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CONTENTS

1	SUMMARY	5	Chart 5	GDP growth estimate for the euro area in Q4 2015 and Q1 2016	7
2	THE REAL ECONOMY	6	Chart 6	GDP growth estimate for Germany in Q4 2015 and Q1 2016	8
2.1	'Hard' indicators of economic activity	6	Chart 7	Economic sentiment indicators for Germany	8
2.2	Leading 'soft' indicators	7	Chart 8	Germany – Ifo index and annual GDP growth	8
3	THE LABOUR MARKET	9	Chart 9	Rates of change in employment	9
4	PRICES	11	Chart 10	Employment – sectoral contributions to the three month-on-three month rate of change	9
5	QUALITATIVE IMPACT ON THE FORECAST	14	Chart 11	Wage developments in the economy	10
	OVERVIEW OF MAIN MACROECONOMIC INDICATORS FOR SLOVAKIA	16	Chart 12	Wage growth	10
	LIST OF TABLES		Chart 13	Composition of annual inflation	11
Table 1	HICP components – comparison of projected and actual rates of change	12	Chart 14	Headline inflation rate	12
Table 2	Selected economic and monetary indicators for the SR	16	Chart 15	Brent crude oil prices and futures	12
	LIST OF CHARTS		Chart 16	Demand-pull inflation	12
Chart 1	Sales, industrial production and exports	6	Chart 17	Year-on-year price changes – trend and forecast	12
Chart 2	Automotive industry indicators	6	Chart 18	GDP, industrial production and sales	14
Chart 3	Real exports of goods and services	7	Chart 19	GDP and the economic sentiment indicator	14
Chart 4	Real private consumption	7	Chart 20	Employers' expectations and employment	14
			Chart 21	Consumers' inflation perceptions and HICP inflation	14



ABBREVIATIONS

CF	Consensus Forecast
CPI	Consumer Price Index
EA	euro area
ECB	European Central Bank
EC	European Commission
EECF	Eastern Europe Consensus Forecast
EIA	Energy Information Administration
EMU	Economic and Monetary Union
EONIA	euro overnight index average
ESA 95	European System of National Accounts 1995
EU	European Union
Eurostat	Statistical Office of the European Communities
FDI	foreign direct investment
Fed	Federal Reserve System
EMU	Economic and Monetary Union
EURIBOR	euro interbank offered rate
FNM	Fond národného majetku – National Property Fund
GDP	gross domestic product
GNDI	gross national disposable income
GNI	gross national income
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
IPI	industrial production index
IRF	initial rate fixation
MFI	monetary financial institutions
MF SR	Ministry of Finance of the Slovak Republic
MMF	money market fund
MPE	Macroeconomic Projection Exercises
NARKS	National Association of Real Estate Offices of Slovakia
NBS	Národná banka Slovenska
NEER	nominal effective exchange rate
NPISHs	Non-profit Institutions serving households
OIF	open-end investment fund
p.a.	per annum
p.p.	percentage points
qoq	quarter-on-quarter
PPI	Producer Price Index
REER	real effective exchange rate
SASS	Slovenská asociácia správcovských spoločností – Slovak Association of Asset Management Companies
SO SR	Statistical Office of the Slovak Republic
SR	Slovenská republika – Slovak Republic
ULC	unit labour costs
ÚPSVR	Ústredie práce, sociálnych vecí a rodiny – Central Office of Labour, Social Affairs and Family
VAT	value-added tax
yoy	year-on-year

Symbols used in the tables

- . – Data are not yet available.
- – Data do not exist / data are not applicable.
- (p) – Preliminary data



1 SUMMARY¹

The macroeconomic indicators of production, sales and exports all grew more slowly in the third quarter in quarter-on-quarter terms, although sales and exports volumes remained at high levels. Whether the production figures pick up in the last quarter depends largely on developments in external demand, not only for cars², but also for the output of the metal and electronics industries.

Favourable labour market developments indicate, however, that the strong growth in domestic demand observed in the previous quarter may continue and help make up for losses related to external demand. This outlook is supported by figures for sales and for consumption and investment imports, as well as by the continuing labour demand in the domestic market. Employment remained on an upward path in October, and increased also in the construction sector, with a six-month lag after the revival in

construction production. Sound financial results are boosting the average wage, which increased more in the third quarter than in the first half of the year.

The upswing in the economy and labour market has still not passed through to inflation. In the absence of demand-pull pressures and with energy prices continuing to fall, the inflation rate remains negative. The annual inflation rate in November was -0.4%³. Available monthly figures for all of the main macroeconomic indicators are in line with the projections of NBS's December 2015 Medium-Term Forecast (MTF-2015Q4).

It has been confirmed that a new car plant will be established in Slovakia. This investment could be an upside risk to the GDP outlook for the years ahead. Other potential risks identified by NBS are oil prices and US demand for VW output.

Before 2015 the Monthly Bulletin included quarterly annexes on developments in the international economy and in the Slovak economy. These matters are now addressed in two separate quarterly publications, entitled "[Report on the International Economy](#)" and "[Report on the Slovak Economy](#)".

- ¹ All month-on-month and quarter-on-quarter changes mentioned in the text have been seasonally adjusted using NBS internal models.
- ² The collapse of Volkswagen's sales in the United States in November could dampen Slovakia's exports if the impact on VW Slovakia's output is not offset by increased production at other carmakers in the country. (Further details are provided on page four).
- ³ Annual rate of change in the price level as measured by the HICP.

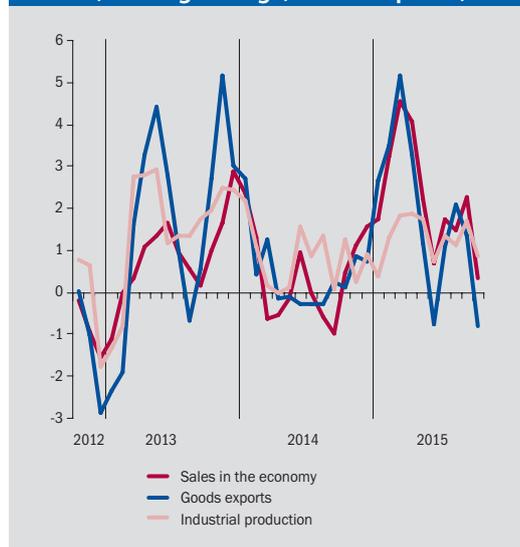
2 THE REAL ECONOMY

2.1 'HARD' INDICATORS OF ECONOMIC ACTIVITY

Owing to base effects, production, sales and exports all recorded slightly lower growth for the three months to end-October than for the previous three months. The performance of sales and production was consistent with expectations for economic developments towards the end of 2015. The deterioration in business sentiment is already suggesting that activity growth may slow slightly in the period ahead⁴. More pessimistic expectations are particularly evident in the automotive, metal and electronic industries.

As regards sales in the economy, the increase in their moving average for the three months to end-October, against the corresponding average three months earlier, eased to 0.3%. This slowdown was mainly caused by sales in the industry and wholesale trade sectors. The (so far) one-off drop in wholesale trade sales in the fourth quarter affected the business sector more than households, and domestic economic fundamentals are expected to continue supporting private consumption. Developments in the manufacture of motor vehicles had a greater impact on overall

Chart 1 Sales, industrial production and exports (per cent, three month-on-three month; moving average; constant prices)



Sources: SO SR and NBS calculations.

Chart 2 Automotive industry indicators (per cent, three month-on-three month; moving average; constant prices)



Sources: SO SR and NBS calculations.

sales growth than on overall production growth, which slowed to 0.9% in three month-on-three month terms.

Average exports for the three months to end-October fell⁵ in comparison with those for the previous three months, but they were higher than average exports for the third quarter, by 0.9%, which was almost in line with the MTF-2015Q4 projection. Exports are expected, however, to experience a certain downward correction in November, if only due to developments in US demand. While total sales of Volkswagen Group in the United States were unchanged in October in year-on-year terms, they slumped by 25% in November owing to the impact of the emissions scandal. Although Volkswagen's Slovak plant has little direct exposure to the United States, its share of car exports to the US may be rising due to the re-exportation of its cars via Germany. If Slovakia's car exports to the US fell by 25% again in 2016, production at Volkswagen Slovakia would fall by 2.7%. Providing the decline was not greater than that, the negative impact on GDP would be confined to next year, at around 0.1 percentage point.

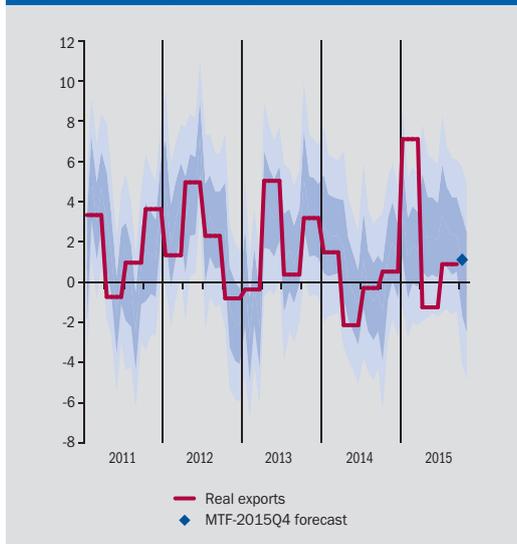
⁴ In the MTF-2015Q4 forecast, GDP growth is projected to decelerate in the first quarter of 2016, to 0.6% quarter-on-quarter.

⁵ The fall in the three-month moving average in comparison with the corresponding average for the previous three months is explained by the base effect of strong exports in June.

Cross-border goods imports, adjusted for expected price movements, were 1.1% higher for the three months to end-October than for the previous three months. With their growth exceeding export growth, the signs are that net exports will contribute negatively to GDP growth

in the last quarter of the year, as projected in the MTF-2015Q4 forecast. Investment imports continued to grow strongly, driven by imports of both industrial and non-industrial transport equipment. This suggests that fixed capital investment will maintain its growth path in last quarter of the year.

Chart 3 Real exports of goods and services (quarter-on-quarter percentage changes)⁶



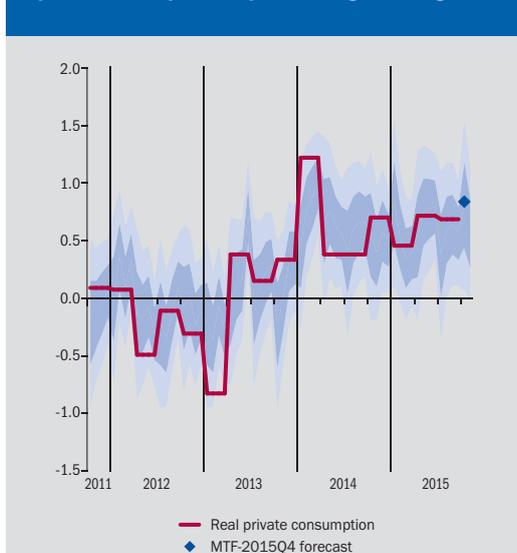
Sources: SO SR and NBS calculations.
Note: The band around the point estimate denotes +/- 1 and 2 times the root mean square error.

2.2 LEADING 'SOFT' INDICATORS

November saw favourable signs for the euro area and German economies

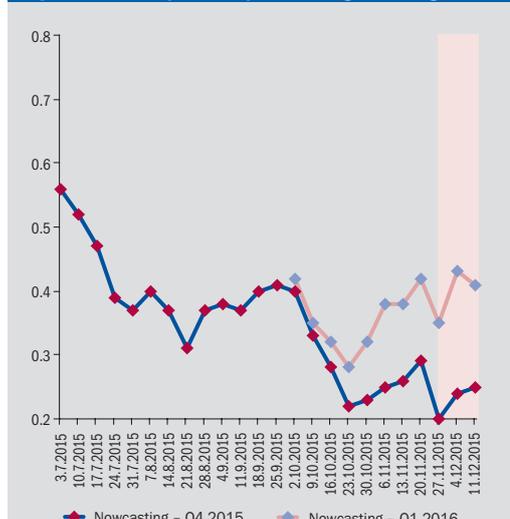
The **economic sentiment indicator** (ESI) for the euro area in November remained unchanged from the previous month (at 106.1), and the ESI for Germany edged down only slightly, to 106.9 (from 107.0 in October). Increases in the composite **Purchasing Managers' Indices** for both the euro area and Germany indicated a favourable level of economic activity. The **Ifo** and **ZEW** indices for Germany also improved in November. But while the results of several November surveys are sending positive signals for economic growth in the euro area and Germany in the fourth quarter, nowcasting forecasts suggest less favourable developments ahead. More importantly, however, the outlooks for the first quarter of 2016 are in line with the MTF-2015Q4 projections.

Chart 4 Real private consumption (quarter-on-quarter percentage changes)⁶



Sources: SO SR and NBS calculations.
Note: The band around the point estimate denotes +/- 1 and 2 times the root mean square error.

Chart 5 GDP growth estimate for the euro area in Q4 2015 and Q1 2016 (quarter-on-quarter percentage changes)



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

6 Charts 3 and 4 show nowcasting results for real growth in, respectively, exports and private consumption. Nowcasting is calculated using OLS time series models based on selected sets of monthly indicators. The indicators are entered in the models with a certain lag, so as to allow the forecast to be calculated with the required time horizon. Nowcasting therefore provides a current estimate of future developments using available monthly figures from the current quarter. The individual model projections are independent of each other and therefore forecasting error in a past quarter cannot affect current projections. Further details about the nowcasting of private consumption are available online at: http://www.nbs.sk/_img/Documents/_komentare/2014/224_HDP_kratkodoba%20pgn%20C_Rychly%20komentar.pdf



Chart 6 GDP growth estimate for Germany in Q4 2015 and Q1 2016 (quarter-on-quarter percentage changes)



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

Chart 8 Germany – Ifo index (2005 = 100) and annual GDP growth



Sources: Eurostat, Ifo Institute and NBS calculations.

Chart 7 Economic sentiment indicators for Germany



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

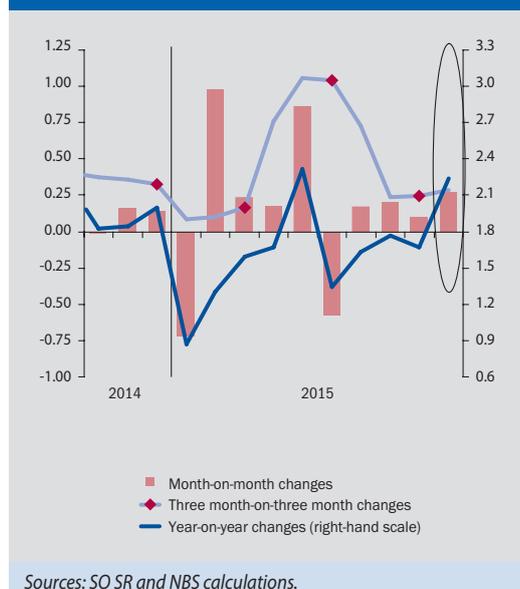
3 THE LABOUR MARKET

Employment in the sectors under review maintained its upward trend in October, with its growth rate accelerating to 2.2% year-on-year. In month-on-month terms, too, employment growth was relatively strong, at 0.3%. Labour demand continues to be supported by rising domestic demand, as is apparent from job growth in the trade and services sectors. The moderation of industrial production growth in October has not as yet passed through to the employment figures, and the number of people employed in industry continues to increase at an annual rate of around 2%. The construction sector has recently begun making a moderate contribution to overall employment growth, more than six months after production in the sector started to rebound. Expectations for employment in the months ahead remain favourable, based mainly on job growth in services, but also in other sectors. The figures for October suggest that employment growth in the fourth quarter will be similar to the MTF-2015Q4 projection⁷.

Chart 10 Employment – sectoral contributions to the three month-on-three month rate of change (moving average; p.p.)



Chart 9 Rates of change in employment (%)

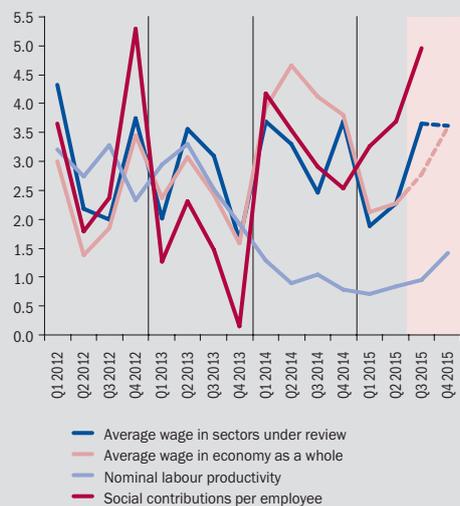


Average annual wage growth in the sectors under review was 3.9% in October (down from 4.2% in September). Wage growth remains above its average for the first half of 2015, supported by recovering corporate profits and increasing labour demand (increasing to the point that employers in some sectors are beginning to experience labour shortages). The strongest annual wage growth in October was observed in the construction sector (8.2%), followed by the trade and services sectors (4% on aggregate). In industry, however, wage growth has ceased accelerating, remaining at 3.4% for the past three months. In the MTF-2015Q4 forecast, wage growth is projected to accelerate in the fourth quarter, to 3.6%, which is more or less consistent with employment growth figures for the sectors under review.

⁷ In MTF-2015Q4, fourth-quarter employment growth is projected to be 0.4% quarter-on-quarter.



Chart 11 Wage developments in the economy (annual percentage changes)



Sources: SO SR and Social Insurance Agency.

Note: The Q4 2015 figures for the average wage in the economy as a whole and for nominal labour productivity are the MTF-2015Q4 projections. The average wage for November in the sectors under review is based on an ARIMA model forecast.

Chart 12 Wage growth (annual percentage changes; three-month moving average)



Source: SO SR.

4 PRICES

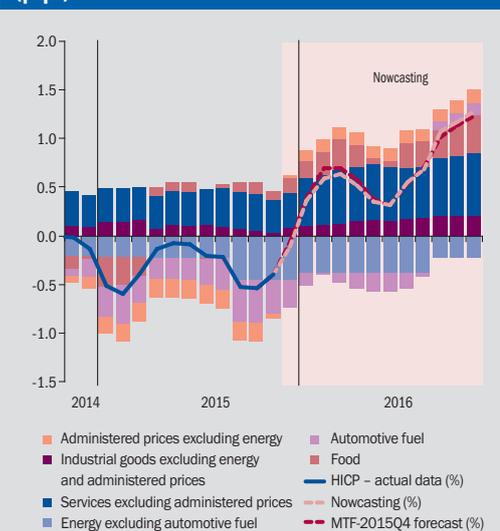
Annual inflation remains negative due to energy prices, while its other components are increasing.

The annual HICP inflation rate was slightly less negative in November 2015 (-0.4%) than in the previous month (-0.5%), while in month-on-month terms the price level remained unchanged. The November inflation figures were entirely in line with NBS's projections.

The headline inflation rate was consistent with the MTF-2015Q4 projection. Looking at its composition, the increase in the food component was slightly lower than forecast and the fall in the energy component was moderately less marked.

Given the assumed increase in agricultural commodity prices, annual food price inflation is expected to accelerate gradually in both the short-term and medium-term horizon. Import prices are not expected to pick up until the second half of 2016. Annual services price inflation excluding administered prices has been fluctuating between 1.4% and 1.6% for eighteen

Chart 13 Composition of annual inflation (p.p.)



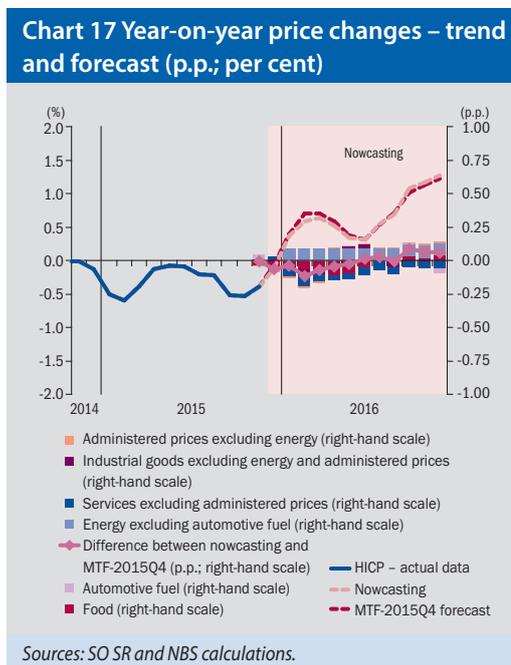
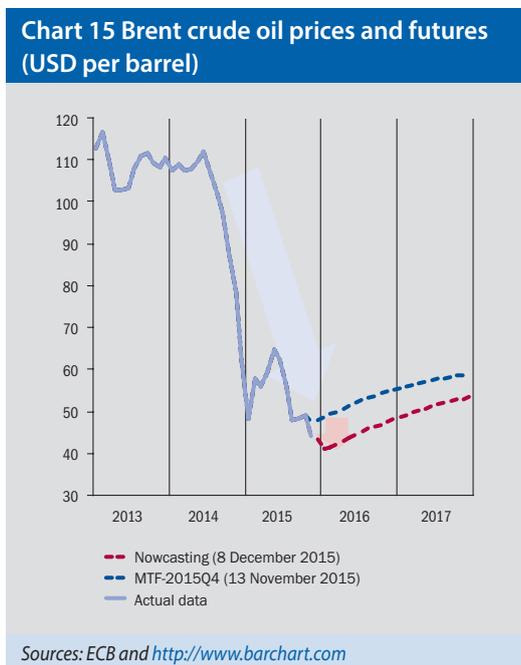
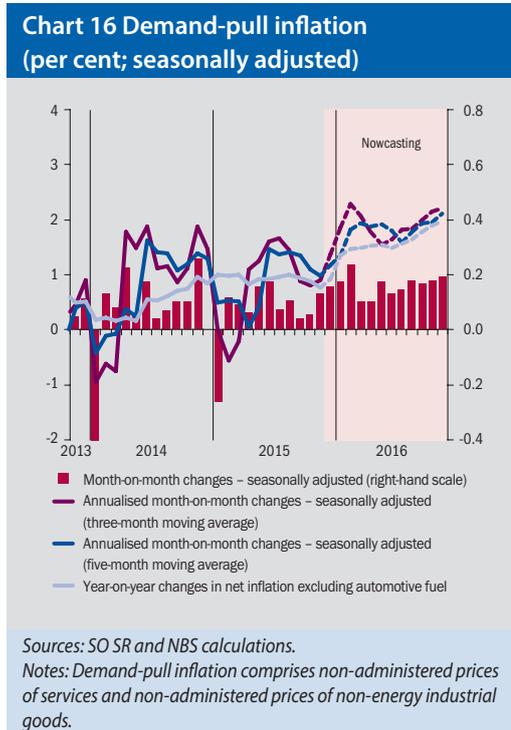
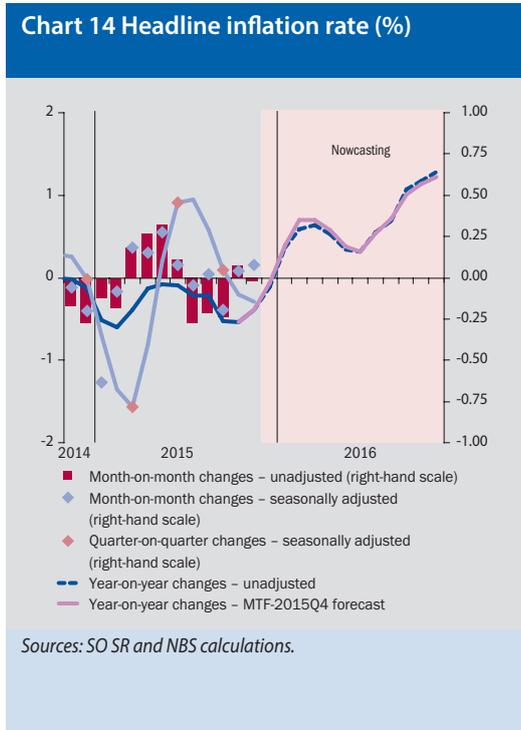
Sources: SO SR and NBS calculations.

months. Wage base growth should begin gradually putting upward pressure on services inflation from early 2016.

Table 1 HICP components – comparison of projected and actual rates of change (in percent unless otherwise stated)

		Non-energy industrial goods	Energy	Food	Services	HICP	Net HICP inflation excluding automotive fuel	
Month-on-month change	A	November 2014 – actual figure	0.2	-0.5	-0.2	-0.4	-0.2	0.2
	B	November 2015 – forecast	0.1	0.0	-0.2	0.0	0.0	0.0
	C	November 2015 – actual figure	0.1	0.2	-0.3	0.0	0.0	0.1
	BC	Contribution to difference between the forecasted and actual m-o-m inflation rate (p.p.)	0.00	0.03	-0.04	0.00	0.00	0.01
Year-on-year change	D	October 2015 – actual figure	0.2	-5.7	0.5	0.6	-0.5	0.9
	E	November 2015 – forecast	0.1	-5.3	0.5	0.9	-0.4	0.7
	F	November 2015 – actual figure	0.1	-5.1	0.3	0.9	-0.4	0.8
	AC	Base effect	insignificant	significant	insignificant	significant	significant	insignificant
	EF	Contribution to difference between the forecasted and actual y-o-y inflation rate (p.p.)	0.01	0.03	-0.04	0.00	0.00	0.01

Source: SO SR and NBS calculations.



Energy inflation is expected to remain negative throughout 2016, owing to further decreases in gas and electricity prices and to depressed oil prices. Automotive fuel prices, as expected, stopped falling in October, but there remains a risk to their outlook in the form of the response of global commodity markets and key

supply-side players to the recent decision of OPEC. Should oil prices continue to fall, additional impulses may be expected not only for prices, but also for household final consumption through the effect of income redistribution (from oil-exporting to oil-importing countries).



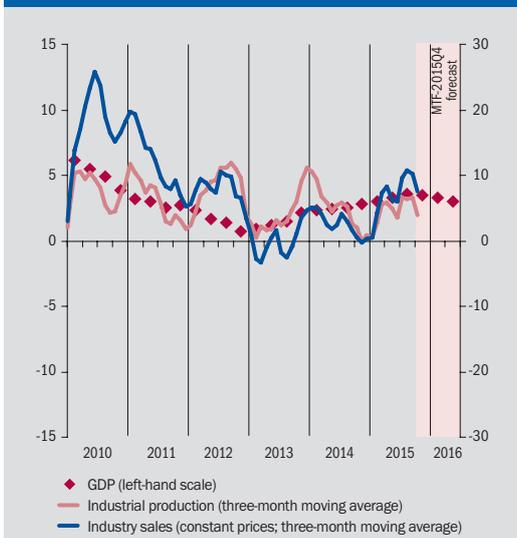
Annual net inflation excluding fuel and administered prices (i.e. demand-pull inflation) has been stable during 2015 at around 1%, despite the accelerating wage base and depreciation of the bilateral exchange rate. In MTF-2015Q4, demand-pull inflation is projected to begin accelerating again.

The headline inflation rate in 2016 is expected to be close to the MTF-2015Q4 projections. The overall price level should start increasing, year-on-year, at the beginning of 2016, owing to the assumed acceleration in markets services inflation.

5 QUALITATIVE IMPACT ON THE FORECAST

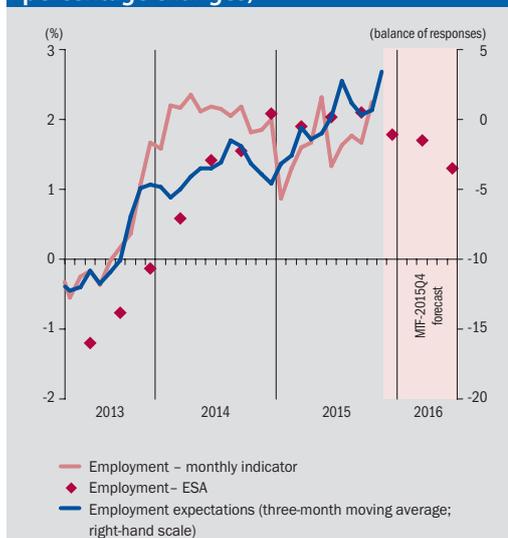
The industrial production figures for October do not yet warrant any revision of the projections made in the MTF-2015Q4 forecast. The recent deterioration in business confidence mainly implies a slowdown in export growth in early 2016. More pessimistic expectations

Chart 18 GDP, industrial production and sales (annual percentage changes)



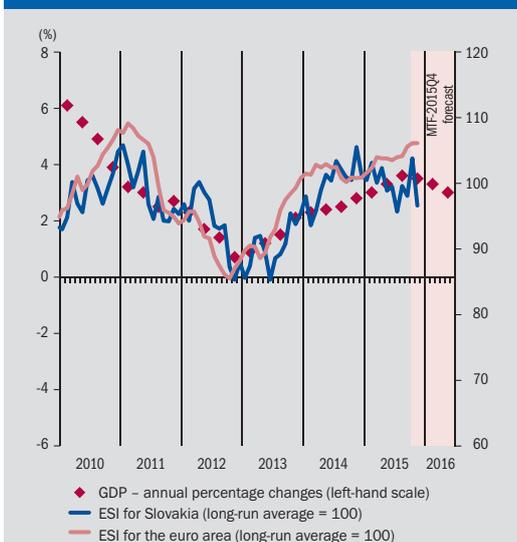
Sources: SO SR and NBS.

Chart 20 Employers' expectations (balance of responses) and employment (annual percentage changes)



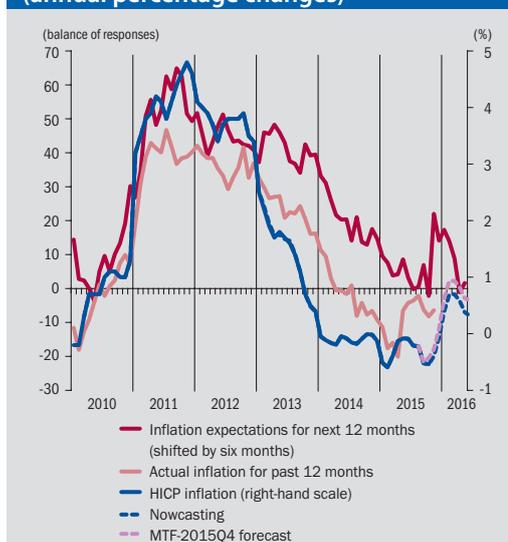
Sources: SO SR, NBS and European Commission.

Chart 19 GDP and the economic sentiment indicator



Sources: SO SR, NBS and European Commission.

Chart 21 Consumers' inflation perceptions (balance of responses) and HICP inflation (annual percentage changes)



Sources: SO SR, NBS and European Commission.



are particularly evident not only in the automotive industry, but also in the metal and electronic industries. If results in the tradables sector worsen towards the year-end, they may be partly counterbalanced by domestic demand – buoyed by favourable labour market conditions, continuing low oil prices, the improving situation in the construction sector

and further imports of investment goods. The labour market situation in October and expectations for employment growth (particularly in services) suggest that growth rates in both employment and wages in the fourth quarter could be in line with MTF-2015Q4 projections. Inflation figures were consistent with the MTF-2015Q4 forecast.



OVERVIEW OF MAIN MACROECONOMIC INDICATORS FOR SLOVAKIA

Table 2 Selected economic and monetary indicators for the SR*(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	Economic Sentiment Indicator (long-term average=100)	M3 ¹⁾ (for analytical use)	Loans to non-financial corporations	Loans to households	State budget balance (EUR mil.)	Deficit ratio (general government deficit as % of GDP)	Debt ratio (general government gross debt as % of GDP)	Current account (% GDP)	Balance of trade (% 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
2007	10.8	1.9	1.8	2.1	11.0	16.7	-	114.9	12.9	25.4	28.6	-781.0	-1.9	29.9	-5.3	-1.6	1.3705
2008	5.7	3.9	6.1	3.2	9.6	2.9	-	99.1	4.9	15.3	25.3	-704.2	-2.3	28.2	-6.2	-1.8	1.4708
2009	-5.5	0.9	-2.6	-2.0	12.1	-15.6	-18.3	77.5	-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	7.9	98.6	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	5.3	9.0	98.7	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	4.9	93.9	8.8	-2.3	10.3	-3,810.7	-4.2	51.9	0.9	3.5	1.2848
2013	1.4	1.5	-0.1	-0.8	14.2	5.2	2.3	90.4	6.4	1.7	10.2	-2,023.3	-2.7	54.6	2.0	4.1	1.3281
2014	2.5	-0.1	-3.5	1.4	13.2	3.7	2.2	100.2	2.5	1.2	13.1	-2,923.4	-2.8	53.5	0.1	3.8	1.3285
2014 Q4	2.8	-0.1	-3.5	2.1	12.6	0.6	1.0	102.4	2.5	1.2	13.1	-	-4.0	53.7	-1.6	2.0	1.2498
2015 Q1	2.9	-0.5	-3.9	1.8	12.4	5.6	3.3	101.2	5.4	2.7	13.4	-	-2.3	54.2	1.8	5.1	1.1261
2015 Q2	3.4	-0.1	-3.8	2.0	11.2	3.6	4.2	100.2	7.2	4.0	13.2	-	-2.6	54.5	-1.7	3.2	1.1053
2015 Q3	3.7	-0.3	-4.5	2.2	11.3	6.3	7.4	97.8	10.4	2.6	13.5	-	.	.	-3.2	1.2	1.1117
2014 Dec.	-	-0.1	-3.7	-	12.3	2.7	1.2	101.3	2.5	1.2	13.1	-618.4	-	-	-	-	1.2331
2015 Jan.	-	-0.5	-3.9	-	12.4	2.1	0.9	100.5	4.0	0.9	13.1	-60.5	-	-	-	-	1.1621
2015 Feb.	-	-0.6	-4.4	-	12.3	3.5	3.0	103.1	4.0	2.5	13.3	-619.5	-	-	-	-	1.1350
2015 Mar.	-	-0.4	-3.3	-	12.1	11.0	6.0	100.1	5.4	2.7	13.4	-271.7	-	-	-	-	1.0838
2015 Apr.	-	-0.1	-3.5	-	11.7	3.0	2.4	102.3	4.9	2.0	13.3	-38.8	-	-	-	-	1.0779
2015 May	-	-0.1	-3.5	-	11.5	1.1	3.5	98.9	6.2	2.9	13.0	-535.8	-	-	-	-	1.1150
2015 June	-	-0.1	-4.4	-	11.5	6.8	6.5	99.5	7.2	4.0	13.2	183.6	-	-	-	-	1.1213
2015 July	-	-0.2	-4.2	-	11.5	11.9	8.8	95.7	9.0	1.7	13.5	156.9	-	-	-	-	1.0996
2015 Aug.	-	-0.2	-4.1	-	11.3	-0.4	5.6	99.6	9.2	0.8	13.6	105.8	-	-	-	-	1.1139
2015 Sep.	-	-0.5	-5.2	-	11.4	7.2	7.7	98.1	10.4	2.6	13.5	-95.7	-	-	-	-	1.1221
2015 Oct.	-	-0.5	-5.0	-	11.0	.	.	103.8	10.2	2.9	13.3	-29.0	-	-	-	-	1.1235
2015 Nov.	-	-0.4	.	-	.	.	.	96.6	.	.	.	24.0	-	-	-	-	1.0736

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

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

More detailed time series for selected macroeconomic indicators

http://www.nbs.sk/_img/Documents/_MonthlyBulletin/2015/StatisticsMB1215.xls