return on equity	7.8	7.5	5.1	7.6	8.2	11.2	9.6
Interest margin to gross income	72.8	71.5	63.9	61.8	60.6	65.9	66.7
Noninterest expenses to gross income	59.6	60.9	63.7	61.2	57.2	50.4	47.7
Liquid assets to total assets	26.8	23.9	27.3	30.0	29.5	31.9	30.5
Liquid assets to short-term liabilities	35.4	31.9	37.7	43.7	39.7	43.4	41.9
Liquidity coverage ratio	...	...	...	186.2	180.0	200.1	202.5
Net stable funding ratio	...	...	...	131.3	130.2	133.7	136.5
Net open position in foreign exchange to capital	0.7	5.1	0.5	0.2	2.2	3.2	2.5
Large exposures to capital	...	...	...	55.0	...	...	...
Geographic distribution of total loans							
Geographic distribution of total loans: Domestic economy	88.6	91.1	89.6	88.5	90.9	89.9	90.9
Geographic distribution of total loans: Advanced economies	11.0	8.5	10.1	11.2	8.8	9.8	8.9
Geographic distribution of total loans: Emerging market and	0.4	0.4	0.4	0.3	0.3	0.3	0.2
Gross asset position in financial derivatives to capital	3.9	5.4	7.2	4.2	15.0	9.5	7.6
Gross liability position in financial derivatives to capital	4.4	5.4	7.0	4.2	15.7	11.5	8.8
Trading income to total income	2.7	1.8	3.5	3.7	4.7	4.2	3.6
Personnel expenses to noninterest expenses	44.7	46.4	41.0	41.8	42.5	44.2	45.4
Spread between reference lending and deposit rates (base points)	...	...	...	203.3	244.0	248.0	254.0
Spread between highest and lowest interbank rates (base points)	...	...	...	70.0	478.0	493.0	489.0
Customer deposits to total (noninterbank) loans	93.4	92.1	95.5	93.3	87.8	89.0	91.1
Foreign-currency-denominated loans to total loans	4.3	2.4	2.9	2.4	2.2	2.5	2.6
Foreign-currency-denominated liabilities to total liabilities	3.2	2.9	2.8	2.5	3.3	3.4	3.5
Credit growth to private sector	...	...	...	...	10.7	3.5	1.7
Other Financial Corporations							
OFCs' assets to total financial assets							
OFCs' assets to total financial system assets: total OFCs	29.8	30.6	30.7	30.3	27.8	28.0	30.0
Real Estate Markets							
Commercial real estate prices (Percentage change/last 12	...	...	...	...	...	...	...
Residential real estate loans to total gross loans	43.9	46.5	47.5	48.6	49.9	50.9	51.7
Commercial real estate loans to total gross loans	...	...	...	...	...	...	...

Source: IMF, Financial Soundness Indicators database.

Table 4. Slovak Republic: Structure of Financial System

	2006Q4				2023Q4			
	Number of institutions	Assets			Number of institutions	Assets		
		(in millions of Euros)	(in percent of financial system)	(in percent of GDP)		(in millions of Euros)	(in percent of financial system)	(in percent of GDP)
Banks	24	37,777	80	83.0	24	121,306	78.7	98.8
Commercial banks	17	31,973	67.8	70.2	10	102,343	66.4	83.3
Private	16	31,546	66.9	69.3	9	101,744	66.0	82.8
Domestic	1	708	1.5	1.6	2	7,094	4.6	5.8
Foreign	15	30,837	65	67.7	7	94,650	61.4	77.1
State-owned	1	427	0.9	0.9	1	600	0.4	0.5
Branches of foreign banks	7	5,803	12	12.7	14	18,963	12.3	15.4
Insurance companies	24	3,928	9	8.6	9	5,578	3.6	4.5
Life insurance companies	5	459	1.0	1.0	2	737	0.5	0.6
General insurance companies	5	54	0.1	0.1	0			
Composite insurance companies	14	3,415	7.2	7.5	7	4,841	3.1	3.9
Pension funds	24	1,207	3	2.6	36	17,516	11.4	14.3
Pension funds 2nd pillar	18	749	1.6	1.6	16	13,997	9.1	11.4
Pension funds 3rd pillar	6	457	1.0	1.0	20	3,519	2.3	2.9
Investment funds					100	9,630	6.2	7.8
Others (securities companies)	44	4,269	9	9.4	20	54	0.0	0.0
Crowdfunding providers					3			
Total financial system	116	47,181	100	104	192	154,084	100	125

Source: National Bank of Slovakia.

Note: Data on Others cover on-balance sheet assets of non-bank investment firms. Client assets (off-balance sheet) of non-bank investment firms total is € 2957 million.

Table 5. Slovak Republic: Composition of Banking Sector

	# of institutions	% of Banking Assets
SIs	4	71.4
Other SSM SIs via branch	8	12.5
High Impact LSIs	3	11.6
Other LSIs	3	1.4
Branches of other SSM LSIs	2	2.5
Branches of non-SSM banking groups	4	0.6
Total (Source NBS)	24	100.0

Source: NBS

Note: LSIs represent about 16 percent of total banking assets, including 3 high-impact LSIs (11.6 percent). As of end-2023, foreign subsidiaries accounted for 61 percent of total financial sector assets while the share of foreign banks' branches was 12 percent.

Table 6. Slovak Republic: Key Recommendations from the 2007 FSAP Update

Recommendations	Status ¹
Regulatory and Supervisory Framework	
<p>Continue integration of supervision through implementation of a risk-based approach for all intermediaries supervised by the NBS, and through creating a common supervisory approach within the NBS through the dissemination of general supervisory principles across different financial subsectors.</p>	<p>As of 2006 the NBS took over the supervision of financial market participants in the banking, capital market, insurance, and pension fund sectors. General rules of procedure for supervision of the financial market are laid down in the Financial Market Supervision Act.</p> <p>The NBS is a member of ESRB, EBA, EIOPA, ESMA. The NBS participates in the ESFS which safeguards the supervision of the EU's financial system and in the SSM. In 2013 the NBS has been authorized to conduct macroprudential policy as part of its supervision of the financial market. In 2013 comprehensive assessment including the Asset Quality Review (AQR) and Stress testing have been performed by the ECB.</p> <p>In 2014 the NBS joined the SSM, on-going supervision and on-site inspections of Significant and Less significant banks are performed based on SSM procedures and follow methodology provided by the ECB.</p> <p>From January 2015, the NBS is the competent authority for consumer protection in the Slovak financial market, and as such it oversees the protection of the rights of financial consumers and provides expertise to the Resolution Council, which is the national resolution authority for institutions in Slovakia's financial sector being part of the SRM.</p> <p>In addition, the cross-sectoral cooperation is supported by Committee for financial market covering all relevant representatives.</p>
<p>Continue monitoring closely prudential indicators and banks' credit assessment standards, to be prepared to take such actions as necessary to address any risks that may emerge.</p>	<p>Monitoring of prudential indicators and bank's credit assessment standards is being conducted by the NBS on regular basis.</p> <p>Comprehensive Supervisory Review and Evaluation Process (SREP) is performed fully in line with the EBA Guidelines and ECB SSM SREP methodology.</p>
<p>Work to strengthen coordination and lines of communication between the NBS and home country supervisors, especially regarding Basel II implementation.</p>	<p>In line with SSM supervisory frame, BASEL II and relevant EU legislation were implemented. At the EU level, the BASEL III regulatory reforms are at its final stage to be implemented via CRR/CRD.</p> <p>The Home-Host cooperation strengthened significantly via establishment the Supervisory Colleges and Joint Supervisory Teams under the SSM merit. The NBS banking supervision is fully involved in all activities performed within these structures.</p>
<p>Provide the NBS with the power to bar persons who come into positions of responsibility in existing banks and who do not meet fit and proper tests.</p>	<p>ECB controls the process for all significant banks under supervision and the legal framework is set by SSM regulation and respective implementing acts. As regards less significant banks, fit and proper procedures are carried out by the NBS. In that regard the capital requirements directive (2013/36/EU), where all fit and proper criteria are set out, was well transposed into Slovak national law. Furthermore, within the fit and proper procedures, the NBS applies the EBA Guideline on the</p>
<p>¹As reported by the NBS.</p>	

Table 6. Slovak Republic: Key Recommendations from the 2007 FSAP Update (Continued)

Recommendations	Status
Regulatory and Supervisory Framework	
	assessment of the suitability of members of the management body and key function holders under Directive 2013/36/EU and Directive 2014/65/EU (EBA/GL/2021/06).
Ensure fit and proper tests and enforcement for the nonbank financial institutions, including insurance companies.	The NBS follows relevant ESMA and EBA guidelines, including insurance sector as a part of Solvency II implementation.
Insurance Sector	
Enhance the supervision of capital adequacy ratios of life insurance policies.	<p>As of 1.1.2016 was Solvency II implemented to Insurance Act 39/2015 Coll.</p> <p>Solvency II introduced a risk-based approach to capital requirements, considering the various risks faced by insurance companies. It requires companies to hold sufficient capital to cover the specific risks they face, such as underwriting risk, market risk, credit risk, and operational risk.</p> <p>Quantification involves sophisticated risk modeling (by means of various stress test and factor-based calculations) and analysis to determine the amount of capital needed to withstand potential adverse events.</p> <p>The solvency ratios and analysis of movements of capital requirements are included in supervisory process, as well as on site supervision of the calculations.</p>
Ensure adequate technical provisions.	<p>After the entry into force of Solvency II Directive (01.01.2016), rules to create adequate technical provisions are provided in two levels of legislation:</p> <ul style="list-style-type: none"> • Sections 37 to 46 of Insurance Act 39/2015 Coll., in which this directive has been transposed, and • Chapter 3 (Articles 17 and following) of Delegated Regulation 2015/35 <p>For undertakings that does not fell within the scope of Solvency II Directive rules are set in Sections 171 to 178 and are based on previous European regime Solvency I.</p> <p>According to section 139 par. 1 subpar. k) of Insurance Act 39/2015 Coll., in case of identified shortcomings the NBS may also impose a sanction to increase technical provisions to be in line with abovementioned provisions.</p> <p>The evaluation of the adequacy of technical provision could be divided to 2 parts:</p> <ol style="list-style-type: none"> 1. In non-life insurance we use chain-ladder methods. 2. In life insurance we are creating the directory of assumptions and assess movements according to different sources of changes of technical provisions – variation analysis.
Define in law the supervisory responsibilities of external insurance auditors and actuaries.	Solvency II Directive created the actuarial key function, that has to be established in every (re)insurance undertaking and operate as independent part of second line of defense. Related provisions can be found in Insurance Act 39/2015 Coll. – concretely Section 7 par. 2 subpar. f), Sections 24, 25 and 29.

Table 6. Slovak Republic: Key Recommendations from the 2007 FSAP Update (Continued)

Recommendations	Status
Regulatory and Supervisory Framework	
	<p>For undertakings that does not fell within the scope of Solvency II Directive there is an obligation to create the actuarial department that has similar obligations and responsibilities as abovementioned actuarial key function – specified in Section 180 par. 2 and Section 183 of Insurance Act 39/2015 Coll.</p> <p>Responsibilities and obligations of external auditors (including those of (re)insurance undertakings) are in general specified in special law – Act on the Statutory Audit 423/2015 Coll. There are also particular provisions governing the status of external insurance auditors in Section 74 of Insurance Act 39/2015 Coll.</p>
Financial Sector Infrastructure	
Ensure that the IFRS financial reporting framework is fully implemented for financial sector entities.	Beginning on 1.1.2006, the IFRS financial reporting system was incorporated into the Act on Accounting 431/2022 Coll, directly connecting it to applicable EU legislation for companies operating in the financial sector.
Second Pillar Pension Funds	
Provide incentives for diversification of pension fund portfolios.	<p>In 2006 the three-pillared structure of Slovak pension system was still relatively new. The second pillar pension funds were introduced in 2005, at same time the reform of third pension pillar was implemented.</p> <p>From 2006 until now, the Slovak pension system has undergone many changes (negative as well positive) affecting the stability of pension system. The latest reform is effective from January 2023. Some of the main current features of the second pillar are: automatic participation (with opt-out option), mandatory contributions (5,5 percent of the assessment base attained in the relevant period; in 2006 – 9 percent), default investment strategy (life cycle), lower fees, individual guarantees.</p> <p>Regarding the diversification of second pension fund portfolios: the pension fund management companies (PFMCs) manage at least one guaranteed bond pension fund and one non-guaranteed index pension fund. The PFMCs manage also other types of pension funds with different investment strategies (mixed funds, equity funds, ESG funds).</p> <p>The current portfolio of pension funds is sufficiently diversified (i.e., from perspective of sectoral, geographical, credit classification and from perspective of increased variety of asset classes, including precious metals within allowed commodity investments, larger portions of ETFs and equity holdings as asset classes with prospects of higher performance compared to money-market or fixed income investments).</p> <p>There is also a new legislative draft (with effect from 1 January 2024) to switch part of the contributions from the second pillar to the first pillar, e.g., to reduce the contributions to the second pillar to 4 percent).</p>
Capital Markets	
Develop a debt management strategy that includes fewer but larger bond issues and following the standards established for government bond-issues in large Euro markets.	<p>Debt management strategy has been developed since 2007 and is made public at: https://www.mfsr.sk/sk/financie/institut-financnej-politiky/strategicke-materialy/strategia-riadenia-stat-dlhu/strategia-riadenia-stat-dlhu.html</p> <p>Bond issues have been reduced significantly to larger 3 billion volumes.</p>

Table 6. Slovak Republic: Key Recommendations from the 2007 FSAP Update (Concluded)

Recommendations	Status
Regulatory and Supervisory Framework	
Decide on a strategy for the development of the Slovak capital market and the future of the Bratislava stock exchange.	<p>The Concept of capital markets development was approved by the Slovak government in 2014.</p> <p>The priority goals of the Concept were the level of development of capitalization and liquidity comparable to the markets of neighboring V4 countries and the quality of infrastructure and service standards of top standards in countries with a developed market economy.</p> <p>The Ministry of Finance of the Slovak Republic, in cooperation with the Ministry of Economy of the Slovak Republic, the National Bank of Slovakia, the Stock Exchange in Bratislava, the Central Depository of Securities of the Slovak Republic, professional associations, other market participants and the professional public prepared draft measures for the completed goals, which are divided into four areas - Market infrastructure, Market liquidity, Cost of the system and Financial education and consumer protection.</p> <p>Since then, significant progress was achieved in areas of financial education and consumer protection which are driven by the National Bank of Slovakia.</p> <p>The national regulatory framework for capital markets is being constantly amended to implement rapidly expanding EU law, mainly as part of the CMU initiative.</p>
Consumer Protection	
Review and fine tune the legal and institutional structure for consumer protection.	<p>National law was amended accordingly - Act. No 266/2005 on consumer protection in financial services.</p> <p>Since 2015 the National Bank of Slovakia (NBS), according to § 1 para. 3 letter c) of Act No. 747/2004 Coll. on the supervision of the financial market and on amendments and supplements to certain laws, as amended by later regulations has been responsible for the protection of consumers on financial market.</p> <p>As part of financial consumer protection, the NBS handles complaints of consumers who are dissatisfied with financial services. The NBS conducts on-site and remote supervision, primarily focusing on whether consumers are subject to unfair commercial practices or unfair contractual terms. If violations of those rules are identified and corrective actions are deemed necessary, sanctions are imposed.</p> <p>The NBS also launched the Strategy to promote financial literacy and supporting activities are carried on along with fine tuning the regulatory framework.</p> <p>Since 2020, the NBS has been enhancing the financial literacy of financial consumers through an educational project called "5peňazi" (5coins).</p>

Table 7. Slovak Republic: Recent Article IV Recommendations Related to the Financial Sector

IMF Article IV Recommendations	Authorities' Response
2022 Article IV Recommendations	
Improvements in response and recovery capacities to ensure swift operations return after a potential cyber-attack.	The authorities are part of the EU's Digital Operational Resilience Act (DORA) that is coming into effect in 2025.
Continue to strengthen the AML/CFT and governance framework.	The authorities have developed and revised the internal guidelines, procedures for AML/CFT regulation and supervision. The action plan to mitigate money laundering (ML) and terrorist financing (TF) risks has been adopted, and deficiencies in reporting suspicious transactions to the Financial Intelligence Unit addressed. However, remaining deficiencies include (i) requirements to manage and mitigate instances of high AML/CFT risks, (ii) beneficial ownership information, and (iii) procedures to mitigate risks posed by politically exposed persons.
Explore additional measures to address housing market vulnerabilities, such as capital-based measures on mortgage exposures, including minimum risk weights and targeted use of a sectoral systemic risk buffer.	The authorities have decided not to apply a sectoral systemic risk buffer to target systemic risks from mortgage loans given that risk weights on mortgages are already high.
Adjust borrower-based measures to address the concentration of loans close to regulatory limits and the rise in loans with maturities beyond retirement age.	The authorities have introduced an age-dependent debt-to-income (DTI) limit to reduce the amount of loans with maturities beyond retirement age.
2023 Article IV Recommendations	
Strengthening the resilience of the financial system to cyber-attacks in line with the EU's Digital Operational Resilience Act (DORA).	The NBS is enhancing the IT security of the financial market in accordance with EU standards. The NBS has conducted preparatory activities for the implementation of DORA, including hosting a DORA workshop.
Gradually unwind the bank levy as planned.	The levy is scheduled to decrease annually by approximately 5 percentage points, reaching 15 percent in 2027. From 2028 onwards the special rate of the bank levy will no longer apply. However, banks will continue to be subject to the standard rate of the special levy (4.356 percent).
Consider additional macroprudential tools to address emerging risks in the CRE sector.	The need to address risks in the CRE sector by a sectoral systemic risk buffer has been analyzed continuously. The NBS is of the view that existing macroprudential buffers are sufficient to cover risks in the CRE sector.

Table 7. Slovak Republic: Recent Article IV Recommendations Related to the Financial Sector (Concluded)

IMF Article IV Recommendations	Authorities' Response
Sustain improvements to the AML/CFT framework.	The authorities are undertaking the third update to the AML/CFT national risk assessment, which is expected to be finalized by 2025Q1. The NBS has taken steps to strengthen AML/CFT supervision incorporating a risk-based approach and new AML/CFT supervision procedures. The NBS inspections have found minor and middle deficiencies related to CDD process, AML staff training, identification of PEPs, and record-keeping, but no fines have been imposed. New MoU between NBS and Ministry of Interior of the Slovak Republic (FIU) has been signed in December 2024. It reflects current developments, trends, and requirements for cooperation between AML/CFT authorities.

Table 8. Slovak Republic: Risk Assessment Matrix^{1,2}

Nature/Source of Main Threats	Overall Level of Concern	
	Likelihood of Severe Realization of Threat in the Next 1–3 Years	Expected Impact on Financial Stability if Threat is Realized
	(high, medium, or low)	(high, medium, or low)
1. Regional conflicts	<p>Medium</p> <p>Intensification of conflicts (e.g., in the Middle East, Ukraine, Sahel, and East Africa) or terrorism disrupt trade in energy and food, tourism, supply chains, remittances, FDI and financial flows, payment systems, and increase refugee flows.</p>	<p>High</p> <p>Slovakia is highly vulnerable to an intensification of regional conflicts given its geographical proximity and dependence on Russian fossil fuels, and high integration in global value chains.</p> <p>An escalation of conflicts would lead to higher energy and commodity prices pushing up inflation and leading to higher for longer policy rates in the euro area.</p>
2. Commodity price volatility	<p>Medium</p> <p>Supply and demand volatility (due to conflicts, trade restrictions, OPEC+ decisions, AE energy policies, or green transition) increases commodity price volatility, external and fiscal pressures, social discontent, and economic instability.</p>	<p>High</p> <p>Increased cost pressures on private sector and/or higher fiscal costs. Higher uncertainty undermines household and corporate confidence.</p> <p>Tighter financial conditions would affect economic activity and heighten credit risk and housing market corrections.</p>
3. Trade policy and investment shocks	<p>High</p> <p>Higher trade barriers or sanctions reduce external trade, disrupt FDI and supply chains, and trigger further U.S. dollar appreciation, tighter financial conditions, and higher inflation.</p>	<p>High</p> <p>Export growth falls significantly given the openness of the Slovak economy and integration in global value chains.</p> <p>Trade disruptions could lead to an increase in unemployment.</p> <p>Higher credit risk would contribute to a deterioration in banks' profitability and asset quality, with adverse effects on banks' solvency.</p>
4. Sovereign debt distress	<p>High</p> <p>Higher interest rates, stronger U.S. dollar, and shrinking development aid amplified by sovereign-bank feedback result in capital outflows, rising risk premia, loss of market access, abrupt expenditure cuts, and lower growth in highly indebted countries.</p>	<p>Medium</p> <p>Higher risk premia on sovereign bonds increases the cost of financing the fiscal deficit, delaying fiscal consolidation, reducing fiscal space, and deteriorating the long-term sustainability of public finances.</p> <p>Bank exposure to sovereign debt is modest, around 10 percent of total assets, but the indirect impact on banks, through the macroeconomic channel, could be considerable.</p>

Table 8. Slovak Republic: Risk Assessment Matrix (Concluded)

Nature/Source of Main Threats	Overall Level of Concern	
	Likelihood of Severe Realization of Threat in the Next 1–3 Years	Expected Impact on Financial Stability if Threat is Realized
	(high, medium, or low)	(high, medium, or low)
5. Delays in the implementation of structural reforms and fiscal consolidation	High/Medium Delays in the implementation of structural reforms and fiscal consolidation in Slovakia. Shift in market perception in the EA undermines high-debt countries' ability to roll over and service debt.	High Increase government borrowing costs, reduce fiscal space, and increase the risk of debt distress.
6. Real estate market downturn	Medium A sharp and sudden decline in prices of residential and commercial properties combined with an economic downturn.	High With elevated banking sector exposure to real estate markets (mortgage and CRE), steep price corrections would weaken macro-financial stability. The quality of banks' credit portfolios deteriorates with a significant increase in NPLs, leading to tighter credit conditions and a slowdown in credit growth. Risks to the banking sector are mitigated to some extent by banks' strong capital, boosted with macroprudential buffers.
7. Tight labor market	Medium A tight labor market, including due to increasing skill mismatches, puts upward pressure on wages and triggers a wage-price spiral.	High Higher wages and inflation may lead to abrupt adjustments in financial markets. High inflation for longer may lead to abrupt adjustments in financial markets. Bank interest margins could get compressed by the relocation of demand deposits towards costlier liabilities.
8. Automotive sector	Medium The automotive sector fails to adjust to the shift to electric vehicles and increased automation. Increasing automation erodes Slovakia's competitive advantage as a source of low-cost skilled labor.	High Loss of competitiveness and shrinking share of the automotive market would threaten the country's growth model and lower potential growth.

¹ In line with the February 2025 G-RAM.

² The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenarios highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon. G-RAM operational guidance is available from the SPR Risk Unit website.

Appendix I. Current Macprudential Settings

Broad-Based Tools Applied to the Banking Sector	
Countercyclical capital buffer	Effective August 1, 2023, the CCyB was increased to 1.5percent.
Capital conservation buffer	After a temporary suspension relating to the COVID-19 pandemic, a CCoB of 2.5percent was re-introduced on January 1, 2023, with exemptions for small and medium-sized firms.
Limit on leverage ratio	After a temporary suspension relating to the COVID-19 pandemic, a limit on the leverage ratio of 3percent was re-introduced on April 1, 2022.
Forward-looking loan loss provisioning requirement	Effective January 1, 2018, IFRS 9 was implemented, which introduced a forward-looking approach to loan loss provisions.
Household Sector Tools	
Cap on loan-to-value ratio	Effective July 1, 2018, an LTV cap of 80 percent on all housing loans collateralized by residential property was implemented, with 20 percent of new housing loan production may be provided with LTV between 80 percent and 90 percent.
Cap on debt-to-income ratio	Effective July 1, 2018, the DTI limits are set to gradually fall from 8 times for borrowers aged 40 and under to 3 at age 60 and over.
Cap on debt-service-to-income ratio	Effective January 1, 2020, a DSTI cap of 60 percent on all housing and consumer loans was implemented. The maximum share of new loans with stressed DSTI ratio between 60 percent and 70 percent is 5 percent, with some exceptions. ¹
Limit on amortization periods	Effective January 1, 2017, caps on loan maturities were set as follows: 30 years for mortgages, 8 for consumer loans, with some exceptions.
Restrictions on unsecured loans	DSTI limit, DTI ratio limit, and limit on amortization periods apply also to (unsecured) consumer loans.
Liquidity Tools Applied to the Banking Sector	
Liquidity Coverage Ratio	After a temporary suspension relating to the COVID-19 pandemic, an LCR of above 100 percent was re-introduced on January 1, 2022.
Net Stable Funding Ratio	Effective June 28, 2021, banks must maintain a net stable funding ratio of above 100 percent.
Tools to Address Systemic Liquidity Risk and Fire Sale Risk in the Nonbank Sector	
Asset management industry	Effective July 1, 2011, at least 10 percent of the value of assets in a public special real-estate fund established as an open-ended fund must consist of liquid assets. Standard funds' assets may only be invested in liquid financial assets.
Central counterparty clearing	Effective January 2, 2020, the EMIR 2.2 is in effect.

¹ DSTI figures are computed based on net income minus subsistence level. Then, the DSTI is the maximum of the DSTI using the actual rate and actual maturity and the DSTI using a stressed rate (actual rate plus 2 ppts, capped at 6 percent) and the maximum maturity.

Tools to Address Risks from Systemically Important Institutions and Interconnectedness within the Financial System	
Capital surcharges for systemically important institutions	<p>Effective January 1, 2023, O-SII buffer rates are set as follows:</p> <ul style="list-style-type: none"> (1) Československá obchodná banka, a.s., – 1.25 percent, (2) 365.bank, a.s., – 0.25 percent, (3) Slovenská sporiteľňa, a.s., – 2 percent, (4) Tatra banka, a.s., – 1.5 percent, (5) Všeobecná úverová banka, a.s., – 1.75 percent. (6) Prima banka Slovensko, a.s., – 0.25 percent. <p>The capital buffers for O-SIIs remain at the same value for the year 2024.</p> <p>Effective January 1, 2023, a G-SII must maintain a leverage ratio buffer equal to 50 percent of the risk-weighted G-SII buffer rate.</p>
Source: iMaPP and NBS.	

Appendix II. Banking Sector Stress Testing Matrix (STeM)

Domain		Assumptions
		Top-down by FSAP team
Banking Sector: Solvency Stress Test		
1. Institutional Perimeter	Institutions included	<ul style="list-style-type: none"> All banks, excluding foreign branches (9 institutions, including 4 SIs that are part of different large European banking groups under ECB direct supervision).
	Market share	<ul style="list-style-type: none"> About 86 percent of banking system assets and 67 percent of the financial system assets.
	Data source and starting date	<ul style="list-style-type: none"> Data Sources: Supervisory returns, data from the credit registry, COREP and FINREP, and publicly available data. Baseline date: balance sheets as of December 2023. Scope of Consolidation: consolidate basis for SIs and individual basis for LSIs.
2. Methodology	Overall framework	<ul style="list-style-type: none"> Credit risk assessed with scenario-based, top-down, bank-level stress test model complemented with sensitivity analysis focusing on credit risk stemming from mortgage portfolios and NFC. The credit portfolio was split in four main credit types: households, corporate, government and financial loans.
	Satellite models for macro-financial linkages	<ul style="list-style-type: none"> Credit risk: link credit risk variables to the set of macroeconomic variables using micro-models for households (simulate ratio of DSTI + essential consumption of households and loans IFRS9 stage distribution¹), and corporates (projection of PDs link to key financial indicators from the corporate stress test). Market Risk: valuation losses/gains due to the impact of interest rate shocks on banks' investment portfolio at fair value. Net interest income: structural model to estimate the impact of interest rates shocks on interest income and expenses using repricing ladder and projected interest rates on new/repriced assets and liabilities.
	Stress test horizon	<ul style="list-style-type: none"> 3-years (2024-2026).
	Assumptions	<ul style="list-style-type: none"> Balance-sheet components were projected using a quasi-static assumption under the adverse scenario. The projected balance sheet items are assumed to grow at a rate equal to the nominal GDP growth when the latter was positive. The growth is set to zero when the economy shrinks, assuming banks do not deleverage during the recession.

¹ See Valderrama, L, P. Gorse, M. Marinkov, and P.B. Topalova, "European Housing Markets at a Turning Point—Risks, Household and Bank Vulnerabilities, and Policy Options", IMF working paper no 2023/076.

Domain		Assumptions
		Top-down by FSAP team
		<ul style="list-style-type: none"> • For the baseline scenario net NFCI grows in line with the bank's business (i.e. shares of non-interest income and non-interest expenses to total assets are kept constant). For the adverse scenario, net NFCI is projected to be equal to the baseline minus one standard deviation of the bank specific historical variability at the end of the first year of the horizon; the following years net NFCI grows in line with balance sheet growth. • The tax rate is set at the bank-specific median effective tax rate across the past 5 years for the stress testing horizon in case of positive net income and zero otherwise. Capital impact projections also take into account the temporary bank levy following the Slovak regulation (levy of 30 percent in 2024, 25 percent in 2025 and 20 percent in 2026). • Dividends are assumed to be paid out of each period net income after bank levy and taxes by banks in compliance with supervisory capital requirements. The dividend payout ratio is determined from the bank-specific median dividend payout ratio over the past five years, with a floor at 50 percent. If banks are not well capitalized or income is negative, it is assumed that there is no dividend payout.
3. Type of analyses	Scenario analysis	<ul style="list-style-type: none"> • Scenario-based stress tests focus on the impact of the macroeconomic environment on credit risk, focusing on the mortgage and commercial real estate portfolios. • Given the domestic orientation of banks, the scenarios focus on domestic macro-financial variables (e.g., GDP, interest rates, unemployment rate, and sovereign spreads). • Two macroeconomic scenarios were simulated at the yearly frequency: • Baseline scenario: The baseline follows the April 2024 WEO. It assumes a mild economic recovery and a weak but stable external environment. GDP growth is projected to increase to 2.1 percent in 2024, initially driven by a rebound in consumption, and continued government support measures. On the external front, improving supply chain conditions are projected to help exports, offsetting a generally weak external environment. Headline inflation keeps falling and the labor market remains tight, with the unemployment rate stabilizing at around 6 percent. • Adverse scenario: The adverse scenario assumes the realization of external risk factors, including the escalation of regional conflicts and an abrupt global slowdown that drives down economic activity in the euro area. This scenario leads to spikes in energy and commodity prices relative to the baseline. The drop in external demand directly impacts Slovakia's economic growth via trade channels. Inflation in the euro area remains above target, as higher energy prices lessen the effects of weak demand. In response, the ECB maintains higher policy rates for longer, contributing to the slowdown. Second round effects stemming from wage increases affect export competitiveness and contribute to the downturn. In this environment, property prices and construction activity undergo a substantial drop. On the fiscal front, lower economic growth would further increase the debt level, widening sovereign spreads and contributing to deteriorating financial conditions. This scenario is simulated using MCM

Domain		Assumptions
		Top-down by FSAP team
		models (an extension of the Global Macrofinancial Model - GFM) and deviation shocks for specific variables.
	Sensitivity analysis	<ul style="list-style-type: none"> • Sensitivity analyses to complement the scenario-based analysis. • Credit risk from households and CRE loans assessed with additional scenarios in the household and corporate micro-models. • Sensitivity analysis for the net fee and commission projection under the adverse scenario given the significant contribution of this component in the profit generation of the Slovak banking system, •
4.Risks and Buffers	Risks assessed	<ul style="list-style-type: none"> • Credit risk and sovereign risk using IFRS approach • Market risks in the trading book, focused on the revaluation of the bond portfolio using duration analysis. • Interest rate risk in the banking book, compression of interest margins. • FX risk and equity price risk not material.
	Buffers	<ul style="list-style-type: none"> • Existing loan loss provisions and capital buffers. • Internal capital generation (i.e., income after taxes). • No new capital injections.
5. Regulatory Standards	Regulatory Standards	<ul style="list-style-type: none"> • Bank-specific (STA/IRB). • Hurdle rates consistent with the Slovak capital regulatory standards that reflect Basel III capital requirements. The hurdle rate applied in the stress test accounts for Common Equity Tier 1 (CET1) regulatory minimum of a 4.5 percent Pillar 1 requirement, bank-specific Pillar 2 requirements, the Capital Conservation Buffer (CCoB) of 2.5 percent and the bank specific O-SII buffers. For the leverage ratio the hurdle rate of Pillar 1 requirement was considered, corresponding to 3 percent.
6. Reporting Format for Results	Output presentation	<ul style="list-style-type: none"> • System-wide capital shortfalls from macroprudential perspective. • Number of banks and percentage of banking system assets below hurdle rates. • Impact of shocks on key P&L components.
Banking Sector: Liquidity Stress Test		
1. Institutional Perimeter	Institutions included	<ul style="list-style-type: none"> • All banks, excluding foreign branches (9 institutions, including 4 SIs that are part of different large European banking groups under ECB direct supervision and considered on individual basis).

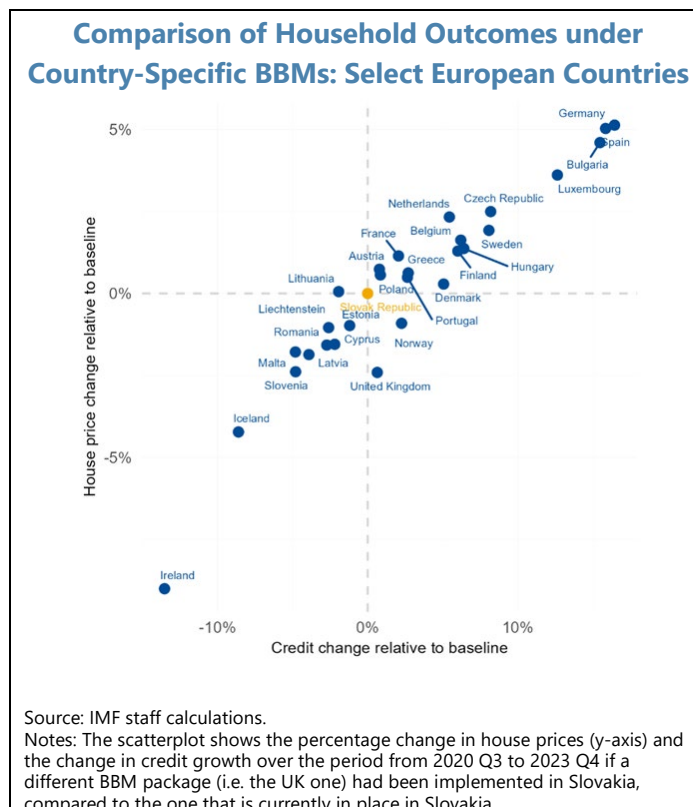
Domain		Assumptions
		Top-down by FSAP team
	Market share	<ul style="list-style-type: none"> About 86 percent of the banking system assets.
	Data and Starting position	<ul style="list-style-type: none"> Cut-off date: December 2023. Data Source: supervisory data from FINREP and COREP (LCR, NSFR, and ALMM Maturity Ladder template).
2. Methodology	Overall framework	<ul style="list-style-type: none"> Regulatory liquidity stress test. Evaluation of LCRs (30-day horizon) and NSFRs (1 year horizon). Cash-flow-based liquidity stress test. Evaluates the ability of banks to withstand a sequence of liquidity shocks in different maturity buckets (from one day to one year), incorporating both contractual and behavioral (where available) assumptions. Liquidity test in EUR.
3. Type of analyses	Scenario analysis	<ul style="list-style-type: none"> The run-off rates are calibrated to reflect scenarios of system-wide deposit runs and dry-up of unsecured wholesale and retail funding, following historical events, recent international experience in liquidity crisis and IMF expert judgment. The haircuts of high-quality liquid assets (HQLA) are calibrated against ECB haircuts and past EA FSAPs.
4. Risks and Buffers	Risks	<ul style="list-style-type: none"> Funding liquidity. Market liquidity.
	Buffers	<ul style="list-style-type: none"> The counterbalancing capacity, including liquidity obtained from markets and/or the central bank's facilities. Expected cash inflows are also included in the cash-flow based and LCR-based analysis.
5. Regulatory Standards	Regulatory Standards	<ul style="list-style-type: none"> Consistent with Basel III regulatory framework. Liquidity shortfall by bank.
6. Reporting Format for Results	Output presentation	<ul style="list-style-type: none"> Liquidity ratio or shortfall by groups of banks and aggregated (system wide). Number of banks that fail their obligations.
Corporate Stress Test		
1. Institutional Perimeter	Entities included	<ul style="list-style-type: none"> The coverage comprises all companies with available financials, including small and medium-sized enterprises (SMEs).
	Data	<ul style="list-style-type: none"> Subscription financial database on corporations, including balance sheets and profit and loss statements. Corporate stress test for the ten largest borrowers of each lender bank fully integrated with the bank stress, exploiting bank data on outstanding credit amounts, provisions, and credit risk mitigants at the level of the lender banks.
	Time Horizon	<ul style="list-style-type: none"> Corporate-level data in 2023 will be used as a starting point. Firms without 2023 data will be imputed by using growth rate of other firms with the same sector and firm size. The data will be projected to 2026 using the same scenarios used for the bank solvency assessment.

Domain		Assumptions
		Top-down by FSAP team
	Overall framework	<ul style="list-style-type: none"> Liquidity and solvency of companies will be tested based on the four indicators (Return on Asset (ROA), Interest Coverage Ratio (ICR), Working Capital over Total Asset (WC/TA), and leverage (debt to equity, D/E), conditional on the baseline and adverse scenarios applied to the bank stress tests. Individual firms are classified by their economic activities and subject to the adverse scenarios used in the bank stress tests. The shocks include an increase in interest expenses on short-term debt, a drop in turnover, and an increase in costs, estimated from the baseline and adverse scenarios. Individual firms are mapped to their lender banks, and the results used to inform the bank stress tests of credit risk.
	Scenarios	<ul style="list-style-type: none"> The analysis applies the same baseline and distressed scenarios used in the bank stress tests. The corporate stress test uses the sectoral estimated scenarios and shocks to interest rates to come up with a set of firm-specific shocks consistent with the bank stress tests. An additional assessment of individual bank exposures to their 10 largest borrowers estimates the PD of large borrowers.
3. Risks and Buffers	Risks	<ul style="list-style-type: none"> Insolvency risk.
	Buffers:	<ul style="list-style-type: none"> EBIT (earnings before interest and taxes) and capital.
4. Reporting Format for Results	Output presentation	<ul style="list-style-type: none"> Total debt, and number of riskier firms (such as firms with ROA below 0 percent, ICR below 100 percent, negative working capital, and negative equity) as well as default probability will be presented by economic sectors, firm sizes, and lender banks, under baseline and distressed scenarios.
Banking System: Interconnectedness Analysis		
1. Institutional Perimeter	Institutions Included	<ul style="list-style-type: none"> Sectoral linkages. Interbank network: 9 banks. Domestic financial system interconnectedness: banks, pensions, investment funds, and insurance companies. Cross-border interconnectedness: interbank cross-border exposures.
	Data	<ul style="list-style-type: none"> Data source: NBS data on interbank, domestic financial system, and bank cross-border exposures. Balance sheet approach matrix for sectoral linkages. Cut-off date: December 2023.
2. Methodology	Overall framework	<ul style="list-style-type: none"> Analyses of network maps. Due to limited interconnectedness, the use of contagion models was not possible.
3. Reporting of Results	Output presentation	<ul style="list-style-type: none"> Network maps.

Appendix III. Quantifying the Effect of BBMs on Credit and House Price Growth in Slovakia

Employing a micro-funded framework that models optimal mortgage choice within macroprudential limits, the analysis quantifies the dampening effect of the BBMs on credit and house price growth from 2020 Q3 to 2023 Q4.

The first finding is that the current BBM package has had a moderately dampening effect on credit and house price growth (compared to a situation without any BBMs in place). Second, compared to the effects that packages in other European countries would have had on credit and house price growth in Slovakia, the Slovak package is of moderate stringency (see right-hand chart). Finally, the analysis examines the impact of various refinements to Slovak BBMs (see chart below). The results indicate that abolishing exemptions for DSTI, maturity, and DTI; eliminating age differentiation of the DTI; and aligning LTV limit differentiation along FTB, STB, Investor, and Top-up categories would lead to an additional reduction in credit and house price growth.



Impact of Alternative BBM Packages in Slovakia

-----> Tightening ----->

		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Segment
Regulation	LTV, %	90	90	90	85	80	80	80	FTBs
		80	80	80	80	80	80	75	STBs
		80	70	70	70	70	70	70	Investors
		80	70	50	50	50	50	50	Top-ups
	DSTI, %	60	60	60	60	60	55	55	All
Impact	Maturity, y.	30	30	30	30	30	30	30	All
	DTI	8	8	8	8	8	6	6	All
	Mortgage flow, %	1	-4	-6	-6	-8	-12	-15	
	House prices, %	1	-2	-3	-3	-3	-5	-7	

Source: IMF staff calculations.
Notes: The table shows the impact of several redesigned BBM packages on mortgage flow and house prices, compared to the one that is currently in place in Slovakia.