



# 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
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>

Euro area industrial production began picking up again in August, as the impact of holiday shutdowns in the car industry faded. Retail sales growth was slightly lower in August than in the previous month. Hard indicators on both the output and expenditure sides still imply the continuation of euro area GDP growth. Leading indicators are likewise pointing to favourable economic activity trends in the period ahead.

In Slovakia, monthly indicators reflected the situation in the euro area, especially in the country's major trading partners. The pick-up in industrial production growth in August was driven mainly by the car industry, and translated into an increase in exports. Sales in the economy remained on an upward path, supported mainly by the industry, services and, to a lesser extent, trade sectors. Nevertheless, owing to slower sales growth in retail and wholesale trade in July and August, private consumption growth may not have accelerated in the third quarter. The GDP nowcast fell

back to the level it was at two months earlier (0.9%).

The labour market situation continues to improve. Employment growth was solid in August, with the services sector reporting the highest job creation. Wage growth accelerated, most notably in services. Perceptions of a labour shortage in some sectors and for certain positions are beginning to have an upward impact on wages. The unemployment rate remained unchanged in September, at 9.4%<sup>2</sup>.

The annual inflation rate as measured by the harmonised index of consumer prices was less negative in September than in the previous month, at -0.5%. The factors keeping inflation negative continued to be food and energy price developments. However, the rate of decrease in energy prices has been moderating, supported in September mainly by an appreciable increase in automotive fuel prices. The headline inflation rate is expected to turn positive at the beginning of next 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.

<sup>2</sup> The registered unemployment rate (seasonally unadjusted; source: ÚPVSR).



### **2** THE REAL ECONOMY

## 2.1 'HARD' INDICATORS OF ECONOMIC ACTIVITY

Monthly figures rebounded in August, as expected, after the previous set of data were subdued by holiday shutdowns, mainly in the car industry. Industrial production and foreign trade increased guite strongly in month-onmonth terms, and sales also picked up. The cumulative monthly data for the summer months (smoothing out the one-off impact of car plant shutdowns) show that industrial production, exports and sales were all higher compared with the same period of the previous year. In terms, however, of their average for the three months to end-August compared with the corresponding average three months earlier, industrial production and exports did not perform so favourably, owing to the base effect of their relatively strong growth in the second quarter.

As for sales in the economy, they increased by 1.6% in three-month-on-three-month terms. Compared with production and exports, sales were less volatile in July and August and therefore less affected by the holiday season. Their

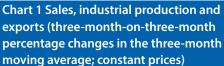
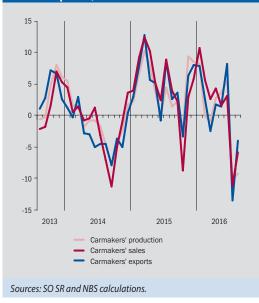




Chart 2 Automotive industry indicators (three-month-on-three-month percentages changes in the three-month moving average; constant prices)



growth was driven mainly by industry sales and to a lesser extent by the services and trade sectors. Although combined sales in wholesale trade and the selling of motor vehicles picked up in August after their deterioration in July, the recovery did not make up all the ground lost in the previous month, and in the case of internal trade alone (mainly wholesale trade, retail trade and selling of motor vehicles), sales are expected to be weaker in the third quarter than in the second quarter.

As regards average goods exports and goods imports for the three months to end-August, each remained unchanged from the previous three months. Exporters had a relatively successful second quarter, with strong growth in market shares. Given that base effect, it is difficult to expect growth to increase significantly in the period ahead.

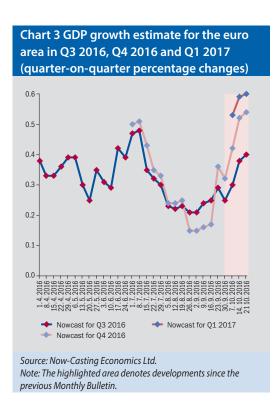
#### 2.2 'SOFT' LEADING INDICATORS

The European Commission's **Economic Sentiment Indicator** (ESI) for the euro area

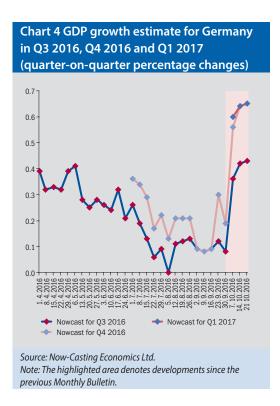


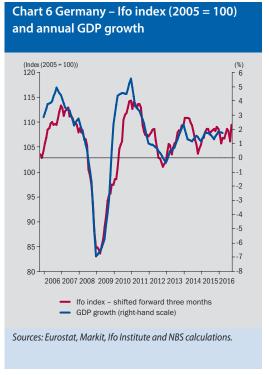
increased in September, as did the ESI for Germany. Compared with their average levels in the second quarter, the euro area ESI for the third quarter as a whole was unchanged and the German ESI was higher. The **Ifo Business** 

**Climate Index** for Germany improved considerably in September, based both on assessments of the current business situation and on expectations for the future climate. As for the **ZEW** surveys in Germany, both the econom-











### CHAPTER 2

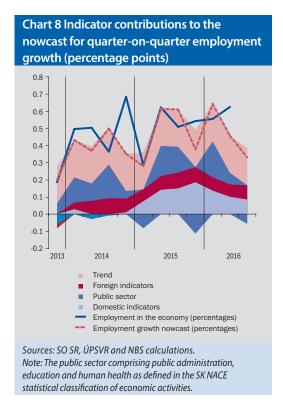
ic sentiment and current conditions indices picked up in October. The **Purchasing Managers' Indices (PMIs)** for the euro area and Germany both increased quite significantly in October, reflecting a marked acceleration of economic activity in the services sector.

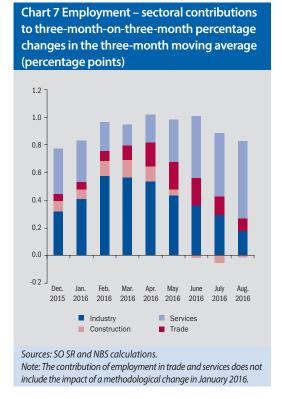
In response to the favourable picture painted by leading indicators and to August's stronger industrial production figures for the principal euro area economies, nowcast projections for GDP growth in the euro area and in Germany in the third quarter have increased to solid levels.

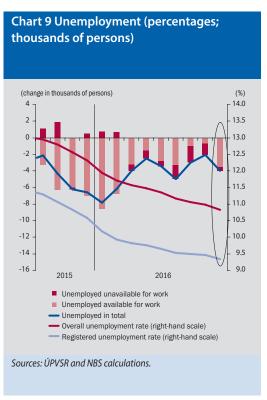


## **3** THE LABOUR MARKET

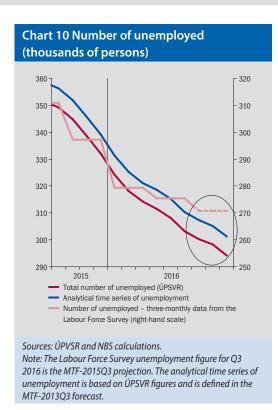
Employment growth remained solid in August, at 0.4% month on month (2.7% year on year). However, the three-month moving average indicates that employment growth may be slightly lower for the third quarter as a whole than for the second quarter. The strongest job growth is currently in the services sector, particularly in the segments of transportation and storage, information technology, administrative and support service activities, and advisory activities. In business activities, however, job growth slowed slightly. Likewise in the industry sector, employment growth was moderately lower, reflecting developments in several segments. One exception was the metal manufacturing sector, where employment has begun to pick up after weak results earlier in the year. The nowcast for employment in the third quarter shows continuing quarter-on-quarter growth, albeit curbed by expected slower job growth in the sectors of public administration, health care and education, by a slightly more moderate fall in unemployment, and subdued production in the construction sector.







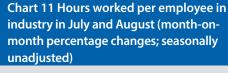


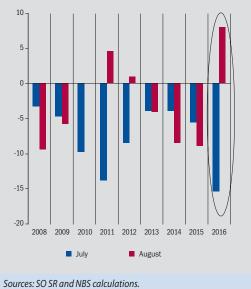


The unemployment rate maintained its downward path in September. The total number of unemployed people fell by around 4,000 month on month<sup>3</sup>. The rate of decrease in unemployment was more moderate in the third quarter than in the first half of the year. The jobless total is on course towards its pre-crisis lows and, with the number of job vacancies remaining high, that trend is expected to continue in the next period. The drop in the number of registered unemployed was accounted for mostly by job seekers finding work.

Annual average wage growth in the sectors under review accelerated to 5.1% in August, after

slowing to 2.6% in July. Partly this was caused by the timing of holiday shutdowns in industry, which compared with the previous year were more heavily concentrated in July. The resulting impact of hours worked weighed on annual wage growth in July and had the opposite effect in August. Nevertheless, the acceleration of wage growth in August was greater than the slowdown in July. Furthermore, wage growth also accelerated in the services sector, and remained at a high level in the trade and construction sectors. The main cause of the pick-up in wage growth is therefore expected to have been rising labour demand supported by solid profitability in the economy. Some employers report having significantly increased basic salaries in order to retain and attract employees.

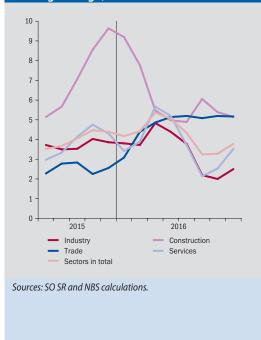




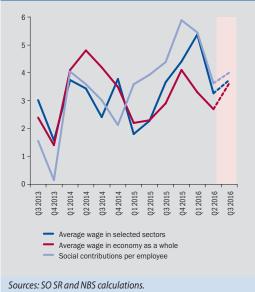
<sup>3</sup> In seasonally-unadjusted terms, the registered unemployment rate decreased month-on-month by 0.01 percentage point, to 9.42%, and the unemployment rate based on the total number of job seekers fell by 0.02 percentage point, to 10.83%.

### CHAPTER 3

# Chart 12 Wage growth (year-on-year percentage changes in the three-month moving average)



## Chart 13 Wage trends in the economy (annual percentage changes)



Note: The Q3 2016 figure for the average wage in the economy as a whole is the MTF-2016Q3 projection. The average wage in the sectors under review and social contributions up to the end of Q3 2016 are imputed using an ARIMA model.

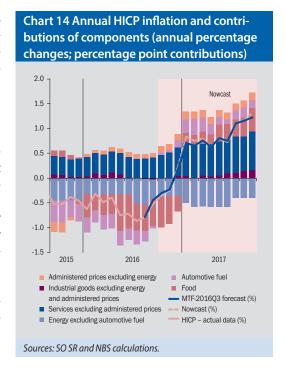


### 4 PRICES

The annual HICP inflation rate for Slovakia was less negative in September (-0.5%) than in August (-0.8). In month-on-month terms, the price level remained flat, with an increase in automotive fuel prices being offset by a decrease in food prices.

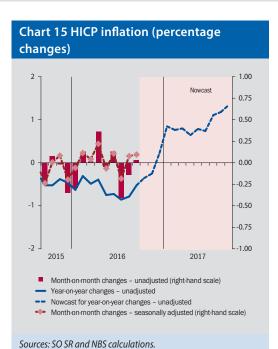
The negative annual inflation rate moderated in September due mainly to the energy component, with petrol/diesel and gas prices falling at a slower rate in line with expectations. In monthon-month terms, petrol/diesel prices increased by 2.1%, while in September of the previous year they slumped by 4.4%. This turnaround directly supported the continuing pronounced moderation in their negative annual rate of change.

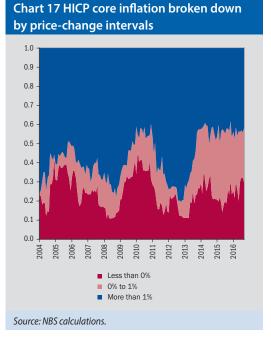
Food inflation is still expected to remain negative until the end of 2016. The expected increase in prices of staple food commodities is expected to be reflected in a gradual acceleration of food inflation. Given also that the reduction of VAT on selected food items will have a fading impact, annual food inflation is expected to turn moderately in early 2017.



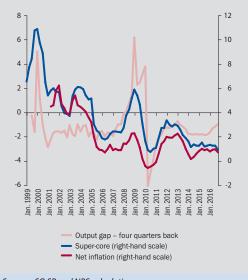
		P components – comparison c			Food	Services	HICP	Net inflation excluding fuel			
Year-on-year changes		August 2016 – actual figure	0.1	-4.7	-2.2	1.4	-0.8	0.7			
	Α	September 2016 – forecast	0.1	-2.5	-2.4	1.5	-0.4	0.8			
	В	September 2016 – actual figure	0.0	-2.7	-2.4	1.4	-0.5	0.7			
	B-A	September – actual figure minus forecast	-0.1	-0.2	0.0	-0.1	-0.08	-0.1			
	(B-A) * weight	Contribution to overall forecast error (percentage point) <sup>1</sup>	-0.03	-0.02	-0.01	-0.02	-0.08	-0.04			
Sources: SO SR and NBS calculations. 1) Projections taken from NBS's Medium-Term Forecast (MTF-2016Q3).											







# Chart 16 Demand-pull inflation (annual percentage changes; seasonally adjusted)



Sources: SO SR and NBS calculations.

Note: The net inflation index comprises non-administered prices of services and non-administered prices of non-energy industrial goods. The super-core index comprises sub-items in the HICP for which the output gap has predictive power with statistical significance.

The strength of the labour market may be starting to have an effect on the price level, albeit only a modest one. Services inflation excluding administered prices remained positive in September, at 0.2% month on month.

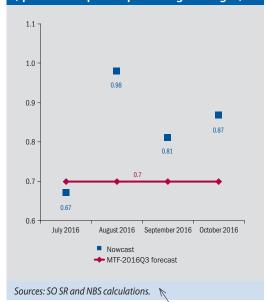
Average annual inflation in 2016 is expected to be as negative as projected in the MTF-2016Q3 forecast (-0.5%). The inflation rate is expected to be slightly less negative in October (at -0.4%) and to turn positive at the end of the year.



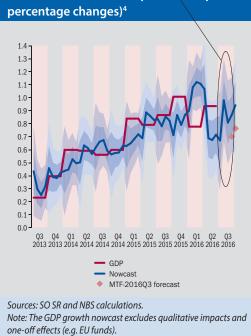
### **5** INDICATIVE IMPACT ON THE FORECAST

The nowcast for quarter-on-quarter GDP growth in the third quarter is higher than the projection in NBS's current Medium-Term Forecast (MTF-2016Q3). This difference reflects industrial production figures in Germany and Slovakia, and wage and sales figures in the sectors under review. But while the nowcast shows a slight upside risk to the outlook for overall GDP, it also shows a downside risk to the outlook for two GDP components - exports and consumption. The nowcast for employment growth is line with the MTF-2016Q3 forecast.

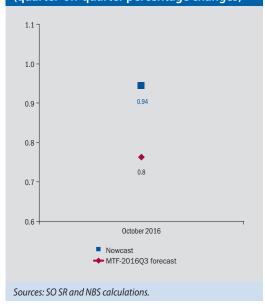
### Chart 18 Nowcast for GDP in Q3 2016 (quarter-on-quarter percentage changes)



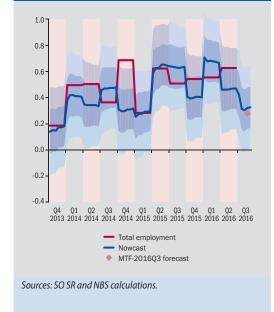
## Chart 19 GDP nowcast (quarter-on-quarter



### Chart 20 Nowcast for GDP in Q4 2016 (quarter-on-quarter percentage changes)



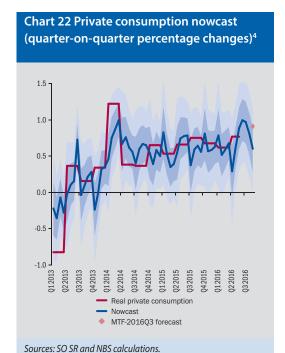
### **Chart 21 Employment nowcast** (quarter-on-quarter percentage changes)4

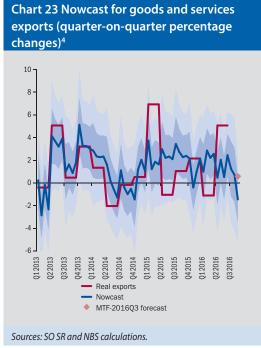


4 The band around the point estimate denotes +/- 1 and 2 times the root mean square error. Nowcasts are calculated using OLS time series models based on selected sets of monthly indicators (for employment, a factor model is used). Nowcasts provide a current estimate of future developments using available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







## 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-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	-2.3	28.2	-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	-7.9	36.0	-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	40.8	-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	-4.1	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	3.9	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	8.6	2.6	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	7.0	7.3	99.7	11.5	6.8	13.0	-1,932.6	-3.0	52.9	-1.3	2.4	1.1095
2015 Q4	4.3	-0.5	-4.8	2.0	11.0	5.0	8.2	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	2.3	5.8	102.6	10.1	3.1	12.8	-	-1.9	52.2	-1.5	3.4	1.1020
2016 Q2	3.7	-0.6	-5.2	2.3	9.6	6.2	6.5	98.7	9.7	0.7	13.4	-			0.4	4.7	1.1292
2016 Q3		-0.7						102.4				-					1.1166
2015 Oct.	-	-0.5	-5.0	-	11.0	1.3	4.8	104.0	10.2	2.9	13.3	-29.1	-	-	-	-	1.1235
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	9.1	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	-14.0	-23.7	103.9	8.9	4.6	13.7	112.2	-	-	-	-	1.1069
2016 Aug.	-	-0.8	-4.8	-	9.4	17.5	29.6	99.9	9.0	4.7	13.0	13.1	-	-	-	-	1.1212
2016 Sep.	-	-0.5		-	9.4			103.4				-33.2	-	-	-	-	1.1212

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

More detailed time series for selected macroeconomic indicators http://www.nbs.sk/\_img/Documents/\_MonthlyBulletin/2016/StatisticsMB1016.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).