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EUROSYSTÉM

Medium-term forecast

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

Contact:
+421 2 5787 2146

http://www.nbs.sk

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1 Overview

The Slovak economy grew by 0.9%, quarter on quarter, in the fourth quarter of 2017. Export growth accounted for most of the expansion, with its rate accelerating after weakening in previous quarters. As for domestic demand, private consumption maintained an upward trend underpinned by the favourable labour market situation. Investment demand cooled slightly, partly as a correction of the previous period's strong investment in the automotive industry.

GDP growth is projected to accelerate from 3.4% in 2017 to 4.2% in 2018 and to 4.7% in 2019. This pick-up is expected to be driven mainly by the upcoming expansion of production capacity in the car industry and, to a lesser extent, by gradually accelerating growth in domestic demand. Consumer demand is expected to benefit from the labour market's improving situation, with increasing growth in both employment and wages. Investment demand should be supported by a rebound in public investment and by continuing growth in private investment. GDP growth is forecast to slow in 2020, to 4.0%, as the impulses from the car industry fade. The production launch date for Slovakia's newest car factory is now later than envisaged in the previous forecast, resulting in slight revisions to the car industry's contribution to GDP growth in individual years of the forecast. Overall, compared with the previous projections, the GDP growth forecast for 2018 has been revised down by 0.1 percentage point, and the forecast for 2020 has been revised up by 0.2%.

The labour market is expected to see net job creation and further growth in employment. Firms will be increasingly recruiting from the ranks of the unemployed, and therefore the unemployment rate is expected to fall below 6% by the end of the forecast period. It will also be necessary to continue recruiting foreign workers. Skilled labour shortages are having an upward impact on wage growth. This is expected to continue over the medium term and to be amplified by the effects of a new amendment to the Labour Code,[1] which cumulatively over the forecast period could add a further 0.6 percentage point to wage growth.

The annual inflation rate is expected to remain slightly above 2% over the whole forecast period. While domestic demand is projected to contribute positively to headline inflation, its impact should be partly offset by cost-push factors stemming from subdued commodity prices.

For both the real economy and inflation, the risks to the outlook are balanced.

The annex to this forecast contains two boxes. The first box estimates the potential impact of the Labour Code amendment on the economy, while the second looks at the estimation of the economy's long-run trends beyond the forecast period.

1 The new Labour Code amendment includes increases in wage premiums for work performed at night and on public holidays, the introduction of wage premiums for weekend work, and a change relating to 13th and 14th salaries.

2 Current developments in the external environment and in Slovakia

The euro area economy's strong growth trend continued in the fourth quarter of 2017[2]

The euro area economy grew in the fourth quarter of 2017 by 0.6% quarter on quarter, which was 0.1 percentage point lower than the pace in the third quarter. The GDP growth was driven mainly by net trade and also by fixed investment spending, household consumption and government consumption. On the other hand, changes in inventories provided a negative contribution. The latest leading indicator data suggest that GDP growth has remained relatively robust in first quarter of 2018. Euro area annual HICP inflation declined to 1.1% in February (from 1.3% in January), as food inflation slowed for a third successive month and energy inflation slowed for a second successive month.

Slovakia's export growth surprised on the upside in the fourth quarter of 2017[3]

Slovakia's GDP rose by 0.9% in the fourth quarter of 2017 on a quarter-on-quarter basis (and by 3.4% for the year as a whole), in line with the previous forecast's projections. Net trade accounted for most of the growth, and there was also a positive contribution from consumer demand, supported by the improving labour market situation. By contrast, investment demand growth slightly undershot projections, partly as a correction of the strong investment growth in the automotive industry in previous quarters.

The economy continued to see a rising number of job vacancies, most of which were filled from the ranks of the unemployed. Some firms responded to skilled labour shortages by recruiting foreign workers. Employment growth in the fourth quarter of 2017 was therefore quite robust, at 0.5% (with the rate for the year as a whole standing at 2.2%). The labour market tightening was to some extent also moderated by Slovak citizens returning from employment abroad. With an increasing number of unemployed finding employment, the unemployment rate fell further than expected, to reach 7.6% at the year-end. The labour market situation is affecting wage growth, which climbed to 5.3%[4] in the last quarter of 2017.

Annual headline inflation accelerated to 2.0% in the fourth quarter of 2017 (while the average for the whole of 2017 was 1.4%). The rate continued to accelerate in early 2018, reaching 2.2% in February. Headline inflation in late 2017 was driven mainly by the food component, and in subsequent months it reflected two factors with opposing impacts. The positive impact of rising demand-pull inflation and energy prices was offset by the fading of the impact of increasing processed food prices.

2 For further details, see the March 2018 issue of NBS's Report on the International Economy.
3 For further details, see the March 2018 issue of NBS's Report on the Slovak Economy.
4 Seasonally adjusted by NBS.

3 Technical assumptions[5]

3.1 Commodities and the exchange rate

In the period between the cut-off date for the January update of the December 2017 forecast and this forecast, the **exchange rate**[6] of the euro against the US dollar showed an appreciation trend. This was supported mainly by favourable news about euro area economic activity growth at the end of 2017. The assumption for the average exchange rate is therefore 2.7 % stronger in this forecast than in the previous forecast, at USD 1.23 per euro. Compared with the previous forecast, the assumption for Slovakia's nominal effective exchange rate (NEER), calculated with respect to the country's 15 most significant trading partners, is 0.2% stronger in this forecast.

For a short period after the cut-off date for the January forecast, the **price of a barrel of Brent crude oil** maintained its upward trend, reflecting the effects of both global demand and adherence to the OPEC/non-OPEC output restraint agreement. At the beginning of February, however, the oil price corrected significantly amid increasing shale oil production in the United States, which was reflected in oil futures prices. Therefore, compared with the previous forecast, the assumptions for the average oil price in US dollars have been revised down slightly, to USD 65 in 2018, USD 61 in 2019 and USD 59 in 2020. Owing to exchange rate appreciation, the assumption for the oil price in euro has been revised down by around 4.0% over the projection period.

3.2 Foreign demand

In the *March 2018 ECB staff macroeconomic projections for the euro area,*[7] economic expansion in the euro area is projected to remain robust, with growth rates staying above potential. Over the forecast period, financing conditions are expected to remain supportive to economic growth, with the ECB's accommodative monetary policy stance continuing to be transmitted to the economy. Lending to the private sector is projected to increase, spurred by lower interest rates and favourable bank lending conditions. Lower deleveraging needs will also contribute to the dynamism of private expenditure. At the same time, private consumption will continue to pick up, as will business investment, reflecting also a strengthening of profit mark-ups in the context of rising demand pressures. Euro area exports are expected to continue benefiting from the ongoing expansion of global economic activity.

The continuing favourable trends in the global economy, together with the ongoing improvement in consumer and business confidence, were reflected in the expected higher demand for Slovak exports. The stronger economic performance of Slovakia's trading partners was the reason for the upward revision of foreign demand growth assumptions (by a cumulative 0.5 percentage point over the forecast period), to 5.3% in 2018, 4.6% in 2019 and 4.1% in 2020.

5 *The technical assumptions of this Medium-Term Forecast are based on the March 2018 ECB staff macroeconomic projections for the euro area, with a cut-off date of 13 February 2018. The EUR/USD exchange rate and assumptions for the Brent crude oil price and Slovakia's foreign demand were updated as at 7 March 2018.*

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

7 *March 2018 ECB staff macroeconomic projections for the euro area.*

4 Macroeconomic forecast for Slovakia

4.1 Economic growth

Export growth to accelerate with support from the launch of production at a new car factory

After falling temporarily in 2017, export growth is expected to accelerate over the next two years, supported by the continuing pick-up in foreign demand and by the launch of production at a new car factory. The upturn in exports is projected to peak in 2019, when Slovakia's new car plant (its fourth) achieves full production capacity and when export growth will significantly exceed growth in foreign demand for Slovak goods and services. During that period, Slovakia will be making inroads into global market shares. Towards the end of the forecast period, export growth will be slowing slightly, at a pace commensurate with foreign demand and with the supply-side shock of production capacity expansion.

Investment to gather momentum

Investment activity is expected to increase this year, reflecting upward trends in both the private and public sector. Private investment is projected to benefit from the accommodative monetary policy stance, elevated production capacity utilisation, and a cyclical pick-up in capital investment. It is also expected that residential construction growth will peak in 2018 and that the public sector will see a revival in major investment projects, especially infrastructure projects. The absorption of EU funds is forecast to increase owing to the realisation of contracted projects. Investment demand growth should moderate in subsequent years in line with economic activity trends and the fading of the impact of major investment in the car industry.

Private consumption to continue strengthening

Consumer demand is expected to maintain its relatively strong growth trend, supported mainly by the favourable labour market situation and its upward impact on consumer sentiment. The signs from current developments, leading indicators, and collective wage negotiations are that nominal income growth will continue accelerating this year and therefore that private consumption will accelerate moderately. Over the medium term, consumer demand growth is

Chart 1 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.

Chart 2 Household income, household consumption and the household saving ratio – trend and forecast

Sources: SO SR and NBS.

projected to remain robust in line with the disposible income trend amid a still constant saving ratio.

Acceleration of GDP growth to be driven by the launch of production at Slovakia's fourth car factory

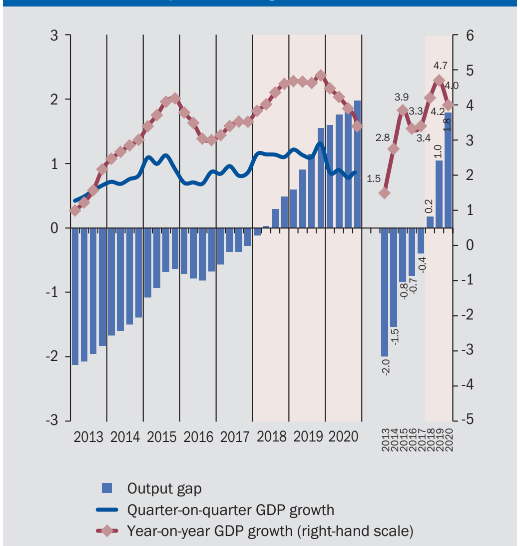
As a result of the upcoming launch of production at Slovakia's fourth car factory, annual GDP growth is expected to accelerate to 4.2% in 2018 and 4.7% in 2019. Among the positive contributors to that growth, besides exports, will be domestic demand and in particular its private consumption component. Once the impact of the expansion of car industry production capacity has faded, economic growth is expected to slow to 4.0% in 2020. In 2018 the economy is expected to start running above its productive capacity as a result of strong growth; over the rest of the forecast period, the positive output gap should widen still further, consequently stimulating demand-pull inflation.

4.2 THE LABOUR MARKET

Overheating also in the labour market

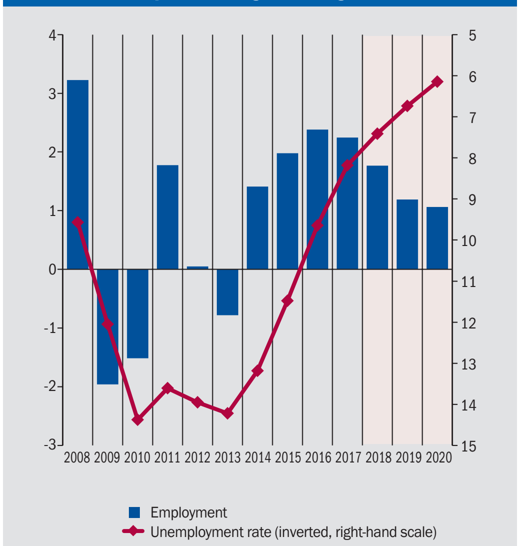
The positive economic situation is generating jobs at a relative rapid pace, and although some sectors are finding it difficult to fill job vacancies, overall employment growth is expected to be a respectable 1.8% in 2018. The unemployment rate is expected to continue falling, and the inflow of foreign workers should also continue. Strong wage growth is likely to draw into the workforce a greater number of pensioners and people caring for small children. It is therefore expected that the gradual upward trend in the labour force participation rate will continue and that the tightening of the labour market will be partly moderated. Employment growth is projected to ease over the forecast period, and the unemployment rate is forecast to fall to an all-time low (just below 6.0% in the last quarter of 2020).

Chart 3 GDP and the output gap – trend and forecast (percentages)



Sources: SO SR and NBS.

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



Sources: SO SR and NBS.

Table 1 Wages (annual percentage changes)

	2017	2018	2019	2020
Nominal labour productivity	2.9	4.5	6.3	5.7
Whole economy – nominal	4.6	5.4	5.6	5.4
Whole economy – real	3.3	3.1	3.3	3.0
Private sector– nominal	4.6	5.4	5.4	5.4
Private sector – real	3.2	3.1	3.0	3.0
Public administration, education and health care – nominal	5.0	5.5	6.5	5.4
Public administration, education and health care – real	3.7	3.2	4.2	3.1

Sources: SO SR and NBS calculations.
Note: 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 5.8% in 2018, 6.9% in 2019, and 5.4% in 2020.
Nominal GDP divided by persons in employment according to statistical reporting methodology.

Nominal wage growth is expected to maintain a robust pace over the forecast period, reflecting increasing labour productivity, inflation and labour market tightening. The upward trend in public sector wage growth is projected to peak in 2019, driven by increases in public sector salary scales from January 2019 and by an expected 6% increase in education sector salaries. In both the private and public sector, the overall cumulative impact of the new Labour Code amendment on the average wage growth is expected to be 0.6[8] percentage point.

4.3 PRICE DEVELOPMENTS

Inflation to be slightly above 2% over the forecast period

The annual inflation rate over the forecast period is expected to be determined mainly by demand-side factors. It is forecast that strong domestic demand accompanied by an overheating labour market and positive output gap will have an upward impact on prices of services and non-energy industrial goods and that

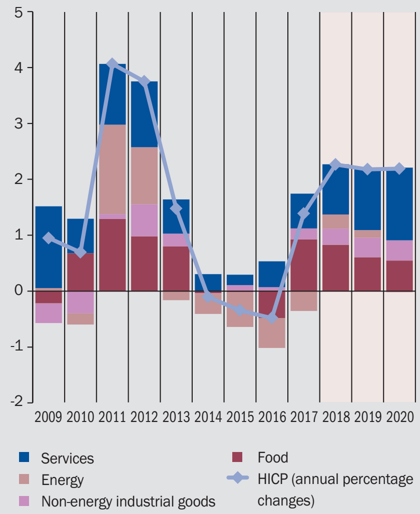
Table 2 Inflation components (annual percentage changes)

	Average 2004-2008 (pre-crisis period)	Average 2010-2014 (post-crisis period with euro currency)	2016	2017	2018	2019	2020
HICP	4.1	2.0	-0.5	1.4	2.3	2.2	2.2
Food	3.6	3.1	-2.0	3.6	3.2	2.4	2.2
Non-energy industrial goods	0.2	0.3	0.2	0.7	1.0	1.2	1.3
Energy	8.3	2.3	-3.5	-2.5	1.7	0.9	-0.1
Services	5.3	2.5	1.5	2.0	2.8	3.5	4.1
Demand-pull inflation	1.8	1.0	0.9	1.4	2.2	2.5	3.0

Sources: SO SR and NBS calculations.
Note: The 'neutral level' of price growth (i.e. beta-convergence) for Slovakia is estimated to be around 2.6%.
Further details are provided, in Slovak, in the Analytical Commentary entitled Perspektívy dlhodobejšieho vývoja slovenskej ekonomiky (do roku 2020) (Longer-term outlooks for the Slovak economy – up to 2020).

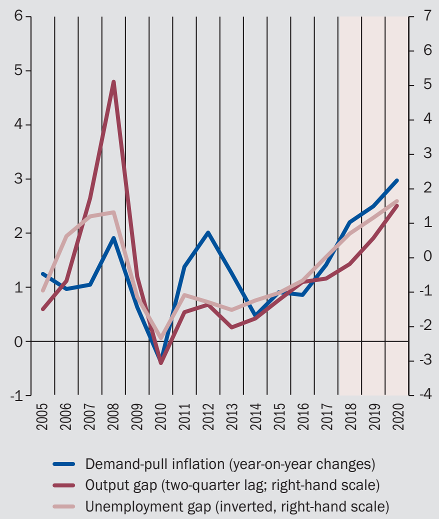
8 *For further details, see Box 1.*

Chart 5 HICP and its components (annual percentage changes; percentage points)



Sources: SO SR and NBS.

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



Sources: SO SR and NBS calculations.

the contribution of these components to the headline inflation rate will gradually increase. Demand-pull pressures will be amplified by the positive impact effect stemming from the Labour Code amendment. The negative impact of past years' energy prices is expected to fade, and as a result of increasing prices of commodities (gas, electricity), energy prices are projected to increase moderately in both 2018 and 2019. The contribution of the food component is expected to decline owing to the fading of the impact of processed food prices, which increased significantly in the second half of 2017. Overall, the headline inflation rate is expected to fluctuate at slightly above 2% during the forecast period.

5 Fiscal outlook

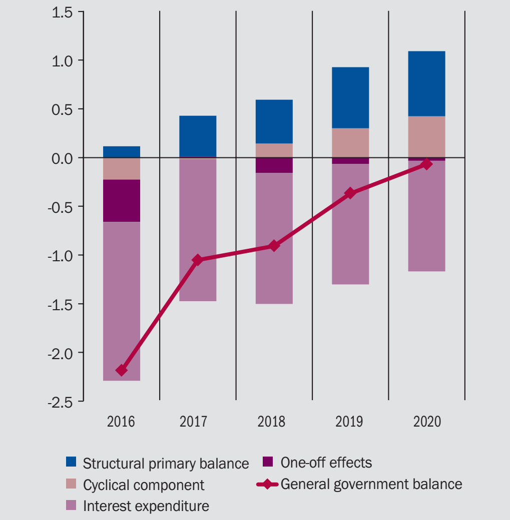
Continuing reduction of general government deficit over the forecast period

Slovakia's general government deficit for 2017 is projected to be 1.1% of GDP,[9] which compared with the previous year is lower by 1.1 percentage points. On the revenue side, this reduction is expected to have been caused mainly by the favourable macroeconomic situation, with robust household consumption and the buoyant labour market situation translating into increases in tax and social contribution revenues. The expenditure side is expected to have contributed to the deficit reduction through falling interest expenditure (in the ongoing low interest environment) and through slower growth in social expenditure, intermediate consumption and investment activity. Health care expenditure is projected to have remained at around the same level as in the previous year.

Both this year and the subsequent years of the forecast period are expected to see continued strong growth in tax and social contribution revenues, falling interest payments, and the moderation of social expenditure growth. The fiscal deficit is therefore projected to continue decreasing, down to 0.9% of GDP in 2018, 0.4% in 2019, and 0.1% in 2020. As for negative impacts on fiscal performance, the main ones on the revenue side are expected to come from government legislative measures, including the introduction of partial income tax relief on 13th and 14th salaries and the scrapping of tax licences. On the expenditure side, the principal negative impacts are projected to be measures in the social sphere,[10] as well as increases in wage premiums for night work, weekend work, and work performed on public holidays.

The downward trend in public debt is expected to continue over the forecast period. The primary surplus is projected to support that trend by gradually increasing from 0.4% of GDP in 2018 to 1% in 2020, as is the further lowering of debt servicing costs. Along with rising GDP, these factors are forecast to contribute to a reduction in

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.

Chart 8 Fiscal stance (percentage points of GDP)

Sources: SO SR and NBS.
Note: Annual rate of change in the cyclically adjusted primary balance, excluding the impact of EU funds.

9 *The first notified deficit and debt figures for 2017 will be published by Eurostat in April 2018.*

10 *The recalculation of pensions awarded before 2004, the minimum indexing of pensions, and further adjustments in the area of welfare and unemployment insurance.*

Table 3 Fiscal developments (annual percentage changes at constant prices, unless otherwise stated)

	2017	2018	2019	2020
General government final consumption	0.2	1.9	1.7	2.1
Government investment	-2.8	22.8	6.4	7.7
of which: EU funds (contributions to growth in percentage points)	*-2.8*	*10.9*	*6.3*	*4.8*
General government balance (percentage of GDP)	-1.1	-0.9	-0.4	-0.1
Fiscal stance (year-on-year change in percentage points)	0.7	-0.1	0.3	0.1
Gross debt (percentage of GDP)	51.0	49.4	47.3	45.1

Sources: SO SR and NBS calculations.

public debt from 49.4% of GDP in 2018 to 45.1% of GDP in 2020.

After being restrictive in 2017, the domestic fiscal stance is expected to be moderately expansionary in 2018, owing mainly to the impact of the increasing absorption of EU funds. Over the forecast period, it is expected that the slightly restrictive impact of the fiscal stance will be offset by the greater absorption of EU funds.

Gradual acceleration of government final consumption expenditure and recovery of investment activity

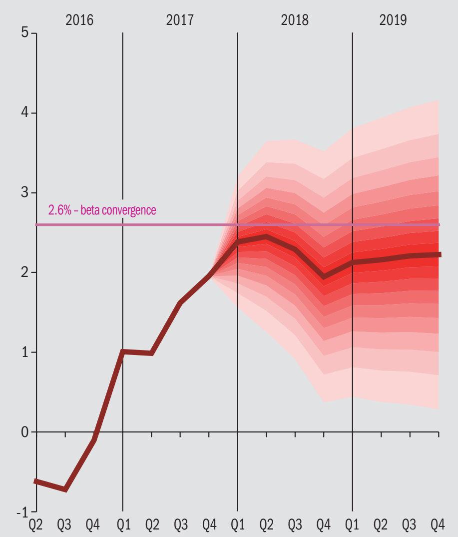
After growth in real government final consumption expenditure slowed last year amid stagnating health care expenditure and a notable pick-up in inflation, it is projected to accelerate over the forecast period thanks mainly to upward trends in expenditure on health care and on goods and services. As for government investment, this year is expected to see an upturn in investment activity, driven mainly by the increasing absorption of EU funds, and that trend should continue in 2019 and 2020.

6 Risks to the forecast

The risks to the real economy outlook are balanced. The risk on the upside relates to the favourable labour market situation, while the downside risks continue to arise from geopolitical factors, concerns about rising protectionism, and the potential delay in the production launch at Slovakia's new car factory.

The risks to the inflation outlook are balanced, with upside risks related to domestic factors and downside risks to lower than expected imported inflation and global economic growth.

Chart 9 HICP forecast (percentages)



Sources: SO SR and NBS.
Note: The chart is calculated using historical inflation prediction errors and a risk survey. The chart's construction is described in more detail 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. Beta convergence – the situation where countries with lower GDP (per capita) have a tendency to grow faster than countries with higher GDP, thereby giving rise to a process of catch-up with advanced economies. Further information is available in the following Analytical Commentary, only in Slovak Perspektívy dlhodobejšieho vývoja slovenskej ekonomiky (do roku 2020) (Longer-term outlooks for the Slovak economy – up to 2020).

Table 4 Risks to the forecast

	2018	2019	2020
GDP	Balanced	Balanced	Balanced
Inflat-ion	Balanced	Balanced	Balanced

Sources: NBS.

7 Comparison with the previous forecast

Compared with the January 2018 update of the December 2017 Medium-Term Forecast (MTF--2017Q4U), the technical assumptions for foreign demand have been revised up slightly in this forecast (MTF-2018Q1). In addition, this year's launch of production at a new car factory will, according to available information, be later than previously expected, and the oil price assumptions over the projection period have been revised down moderately. The latest technical assumptions take into account the estimated impact of the new amendment to the Labour Code.

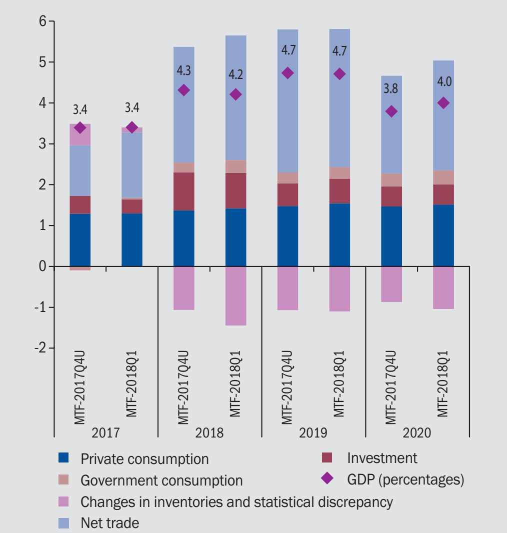
No significant change to the overall macroeconomic outlook

The economic growth outlook over the medium term is largely unchanged in this forecast. Minor revisions have been made in line with current trends and with adjustments to the technical assumptions. The GDP growth forecast for 2018 has been revised down marginally on the basis of recent developments, in particular a reassessment of the non-standard situation in the last quarter of 2017 when imports slumped and inventories were being run down; that trend that is correcting in 2018 through higher imports. Although this year's production launch at Slovakia's fourth car factory has been delayed slightly, the export outlook for 2018 has been buoyed by the carry-over effect of elevated export growth in late 2017. This, together with moderately higher foreign demand, means the projected contribution of net trade to GDP growth is notably higher in this forecast than in the previous exercise. The growth outlook for 2019 reflects the upward impact on private consumption of wage increases related to the new Labour Code amendment. The revision of the 2020 GDP growth outlook stems from the later projection for when Slovakia's new car factory (its fourth) will be running at full capacity.

Moderately higher wage growth

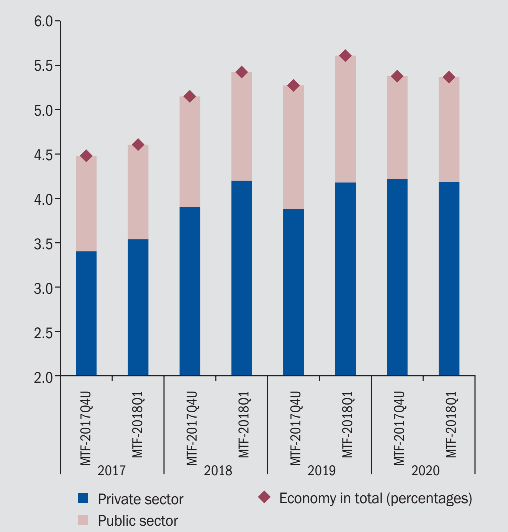
Since employment trends have been consistent with the previous forecast's projections, the outlook for employment growth over the medium term has not been revised. Firms are now hiring

Chart 10 GDP and its components[11] (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.

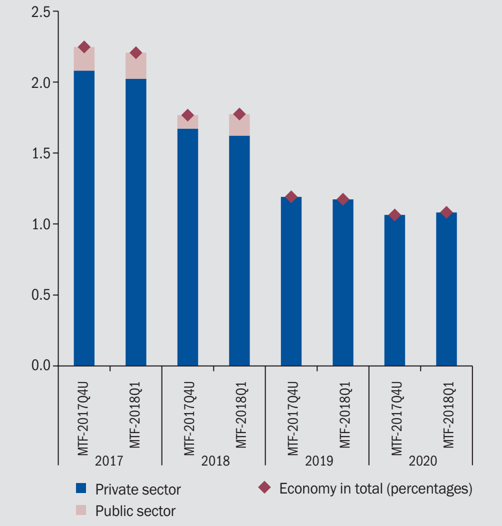
Chart 11 Average wage broken down by public sector and private sector contributions to its rate of change (annual percentage changes; percentage points)



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.

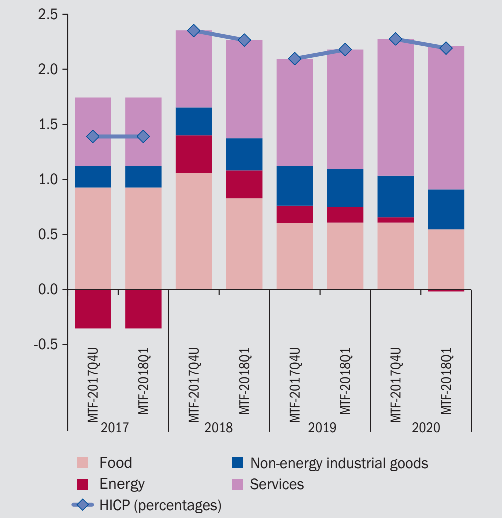
11 The composition of GDP growth is calculated as the contributions of components to GDP growth after deducting their import intensity. In this case the calculation uses the constant import intensity of the different GDP components (household final consumption – 30%, government consumption – 7%, investment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

Chart 12 Employment broken down by public sector and private sector contributions to its rate of change (annual percentage changes; percentage points)



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.

an increasing number of people from the ranks of the unemployed, and therefore the unemployment rate projection for the whole forecast period has been revised down slightly. Looking at monthly indicators, wage growth is expected to be higher than previously projected. In addition, this forecast takes into account the new Labour Code amendment by revising up projected wage growth, especially in 2019.

Inflation remaining above 2%

On the basis of current trends and technical assumptions, the projections for the headline inflation rate in 2018 and 2020 have been revised down slightly. These revisions reflect downward revisions of the energy inflation outlook. In addition, the headline rate in 2018 should be affected by two opposing factors, with the impact of lower food price inflation expected to be offset by higher services inflation that reflects stronger consumer demand. Services prices are expected to have a greater impact on inflation in subsequent years. In 2019 the impact on headline inflation of wage increases related to legislative amendments is expected to be greater than previously projected.

Box 1

ESTIMATED IMPACT OF THE LABOUR CODE AMENDMENT

When the January 2018 update of the December 2017 Medium-Term Forecast (MTF-2017Q4U) was being prepared, an amendment to the Slovak Labour Code concerning wage premiums for work performed at night, at weekends and on public holidays was passing through the legislative process and was therefore included in the risks to the real economy outlook for the medium term. The Labour Code amendment provisions on 13th and 14th salaries were not known when the forecast was produced and were therefore not factored into it.

This forecast (MTF-2018Q1) takes account of the Labour Code amendment's introduction of wage premiums for night work and weekend work and of voluntary 13th and 14th salaries. The technical assumptions[12] have not been altered to take account of the phasing-in on the wage premiums.

The wage premiums are being introduced in two phases and their impact will be most pronounced in 2019 (adding around 0.4 percentage point to overall growth in compensation per employee). It is expected that the impact of the premium-related increase in employee compensation will be partly offset by lower negotiated wages in the period ahead, as firms probably seek to optimise labour costs. Where 13th and 14th salaries are paid on a voluntary basis as provided for by the amendment, they must be paid at the level of the average wage. Since only some firms will have the resources to make such payments, the impact of this measure on wages and the economy is expected to be limited.

The overall cumulative impact of both measures on compensation per employee growth over the forecast period has been estimated at around 0.57 percentage point. The impact of the premium-related increase in wage growth on private consumption growth is projected to be around 0.4 percentage point. It may be expected that firms will respond to the increase in labour costs arising from these compensation-related measures by raising prices modestly, as well as by reducing their profit mark-ups. These cost increases may also be reflected in slower employment growth. The overall cumulative impact on GDP will be minimal.

Table A Impact of new Labour Code provisions on the year-on-year rate of change in selected indicators (percentage points)

	2018	2019	2020	Cumulative 2018–2020
Compensation per employee	0.06	0.40	0.11	0.57
HICP	0.01	0.07	0.06	0.14
GDP	0.02	0.04	-0.04	0.03
Household final consumption expenditure	0.05	0.26	0.07	0.38
Employment	0.00	-0.03	-0.01	-0.04

Sources: NBS calculations.

12 Further details on the Labour Code amendment may be found in the MTF-2017Q4U forecast on the NBS website, at https://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2017/protected/P4QA-2017.pdf

Table 5 Medium-Term Forecast (MTF-2018Q1) for key macroeconomic indicators

Indicator	Unit	Actual data	MTF-2018 Q1			Difference vis-à-vis MTF2017Q4 update		
		2017	2018	2019	2020	2018	2019	2020
Prices								
HICP inflation	annual percentage change	1.4	2.3	2.2	2.2	-0.1	0.1	-0.1
CPI inflation	annual percentage change	1.3	2.3	2.3	2.3	0.0	0.1	-0.1
GDP deflator	annual percentage change	1.3	2.3	2.7	2.8	0.1	0.1	0.0
Economic activity								
Gross domestic product	annual percentage change, constant prices	3.4	4.2	4.7	4.0	-0.1	0.0	0.2
Private consumption	annual percentage change, constant prices	3.6	3.9	4.3	4.2	0.1	0.2	0.1
Final consumption of general government	annual percentage change, constant prices	0.2	1.9	1.7	2.1	0.5	0.0	0.1
Gross fixed capital formation	annual percentage change, constant prices	3.2	8.0	5.3	4.4	-0.5	0.4	0.1
Exports of goods and services	annual percentage change, constant prices	4.3	8.1	8.6	6.6	0.5	-0.5	0.7
Imports of goods and services	annual percentage change, constant prices	3.9	7.8	8.2	6.7	0.1	-0.2	0.7
Net exports	EUR millions at constant prices	6,107	6,762	7,652	8,076	1,199.0	1,037.6	1,133.9
Output gap	percentage of potential output	-0.4	0.2	1.1	1.8	0.0	0.0	0.1
Gross domestic product	EUR millions at current prices	84,985	90,560	97,390	104,076	34.1	110.7	282.4
Labour market								
Employment	thousands of persons, ESA 2010	2,372	2,414	2,443	2,469	-0.7	-1.3	-0.9
Employment (dynamics)	annual percentage change, ESA 2010	2.2	1.8	1.2	1.1	0.0	0.0	0.0
Number of unemployed	thousands of persons[1)]	224	198	182	166	-7.5	-5.2	-5.2
Unemployment rate	percentage	8.1	7.2	6.6	6.0	-0.2	-0.1	-0.1
NAIRU estimation[2)]	percentage points	8.2	7.9	7.7	7.6	-0.1	-0.1	-0.1
Labour productivity[3)]	annual percentage change	1.2	2.4	3.5	2.9	-0.1	0.0	0.2
Nominal productivity[4)]	annual percentage change	2.9	4.5	6.3	5.7	-0.2	0.1	0.1
Nominal compensation per employee	annual percentage change, ESA 2010	4.1	5.2	5.8	5.4	0.0	0.5	0.0
Nominal wages[5)]	annual percentage change	4.6	5.4	5.6	5.4	0.3	0.3	0.0
Real wages[6)]	annual percentage change	3.3	3.1	3.3	3.0	0.3	0.3	0.1
Households and non-profit institutions serving households								
Disposable income	constant prices	2.5	3.4	4.4	4.2	0.0	0.3	0.1
Saving ratio[7)]	percentage of disposable income	8.8	8.2	8.3	8.3	-0.5	-0.5	-0.5
General government sector[8)]								
Total revenue	percentage of GDP	39.3	39.1	38.8	38.4	-0.1	0.1	0.0
Total expenditure	percentage of GDP	40.3	40.0	39.1	38.4	-0.1	0.0	-0.1
General government balance[9)]	percentage of GDP	-1.1	-0.9	-0.4	-0.1	0.0	0.0	0.0
Cyclical component	percentage of trend GDP	0.0	0.1	0.3	0.4	-0.1	0.0	0.0
Structural balance	percentage of trend GDP	-1.0	-0.9	-0.6	-0.5	0.1	0.0	0.0
Cyclically adjusted primary balance	percentage of trend GDP	0.4	0.3	0.6	0.6	0.0	0.0	-0.1
Fiscal stance[10)]	year-on-year change in p. p.	0.7	-0.1	0.3	0.1	-0.1	0.0	0.0
General government gross debt	percentage of GDP	51,0	49,4	47,3	45,1	0,0	0,0	-0,1

Table 5 Medium-Term Forecast (MTF-2018Q1) for key macroeconomic indicators (continuation)

Indicator	Unit	Actual data	MTF-2018 Q1			Difference vis-à-vis MTF2017Q4 update		
		2017	2018	2019	2020	2018	2019	2020
Balance of Payments								
Trade balance (goods)	percentage of GDP	0.8	1.8	2.7	3.0	1.3	1.1	1.3
Current acount	percentage of GDP	-2.1	-0.9	0.2	0.5	1.5	1.4	1.5
External environment and technical assumptions								
Slovakia's foreign demand	annual percentage change	6.1	5.3	4.6	4.1	0.3	0.2	0.0
Exchange rate (USD/EUR)[11),12)]	level	1.13	1.23	1.23	1.23	2.7	2.7	2.7
Oil price in USD[11), 12)]	level	54.4	65.2	61.3	58.6	-1.3	-1.3	-1.7
Oil price in USD[11)]	annual percentage change	23.5	19.8	-6.0	-4.5	-1.5	-0.1	-0.4
Oil price in EUR[11)]	annual percentage change	21.0	10.1	-6.0	-4.5	-4.4	-0.1	-0.4
Non-energy commodity prices in USD	annual percentage change	7.9	7.4	3.2	4.5	4.1	-0.2	0.1
Three-month EURIBOR	percentage per annum	-0.3	-0.3	-0.1	0.4	0.0	0.1	0.3
Ten-year Slovak government bond yields	percentage	0.9	0.8	1.0	1.2	-0.1	-0.1	-0.1

Sources: NBS, ECB a SO SR.
Note: The 2017 figures for the general government sector are projections.
1) Labour Force Survey.
2) Difference between the non-accelerating inflation rate of unemployment (NAIRU) and the unemployment rate. A positive value indicates that the NAIRU is higher than the unemployment rate.
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 changes vis-á-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/2018/protected/P1Q-2018.xls

Box 2

LONG-TERM TRENDS

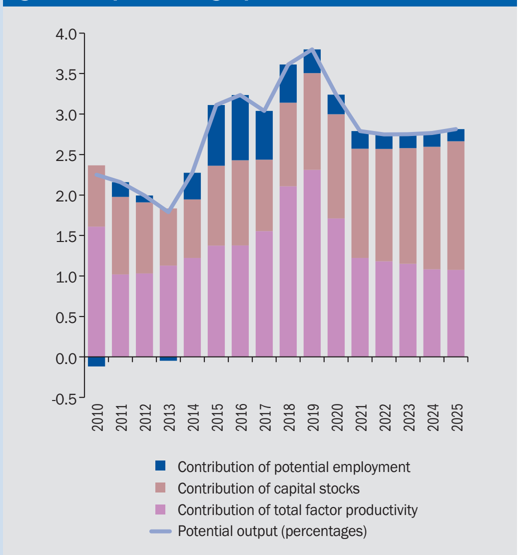
This box looks at the extended macroeconomic outlook for Slovakia, which is presented on an annual basis and covers the period of five years beyond the horizon of the standard macroeconomic forecast. The extended outlook highlights underlying trends in the Slovak economy (potential growth) and describes the economy's cyclical position using a model simulation.

Trend path of potential output growth

The global economic and financial crisis resulted in many countries experiencing a long-term reduction in potential (sustainable) economic performance. In the case of the Slovak economy, this adverse effect has been further accompanied by natural slowdown in potential growth resulting from the ongoing convergence process. It is therefore to be expected that the Slovak economy's potential output growth over coming years will be far lower than its pace in the pre-crisis period. Whereas **Slovakia's annual potential growth averaged 4.9% in the pre-crisis period (2000–2008), it is projected to average around 3.1% in the 2018–2025 period.**

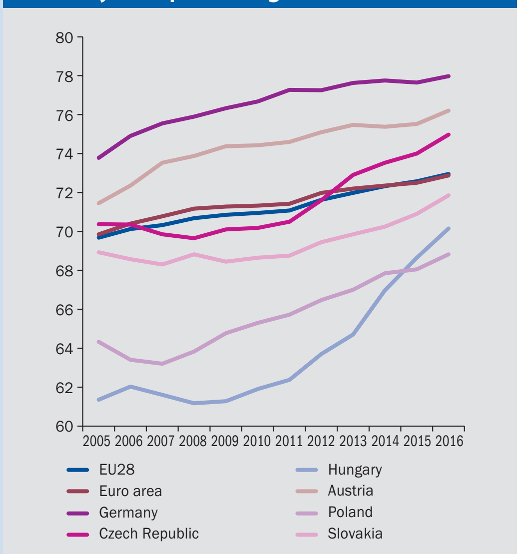
In line with historical experience, the main cause of falling potential growth is expected to be a slowdown in total factor productivity growth, which in the pre-crisis period benefited from large inflows of foreign direct investment. Its growth in the next three years will be supported by the launch of new production in the car industry, but over the longer-term it is expected to stabilise at lower levels. The main driver of potential growth over the longer period will be capital investment, while the contribution of potential employment will gradually fall.

Chart A Contributions to potential output growth (percentage points)



Sources: NBS calculations.

Chart B Labour force participation rate (15–64 years; percentages)



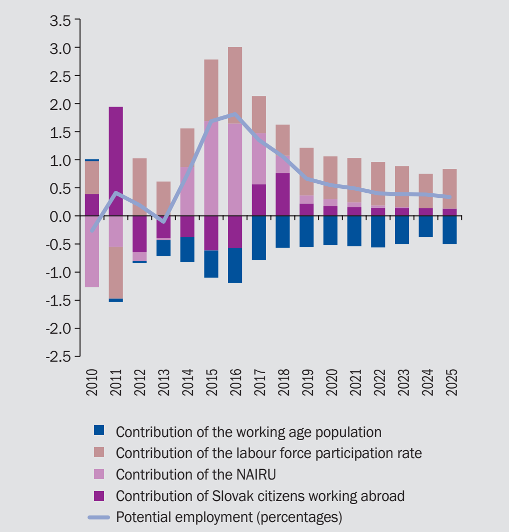
Sources: Eurostat.

Given the current labour market situation, it is worth taking a closer look at the contribution of potential employment to Slovakia's potential output growth. As a result of demographic trends and the rising number of people in older age cohorts, Slovakia's working age population has not been increasing since 2010. The labour force size is rising only due to increasing labour force participation. In other words, pensioners, women caring for one or more children aged up to three years, and students are entering the labour force in increasing numbers. The labour force participation rate in Slovakia is currently around 72% and is expected to rise over the long term to around 77% (i.e. almost to the level of the working age labour force participation rate in Germany). The expected increase in the participation rate is based partly on the assumption of a gradual raising of the retirement age.

The slowdown in potential employment growth is also being supported by the increasing numbers of foreign workers who are finding work in Slovakia due to shortages of domestic labour. Last year more Slovaks returned from employment abroad than went abroad for employment, thus ending a long-term outflow trend. This inflow of returning workers is also contributing to potential employment growth. At the same time, administrative labour market measures aimed at reducing structural unemployment are having a similar impact, as they contribute to a reduction in the long-term unemployment rate and thus reduce the non-accelerating inflation rate of unemployment (NAIRU). The NAIRU is projected to be 7.5% at the end of the long-term forecast period.

Over the long term, it is expected that the above-mentioned factors determining current potential employment trends in Slovakia will remain the same in qualitative terms. The negative demographic trends are expected to be counterbalanced in future by the upward path of the working age labour force participate rate. To a lesser extent, potential employment growth should also be supported by Slovaks returning from employment abroad and by the falling NAIRU.

Chart C Contributions to potential employment growth (percentage points)



Sources: NBS calculations.
Note: The contribution of Slovak citizens working abroad includes the contribution of the error arising from the bridging of the ESA 2010 and Labour Force Survey methodologies.

Projections for the cyclical position

The long-term outlook for Slovakia's economic activity was simulated using PREMISE model[13] and the following technical assumptions: a moderate decline in foreign demand growth, from 4.1% in 2020 to 3.8% in 2025;[14] a decline in foreign (imported) inflation,[15] from 1.9% in 2020 to 1.5% at the forecast horizon;[16] and a gradual increase in the short-term nominal interest rate, up to 2.5% in 2025.[17]

On the basis of this MTF-2018Q1 forecast, it is projected that the negative output gap will close in second half of 2018 and that the economy will gradually begin to overheat over the longer term. The output gap in 2020 is expected to be a positive 1.8%. Real GDP growth should remain above potential up to the beginning of 2022, given the expected robust domestic demand as well as steady foreign

13 PREMISE is a standard DSGE model, applied to Slovakia's small open economy.
14 IMF World Economic Outlook: http://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD
15 Weighted average of export prices of Slovakia's trading partners.
16 Average level since 2010.
17 Expert technical assumption for a gradual return to the equilibrium level.

demand growth. GDP growth is expected to peak in 2019, at 4.7%, owing to the positive impact of increased production capacity in the car industry.

After 2019 overall economic growth will gradually moderate as the positive impulses fade, resulting in the narrowing of the output gap. A gradual increase in nominal interest rates is expected to support that narrowing, but the output gap should nevertheless remain positive. In the years from 2022 to 2025, GDP growth is projected to slow to 2.6%, just below the level of potential growth.

The annual HICP inflation rate is expected to increase above the 2.0% level, with its rate for 2018 projected to be 2.3%. The positive output gap is expected to be accompanied by a gradual increase in domestic production costs, which are projected to push the headline inflation rate up to a peak of 3% towards the end of 2022. Thereafter, with inflationary pressures expected to ease gradually, the inflation rate is projected to fall. Like the output gap, the inflation rate is expected to be slightly higher than optimal (for convergence purposes) in the years 2022 to 2025.

Table A Long-term macroeconomic outlook

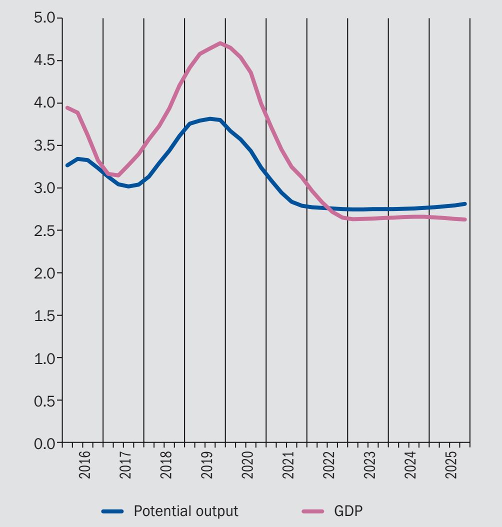
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Real GDP growth (percentage)	3.3	3.4	4.2	4.7	4.0	3.1	2.7	2.6	2.6	2.6
Output gap (percentage of potential GDP)	-0.7	-0.4	0.2	1.0	1.8	2.1	2.0	1.9	1.8	1.6
HICP (percentage)	-0.5	1.4	2.3	2.2	2.2	2.4	2.9	3.0	2.9	2.8

Sources: NBS calculations.

Box 3

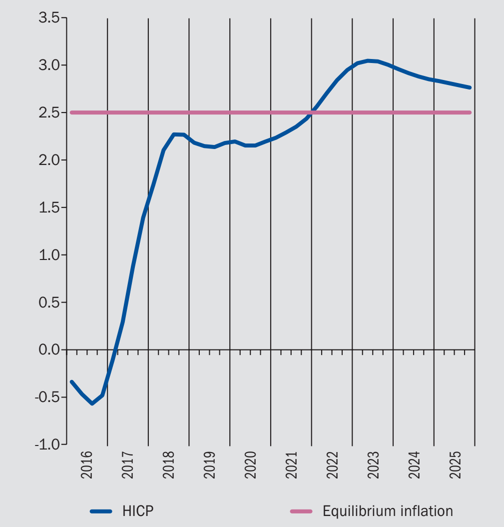
LONG-TERM OUTLOOK[18]

Chart A Real GDP growth (percentages)



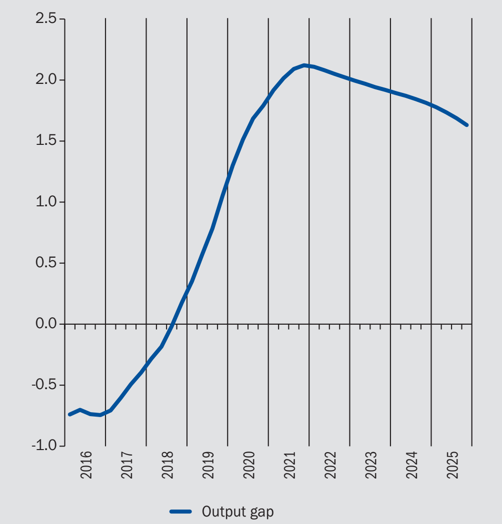
Sources: SO SR and NBS calculations.

Chart C HICP (percentages)



Sources: SO SR and NBS calculations.

Chart B Output gap (percentages of potential GDP)



Sources: SO SR and NBS calculations.

18 Annual rates of change are calculated as the year-on-year change in the annual moving average. The output gap is also calculated using annual moving averages.