# Economic and Monetary Developments

Autumn 2024







# Published by Národná banka Slovenska

© Národná banka Slovenska 2024

# Contact

Národná banka Slovenska Imricha Karvaša 1 813 25 Bratislava info@nbs.sk

# **Electronic version**

https://nbs.sk/en/publications/ economic-and-monetarydevelopments/



This publication was discussed by the Bank Board of Národná banka Slovenska on 8 October 2024.

Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.



# NÁRODNÁ BANKA SLOVENSKA EUROSYSTÉM Contents

1	Summary	8
2	Current macroeconomic developments in the external	
	environment and Slovakia	11
2.1	External environment	11
2.2	Slovakia	15
2.2.1	Economic growth	15
2.2.2	Labour market	17
2.2.3	Consumer prices	22
2.2.4	Residential property prices	26
3	Medium-term forecast	30
3.1	Global outlook and technical assumptions of the forecast	30
3.2	Macroeconomic forecast for Slovakia	32
3.3	Public finance projections	37
3.4	Risks to the forecast	41
List of	poxes	
Box 1	Current labour productivity developments closely linked to	
	efficiency of labour utilisation	19
Box 2	Inflation shows signs of an early upturn	22
Box 3	How many firms are at risk from the new financial transaction tax?	42
List of	tables	
Table 1	Key economic indicators	9
Table 2	External environment and technical assumptions	31
Table 3	Projected package of consolidation and additional expenditure measures	32
Table 4	Wages	36
Table 5	Components of HICP inflation	37
Table 6	Forecast for key macroeconomic indicators	45
Tables	in boxes	
Box 3		
Table A	The risk to firms from the financial transaction tax	42
List of	charts	
Chart 1	GDP	12
Chart 2	Euro area: value added in industry and services	12
Chart 3	Global Purchasing Managers' Index	13
Chart 4	Manufacturing Purchasing Managers' Indices	13



Chart 5	Global inflation - share of countries falling within specific inflation bands	13
Chart 6	The number of central banks whose most recent monetary policy	
	decision increased or reduced interest rates	13
Chart 7	Euro area: non-energy goods inflation broken down by inflation	
	band	14
Chart 8	Euro area: HICP inflation and its components	14
Chart 9	GDP and its components	15
Chart 10	Sectoral contributions to GDP growth	15
Chart 11	Household consumption	16
Chart 12	Investment	16
Chart 13	Absorption of EU funds	17
Chart 14	Employment	18
Chart 15	Number of foreigners employed in Slovakia and quarterly flows	18
Chart 16	Early retirements	18
Chart 17	Number of insurance relationships as a proxy for employment	18
Chart 18	Nominal wages by sector	22
Chart 19	Real wages	22
Chart 20	HICP inflation and its components	24
Chart 21	Decomposition of the difference between the actual inflation rate	
	and the rate projected in the summer 2024 forecast	24
Chart 22	Food price evolution and the base effect	25
Chart 23	Food inflation and its components	25
Chart 24	Import prices and net HICP inflation	26
Chart 25	Services prices	26
Chart 26	Housing affordability index (HAI) value as a ratio of its historical	
	average	27
Chart 27	Composite index to assess housing price developments	27
Chart 28	Housing prices and economic indicators	28
Chart 29	Mortgage lending	28
Chart 30	Housing prices and the number of flats under construction	29
Chart 31	Foreign demand	30
Chart 32	Three-month EURIBOR	31
Chart 33	Ten-year Slovak government bond yield	31
Chart 34	Economic growth	33
Chart 35	Change in projection vis-à-vis the summer 2024 forecast	33
Chart 36	Private consumption	34
Chart 37	Private investment	34
Chart 38	Slovakia's absorption of EU funds and net financial position	35
Chart 39	Employment	35
Chart 40	Nominal compensation per employee	35
Chart 41	HICP inflation and its component	37
Chart 42	Change in projection vis-à-vis the summer 2024 forecast	37



Chart 43	Decomposition of the general government balance	38
Chart 44	Fiscal stance	38
Chart 45	Comparison of projections for the deficit and its decomposition	39
Chart 46	Comparison of public debt projections	39
Chart 47	Public debt and factors of change	40
Chart 48	General government gross debt under DSA scenarios	41
Chart 49	Prices excluding indirect taxes	44
Chart 50	Restaurant and cafe prices in EU countries	44
Charts in	n boxes	
Chart A	Labour productivity	19
Chart B	Change in labour productivity and in the labour hoarding indicator	
	between the Q2 2024 and 2021 levels	19
Chart C	Labour hoarding indicator	20
Chart D	Labour hoarding indicator for Slovakia across sectors	20
Chart E	Difference between the labour hoarding indicator and labour	
	productivity	21
Box 2		
Chart A	Inflation stripped of the most volatile components	23
Chart B	Model approach	23



### **Abbreviations**

bp basis point(s)

CPI Consumer Price Index

DSA debt sustainability analysis

EA euro area

ECB European Central Bank
EC European Commission

ESA 2010 European System of Accounts 2010 ESCB European System of Central Banks

EU European Union

EUR euro

EURIBOR euro interbank offered rate

Eurostat statistical office of the European Union

GDP gross domestic product HAI housing affordability index

HICP Harmonised Index of Consumer Prices

ICT information and communication technology

LFS Labour Force Survey

MFF multiannual financial framework

MF SR Ministry of Finance of the Slovak Republic

MTF medium-term forecast (of NBS)

NACE Statistical Classification of Economic Activities in the European

Community (Rev. 2)

NARKS Slovak National Association of Real Estate Agencies /

Národná asociácia realitných kancelárií Slovenska

NBS Národná banka Slovenska

NPISHs non-profit institutions serving households

OECD Organisation for Economic Co-operation and Development

OPEC Organization of the Petroleum Exporting Countries

p.a. per annum

PMI Purchasing Managers' Index

pp percentage point(s)

PP programming period (of the European Union)

RRF Recovery and Resilience Facility (of the European Union)
RRP recovery and resilience plan (of the Slovak Republic)

SO SR Statistical Office of the Slovak Republic

ÚPSVaR SR Central Office of Labour, Social Affairs and Family of the Slovak

Republic / Ústredie práce, sociálnych vecí a rodiny Slovenskej

republiky

US United States
USD US dollar

VAT value-added tax



# Conventions used in the tables

- data do not exist/data are not applicable
  data are not yet available
  nil or negligible
  (p) provisional



# 1 Summary

The domestic economy is expected to cope with the newly announced fiscal consolidation package. We envisage relatively solid economic growth of 2.5% both this year and next. Neither employment nor average real wages should decline. Inflation is projected to rebound temporarily, up to 5% in 2025, before returning to normal levels thereafter.

The situation for households and firms will not improve to the extent we anticipated in the spring and summer. This is not, however, related solely to the consolidation of public finances. The recovery of key trading partners' economies is stalling. At the same time, consumer demand will soften as household gas prices are reset to market levels—likely in a single step—after being artificially held down.

The consolidation of public finances is expected to reduce economic growth by around 0.6 pp in 2025. The number of jobs added to the economy is estimated to be 11,000 fewer compared with the no-consolidation scenario. In previous forecasts, we highlighted the risks associated with the necessary repair of public finances. On the other hand, consolidation helps limit risk in the evolution of long-term interest rates and in the adverse economic effects arising from them.

Inflation will temporarily accelerate on the back of tax changes and increases in administered energy prices. Compared with the summer 2024 forecast, we project inflation to be 1.5 pp higher in 2025. Price growth is already at a concerning level, apparently driven by price movements across the entire consumption basket. The evolution of inflation expectations will have to be closely monitored.

Employment has not been growing for some time, owing partly to shortages of skilled labour and to large numbers of people taking early retirement. With domestic spare capacity nearly exhausted, foreign workers in particular are helping to fill job vacancies. As firms face rising costs, we expect fewer jobs to be created and employment to rise only marginally.

In the light of the approved consolidation measures, the general government deficit is projected to fall to 4.5–4.6% of GDP in 2025 and 2026. The deficit for 2024 is expected to increase to 5.7% of GDP, the highest level since the global financial crisis of 2009–10. Most of the deficit is of a long-term 'structural' nature, which means that its elimination will require permanent measures—not simply economic recovery. Improvement in the coming years will be based mainly on the consolidation package, but also



on the unwinding of energy price compensation measures. Public debt is projected to reach 57.6% of GDP in 2024 and to continue rising.

The size of the fiscal consolidation package far exceeds the effort needed to achieve the budget targets set so far, thus providing the government with fiscal space to implement other priorities. If these priorities are of a permanent nature, there will be need for additional consolidation measures from 2026 onwards. If, however, they consist of temporary compensatory measures, deficit reduction could continue without requiring significant spending cuts or additional taxation. The continuation of consolidation in the years ahead is essential for reversing the uptrend in Slovakia's public debt ratio.

The risks in this forecast are elevated, with those to the economic growth outlook predominantly on the downside. The inflation outlook is subject to both upside and downside risks. External factors include geopolitical tensions and economic recovery in the euro area. Domestically, uncertainty centres on the final form of the consolidation package and its impact on the economy. Price developments are surrounded by the risk that VAT changes will not have the estimated impact and that firms will pass on their increased costs to households.

Table 1 Key economic indicators										
	Actual data	Autumn 2024 medium-term forecast (MTF-2024Q3)			Difference vis-à-vis the summer 2024 forecast (MTF-2024Q2)					
	2023	2024	2025	2026	2024	2025	2026			
GDP (annual percentage change)	1.6	2.5	2.5	1.9	-0.3	-0.7	-0.2			
HICP (annual percentage change)	11.0	3.0	5.0	2.7	0.2	1.5	-0.7			
Average nominal wage (annual percentage change)	9.7	6.6	5.3	4.1	-0.8	0.1	-0.8			
Average real wage (annual percentage change)	-0.7	3.8	0.2	1.4	-0.7	-1.4	-0.1			
Employment (annual percentage change; ESA 2010)	0.3	-0.2	0.2	0.0	-0.2	-0.4	-0.2			
Unemployment rate (percentage; Labour Force Survey)	5.8	5.3	5.4	5.6	-0.2	0.2	0.4			

Source: NBS.

Note: Real wages deflated by CPI inflation.

This report takes a closer look at the following topics:

• Inflation has undergone a quiet reversal in recent months and is now accelerating again. Is this due to one-off effects or rather to sticky inflation pressures in core items of the consumption basket?



- Several indicators of what is known as underlying inflation suggest, unfortunately, that we are facing the second possibility.
- Employment in Slovakia is stagnating and it seems that firms are seeking to stimulate labour productivity growth through investment without having to increase scarce human capital. In this, Slovakia diverges from the euro area, where firms are taking on people even while the economy is stagnating, resulting in falling productivity.



# 2 Current macroeconomic developments in the external environment and Slovakia

### 2.1 External environment

The global economy experienced modest growth in the second quarter of 2024, primarily driven by services activity, while the situation in industry also showed improvement. However, signs of a slowdown in economic growth gradually began to emerge.

In China, troubles in the real estate sector are translating into elevated uncertainty among households and weak domestic demand. Fragile consumer demand was the main reason for the slowdown in China's economic growth in the second quarter, which was less than half of its level of the previous quarter (Chart 1). In year-on-year terms, growth dropped below 5%—the target rate for the whole of 2024. On the other hand, the Chinese economy continued to be supported by government stimulus and by a relatively strong industry sector that benefited from falling export prices.

In the United States, by contrast, economic growth accelerated in the second quarter, buoyed by strong consumer demand as well as by ongoing investment growth. In the summer months, however, the labour market started to show signs of cooling, which raised fears of a possible recession and led to significant declines in stock markets. Although fears of a sudden recession are probably unfounded, labour market developments, as well as some leading indicators, point to a gradual easing of economic momentum.

The euro area economy grew for a second successive quarter after its previous stagnation. The quarter-on-quarter growth rate edged down to 0.2% in the second quarter, from 0.3% in the previous period. Adjusted to exclude relatively volatile data from Ireland, economic growth was accounted for by government consumption expenditure and, to a lesser extent, net exports. On the other hand, private consumption and investment declined. Measured by the output approach, GDP continued

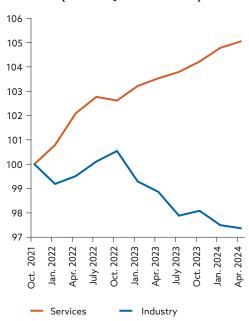
<sup>&</sup>lt;sup>1</sup> Ireland's GDP figures do not fully reflect economic processes, but are affected by tax optimisation operations of multinational firms.



to be supported mainly by services activity, while industry remained subdued (Chart 2).

Chart 1
GDP (quarter-on-quarter percentage changes)

Chart 2
Euro area: value added in industry and services (index: Q4 2021 = 100)



Source: Macrobond.

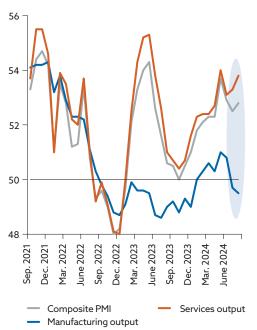
Sources: Macrobond, and NBS.

In the third quarter, the Purchasing Managers' Index (PMI) continued to indicate relatively solid global economic activity (Chart 3), underpinned mainly by services. By contrast, manufacturing output has started to cool again after firming during the summer months (Chart 4). Although energy prices are lower than they were during the energy crisis, gas prices remain around five times higher in the euro area than in the United States. This further weakens the position of euro area industry, which has been struggling for some time. Among euro area countries, Germany reports the most troubled industry sector. According to the PMI, however, manufacturing activity is also moderating in China and the United States.

Inflationary pressures have continued to moderate gradually in many countries around the world. At the height of the energy crisis, almost 60% of the 190 countries covered by Chart 5 faced an inflation rate exceeding 8%, while today that share is less than one-tenth. Indeed, headline inflation has fallen to below 4% in a majority of countries. The slowdown in price growth has allowed central banks to begin the gradual easing of monetary policy (Chart 6). After the ECB lowered its policy rates for the second time this year in September, the US Federal Reserve decided to cut its key rate, thereby reinforcing the global dimension of monetary policy easing.



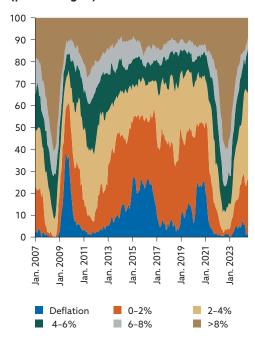
Chart 3
Global Purchasing Managers' Index
(PMI)



Source: Macrobond.

**Note:** PMI readings above 50 indicate an expansion of economic activity, while readings below 50 indicate a contraction.

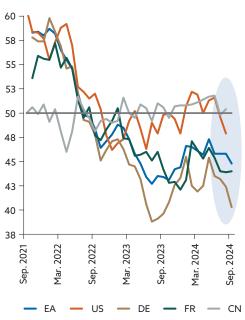
Chart 5
Global inflation - share of countries
falling within specific inflation bands
(percentages)



Source: Macrobond.

Note: The chart covers almost 190 countries.

Chart 4
Manufacturing Purchasing Managers'

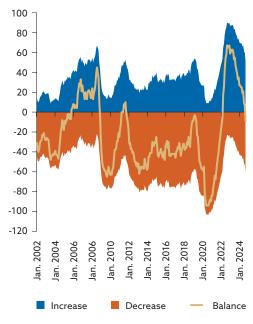


Sources: Macrobond, and NBS.

Chart 6

**Indices** 

The number of central banks whose most recent monetary policy decision increased or reduced interest rates



Sources: Macrobond, and NBS.

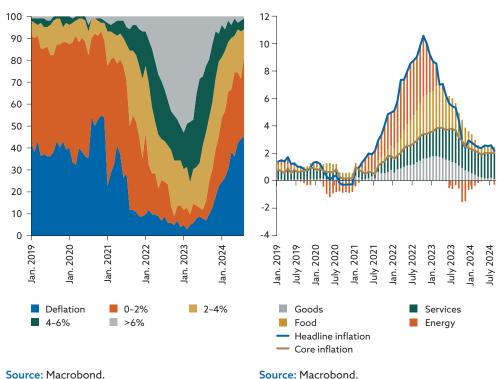
**Note:** The chart covers more than 100 central banks from around the world.



Annual inflation in the euro area slowed by 0.7 pp over the first eight months of 2024, to stand at 2.2% in August. The main contributors to this disinflation have been non-energy goods prices and, until July, food prices. In August, energy prices also had a dampening impact on inflation. The deceleration in non-energy goods inflation has been due to falling import prices, the normalisation of supply chains, and the fading impact of the energy cost shock. As regards goods, the prices of more than 40% of the items in the consumption basket have declined in year-on-year terms (Chart 7). Services prices continue to prevent faster disinflation, remaining as the largest contributor to headline inflation (Chart 8). Annual services inflation has been around 4% for ten months now, its rather high stickiness being associated with relatively strong wage growth, as well as with the higher wage intensity of this sector.

Chart 7
Euro area: non-energy goods inflation broken down by inflation band (annual percentage changes)

Chart 8
Euro area: HICP inflation and its components (annual percentage changes; percentage point contributions)



Source: Macrobond.

Note: The chart covers prices of goods at the COICOP5 level.

<sup>&</sup>lt;sup>2</sup> Annual food inflation accelerated slightly in August 2024.



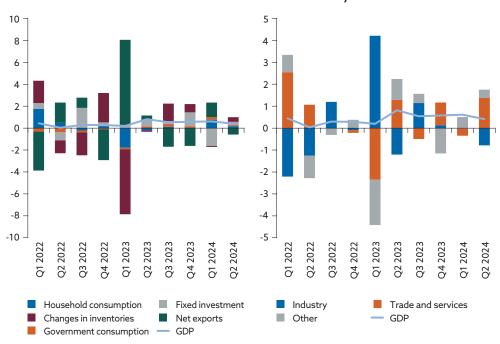
## 2.2 Slovakia

# 2.2.1 Economic growth

After a promising start to 2024, the Slovak economy's quarter-on-quarter growth slowed to 0.4% in the second quarter of the year. Industry was the most underperforming sector, as it struggled under the impact of an adverse situation across Europe (Chart 10). Nor did the roll-out of new automotive production have as favourable an effect as had been expected. On the positive side, household consumption continued to grow. Investment activity was driven mainly by car manufacturing, with government investment slackening after the completion of EU fund disbursements under the 2014–2020 programming period.

Chart 9
GDP and its components (quarteron-quarter percentage changes;
percentage point contributions)

Chart 10
Sectoral contributions to GDP growth
(quarter-on-quarter percentage
changes; percentage point
contributions)



Sources: SO SR, and NBS.

Sources: SO SR, and NBS.

Ongoing growth in real incomes allowed households to spend slightly more in the second quarter, while also replenishing their savings. Households maintained their level of spending on durable goods and increased their outlays on services. Purchases of everyday items returned to normal levels, as the Easter shopping season occurred earlier than usual this year. Increasing household bank deposits indicate the propensity of some households to build up their savings, although the proportion of household income being allocated to savings remains lower than was usual in the past.



Chart 11

Household consumption (quarteron-quarter percentage changes; percentage point contributions)

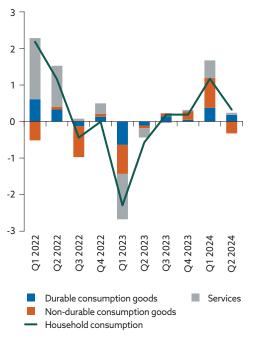


Chart 12

Investment (current prices; annual percentage changes; percentage point contributions)



Sources: SO SR, and NBS.

Note: The sum of the household consumption components does not equal total household consumption owing to the indirect method of seasonal adjustment.

Sources: SO SR, and NBS.

## Exports remain weak in the face of an adverse external environment.

All industries, even the automotive industry, experienced weaker performance in the second quarter. Thanks to the roll-out of new production and a temporary easing of component shortages, goods exports were slightly higher compared with the beginning of the year. However, the prolonged struggles of European industry were reflected in the overall poor performance of Slovak exporters. Moreover, consumption growth and investment in new production pushed up imports, thereby worsening the trade balance and having a downward impact on economic growth.

# Investment activity in the second quarter was supported mainly by firms, with households and government underperforming in this respect.

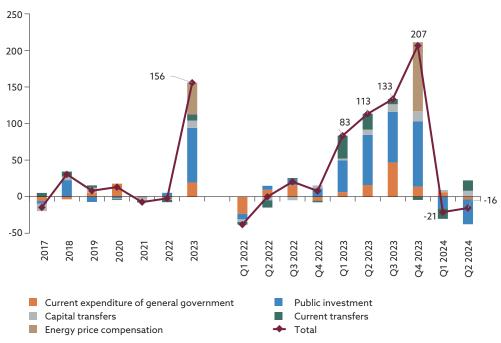
Preparations for new production in the automotive industry were the driver of business investment in machinery and equipment (Chart 12). Household investment activity remained subdued owing to high interest rates. There were, however, the first signs of recovery in the real estate market, which could translate into higher household investment in the period ahead.

The decline in the absorption of EU funds moderated in the second quarter. The negative year-on-year change in the uptake of EU funds



in the first two quarters of 2024 was due to a high base effect from the previous year, when Slovakia had to complete the disbursement of funds allocated under the 2014–2020 EU programming period. The decline in EU fund disbursements was seen mainly in the area of public investment. By contrast, agricultural subsidies had an upward impact on the annual rate of change in the uptake of EU funds, as delayed support payments to farmers were released to a significant extent (Chart 13).

Chart 13
Absorption of EU funds (annual percentage changes) 1)



Sources: MF SR, and NBS.

1) Adjusted for spending on financial instruments.

### 2.2.2 Labour market

Employment in Slovakia has not been growing for some time (Chart 14), with its stagnation translating into higher labour productivity (Box 1).

The first half of the year saw an increase in early retirements, particularly in industry and in certain sub-sectors of services and trade. The number of workers dropped by around 6,500 (0.3%) year-on-year. Although firms are increasingly recruiting foreign workers (Chart 15), this inflow is insufficient to offset the decline in working-age people.

While a high number of early retirements will pose a challenge to Slovakia for some time to come (Chart 16), it is not the only factor weighing on employment. Others include the adverse situation in industry and softening demand in services. This is why monthly labour market data show a falling number of people in employment, according to reporting by health insurance companies and the Social Insurance Agency (Chart 17).



Chart 14
Employment (quarter-on-quarter percentage changes)

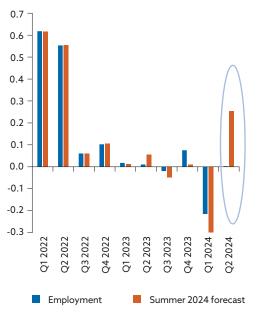
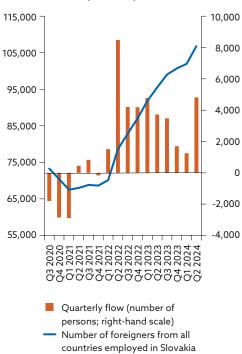
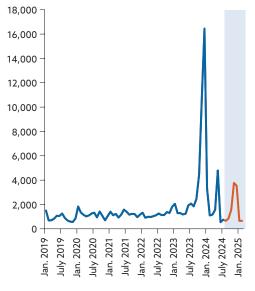


Chart 15 Number of foreigners employed in Slovakia and quarterly flows



Sources: SO SR, and NBS.

Chart 16
Early retirements (number of applications - actual figures and forecast)

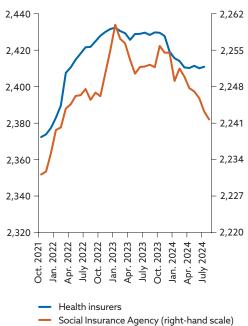


Sources: Social Insurance Agency, and NBS.

Chart 17

Sources: ÚPSVaR, and NBS.

Number of insurance relationships as a proxy for employment (numbers in thousands)



**Sources:** Social Insurance Agency, health insurers, and NBS.



# Box 1

# Current labour productivity developments closely linked to efficiency of labour utilisation

In several euro area countries, as well as the euro area as a whole, labour productivity has stagnated or declined since 2022 (Chart A). Although employment is growing, the economy is underperforming. The global economy remains subdued, with no significant signs of recovery. The combination of weak global demand and the lingering effects of high costs is affecting mainly major European countries.

This situation is partly explained by labour hoarding, as evidenced by an indicator based on data from the European Commission's business surveys. The indicator measures the share of firms that plan to retain or even increase their workforce, despite expecting a reduction in demand for their output. Such behaviour can occur in the short term if firms view the dip in demand as a temporary issue and expect a recovery. Chart B shows that countries reporting an increase in labour hoarding since 2021 have also experienced a more pronounced slowdown or decline in labour productivity.

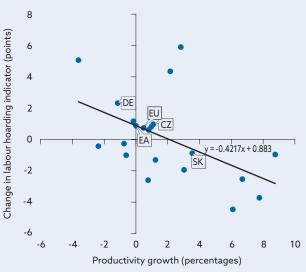
# Chart A Labour productivity (GDP/employment; index: 2015 = 100)



Sources: European Commission, and NBS.

### **Chart B**

Change in labour productivity and in the labour hoarding indicator between the Q2 2024 and 2021 levels



Sources: European Commission, and NBS.



Slovakia was one of the exceptions during the studied period, as it experienced an acceleration in labour productivity growth alongside a decline in labour hoarding. The Slovak economy benefited from households' relatively strong propensity to consume. At the same time, the decline in demand for industrial output has been less pronounced in Slovakia than, for example, in Germany. According to the European Commission's indicator, Slovakia ranks among the countries with the lowest share of firms hoarding labour (Chart C). Until 2019, the labour hoarding indicator for Slovakia was at a similar level as those for the European Union and the euro area. After the pandemic outbreak in 2020, all countries showed a significant increase in labour hoarding, stoked by governments' large-scale measures to support job retention. The situation normalised significantly after the pandemic subsided, but in the last three years, labour hoarding has gradually declined in Slovakia while rising again in the EU and euro area.

In Slovakia, the lowest levels of labour hoarding are seen in the retail trade and services sectors (Chart D), which may reflect the above-mentioned state of domestic demand. Labour hoarding is highest in the construction sector, where the share of firms that have not reduced their workforce despite a worsening demand outlook has increased since late 2023. From a firm-size perspective, the tendency to hoard labour during periods of weaker demand is more pronounced among medium-sized and large enterprises, likely because they have greater financial reserves to cover additional wage costs in the short term.

Chart C
Labour hoarding indicator (12-month moving average; percentages)



Sources: European Commission, and NBS.

Chart D

Labour hoarding indicator for Slovakia across sectors (12-month moving average; percentages)

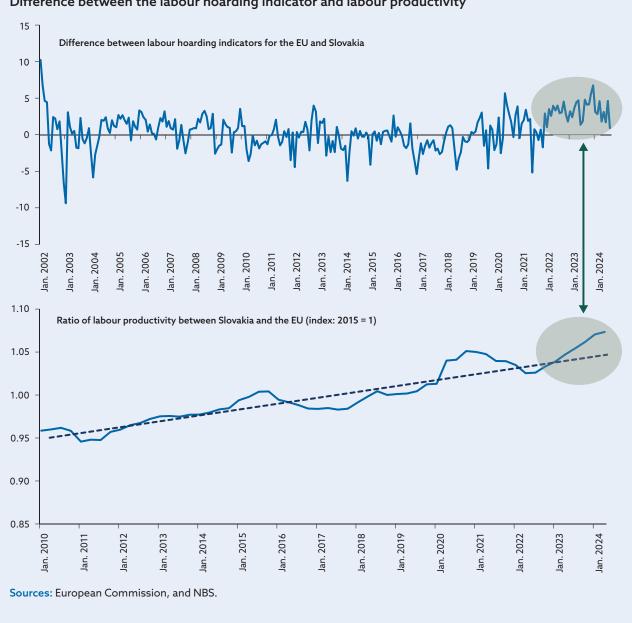


Sources: European Commission, and NBS.



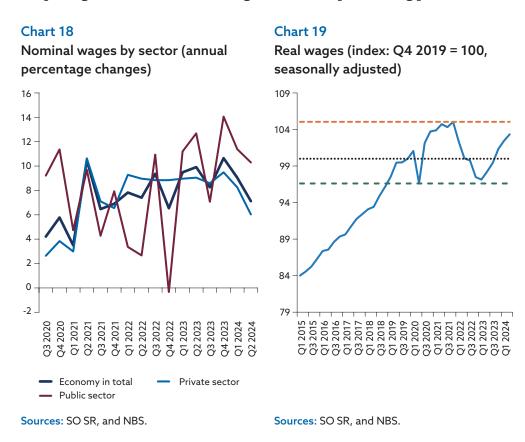
In Slovakia, economic performance has less scope to improve if the decline or slowdown in EU countries' productivity growth is cyclical in nature. The higher productivity growth in Slovakia than the long-run EU average since 2022 may be directly related to more efficient labour utilisation in Slovakia. Chart E clearly shows that there has been an improvement in Slovakia's total labour productivity since late 2021, while the EU as a whole has exhibited a notable increase in labour hoarding. In terms of Slovakia's economic convergence with the EU, this can be viewed as a positive signal. On the other hand, countries with a higher share of spare labour capacity may be better positioned to respond more flexibly when global demand picks up, whereas Slovakia may be more constrained in its ability to increase output.

Chart E
Difference between the labour hoarding indicator and labour productivity





The assumptions of slowing, albeit still relatively strong, nominal wage growth are being borne out (Charts 18 and 19). Wages are responding to the sharp decline in inflation. A slight lag means that nominal wage growth is outpacing inflation, thus restoring households' purchasing power.



# 2.2.3 Consumer prices

Slovakia's annual inflation rate accelerated to 3.2% in August. The development of what is known as underlying inflation is concerning (Box 2). This measure of inflation, which excludes the most volatile items, is largely influenced by domestic factors and is characterised by stickiness.

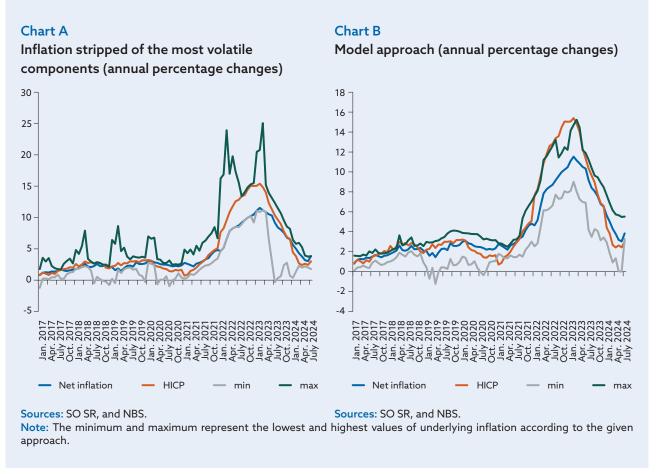
# Box 2 Inflation shows signs of an early upturn

Inflation has surprised on the upside in recent months, with its previous slowing trend halting earlier than expected. Headline inflation is being driven by the price-stickiness of common items. At the same time, both headline and underlying inflation are showing the same trend. Although headline inflation has recently been affected by various one-off effects, underlying inflation appears to have started accelerating. There is a growing risk that people's inflation expectations may become anchored at a higher level.



Trends in underlying inflation can be revealed by constructing price indices that strip away less significant noise, including various one-off administrative measures and short-lived supply shocks that are less relevant from a monetary policy perspective. One approach is to exclude the most volatile items from the consumption basket, such as the top 5% or 10% of items. Another option is to use a model-based approach that accounts for common trends across individual components of the consumption basket or utilises the predictive power of certain macroeconomic indicators.

Whichever approach is used to measure underlying inflation, the current message remains the same: the disinflationary trend appears to have stalled, with inflation levels now above the target necessary for ensuring price stability.



Headline inflation stopped slowing in the second quarter and has since shown upward momentum. The acceleration of price growth since April has been driven by food prices and by the expected fading of the impact



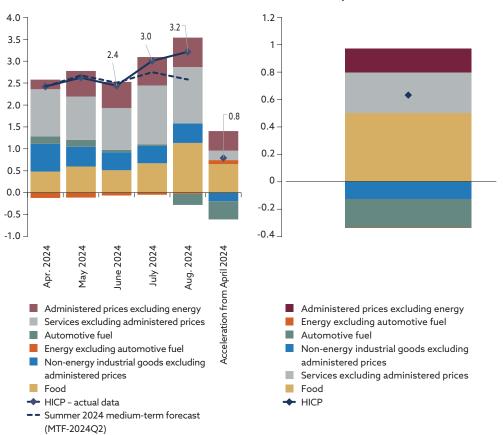
of administrative price measures from the previous year. Inflation has been higher than projected in the summer 2024 forecast (Chart 21).

Chart 20

HICP inflation and its components (annual percentage changes; percentage point contributions)

Chart 21

Decomposition of the difference between the actual inflation rate and the rate projected in the summer 2024 forecast (percentage point contributions)



Sources: SO SR, and NBS. Sources: SO SR, and NBS.

Food inflation exceeded our expectations by accelerating to 3.6% in August (after being at 1.5% in April) (Chart 23). Although cost items from the previous period created space for a pronounced decline in food prices, that did not materialise. On the contrary, food prices actually increased in month-on-month terms, even though July and August are typically associated with declines in prices of both processed and, especially, unprocessed food (Chart 22).



Chart 22
Food price evolution and the base
effect (month-on-month percentage
changes)

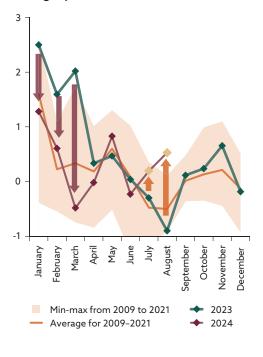
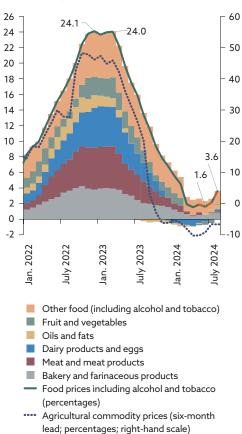


Chart 23
Food inflation and its components
(annual percentage changes;
percentage point contributions)



Sources: SO SR, and NBS.

Sources: SO SR, and NBS.

Net inflation (the headline rate excluding automotive fuel) has gained momentum in recent months. Its favourable path ended in June, when the rate hit a short-term trough (Chart 24). Thereafter, net inflation accelerated on the back of rising services prices (Chart 25), reaching 3.9% in August. Non-administered prices of services are gradually reflecting accumulated cost factors from the past, as seen in the adjustments to prices of postal services, financial services, public transport, etc. However, the slowdown in wage growth should act as a drag on price growth. The easing of supply shocks has impacted mainly goods prices (Chart 24).



Chart 24
Import prices and net HICP inflation
(annual percentage changes)

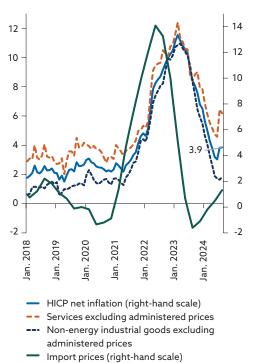
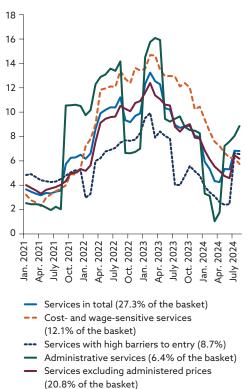


Chart 25
Services prices (annual percentage changes)



Sources: SO SR, and NBS.

Sources: SO SR, and NBS.

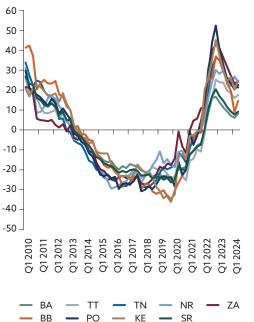
# 2.2.4 Residential property prices

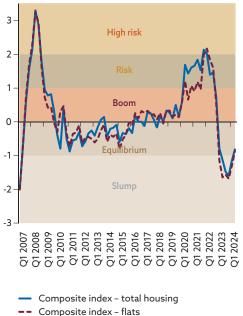
Housing prices in Slovakia increased in the second quarter of 2024, recording their first quarter-on-quarter rise since the onset of monetary policy tightening. They were 1.6% higher compared with the previous quarter but still below 2023 levels. The cost of housing rose in five of Slovakia's eight regions—most sharply in Banská Bystrica—and fell slightly in Žilina and Nitra regions.



Chart 26
Housing affordability index (HAI)
value as a ratio of its historical
average (percentages)

Chart 27
Composite index to assess housing price developments





Sources: NARKS, SO SR, United Classifieds, and NBS.

Note: BA - Bratislava Region; TT - Trnava Region; TN - Trenčín Region; NR - Nitra Region; ZA -Žilina Region; BB - Banská Bystrica Region; PO - Prešov Region; KE - Košice Region; SR - Slovak Republic. **Sources:** NARKS, SO SR, United Classifieds, and NBS.

The improvement in housing affordability stalled in the second quarter

(Chart 26). Average mortgage rates for the period April–June remained around the same level as at the beginning of the year. Nor did wage growth show any significant changes. Thus, the moderate rise in housing prices resulted in the housing affordability index (HAI)<sup>3</sup> increasing by 1.5 points, back to end-2023 levels. The largest deterioration in housing affordability was observed in Košice Region, which, along with Nitra and Trenčín, is now among the regions with the least affordable housing.

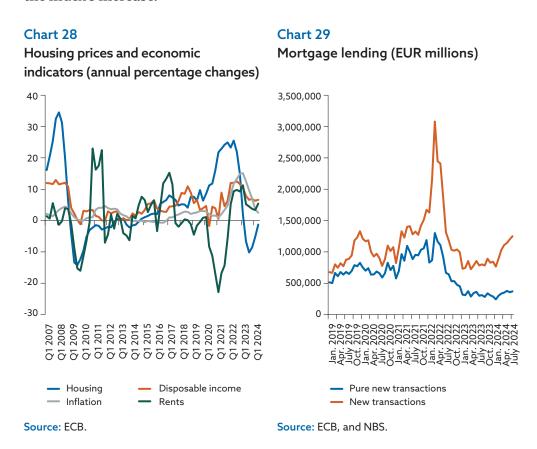
The real estate market's gradual upturn is also reflected in the composite index<sup>4</sup> for assessing housing price developments (Chart 27). The upward

The HAI calculation is based on a so-called adequate income derived from the current average cost of mortgage loan servicing (taking into account current housing prices and interest rates). The adequate income is compared with the wage level on a region-by-region basis. The final ratio is then interpreted in relation to the long-run average.

<sup>&</sup>lt;sup>4</sup> In order to assess the impact of housing prices on financial and economic stability, we compare their evolution with the evolution of their underlying theoretical fundamentals. We do so using a composite index based on ratio indicators (the real housing price; price/income; price/rent; mortgage loans/households' gross disposable income; amount of residential construction/GDP). Further information on the composite index's compilation



pressure on the index is coming not only from real prices and disposable income, but also from the areas of lending and residential construction. The gap between housing price evolution and household income, or inflation, is gradually closing (Chart 28). By contrast, rent growth accelerated in the second quarter, so the price-to-rent ratio contributed only marginally to the index's increase.



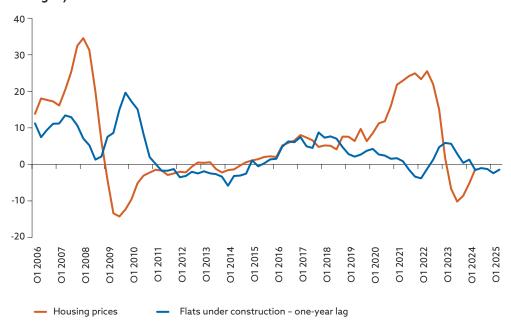
A look at mortgage data provides grounds for modest optimism (Chart 29). In June, the ECB started to ease monetary policy, but its move has not yet passed through to interest rates on mortgages originated in the second quarter. Nevertheless, we are seeing an increase in the volume of mortgage lending, including a tentative rise in pure new mortgages (excluding refinancing and top-up loans).

As regards the building of flats, the number of construction completions decreased in the second quarter by more than 16% year-on-year. However, the total number of flats under construction remains relatively stable, as also indicated by data on residential construction output. The supply side of the real estate market continues to provide grounds largely for an upward trend in housing prices (Chart 30).

is provided in Cár, M. and Vrbovský, R., 'Composite index to assess housing price development in Slovakia', Biatec, Vol. 27, No 3, Národná banka Slovenska, Bratislava, 2019.



Chart 30 Housing prices and the number of flats under construction (annual percentage changes)



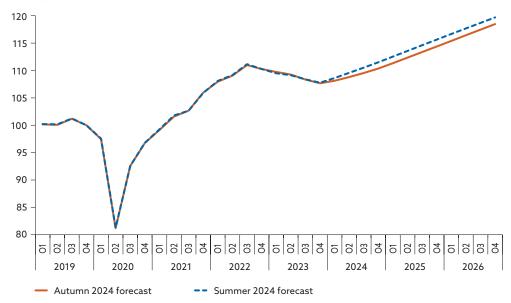
Sources: NARKS, SO SR, and United Classifieds.

# 3 Medium-term forecast

# 3.1 Global outlook and technical assumptions of the forecast<sup>5</sup>

The outlook for foreign demand for Slovak products is deteriorating slightly (Chart 31). The faltering state of German industrial production is gradually translating into a moderate decline in foreign demand growth. Compared with the summer 2024 forecast, the assumption for the level of foreign demand at the end of 2026 has been revised down by 1 percentage point.

Chart 31 Foreign demand (index: Q4 2019 = 100)



Source: NBS.

We currently expect a favourable path for oil prices and assume that the barrel price of oil will reach USD 74 in 2025. The assumption for the euro's exchange rate against the dollar is 3.1% stronger in this forecast than in the previous edition, at 1.11 US dollars per euro over the projection horizon.

Markets expect a gradual reduction in short-term interest rates. Compared with the summer forecast, the assumptions for these rates have been revised down by around 30 basis points, while long-term interest rates are assumed to stabilise at around 3.3% over the forecast period (Charts 32 and 33).

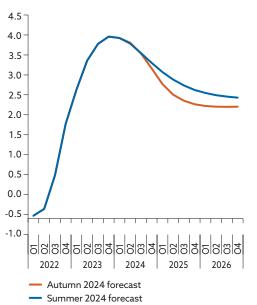
The technical assumptions of this medium-term forecast are based on the September 2024 ECB staff macroeconomic projections for the euro area.

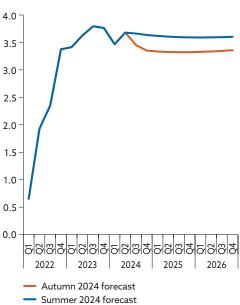


Chart 32
Three-month EURIBOR

Chart 33

Ten-year Slovak government bond yield





Source: European Commission, and NBS.

Sources: SO SR, and NBS.

percentage changes, unless otherwise indicated)									
	Actual data Autumn 2024 forecast (MTF-2024Q3) Difference vis-à-vis the summer 2024 forecast (MTF-2024Q2) in pp					orecast			
	2023	2024	2025	2026	2024	2025	2026		
Slovakia's foreign demand	-0.7	0.4	3.3	3.6	-0.8	-0.4	0.0		
USD/EUR exchange rate 1) (level)	1.08	1.09	1.11	1.11	1.3	3.1	3.1		
Oil price in USD <sup>1)</sup> (level)	83.7	82.1	74.4	72.1	-2.0	-4.6	-3.2		
Oil price in USD	-19.2	-2.0	-9.3	-3.1	-2.0	-2.5	1.4		
Oil price in EUR	-21.3	-3.0	-10.8	-3.1	-3.3	-4.0	1.4		
Non-energy commodity prices	-12.5	7.3	1.3	2.5	-4.1	-2.6	1.6		
Three-month EURIBOR (percentage per annum)	3.4	3.6	2.5	2.2	0.0	-0.3	-0.3		

Sources: ECB, SO SR, and NBS.

yield (percentage)

Ten-year Slovak government bond

Note: Annual percentage changes and changes vis-à-vis the previous forecast are calculated from unrounded figures.

3.6

3.5

3.3

-0.1

3.3

-0.3

-0.3

In the updated fiscal projections, the net additional impact of the newly announced consolidation package is estimated at 0.7% of GDP in 2025. The consolidation measures are largely focused on increasing revenue and will have repercussions for the economy. At the same time, the government is creating fiscal space to mitigate the adverse effects on firms and/or selected groups of households.

<sup>1)</sup> Differences vis-à-vis the previous forecast are in percentages.



Table 3 Projected package of consolidation and additional expenditure measures (percentages of GDP)

	2025	2026
Consolidation package	1.6	1.7
of which VAT	0.5	0.5
of which corporate taxation	0.5	0.6
of which social benefits	0.4	0.3
of which other measures	0.3	0.4
Unspecified expenditures	0.9	0.9
Net impact	0.7	0.8

Sources: MF SR, and NBS estimates and assumptions.

Note: Unspecified expenditures are assumed to be of a permanent nature.

# 3.2 Macroeconomic forecast for Slovakia

The Slovak economy is projected to record solid growth of around 2.5% in both 2024 and the following year (Chart 34). This year's growth is underpinned largely by domestic demand. With the European economy struggling, export performance cannot be expected to boost growth. Next year, however, economic growth will be driven more by improved export results, given the impact of the new fiscal consolidation on households and firms. Both sectors are well prepared to cope with the increase in costs without experiencing a marked decline in their well-being.

Theeconomy will perform less well in subsequent years than was projected in the summer 2024 forecast. Several risks to the summer projections are materialising. We see three reasons to expect that economic growth will be slower than envisaged in the summer. The first is the delayed recovery of the European economy, which is crucial for Slovakia's export-oriented economy. Second, this forecast takes account of the newly announced fiscal consolidation package, which will have an adverse impact on economic activity. The third factor is the government's announcement to end across-the-board energy price subsidies. This prompted us to revise up the estimated increase in household gas prices in 2025 and to revise it down in 2026. Consumer gas prices should thus reflect market prices. Overall, there is a prevalence of factors that will cause higher prices, burden the business environment with higher costs and taxes, and reduce household incomes.

A deteriorating external environment is affecting industrial firms in Slovakia. This impact is already captured to a large extent in data for the second quarter. We anticipate that the European economy will remain stalled for some time before picking up. It is expected to start turning the corner next year, possibly mitigating some of the effects of the new fiscal consolidation measures.



The consolidation package will reduce next year's economic growth by around 0.6 pp (Chart 35). The bulk of the consolidation effort consists of VAT changes, which will add impetus to inflation and constrain households' purchasing power. This is expected to translate into weaker consumer demand. Increased costs will have a direct downward impact on investment and job creation.

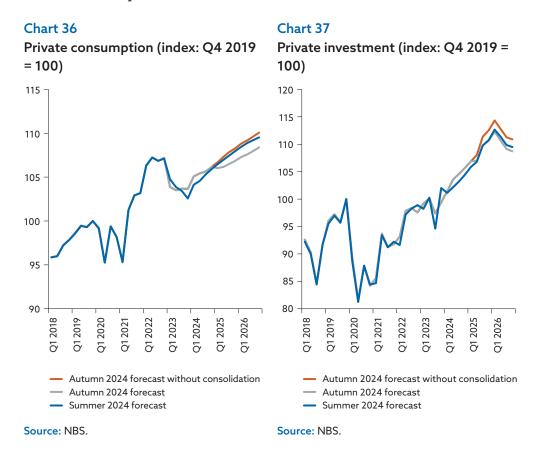
Chart 34 Chart 35 Economic growth (annual percentage Change in projection vis-à-vis the changes) summer 2024 forecast (percentage points) 3.5 0.4 0.2 3.0 0.0 2.5 -0.2 2.0 -0.4 1.5 -0.6 1.0 -0.8 0.5 -1.0 -1.2 0.0 -2023 2024 2025 2026 2024 2025 2026 Summer 2024 forecast Actual data Technical assumptions Autumn 2024 forecast without consolidation Other factors Gas prices in 2025 Autumn 2024 forecast Consolidation Change in GDP growth Sources: SO SR, and NBS. Sources: SO SR, and NBS.

After making progress this year, households' recovery of lost purchasing power is expected to slow next year. Households will bear the brunt of the consolidation effort, since, in addition to VAT increases, all households will face the ending of energy price subsidies and generous benefits. Real growth in household income will be lower than previously projected owing to higher inflation, so households will have to cut down their spending. There will be some relief when inflation slows down in 2026, with private consumption expected to pick up as income growth accelerates.

Fiscal consolidation will slightly weaken investment (Chart 37). Although investment will continue to grow in the coming period, the consolidation effort will place a greater tax burden on the business sector, potentially reducing business investment activity as firms become less competitive. However, the onset of monetary policy easing and lower real interest rates could at least partially offset the fiscal consolidation's adverse impact on firms. Investment is expected to be boosted more significantly by the disbursement of EU funds from the Recovery and Resilience Facility (RRF),



through the implementation of Slovakia's recovery and resilience plan (RRP). These funds should make up the largest part of public investment and benefit the private sector as well.



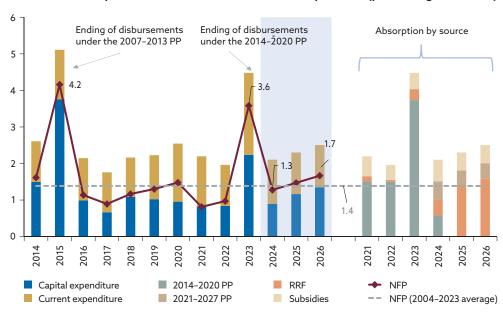
This year's net receipts from the EU budget are projected to move back towards the long-term average for Slovakia's net financial position vis-à-vis that budget (Chart 38). Following the fading of the impetus provided by last year's completion of disbursements under the 2014–2020 programming period, the uptake of EU funds allocated under the 2021–2027 budget is expected to begin slowly. Additional revenues from the RRF should ensure that the decline in net receipts from the EU budget to below the long-term average is mitigated. Slovakia's net position vis-à-vis the EU budget is envisaged to gradually improve over the forecast horizon.

The labour market situation will be slightly worse than projected in the summer (Chart 39). Job creation will be weaker than expected, and the projected number of people in employment at the end of the forecast period has been revised down by around 20,000 from the summer forecast. Public finance consolidation accounts for the slightly greater share of that decline, while the rest is due to a large number of early retirements and, to a lesser extent, a weaker economy. Employment has been stagnating for some time, and the problem of skilled labour shortages is being compounded by increased early retirement. With this situation continuing in the



months ahead, we expect employment to decline this year. In subsequent years, population ageing will have a more pronounced impact, increasing pressures on the labour market. The inflow of foreign workers is unlikely to be sufficient to satisfy labour demand.

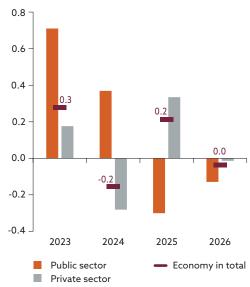
Chart 38
Slovakia's absorption of EU funds and net financial position (percentages of GDP)



Source: NBS.

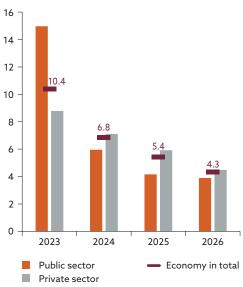
Note: NFP - net financial position; PP - programming period.

Chart 39 Chart 40
Employment (annual percentage Changes) Chart 40
Nominal contained Changes



Sources: SO SR, and NBS.

Nominal compensation per employee (annual percentage changes)



Sources: SO SR, and NBS.



Labour income is expected to remain strong (Chart 40). While the wage growth outlook remains the same, higher inflation will mean that household purchasing power does not improve significantly next year. Households will therefore have to wait until 2026 before they can expect any notable growth in real incomes.

Table 4 Wages (annual percentage changes)								
	2022	2023	2024	2025	2026			
Nominal labour productivity	7.6	11.6	7.6	5.6	4.9			
Whole economy - nominal wages	6.4	9.7	6.6	5.3	4.1			
Whole economy - real wages	-5.6	-0.7	3.8	0.2	1.4			
Private sector - nominal wages		8.4	6.9	5.7	4.1			
Private sector - real wages		-1.9	4.1	0.6	1.3			
Public administration, education and health care – nominal wages	2.8	14.0	5.4	4.1	4.2			
Public administration, education and health care - real wages	-8.9	3.2	2.7	-0.9	1.5			

Sources: SO SR, and NBS.

**Notes:** Deflated by the CPI. Nominal labour productivity – GDP divided by persons in employment (ESA 2010).

Annual inflation is projected to rise temporarily, up to 5% in 2025. This should be the last year of high inflation. Recent months have seen inflation gain momentum, and its projected average rate for 2024 is now 3%, representing a slight increase compared with the summer forecast. Price growth will be stronger next year. We have revised our assumptions for administered energy prices for households, with gas prices now expected to be raised to market-implied levels, i.e. by around 30%. This will add around 0.8 pp to the headline inflation rate.

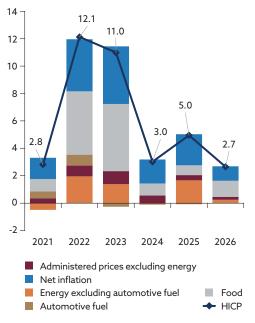
The newly announced consolidation measures include several changes to VAT rates. Most of the consumption basket will be affected by the increase in the basic VAT rate (from 20% to 23%). For a smaller number of items (selected staple foods and restaurant meals), VAT will be reduced. The overall impact of the consolidation package on headline inflation is expected to be 0.8 pp.

**Domestic price pressures are envisaged to increase.** Although labour costs are not rising, we expect that firms will pass on their additional tax burden to consumer prices.

The headline inflation rate is expected to fall below 3% in 2026. After the adverse consolidation effects have eased and energy prices have returned to market levels, we expect the inflation rate to reflect cost factors and weaker demand from an economy operating below potential.



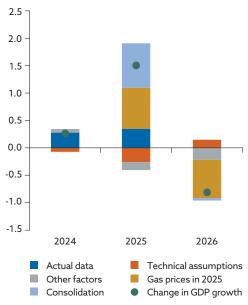
Chart 41 HICP inflation and its components (annual percentage changes; percentage point contributions)



Sources: SO SR, and NBS.

Chart 42 Change in projection vis-à-vis the

summer 2024 forecast (percentage points)



Sources: SO SR, and NBS.

Table 5 Components of HICP inflation (annual percentage changes)									
	Average for 2004-08 (pre-crisis period)	Average for 2010-14 (post-crisis period with euro currency)	2022	2023	2024	2025	2026		
HICP	4.1	2.0	12.1	11.0	3.0	5.0	2.7		
Food	3.6	3.1	16.1	15.6	2.8	2.3	3.7		
Non-energy industrial goods	0.2	0.3	7.3	8.8	2.3	4.3	1.9		
Energy	8.3	2.3	18.8	7.4	-0.9	10.7	1.5		
Services	5.3	2.5	9.3	10.1	5.9	5.7	2.8		
Net inflation	1.8	1.0	8.3	9.3	3.9	5.0	2.3		

Sources: SO SR, and NBS.

### Public finance projections 3.3

Slovakia's general government deficit for 2024 is projected to be 5.7% of GDP (Chart 43), which represents a year-on-year deterioration of 0.8 pp.

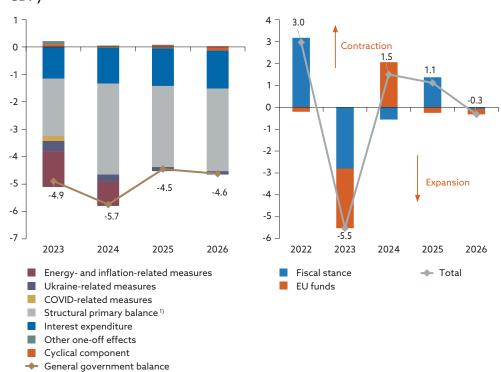
This high level is due partly to temporary measures to compensate for high energy prices in the current year; however, the greater part of the deficit is structural in nature, in other words it is a permanent deficit not related to current state of the economy. The fiscal deficit is projected to improve in subsequent years, to around 4.5-4.6% of GDP, largely thanks to the impact of the new consolidation package. More pronounced structural



consolidation is expected only in 2025. On the current assumptions for fiscal performance, we expect public debt to reach 57.6% of GDP in 2024 and to surpass the 60% of GDP threshold in the last year of the projection horizon.

Chart 43
Decomposition of the general
government balance (percentages of
GDP)

Chart 44
Fiscal stance (percentage points of GDP)



Sources: SO SR, and NBS.

1) Excluding pandemic-, Ukraine- and energy-related Measures.

Notes: One-off factors include non-cyclical effects that have a temporary impact on the general government balance and are supposed to be eliminated in the future. Additional government spending from 2025 should include targeted social assistance for vulnerable groups at risk from rising gas prices. Given, however, that the form and size of these expenditures is still unclear, they are classified within the structural primary balance.

Sources: SO SR, and NBS.

**Note:** Fiscal stance – annual rate of change in the cyclically adjusted primary balance.

Compared with the previous forecast, the deficit projection for 2024 is largely unchanged (Chart 45). The projection for 2025 has been revised down by 0.5 pp, mainly in the light of the new consolidation package, the bulk of which comprises VAT rises and increased taxation of firms (including the introduction of a financial transaction tax). The consolidation effort also includes reducing social spending on parental pensions, lowering the child tax credit, and making savings on employee compensation in the general government sector. However, the positive



effects are partially offset by a faster increase in pension benefits and projected spending on government priorities.<sup>6</sup>

Despite the consolidation measures, we have revised up the deficit projection for 2026 by 0.1 pp compared with the previous forecast. This deterioration in the outlook is due largely to higher projected public investment in the defence sector and adverse macroeconomic effects of the consolidation package, which, through slower economic growth and higher inflation, will result in lower tax revenues and higher social spending.

Chart 45 Chart 46 Comparison of public debt Comparison of projections for the deficit and its decomposition projections (percentages of GDP) (percentages of GDP; percentage point contributions) 60.4 61 60.3 60 58.8 58.7 58.4 0 59 58 57.6 57.6 57.6 -2 57 -3 56.0 56.0 56 55 -4.5 -4.5 -5 -4.6 -5.0 -5.0 4.9 -5.1 54 -6 -5.7 -5.7 -5.8 -7 53 Autumn 2024 forecast Autumn 2024 forecast without consolidation Autumn 2024 forecast without consolidation Autumn 2024 forecast Summer 2024 forecast Summer 2024 forecast Autumn 2024 forecast without consolidation 2024 forecast Autumn 2024 forecast Summer 2024 forecast Summer 2024 forecast Autumn 2024 forecast 2024 forecast Autumn 2024 forecast Summer 2024 forecast Summer 2024 forecast Summer. Summer 2023 2023 2024 2025 2026 2024 2025 2026 Cyclical component - Deficit (percentage of GDP) Temporary measures Structural primary balance Interest expenditure

Gross general government debt is forecast to increase gradually and to exceed the 60% of GDP threshold in 2026 (Chart 46). It should continue

Source: NBS.

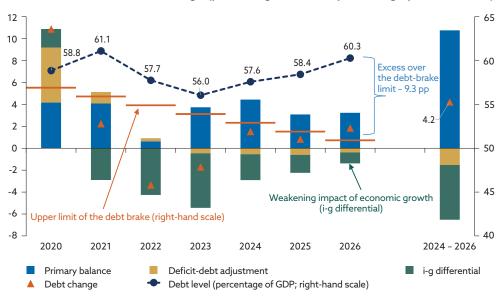
Source: NBS.

The size of the consolidation package far exceeds the effort needed to achieve the budgetary targets set so far, thus providing the government with fiscal space to implement other priorities. These expenditures are assumed to be largely of a permanent nature and will be reflected mainly in social payments, current and capital transfers, and healthcare payments. Using the fiscal space for expansionary measures of a permanent nature would increase the need for additional consolidation measures from 2026 onwards, while using it in a more prudent manner would enable a faster recovery of public finances.



moving away from the upper limit of the debt brake.<sup>7</sup> The public debt projection for 2026 is 60.3% of GDP, which represents an increase of more than 4 pp over the three years since 2023. The rising debt is primarily due to fiscal performance, particularly the general government deficit. Consolidation and deficit reduction next year should translate into lower financing needs, thereby slowing the pace of government borrowing. In 2026, assuming the permanent nature of additional expenditure on government priorities and no further consolidation measures, the budget deficit is expected to remain slightly above its 2025 level. As a result, primary deficit financing should be at a similar level as in the previous period. With economic growth having a weakening impact, the relative debt is expected to rise more significantly and exceed the 60% of GDP level. Debt accumulation is expected to be tempered by partial state financing from liquid financial reserves. The gap between public debt and the debt brake<sup>8</sup> upper limit is projected to be more than 9 pp by the end of the horizon (Chart 47).

Chart 47
Public debt and factors of change (percentages of GDP; percentage points of GDP)



Sources: NBS, and SO SR.

Notes: Debt-deficit adjustment – a factor of consistency between the fiscal deficit and the debt change; i-g differential – a factor taking into account the impact of interest costs and economic growth on the debt change.

The projected evolution of the fiscal deficit over the forecast horizon implies the necessity for further consolidation beyond 2026, with a level of 0.5 pp of GDP per year appearing to be the minimum required to avoid unsustainable debt growth. With the current setup of consolidation

For 2023, the upper limit of sanction bands under the debt brake regime was 54% of GDP. Under a transitional provision of the constitutional Fiscal Responsibility Act, the upper limit of general government debt is to be reduced by one percentage point per year from 2018 to 2027, when it will drop to the level of 50% of GDP.

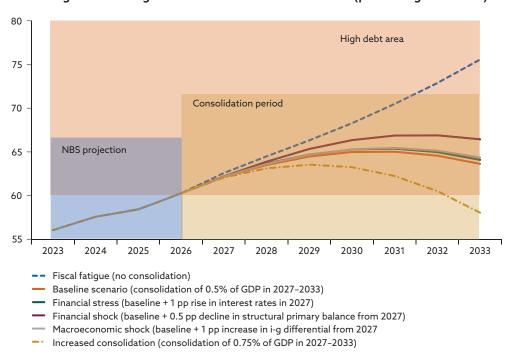
 $<sup>^{8}</sup>$  The upper debt-brake limit applicable to gross debt in 2026 is 51%.



measures, public debt will not stabilise until after 2030, even if the consolidation effort is maintained at 0.5% of GDP beyond the horizon.

To bring public debt back below 60% of GDP would require improving the fiscal balance by more than 0.75° pp of GDP per year beyond 2026. In the increased consolidation scenario, the fiscal balance would reach a surplus in 2030. In the event of no further consolidation, i.e. 'fiscal fatigue', after 2026, public debt would spiral up to 76% of GDP in 2033 (Chart 48). Moreover, postponing consolidation does not create fiscal space for any unexpected adverse fiscal, macroeconomic or financial shocks.

Chart 48
General government gross debt under DSA<sup>10</sup> scenarios (percentages of GDP)



Source: NBS.

# 3.4 Risks to the forecast

The forecast carries significant risks, which in the case of the economic growth outlook are predominantly on the downside. Although the consolidation package has now been announced, it remains surrounded by uncertainty. This is because the measures are still being tweaked and may

<sup>&</sup>lt;sup>9</sup> Each additional increase of 0.25 pp of GDP per year shortens by one year the period to bring public debt below 60% of GDP.

DSA - debt sustainability analysis. The DSA analyses debt sustainability by simulating possible scenarios of public debt developments under certain assumptions. This approach is suitable for projecting medium to long-term trajectories over a horizon of 3 to 15 years. The DSA's core component includes a set of deterministic projections based on fiscal consolidation scenarios up to 2033 and on assumptions for macroeconomic and financial variables, including the assumption of population ageing.



be subject to amendments during parliamentary approval. Furthermore, it is difficult to predict how households and firms will behave, with much depending whether they rein in their investment and consumption to a greater extent.

The newly approved financial transaction tax heightens uncertainty about the impact on the economy and price developments. This measure represents an appreciable increase in firms' costs. Not only may it dampen investment activity and job creation, its impact may be felt by final consumers through higher prices.

### Box 3

# How many firms are at risk from the new financial transaction tax?

The introduction of the financial transaction tax newly approved by the Slovak Parliament is not expected to overwhelm the domestic business sector; however, it does represent a significant unknown. Firms will likely learn to adapt to the tax, as happened in Hungary. However, it is quite difficult to predict how the tax will affect corporate behaviour—whether, for example, firms will rein in investment or relocate their headquarters abroad—and to estimate how much revenue it will generate. We have made a simplified attempt to estimate how many firms could be at risk of becoming loss-making due to the increase in costs related to the financial transaction tax.

In our scenario, a tax rate of 0.4% (with no upper limit, as we cannot distinguish between the number and size of transactions) is applied to firms' expenses, specifically payments on their balance sheets, which include production costs (materials, goods, energy, etc.), personnel costs (wages), and other expenses. Under this scenario, the number of loss-making firms would increase by approximately 3,600.11 From a sectoral perspective, firms in the industry and construction sectors are most vulnerable under such a tax regime.

Table A The risk to firms from the financial transaction tax (FTT)								
	2023	With the FTT	Difference					
Number of loss-making firms	33,253	36,915	3,662					
Share of loss-making firms	27.8%	30.9%	3.1 pp					

Sources: FinStat, and NBS.

The absorption of EU funds represents a downside risk to the economic outlook. If the uptake of RRF funding does not pick up pace, economic growth could be slower than projected.

Under this scenario, the tax collected would amount to around €700 million, with over 80% coming from large corporates. As the tax has a ceiling of €40 per transfer, this estimate is rather optimistic.



### Economic growth could also be weaker as a result of developments abroad.

The forecast assumes a relatively significant recovery in foreign demand for Slovak goods and services. If, however, this assumption is not borne out, as was the case in the first half of the year, the domestic economy will grow more slowly than forecast.

The inflation outlook is subject mainly to geopolitical risks that could put upward pressure on commodity prices. In addition, the consolidation effort implies higher uncertainty in price transmission in both directions. The forecast incorporates full pass-through of the VAT changes, but this is a rather optimistic scenario, since we have seen before the non-response of prices to VAT cuts.

While the forecast assumes full pass-through, recent historical experience<sup>12</sup> and foreign studies <sup>13</sup> suggest this may not be the case. Full pass-through of a VAT reduction was shown only in Portugal in respect of a temporary cut in the VAT rate on staple foods. After the period of lower VAT ended, prices increased symmetrically.<sup>14</sup> A major risk to the inflation outlook is that prices are adjusted downwards in response to the VAT reduction. Inflation could therefore be even higher next year than envisaged in the forecast. There is also uncertainty about the pass-through of lower VAT to staple foods.

Food services prices surged even further following the VAT hike in January 2023, as Chart 49 shows. The conclusion that food services prices did not fall in response to the VAT cut can be seen when making a comparison with other countries (Chart 50). The overall cumulative price increase in this category in Slovakia is among the highest among EU countries. In other words, the VAT reduction had no downward impact on prices.

In January 2023 VAT was reduced on basic foodstuffs and selected services (food service operations, sport facilities, etc.). In 2020 VAT was reduced on selected food products. In NBS Discussion Note No 113, the impact of this VAT reduction is estimated using microdata. The result shows that, under normal economic conditions, the VAT cut was almost entirely passed on to prices of cheaper, more durable, and standardised goods, but often only slightly or not at all to prices of costlier, fresh, and high-quality goods.

Benedek, D., De Mooij, R., Keen, M. and Wingender, P., "Estimating VAT Pass Through", IMF Working Papers, Vol. 2015, No 214, International Monetary Fund, Washington DC, September 2015; Benzarti, Y., Garriga, S. and Tortarolo, D., "Can VAT Cuts and Anti-Profiteering Measures Dampen the Effects of Food Price Inflation?", NBER Working Paper, No 32241, March 2024.

<sup>&</sup>lt;sup>14</sup> Bernardino, T. et al., "The Full, Persistent, and Symmetric Pass-Through of a Temporary VAT Cut", *REM Working Paper Series*, No 0345-2024, October 2024.



Chart 49
Prices excluding indirect taxes (annual percentage changes)

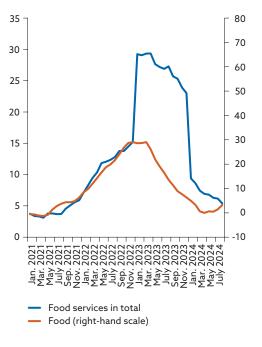
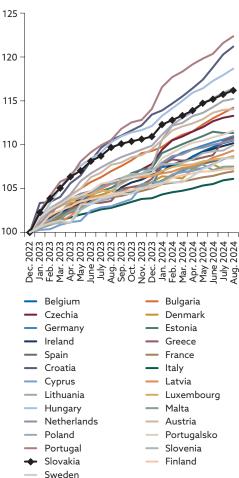


Chart 50

Restaurant and cafe prices in EU countries (index: December 2022 = 100)



Sources: SO SR, and NBS.

Sources: Eurostat, and NBS.



	forecast (MTF-2024Q3)							
Indicator	Unit	Actual data	Autumn 2024 forecast (MTF-2024Q3)			Difference vis-à-vis the summer 2024 forecast (MTF-2024Q2)		
		2023	2024	2025	2026	2024	2025	2026
Price developments			'				'	
HICP inflation	annual percentage change	11.0	3.0	5.0	2.7	0.2	1.5	-0.
CPI inflation	annual percentage change	10.5	2.7	5.0	2.7	0.1	1.5	-0.
GDP deflator	annual percentage change	10.1	4.4	2.9	2.3	-0.1	0.4	-0.
Economic activity								
Gross domestic product	annual percentage change, constant prices	1.6	2.5	2.5	1.9	-0.3	-0.7	-0.2
Private consumption	annual percentage change, constant prices	-3.0	1.8	0.8	1.3	0.5	-1.3	-0.
General government final consumption	annual percentage change, constant prices	-0.6	3.3	2.9	2.4	1.1	-0.4	0.
Gross fixed capital formation	annual percentage change, constant prices	10.6	0.5	5.5	2.6	0.9	-0.9	1.
Exports of goods and services	annual percentage change, constant prices	-1.0	2.0	4.2	3.5	-1.6	-0.4	0.
Imports of goods and services	annual percentage change, constant prices	-6.9	3.2	4.1	3.5	-1.0	-0.7	0.
Net exports	EUR millions at constant prices	6,845	5,986	6,326	6,523	-622.4	-390.2	-812.
Output gap	percentage of potential output	0.2	-0.1	-0.2	-0.4	0.0	-0.6	-0.
Gross domestic product	EUR millions at current prices	122,813	131,425	138,666	144,587	-474.0	-856.4	-1,768.
Labour market								
Employment	thousands of persons, ESA 2010	2,434	2,430	2,435	2,435	-3.7	-13.5	-18.
Employment	annual percentage change, ESA 2010	0.3	-0.2	0.2	0.0	-0.2	-0.4	-0.
Number of unemployed	thousands of persons, LFS 1)	162	148	149	154	-5.0	3.9	11.
Unemployment rate	percentage	5.8	5.3	5.4	5.6	-0.2	0.2	0.
NAIRU estimate 2)	percentage	6.2	6.1	6.1	6.1	0.0	0.0	0.
Labour productivity 3)	annual percentage change	1.3	2.6	2.3	2.0	-0.2	-0.2	0.
Nominal productivity 4)	annual percentage change	11.6	7.2	5.3	4.3	-0.2	0.2	-0.
Nominal compensation per employee	annual percentage change, ESA 2010	10.4	6.8	5.4	4.3	-0.8	0.2	-0.
Nominal wages 5)	annual percentage change	9.7	6.6	5.3	4.1	-0.8	0.1	-0.
Real wages 6)	annual percentage change	-0.7	3.8	0.2	1.4	-0.7	-1.4	-0.
Households and non-profit institu								
Disposable income	annual percentage change, constant prices	-2.3	2.9	0.2	1.4	-0.6	-1.1	0.
Saving ratio 7)	percentage of disposable income	6.6	7.4	6.9	6.9	-1.1	-0.8	-0.
General government sector 8)								
Total revenue	percentage of GDP	43.0	40.2	41.1	41.2	0.1	1.3	1.
Total expenditure	percentage of GDP	47.9	46.0	45.6	45.8	0.1	0.8	1.
General government balance 9)	percentage of GDP	-4.9	-5.7	-4.5	-4.6	0.0	0.5	-0.
Cyclical component	percentage of trend GDP	0.1	0.0	-0.1	-0.1	0.0	-0.2	-0.
Structural balance	percentage of trend GDP	-5.1	-5.8	-4.4	-4.5	0.0	0.7	0.
Cyclically adjusted primary balance	percentage of trend GDP	-3.8	-4.4	-3.0	-3.1	0.1	0.7	0.
Fiscal stance 10)	annual percentage point change	-2.8	-0.6	1.4	-0.1	0.1	0.6	-0.
General government gross debt	percentage of GDP	56.0	57.6	58.4	60.3	0.0	-0.4	-0.



Table 6 Forecast for key macroeconomic indicators (continued)									
Indicator	Unit	Actual data	Autumn 2024 forecast (MTF-2024Q3)			Difference vis-à-vis the summer 2024 forecast (MTF-2024Q2)			
		2023	2024	2025	2026	2024	2025	2026	
Balance of payments									
Goods balance	percentage of GDP	0.2	0.6	0.3	0.1	-1.1	-0.5	-0.4	
Current account	percentage of GDP	-1.7	-1.5	-1.6	-1.8	-0.1	0.1	0.2	
External environment and techni	cal assumptions								
Slovakia's foreign demand	annual percentage change	-0.7	0.4	3.3	3.6	-0.8	-0.4	0.0	
USD/EUR exchange rate 11), 12)	level	1.08	1.09	1.11	1.11	1.3	3.1	3.1	
Oil price in USD 11), 12)	level	83.7	82.1	74.4	72.1	-2.0	-4.6	-3.2	
Oil price in USD 11)	annual percentage change	-19.2	-2.0	-9.3	-3.1	-2.0	-2.5	1.4	
Oil price in EUR 11)	annual percentage change	-21.3	-3.0	-10.8	-3.1	-3.3	-4.0	1.4	
Non-energy commodity prices in USD	annual percentage change	-12.5	7.3	1.3	2.5	-4.1	-2.6	1.6	
Three-month EURIBOR	percentage per annum	3.4	3.6	2.5	2.2	0.0	-0.3	-0.3	
Ten-year Slovak government bond yield	percentage	3.6	3.5	3.3	3.3	-0.1	-0.3	-0.3	

Sources: NBS, ECB, and SO SR.

- 1) Labour Force Survey.
- 2) Non-accelerating inflation rate of unemployment
- 3) GDP at constant prices / employment (ESA 2010).
- 4) Nominal GDP divided by persons in employment (according to SO SR quarterly statistical reporting).
- 5) Average monthly wages (ESA 2010).
- 6) Wages (ESA 2010) deflated by CPI inflation.
- 7) Saving ratio = gross savings / (gross disposable income + adjustments for any pension entitlement change) \*100. Gross savings = gross disposable income + adjustments for any pension entitlement change private consumption.
- 8) Sector S.13.
- 9) B9n Net lending (+) / net borrowing (-).
- 10) Year-on-year change in cyclically adjusted primary balance; a positive value denotes a restrictive stance.
- 11) Year-on-year percentage changes and changes vis-à-vis the previous forecast are calculated from unrounded figures.
- 12) Changes vis-à-vis the previous forecast (percentages).

More detailed time series of selected macroeconomic indicators can be found on the NBS website at:

https://nbs.sk/en/publications/economic-and-monetary-developments/