Impact of inflation on the financial stability

Vladimír Dvořáček

Member of the Bank Board of Národná banka Slovenska

Executive Director of NBS's Supervision and Financial Stability Division

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Handelskammer Schweiz Slowakische Republic

23 September 2022

Slovak banking sector

Key characteristics:

- Small compared to EU: total assets only EUR 115 bln. (0,36% of EU banking sector)
- Absolutely key to the domestic economy:
    - The only lender to households and SMEs
    - Providing more than a half of the funding to corporate sector
- Traditional business model: collection of deposits and lending to local entities
- Dominated by European banking groups, controlling more than 90% of assets

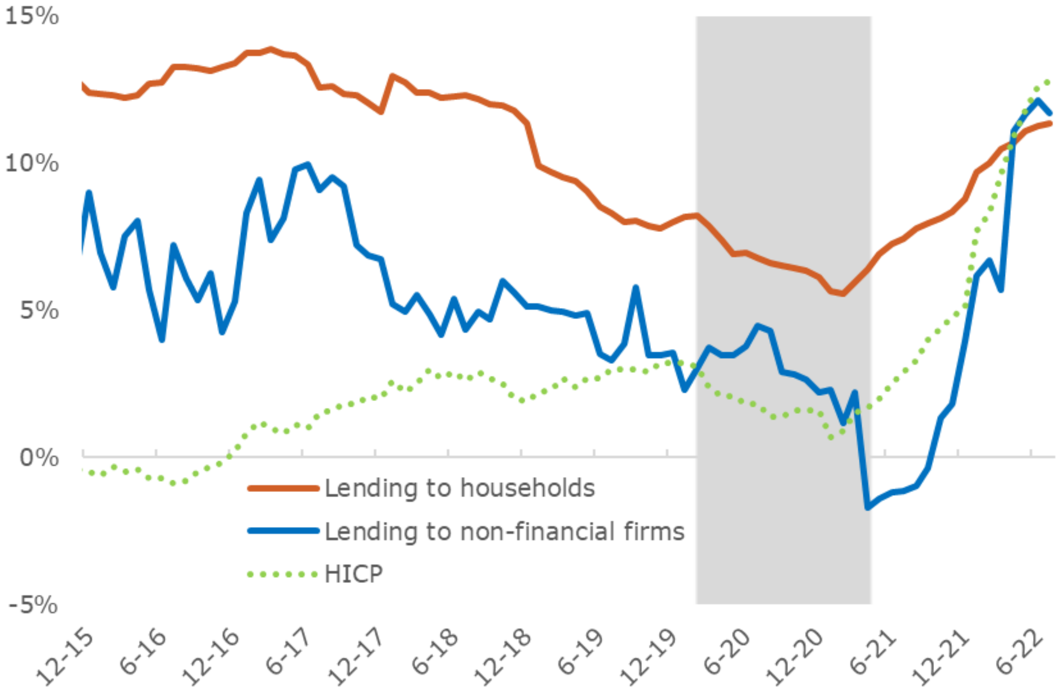
Key policy focus:

- Creating sound and competitive conditions for EU banking groups while taking into account essential role of their subsidiaries and branches on the local lending markets

Domestic lending market

- Acceleration in lending to both households and enterprises in 2021
- NFC: Mostly driven by growing input prices and commercial real estate investments
- Households: Main factors include low interest rates with expectations of further increase, soaring property prices, inflationary expectations, refinancing with top-ups

Annual credit growth: households and enterprises



Source: NBS

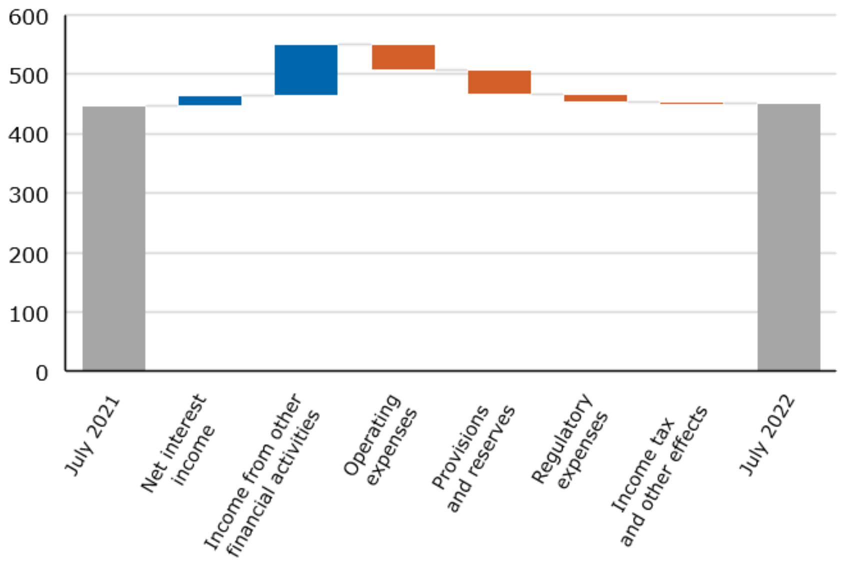
Housing loans and housing market

Source: ECB

Profitability of banking sector

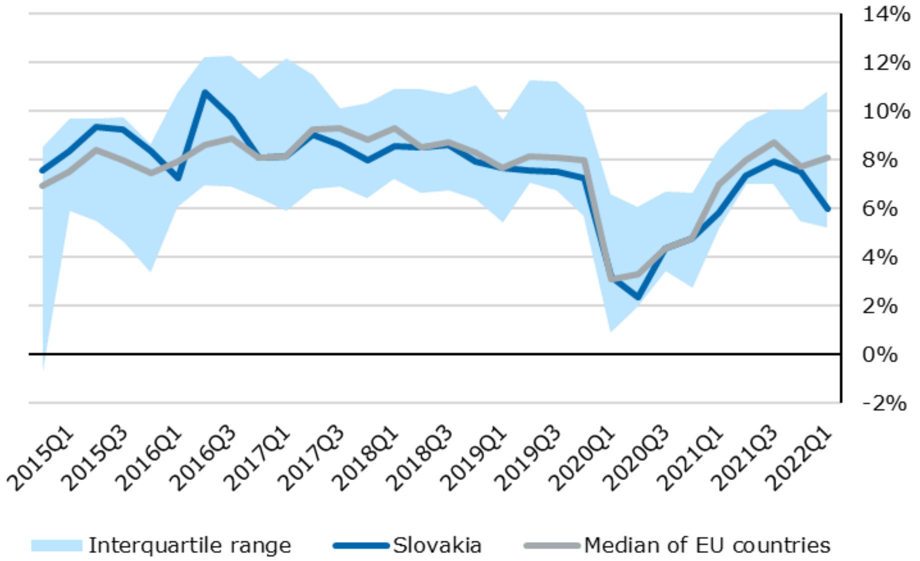
- Mild increase in overall net profit due to mutual offset of change in aggregate revenue and cost items
- Revenues highly boosted by increase in fees and commissions (14 %), both from clients and third parties
- Year-to-date contribution of net interest TLTRO effects decreased from 23 mil. EUR to 8 mil. EUR
- As of Q1 2022, the biggest negative difference (2,1 p. p.) in return on equity to EU Median
- Solid capital position: Tier 1 at 18,1 %, overall solvency at 19,6 %

Net profit change and its contributors in year-on-year increase (in mil. EUR)



Source: NBS

Annualized return on equity in banking sectors of EU Member States



Source: ECB

Active macropru policy with developing objectives

NÁRODNÁ BANKA SLOVENSKA EUROSYSTÉM

Sound credit growth

Address spillovers from real estate market

Slower increase in household debt

Less risky loans

Maturity prolongation and top-ups

2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022

LTV limit introduction

Maturity cap introduction

LTV limit tightening

DSTI limit introduction

LTV limit tightening

DTI limit introduction

DSTI limit tightening

DTI limit tightening

CCyB tightening

CCyB tightening

CCyB tightening

CCyB tightening

CCyB release

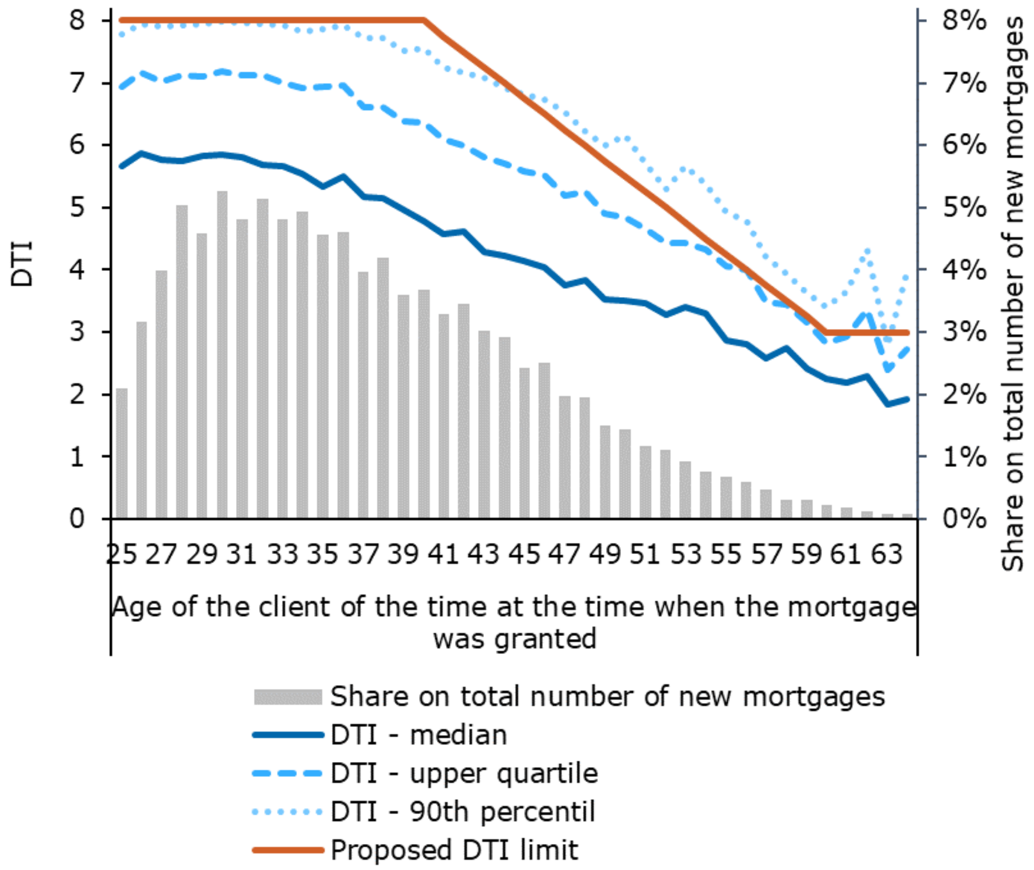
CCyB tightening

Recent policy tightening

Linear decrease of the DTI limit for clients older than 40 (from 8 to 3)

- Applicable only for loans exceeding age of 65 years
- Technical assumptions: clients should be able to repay the loan before the age 70 years (without any actual hard limit)
- DTI adjustment is preferred over DSTI as it cannot be circumvented by a maturity extension
- Equivalent to applying 20% haircut to the income after retirement age (based on the current 95th percentile of the DTI values)
- Existing 5 % exemption remains in place

Current DTI values and proposed limit

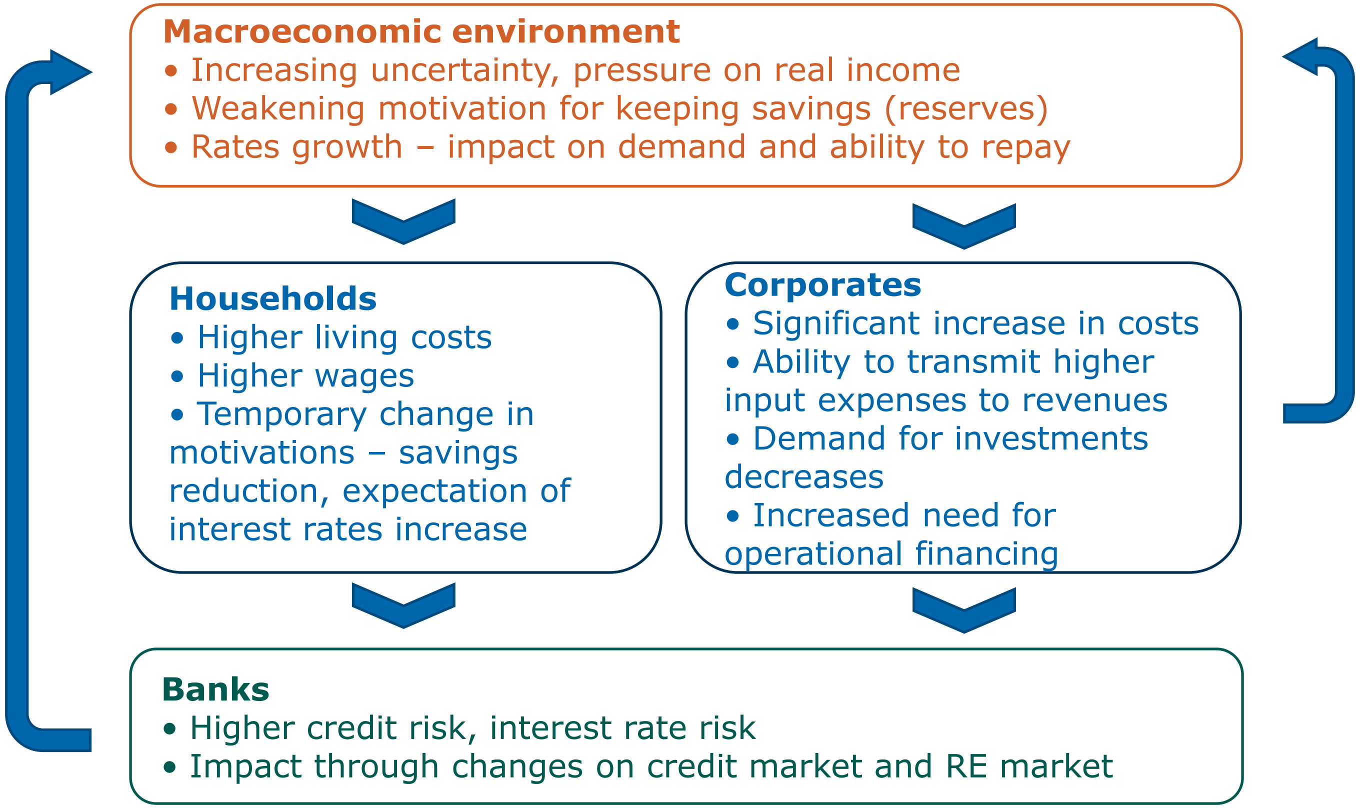


Source: NBS

Impact of inflation on the financial stability

NÁRODNÁ BANKA SLOVENSKA EUROSYSTÉM

- Increasing corporate inputs costs – depending on individual firm reaction
- Negative impact on household savings – concentration in the form of deposits
- Expected decrease of household real income – lower-income households are at the highest risk
- Higher debt refinancing costs (all sectors) – partly offset by the decrease of real debt value

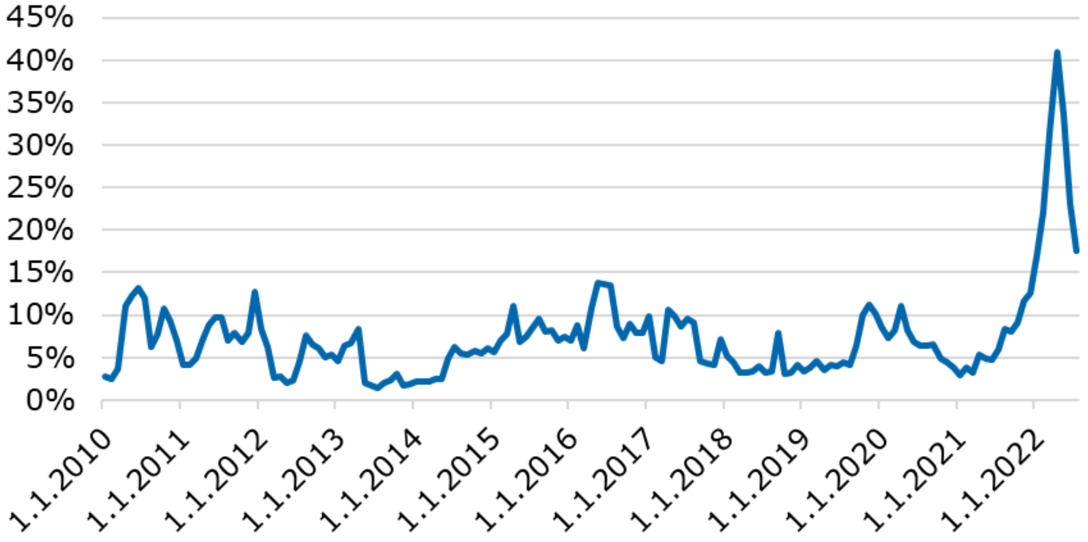


Zdroj: NBS

Impact of growth in interest rates

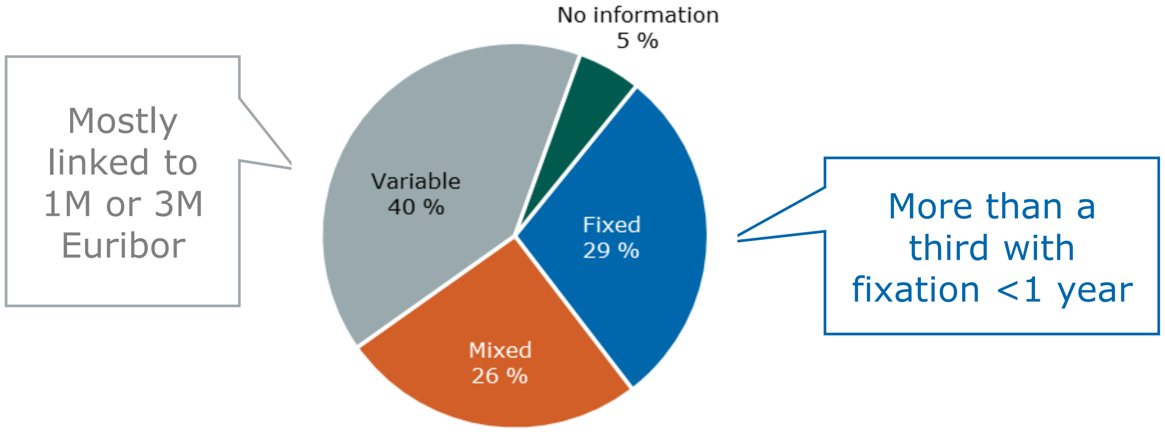
- **Households:** Gradual effect
  - Extraordinary demand for longer fixations in the beginning of 2022
  - Around 15% of mortgages refixes interest rates in 2022, another 20% in 2023
  - An increase of 2% to 5% in interest rates may put 0,5% to 1,7% households at risk (over next 3 years)
- **Corporates** will notice the interest rates growth faster

Share of mortgages with interest rate fixed for more than 5 years (new mortgages)



Source: NBS

Interest rates fixation on corporate loans

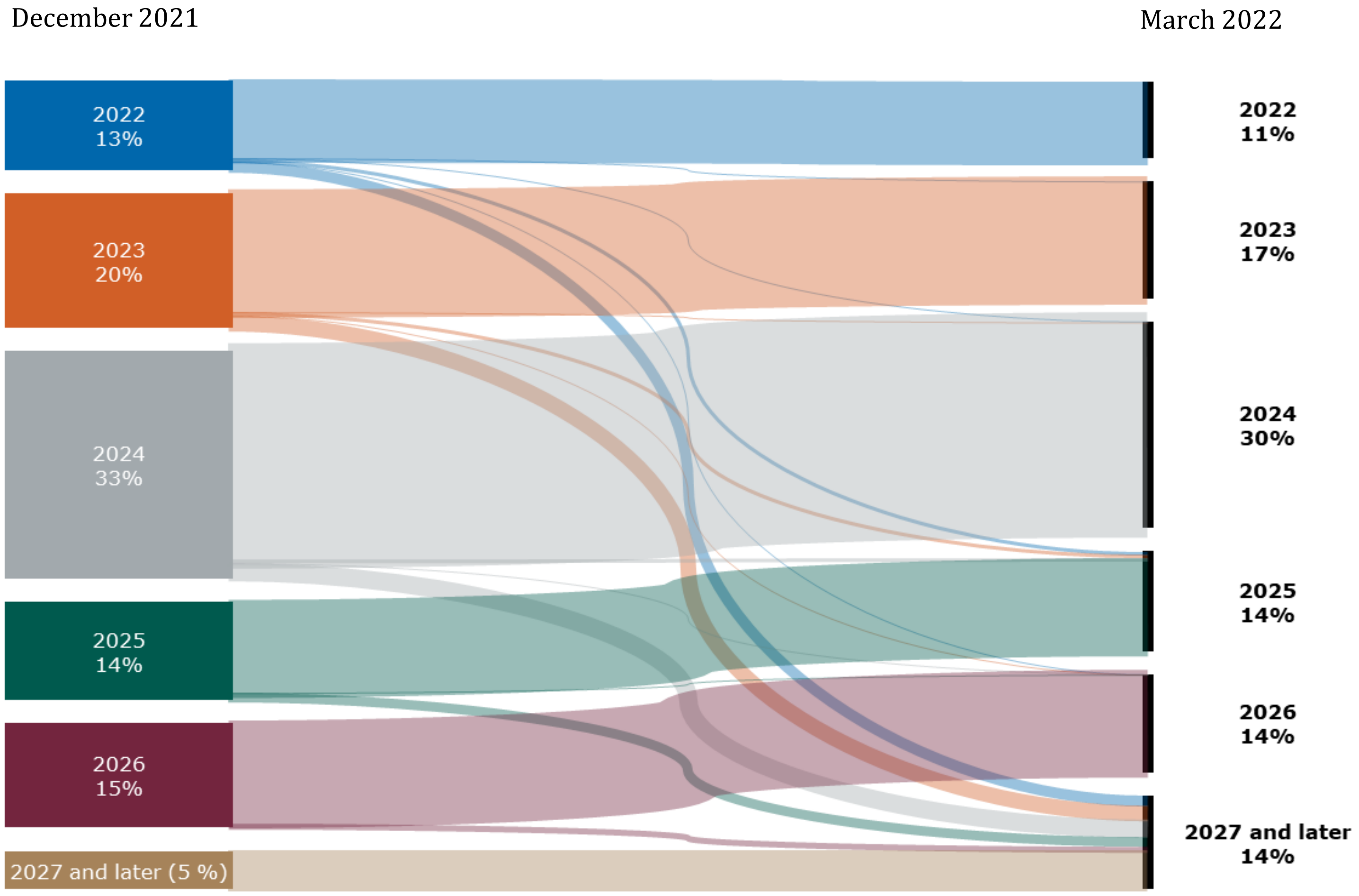


Source: NBS

Impact of growth in interest rates

- Many households fixed lower interest rate in Q.1 2022
- Share of mortgages with interest rate fixed for 5 and more years reached up to 68 %
- Impact of financial literacy
    - Longer fixations were preferred mainly by prime borrowers (higher income, university education, higher debt, higher financial assets)

Change in share of mortgages with a refixation date in given years



Source: NBS

Inflation impact on households credit risk

NÁRODNÁ BANKA SLOVENSKA EUROSYSTÉM

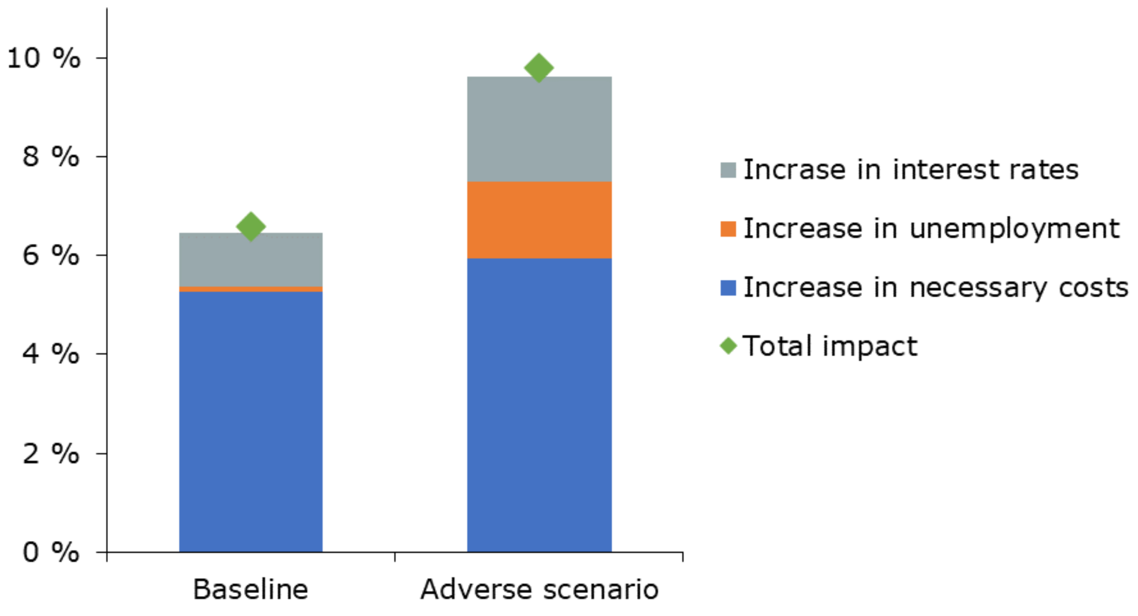
	Baseline scenario	Severe scenario
Inflation(HICP)	40%	40%
Increase in necessary costs	51%	51%
Wage growth	35%	26%
Increase in unemployment	0,3 p.b.	5,3 p.b.
Mortgage interest rates growths	3 p.b.	5 p.b.

- Cumulative data for years 2021 – 2024, homogeneous growth is assumed.
- Necessary costs include food, non-alcoholic beverages, housing, water, electricity, gas, health, transport, telecommunication and financial services.

Inflation impact on households credit risk

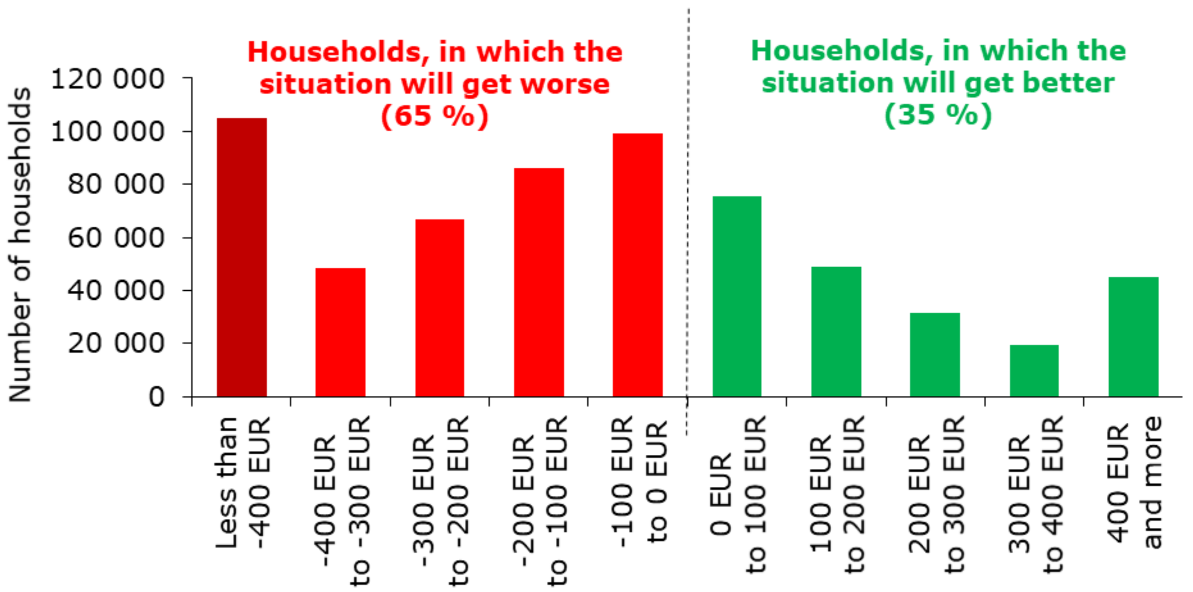
- Cash flow of almost 35 % households will be higher (Income outpacing the costs)
- More than 6 % of retail loans may be at risk (baseline) – inflation plays the key role
- 2% of mortgages and 6% of consumer loans may default
- Mortgage LGD is currently lower compared to recent years stress testing
    - Due to strong growth of RRE prices

Increase in households at risk



Source: NBS.

Change in average monthly CF of households in baseline

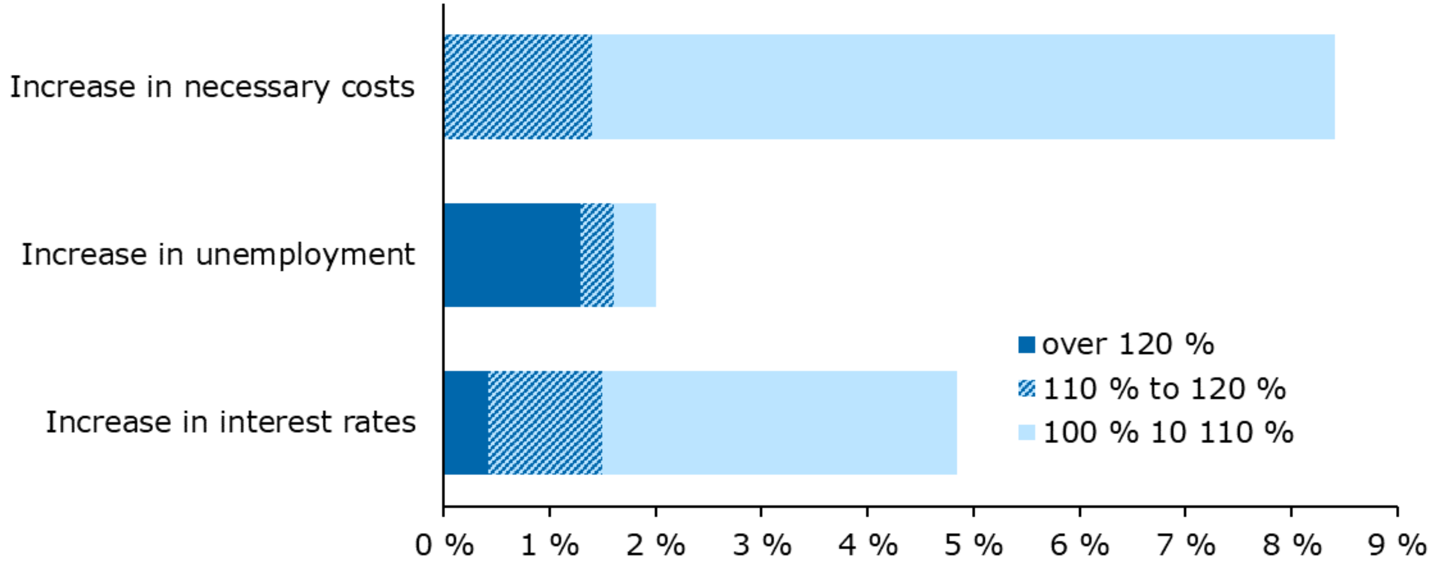


Source: NBS.

Inflation impact on households credit risk

- Inflation impact on loans at risk
  - Gradual impact – possible solution in lowering consumption or changing its structure
  - Increase in loans at risk is relatively high, but many households will be close to the „edge“
  - Nature of credit risk is changing
- In adverse scenario, significant worsening of situation in small part of household due to unemployment

Extent and intensity of impact on financial situation of households in adverse scenario



Source: NBS

Inflation impact on corporate credit risk (1)

- Initial impact due to significant increase of costs, especially energy and input costs
  - Differences in costs’ structure based on the size of the enterprises and / or respective economic sector
  - Simulations based on individual data
- Consequent impact due to decrease in demand
  - Decline in turnover due to decrease in output volume that could be sold

	Baseline scenario			Severe scenario		
	2022	**2023**	**2024**	**2022**	**2023**	**2024**
Turnover	-6,2 %	3,4 %	4,8 %	-6,2 %	3,4 %	4,8 %
Input and energy costs	60 %	10 %	0 %	60 %	150 %	-10 %
Costs of goods sold	30 %	15 %	5 %	30 %	15 %	5 %
- Costs of services	15 %	10 %	7 %	15 %	10 %	7 %
Personnel costs	7 %	10 %	5 %	7 %	10 %	5 %

Source: NBS

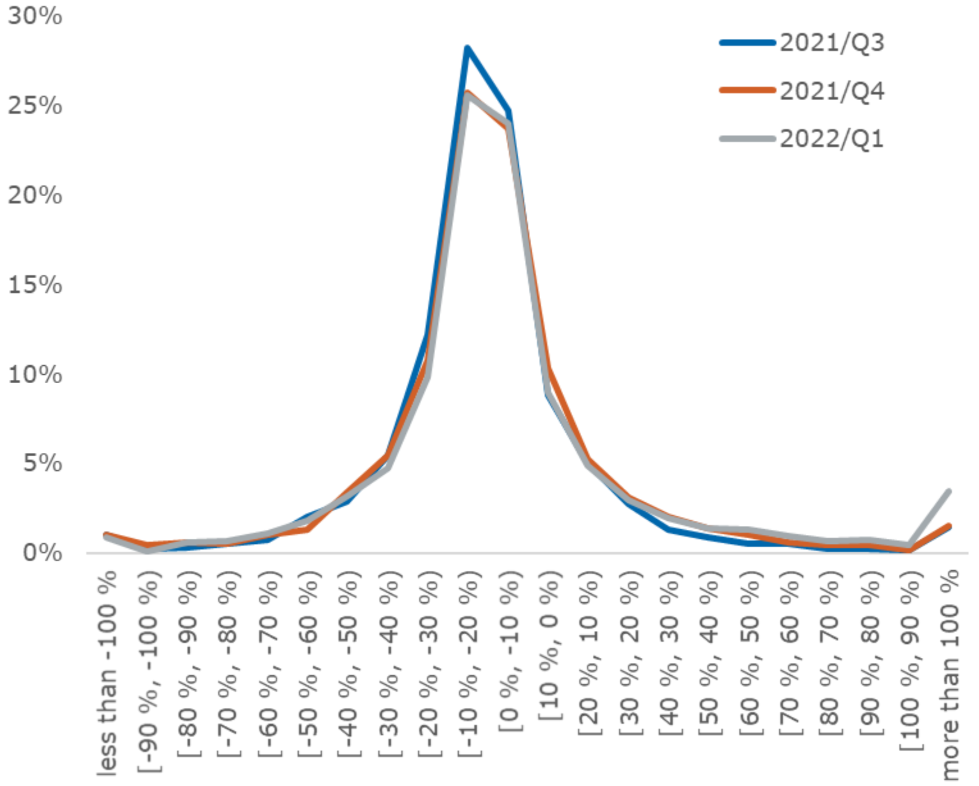
Inflation impact on corporate credit risk (2)

- Significant uncertainty (reaction ability of individual firms, transmission of input cost increase to output price increase)

- Ability of firms to offset increased costs by revenue increase
  - Shows strong heterogeneity in corporate sector – firms could be exposed to deeply severe impacts
  - Distribution is left-skewed – median firms are not able to fully cover increased costs

- Financial position of the firms affects the ability of firms to absorb these two impacts

Distribution of difference of relative revenue increase and relative cost increase (No. of firms)

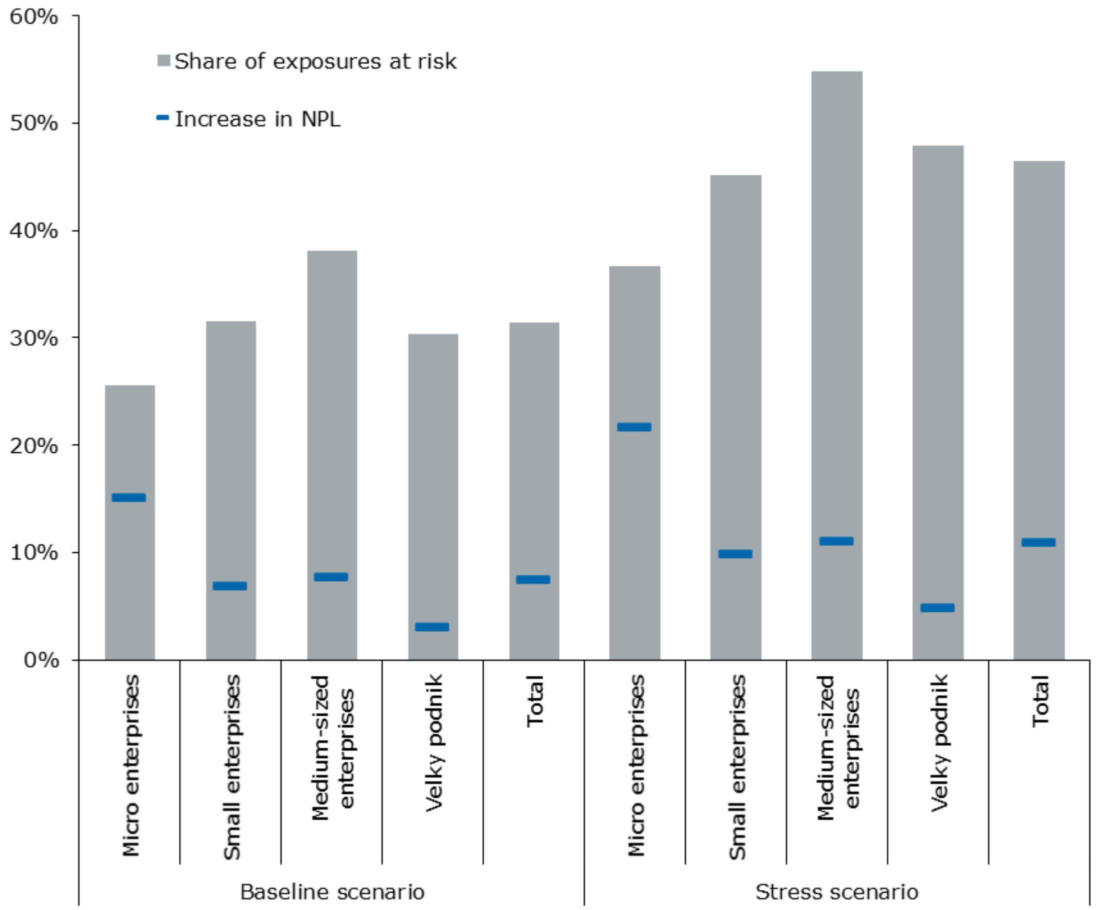


Source: NBS

Inflation impact on corporate credit risk (3)

- Simulation with higher costs in following years shows high sensitivity of firms to the scenario
    - The status „at risk“ (i.e. firms with negative equity) could be labelled on up to 31 % of loans in baseline scenario (and almost 50 % in severe scenario)
- Negative equity does not necessarily lead to default
    - In total, 7,5 % of loans could default (10,5 % in severe scenario)
- These figures do not take into account any supportive government measures (capitalization, energy price caps)
- The game-changer is the ability to transmit higher input costs to revenues

Increase in corporate loans at risk



Source: NBS

Conclusions

- Despite the growing challenges and uncertainties, banking sector remains stable
- Resilience of the Slovak banking sector was also proved in stress-testing exercise
- Financial cycle is still strong but there are clear signs of deceleration
- NBS has activated a comprehensive package of macroprudential policy instruments

- Significant impact of increased inflation on financial stability
- Part of corporates is exposed to the risk of financial difficulties
- Households´ situation is somewhat better, but they will face the risks, too

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Thank you for your attention