



# NBS Monthly Bulletin

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#### **A**BBREVIATIONS

CPI Consumer Price Index

EA euro area

ECB European Central Bank
EC European Commission
EMEs emerging market economies
EONIA euro overnight index average
ESA 2010 European System of Accounts 2010

ESI Economic Sentiment Indicator (European Commission)

EU European Union

EUR euro

EURIBOR euro interbank offered rate

Eurostat statistical office of the European Union

FDI foreign direct investment GDP gross domestic product

GNDI gross national disposable income

GNI gross national income

HICP Harmonised Index of Consumer Prices

Ifo Institute Leibniz Institute for Economic Research at the University of Munich

IMF International Monetary Fund
MFI monetary financial institutions

MF SR Ministry of Finance of the Slovak Republic

MMF money market fund

MTF NBS's Medium-Term Forecast (published on a quarterly basis)

NACE Statistical Classification of Economic Activities in the European Community (Rev. 2)

NARKS National Association of Real Estate Offices of Slovakia

NBS Národná banka Slovenska
NEER nominal effective exchange rate
NFC non-financial corporation

NPISHs Non-profit institutions serving households

OECD Organisation for Economic Co-operation and Development

p.a. per annump.p. percentage point

PMI Purchasing Managers' Index REER real effective exchange rate

SASS Slovenská asociácia správcovských spoločností – Slovak Association of Asset

Management Companies

SME small and medium-sized enterprise
SO SR Statistical Office of the Slovak Republic

ULC unit labour costs

ÚPSVR Ústredie práce, sociálnych vecí a rodiny – Central Office of Labour, Social Affairs and

amily

ÚRSO Úrad pre reguláciu sieťových odvetví – Regulatory Office for Network Industries

USD US dollar VAT value-added tax

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<sup>1</sup>

Hard indicators of economic activity in the euro area provided a mixed picture early in the third quarter. While industrial production increased moderately, retail sales were down. Leading indicators continue to improve and point to the euro area economy maintaining its robust growth.

In Slovakia, too, monthly indicators were sending ambiguous signals at the start of the third quarter. All hard indicators fell, including industrial production and sales, which both declined for a second successive month. Their decline was most pronounced in transport equipment manufacturing, where the trends going forward will be determined by production launches of new car models. It is expected that transport equipment output has fallen temporarily and that it will gradually begin to increase in the second half of the year after revamped high-end SUVs start being produced.

The labour market situation remains favourable, and although employment growth has

been affected by the slight worsening of hard indicators, it remains strong and, based on firms' expectations, should maintain its high level in the period ahead. Job creation is highest in industry and services, and has recently been increasingly strong in the subdued construction sector. The unemployment rate continued to fall in August, to 6.6%<sup>2</sup>, indicating continued growth in employment. The strong wage growth trend moderated in July owing to a slowdown in production, as well as to a drop in overtime and holiday payments in the retail trade sector.<sup>3</sup>

In line with expectations, the annual inflation rate increased further in August, to 1.6%, with the food component recording the largest rise. Demand-pull inflation also increased, owing mainly to non-administered prices of services. A diminishing number of consumption items are falling in price and an increasing number are recording an inflation rate of more than 1%.

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

<sup>2</sup> The registered unemployment rate for job seekers available for work, seasonally adjusted.

<sup>3</sup> For further details, see Section 3 The labour market.



### **2** THE REAL ECONOMY

# 2.1 'HARD' INDICATORS OF ECONOMIC ACTIVITY

Monthly indicators of real economic activity fell in July in three-month-on-three-month terms. Goods exports dropped by 2.4%, sales by 2.1% and industrial production by 1.1%. In the case of both production and sales, it was their second consecutive negative result on this measure, while goods exports had been falling for a longer period.

Whereas June's monthly indicators were clearly affected by a car factory strike, July's indicators reflected the impact of summer factory shutdowns. As in June, it was the transport equipment and electronics manufacturing sectors that weighed most heavily on overall industrial production in July. Unlike in the previous month, however, metal manufacturing had a positive impact. In month-on-month terms, all the core sectors apart from the refined petroleum product industry and chemical industry reported either a decline, or a no more than modest increase, in output.

A similar trend was observed in sales, which in July were dampened mainly by results in indus-

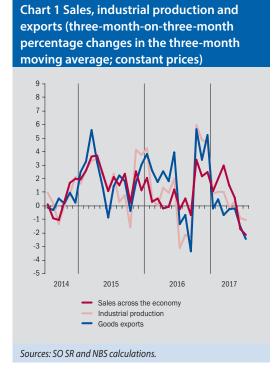
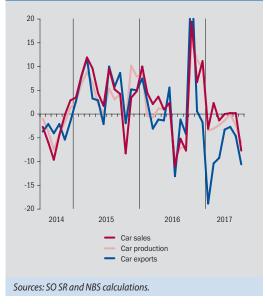


Chart 2 Automotive industry trends (three-month-on-three-month percentage changes in the three-month moving average; constant prices)



try. Sales growth in trade also slowed. From such a one-off softening, it is not possible to infer changes in the private consumption projections for the third quarter of 2017. Economic sentiment remains favourable and relatively elevated, and the retail trade confidence indicator recorded a further moderate increase in August.

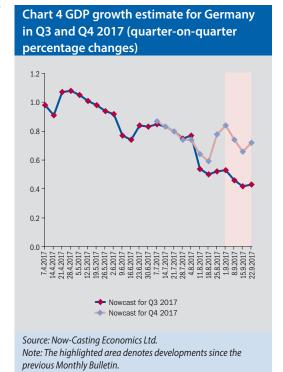
Car exports in July were adversely affected by summer factory shutdowns, and have been lagging behind last year's volumes since the beginning of 2017. The subdued exports of domestic car manufacturers in the second quarter were one of the main causes of the fall in overall exports. Most of the decline in carmakers' exports was attributable to lower exports of high-end SUVs. After increasing for three years, demand for SUVs cooled at the beginning of 2017, especially in Europe. SUV models produced in Slovakia were among models that accounted for the largest share of the drop in demand (as much as a quarter of the total). These losses are expected to be made up before the end of this year, since the market is anticipating a new generation of the affected models to enter production. Their sales should not only compensate for the previous drop in demand, but also



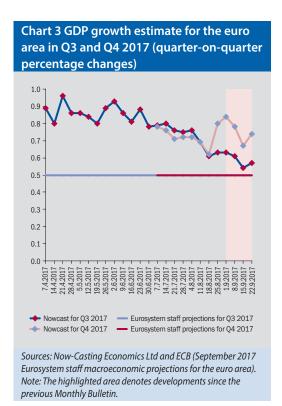
accelerate growth in car sales. The expectations of an upturn in car sales appear to be well grounded, given the measures that have been announced in certain European countries, specifically the introduction of scrapping schemes following the tightening of environmental standards. Although car manufacturers continue to face risks from recent emission scandals, their efforts to remove the shortcomings and to restore their reputations could boost activity in the car industry.

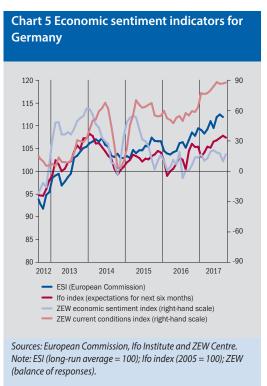
#### 2.2 'SOFT' LEADING INDICATORS

The European Commission's **Economic Sentiment Indicator** (ESI) for the euro area increased in August (to 111.9), its highest level in more than ten years. The ESI for Germany fell, but remained elevated (also at 111.9). The composite **Purchasing Managers' Index** (PMI) for the euro area increased in September (to 56.7, from 55.7 in August), as did the PMI for Germany (to 57.8, from 55.8 in August). Germany's **ZEW economic sentiment index** increased substantially in September, and the ZEW current conditions index remained favourable. The **Ifo Business Climate Index** fell in September and also showed a slight deterioration in expectations for the next six months.



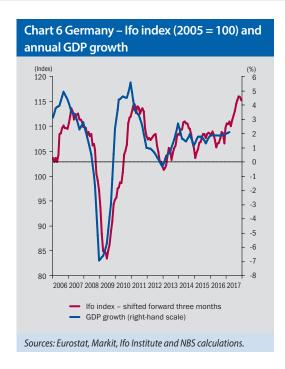
Leading indicators, as well as short-term forecasts, point to the continuation of economic growth in the second half of 2017.







#### $C\ H\ A\ P\ T\ E\ R\quad 2$

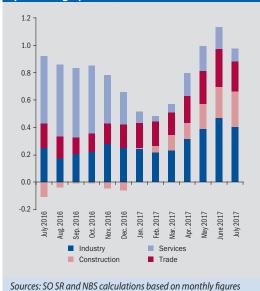




## **3** THE LABOUR MARKET

Employment across the reviewed segments of the private sector increased in July by 3.1% year

Chart 7 Employment – sectoral contributions to three-month-on-three-month changes in the three-month moving average (percentage points)

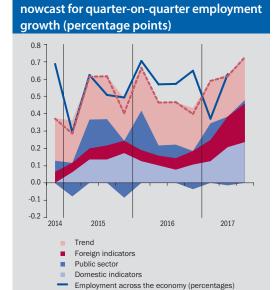


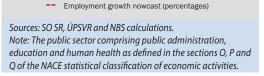
for employment in the reviewed sectors.

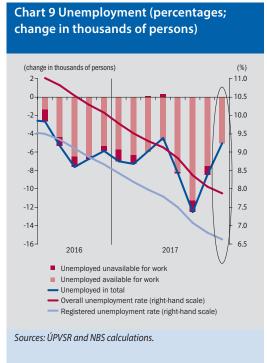
**Chart 8 Indicator contributions to the** 

on year (after increasing by 3.3% in June). Monthon-month, and also in three-month-on-three-month moving average terms, employment growth remains solid and supported by all the main sectors. In industry, year-on-year job growth in July was 3.3%, while in trade and services together it was 2.8% and in the construction sector 3.6%. The favourable employment trends, along with employers' expectations, indicate that employment growth will remain relatively strong in the third quarter. On that basis, the employment growth outlook is slightly higher in the NBS's September 2017 Medium-Term Forecast (MTF-2017Q2).

The number of unemployed fell in August, by around five thousand month-on-month, or 0.18 percentage point in terms of the unemployment rate (after seasonal adjustment by NBS). The unemployment rate for the total number of job seekers therefore fell to 7.9%.<sup>4</sup> As in the previous four months, this drop reflected to some extent the removal of people from the unemployment register for administrative reasons (reasons other than finding work), which may be

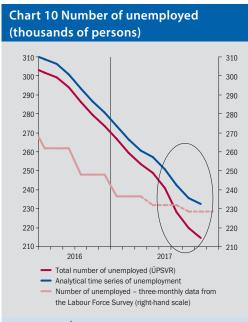






4 In non-seasonally adjusted terms, the registered unemployment rate decreased month-on-month by 0.2 percentage point, to 6.5%, and the registered unemployment rate based on the total number of job seekers fell by 0.2 percentage point, to 7.7%.





Sources: SO SR, ÚPSVR and NBS calculations. Note: The Labour Force Survey unemployment figures for Q3 2017 are the MTF-2017Q3 projections. The analytical time series of unemployment is based on ÚPSVR figures and is defined in the MTF-2013Q3 forecast.

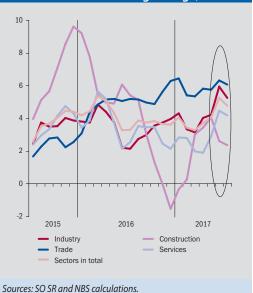
related to a tightening of the rules under which people registered as unemployed may earn additional income. Since the rules were tightened in May 2017, an above-average number of people have had their unemployment registration ended for these reasons. After analytical adjustment for such deregistrations, August's monthon-month fall in the number of unemployed was around three thousand. The margin of that decline provides further support for NBS's latest nowcast and forecast, which envisage strong employment growth in the third guarter. Looking ahead, the sources of labour for filling job vacancies, besides the unemployed, are expected to include to a substantial extent foreigners, people from the economically inactive population (pensioners, students), and Slovaks returning from working abroad. A positive aspect of the current situation is that both short-term and long-term unemployment are falling.

Annual average wage growth across the reviewed sectors increased in July by 4.2% year-on-year, which was lower compared with June (6.2%) and with the average for the second quarter (5.3%). The slowdown in wage growth may be linked with July's month-on-month declines in industrial production and in sales (lower production can

weigh on wages through declines in overtime payments and in earnings of employees whose wages are linked to the number of hours worked and whose bonuses are output-related). The decline in trade sector wage growth in July (to 5.9%, from 7.7% in June) may have reflected a sharp drop in the overall extra pay earned by retail sector employees for working on public holidays, following the recent adoption of a law amendment requiring most shops to close on such holidays. The total amount of these payments may be around €2 million per holiday lower compared with the status quo ante, and the negative impact of their decline on headline wage growth in July is estimated at between 0.1 and 0.2 percentage point. The slowdown in the energy sector's volatile wage growth5 may have chipped 0.4 percentage point off headline wage growth.

The labour market is continuing to experience labour shortages, while at the same time there is net job creation and a favourable external environment. In that light, the slowdown in production and wage growth is expected to be temporary and both indicators should pick up going forward. Wage growth is also expected to reflect, gradually, a moderate upturn in inflation. July's private sector wage growth (4.2%) and negotiated wage increases in the public sector (6% on average) are broadly in line with the MTF-201Q3 projection that overall annual wage growth this year will be 4.4%.

Chart 11 Wage growth by sector based on monthly figures (annual percentage changes in the three-month moving average)

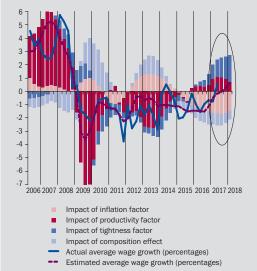


<sup>5</sup> The year-on-year rate of change in energy sector wages normally fluctuates within a range from 10% to -10%, but in July it was 38% lower than in June, at -0.4%.



#### CHAPTER 3

### Chart 12 Factor model based wage determinants (annual percentage changes; percentage point contributions; deviations from long-run average)



#### Source: NBS calculations.

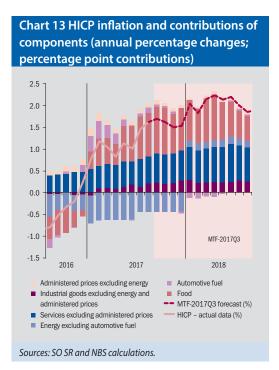
Notes: Long-run average annual wage growth is 4.3% (calculated since 2006). Wages and productivity are given in nominal terms. Further information about the methodology is provided in this Analytical Commentary.



## 4 PRICES

Annual HICP inflation followed its increase in July with another in August, edging up from 1.5% to 1.6%. The increase was driven mainly by food prices. In month-on-month terms, the price level remained unchanged.

Food prices accounted for most of the acceleration in the annual HICP inflation rate in Au-





gust. In the category of processed foods, prices of fats (fresh butter), milk and dairy products maintained a strong upward course, owing to low stocks of these productions in the European market (probably stemming from subdued production capacities).

Table 1 HICP components – comparison of projected and actual rates of change (percentages; percentage point contributions)												
			Non-energy industrial goods	Energy	Food	Services	НІСР	Net inflation excluding fuel				
		July 2017 – actual figure	0.7	-2.6	3.7	2.2	1.5	1.5				
hanges	А	August 2017 – MTF-2017Q2 forecast	1.2	-2.0	2.7	2.0	1.4	1.7				
arc	В	August 2017 – actual figure	1.0	-2.3	3.9	2.1	1.6	1.7				
Year-on-year changes	B-A	August – actual figure minus forecast	-0.2	-0.3	1.2	0.1	0.25	-0.1				
Yea	(B-A) * weight	Contribution to overall forecast error <sup>1)</sup>	-0.06	-0.05	0.31	0.03	0.25	-0.03				
Sources: SO SR and NBS calculations. 1) Projections taken from NBS's June 2017 Medium-Term Forecast (MTF-2017Q2).												



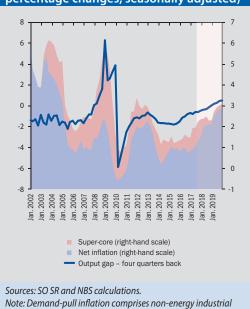


The euro's appreciating exchange rate dampened import price growth and consequently, as expected, non-energy industrial goods inflation. Services inflation in August increased month on month and maintained its upward trend in year-on-year terms, rising to 2.1% (or 2.5% excluding administered prices such as prices of rail and road passenger transport, sewerage, postal services and health services). Given the continuing

growth in household final consumption, services inflation is expected to continue rising in the near term. Demand-pull inflation is also expected to accelerate slightly, despite exchange rate appreciation.

Upward movements in agricultural commodity prices and current inflation developments were taken into account in the MTF-2017Q3 forecast.

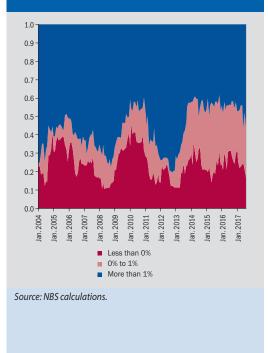
Chart 15 Demand-pull inflation unadjusted for methodological revisions (annual percentage changes; seasonally adjusted)



goods. The super-core index comprises sub-items in the HICP for which the output gap has predictive power with statistical

significance.

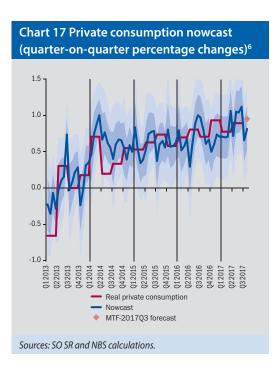
Chart 16 HICP core inflation broken down by price-change intervals

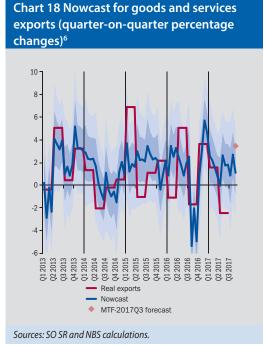


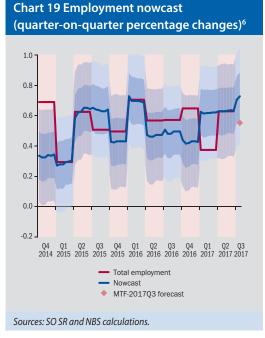


## **5** INDICATIVE IMPACT ON THE FORECAST

Nowcast movements and all the most recent monthly data have been incorporated into NBS's September 2017 Medium-Term Forecast (MTF-2017Q3).

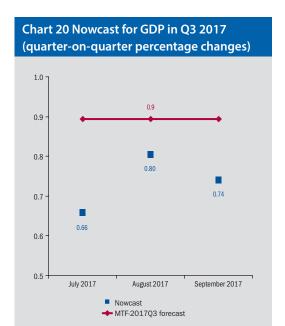




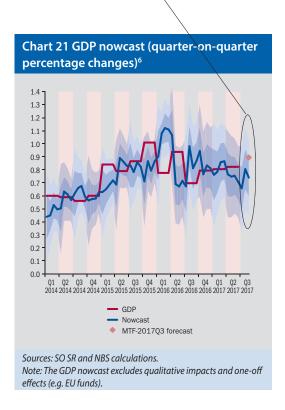


6 The band around the point estimate denotes +/- 1 and 2 times the root mean square error. Nowcasts are calculated using OLS time series models based on selected sets of monthly indicators (for employment, a factor model is used). Nowcasts provide a current estimate of future developments using available 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.

#### CHAPTER 5



Sources: SO SR and NBS calculations.





# Overview of main macroeconomic indicators for Slovakia

#### Table 2 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	Unem- ployment rate (%)	Industrial produc- tion index	Total sales of sectors <sup>1)</sup>	Economic Sentiment Indicator (long-term average=100)	M3 (for analyti- cal use) <sup>2)</sup>	Loans to private sector <sup>3)</sup>	Loans to non-fi- nancial corpora- tions <sup>3)</sup>	Loans to house- holds <sup>3)</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
2009	-5.4	0.9	-2.6	-2.0	12.1	-15.5	-16.4	76.9	-2.8	1.1	-3.3	11.0	-2,791.3	-7.8	36.3	-3.4	0.4	1.3948
2010	5.0	0.7	-2.7	-1.5	14.4	8.2	8.0	98.7	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	13.6	5.2	6.2	98.8	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	14.0	8.0	4.4	93.9	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	14.2	3.8	1.9	90.2	6.4	6.4	1.7	10.3	-2,023.3	-2.7	54.7	1.9	3.9	1.3281
2014	2.6	-0.1	-3.5	1.4	13.2	3.6	2.6	100.4	2.5	7.7	1.9	13.2	-2,923.4	-2.7	53.6	1.1	3.6	1.3285
2015	3.8	-0.3	-4.2	2.0	11.5	7.3	7.4	99.7	11.5	10.7	7.3	13.1	-1,932.6	-2.7	52.5	0.2	2.6	1.1095
2016	3.3	-0.5	-4.3	2.4	9.7	4.8	4.1	101.6	6.1	10.2	4.2	13.4	-980.3	-1.7	51.9	-0.7	2.8	1.1069
2016 Q3	3.0	-0.7	-4.2	2.4	9.5	2.9	2.3	102.4	9.3	9.9	4.4	13.1	-	-0.6	52.4	-1.0	2.2	1.1166
2016 Q4	3.0	-0.1	-2.4	2.6	9.1	4.1	3.6	102.7	6.1	10.2	4.2	13.4	-	-3.1	51.9	-1.8	1.8	1.0789
2017 Q1	3.1	1.0	2.0	2.1	8.7	7.7	6.1	104.3	5.7	11.1	8.0	12.6	-	-0.8	53.5	1.0	2.4	1.0648
2017 Q2	3.3	1.0	1.9	2.1	8.1	1.7	3.0	101.7	5.9	12.6	10.5	13.3	-			-0.8	2.5	1.1021
2016 Sep.	-	-0.5	-3.2	-	9.4	4.2	2.5	103.4	9.3	9.9	4.4	13.1	-33.2	-	-	-	-	1.1212
2016 Oct.	-	-0.3	-2.8	-	9.1	3.4	3.3	102.8	8.7	10.1	5.4	13.0	223.7	-	-	-	-	1.1026
2016 Nov.	-	-0.2	-2.6	-	8.8	3.4	3.2	101.3	8.1	9.4	3.5	13.1	-201.6	-	-	-	-	1.0799
2016 Dec.	-	0.2	-1.8	-	8.8	5.9	4.3	103.9	6.1	10.2	4.2	13.4	-358.1	-	-	-	-	1.0543
2017 Jan.	-	0.8	0.4	-	8.6	7.5	4.7	104.6	6.2	11.4	7.3	13.5	92.3	-	-	-	-	1.0614
2017 Feb.	-	1.2	2.6	-	8.4	2.5	5.3	106.6	6.6	11.9	9.4	13.5	-500.0	-	-	-	-	1.0643
2017 Mar.	-	1.0	3.0	-	8.0	13.1	8.2	101.6	5.7	12.0	8.5	13.8	70.7	-	-	-	-	1.0685
2017 Apr.	-	0.8	2.5	-	7.7	-3.2	4.0	101.6	6.1	12.3	9.6	13.6	-298.2	-	-	-	-	1.0723
2017 May	-	1.1	1.9	-	7.4	5.1	4.1	102.6	5.7	13.0	11.7	13.6	-256.4	-	-	-	-	1.1058
2017 June	-	1.0	1.4	-	6.9	3.1	0.8	100.8	5.9	12.6	10.5	13.3	72.6	-	-	-	-	1.1229
2017 July	-	1.5	0.6	-	6.7	9.2	6.7	102.1	5.6				53.2	-	-	-	-	1.1511
2017 Aug.	-	1.6		-	6.5			104.0					-227.2	-	-	-	-	1.1807

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

More detailed time series for selected macroeconomic indicators http://www.nbs.sk/\_img/Documents/\_MonthlyBulletin/2017/StatisticsMB0917.xls

<sup>1)</sup> Constant prices (seasonally adjusted).

<sup>2)</sup> Currency in circulation in M3 refers to money held by the public (according to methodology in place prior to 2008).

<sup>3)</sup> Adjusted for sales and securitisation.