



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



MEDIUM-TERM FORECAST

UPDATE Q4
2016

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

Contact:
+421 2 5787 2146

<http://www.nbs.sk>

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CONTENTS

1	UPDATE OF THE DECEMBER 2016 MEDIUM-TERM FORECAST (MTF-2016Q4U)	4
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2	TECHNICAL ASSUMPTIONS	5
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LIST OF CHARTS

Chart 1	GDP and its components	5
Chart 2	Forecast for foreign demand and for Slovak exports of goods and services	6
Chart 3	Annual HICP inflation and its components	6

LIST OF TABLES

Table 1	Update of the Medium-Term Forecast (MTF-2016Q4U) for key macroeconomic indicators	8
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1 UPDATE OF THE DECEMBER 2016 MEDIUM-TERM FORECAST (MTF-2016Q4U)¹

This update of the December 2016 Medium-Term Forecast is based on recently released details about the composition of GDP growth for the third quarter of 2016. The latest monthly indicators of the real economy's performance in the fourth quarter of 2016 are also taken into account, as are leading indicators² of the economy's development over the near term.

In their **technical assumptions**, this update and the December forecast differ mainly in the assumption for **oil prices** in 2017. **The assumption for foreign demand remained largely unchanged.**

The recently released information about economic growth in the third quarter showed a deterioration in investment activity. As a result, the projection for investment demand in 2017 has been revised down. Since a large part of overall investment is expected to be imported, the main impact of this revision has been a downward adjustment in the outlooks for imports and potential growth, without greatly affecting the short-term outlook for GDP growth. Thus **the projection for economic growth in 2017 remains unchanged, at 3.1%**. In the absence of any new information that would affect them, the **GDP growth projections for the next two years are unchanged, at 4.2% in 2018 and 4.6% in 2019**. The main drivers of growth in these years will be accelerating domestic demand and, thanks to the launch of production at a new car plant, net exports.

The favourable economic trends have resulted in a slight improvement in the outlook for the labour market. Employment growth in 2017 is expected to be slightly higher than projected in the December forecast. Given that the labour

market is tightening, the increase in job growth is expected to be partly accounted for by imported labour. While employment growth should continue to be reflected in a further fall in the unemployment rate, it is also expected to have an upward impact on wage growth.

The inflation outlook remains largely the same as in the previous forecast. The annual headline rate was in line with projections, however, its composition has slightly changed. The outlook for petrol/diesel prices has been revised up on the basis of recent increases in crude oil prices. Nevertheless, rising energy commodity prices are not expected to pass through to regulated energy prices until next year. Food prices are also expected to have an upward impact on headline inflation. Over the medium term, domestic demand is expected to pick up and support increases in industrial goods inflation and services inflation. Consequently, the projected annual inflation rate has been revised up to 1.2% in 2017, and is approaching 2% in subsequent years.

The outlook for the fiscal deficit over the projection horizon is largely unchanged, with the only revision being to the expected general government deficit in 2016. This has been reduced by 0.1 percentage point on the basis that the projected decline in spending on projects co-financed by the EU is now slightly higher than the projected decline in tax revenues.

The risks to the outlooks for real GDP growth and inflation are on the downside. Growth in Slovak exports of goods and services may be lower than projected if foreign demand is weakened by the UK's decision to leave the EU. The inflation outlook is most at risk from a lower than projected rebound in demand-pull inflation.

¹ This update of the MTF-2016Q4 forecast is abbreviated as MTF-2014Q4U. The December Medium-Term Forecast is updated each January owing to NBS's membership of the Macroeconomic Forecasting Committee (MFC), which under the Fiscal Responsibility Act is required to produce a macroeconomic and tax forecast by 15 February of each year. The December forecasts have been updated every year since 2013.

² The cut-off date for the data included in this update is 11 January 2016.

2 TECHNICAL ASSUMPTIONS

This update (MTF-2013Q4U) incorporates technical assumptions that are based on both published external data (oil prices and the exchange rate), and NBS staff projections for foreign demand.

The exchange rate² of the euro against the US dollar had a depreciating trend between the cut-off dates for the December forecast and this update. The assumption for the average exchange rate has therefore been revised down by 3.7% from the previous forecast, to USD 1.09 per euro. The nominal effective exchange rate (NEER), calculated with respect to Slovakia's 15 most significant trading partners, is 0.5% lower in this update than in the December forecast.

After the cut-off date for the December forecast there was an upswing in **oil prices**. Based on the path implied by futures markets, the price of a barrel Brent crude oil is now assumed to be USD 57.2 in 2017, USD 57.7 in 2018, and USD 57.4 in 2019. The assumptions for the oil price in euro have been revised up, by 20.4% in 2017, by 13.9% in 2018 and by 9.2% in 2019.

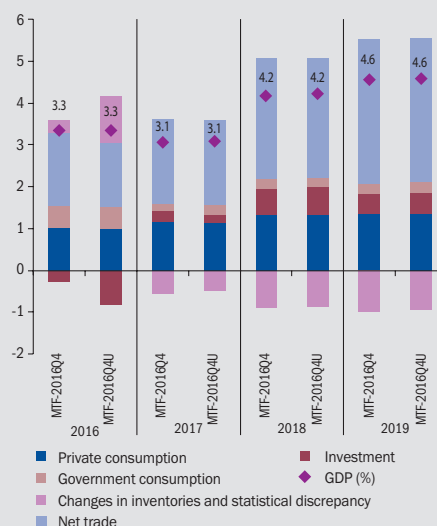
OUTLOOK FOR THE EXTERNAL ENVIRONMENT

In response to the current favourable trends in leading indicators and to an improvement in short-term projections for euro area economic growth, the projected rate of growth in Slovakia's external demand in 2017 has been revised up slightly from the previous forecast. External demand growth is now projected to reach 3.6% in 2017, accelerating to 4.1% by the end of the projection horizon.

MACROECONOMIC FORECAST FOR SLOVAKIA

This update of the December forecast takes into account the composition of GDP growth in the third quarter of 2016 and changes in technical assumptions – most notably in oil prices, but also, to a lesser extent, in the exchange rate. **The projections for Slovakia's economic growth are unchanged, at 3.1% in 2017, 4.2% in 2018 and 4.6% in 2019.** The composition of the projected GDP growth has, however, undergone some adjustment.

Chart 1 GDP and its components (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.

Note: The item 'Changes in inventories and statistical discrepancy' includes uncategorised imports that remained after the calculation of import intensity.

The composition of GDP growth in the third quarter of 2016 differed slightly from that projected in the December forecast. Fixed investment fell even further than had been expected. Some part of investment may have been in progress and recorded under 'changes in inventories and statistical discrepancy'. Even in that case, however, the fall in investment demand was greater than projected. It also appears that last year's drop in EU-funding of private investment activities was to some extent not replaced with own investment. The slowdown in fixed capital formation is expected to continue in 2017. Own investment is projected to pick up in 2018 and 2019 and the absorption of EU funds should gradually gather momentum, supporting a renewed acceleration of investment activity. The projections for investment in the car industry during these years remain unchanged.

The private consumption outlook is the same as in December, since developments in the third quarter were in line with projections and since indicators still point to the continuation of the

favourable consumption trend. Private consumption growth is expected to accelerate over the projection horizon, reflecting the improving income situation of households.

The decline in exports in the third quarter of 2016 was slightly greater than projected in the December forecast. Based, however, on monthly indicators and a slight improvement in foreign demand, the impact of the third-quarter export figures on the outlook is expected to be offset by stronger export growth in the last quarter of 2016 and first quarter of 2017. The projections for export growth during the forecast period remain unchanged, higher than the forecast for foreign demand growth. Market shares are expected to increase significantly due to the launch of new production in the car industry. Given that both domestic demand and exports deteriorated in 2016, the near term outlook for import growth has been revised down accordingly.

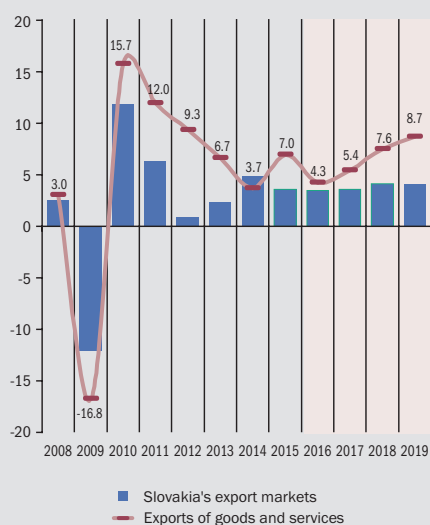
The latest monthly indicators for the labour market suggest that employment trends in the near term will be better than projected in the December forecast. As a result, the forecast for employment growth in 2017 has been revised up slightly. The higher employment growth is

expected to have only a minor downward impact on the unemployment rate, since monthly indicators are now revealing a greater inflow of foreign workers. Wage growth in 2016 is expected to be similar to the rate projected in the December forecast. Over the medium term, however, the wage growth outlook has been revised up slightly in response to declining labour market slack.

The annual inflation rate is moving in line with projections. As for the outlook for the composition of headline inflation in 2017, non-energy industrial goods inflation and services inflation have been revised down slightly. The impact of these changes, however, is offset by an upward revision of food inflation. The recent increase in crude oil prices is expected to push up automotive fuel inflation, while regulated heat prices should have a downward impact. Based on the assumptions of increasing import prices and slowly evolving demand-side pressures, the inflation rate is expected to accelerate slightly over the medium term.

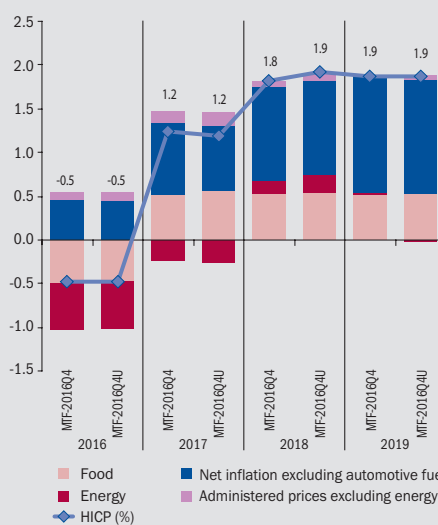
The external risks to the GDP outlook are on the downside. The decline in foreign demand could be greater than projected if uncertainty mounts

Chart 2 Forecast for foreign demand and for Slovak exports of goods and services (annual percentage changes; constant prices)



Sources: SO SR, ECB and NBS calculations.

Chart 3 Annual HICP inflation and its components (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.



about whether the UK's decision to leave the EU results in more difficult trade conditions. . Another risk to the projections is the impact of measures adopted by the new administration in the United States. The risks to the inflation outlook are tilted to the downside. The principal risk is that demand-pull inflation will be more subdued than projected.

This update does not take into account the latest price decisions that the Regulatory office for Network Industries (ÚRSO) has taken in respect of two distribution utilities – SPP (gas) and SSE (electricity) – since they were issued after the cut-off date. Based on available information, the SPP-related decision is expected to result in regulated gas prices being reduced by around 4% (this update envisaged a drop of 2.6%) with a marginal impact on headline inflation (-0.07 percentage point). As for the decision on regulated electricity prices, its impact on households cannot be calculated at this stage. It will depend on the weight to be assigned to

electricity prices in the consumption basket for 2017, based on the new tariffs and bands set for electricity prices.

Compared with the December forecast, the projected general government deficit for 2016 has been revised down by 0.1 percentage point, to 2.3% of GDP. A slight deterioration in tax revenues was more than offset by a reduction in the estimate for spending on EU co-funded projects. The fiscal deficit outlook for subsequent years is unchanged from the previous forecast, falling gradually to 1.6% in 2017, 0.8% in 2018 and 0.3% in 2019. The government debt is expected to fall to 52.0% of GDP in 2016, a drop of 0.5 percentage point compared with the previous year. This reflects the impact of reduced hoarding of liquidity maturing in 2017 and early purchases of government bonds. Given the improving outlook for the primary budget balance, the government debt-to-GDP ratio is projected to continue falling, to 51.9% in 2017, 50.5% in 2018 and 49.4% in 2019.



Table 1 Update of the Medium-Term Forecast (MTF-2016Q4U) for key macroeconomic indicators

Indicator	Unit	Actual	MTF-2016Q4U					Difference versus MTF-2016Q4			
		2015	2016	2017	2018	2019	2016	2017	2018	2019	
Prices											
HICP inflation	annual percentage change	-0.3	-0.5	1.2	1.9	1.9	0.0	0.0	0.1	0.0	
CPI inflation	annual percentage change	-0.3	-0.5	1.2	1.9	2.0	0.0	0.0	0.1	0.0	
GDP deflator	annual percentage change	-0.2	-0.4	1.3	1.9	2.1	0.0	0.0	0.0	0.0	
Economic activity											
Gross domestic product	annual percentage change, constant prices	3.8	3.3	3.1	4.2	4.6	0.0	0.0	0.0	0.0	
Private consumption	annual percentage change, constant prices	2.2	2.7	3.1	3.7	3.8	-0.1	0.0	0.0	0.1	
Final consumption of general government	annual percentage change, constant prices	5.4	2.9	1.4	1.3	1.7	0.0	0.5	0.0	0.0	
Gross fixed capital formation	annual percentage change, constant prices	16.9	-7.0	1.8	6.3	4.4	-4.7	-0.8	0.6	0.3	
Exports of goods and services	annual percentage change, constant prices	7.0	4.3	5.4	7.6	8.7	-0.5	0.0	0.0	-0.1	
Imports of goods and services	annual percentage change, constant prices	8.1	2.1	4.5	7.4	8.1	-0.6	-0.2	0.0	0.0	
Net exports	EUR millions at constant prices	4,293	6,016	6,988	7,600	8,779	76.9	251.7	236.5	223.3	
Output gap	percentage of potential output	-1.0	-0.6	-0.2	0.4	1.2	0.0	0.2	0.2	0.3	
Gross domestic product	EUR millions at current prices	78,686	80,986	84,590	89,806	95,863	-0.4	24.6	24.7	-0.4	
Labour market											
Employment	thousands of persons, ESA 2010	2,267	2,319	2,356	2,381	2,403	0.9	6.4	7.5	8.3	
Employment	annual percentage change, ESA 2010	2.0	2.3	1.6	1.1	0.9	0.0	0.3	0.0	0.0	
Number of unemployed	thousands of persons ¹⁾	314	269	244	225	209	-0.4	-3.6	-3.9	-4.6	
Unemployment rate	percentage	11.5	9.7	8.8	8.1	7.5	-0.1	-0.2	-0.2	-0.2	
Unemployment gap ²⁾	percentage points	1.9	0.2	-0.3	-0.7	-1.1	0.0	-0.1	-0.2	-0.1	
Labour productivity ³⁾	annual percentage change	1.8	1.0	1.5	3.1	3.6	0.0	-0.2	0.0	0.0	
Nominal productivity ⁴⁾	annual percentage change	1.4	0.5	2.8	5.0	5.8	-0.1	-0.2	-0.1	0.0	
Nominal compensation per employee	annual percentage change, ESA 2010	3.1	1.6	4.1	4.6	4.6	-1.1	-0.3	0.1	0.0	
Nominal wages ⁵⁾	annual percentage change	2.9	3.3	4.2	4.6	4.6	-0.1	0.2	0.1	0.0	
Real wages ⁶⁾	annual percentage change	3.2	3.9	2.9	2.6	2.6	0.0	0.2	0.0	0.1	
Households and non-profit institutions serving households											
Disposable income	constant prices	4.0	2.9	3.8	3.5	3.7	-0.8	0.4	-0.2	0.1	
Saving ratio ⁷⁾	percentage of disposable income	8.8	9.2	9.7	9.6	9.5	-0.5	-0.2	-0.4	-0.3	
General government sector⁸⁾											
Total revenue	percentage of GDP	42.9	40.5	40.7	40.6	40.1	-0.4	-0.5	-0.6	-0.5	
Total expenditure	percentage of GDP	45.6	42.9	42.2	41.5	40.5	-0.5	-0.6	-0.5	-0.4	
General government balance ⁹⁾	percentage of GDP	-2.7	-2.3	-1.6	-0.8	-0.3	0.1	0.0	0.0	0.0	
Cyclical component	percentage of trend GDP	-0.3	-0.2	0.0	0.2	0.3	-0.1	0.0	0.0	0.0	
Structural balance	percentage of trend GDP	-1.9	-1.8	-1.5	-1.0	-0.7	0.2	0.0	0.0	0.0	
Cyclically adjusted primary balance	percentage of trend GDP	-0.6	-0.5	0.0	0.4	0.7	0.2	0.0	0.0	0.0	
Fiscal stance ¹⁰⁾	year-on-year change in p. p.	-0.5	0.1	0.5	0.4	0.2	0.2	-0.1	0.0	0.0	
General government gross debt	percentage of GDP	52.5	52.0	51.9	50.5	49.4	-0.9	-0.7	-0.6	-0.7	

**Table 1 Update of the Medium-Term Forecast (MTF-2016Q4U) for key macroeconomic indicators**

Indicator	Unit	Actual	MTF-2016Q4U					Difference versus MTF-2016Q4			
		2015	2016	2017	2018	2019	2016	2017	2018	2019	
Balance of Payments											
Trade balance (goods)	percentage of GDP	2.7	3.8	3.8	4.0	4.8	-0.1	-0.4	-0.3	-0.2	
Current account	percentage of GDP	0.2	1.1	1.1	1.6	2.6	-0.2	-0.5	-0.4	-0.3	
External environment and technical assumptions											
Slovakia's foreign demand	annual percentage change	3.6	3.5	3.6	4.1	4.1	0.0	0.1	0.0	0.1	
Exchange rate (USD/EUR) ¹¹⁾	level	1.11	1.11	1.05	1.05	1.05	-0.4	-3.7	-3.7	-3.7	
Oil price in USD ¹¹⁾	level	52.4	44.2	57.2	57.7	57.4	2.4	16.0	9.7	5.2	
Oil price in USD	annual percentage change	-47.0	-15.7	29.4	0.9	-0.6	2.0	15.1	-5.8	-4.3	
Oil price in EUR	annual percentage change	-36.6	-15.5	36.5	0.9	-0.6	2.2	20.0	-5.8	-4.3	
Non-energy commodity prices in USD	annual percentage change	-16.5	-4.0	6.6	3.8	4.5	0.0	0.0	0.0	0.0	
Three-month EURIBOR	percentage per annum	0.0	-0.3	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0	
Ten-year Slovak government bond yields	percentage	0.9	0.5	0.9	1.1	1.3	0.0	0.0	0.0	0.0	

Sources: NBS, ECB and SO SR.

1) Labour Force Survey.

2) Difference between the unemployment rate and NAIRU (non-accelerating inflation rate of unemployment). A positive value indicates that the unemployment rate is higher than the NAIRU.

3) GDP at constant prices / employment – ESA 2010.

4) Nominal GDP divided by persons in employment (according to SO SR quarterly statistical reporting).

5) Average monthly wages (according to SO SR statistical reporting).

6) Wages according to SO SR statistical reporting, deflated by CPI inflation.

7) Savings ratio = gross savings / (gross disposable income + adjustments for any pension entitlement change) *100; Gross savings = gross disposable income + adjustments for any pension entitlement change – private consumption.

8) S.13; fiscal outlook.

9) B.9N – Net lending (+) / borrowing (-).

10) Year-on-year change in cyclically adjusted primary balance; a positive value denotes tightening.

11) Changes vis-à-vis the previous forecast (percentages).

Note: Changes vis-à-vis the previous forecast are calculated from rounded figures.

Time series of selected macroeconomic indicators can be found on the NBS website at http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2016/MTF-2016Q4_a.xls