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ABBREVIATIONS

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 annum
p.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 Family
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 SUMMARY¹

Euro area economic growth is expected to have remained relatively strong in the fourth quarter of 2017. This expectation is based on monthly data for industrial production and on forward looking indicators.

In Slovakia, real economy data showed an improvement in October that was in line with the projection in NBS's current forecast. Industrial production increased as expected, and so did sales and exports. The favourable figures stemmed largely from output growth in the automotive industry. Domestic demand indicators showed a positive trend. A combination of retail sales growth, improving expectations in retail trade, and brightening sentiment among households is expected to have boosted private consumption.

The labour market situation continued to improve in October. Employment increased by 3.1% year on year, with most of the new jobs being added in industry and services. Wage growth slowed slightly, although that was due to the base effect of high bonus payments in the previous year.

Annual inflation increased to 2.1% in November, with both cost-push and demand-pull factors making positive contributions. The acceleration of inflation reflected the impact of supply-side shocks on food prices. Demand-side pressures likewise had an upward impact on headline inflation, as did the pass-through of higher import prices to the non-energy industrial goods component. The inflation rate is expected to continue increasing gradually in the short term.

¹ 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

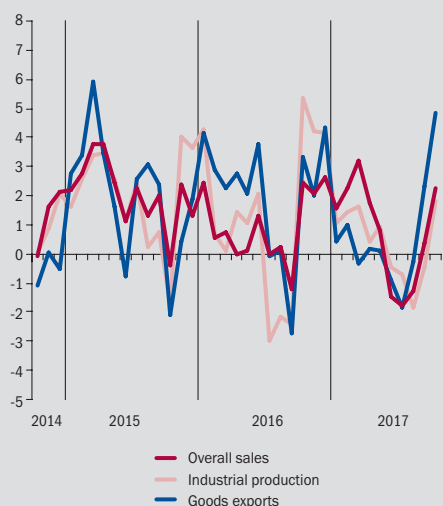
2.1 'HARD' INDICATORS OF ECONOMIC ACTIVITY

Industrial production picked up in October 2017 in three-month-on-three-month terms, and both sales growth and export growth accelerated on this measure. The main common thread running across the increased economic activity was the upturn in the automotive and petrochemical industries.

Industrial production increased by 1.8% in the three months to October compared with the previous three month period. The car industry – rebounding from a temporary slowdown related to plant retooling for the production of new car models – had a positive impact on the industrial production index. By contrast, metal manufacturing contributed negatively after performing favourably in previous months.

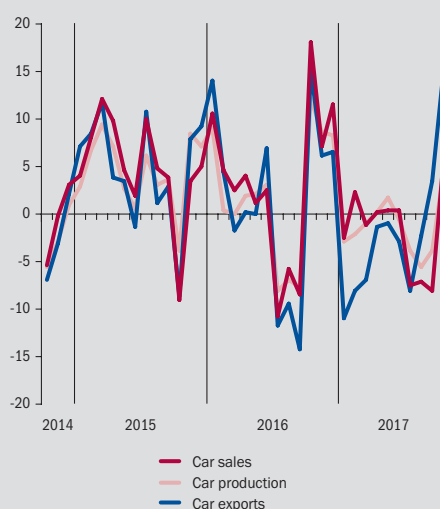
As for overall sales, their three-month-on-three-month growth rate increased to 2.2%. Besides industry, the main contributor to that growth was wholesale trade, which in October recorded

Chart 1 Sales, industrial production and exports (three-month-on-three-month percentage changes in the three-month moving average; constant prices)



Sources: SO SR and NBS calculations.

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



Sources: SO SR and NBS calculations.

increases in sales of information technologies, household goods, and machinery. Retail sales increased less than wholesale sales, but nevertheless remained at a higher level.

Growth in goods exports increased to 4.8% in October on a three-month-on-three-month basis. The increase in goods imports was commensurate to that in exports. Consumer goods imports for the retail network also increased.

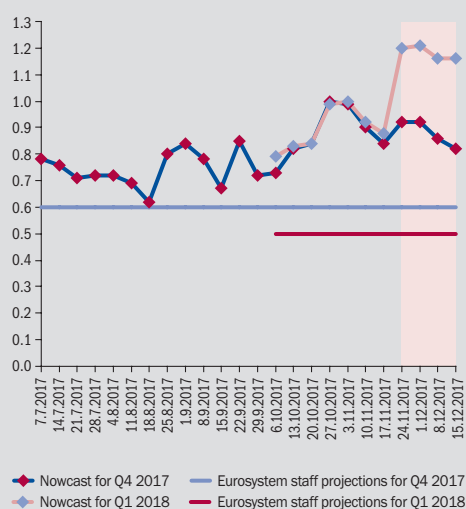
2.2 'SOFT' LEADING INDICATORS

The European Commission's **Economic Sentiment Indicator (ESI)** for the euro area increased in November and reached its highest level since 2000; the ESI for Germany was broadly unchanged. December's increase in the composite Purchasing Managers' Index (**PMI**) for the euro area indicated an acceleration of economic activity growth. The PMI for Germany rose to a six-and-a-half-year high. The **Ifo Business Climate Index** for Germany climbed to a new all-time high in November, based mainly on optimism

about the future development of the economy. The **ZEW economic sentiment index** for Germany fell slightly in December, but the current conditions index remained relatively favourable.

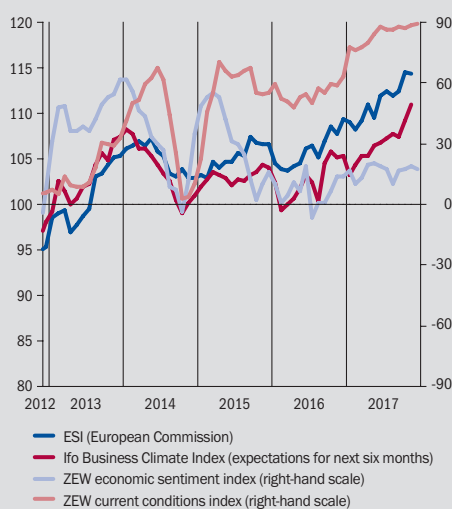
Leading indicators, as well as short-term forecasts, suggest that economic growth in both Germany and the euro area as a whole will remain strong at the end of 2017.

Chart 3 GDP growth estimate for the euro area in Q4 2017 and Q1 2018
(quarter-on-quarter percentage changes)



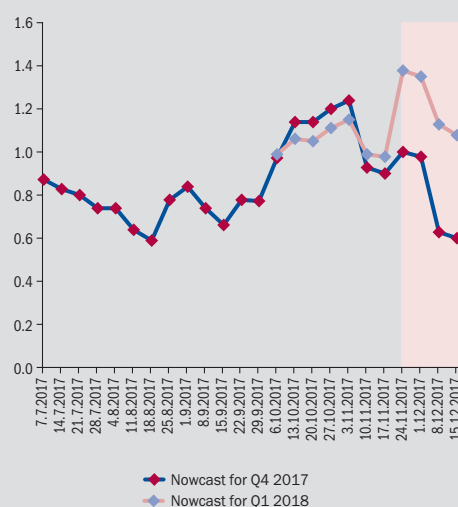
Sources: Now-Casting Economics Ltd and ECB (December 2017 Eurosystem staff macroeconomic projections for the euro area).
Note: The highlighted area denotes developments since the previous Monthly Bulletin.

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 Q4 2017 and Q1 2018
(quarter-on-quarter percentage changes)



Source: Now-Casting Economics Ltd.
Note: The highlighted area denotes developments since the previous Monthly Bulletin.

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



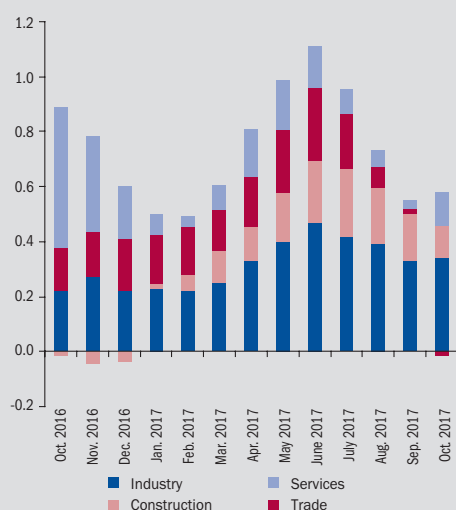
Sources: Eurostat, Markit, Ifo Institute and NBS calculations.

3 THE LABOUR MARKET

Employment across the reviewed sectors increased in October by 3.1% year on year (after increasing by 2.9% in the third quarter). In three-month-on-three-month moving average terms, employment increased by 0.6% in October. Job growth continues to be supported by stable growth in industry. In the services sector, employment growth accelerated moderately, while in trade it remained virtually flat. Monthly indicators significant for the employment outlook have been relatively favourable in the fourth quarter. This fact was taken into account in NBS's December 2017 Medium-Term Forecast (MTF-2017Q4). The view that job growth will continue is based not only on October's job figures, but also on other indicators, such as employers' expectations, registered unemployment (ÚPSVR methodology), and soft and hard indicators of economic activity in Slovakia and abroad.

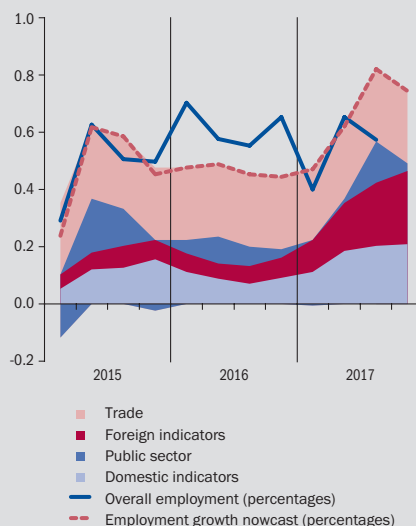
Average annual wage growth in the reviewed sectors was 4% in October, which compared with the average for the third quarter was lower by 0.4 percentage point. Most of the sectors contributed to that slowdown, with the exception of the expand-

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



Sources: SO SR and NBS calculations based on monthly figures for employment in the reviewed sectors.

Chart 8 Indicator contributions to the nowcast for quarter-on-quarter employment growth (percentage points)



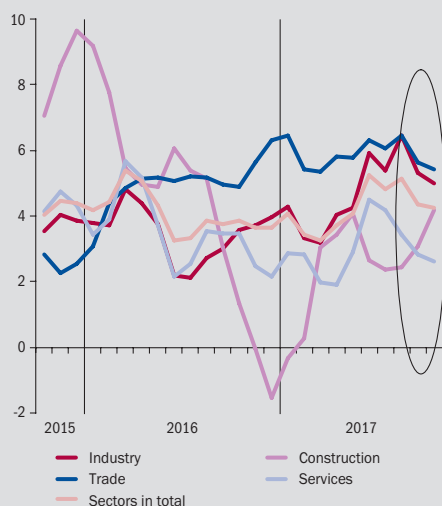
Sources: SO SR, ÚPSVR and NBS calculations.

Note: The public sector comprising public administration, education and human health as defined in the sections O, P and Q of the NACE statistical classification of economic activities.

ing construction industry, where wage growth increased to 5.6%. The trade sector also saw relatively strong average wage growth. (Some of the larger chain stores have raised wages significantly this year.) In industry, annual wage growth in October stood at 4.2%, which compared with the sector's average for the third quarter, represented the largest drop among the principal sectors. The lower wage growth in the fourth quarter is likely to be caused by a relatively significant base effect, namely the previous year's sizeable increase in bonus payments in the private and public sector. Based on the October data, it so far appears that no such increase will occur in the fourth quarter of this year. As a result, annual wage growth is expected to be lower in the fourth quarter than in the third quarter. This projection is also made in the MTF-2017Q4 forecast. Current monthly indicators implying further economic growth, unmet labour demand, and a slight pick-up in inflation are expected to support wage growth acceleration in 2018. Wage growth should also be boosted by planned increases in additional payments for work performed at nights and weekends.

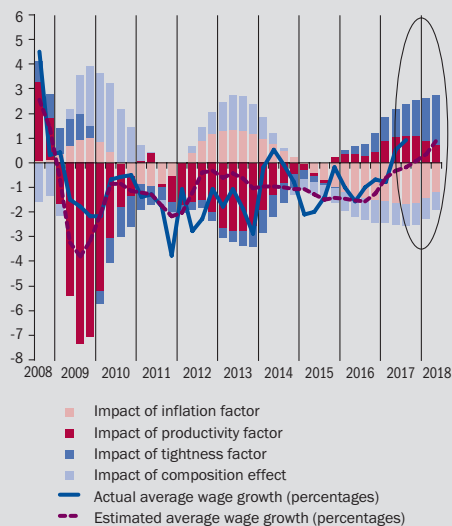


Chart 9 Wage growth by sector based on monthly figures (annual percentage changes in the three-month moving average)



Sources: SO SR and NBS calculations.

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



Sources: 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](#).

Chart 10 Wage growth trends (annual percentage changes)



Sources: SO SR and NBS calculations.

Note: Wage data for reviewed sectors in Q4 2017 is based on data for October 2017.

4 PRICES

The annual HICP inflation rate in Slovakia increased to 2.1% in November (from 1.8% in October). The increase was supported by rises in food inflation and in non-energy industrial goods inflation. In month-on-month terms, the price level increased by 0.3%.

Chart 12 HICP inflation and its components (annual percentage changes; percentage point contributions)

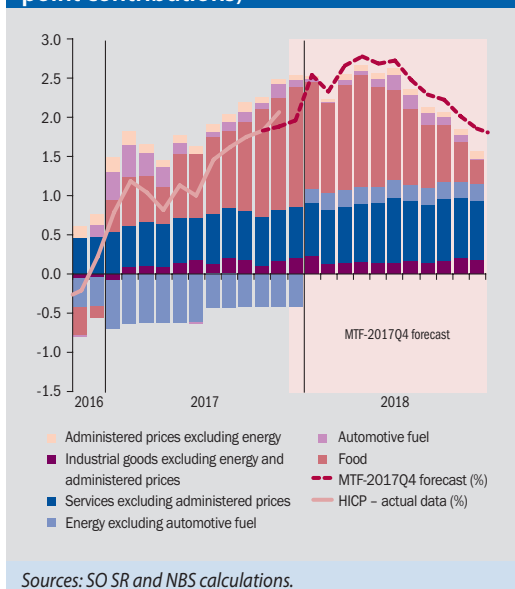
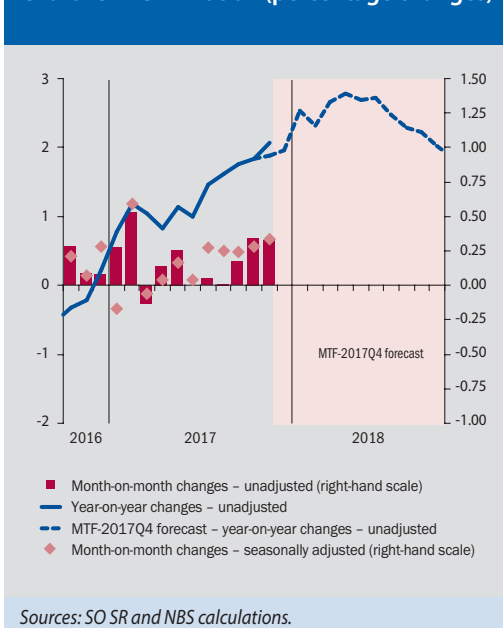


Chart 13 HICP inflation (percentage changes)



Annual food price inflation maintained its upward path in November. Supply shocks were evident mainly in egg prices, which increased by 50% month on month, and in prices of certain dairy products. Processed food inflation excluding alcohol and tobacco increased to

Table 1 HICP components – comparison of projected and actual rates of change (percentages; percentage point contributions)

			Non-energy industrial goods	Energy	Food	Services	HICP	Demand-pull inflation excluding fuel
Year-on-year changes	A	October 2017 – actual figure	0.5	-2.5	5.3	2.1	1.8	1.5
	B	November 2017 – MTF-2017Q4 forecast	0.5	-1.8	5.1	2.1	1.9	1.5
	B-A	November 2017 – actual figure minus forecast	0.2	0.0	0.5	0.0	0.18	0.1
	(B-A) * weight	Contribution to overall forecast error ¹	0.05	0.00	0.13	0.00	0.18	0.05

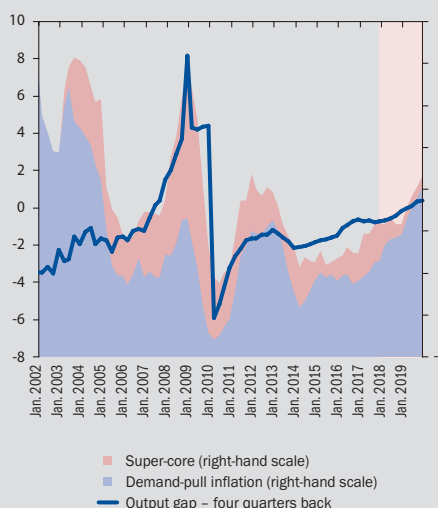
Sources: SO SR and NBS calculations.

1) Projections taken from NBS's December 2017 Medium-Term Forecast (MTF-2017Q4).

6.6%; it is expected to peak in December 2017, before decelerating amid current and projected developments in agricultural commodity prices in the European market. Non-energy industrial goods inflation also increased, moderately, in year on year terms. This category saw increases in prices of non-durable and semi-durable consumption goods, possibly resulting from strengthening consumer demand amid favourable trends in the labour market and in households' improving expectations for their financial situation. Energy price inflation was in line with projections. After five years in negative territory, energy inflation is expected to turn positive in January 2018, owing to anticipated increases in consumer prices of electricity, gas and heat. Annual services inflation was unchanged in November for a fourth successive month. Its rate in 2018 is expected to rise moderately on the basis of increases in service sector wages and in real consumer demand.

In view of current trends, the average headline inflation rate in 2017 is expected to be 1.4%, and in 2018 it is expected to accelerate above 2%.

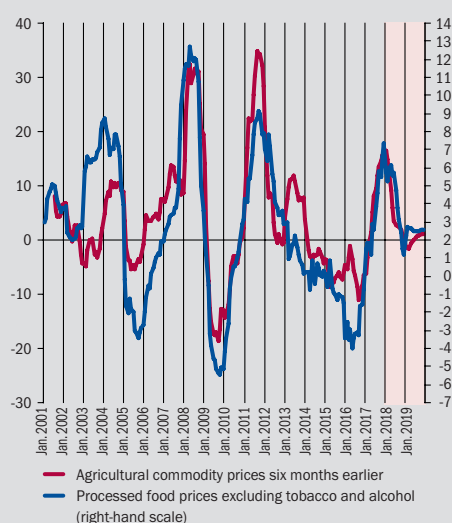
Chart 15 Trends in the HICP demand-pull component unadjusted for methodological revisions (annual percentage changes; seasonally adjusted)



Sources: SO SR and NBS calculations.

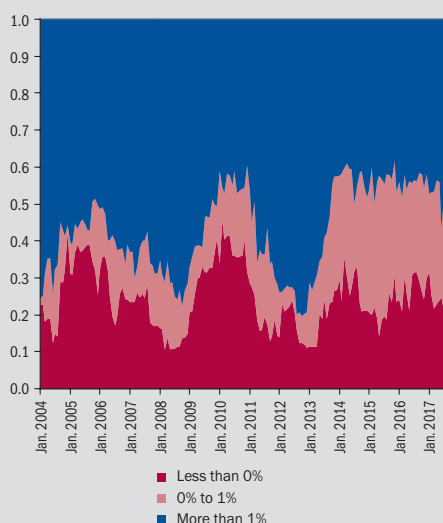
Note: Demand-pull inflation comprises the following: industrial goods excluding energy and administered prices; and services excluding administered prices. The super-core index comprises sub-items in the HICP for which the output gap has predictive power with statistical significance.

Chart 14 Trends in the HICP food component (annual percentage changes)



Sources: SO SR and NBS calculations.

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



Source: NBS calculations.

5 INDICATIVE IMPACT ON THE FORECAST

Nowcast movements and all the most recent monthly data have been incorporated into NBS's December 2017 Medium-Term Forecast (MTF-2017Q4).

Chart 17 Nowcast for employment (quarter-on-quarter percentage changes)²

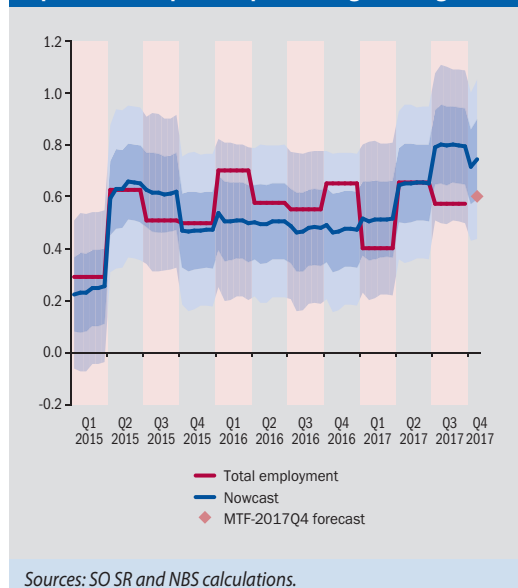


Chart 18 Nowcast for GDP in Q4 2017 (quarter-on-quarter percentage changes)

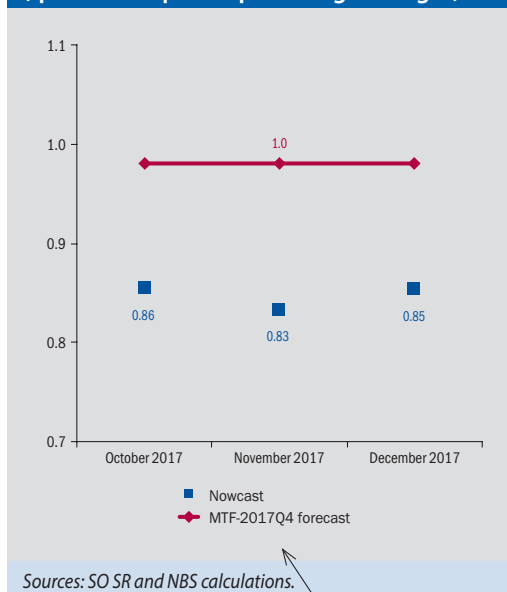
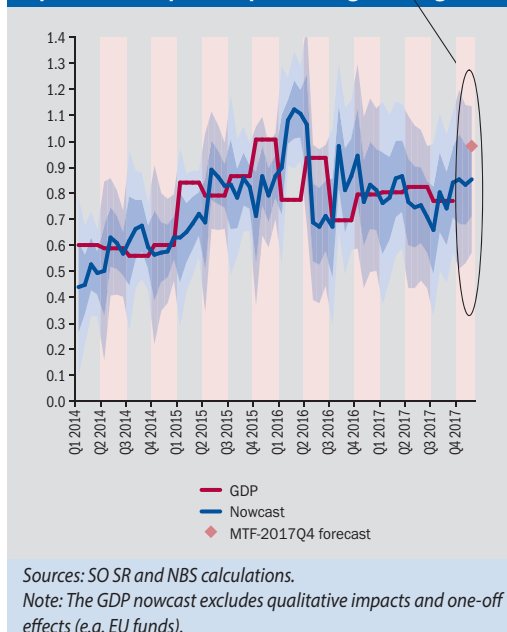


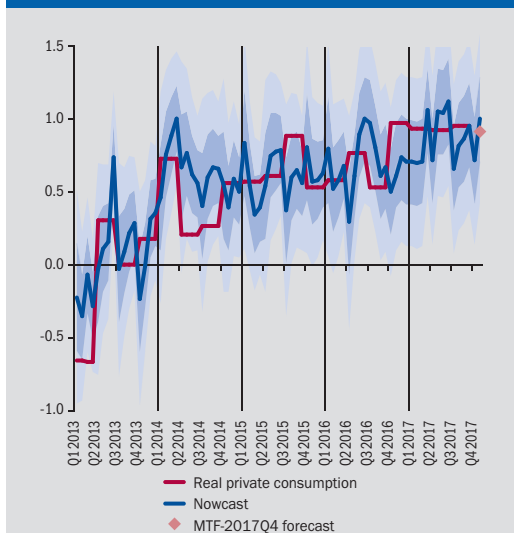
Chart 19 Nowcast for GDP (quarter-on-quarter percentage changes)²



² 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](#).

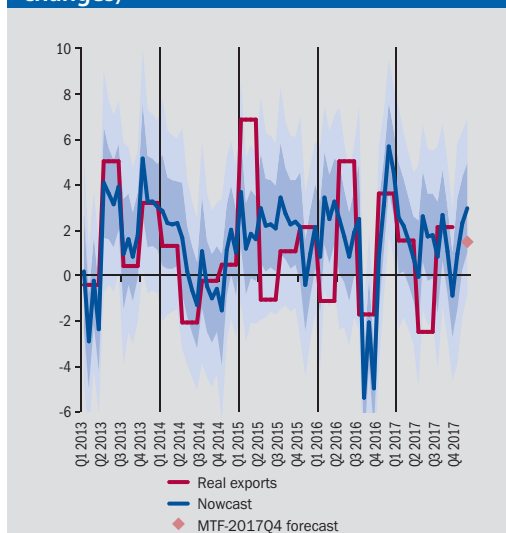


Chart 20 Nowcast for private consumption (quarter-on-quarter percentage changes)²



Sources: SO SR and NBS calculations.

Chart 21 Nowcast for goods and services exports (quarter-on-quarter percentage changes)²



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 domestic product	HICP	Industrial producer prices	Employment ESA 2010	Unemployment rate (%)	Industrial production index	Total sales of sectors ¹⁾	Economic Sentiment Indicator (long-term average=100)	M3 (for analytical use) ²⁾	Loans to private sector ³⁾	Loans to non-financial corporations ³⁾	Loans to households ³⁾	State budget balance (EUR mil.)	General government balance (% of GDP)	General government 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	-15.6	-16.5	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	8.1	8.1	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	2.8	-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	53.5	1.1	3.6	1.3285
2015	3.9	-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	52.3	-1.7	1.3	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	-2.2	51.8	-1.5	2.0	1.1069
2016 Q4	3.2	-0.1	-2.4	2.6	9.1	4.1	3.6	102.7	6.1	10.2	4.2	13.4	-	-3.6	51.9	-3.3	0.3	1.0789
2017 Q1	3.0	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	0.2	2.3	1.0648
2017 Q2	3.7	1.0	1.9	2.1	8.1	1.7	3.2	101.7	5.9	12.6	10.5	13.3	-	-0.9	51.8	-1.7	2.0	1.1021
2017 Q3	3.4	1.6	1.6	2.3	8.0	3.3	4.8	104.6	6.4	11.2	9.8	12.0	-	.	.	-2.6	0.0	1.1746
2016 Dec.	-	0.2	-1.8	-	8.8	5.8	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	4.6	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	13.0	8.3	101.6	5.7	12.0	8.5	13.8	70.7	-	-	-	-	1.0685
2017 Apr.	-	0.8	2.5	-	7.7	-3.1	4.1	101.6	6.1	12.3	9.6	13.6	-298.2	-	-	-	-	1.0723
2017 May	-	1.1	1.9	-	7.4	5.0	4.2	102.6	5.7	13.0	11.7	13.6	-256.4	-	-	-	-	1.1058
2017 June	-	1.0	1.4	-	6.9	3.2	1.1	100.8	5.9	12.6	10.5	13.3	72.6	-	-	-	-	1.1229
2017 July	-	1.5	0.6	-	6.7	9.2	7.0	102.1	5.6	11.9	9.6	13.3	53.2	-	-	-	-	1.1511
2017 Aug.	-	1.6	2.1	-	6.5	-0.4	3.9	104.0	6.7	12.1	10.4	13.3	-227.2	-	-	-	-	1.1807
2017 Sep.	-	1.8	2.1	-	6.4	2.3	3.6	107.7	6.4	12.0	10.3	13.0	-94.8	-	-	-	-	1.1915
2017 Oct.	-	1.8	2.0	-	6.1	5.4	3.9	106.3	6.8	11.3	8.3	13.1	336.2	-	-	-	-	1.1756
2017 Nov.	-	2.1	.	-	.	.	.	102.0	-229.7	-	-	-	-	1.1738

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

1) Constant prices (seasonally adjusted).

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

3) Adjusted for sales and securitisation.

More detailed time series for selected macroeconomic indicators

http://www.nbs.sk/_img/Documents/_MonthlyBulletin/2017/StatisticsMB1217.xls