



# NBS Monthly Bulletin

NOVEMBER 2016

Published by: © Národná banka Slovenska

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

Contact: +421/2/5787 2146

http://www.nbs.sk

Discussed by the NBS Bank Board on 22 November 2016.

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

ISSN 1337-9526 (online)



## **C**ONTENTS

1	SUMMARY	5	Chart 4	Economic sentiment indicators					
				for Germany	8				
2	THE REAL ECONOMY	6	Chart 5	Germany – Ifo index and annual					
2.1	Flash estimate of euro area GDP	6		GDP growth	8				
2.2	Flash estimate of Slovak GDP	6	Chart 6	Employment according to the ESA					
2.3	'Soft' leading indicators	7		2010 methodology – trend and					
				forecast	9				
3	THE LABOUR MARKET	9	Chart 7	Indicator contributions to the					
				nowcast for quarter-on-quarter					
4	PRICES	11		employment growth	9				
			Chart 8	Employment – sectoral contributions					
5	INDICATIVE IMPACT			to three-month-on-three-month					
	ON THE FORECAST	13		percentage changes in the three-					
				-month moving average	9				
<b>OVEF</b>	RVIEW OF MAIN MACROECONOMIC		Chart 9	Sectoral contributions to					
INDI	CATORS FOR SLOVAKIA	15		employment growth in services	9				
			Chart 10	Wage growth	10				
LIST	OF TABLES		Chart 11	Wage trends in the economy	10				
Table 1	HICP components – comparison		Chart 12	Annual HICP inflation and					
	of projected and actual rates of			contributions of components	11				
	change	11	Chart 13	HICP inflation	12				
Table 2	Selected economic and monetary		Chart 14	Demand-pull inflation	12				
	indicators for Slovakia	15	Chart 15	HICP core inflation broken down					
				by price-change intervals	12				
LIST OF CHARTS			Chart 16	Private consumption nowcast	13				
Chart 1	GDP – trend and NBS forecast	7	Chart 17	Nowcast for goods and services					
Chart 2	GDP growth estimate for the euro			exports	13				
	area in Q4 2016 and Q1 2017	7		Employment nowcast	13				
Chart 3	GDP growth estimate for Germany		Chart 19	Nowcast for GDP in Q4 2016	14				
	in Q4 2016 and Q1 2017	7	Chart 20	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>

According to the flash estimate, euro area GDP increased by 0.3%, quarter on quarter, in the third quarter of 2016. The result continued this year's favourable trend, but included changes to the national contributions to aggregate economic growth. A slight slowdown of activity growth in Germany was offset by further growth in other large economies of the euro area (France, Italy and Spain). According to monthly data, overall GDP growth was driven mainly by domestic demand.

In Slovakia, quarter-on-quarter GDP growth edged down, in line with expectations, to 0.7% (from 0.9% in the previous quarter). Monthly figures suggest the slowdown was caused mainly by the investment component and, due to a base effect, by export performance. Private consumption indicators did not improve significantly, implying that private consumption growth, despite the strengthening labour market situation, is probably not picking up.

Even though economic growth moderated, the labour market situation remained favourable.

Employment growth, for example, maintained its strong trend of previous quarters, to stand at 0.6%. The creation of new jobs is therefore likely to be even higher in 2016 than in the previous two years. Job creation is strongest in the services sector, but more subdued in industry and construction. Wage developments are reflecting the strengthening economic situation. According to monthly indicators, wage growth accelerated moderately in the third quarter, supported by strong demand as well as by labour shortages in certain economic sectors.

As for inflation, it continues to rebound from historical lows in the summer months. The annual inflation rate was, as expected, less negative in October than in September, at -0.3%. The month-on-month inflation rate was 0.3%. The upward trend is largely attributable to prices of automotive fuel and to prices of non-energy industrial goods. Petrol/diesel prices increased year-on-year for the first time in 26 months. The annual inflation rate is expected to turn positive around the turn of the year.

<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** THE REAL ECONOMY

#### 2.1 FLASH ESTIMATE OF EURO AREA GDP

According to Eurostat's flash estimate<sup>2</sup>, **euro area GDP increased by 0.3%, quarter on quarter, in the third quarter of 2016.** The growth rate was the same as in the previous quarter. Both retail trade and construction<sup>3</sup> saw growth accelerate, indicating a greater impact of domestic demand on the euro area economy. Relatively strong growth was also observed in industrial production, including in its manufacturing component. This may signal a strengthening of export activity, although available data from national statistical offices are ambiguous on this point. At the same time, available data imply rising import growth and a weakening of the impact of net exports.

As for the breakdown of euro area GDP growth by national economies, there was heterogeneity across the principal economies. In both France and Italy economic growth increased by 0.3 percentage point (to 0.2% and 0.3% respectively) and in the Netherlands it remained unchanged from the previous quarter (at 0.7%). By contrast, Germany's GDP growth moderated by 0.2 percentage point (to 0.2%) and Spain's slowed by 0.1 percentage point (to 0.7%). Slovakia remained among the fastest-growing economies in the euro area (0.7%), as did Portugal (0.8%) and Cyprus (0.7%).

**Germany's economic growth** continued to **slow** in the third quarter, **down to 0.2%** (from 0.4% in the previous quarter). According to preliminary figures, its growth was driven by private and government consumption. Investment in construction increased, in contrast to investment in machinery and equipment, which was lower in the third quarter than in the second. Net exports contributed negatively to Germany's GDP growth, as exports declined slightly and imports increased.

On the other hand, the **France's GDP growth picked up** somewhat, to stand **at 0.2%,** after contracting moderately in the previous quarter This upturn was partly accounted for by domes-

tic demand and in particular its investment component (private and public consumption growth remained the same as in the previous quarter). Changes in inventories made a strong positive contribution to GDP growth, but that impact was cancelled out by net exports, which included a marked acceleration in imports.

### 2.2 FLASH ESTIMATE OF SLOVAK GDP

The Slovak economy **grew in the third quarter by 0.7% quarter on quarter.** After registering 0.9% in the second quarter, GDP growth underwent an expected correction and returned to the level observed earlier in the year. Annual GDP growth slowed from 3.8% in the second quarter to 3% in the third.

Information on the composition of GDP growth will be released in December. Monthly indicators suggest, however, that the correction of GDP growth to its earlier level could stem from a weakening of exports and investment. As regards exports, monthly foreign trade data showed a correction caused by the base effect of strong export performance in the second quarter (reflecting a pre-summer export spike in June). Weak construction sales in the third quarter point to a drop in investment.

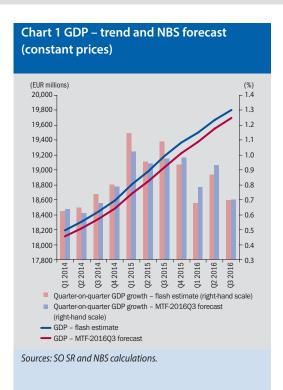
While investor hesitancy is probably persisting, household consumption growth may follow a more stable trend. At the same time, however, retail sales and consumption goods imports remain weak and are not indicating an upturn in consumption.

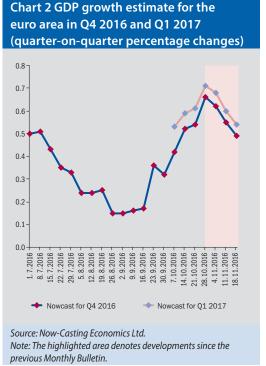
Gross domestic product is higher than projected in NBS's current Medium-Term Forecast (MTF-2016Q3) due mainly to the transfer of two large companies – the rail operator ZSSK and the Nuclear and Decommissioning Company (JAVYS) – into the general government sector. This transfer changed the way the economic output of these companies is recorded. Their contribution to GDP is now calculated using the cost of production method, whereas before it was calculated using

<sup>2</sup> Information on the composition of third-quarter GDP in the euro area and in Slovakia will be released on 6 December 2016.

<sup>3</sup> The construction data are for two months.







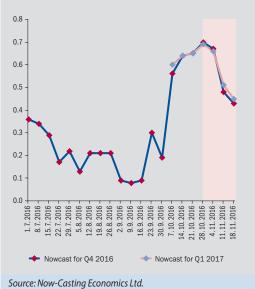
the value added method. The new method gives a higher amount than the previous method and is considered to express in financial terms the companies' potential benefit to the economy.

### 2.3 'SOFT' LEADING INDICATORS

The European Commission's **Economic Sentiment Indicator** (ESI) for the euro area increased appreciably in October, as did the ESI for Germany. The composite output **Purchasing Managers Indices** for the euro area and Germany both increased notably in October. The **Ifo** and **ZEW** leading indicators for Germany also improved.

Leading indicators, as well as nowcasts, suggest that economic growth in Germany and the euro area as a whole will continue in the fourth quarter of 2016.



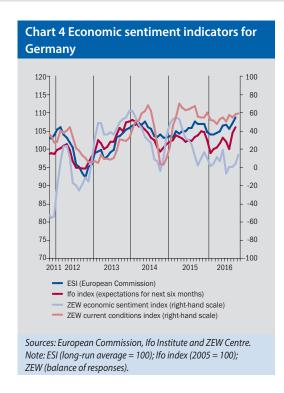


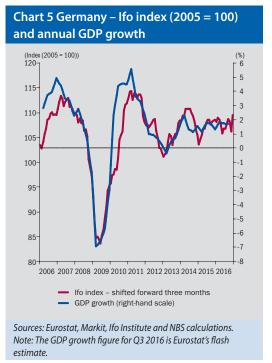
Source: Now-Casting Economics Ltd.

Note: The highlighted area denotes developments since the previous Monthly Bulletin.



### CHAPTER 2







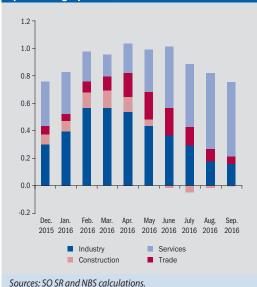
## **3** THE LABOUR MARKET

Employment grew by 0.6%, quarter on quarter, in the third quarter of 2016, more than projected in the MTF-2016Q3 forecast. Its annual growth rate was 2.4% (up from 2.3% in the second quarter).

## Chart 6 Employment according to the ESA 2010 methodology – trend and forecast (percentages)



Chart 8 Employment – sectoral contributions to three-month-on-three-month percentage changes in the three-month moving average (percentage points)



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

Chart 7 Indicator contributions to the

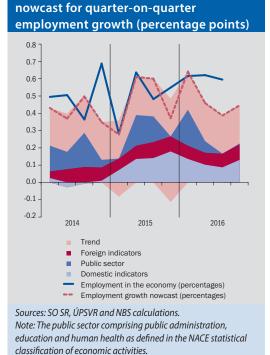
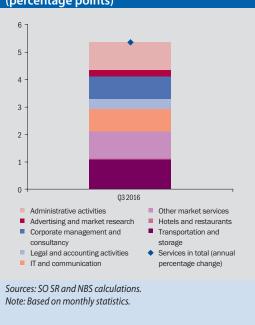


Chart 9 Sectoral contributions to employment growth in services (percentage points)



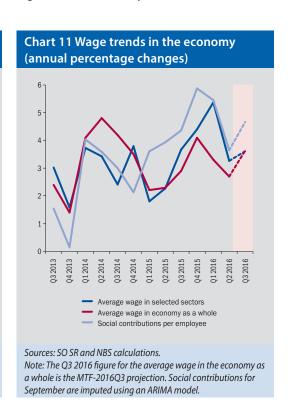


Employment growth is approaching pre-crisis levels, but monthly figures have not yet captured the extent of this growth. The likely driver of the job growth is service sector segments in which capacity is being expanded partly in order to use what is by international standards a relatively inexpensive skilled workforce. Such expansion requires comparatively low investment costs. In industry, quarter-on-quarter job growth may have weakened in the third quarter, while in the construction sector there was probably zero job creation.

Average annual wage growth in the sectors under review was 3.2% in September. Its rate for the third quarter accelerated to 3.6%, from 3.3% in the previous quarter. It may therefore

be assumed that wage growth in the economy as whole also increased, approximately in line with the MTF-2016Q3 forecast. The wage growth acceleration was largely caused by wage developments in the industry and services sectors. Wage growth in business activities is reaching a high level. In the construction sector, by contrast, wage growth is slowing owing mainly to a strong base effect from the end of last year. Wages have been buoyed by the favourable situation in labour demand and also by September's increases in teachers' salaries. The volatility of wage growth across individual months in the third quarter was related to the unusual timing of factory holiday shutdowns, and therefore the data for the quarter as a whole are more meaningful than the monthly data.

## 



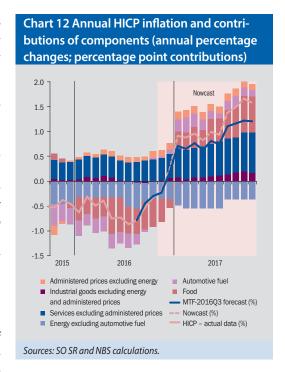


## 4 PRICES

The annual HICP inflation rate for Slovakia was less negative in October (-0.3%) than in September (-0.5%). The month-on-month inflation rate was 0.3%, which reflected seasonal increases in clothing and footwear prices and increases in prices of postal services and automotive fuel.

The negative annual inflation rate continued to moderate in October due mainly to industrial goods prices. As for energy prices, the automotive fuel component increased year-on-year for the first time in 26 months, rising by 1.9% month-on-month. At the same time, based on the available technical assumptions, petrol/diesel prices are expected to continue accelerating into the first quarter of 2017.

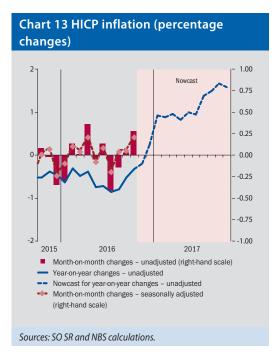
The expected increase in prices of staple food commodities, including the fading impact of VAT reductions on selected foodstuffs, is expected to be reflected in a gradual acceleration of food inflation in the coming months. Favourable labour market developments may have an impact on demand-pull inflation in the near term. Services inflation excluding administered prices continued its moderate increasing trend in October, reaching 1.7% year on year.

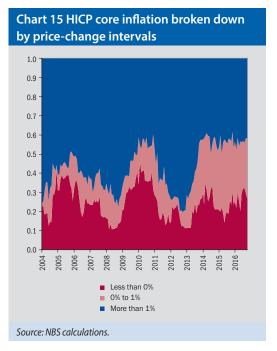


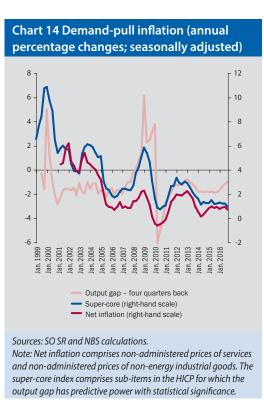
Average annual inflation in 2016 is expected to be as negative as projected in the MTF-2016Q3 forecast (-0.5%). The headline rate could turn positive in December. Inflation is expected to accelerate over the course of 2017, although the low inflation environment is expected to continue in the first half of the year.

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				
Se		September 2016 – actual figure	0.0	-2.7	-2.4	1.4	-0.5	0.7				
ange	Α	October 2016 – forecast	0.2	-2.4	-2.2	1.7	-0.3	0.9				
rch	В	October 2016 – actual figure	0.3	-2.1	-2.3	1.5	-0.3	0.8				
Year-on-year changes	B-A	October – actual figure minus forecast	0.1	0.2	-0.1	-0.2	-0.02	-0.1				
Year-	(B-A) * weight	Contribution to overall forecast error (percentage point) <sup>1</sup>	0.03	0.04	-0.02	-0.06	-0.02	-0.03				
Sources: SO SR and NBS calculations. 1) Projections taken from NBS's Medium-Term Forecast (MTF-2016Q3).												

### CHAPTER 4



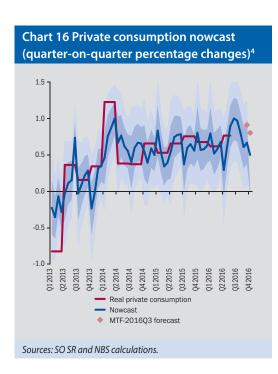


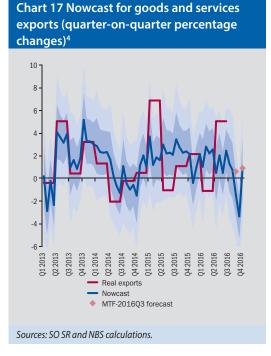


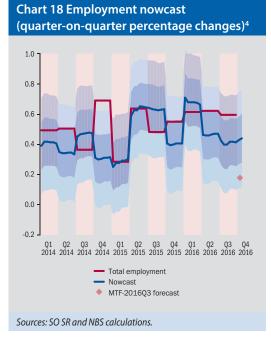


## **5** INDICATIVE IMPACT ON THE FORECAST

The nowcast for employment growth in the fourth quarter is higher than the projection in NBS's current Medium-Term Forecast (MTF-2016Q3). It reflects the fact that business survey indicators remained relatively favourable in October. The nowcast for GDP growth in the fourth quarter is in line with projections, although the private consumption nowcast is slightly lower than the forecast.



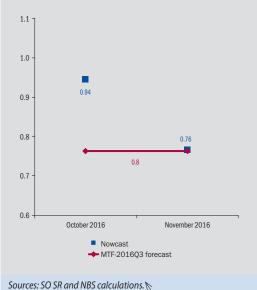




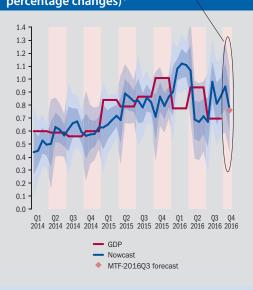
4 The band around the point estimate denotes +/- 1 and 2 times the root mean square error. Nowcasts are calculated using OLS time series models based on selected sets of monthly indicators (for employment, a factor model is used). Nowcasts provide a current estimate of future developments using available 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 20 GDP nowcast (quarter-on-quarter percentage changes)<sup>4</sup>



Sources: SO SR and NBS calculations. Note: The GDP growth nowcast excludes qualitative impacts and one-off effects (e.g. EU funds).



## 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 production 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-fi- nancial 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	-2.4	28.5	-6.2	-1.8	1.4708
2009	-5.5	0.9	-2.6	-2.0	12.1	-15.5	-16.6	77.3	-2.8	-3.3	11.0	-2,791.3	-7.8	36.3	-3.5	0.4	1.3948
2010	5.1	0.7	-2.7	-1.5	14.4	8.1	8.3	98.7	7.8	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	6.1	98.8	2.9	7.6	11.1	-3,275.7	-4.3	43.7	-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	52.2	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	54.7	1.8	4.1	1.3281
2014	2.5	-0.1	-3.5	1.4	13.2	8.6	2.6	100.4	2.5	1.2	13.1	-2,923.4	-2.7	53.6	1.2	3.8	1.3285
2015	3.6	-0.3	-4.2	2.0	11.5	7.0	7.3	99.7	11.5	6.8	13.0	-1,932.6	-2.7	52.5	0.2	2.7	1.1095
2015 Q4	4.6	-0.5	-4.8	2.0	11.0	5.1	8.4	99.0	11.5	6.8	13.0	-	-4.4	52.5	0.7	1.5	1.0953
2016 Q1	3.4	-0.5	-5.3	2.2	10.4	2.3	5.8	102.6	10.1	3.1	12.8	-	-2.0	52.2	-0.6	3.4	1.1020
2016 Q2	3.8	-0.6	-5.2	2.3	9.6	6.2	6.3	98.7	9.7	0.7	13.4	-	-1.7	53.3	1.3	4.7	1.1292
2016 Q3	3.03)	-0.7	-4.2	2.43)		1.9	1.8	102.4	9.3	3.8	12.9	-					1.1166
2015 Nov.	-	-0.4	-5.0	-	10.8	8.4	11.3	96.8	10.4	5.1	13.5	24.1	-	-	-	-	1.0736
2015 Dec.	-	-0.5	-4.5	-	10.6	5.7	9.0	96.3	11.5	6.8	13.0	-751.2	-	-	-	-	1.0877
2016 Jan.	-	-0.6	-5.2	-	10.4	1.9	2.2	102.5	11.3	4.4	12.9	8.6	-	-	-	-	1.0860
2016 Feb.	-	-0.3	-4.7	-	10.1	7.1	3.8	102.6	10.5	2.8	12.6	-842.7	-	-	-	-	1.1093
2016 Mar.	-	-0.5	-5.9	-	9.9	-1.8	5.0	102.8	10.1	3.1	12.8	-44.8	-	-	-	-	1.1100
2016 Apr.	-	-0.4	-5.6	-	9.6	7.4	12.2	99.6	10.9	3.3	12.9	232.8	-	-	-	-	1.1339
2016 May	-	-0.7	-5.6	-	9.5	9.0	8.5	98.0	10.8	1.5	13.3	-465.4	-	-	-	-	1.1311
2016 June	-	-0.7	-4.5	-	9.5	2.4	4.3	98.6	9.7	0.7	13.4	375.1	-	-	-	-	1.1229
2016 July	-	-0.9	-4.6	-	9.4	-13.9	-23.7	103.9	8.9	4.6	13.7	112.2	-	-	-	-	1.1069
2016 Aug.	-	-0.8	-4.8	-	9.4	17.2	29.6	99.9	9.0	4.7	13.0	13.1	-	-	-	-	1.1212
2016 Sep.	-	-0.5	-3.2	-	9.4	3.9	1.2	103.4	9.3	3.8	12.9	-33.2	-	-	-	-	1.1212
2016 Oct.	-	-0.3		-				102.8				223.7	-	-	-	-	1.1026

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

More detailed time series for selected macroeconomic indicators http://www.nbs.sk/\_img/Documents/\_MonthlyBulletin/2016/StatisticsMB1116.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> Flash estimate of the Statistical Office of the Slovak Republic.