



# NBS Monthly Bulletin

SEPTEMBER 2018

Published by: © Národná banka Slovenska

Address: Národná banka Slovenska Imricha Karvaša 1, 813 25 Bratislava Slovakia

Contact: info@nbs.sk

http://www.nbs.sk

Discussed by the NBS Bank Board on 25 September 2018.

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

ISSN 1337-9526 (online)



# CONTENTS

1	SUMMARY	5
2	THE REAL ECONOMY	7
2.1	External environment	7
2.2	The Slovak economy	8
2.2.1	Economic activity indicators	8
2.2.2	Labour market	9
2.2.3	Prices	12
2.2.4	Loans and deposits	13
3	INDICATIVE IMPACT	
	ON THE FORECAST	16
	VIEW OF MAIN MACROECONOMIC ATORS FOR SLOVAKIA	17
LIST C	OF TABLES	
Tab.1	Macroeconomic indicators released	
	since the previous monthly bulletin	6
Tab. 2	HICP components – comparison	
	of projected and actual rates of	
	change	12
Tab. 3	Selected economic and monetary	
	indicators for Slovakia	17
LIST C	OF CHARTS	
Chart of	the month Passenger car registrations	5
Chart 1	Economic indicators	8
Chart 2	Economic indicators	8
Chart 3	Main industrial production	
	subsectors	8
	Economic Sentiment Indicator	9
Chart 5	Consumer confidence indicator	9

Chart 5	Consumer connuence indicator	9
Chart 6	Alternative indicators of employment	
	trends	9

Chart 7	Indicator contributions in the	
	calculation of labour market	
	tightness	10
Chart 8	Foreign workers as a share of the	
	increase in the number of people	
	employed in Slovakia over the	
	previous four quarters	10
Chart 9	Number of unemployed – trend	
	and forecast	10
Chart 10	Wage level by sector based on	
	monthly figures	11
Chart 11	Factor model based wage	
	determinants	11
Chart 12	Instability of average wage growth	
	in manufacturing industry	11
Chart 13	Contributions of components to	
	HICP inflation	12
Chart 14	HICP inflation and its components	12
Chart 15	HICP inflation and its components	
	<ul> <li>comparison between the</li> </ul>	
	MTF-2018Q3 and MTF-2018Q2	
	forecasts	13
Chart 16	Food prices	13
Chart 17	Total loans	13
Chart 18	Lending rates for NFCs	13
Chart 19	Interest rates on housing loans to	
	households	14
Chart 20	Interest rates on consumer loans	
	to households	14
Chart 21	Total deposits	14
Chart 22	Deposit rates for NFCs	15
Chart 23	Deposit rates for households	15
	Nowcast for employment	16
Chart 25	Nowcast for GDP in Q3 2018	16
Chart 26	Nowcast for GDP	16



#### **A**BBREVIATIONS

CPI EA ECB EC EMES EONIA ESA 2010 ESI EU EUR EUR EURIBOR EURIBOR EURIBOR EURIBOR EURIBOR IOP GNDI GDP GNDI GDP GNDI GNI HICP Ifo Institute IMF MFI MFSR MFI MFSR MMF MTF NACE NARKS NBS NEER NFC NPISHS OECD p.a. p.p. PMI	Consumer Price Index euro area European Central Bank European Commission emerging market economies euro overnight index average European System of Accounts 2010 Economic Sentiment Indicator (European Commission) European Union euro euro euro interbank offered rate statistical office of the European Union foreign direct investment gross domestic product gross national disposable income gross national disposable income gross national income Harmonised Index of Consumer Prices Leibniz Institute for Economic Research at the University of Munich International Monetary Fund monetary financial institutions Ministry of Finance of the Slovak Republic money market fund NBS's Medium-Term Forecast (published on a quarterly basis) Statistical Classification of Real Estate Offices of Slovakia Národná banka Slovenska nominal effective exchange rate non-financial corporation Non-profit institutions serving households Organisation for Economic Co-operation and Development per anum percentage point Purchasing Manaagers'Index
p.a.	per annum
PMI	Purchasing Managers' Index
REER SASS	real effective exchange rate Slovenská asociácia správcovských spoločností – Slovak Association of Asset Management Companies
SME SO SR	small and medium-sized enterprise Statistical Office of the Slovak Republic
ULC	unit labour costs
ÚPSVR	Ústredie práce, sociálnych vecí a rodiny – Central Office of Labour, Social Affairs and Family
ÚRSO	Úrad pre reguláciu sieťových odvetví – Regulatory Office for Network Industries
USD	US dollar
VAT	value-added tax Das Zantrum für Europäische Wirtschaftsforschung – The Contro for European Economic
ZEW	Das Zentrum für Europäische Wirtschaftsforschung – The Centre for European Economic Research

Symbols used in the tables

- Data are not yet available.
  Data do not exist / data are not applicable.
- (p) Preliminary data



### **1** SUMMARY

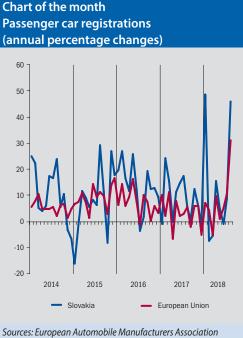
Monthly indicators for the euro area imply a slight slowdown in economic activity at the start of the third quarter. Affected by the situation in the automotive industry, industrial production fell significantly in July. The drop in the manufacture of motor vehicles was related to new emission standards that enter into force from September of this year. Since carmakers were not managing to homologise all types of vehicle, they had to suspend part of their production. As a corollary, new car registrations in July and August hit record levels in all EU countries, since all new cars that would otherwise not conform to the new emission standards, and therefore be unsellable after 1 September, were registered before being put on the market. Retail sales declined in July, which may indicate a softening of private consumption. Sentiment in the euro area nevertheless remains favourable, with leading indicators holding their elevated levels.

In Slovakia, the moderation of industrial production growth in July stemmed largely from developments in the euro area. The impact of a decline in car industry output was, however, offset by results in other sectors of industry. These had a positive impact on exports, as well as on aggregate sales in the economy. Leading indicators in August implied weakening economic activity.

Employment growth fell slightly in July, which, given the high job vacancy rate, points to shortages of skilled labour. Employers are therefore recruiting foreign workers to an increasing extent and are also taking advantage of the increasing labour force participation. Labour market tightening is putting strong upward pressure on annual wage growth, which in July stood at 9.2%. On the other hand, July's figures were partly affected by variable wage components in the energy sector (an impact of up to one percentage point).

The annual inflation rate increased in August, to 2.9%, pushed up by rising services prices, in particular air ticket prices. The strongest upward pressure on the price level are currently from food prices and vehicle fuel prices.

Private sector credit growth edged down in July, to 10.3% year on year. This reflected weaker growth in credit to non-financial corporations (NFCs) and may also have been partly due to rises in lending rates for NFCs.



(ACEA) and NBS calculations.



Indicator	Unit	Period	Current period	Previous period	
Euro area					
Confidence indicators					
PMI	index	September 2018	54.2	54.5	
Economic Sentiment Indicator	long-run average = 100	August 2018	111.6	112.1	
Economic indicators					
Gross domestic product	annual percentage change, constant prices	Q2 2018	2.1	2.4	
Industrial production index	annual percentage change	July 2018	-0.1	2.3	
Retail sales	annual percentage change, constant prices	July 2018	1.1	1.5	
Unemployment rate	percentage	July 2018	8.2	8.2	
HICP inflation	annual percentage change	August 2018	2.0	2.1	
Oil price in USD <sup>1)</sup>	level	September 2018	78.2	73.8	
EUR/USD exchange rate <sup>1)</sup>	level	September 2018	1.163	1.155	
Slovakia					
Confidence indicators					
Economic Sentiment Indicator	long-run average = 100	August 2018	97.7	100.5	
ndustrial confidence indicator	percentage balance	August 2018	0.1	1.4	
Consumer confidence indicator	percentage balance	August 2018	-3.9	-3.9	
Economic indicators					
Gross domestic product	annual percentage change, constant prices	Q2 2018	4.2	3.6	
Aggregate sales	annual percentage change, constant prices	July 2018	8.2	7.6	
Industrial production index	annual percentage change	July 2018	2.6	2.0	
Private sector credit	annual percentage change	July 2018	10.3	10.6	
Employment	annual percentage change	July 2018	3.3	3.5	
Jnemployment rate	percentage	August 2018	6.7	6.7	
Nominal wages	annual percentage change	July 2018	9.2	6.5	
HICP inflation	annual percentage change	August 2018	2.9	2.6	

1) The average for the current period is for the period from the start of the month.

Note: Values in bold show a significant deviation. In the case of macroeconomic indicator values for the euro area, deviations are calculated/determined by comparing the values with market expectations, and in the case of macroeconomic indicator values for Slovakia, including the oil price and exchange rate, by comparing them with their three-month averages. The method of constructing threshold intervals for bold values in the table is described in the August 2018 NBS Monthly Bulletin.

Movements in the model estimates, as well as all the latest monthly data, were taken into account in NBS's September 2018 Medium-Term Forecast (MTF-2018Q3).



## **2** The real economy<sup>1</sup>

#### 2.1 EXTERNAL ENVIRONMENT

The euro area economy expanded in the second quarter of 2018 by 0.4%, quarter on quarter. This figure, released in September, matched the flash estimate. The main driver of the growth was domestic demand, in particular investment demand. Net trade made a negative contribution, similar to its impact in the previous quarter.

Short-term indicators are so far implying a weaker start to the third quarter. Looking at the available monthly indicators, euro area industrial production declined in July, by 0.8% month on month (0.1% year on year). The fall was caused largely by the manufacture of motor vehicles, whose 7% decline in July was related to fact that stricter EU emissions testing standards enter into force on 1 September 2018. Euro area retail sales also fell in July, by 0.2% month on month. By contrast, construction production recorded a moderate increase of 0.3%.

The available leading indicators remained relatively favourable despite falling slightly. The final composite Purchasing Managers' Index (PMI) for the euro area fell to 54.2 in September (from 54.5 in August), owing mainly to a notable slowdown in the manufacturing sector's activity growth. Although September's euro area PMI was the second lowest monthly PMI since the end of 2016, it still implied relatively strong economic growth. New orders growth fell (to one of its lowest levels since December 2016), and employment growth also dipped, but still remains close to historical highs. The European Commission's Economic Sentiment Indicator (ESI) for the euro area was slightly lower in August than in July (by 0.5 point). The average ESI for July and August was 111.9, therefore below the average for the second quarter as a whole (112.5). Among the ESI components in August, consumer confidence fell the most and the industrial and services confidence indicators fell more moderately. Their impact was largely cancelled

out by increases in the construction and retail trade confidence indicators.

Brent crude oil prices rose back towards USD 80 per barrel in mid-September, with their relatively strong increase being largely a result of the tightening global oil market. The most recent data indicated a decline in US oil inventories, and the US Energy Information Administration lowered its outlook for daily oil production. Oil supply disruption concerns triggered by Hurricane Florence also put upward pressure on oil prices, as did impending US sanctions on Iran, which, although not due to take effect until November, are already forcing traders to avoid imports from Iran. As for the impact of unstable and falling production in Libya and Venezuela, traders are concerned as to whether OPEC, OPEC allies, and the United States will manage to make up the resulting shortfall.

**Protectionist measures** taken by the United States against China **have not yet dented China's trade surplus with the United States**. In August this surplus reached its highest ever level, USD 31 billion, with a month-on-month increase of around 10%. Despite the measures taken by the US Administration, growth in US exports to China has remained relatively stable over the past five months, at around 10%.

In response to developments in the Turkish lira's exchange rate, as well as to inflation trends, **Tur-key's central bank** decided at its policy meeting on 13 September **to raise its main interest rate** (the one-week repo rate) from **17.75%** to **24%**. In its press release announcing the decision, the central bank said that recent developments regarding the inflation outlook point to significant risks to price stability. It also confirmed that it would continue to use all available instruments in pursuit of the price stability objective. Following the rate hike, the Turkish lira appreciated by more than 5% against the US dollar. Since the start of the year the Turkish lira has depreciated by around 40% against that currency.

<sup>1</sup> All month-on-month and quarter-on-quarter changes mentioned in the text have been seasonally adjusted using NBS internal models.



#### 2.2 THE SLOVAK ECONOMY

#### **2.2.1 ECONOMIC ACTIVITY INDICATORS**

In July 2018 monthly economic activity indicators for Slovakia reflected lower production in the domestic automotive industry, which had a downward impact on industrial production as well as on the export results of Slovakia's largest exporters. Thanks mainly to higher growth in other exports, notably in electronic products, the car industry's weaker activity was not accompanied by a decline in overall industrial exports or sales. And given an increase in non-industry sales, notably in the trade and construction sectors, aggregate sales in the economy recorded strong growth.

The summer months have also brought heightened volatility to confidence indicators. The overall Economic Sentiment Indicator for Slovakia fell in August to 97.7, below its long-run average. All of the indicator's components decreased, and services confidence fell the most. On the positive side - given that annual household consumption growth dropped from 3.5% in the first guarter of 2018 to 2.2% in the second guarter - consumer confidence remained unchanged. Consumers had positive views on their future financial situation and future savings. At the same



1.0

0.5

0.0

-0.5

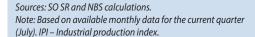
-1.0

-1.5

IPI

Sales

02 2018



Exports

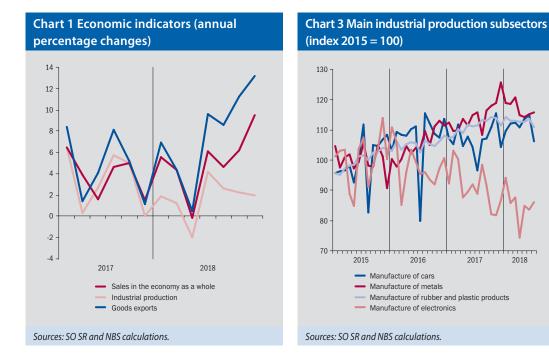
IPI

Sales

03 2018

Exports

time, however, their assessments of the future general economic situation and future unemployment were unfavourable, and therefore the overall consumer confidence indicator stayed at the same level.

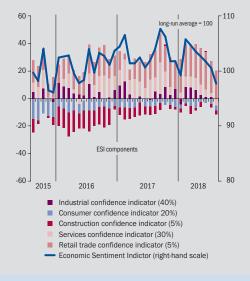




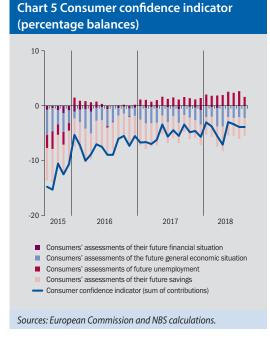
2018



#### Chart 4 Economic Sentiment Indicator (percentage balances)



Sources: European Commission and NBS calculations.

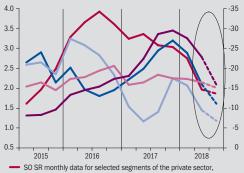


#### 2.2.2 LABOUR MARKET

According to monthly data, employment across the reviewed sectors increased in July, by 3.3% year on year. After adjustment for the impact of significant breaks in the time series, employment growth in August stood at 1.9%<sup>2</sup> (the average rate for the second quarter was 2%). The analytically adjusted time series at present implies that job growth will be lower in the third quarter than in the second quarter. Employers reporting shortages of skilled labour are still seeking to cover these shortages by increasing the recruitment of foreign workers and of people who were previously economically inactive (an increase in labour force participation). At the sectoral level, employment growth was relatively stable, easing only in retail trade and the food services industry.

Alternative indicators of employment trends also imply a slowdown in job growth in the third quarter. The employment nowcast projects that employment will continue increasing in quarter, but at a slightly lower pace compared with the second quarter. The factors behind this nowcast projection may include certain domestic and foreign confidence indicators and the indicator of global trade volume.<sup>3</sup> The gradual moderation of employment growth is also projected by the MTF-2018Q3 forecast. In an environment of labour supply constraints and continuing, albeit more moderate, employment growth, the indicator of labour market tightening remains elevated.

#### Chart 6 Alternative indicators of employment trends (annual percentage changes; standardised balances)



- S0 SR monthly data for selected segments of the private sector, adjusted for breaks in the time series
- Number of employees and self-employed people registered with the Social Insurance Agency
   Number of employees and self-employed people registered with
- health insurers • Official quarterly employment (ESA 2010 methodology) – SO SR
- Interspective (and the second s
- reverse right-hand scale)

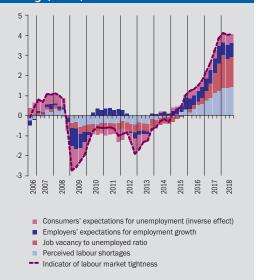
### Sources: SO SR, Social Insurance Agency, health insurers and NBS calculations.

Note: The employment figure for Q3 2018 is the MTF-2018Q3 projection.

- 2 Monthly and quarterly figures differ significantly in methodological terms. Therefore the rate of change of monthly and quarterly figures, after their averaging, may not be identical for the same quarter, not even when using the analytically adjusted NBS time series. The analytical time series should, however, more reliably capture any decrease or increase in the rate of change in the next quarter.
- 3 Source: CPB Netherlands.
- NBS Monthly Bulletin september 2018



Chart 7 Indicator contributions in the calculation of labour market tightness (standardised indicators and their weighted average; level)

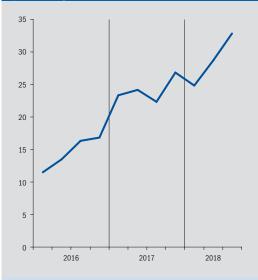


Sources: European Commission and NBS calculations.

The unemployment rate based on the total number of job seekers was just 0.02 percentage point lower in August than in July, at 6.68% after seasonal adjustment.<sup>4</sup> Therefore the average unemployment rate for the whole third quarter recorded only a slight drop in quarter-on-quarter terms. After its substantial downward trend of recent years, unemployment is now falling much more moderately. At a time of low unemployment, employers are finding it increasingly difficult to recruit employees from among the unemployed. The strength of labour demand is further evidenced by the high number of job vacancies (around 80,000).

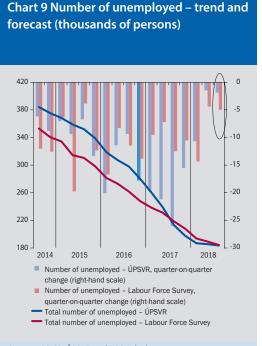
The MTF-2018Q3 forecast also envisages a slight drop in unemployment in the near term. Since the beginning of this year, the fall in unemployment as measured by the Labour Office (ÚPSVR) has been lower than that measured by the Labour Force Survey by around three thousand people per quarter.<sup>5</sup>

Chart 8 Foreign workers as a share of the increase in the number of people employed in Slovakia over the previous four quarters (percentages)



#### Sources: ÚPSVR and SO SR.

Notes: The calculation for the given quarter consists of dividing the year-on-year increase in the number of foreigners working in Slovakia by the total year-on-year increase in headcount employment (according to ESA 2010 methodology). Data for Q3 2018 are based on developments in July and on the MTF-2018Q3 projection for employment.



Sources: SO SR, ÚPSVR and NBS calculations. Note: The September 2018 figure for unemployment as measured by ÚPSVR is imputed using an ARMA model.

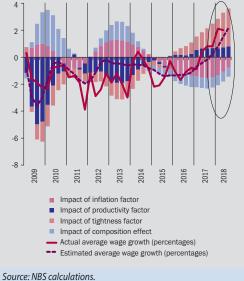
- 4 In non-seasonally adjusted terms, the unemployment rate based on the total number of job seekers fell from 6.6% to 6.53%.
- 5 Given their differences, these methodologies cannot produce the same results. Recently, however, the differences between their results appear to have been accentuated by legislative changes, with the conditions for claiming unemployment benefit having been eased since the start of the year. It is now sufficient for a new iob seeker to have worked only two years of the last four in order to be entitled to claim unemployment benefit (previously it was three years of the last four). At the same time, people previously employed on a fixed-term contract may claim six months of benefits (previously four months of benefits). These facts may have a slight upward impact on the inflow of registered job seekers, while moderating their outflow; this may not be fully reflected in quarterly unemployment according to the Labour Force Survey.
- NBS Monthly Bulletin september 2018

### 10



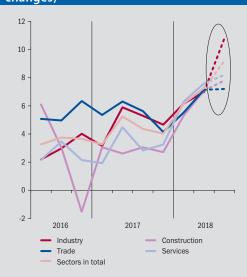
Annual average wage growth in the reviewed sectors increased markedly in July, to 9.2% (the average rate for the second quarter was 7.3 %). The acceleration was driven largely by wage increases in the energy sector.<sup>6</sup> Month-on-month fluctuations were also observed in other sectors of industry, owing to differences between this year and last year in the months in which firms paid bonuses or raised basic wages. It is therefore very likely that wage growth returned to a lower level in August, and therefore average wage growth in manufacturing industry for the third quarter as a whole is expected to be lower than the rate implied by July's figures. In the public sector, wage growth may even moderate significantly, owing to the fading of the impact of a 6% hike in teachers' basic salaries, phased in from September 2017, and of bonuses paid to other public sector workers between September and December 2017 (at the level of 2% of their position salaries). Wage growth in the economy as a whole in coming quarters is expected to be similar to its level in the second quarter.

Chart 11 Factor model based wage determinants (annual percentage changes; percentage point contributions; deviations from long-run average)



Note: Long-run average annual wage growth is 4.4% (calculated since 2006). Wages and productivity are given in nominal terms.

Chart 10 Wage level by sector based on monthly figures (annual percentage changes)



#### Sources: SO SR and NBS calculations. Note: The figures given for Q3 2018 are those for July 2018.

#### Chart 12 Instability of average wage growth in manufacturing industry (percentages; percentage points)



 Change in year-on-year rate of change in 2018 (estimate for months for which data is not available)

#### Sources: SO SR and NBS calculations.

Note: The estimate for August 2018 was produced by looking at the average of the previous corrections of strong single-month wage growth. The remaining months of 2018 are estimated in such a way that the cumulative average seasonally adjusted wage growth in the second half of the year is the same as that in the first half of the year.

6 The situation in the energy sector was highly non-standard. In July 2017 wages in the sector fell markedly in month-on-month terms (after seasonal adjustment), but in July this year they increased sharply. The wages in June of last vear and this vear showed a similar turnaround. As a result, the year-on-year rate of change in the energy sector's average wage accelerated from -21% in June 2018 to 43% in July 2018, which accounted for 0.7 percentage point of the aggregate annual wage growth for the reviewed sectors. The acceleration was probably caused by variable wage components.

NBS Monthly Bulletin september 2018



#### 2.2.3 PRICES

3.5 3.0

2.5 2.0

1.5

1.0

0.5

0.0

-0.5

-1.0

The annual HICP inflation rate in Slovakia increased to 2.9% in August (from 2.6% in July), which was slightly higher than projected. In month-on-month terms, the overall price level increased moderately.

The annual inflation rate was higher in August than in July owing to an increase in services price inflation. Since the start of the year, headline inflation has been fluctuating as a result of movements in air ticket prices and food prices. The months ahead are expected to see lower rates

of increase in HICP sub-indices. Although petrol/ diesel price inflation peaked in June, it remained high in August, at 14%.

The headline inflation rate is expected to moderate gradually until November. From September, the fading of the recent supply-side shock in food prices will have an increasing impact that will continue into November 2018. As for the annual rate of increase in petrol/diesel prices, it is expected to moderate in line with technical assumptions. The average headline rate for 2018 is projected to be 2.6%.

21

14

0

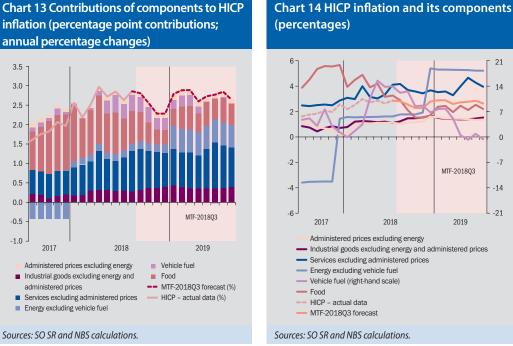
-7

-14

-21

MTF-201803

2019



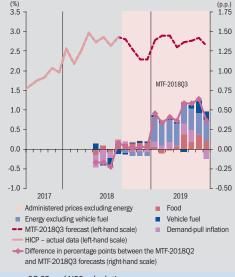
#### Industrial goods excluding energy and administered prices Services excluding administered prices Energy excluding vehicle fuel Sources: SO SR and NBS calculations. Table 2 HICP components - comparison of projected and actual rates of change (percentages; percentage point contributions) Demand-Admi--pull nistered Non-energy inflation prices industrial HICP Energy Food Services excluding exclugoods vehicle ding fuel energy August 2018 - MTF-2018Q2 1.1 3.3 2.79 2.5 A 4.4 3.0 1.0 Year-on-year changes forecast August 2018 – actual В 1.1 4.1 3.3 3.5 2.86 2.6 1.1 figure August 2018 – actual figure R-A 0.0 -0.4 0.3 0.2 0.1 0.1 0.1 minus forecast **Contribution to overall** (B-A) \* weight 0.00 -0.06 0.07 0.06 0.08 0.05 0.01 forecast error<sup>1)</sup>

Sources: SO SR and NBS calculations.

1) Projections taken from NBS's June 2018 Medium-Term Forecast (MTF-2018Q2).

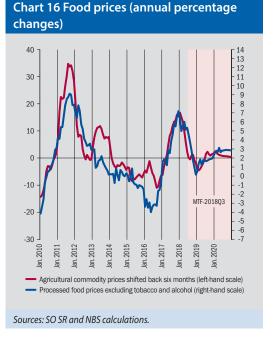


Chart 15 HICP inflation and its components – comparison between the MTF-2018Q3 and MTF-2018Q2 forecasts (annual percentage changes; percentage point contributions)



#### Sources: SO SR and NBS calculations.

Note: Demand-pull inflation comprises the following: industrial goods excluding energy and administered prices; and services excluding administered prices.



#### 2.2.4 LOANS AND DEPOSITS

Private sector credit growth in Slovakia edged down in July, to 10.3% year on year (from 10.6% in June), as a result of lower growth in loans to non-financial corporations (NFCs). Most of the new NFC credit in July went to the sectors of real estate activities, trade, and transportation sectors; by contrast, credit demand among industrial firms has been subdued in recent months. Banks' lending rates for NFCs show a slightly rising trend, which has seen average NFC lending rates in Slovakia move away from the average in the euro area as whole. Within this trend, the highest increases have been in rates on operating loans. If this trend continues, it could damp-



Sources: ECB and NBS calculations.

### Chart 18 Lending rates for NFCs (percentages; 3-month moving average)



Source: ECB.

Note: The dashed lines denote the highest and lowest interest rates in euro area countries.

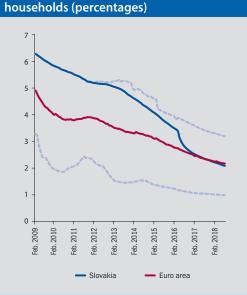
NBS



en firms' demand for loans. Despite the dip in NFC credit growth, the situation in the NFC credit market suggests that firms' investment activity will maintain an upward path in the third quarter.

Household demand for loans showed no let-up in July. Household credit growth remained steady

Chart 19 Interest rates on housing loans to



Source: ECB.

Note: The dashed lines denote the highest and lowest interest rates in euro area countries.



### Chart 20 Interest rates on consumer loans to households (percentages)

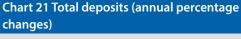
Source: ECB.

Note: The dashed lines denote the highest and lowest interest rates in euro area countries.

at 11.7%, year on year, supported mainly by low nominal interest rates. Interest rates on housing loans to households are below the average in the euro area. Household demand for consumer loans remained relatively strong (above 9% year on year), notwithstanding high interest rates on such loans. Although these rates are falling, they remain almost twice as high as the euro area average.

Growth in total private sector deposits increased in July, to 7.1% year on year (from 6.4% in June). This acceleration was supported by both NFC deposits and household deposits. With favourable macroeconomic developments boosting business, NFC deposits are rising. Firms in the trade sector are benefiting from rising domestic demand, while export-oriented firms, especially in industry, are benefiting from the continuing increase in foreign demand. As for households, their deposit growth accelerated slightly, on the back of rising incomes.

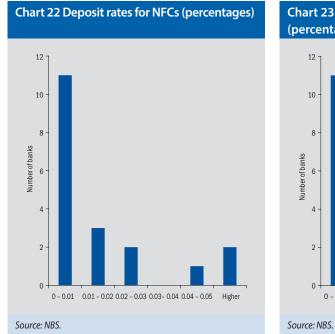
Total private sector deposits are building up quite rapidly, even with deposit rates at practically zero levels. This is largely due to the structure of deposits. Not only firms, but also households hold the majority of their deposits in non-interest bearing current accounts. In Slovakia, neither NFC deposits nor household deposits have yet been subject to negative interest rates.

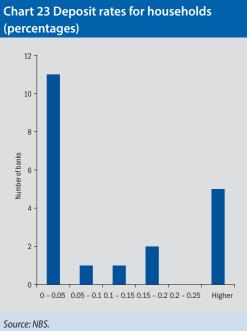




Sources: ECB and NBS calculations.







#### NBS Monthly Bulletin september 2018

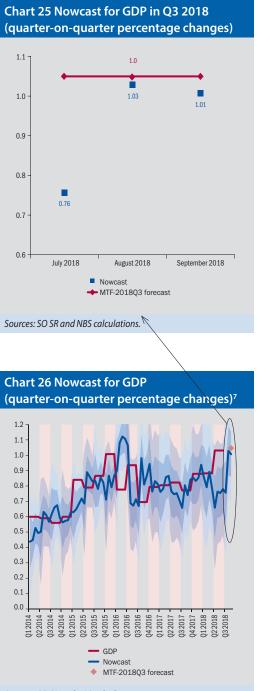


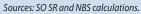
### **3** INDICATIVE IMPACT ON THE FORECAST

Nowcast movements and all the latest monthly data have been incorporated into NBS's September 2018 Medium-Term Forecast (MTF-2018Q3).



Note: The calculation incorporates signalling, i.e. the acceleration or slowdown indicated by the model is added or deducted from the quarter-on-quarter rate of change in employment in the previous quarter.





7 The band around the point estimate denotes +/- 1 and 2 times the root mean square error. Nowcasts are calculated using OLS time series models based on selected sets of monthly indicators (for employment, a factor model is used). Nowcasts provide a current estimate of future developments using available monthly figures from the current quarter, their future values forecast with ARIMA models, and their lagged values. The individual model projections are independent of each other and therefore a forecasting error in a past quarter cannot affect current projections. Further details are available in the commentaries on the GDP nowcasts, private consumption nowcasts, export nowcasts and employment nowcasts.

#### NBS Monthly Bulletin september 2018

### 16



### **OVERVIEW OF MAIN MACROECONOMIC INDICATORS FOR SLOVAKIA**

#### Table 3 Selected economic and monetary indicators for Slovakia

(annual percentage changes, unless otherwise indicated)

	Gross do- mestic prod- uct	HICP	Industrial producer prices	Employ- ment ESA 2010	Registered unem- ployment rate <sup>1)</sup>	Unemploy- ment rate based on the total number of job seekers <sup>1)</sup>	Industrial produc- tion index	Total sales of sectors <sup>2)</sup>	Economic Sentiment Indicator (long-term aver- age=100)	M3 (for analyti- cal use) <sup>3)</sup>	Loans to private sector <sup>4)</sup>	Loans to non-fi- nancial corpora- tions <sup>4)</sup>	Loans to house- holds <sup>4)</sup>	State budget balance (EUR mil.)	General govern- ment balance (% of GDP)	General govern- ment gross debt (% of GDP)	Current account (% of GDP)	Balance of trade (% of GDP)	USD/EUR exchange rate (average for the period)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2010	5.0	0.7	-2.7	-1.5	12.5	14.2	12.5	8.1	98.6	7.8	5.3	1.6	12.5	-4,436.1	-7.5	41.2	-4.7	-0.1	1.3257
2011	2.8	4.1	2.7	1.8	13.2	14.6	3.5	6.2	98.7	2.9	9.3	7.6	11.1	-3,275.7	-4.3	43.7	-5.0	-0.1	1.3920
2012	1.7	3.7	3.9	0.1	13.6	15.0	4.3	4.4	93.8	8.8	3.8	-2.3	10.3	-3,810.7	-4.3	52.2	0.9	3.4	1.2848
2013	1.5	1.5	-0.1	-0.8	14.1	15.4	2.1	1.9	90.0	6.4	6.4	1.7	10.3	-2,023.3	-2.7	54.7	1.9	3.9	1.3281
2014	2.8	-0.1	-3.5	1.4	12.8	14.3	2.9	2.5	100.2	2.5	7.7	1.9	13.2	-2,923.4	-2.7	53.5	1.1	3.6	1.3285
2015	3.9	-0.3	-4.2	2.0	11.5	13.1	6.1	7.3	99.6	11.5	10.7	7.3	13.1	-1,932.6	-2.7	52.3	-1.7	1.3	1.1095
2016	3.3	-0.5	-4.3	2.4	9.5	11.1	3.8	4.1	101.5	6.1	10.2	4.2	13.3	-980.3	-2.2	51.8	-1.5	2.0	1.1069
2017	3.4	1.4	1.9	2.2	7.1	8.3	2.9	4.5	103.3	7.8	10.5	7.8	12.3	-1,220.1	-1.0	50.9	-2.1	0.8	1.1297
2017 Q3	3.4	1.6	1.6	2.3	6.5	7.8	2.6	4.7	104.5	6.4	12.0	10.3	13.0	-	-1.2	51.3	-3.3	-0.9	1.1746
2017 Q4	3.5	2.0	1.9	2.2	6.0	7.2	3.6	4.1	103.3	7.8	10.5	7.8	12.3	-	-1.4	50.9	-2.2	0.8	1.1774
2018 Q1	3.6	2.4	3.0	2.2	5.6	6.7	0.0	3.6	103.2	8.8	9.9	6.3	11.8	-	-0.6	50.8	-0.8	1.1	1.2292
2018 Q2	4.2	2.9	4.8	2.1	5.5	6.7	3.2	5.3	102.6	7.0	10.6	7.9	11.7	-	•		-1.3	2.1	1.1915
2017 Sep.	-	1.8	2.1	-	6.3	7.6	1.9	3.3	107.6	6.4	12.0	10.3	13.0	-94.8	-	-	-	-	1.1915
2017 Oct.	-	1.8	2.0	-	6.2	7.4	6.3	3.2	106.2	6.8	11.3	8.3	13.1	336.2	-	-	-	-	1.1756
2017 Nov.	-	2.1	1.7	-	6.0	7.2	4.8	4.9	101.8	7.9	10.9	7.7	12.8	-229.7	-	-	-	-	1.1738
2017 Dec.	-	2.0	2.1	-	5.9	7.1	-0.9	4.3	101.8	7.8	10.5	7.8	12.3	-238.7	-	-	-	-	1.1836
2018 Jan.	-	2.6	2.6	-	5.7	6.9	2.7	3.9	99.2	8.4	10.3	6.5	12.6	146.9	-	-	-	-	1.2200
2018 Feb.	-	2.2	3.2	-	5.6	6.7	1.2	4.2	105.7	7.8	10.0	5.9	12.4	-488.6	-	-	-	-	1.2348
2018 Mar.	-	2.5 3.0	3.4 4.2	-	5.5 5.5	6.6 6.7	-3.5 5.9	2.6 3.2	104.7 103.5	8.8 8.3	9.9 10.2	6.3	11.8	-113.2 -96.1	-	-	-	-	1.2336
2018 Apr. 2018 May	-	3.0 2.7	4.2	-	5.5	6.7	2.0	5.2 4.9	103.5	8.5 7.3	9.8	6.7 5.9	11.8 11.7	-90.1	-	-	-	-	1.2276 1.1812
2018 May 2018 June	-	2.7	4.5 5.6	-	5.5	6.7	2.0	4.9 7.6	102.6	7.5	9.8 10.6	5.9 7.9	11.7	-174.2		-	-	-	1.1678
2018 July	-	2.9	6.9		5.5	6.7	2.0	8.2	101.7	7.0	10.0	7.9	11.7	188.9					1.1686
2018 July 2018 Aug.	_	2.0	0.9	_	5.4	6.7	2.0	0.2	97.7	1.2	10.5	7.1	11.7	-357.6			_	_	1.1549
20107.01g.		,	•		5.1	5.7			2.11	•			•	00710					

Sources: Statistical Office of the Slovak Republic, MF SR, the European Commission and NBS.

1) Monthly and quarterly data based on seasonal adjustment of NBS.

2) Constant prices (seasonally adjusted).

3) Currency in circulation in M3 refers to money held by the public (according to methodology in place prior to 2008).

4) Adjusted for sales and securitisation.

More detailed time series for selected macroeconomic indicators http://www.nbs.sk/\_img/Documents/\_MonthlyBulletin/2018/StatisticsMB0918.xls