



# NBS Monthly Bulletin

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# **C**ONTENTS

1	SUMMARY	5	Chart 4	GDP growth estimate for Germany	_				
	THE REAL ECONOMY	_		in Q2, Q3 and Q4 2016	7				
2	THE REAL ECONOMY	6	Chart 5	Economic sentiment indicators for	_				
2.1	'Hard' indicators of economic activity	6		Germany	7				
2.2	'Soft' leading indicators	6	Chart 6	Germany – Ifo index and annual GDI growth	7				
3	THE LABOUR MARKET	8	Chart 7	Employment – sectoral contribution to the three month-on-three month					
4	PRICES	11		rate of change	8				
		• •	Chart 8	Indicator contributions to nowcast					
5	INDICATIVE IMPACT		ca.co	of quarter-on-quarter employment					
	ON THE FORECAST	13		growth	8				
			Chart 9	Unemployment	9				
OVERVIEW OF MAIN MACROECONOMIC				Number of unemployed	9				
INDICATORS FOR SLOVAKIA				Wage growth	9				
				Wage developments in the economy	y 9				
LIST OF TABLES				Annual HICP inflation and its					
Table 1	HICP components – comparison			composition	11				
	of projected and actual rates		Chart 14	HICP inflation	11				
	of change	11	Chart 15	Demand-pull inflation	12				
Table 2	Selected economic and monetary		Chart 16	HICP core inflation broken down by					
	indicators for Slovakia	15		price-change intervals	12				
			Chart 17	Employment nowcast	13				
LIST OF CHARTS			Chart 18	Private consumption nowcast	13				
Chart '	Sales, industrial production and		Chart 19	Nowcast for goods and services					
	exports	6		exports	13				
Chart 2	2 Automotive industry indicators	6	Chart 20	Nowcast for GDP growth in Q2 2016	14				
Chart 3	GDP growth estimate for the euro			Nowcast for GDP growth in Q3 2016	14				
	area in Q2, Q3 and Q4 2016	7	Chart 22	GDP nowcast	14				



### **A**BBREVIATIONS

CPI Consumer Price Index

EA euro area

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

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

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)

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 annum p.p. percentage point

PMI Purchasing Managers' Index

PPI Producer Price 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

Family

USD US dollar VAT value-added tax

#### 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>

Recent developments in the euro area imply a slowdown in economic activity. Industrial production was lower in May than in the previous month, and retail sales remained flat. The situation going forward will be considerably affected by elevated volatility in financial markets following the United Kingdom's vote to leave the European Union.

Economic trends in Slovakia remained favourable in May, apart from an expected slowdown in construction activity. The negative impact of the construction sector on overall sales in the economy was mitigated by increased sales in the trade sector. That fact, along with an improvement in the retail trade confidence indicator, implies an acceleration in final consumption. Industrial production and exports maintained their growth trends in May. In the light of such monthly figures, therefore the nowcast for GDP

growth in the second quarter remained at the level of NBS's forecast (0.7%).

The labour market situation remained favourable in May, although it did cool to some extent. Employment growth slowed, particularly in the construction sector, and wage growth also eased. Wage growth slowed in the second quarter, after a strong performance in the first quarter that was influenced by temporary calendar effects (Easter and the leap day). The unemployment rate remained unchanged in June, at 9.5%.

The negative annual inflation rate in June was the same as in May, at -0.7%. The main causes of this result were food and energy prices. The headline rate is expected to reach 0% at the turn of next year and to climb to 1% in first quarter of 2017. It is projected to fluctuate around that level throughout the first half of the year.

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

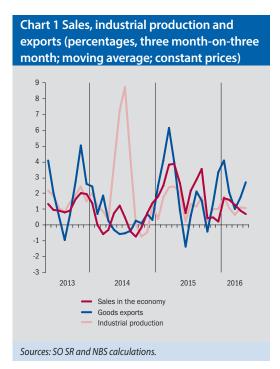


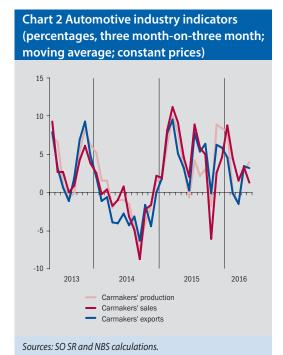
### **2** THE REAL ECONOMY

### 2.1 'HARD' INDICATORS OF ECONOMIC ACTIVITY

Economic activity indicators were favourable in May. Industrial production increased by 1% and goods exports rose by 2.7% in terms of the difference between its average for the three months to end-May and the three months to end-February. The most notable pick-up was in the manufacture and export of refined petroleum products, which in previous months had been held back by technical shutdowns of production facilities. Export growth in the electronics and metal industries was probably accounted for by existing stocks, since neither industry reported a commensurate increase in production. The energy sector had a negative impact on overall industrial output (owing to temporary shutdowns).

As for total sales in the economy, their three month-on-three month growth rate was 0.7%. The rate would have been higher but for the continuing negative contribution of the construction sector. The downward trend in infrastructure construction output observed in previous months





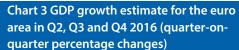
continued in May, in line with second-quarter investment projections contained in NBS's Medium-Term Forecast (MTF-2016Q2).

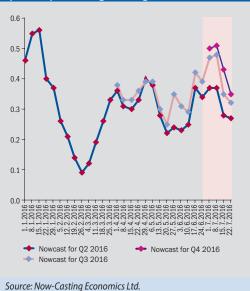
Both the trade and accommodation sectors saw an increase in sales. With the retail sales confidence indicator at a five-year high, projections for private consumption growth in the second quarter are expected to be met.

#### 2.2 'SOFT' LEADING INDICATORS

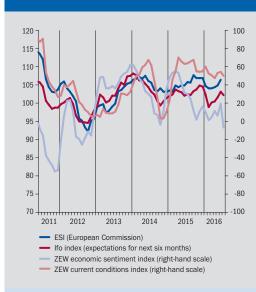
Certain foreign leading indicators in July were affected by the UK's vote to leave the European Union ('Brexit'). The results of the referendum caused Germany's **ZEW economic sentiment index** to slump into negative figures (the index aggregates analysts' expectations for the performance of the German economy over the next six months). The **Ifo Business Climate Index** for Germany also fell. The Brexit vote did not have an impact on the **Purchasing Managers' Index** (PMI) for Germany, which increased in July to its highest level of the year. The euro area PMI fell only slightly.







# Chart 5 Economic sentiment indicators for Germany



Sources: European Commission, Ifo Institute and ZEW Centre. Note: ESI (long-run average = 100); Ifo index (2005 = 100); ZEW (balance of responses).

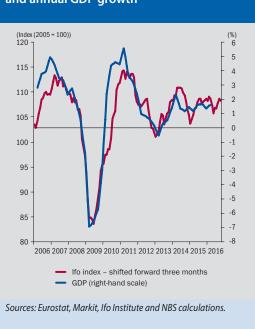
# Chart 4 GDP growth estimate for Germany in Q2, Q3 and Q4 2016 (quarter-on-quarter percentage changes)

Note: The highlighted area denotes developments since the

previous Monthly Bulletin.



# Chart 6 Germany – Ifo index (2005 = 100) and annual GDP growth



The result of the Brexit referendum triggered uncertainty among survey respondents, and therefore, from the vantage point of early July, this may indicate a slowdown in euro area economic growth in the third quarter of 2016.



### **3** THE LABOUR MARKET

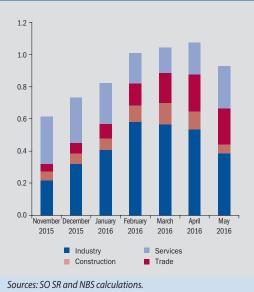
Employment growth across the sectors under review was 0.1%, month-on-month, in May, slightly lower than in the three previous months. This indicates that employment growth in the second quarter will be lower than in the previous quarter. In year-on-year terms employment in the sectors under review grew by 1.5% in May (after increasing by 1.6% in the first quarter). Employment growth continues to reflect positive contributions from several key sector, although the growth rates in industry and construction moderated somewhat in the recent period. In the construction sector in particular this trend is accounted for by subdued output. The real economy may also contribute to lower employment growth through the lagged impact of weaker sales growth in recent months.

The unemployment rate based on the total number of job seekers fell in June by 0.2 percentage point month-on-month, to 11.12%<sup>2</sup>. The registered unemployment rate decreased more moderately, since the number of unemployed

enrolled in labour activation and voluntary work schemes fell and most of those who left such schemes again became unemployed people available for work. The decrease in unemployment in June was the highest monthly drop in the second quarter; nevertheless, owing to weaker results in April and May, the unemployment rate fell more moderately in the second quarter than in the first quarter. The better figures in June reflected an increase in the number of job seekers finding employment and a relatively stable inflow of new unemployed. The number of job vacancies remains at a high level in historical terms, providing a sign of further employment growth.

Leading indicators for employment suggest that it increased further in the second quarter, albeit more moderately than in the first quarter. This slowdown may be partly because public sector job creation is expected to be lower in the second quarter after its high level in the previous quarter. This trend is consistent with the projections of the MTF-2016Q2 forecast.

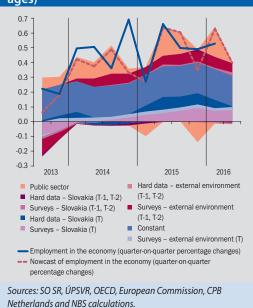
Chart 7 Employment – sectoral contributions to the three month-on-three month rate of change (moving average; percentage point contributions)



Sources: SO SK and NBS calculations.

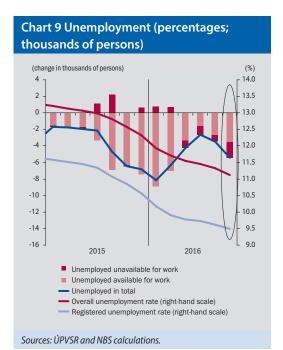
Note: The contribution of employment in trade and services does not include the impact of a methodological change in January 2016.

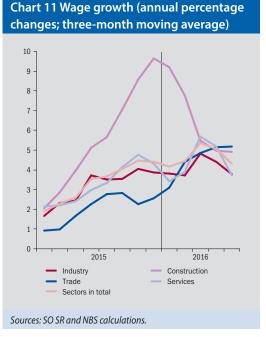
# Chart 8 Indicator contributions to nowcast of quarter-on-quarter employment growth (percentage point contributions; percentages)

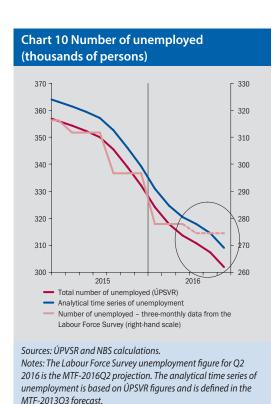


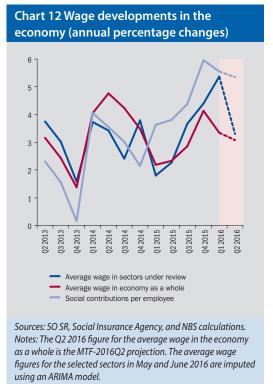
2 In seasonally-unadjusted terms, the registered unemployment rate remained flat month-on-month, at 9.45%, and the unemployment rate based on the total number of job seekers fell by 0.11 percentage point, to 11.02%.











Annual average wage growth across the sectors under review was 3.6% in May (after a growth rate of 2.6% in April). Wage growth remained lower than the average for the first quarter, possibly reflecting a certain slowdown in economic activity growth earlier in the year and

the fading impact of Easter and leap day calendar effects observed during the first quarter of 2016. The strongest wage growth in May was in the construction and trade sectors (more than 5%). Annual wage growth in the industry and services sectors was approximately 2 to



### CHAPTER 3

3 percentage points lower in the second quarter than in the first. In industry the slowdown was caused mainly by wage dynamics in the industries manufacturing food, chemicals, metals, and transport equipment. In services, wage growth moderated in the transportation and IT sectors.

Wage developments in the selected sectors suggest the MTF-2016Q2 projection for aver-

age wage growth of 3.1% in the second quarter remains realistic. This forecast is, however, subject to an upside risk over the rest of the year, as suggested by a significant increase in the amount of social contributions paid (per employee) and higher negotiated wage increases in certain larger firms (which may be reflected in the wage figures during the second and third quarters). The main source of this upside risk is the ongoing increase in labour demand.

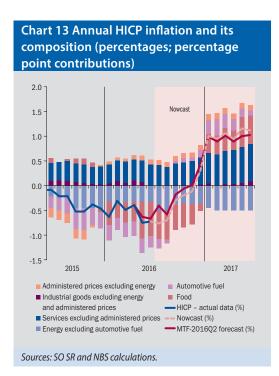


### 4 PRICES

The annual HICP inflation rate for Slovakia was as negative in June as in May, at -0.7%. In monthon-month terms, the price level increased slightly, reflecting moderate increases in food and energy prices.

Brent oil prices increased in June, maintaining an upward trend that began in February. As a consequence, automotive fuel prices went up. Looking, however, at petroleum product inventories in the United States, their current growth is expected to act as a restraint on oil price inflation.

An environment of low food commodity prices in global markets is contributing to relatively subdued food price inflation. Wheat and maize prices are oscillating around their lowest level for many years, indicating that this year's harvests are expected to be relatively good. The key information in this regard, however, will be official



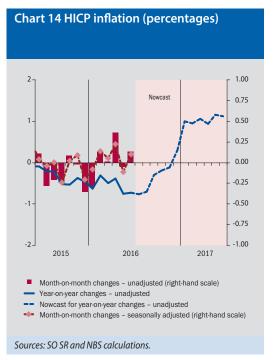


Table 1 HICP components – comparison of projected and actual rates of change (annual percentage changes; percentage point contributions)												
			Non-energy industrial goods	Energy	Food	Services	HICP	Net inflation excluding fuel				
SS		May 2016 – actual figure	0.4	-4.0	-3.0	1.5	-0.7	1.0				
ange	Α	June 2016 – forecast	0.3	-4.0	-2.5	1.5	-0.7	0.9				
r ch	В	June 2016 – actual figure	0.2	-3.7	-2.8	1.5	-0.7	0.8				
Year-on-year changes	B-A	June – actual figure minus forecast	-0.1	0.3	-0.3	0.0	-0.06	-0.1				
Year-	(B-A) * weight	Contribution to overall forecast error (percentage point) <sup>1)</sup>	-0.03	0.05	-0.07	-0.01	-0.06	-0.04				
Sources: SO SR and NBS calculations. 1) Projections taken from NBS's Medium-Term Forecast (MTF-2016Q2).												



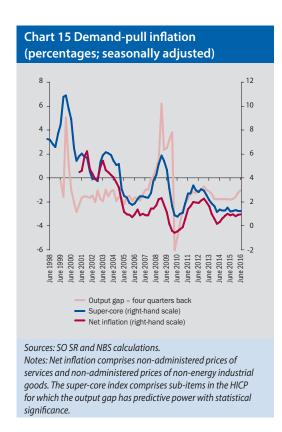
### CHAPTER 4

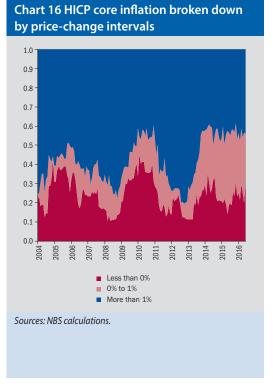
estimates of harvests and global stocks of grain over coming months.

Favourable labour market developments and further wage growth are expected to create demand-pull pressures that will cause a gradual increase in services price inflation, which is expected to begin in the second half of 2016.

The average annual rates of energy and food prices inflation in 2016 are expected to be negative. Therefore, in the short term, external factors

should continue exerting a drag on strengthening demand-side impulses from the labour market and from wage growth. The headline inflation rate for 2016 is expected to be slightly negative, similar to the MTF-2016Q2 projection. It is expected that inflation will reach 0% at the turn of next year, before climbing to 1% in the first quarter of 2017 and fluctuating around that level throughout the first half of the year (Chart 14). Chart 16 indicates that the low-inflation environment<sup>3</sup> will be preponderant even in the absence of temporary external factors.





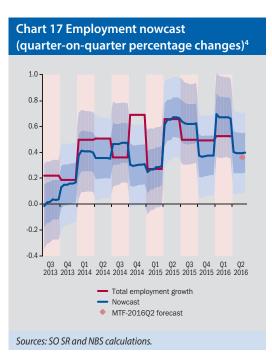
<sup>3</sup> Inflation growth between 0% and 1%.

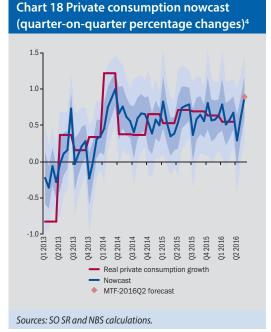


### **5** INDICATIVE IMPACT ON THE FORECAST

Nowcasts for GDP and employment in the second quarter of 2016 remain in line with the projections of NBS's Medium-Term Forecast (MTF-2016Q2), which projects GDP and employment to grow by, respectively, 0.7% and 0.4% in quarter-on-quarter terms. The estimate for GDP growth in the third quarter is also 0.7%. Nevertheless, the Brexit scenario was not a factor in MTF-2016Q2 forecast, nor has it yet been reflected in the hard figures.

The private consumption and export nowcasts are also at the levels of the MTF-2016Q2 projections.





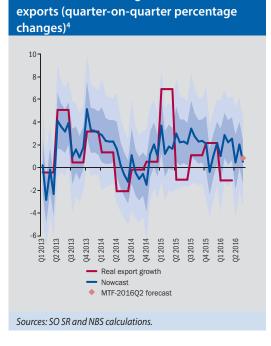
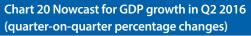
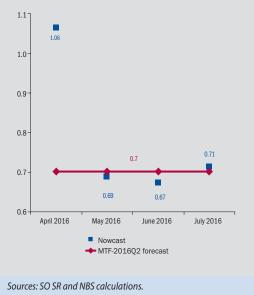


Chart 19 Nowcast for goods and services

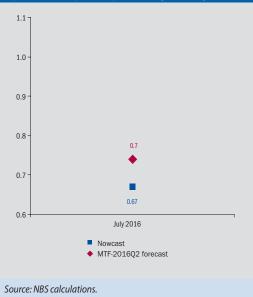
4 The band around the point estimate denotes +/- 1 and 2 times the root mean square error. Nowcasts are calculated using OLS time series models based on selected sets of monthly indicators (for employment, a factor model is used). Nowcasts provide a current estimate of future developments using available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

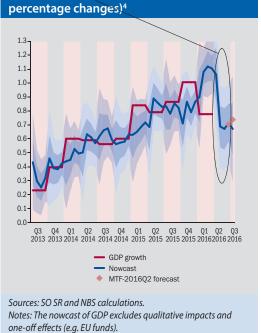




# Chart 21 Nowcast for GDP growth in Q3 2016 (quarter-on-quarter percentage changes)



# Chart 22 GDP nowcast (quarter-on-quarter percentage changes)<sup>4</sup>





### Overview of main macroeconomic indicators for Slovakia

### Table 2 Selected economic and monetary indicators for Slovakia

(annual percentage changes, unless otherwise indicated)

	Gross domestic product	HICP	Industrial producer prices	Employ- ment ESA 2010	Unem- ployment rate	Industrial produc- tion index	Total sales of sec- tors <sup>1)</sup>	Economic Sentiment Indicator (long-term average=100)	M3 (for analyti- cal use) <sup>2)</sup>	Loans to non- financial corpora- tions	Loans to house- holds	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
2008	5.7	3.9	6.1	3.2	9.6	2.9	-	99.3	4.9	15.3	25.3	-704.0	-2.3	28.2	-6.2	-1.8	1.4708
2009	-5.5	0.9	-2.6	-2.0	12.1	-15.6	-16.5	77.3	-2.8	-3.3	11.0	-2,791.3	-7.9	36.0	-3.5	0.4	1.3948
2010	5.1	0.7	-2.7	-1.5	14.4	8.2	8.2	98.7	7.8	1.6	12.5	-4,436.1	-7.5	40.8	-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	7.6	11.1	-3,275.7	-4.1	43.3	-5.0	-0.1	1.3920
2012	1.5	3.7	3.9	0.1	14.0	8.0	4.4	94.0	8.8	-2.3	10.3	-3,810.7	-4.3	52.4	0.9	3.5	1.2848
2013	1.4	1.5	-0.1	-0.8	14.2	3.8	1.8	90.4	6.4	1.7	10.2	-2,023.3	-2.7	55.0	2.0	4.1	1.3281
2014	2.5	-0.1	-3.5	1.4	13.2	8.7	2.5	100.4	2.5	1.2	13.1	-2,923.4	-2.7	53.9	0.1	3.8	1.3285
2015	3.6	-0.3	-4.2	2.0	11.5	6.9	7.4	99.7	11.5	6.8	13.0	-1,932.6	-3.0	52.9	-1.3	2.4	1.1095
2015 Q3	3.7	-0.3	-4.5	2.2	11.3	6.0	9.8	98.0	10.4	2.6	13.5	-	-1.6	53.9	-3.8	0.8	1.1117
2015 Q4	4.3	-0.5	-4.8	2.0	11.0	5.0	8.6	99.0	11.5	6.8	13.0	-	-5.2	52.9	-1.1	0.8	1.0953
2016 Q1	3.4	-0.5	-5.3	2.2	10.4	2.1	5.9	102.6	10.1	3.1	12.8	-			-0.8	4.2	1.1020
2016 Q2		-0.6						98.7				-					1.1292
2015 July	-	-0.2	-4.2	-	11.5	11.2	18.7	95.9	9.0	1.7	13.5	156.8	-	-	-	-	1.0996
2015 Aug.	-	-0.2	-4.1	-	11.3	-0.3	0.7	99.9	9.2	0.8	13.6	105.8	-	-	-	-	1.1139
2015 Sep.	-	-0.5	-5.2	-	11.4	7.0	10.8	98.3	10.4	2.6	13.5	-96.0	-	-	-	-	1.1221
2015 Oct.	-	-0.5	-5.0	-	11.0	1.1	4.8	104.0	10.2	2.9	13.3	-29.1	-	-	-	-	1.1235
2015 Nov.	-	-0.4	-5.0	-	10.8	8.1	11.3	96.8	10.4	5.1	13.5	24.1	-	-	-	-	1.0736
2015 Dec.	-	-0.5	-4.5	-	10.6	6.0	9.0	96.3	11.5	6.8	13.0	-751.2	-	-	-	-	1.0877
2016 Jan.	-	-0.6	-5.2	-	10.4	1.6	2.2	102.5	11.3	4.4	12.9	8.6	-	-	-	-	1.0860
2016 Feb.	-	-0.3	-4.7	-	10.1	7.0	3.8	102.6	10.5	2.8	12.6	-842.7	-	-	-	-	1.1093
2016 Mar.	-	-0.5	-5.9	-	9.9	-1.9	5.0	102.8	10.1	3.1	12.8	-44.8	-	-	-	-	1.1100
2016 Apr.	-	-0.4	-5.6	-	9.6	7.8	12.2	99.6	10.9	3.3	12.9	232.8	-	-	-	-	1.1339
2016 May	-	-0.7	-5.6	-	9.5	6.0	8.5	98.0	10.8	1.5	13.3	-465.4	-	-	-	-	1.1311
2016 June	-	-0.7		-	9.5			98.6				375.1	-	-	-	-	1.1229

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

More detailed time series for selected macroeconomic indicators http://www.nbs.sk/\_img/Documents/\_MonthlyBulletin/2016/StatisticsMB0716.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).