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1 Summary

Slovakia's economic growth remained robust in the second quarter of 2016, higher than projected in the June 2016 Medium-Term Forecast (MTF-2016Q2). The composition of GDP growth changed slightly, with net exports making the largest contribution. Domestic demand also had a positive impact, as private consumption picked up amid a favourable labour market situation.

In view of the better than expected economic situation, in particular the strong export performance in the second quarter, **the GDP growth forecast for 2016 has been revised up to 3.5%** (by 0.2 percentage point from the previous forecast). The favourable development outweighed the effects of weaker domestic demand and a worsening external environment. GDP growth is now expected to decelerate in 2017, to 3.3% (a downward revision of 0.2 percentage point from the previous projection). Next year could see repercussions from the UK's vote for leaving the European Union ('Brexit'). **Economic growth is expected to accelerate in 2018 to 4.2%** (unchanged), boosted by the launch of production at a new car plant.

The labour market is expected to see a repeat of the previous year's trends, with strong growth in both employment (2%) and real wages (3.9%). Most of the new jobs are being created in services and industry, and that situation is expected to continue. Tensions may appear in the labour market over the projection horizon, as certain sectors start to face labour shortages. This will support increasing recruitment of older people and foreigners, and will probably also push up negotiated wages. Given, however, the impact that increasing inflation will have on nominal wages, the high saving ratio is expected to fall gradually with an upward effect on private consumption.

The average annual inflation rate for 2016 is expected to be negative (-0.5%), owing mainly to food and energy price developments. The price level should, however, begin rising from next year, due to increases in food and energy prices and, to a lesser extent, non-energy industrial goods prices. The headline inflation rate is expected to reflect strengthening consumer demand. Looking further ahead, the inflation rate in 2018 is expected to approach 2%, based on assumed increases in commodity prices, import prices and domestic demand.

Both the real GDP and inflation outlooks are subject to balanced risks.

This forecast includes two boxes. The first estimates the impact of the Brexit vote on the Slovak economy. The second explains the higher labour force participation rate and its impact on key labour market indicators over the projection horizon.

Table 1 GDP and inflation projections (annual percentage changes)

	MTF-2016Q3			Difference vis-à-vis MTF-2016Q2		
	2016	2017	2018	2016	2017	2018
GDP	3.5	3.3	4.2	0.2	-0.2	0.0
HICP	-0.5	1.1	1.7	-0.2	-0.1	-0.1
Demand-pull inflation[1)]	0.9	1.6	2.0	-0.1	0.0	-0.2

Sources: SO SR and NBS.
1) This is the HICP inflation rate excluding food, energy and administered prices. It better reflects domestic price pressures than does the overall HICP and, when external shocks fade, it is a better indicator of the future inflation path.

2 Current developments in the external environment and in Slovakia

Euro area GDP growth slowed in the third quarter

Euro area real GDP increased in the second quarter of 2016 by 0.3% quarter on quarter, after growing by 0.5% in the first quarter. The growth was driven mainly by net exports and partly also by domestic demand, which decelerated due to weakening growth in private and public consumption and stagnation in investment. All but one of the major national economies in the euro area reported a slowdown in economic activity. The exception was the Netherlands, where growth remained unchanged from the previous quarter (at 0.6%). Growth fell most sharply in France (by 0.7 percentage point) and in Italy (by 0.3 percentage point), recording a zero rate in both countries. Germany saw its GDP growth fall to 0.4%, but continued to have a positive impact on the performance of the euro area economy as a whole. Spain's growth rate remained solid (at 0.7%), albeit slightly more moderate compared with the previous quarter. The available leading indicators are not providing a clear picture of the period ahead, but it is generally expected that economic growth will decelerate. The annual HICP inflation rate in August was the same as in July, at 0.2%. Energy inflation became less negative, but still remained strongly negative.

In Slovakia, as in the euro area, economic growth was driven mainly by net exports and partly by private consumption[1]

Slovakia's GDP growth in the second quarter was 0.9% in quarter-on-quarter terms, exceeding the projection in the previous forecast. The principal contributors to that growth were exports of goods (mainly cars and electronics) and services (supported by an increase in the number of foreign tourists to Slovakia). Private consumption continued to grow amid favourable labour market conditions and a low-inflation environment. After its expected sharp fall in the first quarter, investment increased moderately in the second quarter, owing mainly to relatively strong investment demand in the private sector.

The labour market situation reflected the buoyancy of the economy. Employment growth in the second quarter was higher than projected in the previous quarter (0.6% quarter on quarter). The strongest job growth was in the services and trade sectors. This favourable trend was accompanied by a fall in the unemployment rate. Annual wage growth continued to ease, reflecting lower wage growth in industry and the public sector. On the other hand, wage growth increased in the trade and service sectors.

The inflation rate remained negative in the second and third quarters, slightly more negative than projected in the previous forecast. Food prices exerted the largest drag, owing to pipeline pressures from very low food commodity prices. Both industrial goods inflation and services inflation were subdued. Their rates are reflecting mainly cost-push factors and low import prices, and not as yet the strengthening of domestic demand.

1 *For further details, see the "Report on the Slovak Economy – September 2016".*

3 Technical assumptions of the forecast[2]

3.1 COMMODITIES AND THE EXCHANGE RATE

The exchange rate[3] of the euro against the US dollar depreciated slightly between the cut-off dates for the previous forecast (early May) and this MTF-2016Q3 forecast. In this forecast, the assumption for the average exchange rate is USD 1.12 per euro, 2% lower than the assumption in the June forecast. The nominal effective exchange rate (NEER), calculated with respect to Slovakia's 15 most significant trading partners, is 0.2% lower in this forecast than in the previous forecast.

The **Brent crude oil price** is assumed to be moderately higher compared with the previous forecast. Based on the path implied by futures markets, the price of a barrel Brent crude oil is assumed to be USD 43.9 in 2016, USD 50.7 in 2016, and USD 53.5 in 2018. The assumptions for the oil price in euro have been revised up, by 2.5% in 2016 and by around 6% in 2017 and 2018.

3.2 FOREIGN DEMAND

The recovery in euro area activity is expected to continue, albeit at a slower pace. According to the forecast, domestic demand should remain the mainstay of GDP growth, supported notably by the ECB's accommodative monetary policy stance and moderately expansionary fiscal stance in 2016. Extra-euro area exports are significantly affected by a downward revision of euro area foreign demand, largely related to the weaker UK outlook. Euro area labour market conditions should continue to improve over the projection horizon. In annual terms, GDP is expected to grow by 1.7% in 2016 and by 1.6% in 2017 and 2018. Compared with the ECB's June 2016 projections, the growth forecast for 2016 has been revised up by 0.1 percentage point and the forecasts for 2017 and 2018 are each lowered by 0.1 percentage point[4].

The projections for **Slovakia's foreign demand** have been revised down in view of the weakening recovery of the global economy as well as the impact of Brexit on Slovakia's trading partners. The assumptions for Slovakia's foreign demand growth are 3.4% in 2016, rising to 3.7% in 2017 and 4.3% in 2018.

2 *The technical assumptions of this Medium-Term Forecast are based on the "September 2016 ECB staff macroeconomic projections for the euro area", with a cut-off date of 18 August 2016. The assumptions for the EUR/USD exchange rate, Brent oil prices and Slovakia's foreign demand were updated as at 7 September 2016.*

3 *The bilateral EUR/USD exchange rate is assumed to remain unchanged over the projection horizon at the average level prevailing in the ten-working day period ending on the cut-off date.*

4 *According to the "September 2016 ECB staff macroeconomic projections for the euro area".*

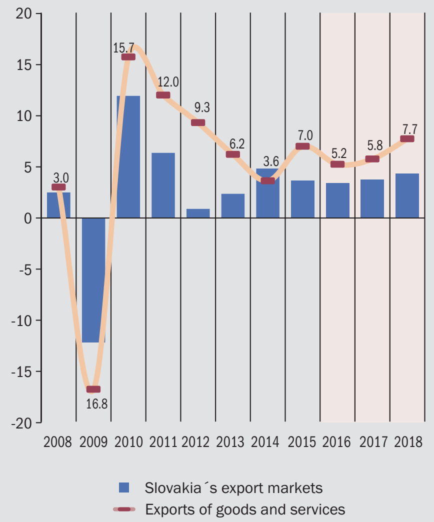
4 Macroeconomic forecast for Slovakia

4.1 ECONOMIC GROWTH

Brexit weighing slightly on export growth

Export growth is expected to moderate in 2016 owing to developments in foreign demand. Slovakia should nevertheless continue to gain market shares. Export performance is expected to pick up in 2017 in step with foreign demand, and to accelerate further in 2018, boosted by the launch of production at a new car plant. Brexit-related downward revisions to export growth projections over the forecast period are modest, cumulatively around 0.8 percentage point.

Chart 1 Forecast for foreign demand and for Slovak exports of goods and services (annual percentage changes; constant prices)



Sources: SO SR, ECB and NBS calculations.

Weakening of overall investment activity this year

Private investment growth is expected to remain robust in 2016, owing to long-term investments in the car and energy industries and to the continuing strong trend in residential construction, supported by historically low nominal interest rates. At the same time, however overall investment growth is projected to slow amid an expected slump in government investment, as EU funds available under the new programming period start to be absorbed only gradually. In subsequent years, investment activity will be supported not only by the longer-term projects referred to above, but also by the construction of a road bypass around Bratislava and by the gradual acceleration in the absorption of EU funds. The impact of Brexit on investment activity is assumed to be minor, given the fading of the financial market volatility and uncertainty that initially followed the vote and downward revisions of long-term interest rates.

Sustained pick-up in private consumption

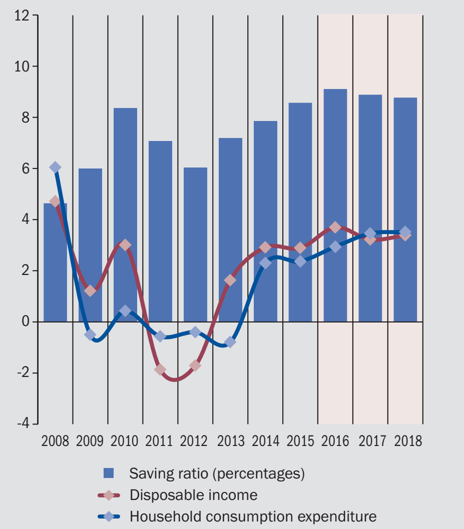
Private consumption is expected to accelerate over the projection horizon due to strong growth in employment and wages. Favourable economic trends and increasing labour productivity are providing scope for further real wage growth. Nominal wages should be buoyed by wage increases in the education sector scheduled for September this year and January 2017. The real increase in household purchasing power this year will also be supported by the negative inflation rate. As inflation gradually increases in subsequent years, it

Table 2 Investment (annual percentage changes; constant prices)

	2015	2016	2017	2018
Gross fixed capital formation in total	14.0	0.9	5.7	5.8
– private sector	5.2	9.4	7.7	5.3
– public sector	55.3	-26.5	-3.7	8.6

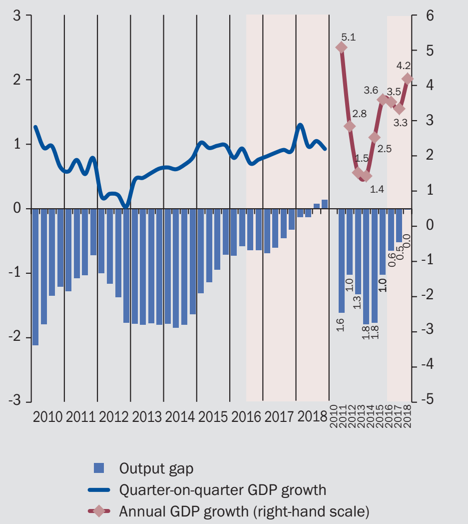
Sources: SO SR and NBS calculations.
Note: The absorption of EU funds under the 2007-2013 programming period came to an end in 2015.

Chart 2 Household income and consumption (annual percentage changes; constant prices) and the household saving ratio (percentages)



Sources: SO SR and NBS.

Chart 3 GDP growth and the output gap (%)



Sources: SO SR and NBS.

will have a dampening effect on households' real income growth. It is assumed, however, that households will begin to increase their spending and show a slightly lower propensity to save.

Despite Brexit, the Slovak economy should grow swiftly over the projection horizon

The slowdown in foreign demand growth will weigh also on the Slovak economy via a softening of export growth from the second half of this year. Over the rest of the projection horizon, the external environment is expected to recover moderately, thus supporting an increase in goods and services exports from Slovakia. Domestic demand should be buoyed by the improving labour market situation, accelerating investment demand and the accommodative monetary policy stance. **Slovakia's economic growth in 2016** is projected to be **3.5%** and to be balanced in its composition. The growth rate is expected to **slow moderately in 2017, to 3.3%,** before accelerating in **2018, to 4.2%,** boosted by the launch of production at a new car plant. It is assumed that the strengthening of GDP growth will result in **closure of the output gap by the end of the projection horizon**[5].

4.2 THE LABOUR MARKET

Labour market developments should remain favourable

The current favourable trends in the labour market have been reflected in the market's outlook for this year. Employment growth is expected to be 2.0%, similar to last year's level and to the level in the pre-crisis years of 2006 and 2007. A combination of firms' expectations and an increasing number of job vacancies is supporting assumptions that this upward trend will continue in the months ahead. Over the projection horizon, however, employment growth is expected to moderate, reflecting both supply-side and demand-side factors. Some sectors are beginning to see signs of labour shortages, which could support stronger wage growth. Consequently, this forecast assumes that firms may recruit more older people, women on part-time contracts, and foreign workers. It also assumes that the number of hours worked per employee will increase.

The unemployment rate is expected to continue its falling trend over the forecast period, down to 8.5% by the end of 2018. The rate of decrease will be partly moderated by the ongoing increase in labour force participation[6].

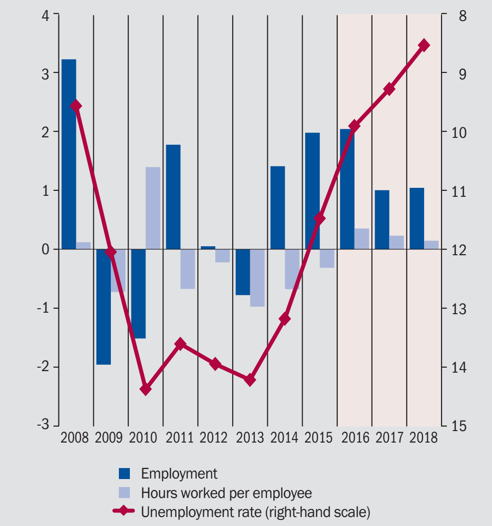
5 *See Box 1 for further information about the estimated impact of the Brexit vote on the Slovak economy.*
6 *See Box 2 for further information about the higher labour force participation rate and its impact on key labour market indicators.*

Table 3 Wages (annual percentage changes)

	2015	2016	2017	2018
Nominal labour productivity	1.2	1.1	3.5	5.0
Whole economy – nominal	2.9	3.4	3.9	3.9
Whole economy – real	3.2	3.9	2.8	2.1
Private sector – nominal	2.8	3.0	4.0	4.0
Private sector – real	3.1	3.5	2.8	2.2
Public administration, education and health care – nominal	3.3	5.1	4.0	3.7
Public administration, education and health care – real	3.7	5.7	2.8	1.9

Sources: SO SR and NBS calculations.
Notes: Deflated by the CPI. The sector ‚Public administration, education and health care' corresponds to sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities. Nominal average wage growth in the general government sector (ESA S.13) is projected to be 5.2% in 2016, 4% in 2017 and 3.7% in 2018.

Chart 4 Employment, hours worked (annual percentage changes), and the unemployment rate



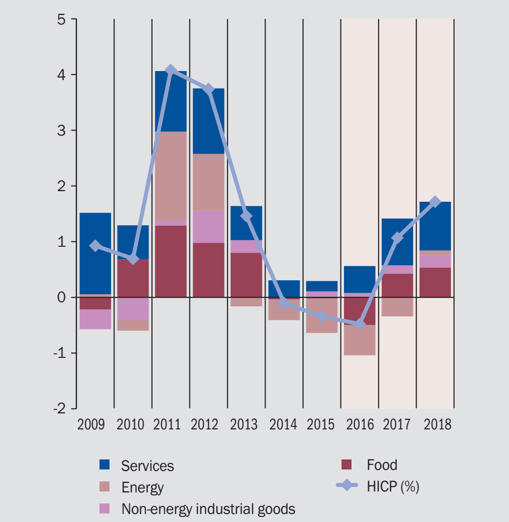
Sources: SO SR and NBS.

4.3 PRICE DEVELOPMENTS

Price level to fall again this year, before rising again from the turn of the year

A slump in food commodity prices and declining in energy prices are again this year helping to keep the average annual inflation rate in negative territory. The price level is projected to return to growth from the beginning of 2017, with increases expected in prices of services, food and, to a lesser extent, industrial goods. Services inflation is expected to reflect growing domestic demand and the fading decline in cost-push factors. Wage growth should have an increasingly positive impact on services inflation. Energy prices are expected to continue exerting a drag on the headline inflation rate in 2017, as low energy commodity prices create further scope for a drop in energy prices. In 2018 all items in the consumption basket are expected to have a positive impact on the overall inflation figure, pushing it up to 1.7%.

Chart 5 Annual HICP inflation and its components (p. b.)



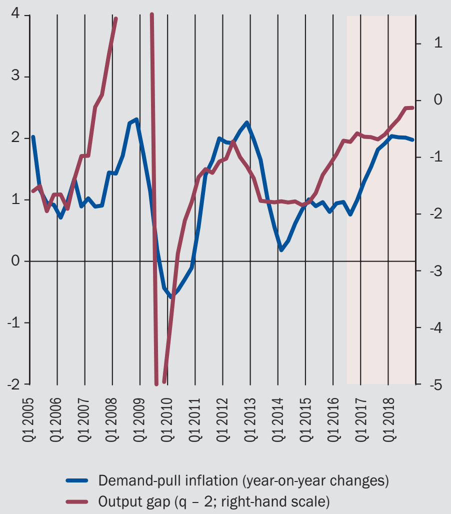
Sources: SO SR and NBS.

Table 4 Inflation components (annual percentage changes)

	Average 2004-2008 (pre-crisis period)	Average 2010-2014 (post-crisis period)	2014	2015	2016	2017	2018
HICP	4.1	2.0	-0.1	-0.3	-0.5	1.1	1.7
Food	3.6	3.1	-0.2	-0.1	-2.0	1.8	2.3
Non-energy industrial goods	0.2	0.3	0.0	0.4	0.3	0.5	0.7
Energy	8.3	2.3	-2.2	-3.9	-3.6	-2.3	0.6
Services	5.3	2.5	1.0	0.6	1.5	2.6	2.8
Demand-pull inflation	1.8	1.0	0.5	0.9	0.9	1.6	2.0

Sources: SO SR and NBS calculations.
Note: The ‚neutral level' of price growth (i.e. beta-convergence) for Slovakia is estimated to be around 2.3%.

Chart 6 Demand-pull inflation and the output gap (percentages)



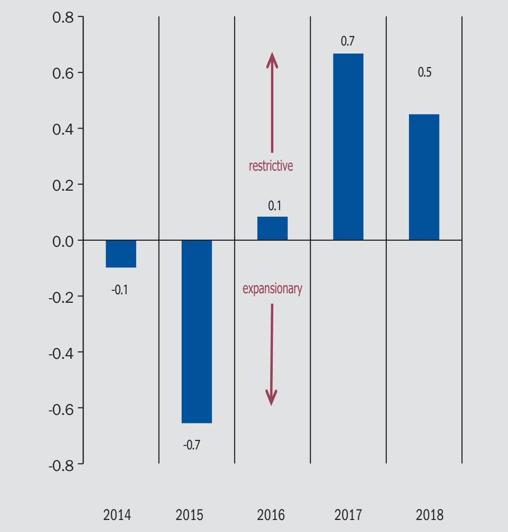
Sources: SO SR and NBS calculations.

5 Fiscal outlook

Restrained expenditure growth, the economic cycle, and tax measures are reducing the budget deficit

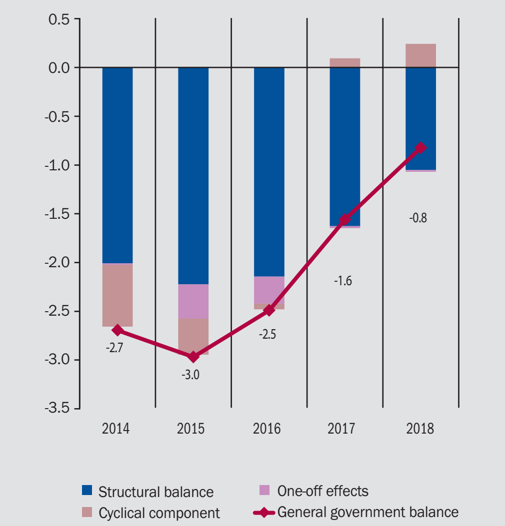
Slovakia's general government budget deficit, after hitting the excessive deficit threshold of 3.0% of GDP in 2015, is expected to fall gradually over the projection horizon, from a projected 2.5% in 2016 to 1.6% in 2017 and 0.8% in 2018. This improving trend is predicated mainly on continuing economic growth, a low inflation rate (inflation-indexed social expenditure), low interest costs, the discontinuance of one-off factors, and, from 2017, tax measures. Government measures (some approved, others proposed) are projected to have both negative and positive effects on the fiscal deficit. On the one hand, revenues should be boosted by the prolongation of the higher special levy on regulated industries, an increase in taxes on tobacco products, the retention of the special levy on financial institutions at its current level, and an increase in levies on gambling. On the other hand, a reduction in VAT on basic food items from 2016 and a cut in the corporate tax rate (to 21%) from 2017 will have a negative impact on the deficit, as will the gradual reduction in pension insurance rates under the state-run first pillar of the pension system in favour of the second pillar. Among the main developments taken into account on the expenditure side are a further salary increase for teachers and an adjustment to Christmas bonuses for pensioners. Next year is expected to see the deficit negatively affected by a marginal increase in first-pillar pensions.

Chart 8 Fiscal stance (percentages of GDP)



Sources: SO SR and NBS.
Note: Annual rate of change in the cyclically adjusted primary balance. Excluding the impact of EU funds outside the public sector.

Chart 7 Breakdown of the general government balance (percentages of GDP)



Sources: SO SR and NBS.
Note: One-off factors include non-cyclical effects that have a temporary impact on the general government balance and should be eliminated in the future.

After its expansionary impact in 2015, stemming mainly from marked investment growth, the fiscal stance is expected to have an almost neutral impact in 2016, as expansionary measures on the revenue side of the budget (notably the cut in VAT on basic foodstuffs) should be offset by an increase in tax receipts and by restraint on the expenditure side. Subsequent years are expected to see tightening of the fiscal stance, on both the revenue and expenditure sides, and therefore a dampening of aggregate demand.

Slower government expenditure growth

It is still assumed that nominal expenditure growth will moderate over the projection hori-

Table 5 Fiscal developments and forecasts (annual percentage changes and current prices, unless otherwise stated)

	2015	2016	2017	2018
General government final consumption (constant prices)	3.4	2.6	1.3	1.1
Government investment (constant prices)	55.3	-26.5	-3.7	8.6
General government balance (percentages of GDP)	-3.0	-2.5	-1.6	-0.8
Fiscal stance[1)] (year-on-year change in percentage points)	-0.7	0.1	0.7	0.5
Gross debt (percentages of GDP)	52.9	52.9	52.5	51.1

Sources: SO SR and NBS calculations.
1) Annual rate of change in the cyclically adjusted primary balance; (-) denotes expansion.

zon and that inflation will accelerate, leading to slower real growth in general government final consumption expenditure.

Public investment in the first half of 2016 fell year on year in line with expectations, owing to the lower absorption of EU funds. Its annual rate of change is projected to remain negative in 2017, and should recover only in 2018, when the absorption of EU funds gains momentum again.

Government debt expected to stay below the debt brake threshold of 53% of GDP

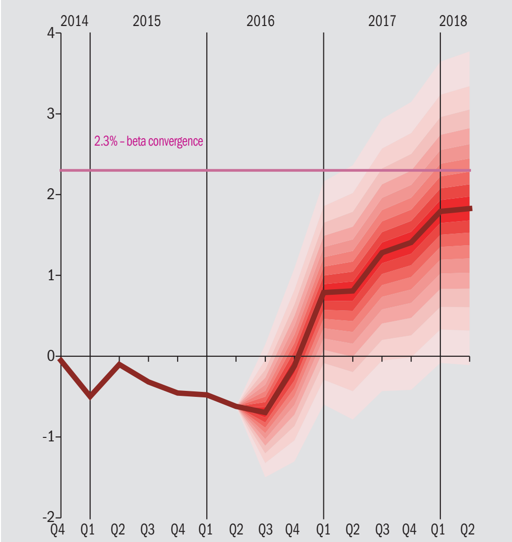
The projection for the government debt ratio in 2016 is that it will be unchanged from the previous year, at 52.9% of GDP. This is partly because the refinancing requirements for the cash shortfall in the budget are lower than they were last year. Due mainly to an improving primary balance and lower interest costs, the debt ratio is expected to fall gradually over the rest of the projection horizon, down to 51.1% of GDP by the end of 2018.

6 Risks to the forecast

Brexit-related risks to the GDP growth outlook have been incorporated into this forecast. The overall risks to the outlook over the medium term are balanced. Downside risks include the slower absorption of EU funds, geopolitical risks, and a deterioration in leading indicators. Upside risks relate to government consumption developments and to households' drawing on savings.

The risks to the inflation outlook are balanced. The upside risk of a higher than projected increase in oil prices is offset by the downside risk of weaker foreign demand.

Chart 9 HICP inflation forecast (percentages)



Sources: SO SR and NBS.
Note: The chart is based on historical prediction errors and a risk questionnaire. A more detailed description of the chart's construction is provided at: http://www.nbs.sk/_img/Documents/PUBLIK/MU/pris_04.pdf, or http://www.nbs.sk/_img/Documents/PUBLIK/MU/Hucek_Gavura09-07-Biatec.pdf

Table 6 Risks to the forecast

	2016	2017	2018
GDP	Balanced	Balanced	Balanced
Inflation	Balanced	Balanced	Balanced

Sources: NBS.

7 Comparison with the previous forecast

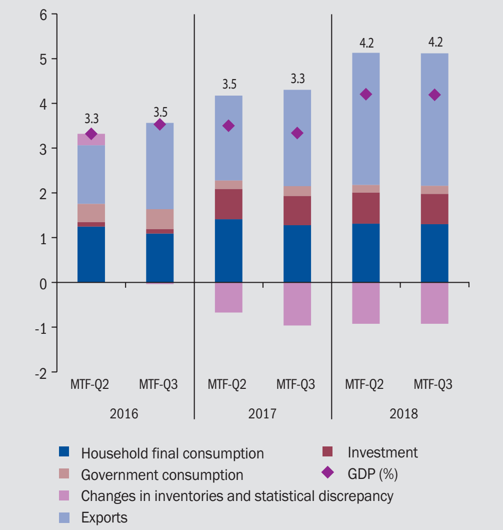
Improving current trend in activity and a slight Brexit-related downward revision of next year's GDP growth

Compared with the June Medium-Term Forecast (MTF-2016Q2), the outlook for Slovakia's GDP growth in 2016 has been revised up in the light of improving economic trends in the second quarter of the year. Export performance was stronger, prompting an upward revision of the export growth projections for both this year and next year. Slovak exporters increased their market shares appreciably. At the same time, however, the outlook for global growth has deteriorated since the last forecast, owing to the UK's vote to leave the European Union. The impact of the Brexit vote on Slovakia's foreign demand over the projection horizon is cumulatively around 0.8 percentage point. Most of this impact falls in 2017 and for that reason the GDP growth outlook for next year has been revised down. On the domestic side of the economy, a downward revision has been made to the projected growth in private consumption, which is not yet fully reflecting increases in employment and wages.

Further improvement in labour market outlook

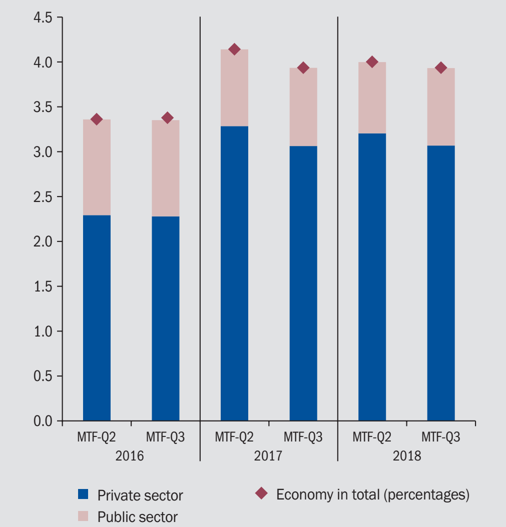
The recent situation in the labour market was more favourable than projected in the previous forecast. At the same time, surveys of employers' sentiment continue to indicate favourable trends in the third quarter. As a result, the employment growth projection for 2016 has been revised up. The increase is predicated mostly on public sector job growth, in the health-care and education sectors, as well as on temporary Government measures to support employment. Employment growth over the projection horizon is raised in this forecast by 6,000 people, after deducting the negative impact of the Brexit vote (equivalent to around 4,000 jobs). The nominal wage growth projection underwent only a slight downward adjustment, but with the inflation rate lower than expected there was no change in the real wage outlook.

Chart 10 GDP and its components[7] (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.

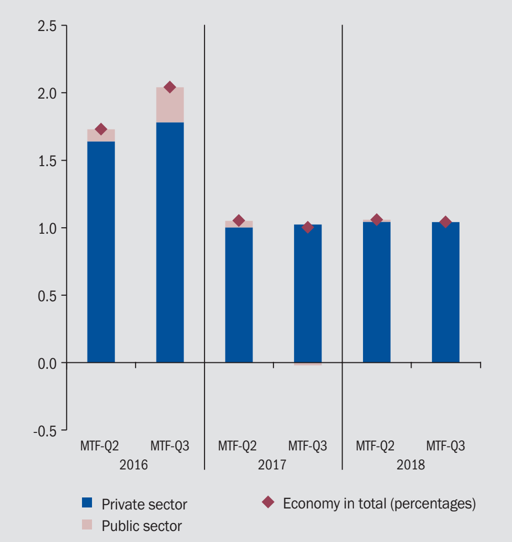
Chart 11 Average wage in the economy and contributions from the public and private sectors (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.
Note: The public sector comprises sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities.

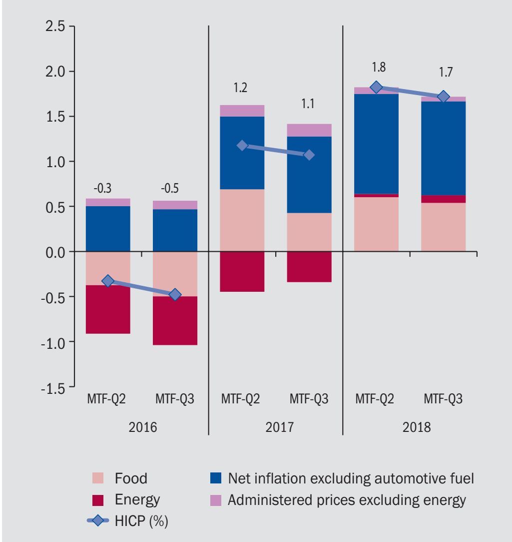
7 The composition of GDP growth is calculated as the contributions of components to GDP growth after deducting their import intensity. In this case the calculation uses the constant import intensity of the different GDP components (household final consumption – 30%, government consumption – 7%, investment – 50%, and exports – 62.5%). Remaining imports were included under changes in inventories and the statistical discrepancy.

Chart 12 Employment in the economy and contributions from the public and private sectors (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.
Note: The public sector comprises sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities

Chart 13 HICP inflation and its components (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.

Inflation forecast revised down slightly over the projection horizon

The average annual inflation rate forecast for 2016 has been revised down slightly, given that its recent level has been more negative than previously projected due mainly to food price developments. The revision over the projection horizon takes into account a slower recovery of agricultural commodity prices and lower inflation in services and in non-energy industrial goods.

Box 1

ESTIMATED IMPACT ON THE SLOVAK ECONOMY OF THE OUTCOME OF THE UK REFERENDUM ON EU MEMBERSHIP

This MTF-2016Q3 forecast factors in the estimated impact on the Slovak economy of the outcome of the UK referendum on EU membership ('Brexit')[8]. This effect reflects the latest information about trends in factors relevant to the Slovak economy.

The vote for Brexit has prompted a significant downward revision of the outlook for UK economic growth in the second half of 2016 and in 2017. In its August 2016 projections, the Bank of England revised sown the projection for UK GDP growth in 2017 and 2018 by 1.5 percentage points and 0.5 percentage point respectively. On these figures, the direct impact on the Slovak economy (stemming from lower UK activity growth) may not necessarily be significant, given that exports to the UK make up less than 5% of Slovakia's total exports. However, the weakening of the UK's economic outlook could adversely affect other EU countries, mostly through trade linkages[9]. These countries are expected to be exposed to a marked decline in investment and slower private consumption in the UK, as well as to uncertainty related to the outcome of trade

8 *In the previous forecast, Brexit was a wholly negative risk; its impact on GDP growth up to 2018 was estimated ex ante in the Analytical Report No 36 of June 2016 to be -0.3 percentage points (equivalent to 3,600 jobs).*

9 *For example, Slovakia's largest trading partner, Germany, has strong trade linkages with the United Kingdom.*

negotiations (the risk being that companies will be hesitant to enter into new longer-term trade negotiations). The outlook for imports and other components of the UK's GDP have been revised down substantially, and these revisions have weighed, directly and indirectly, on the economic activity outlooks for trading partners of Slovakia.

As for the estimated impact of Brexit on the Slovak economy, it consists mainly in the slowdown of foreign demand growth. The projection for this growth over the forecast period (ending in 2018) is lower in MTF-2016Q3 than in the previous forecast, cumulatively by 0.8 percentage point, with the impact of the Brexit vote accounting for almost the entire difference. For a brief period following the referendum, Slovakia's nominal effective exchange rate (NEER) appreciated slightly, before returning to a depreciation path. As at 7 September 2016 (the cut-off date for this forecast) the 10-day average of Slovakia's NEER was similar to its pre-referendum level[10]. Compared with the June 2016 projections, interest rates have been revised further down, and the expected pass-through to the Slovak economy is expected to be only moderately positive. The fact that the originally expected risks of Brexit-related uncertainty have not materialised is partly compensating for the current lack of depreciation in the Slovak exchange rate.

The main impact of the Brexit vote on the Slovak economy is therefore expected to be a slowdown in foreign demand for Slovak exports. The partial depreciation of the euro vis-à-vis the US dollar should also weigh slightly on GDP growth. The cumulative negative impact of the Brexit vote on the Slovak GDP growth projection until 2018 is lower than **0.4 percentage point**, which translates into around 4,000 fewer jobs being created.

As regards the **inflation** outlook, the Brexit-related drag of lower demand in this year and next year is offset by the euro's depreciation against the US dollar. Hence the overall impact of the Brexit vote on the near-term inflation outlook is **balanced**. After the exchange rate's positive impact on the inflation rate fades, the Brexit-related drop in demand is expected to have a slightly more negative impact on the inflation outlook for 2018, amounting to -0.07 percentage point.

Table A Impact of the Brexit vote on the outlook for the Slovak economy (deviations from the baseline in percentage points, unless otherwise stated)

	2016	2017	2018
GDP	-0.09	-0.37	-0.41
HICP	0.01	0.01	-0.07
Employment (number of persons)	-273	-2,405	-4,015

Source: NBS calculations.

10 Over the same period, the euro depreciated vis-à-vis the US dollar by 1.7%, which for the energy-intensive Slovak economy does not have an expansionary effect. The impact of Brexit was initially estimated on the assumption of a moderate depreciation in the Slovak economy's effective exchange rate, but that has so far not materialised due partly to the fact that the currencies of Slovakia's regional trading partners have weakened against the euro.

Box 2

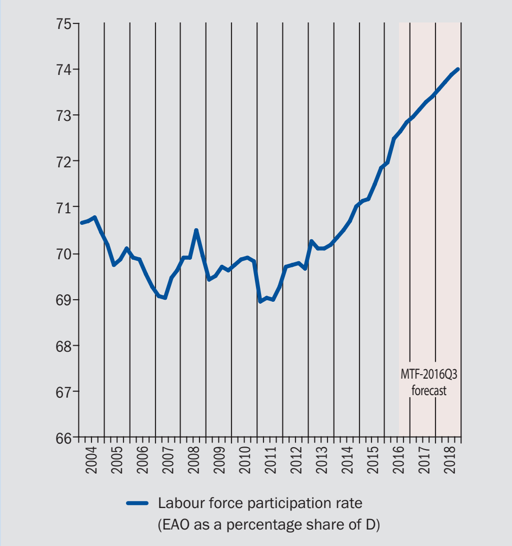
LABOUR MARKET UPTURN IS INCREASING LABOUR FORCE PARTICIPATION

The number of people employed in Slovakia in the second quarter of 2016 was around 2.5 million[11] and the average unemployment rate for the period was 10%. In the pre-crisis period a similar level of employment was accompanied by an unemployment rate of just 9%. How is the difference to be explained?

The Slovak labour market has been experiencing an upturn since 2014. As their crisis-related fears have abated, many firms have begun to expand and recruit on the basis of increased demand for their products as well as their bolder investment plans. In the background of this trend are noteworthy changes in labour force participation (in other words, the number of people who are either employed or actively looking for work)[12] and in demographic developments.

Slovakia has an ongoing downward trend in the number of people of productive age (aged 15 to 64). With the birth rate falling since the 1990s, the number of people who are turning 65 or retiring is notably larger than the number of people entering the productive age cohort.

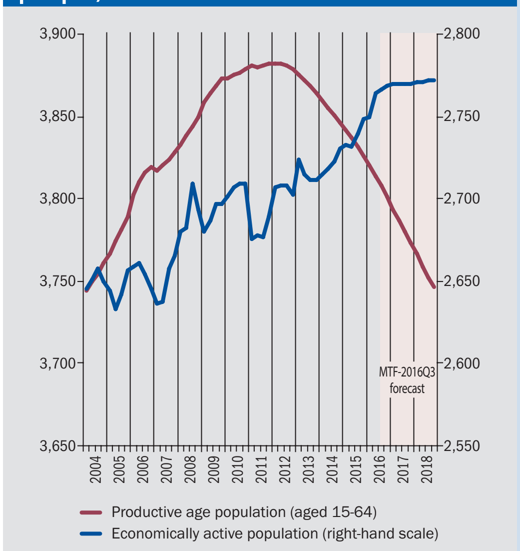
Chart B Labour force participation rate (percentages)



Sources: SO SR (Labour Force Survey) and NBS calculations.

Employers are therefore having to compete for workers from a diminishing pool of potential candidates. As recruitment demand has increased since 2014, so has the labour force participation rate. In other words, an increasing number of people are either in work or looking for work, including an increasing number who had previously excluded themselves from the labour force. The latest data for the first half of 2016 indicate a strong increase in labour force participation among women aged 25 to 39 and among older people. Employers are increasingly solving their rising demand for labour by creating part-time jobs, which support an increase in the female participation rate in particular. Indeed, the share of employed women who work on part-time contracts has more than doubled since the crisis, to 8%. The increase in female participation in the workforce is also partly related to a gradual raising of the retirement age since 2004.

Chart A Economically active population and the productive age cohort (thousands of people)

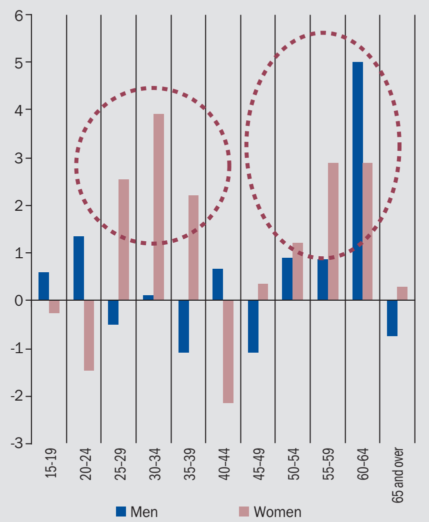


Sources: SO SR (Labour Force Survey) and NBS calculations.

11 Based on seasonally adjusted data; source: SO SR (Labour Force Survey).

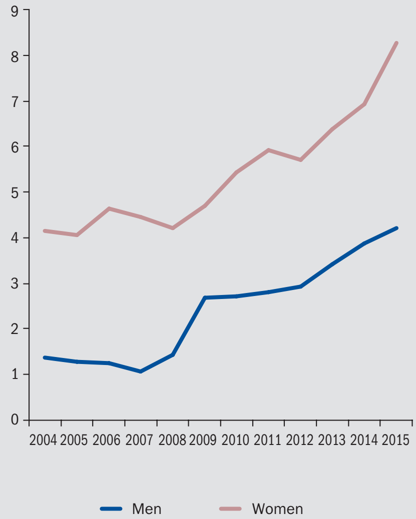
12 The participation rate indicates the level of economic activity, i.e. the economically active population (people either employed or actively looking for work; here denoted by the letters EAP) as a share of the total population of productive age (aged 15 to 64 and including those who are neither in work or looking for work; here denoted by the letter D).

Chart C Changes in labour force participation by gender and age (annual percentage point changes in the first half of 2016)



Sources: SO SR (Labour Force Survey) and NBS calculations.

Chart D Part-time employment (percentage of people in employment)



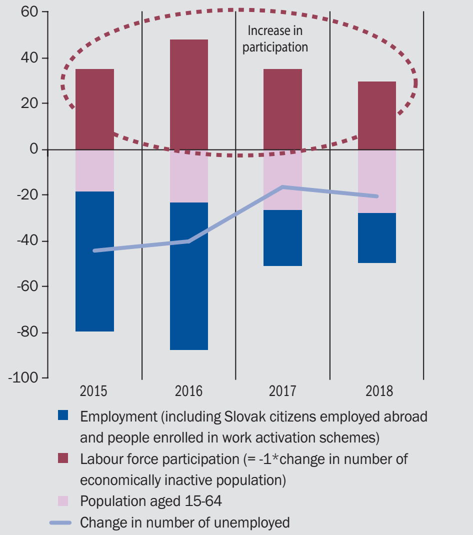
Sources: Eurostat.

The outlook for labour force participation is that it will continue increasing over the projection horizon, i.e. until the end of 2018. This is predicated on employers using of all sources of workforce supply in order to meet their demand for labour, on the fading impact of the 2004 pension reform, and on the linking of the retirement age to life expectancy. The increasing participation rate (and increasing economically active population) over the projection horizon does, however, further moderate the rate of decrease in unemployment, since an increase in the number of people starting to seek work after previously being economically inactive translates into fewer people that employers will recruit from the pre-existing pool of unemployed. The surge in the participation rate compared with its pre-crisis level also explains why the unemployment rate has not fallen back to its pre-crisis level even while the number of people in employment is higher now than it was then.

Table A Comparison of unemployment rate projections (percentages)

	2016	2017	2018
NBS	9.9	9.3	8.5
Financial Policy Institute of the Slovak Finance Ministry	9.8	8.5	7.4
IMF	10.4	9.6	9.2
European Commission	10.5	9.5	-
OECD	10.4	9.6	-

Chart E Changes in the number of unemployed and the contributions to these changes (thousands of persons; MTF-2016Q3 forecast)



Sources: SO SR (Labour Force Survey) and NBS calculations.

Differences between the unemployment rate projections of different institution arise from variations in their assumptions for employment, labour force participation, and demographic trends.

Table 7 Medium-Term Forecast (MTF-2016Q3) for key macroeconomic indicators

Indicator	Unit	Actual	MTF-2016Q3			Change vis-à-vis MTF-2016Q2		
		2015	2016	2017	2018	2016	2017	2018
Prices								
HICP inflation	annual percentage change	-0.3	-0.5	1.1	1.7	-0.2	-0.1	-0.1
CPI inflation	annual percentage change	-0.3	-0.5	1.1	1.8	-0.2	-0.1	-0.1
GDP deflator	annual percentage change	-0.3	-0.3	1.3	1.8	-0.2	-0.2	-0.1
Economic activity								
Gross domestic product	annual percentage change, constant prices	3.6	3.5	3.3	4.2	0.2	-0.2	0.0
Final consumption of households	annual percentage change, constant prices	2.4	2.9	3.5	3.5	-0.5	-0.3	0.0
Final consumption of general government	annual percentage change, constant prices	3.4	2.6	1.3	1.1	0.2	0.2	0.1
Gross fixed capital formation	annual percentage change, constant prices	14.0	0.9	5.7	5.8	0.0	-0.2	-0.1
Exports of goods and services	annual percentage change, constant prices	7.0	5.2	5.8	7.7	1.6	0.7	-0.2
Imports of goods and services	annual percentage change, constant prices	8.2	4.1	6.1	7.4	1.4	0.7	-0.2
Net exports	EUR millions at constant prices	4,269	5,262	5,343	5,978	251	281	300
Output gap	percentage of potential output	-1.0	-0.6	-0.5	0.0	0.2	0.0	0.0
Gross domestic product	EUR millions at current prices	78,071	80,609	84,343	89,502	-7	-304	-390
Labour market								
Employment	thousands of persons, ESA 2010	2,267	2,313	2,337	2,361	7.0	6.0	5.7
Employment	annual percentage change, ESA 2010	2.0	2.0	1.0	1.0	0.3	-0.1	-0.1
Number of unemployed	thousands of persons [1)]	314	274	257	237	-0.2	2.1	2.5
Unemployment rate	percentage	11.5	9.9	9.3	8.5	-0.1	0.1	0.0
Unemployment gap [2)]	percentage points	1.7	0.2	-0.1	-0.5	-0.1	-0.1	0.0
Labour productivity [3)]	annual percentage change	1.6	1.5	2.3	3.1	-0.1	-0.1	0.0
Nominal productivity [4)]	annual percentage change	1.2	1.1	3.5	5.0	-0.4	-0.4	-0.1
Nominal compensation per employee	annual percentage change, ESA 2010	2.4	2.8	3.9	3.9	-0.5	-0.2	-0.1
Nominal wages [5)]	annual percentage change	2.9	3.4	3.9	3.9	0.0	-0.2	-0.1
Real wages [6)]	annual percentage change	3.2	3.9	2.8	2.1	0.2	-0.1	0.0
Households								
Disposable income	constant prices	2.9	3.7	3.2	3.4	-0.1	-0.5	0.0
Saving ratio	percentage of disposable income	8.6	9.1	8.9	8.8	-0.3	-0.5	-0.4
General government sector [7)]								
Total revenue	percentage of GDP	42.7	40.8	40.7	40.4	0.0	0.5	0.5
Total expenditure	percentage of GDP	45.6	43.3	42.3	41.3	-0.1	0.1	0.1
General government balance [8)]	percentage of GDP	-3.0	-2.5	-1.6	-0.8	0.1	0.4	0.4
Cyclical component	percentage of trend GDP	-0.4	-0.1	0.1	0.2	0.0	0.0	0.0
Structural balance	percentage of trend GDP	-2.2	-2.1	-1.6	-1.1	0.0	0.4	0.4
Cyclically adjusted primary balance	percentage of trend GDP	-0.8	-0.7	-0.1	0.4	0.1	0.4	0.4
Fiscal stance [9)]	year-on-year change in p. p.	-0.7	0.1	0.7	0.5	0.1	0.4	-0.1
General government gross debt	percentage of GDP	52.9	52.9	52.5	51.1	-0.5	-0.8	-1.0

Table 7 Medium-Term Forecast (MTF-2016Q3) for key macroeconomic indicators (continued)

Indicator	Unit	Actual	MTF-2016Q3			Change vis-à-vis MTF-2016Q2		
		2015	2016	2017	2018	2016	2017	2018
Balance of Payments								
Trade balance (goods)	percentage of GDP	2.4	3.1	2.4	2.5	0.4	0.4	0.2
Current acount	percentage of GDP	-1.3	-0.6	-1.2	-0.7	0.6	0.4	0.3
External environment and technical assumptions								
Slovakia's foreign demand	annual percentage change	3.6	3.4	3.7	4.3	-0.2	-0.6	-0.3
Exchange rate (USD/EUR) [10]	level	1.11	1.12	1.12	1.12	-1.3	-2.0	-2.0
Oil price in USD [10]	level	52.4	43.9	50.7	53.5	1.2	3.4	4.2
Oil price in USD	annual percentage change	-47.0	-16.1	15.4	5.4	1.0	2.5	0.8
Oil price in EUR	annual percentage change	-36.6	-16.7	15.2	5.4	2.1	3.3	0.8
Non-energy commodity prices in USD	annual percentage change	-19.9	-3.0	5.3	4.2	0.3	1.0	-0.4
Three-month EURIBOR	percentage per annum	0.0	-0.3	-0.4	-0.4	0.0	-0.1	-0.1
Ten-year Slovak government bond yields	percentage	0.9	0.5	0.5	0.6	-0.1	-0.3	-0.4

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) S. 13; fiscal outlook.
8) B9n – Net lending (+) / borrowing (-).
9) Year-on-year changes in cyclically adjusted primary balance; a positive value denotes tightening.
10) Change vis-à-vis the previous forecast (in per cent).

Time series of selected macroeconomic indicators can be found on the NBS website at
http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2016/protected/P3Q-2016.xls