NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Medium-term forecast

Update Q4 2017

Published by:

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

Contact:
info@nbs.sk

http://www.nbs.sk

Discussed by the NBS Bank Board on
30 January 2018.

ISSN 1338-1474 (online)

Contents

1 Update of the December 2017 Medium-Term Forecast (MTF-2017Q4U)[1]

This update of the December 2017 Medium-Term Forecast[2] is based on recently released details about the composition of GDP growth for the third quarter of 2017. The latest monthly indicators of the real economy's performance in the fourth quarter of 2017 are also taken into account, as are leading indicators of the economy's development in the near term.

The technical assumptions used for this update do not differ significantly from those used for the December forecast. The oil price assumptions over the forecast period are higher and the exchange rate is stronger. The assumption for foreign demand remains largely unchanged.

The detailed information about the composition of GDP growth pointed to a weakening of export growth and an offsetting increase in investment demand. While the differences in GDP composition are taken into account in this update, the overall outlook for economic growth is left unchanged. GDP growth is projected to accelerate with support from the launch of new production capacity in the car industry, to 4.3% in 2018 and 4.7% in 2019. Its rate is expected to fall back to 3.8% in 2020. Investment demand has strengthened on the supply-side of the economy, and with real GDP continuing to grow, the closing of the output gap is now expected to occur slightly later than previously envisaged, in the first quarter of this year. The economy is therefore expected to operate at equilibrium this year and then to begin overheating in subsequent years. This should be gradually reflected in demand-pull inflation.

On the back of solid economic growth, the labour market situation continues to improve in line with expectations. On the basis of leading indicators, the employment forecast for this year has been revised up slightly in this update, and the unemployment rate projection is commensurately lower. Wage growth is expected to accelerate over the forecast period in line with labour productivity growth and also supported by the tightening labour market. The wage growth projections are largely unchanged from the December forecast.

The inflation rate is forecast to remain above 2% throughout the forecast period. Compared with the December forecast, the headline inflation projection for 2019 has been revised up to reflect the upward impact on energy prices of current increases in energy commodity prices.

The outlook for the fiscal deficit over the projection horizon is not significantly different from the December outlook. The only change is in the fiscal deficit projection for 2017, which has been revised down by 0.1 percentage point on grounds of higher tax and social contribution revenues.

The risks to the GDP growth outlook were balanced in the December forecast, but are slightly on the upside in this update. The risks to the inflation outlook have undergone a similar shift.

1 This update of the MTF-2017Q4 forecast is abbreviated as MTF-2017Q4U. 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 9 January 2017.

2 Technical assumptions

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

The exchange rate[2] of the euro against the US dollar followed an appreciation trend between the cut-off dates for the December forecast and this update. The assumption for the average exchange rate is therefore 2.1% stronger in this update than in the previous forecast, at USD 1.09 per euro. Compared with the December forecast, the assumption for Slovakia's nominal effective exchange rate (NEER), calculated with respect to the country's 15 most significant trading partners, is now 0.2% weaker.

Oil price assumptions have been revised up from the December levels. Based on the path implied by futures markets, the price of a barrel Brent crude oil is now assumed to be USD 66.0 in 2018, USD 62.2 in 2019, and USD 59.6 in 2020. The assumptions for the oil price in euro have therefore also been revised up, by 5.0% in 2018, 3.3% in 2018 and 1.8% in 2020.

Outlook for the external environment

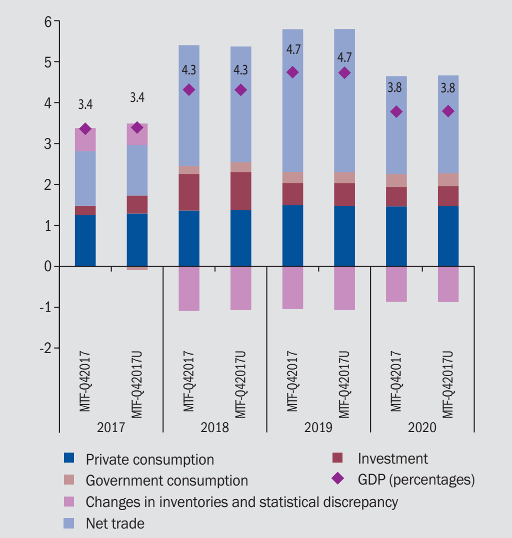
On the basis of recent leading indicator data and near-term GDP growth outlooks for the euro area, no significant changes have been made to the assumptions for Slovakia's foreign demand growth, which is assumed to increase by 5.0% in 2018, 4.4% in 2019 and 4.1% in 2020.

3 Macroeconomic forecast for Slovakia

This update of the December forecast takes into account the composition of GDP growth in the third quarter of 2017 and the latest technical assumptions. Given that external projections continue to show favourable trends and that economic growth in the third quarter was in line with expectations, the GDP growth outlook remains unchanged. **Slovakia's GDP growth is projected to be 4.3% in 2018, 4.7% in 2019, and with the fading of the impulses from new production capacity in the car industry 3.8% in 2020.**

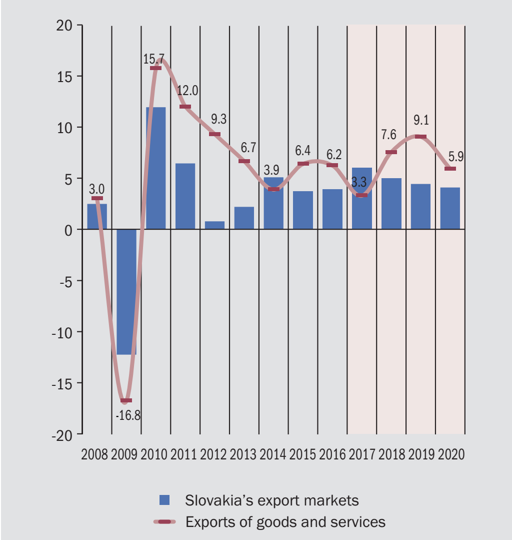
Compared with the December forecast, there have been some slight revisions to projections for the composition of economic growth. Since the pick-up in exports in the third quarter was lower than expected, the export growth forecast for 2018 has been revised down. Nevertheless, export growth is expected to accelerate this year as new investment in the car industry gradually begins to have an impact. The new car plant that begins operation in 2018 will support further acceleration of exports in 2019 as its production gathers momentum. Thereafter, these growth-supporting effects will fade and export growth will moderate in the last year of the forecast period. Even so, export growth is expected to outpace foreign demand growth, meaning that Slovakia should gain market shares.

Chart 1 Comparison of projections for 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.

Chart 2 Slovakia's foreign demand and exports of goods and services – trend and forecast (annual percentage changes; constant prices)



Sources: SO SR, ECB and NBS calculations.

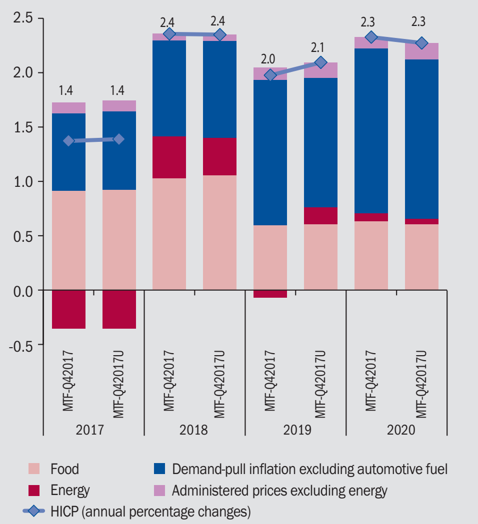
The impact of lower export growth on this year's GDP growth is expected to be offset by higher investment. Current investment demand, especially in the private sector, is higher than envisaged in the December forecast. In addition to stronger private investment, this year is expected to see an acceleration of government investment growth, owing to the increasing absorption of EU funds. Thereafter, investment growth is expected to moderate, with the fading of the impact of significant investment in the car industry.

Private consumption trends are in line with projections, as increasing confidence and the improving labour market situation boost household expenditure growth. A further moderate increase in that growth is envisaged in subsequent years as a result of rising incomes, which will surpass the impact of marginally higher consumer price inflation.

Labour market indicators at the end of 2017 were consistent with projections. At the same time, however, leading indicators were pointing to slightly better-than-expected employment figures for 2018. That data was factored into this update, and a greater rate of decrease is now projected for the unemployment rate. Nominal compensation per employee growth is expected to increase over the forecast period, reflecting labour productivity growth and further tightening of the labour market. This update takes account of the fact that employers' health insurance contributions will cease to be tax deductible from 2018. As a result, the projected growth in nominal compensation has been revised up by around 0.1 percentage point. Given higher inflation, however, no increase is envisaged in real compensation per employee.

Headline inflation at the end of 2017 was in line with the December forecast. The inflation rate in 2018 is expected to increase to 2.4%, with all components of the consumer basket projected to make a positive contribution. The supply-side shock of increasing processed food inflation is expected to continue in the first half of 2018. Energy inflation should also increase, owing mainly to hikes in electricity prices. The rising oil price is expected to have an upward impact on pump prices.

Chart 3 Comparison of projections for HICP inflation and its components (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.

Growing consumer demand is projected to push up demand-pull inflation. Over the next two years the impact of elevated food inflation should fade, and therefore the headline inflation rate is expected to fall. Compared with the December forecast, the inflation projection for 2019 has been revised up slightly to reflect higher energy prices.

The wage growth outlook in this update is subject to an upward risk that was not present in the December forecast, namely a draft Labour Code amendment intended to raise wage premiums for night work, weekend work and work performed on public holidays. The extent of its impact on prices and the real economy will depend on the content of the amendment's finally approved version and on developments in collective bargaining. The risks to the GDP growth outlook have shifted slightly to the upside. The current favourable trends in the global economy and the continuing high levels of leading indicators may, on the one hand, support an acceleration of foreign demand for Slovak exports. On the other hand, downside risks remain present in the form of geopolitical factors and the potentially later than scheduled launch of a new production in the car industry.

The risks to the inflation outlook have also moved upward, encompassing not only the possibility of higher-than-expected wage growth, but also the potentially stronger impact of domestic demand pressures and the global economic recovery. These risks may be partly mitigated by the still subdued level of imported inflation and the return of processed food prices to previous levels.

As for the fiscal projections, the fiscal deficit forecast for 2017 has been revised down by 0.1 percentage point, to 1.3% of GDP, since cash data from the end of the year suggest that VAT and social contributions revenues were slightly higher than expected and social payments were lower. The fiscal deficit projections over the forecast period remain unchanged, and the general government budget should be almost balanced by the end of the forecast period. Public debt is projected to fall over the forecast period, as government funding requirements decrease (under a rising primary surplus) and interest payments fall. The public debt is expected to be down to 45.2% of GDP in 2020.

Box 1

ESTIMATING THE IMPACT OF WAGE PREMIUMS ON NOMINAL WAGE GROWTH

Under a draft amendment to the Labour Code, wage premiums for work performed at night, at weekends and on public holidays will undergo changes beginning on 1 May 2018. These changes will be phased in over two stages (the first in May 2018 and the second a year later). Given that the final levels of wage premiums was not known when this update was being compiled (with the original proposal being modified on the basis of negotiations), the impact of the amendment was not taken into account in the wage projections of this update.

1. How wage premiums will change (according to the information available at 20 January 2018)

Wage premiums for night work, currently set at 20% of the minimum hourly wage, are expected to be raised to 30% this year and then to 40% next year. The increase will be higher for work classified as higher risk (by five percentage points in 2018 and ten percentage points in 2019). For certain employers, whose activities, by their nature, are largely carried out at night (for example, bakers), the increases in the night-work premium should be lower by five percentage points.

A new premium for weekend work, not defined in the current version of the Labour Code, is expected to be introduced from May. A distinction will be made between work performed on Saturdays and Sundays. The premium for Saturday work will be set at 25% of the minimum hourly wage from May 2018, and will be raised to 50% in 2019, while the premium for Sunday work will be set at 50% from May and at 100% next year. In this case, too, some employers will be exempted from paying the full premiums.

Premiums for work performed on public holidays are expected to be increased to 100% of the minimum hourly wage, from their current level of 50%.

The impact on average wage growth over the forecast period

Minimum hourly wages are calculated on the basis of the minimum wage, which in 2018 is set at €480 per month. The percentage rates of wage premiums and their amount in hourly terms are shown in Table A.

According to Eurostat data, night work is performed on a regular basis by around 16% of all employees, and weekend work by around 24%. Although weekend-work premiums are not at present recognised by law, many firms are already paying them under the terms of collective agreements, usually at a level of between 20% and 25% of the average wage. Night-work premiums are typically slightly higher than the current minimum requirement, while premiums for work performed on public holidays are usually at 100% of the average wage.[3]

Taking into account the difference between the minimum amount of premium payments currently stipulated by the Labour Code and the amounts actually being paid, it is estimated that the proposed premium increases will cause a cumulative 1.6% increase in the

Table A Wage premiums in terms of percentage rates and hourly amounts

Minimum hourly wage (EUR)	Night work			Weekend work		
	20%	30%	40%	25%	50%	100%
2.76	0.55	0.83	1.10	0.69	1.38	2.76

Sources: Ministry of Labour, Social Affairs and Family (MPSVR) and NBS calculations.

3 Source: *Trexima.*

average wage over the period 2018 to 2020[4]. The premiums concern only those sectors in which night work and weekend work is performed. Furthermore, the impact of the premium increases on nominal wages depends on the wage level: the lower the wage, the greater the impact. The impact will therefore be heterogeneous across employers. The ultimate impact of the premium increases on wage growth in the economy as a whole may be moderated by the terms of collective bargaining and also by reductions in the number of people employed at night and weekends.

4 *The minimum wage growth in 2019 is accounted for in the calculation.*

Table 1 Update of the December 2017 Medium-Term Forecast (MTF-2015Q4U) for key macroeconomic indicators

Indicator	Unit	Actual data	MTF-2017Q4U				Difference vis-à-vis MTF2017Q4			
		2016	2017	2018	2019	2020	2017	2018	2019	2020
Prices										
HICP inflation	annual percentage change	-0.5	1.4	2.4	2.1	2.3	0.0	0.0	0.1	0.0
CPI inflation	annual percentage change	-0.5	1.3	2.3	2.2	2.4	0.0	0.0	0.1	0.0
GDP deflator	annual percentage change	-0.4	1.2	2.2	2.6	2.8	0.0	0.0	0.0	0.0
Economic activity										
Gross domestic product	annual percentage change, constant prices	3.3	3.4	4.3	4.7	3.8	0.0	0.0	0.0	0.0
Private consumption	annual percentage change, constant prices	2.7	3.6	3.8	4.1	4.1	0.2	0.0	0.0	0.0
Final consumption of general government	annual percentage change, constant prices	1.6	-0.6	1.4	1.7	2.0	-0.5	0.2	0.0	0.0
Gross fixed capital formation	annual percentage change, constant prices	-8.3	4.0	8.5	4.9	4.3	1.8	0.1	0.0	0.0
Exports of goods and services	annual percentage change, constant prices	6.2	3.3	7.6	9.1	5.9	-0.2	-0.2	0.1	0.0
Imports of goods and services	annual percentage change, constant prices	3.7	3.9	7.7	8.4	6.0	0.1	-0.2	0.0	0.0
Net exports	EUR millions at constant prices	5,596	5,303	5,563	6,614	6,942	-265.4	-424.0	-426.5	-450.7
Output gap	percentage of potential output	-0.7	-0.4	0.2	1.1	1.7	0.0	-0.1	-0.1	-0.2
Gross domestic product	EUR millions at current prices	81,154	84,880	90,526	97,279	103,794	30.9	29.6	-13.5	-38.0
Labour market										
Employment	thousands of persons, ESA 2010	2,321	2,373	2,415	2,444	2,470	0.0	1.9	2.0	1.2
Employment (dynamics)	annual percentage change, ESA 2010	2.4	2.2	1.8	1.2	1.1	0.0	0.1	0.0	0.0
Number of unemployed	thousands of persons[1)]	266	226	205	187	171	0.0	-2.1	-2.2	-1.3
Unemployment rate	percentage	9.6	8.2	7.4	6.7	6.1	0.0	-0.1	-0.1	-0.1
NAIRU estimation[2)]	percentage points	9.1	8.3	8.0	7.8	7.7	-0.1	-0.1	-0.2	-0.1
Labour productivity[3)]	annual percentage change	0.9	1.1	2.5	3.5	2.7	0.0	-0.1	0.0	0.0
Nominal productivity[4)]	annual percentage change	0.4	2.8	4.7	6.2	5.6	-0.1	-0.2	0.0	0.0
Nominal compensation per employee	annual percentage change, ESA 2010	2.3	4.2	5.2	5.3	5.4	0.3	0.1	0.0	0.1
Nominal wages[5)]	annual percentage change	3.3	4.5	5.1	5.3	5.4	0.1	0.0	0.0	0.1
Real wages[6)]	annual percentage change	3.8	3.1	2.8	3.0	2.9	0.0	0.0	-0.1	0.0
Households and non-profit institutions serving households										
Disposable income	constant prices	3.2	2.4	3.4	4.1	4.1	-0.6	-0.2	-0.1	0.0
Saving ratio[7)]	percentage of disposable income	9.5	8.9	8.7	8.8	8.8	-0.4	-0.4	-0.4	-0.4
General government sector[8)]										
Total revenue	percentage of GDP	39.3	39.3	39.2	38.7	38.4	-0.1	0.0	0.0	0.1
Total expenditure	percentage of GDP	41.5	40.6	40.1	39.1	38.5	-0.1	0.0	0.0	0.1
General government balance[9)]	percentage of GDP	-2.2	-1.3	-0.9	-0.4	-0.1	0.1	0.0	0.0	0.0
Cyclical component	percentage of trend GDP	-0.2	0.0	0.2	0.3	0.4	0.0	0.0	0.0	0.0
Structural balance	percentage of trend GDP	-1.5	-1.0	-1.0	-0.6	-0.5	0.1	-0.1	0.1	0.0
Cyclically adjusted primary balance	percentage of trend GDP	-0.3	0.2	0.3	0.6	0.7	0.1	0.0	0.0	0.0
Fiscal stance[10)]	year-on-year change in p. p.	0.3	0.5	0.0	0.3	0.1	0.0	-0.2	0.1	0.0
General government gross debt	percentage of GDP	51.8	51.0	49.4	47.3	45.2	-0.1	0.0	-0.1	0.0

Table 1 Update of the December 2017 Medium-Term Forecast (MTF-2015Q4U) for key macroeconomic indicators (continuation)

Indicator	Unit	Actual data	MTF-2017Q4U				Difference vis-à-vis MTF2017Q4			
		2016	2017	2018	2019	2020	2017	2018	2019	2020
Balance of Payments										
Trade balance (goods)	percentage of GDP	2.0	1.1	0.5	1.6	1.7	-0.2	-0.5	-0.4	-0.4
Current acount	percentage of GDP	-1.5	-1.9	-2.4	-1.2	-1.0	-0.2	-0.5	-0.4	-0.4
External environment and technical assumptions[11]										
Slovakia's foreign demand	annual percentage change	3.9	6.0	5.0	4.4	4.1	0.0	0.0	0.1	0.0
Exchange rate (USD/EUR)[12]	level	1.11	1.13	1.20	1.20	1.20	0.1	2.1	2.1	2.1
Oil price in USD[12]	level	44.0	54.4	66.0	62.2	59.6	0.1	7.2	5.5	3.9
Oil price in USD	annual percentage change	-15.9	23.5	21.4	-5.9	-4.1	0.2	8.0	-1.5	-1.4
Oil price in EUR	annual percentage change	-15.7	21.0	14.5	-5.9	-4.1	0.0	5.4	-1.5	-1.4
Non-energy commodity prices in USD	annual percentage change	-3.9	7.9	3.3	3.4	4.3	0.0	0.0	0.0	0.0
Three-month EURIBOR	percentage per annum	-0.3	-0.3	-0.3	-0.1	0.1	0.0	0.0	0.0	0.0
Ten-year Slovak government bond yields	percentage	0.5	0.9	0.9	1.1	1.4	0.0	0.0	0.0	0.0

Sources: NBS, ECB a SO SR.
1) Labour Force Survey.
2) Non-accelerating inflation rate of unemployment (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) Saving 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) B9n – Net lending (+) / borrowing (-).
10) Year-on-year change in cyclically adjusted primary balance; a positive value denotes a restrictive stance.
11) Year-on-year percentage changes and differences vis-à-vis the previous forecast are calculated from unrounded figures.
12) Changes vis-à-vis the previous forecast (percentages).

Time series of selected macroeconomic indicators can be found on the NBS website at
http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2017/P4Q-2017_a.pdf