Medium-Term Forecast

Q2 2019

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1 Overview

The Slovak economy expanded by 0.9%, quarter on quarter, in the first three months of 2019. The growth was based mainly on export performance, with the contribution of domestic demand having weakened since the previous year. Export growth was strongly supported by increased production in the car industry. As for domestic demand, it reflected lower growth in household consumption expenditure. As expected, employment growth slowed slightly in the first quarter. Despite softer domestic demand, employment growth was most pronounced in the services and construction sectors. Robust wage growth reflected mainly increases in public sector salaries.

The car industry is expected to continue underpinning economic growth both this year and in 2020. Against a backdrop of a global economic slowdown, Slovakia's GDP growth is projected to be 3.3% in 2019 and 3.2% in 2020. Besides net exports, domestic demand is also expected to have a positive impact on that growth. In 2021, after the impact of new car production has faded, GDP growth is projected to ease to 2.8%. Compared with the March 2019 projections (MTF-2019Q1), the growth projections for 2019 and 2020 have each been revised down by 0.2 percentage point, largely in response to lower than expected foreign demand.

Turning to the labour market, employment growth is expected to moderate amid slowing economic growth and adverse demographics. Softening external demand is expected to be reflected in weaker demand for labour, particularly in industry. This negative impact may, however, be partly mitigated by sectors reliant on domestic demand. Wage growth is expected to decelerate over the projection period, but also to remain at elevated levels owing to labour market tightness and substantial increases in public sector contractual wages.

The annual HICP inflation rate is projected to remain close to 2.5% throughout the projection period. The main inflationary pressure is coming from the energy component, given recent increases in administered prices and sharp rises in motor fuel prices. Food prices have also been contributing positively to headline inflation. After the impact of high commodity prices has faded, inflation is expected to begin edging down next year. The effect of those prices should be partly offset by rising demand-pull inflation.

The risks to the GDP growth outlook are predominantly on the downside, owing to the impact of continuing protectionist measures and the persisting uncertainty surrounding Brexit. The risks to the inflation outlook are balanced.

2 Recent developments in the external environment and in Slovakia

Euro area GDP growth accelerated in the first quarter

The euro area economy's quarter on quarter growth accelerated to 0.4% in the first quarter of 2019, from 0.2% in the fourth quarter of 2018. All the large euro area countries contributed positively to that growth. According to short-term indicators, industrial production[1] picked up significantly, and construction output more moderately, in the first quarter of 2019, while retail trade was almost unchanged from the previous quarter. Except in Germany, industrial production increased in all the major euro area economies: the Netherlands, Spain, Italy and France. The latest leading indicators point to a weakening of euro area growth in the second quarter. Annual HICP inflation in the euro area increased to 1.7% in April 2019 (from 1.4% in March), reflecting a marked rise in services inflation stemming from Easter-related calendar effects related to the timing of Easter. Non-energy industrial goods inflation also increased, marginally, while energy inflation was the same as in the previous month.

Slovakia's economic growth was export driven

The Slovak economy grew 0.9%, quarter on quarter, in the first quarter of 2019, thus maintaining the robust growth it recorded in the previous period. There was, though, a slight change in the composition of GDP growth, with net exports accounting for most of the growth and domestic demand for a smaller share. Exports benefited from still rising output in the car industry. Within domestic demand, by contrast, households' consumption expenditure declined and their propensity to save increased owing to negative sentiment. Signs of cautiousness were also apparent in investment demand, with the start of the year seeing a notable decline in industrial confidence that is expected to have dampened investment growth.

Employment growth in the first quarter stood at 0.3% in quarter-on-quarter terms. The economy continues to support net job creation, as is particularly evident in the construction sector, which is experiencing a boom in larger development projects. Job growth is also quite strong in the services

[1] The indicators' averages for the first quarter of 2019 are calculated from their available monthly readings in that quarter.

sector, where firming consumer demand for selected services may have had an impact. Wage growth remained robust in the first quarter, underpinned mainly by significant increases in public sector salaries.

The annual HICP inflation rate accelerated to 2.4% in the first quarter of 2019 (from 2.1% in the fourth quarter of 2018), and it remained at that level in April. The increase was based mainly on increases in the energy component (motor fuel prices and administered energy prices) and in food inflation, which picked up after slowing temporarily at the end of last year. Demand-pull inflation moderated amid a lower rate of increase in non-energy industrial goods prices.

3 Technical assumptions of the forecast[2]

3.1 Commodities and the exchange rate

Between the cut-off dates for the March 2019 forecast and this forecast, the **exchange rate**[3] of the euro against the US dollar followed a depreciating trend that reflected weaker outlooks for euro area economic growth. The euro depreciated even after ECB announced it would be adopting further measures to support the euro economy. The average exchange rate over the period 2019-21 is assumed to be USD 1.12 per euro, so, compared with the March forecast, the rate is 1.0% weaker in 2019 and 1.4% weaker in both 2020 and 2021. For 2019, the nominal effective exchange rate (NEER) calculated with respect to Slovakia's 15 most significant trading partners, is 0.1% higher in this forecast than in the previous forecast, and for both 2020 and 2021 it is 0.2% higher.

Between this forecast and the March forecast, **oil prices** were rising due to reduced output from OPEC and allied oil producers (in particular Russia), the continuing US sanctions on Venezuela and Iran, and the political and economic crisis in Venezuela. The assumptions for the price per barrel of Brent crude oil over the projection period are therefore higher in this forecast than in the March forecast, at USD 68 in 2019 and USD 63 in 2020 and 2021. Compared with the March forecast, the euro oil price is also assumed to be higher, by around 6% in 2019, 3% in 2020 and 1% in 2021.

3.2 Foreign demand

In the June 2019 Eurosystem staff macroeconomic projections, the forecast for euro area GDP growth in 2019 has been revised up slightly (by 0.1 percentage point), after GDP growth in the first quarter exceeded the forecast in the ECB's March projections. By contrast, the growth projections for 2020 and 2021 have been revised down, by 0.2 and 0.1 percentage point

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[2] The technical assumptions of this Medium-Term Forecast are based on the June 2019 Eurosystem staff macroeconomic projections for the euro area, whose cut-off date for technical assumptions was 15 May 2019 (or in the case of the foreign demand assumptions, 22 May 2019).

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

respectively. GDP growth is expected to fall to 1.2% in 2019, before increasing to 1.4% in 2020 and 2021.

Global economic growth projections have been revised down amid persisting uncertainty related to geopolitical factors, to the ongoing application of protectionist measures, and to the vulnerability of emerging market economies. Compared with NBS's March projection exercise, the assumptions for growth in foreign demand for Slovak exports have been revised down over the whole projection period in response to the softening of GDP growth in the euro area and in particular to expectations for weakening activity growth in Slovakia's main trading partners (Germany and the Czech Republic); they now stand at 3.0% in 2019 (down by 0.4 percentage point), 3.2% in 2020 (by 0.8 percentage point) and 3.6% (by 0.2 percentage point).

4 Macroeconomic forecast for Slovakia

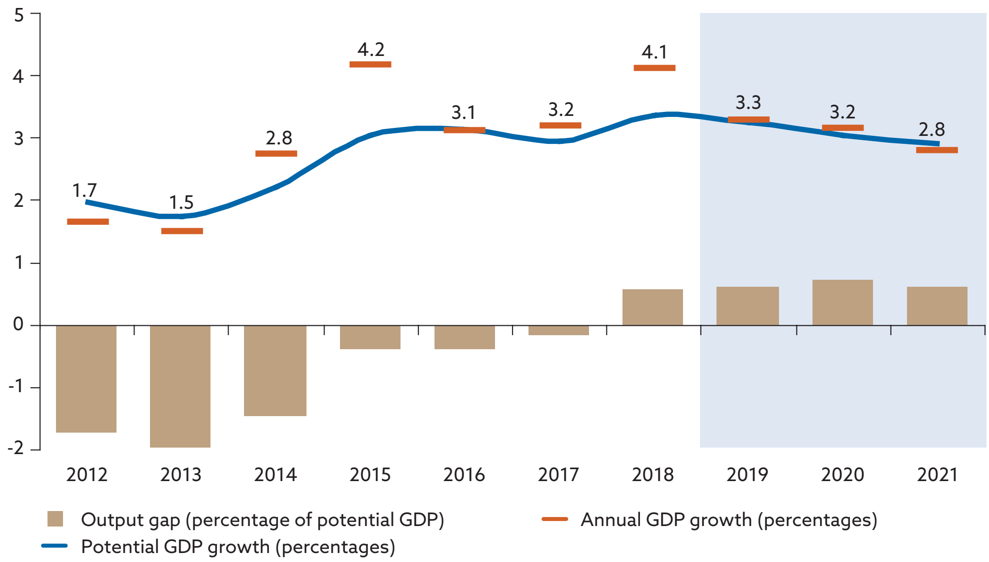
4.1 Economic growth

Economic growth is losing momentum

After accelerating appreciably in 2018, Slovakia's economic growth has begun gradually to moderate. GDP growth is expected to slow to 3.3% in 2019, while the impact of weaker domestic demand growth should be partly offset by the coming on stream of new production capacity in the automotive industry. After that supply shock has faded, GDP growth is projected to ease to 2.8% in 2021.

Chart 1

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



Sources: SO SR and NBS calculations.

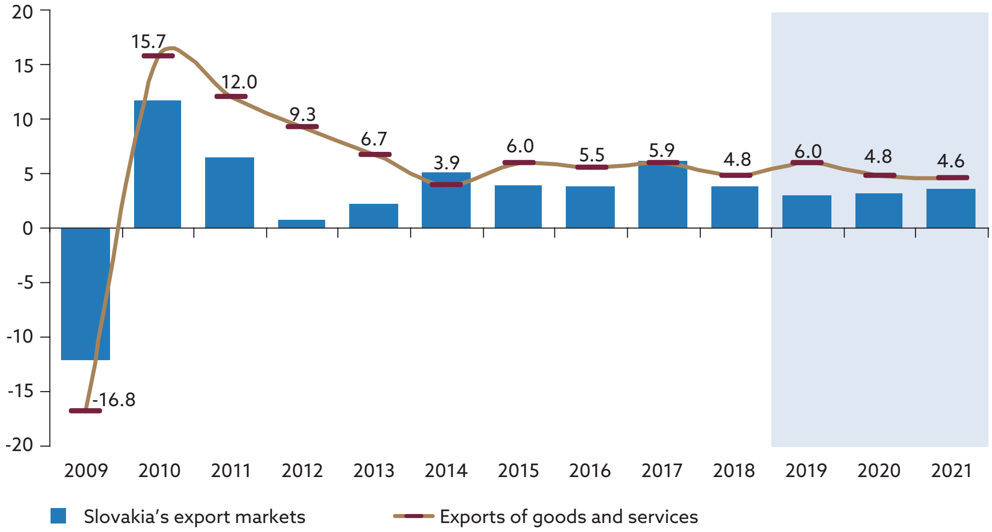
The output gap will be positive over the 2019-2021 forecast period. The business cycle, however, has already peaked in 2018.

Export growth projected to increase in 2019

Export growth is expected to pick up in 2019 despite softening foreign demand. Exports will reflect the one-off effect of new production capacity launched in the car industry. After this supply shock has faded, export growth is projected to slow; nevertheless, given Slovakia's ongoing favourable price competitiveness and its flexibility in terms of goods produced and export locations, export is still expected to outpace foreign demand growth.

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.

Investment demand growth to be driven mainly by the public sector

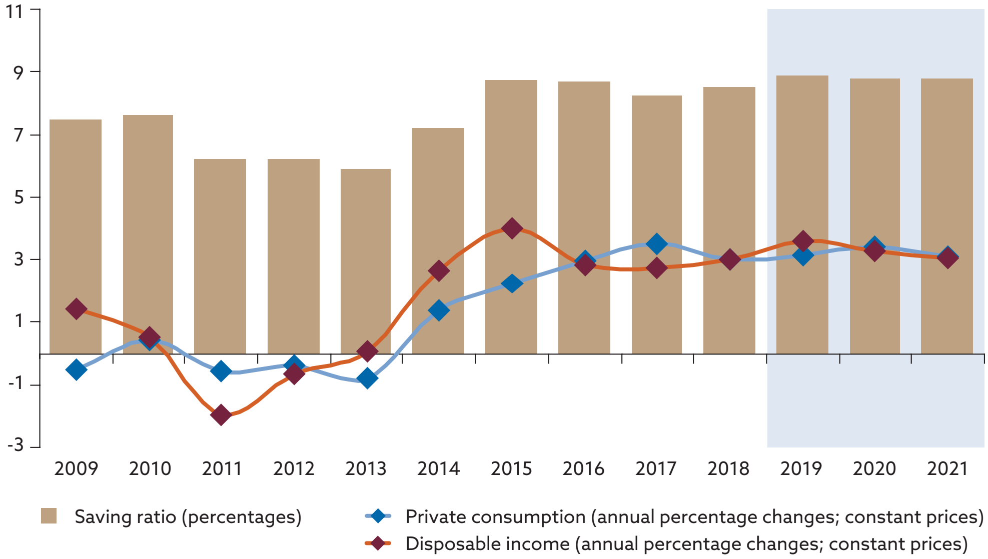
Investment activity growth, which increased in 2018 owing to one-off investments in the car industry, is projected to decelerate. Private sector investment is expected to be affected by the persisting uncertainty surrounding global developments and the loss of momentum in the domestic economy. At the same time, however, the impact of weak investment demand in the private sector should be partly offset by increasing absorption of EU funds and by other government investment expenditure.

Signs of household caution with implications for consumption

Private consumption is expected to remain relatively strong in coming years. Household disposable income growth should be based mainly on sharply rising income from work, as well as on one-off government measures (Christmas benefits, a doubling of the tax credit for children aged up to six, free school lunches). The growth in household income is expected to support not only consumption expenditure growth, but also an increase in the household saving ratio. Households are expected to increase their financial assets and to respond to their increasing indebtedness.

Chart 3

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



Sources: SO SR and NBS.

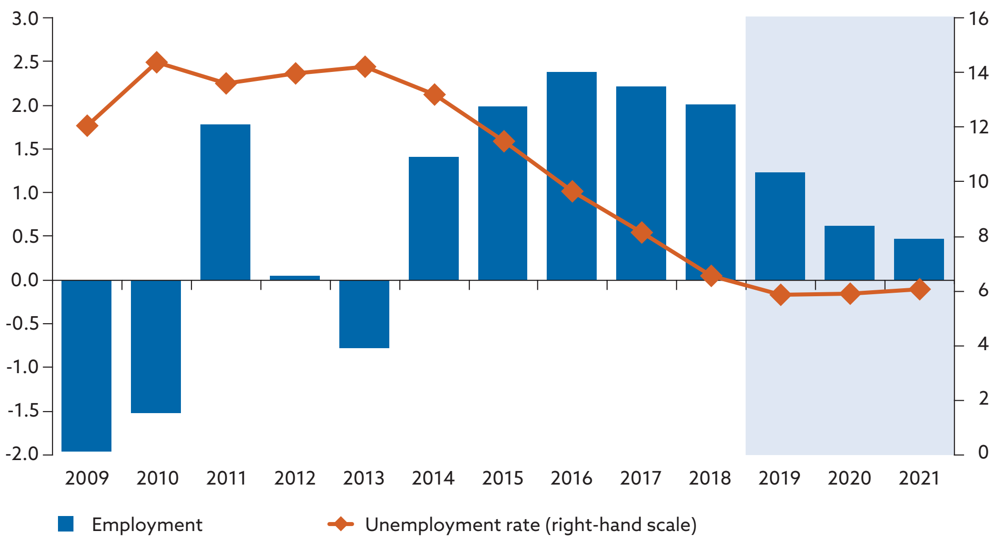
4.2 Labour market

Job creation slowdown

Employment growth is expected to decline gradually as a result of labour shortages. These reflect adverse demographics and, with the unemployment rate at a historical low, the minimal scope for further recruitment from the ranks of the unemployed. The labour force should be boosted by Slovaks returning from employment abroad and by increasing labour force participation. Job growth is also expected to be weakened by the phase of the business cycle.

Chart 4

Employment and the unemployment rate (annual percentage changes)



Sources: SO SR and NBS.

Wage growth is projected to remain elevated and to be higher in 2019 than in the previous year. Besides labour market tightness and labour productivity growth, the factors behind this trend include increased wage premia for night, weekend and public holiday work and increases in public sector contractual wages. After the fading of these factors, and amid a cooling global economy, wage growth is expected to moderate gradually in subsequent years.

Table 1 Wages (annual percentage changes)

	2018	2019	2020	2021
Nominal labour productivity	4.4	5.0	5.0	4.8
Whole economy – nominal wages	6.2	6.7	6.1	5.5
Whole economy – real wages	3.6	4.0	3.5	3.2
Private sector – nominal wages	6.0	6.1	5.5	5.4
Private sector – real wages	3.5	3.5	2.9	3.1
Public administration, education and health care – nominal wages	6.7	8.6	8.2	5.9
Public administration, education and health care – real wages	4.1	5.9	5.6	3.6

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. Average nominal wage growth in the general government sector (ESA S.13) is projected to be 8.9% in 2019, 8.4% in 2020, and 5.8% in 2021. Nominal labour productivity – GDP divided by persons in employment according to statistical reporting methodology.

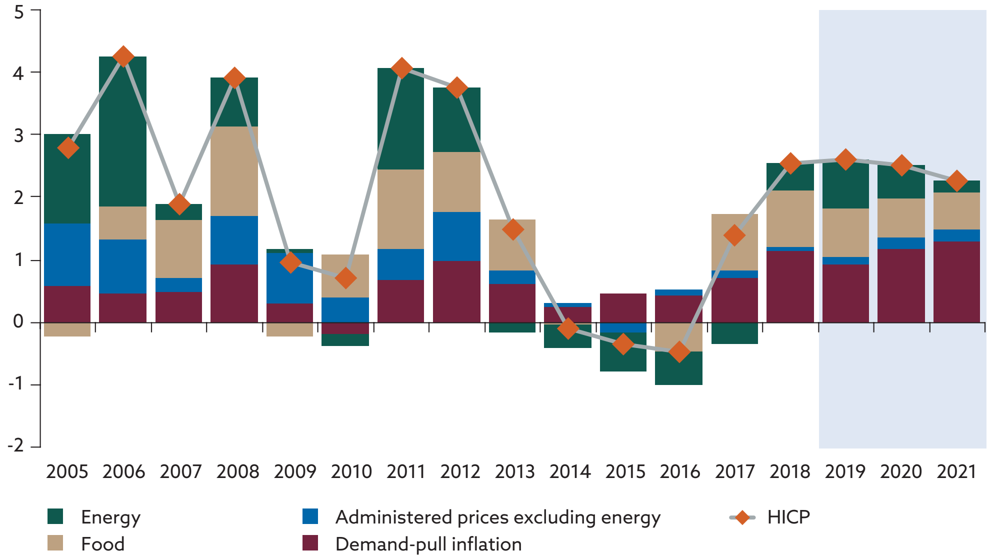
4.3 Price developments

Inflation to be around 2.5% over the medium term

Annual HICP inflation in Slovakia is projected to average 2.5% throughout the projection period, with cost and demand factors both having an impact on the headline rate. Strong increases in prices of energy commodities and agricultural commodities are expected to put upward pressure on inflation in 2019 in particular. Their impact, however, is expected to fade gradually, and therefore demand factors supported by the positive output gap should come to the fore. The impact of rising demand should be most pronounced in services inflation.

Chart 5

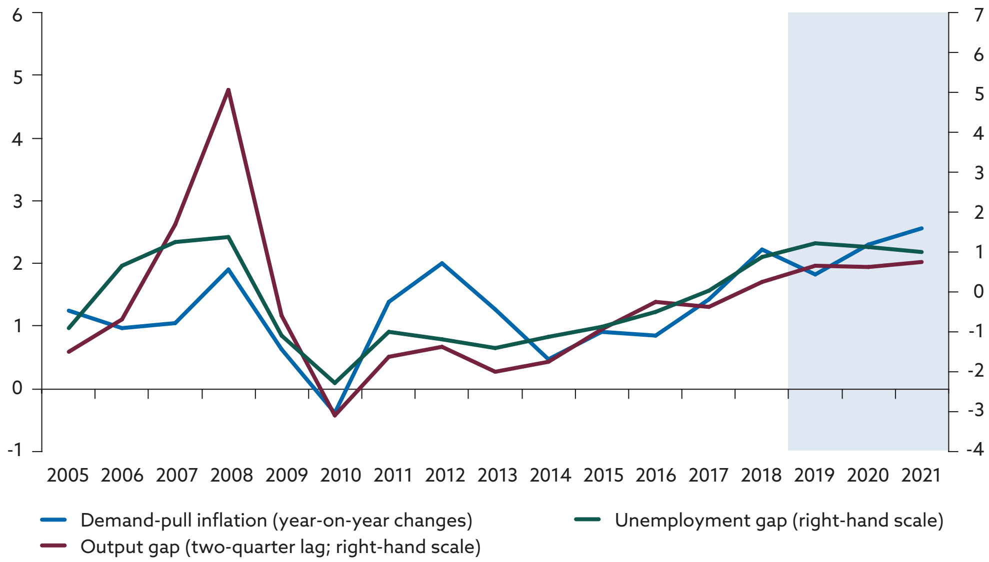
HIL inflation



Sources: SO SR and NBS calculations.

Chart 6

Demand-pull inflation and the output gap (percentages)



Sources: SO SR and NBS calculations.
Note: Demand-pull inflation comprises the following: services inflation excluding administered prices; non-energy industrial goods inflation excluding administered prices.

Table 2 Inflation components (annual percentage changes)

	Average 2004-2008 (pre-crisis period)	Average 2010-2014 (post-crisis period with euro currency)	2017	2018	2019	2020	2021
HICP	**4.1**	**2.0**	**1.4**	**2.5**	**2.6**	**2.5**	**2.3**
Food	3.6	3.1	3.6	3.4	3.2	2.5	2.5
Non-energy industrial goods	0.2	0.3	0.6	1.1	1.2	1.8	1.8
Energy	8.3	2.3	-2.5	3.0	4.9	3.4	1.3
Services	5.3	2.5	2.0	2.8	2.3	2.7	3.0
Demand-pull inflation	1.8	1.0	1.4	2.2	1.8	2.3	2.6

Sources: SO SR and NBS calculations.

5 Fiscal outlook

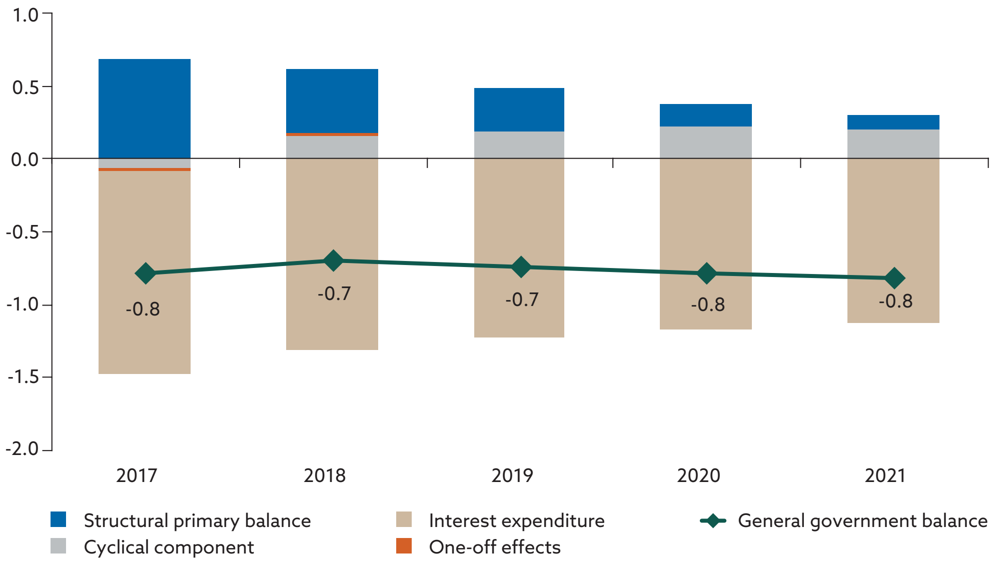
Moderate deficit growth and gradual fall in debt up to 2021

Slovakia's general government deficit is projected to be the same in 2019 as in the previous year, at 0.7% of GDP, and then to edge up to 0.8% in both 2020 and 2021. It is still expected that falling interest rates will have a positive impact on the deficit. The primary balance should have a slightly expansionary character in 2019 and 2020, when growth in expenditure (in particular on employee compensation, social transfers in kind, and investment) is expected to be supported by new legislation on taxes and social security contributions. The fiscal stance is envisaged to become neutral by the end of the projection period, with the restrictive impact of primary expenditure counterbalanced mainly by the fall in revenue arising from the bank levy's cancellation.

Compared with the March 2019 forecast, the fiscal deficit projection for 2019 remains unchanged, while the projections for 2020 and 2021 have been revised down slightly, by 0.1 percentage point and 0.2 percentage point respectively. The deficit increase is largely attributable to a deterioration in the macroeconomic outlook which implies slower growth in tax and social security contribution revenues.

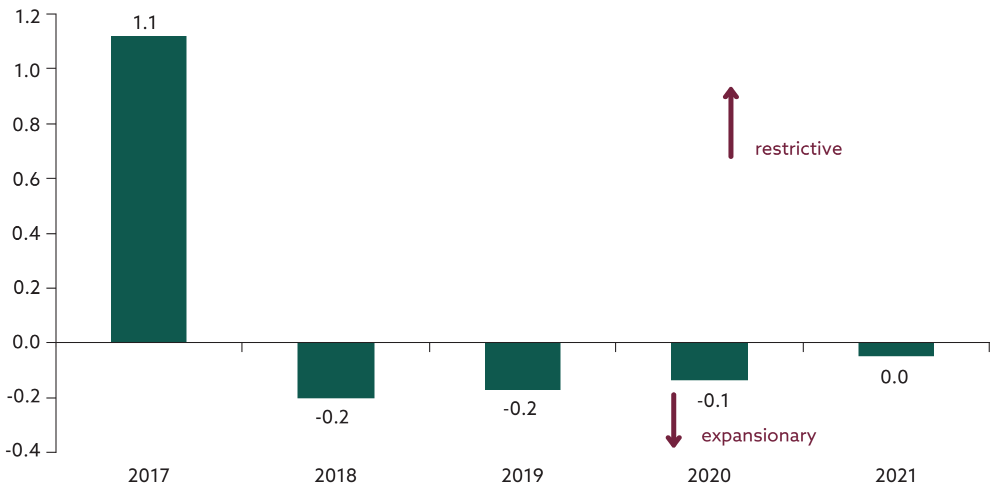
Public debt as a share of GDP is expected to fall by one percentage point in 2019, to 47.9%, and to continue declining over the projection period, down to 46.8% in 2021. This downward path should be supported by the continuing trend in primary surpluses and by the favourable difference between interest expenditure and economic growth. Compared with the March fiscal projections, however, the debt projections for 2020 and 2021 have been revised up by, respectively, 0.2 percentage point and 0.3 percentage point, in response to fiscal performance revisions and slower GDP growth.

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



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

Government consumption expenditure to accelerate over the forecast period

General government final consumption expenditure is expected to increase more moderately in 2019 than it did in 2018. Although wage expenditure and healthcare expenditure are expected to accelerate, growth in expenditure on goods and services is projected to moderate. Government consumption growth is expected to accelerate in 2020 and 2021, mainly owing to the impact of new availability payments under public-private partnership (PPP) projects. As for government investment activity, it is volatile and strongly affected by the absorption of EU funds. As a result, government investment growth is expected to be somewhat lower in 2019. Over the projection period, however, both domestic investment activity and the absorption of EU funds are expected to maintain relatively high growth.

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

	2017	2018	2019	2020	2021
General government final consumption expenditure	1.7	1.9	1.5	2.7	3.2
Government investment	2.2	16.2	7.8	8.9	6.1
Contribution of EU funds to rate of change (percentage points)	-4.2	12.1	3.2	6.0	2.8
General government balance (percentage of GDP)	-0.8	-0.7	-0.7	-0.8	-0.8
Fiscal stance (year-on-year change in percentage points)	1.1	-0.2	-0.2	-0.1	0.0
Gross debt (percentage of GDP)	50.9	48.9	47.9	47.1	46.8

Sources: SO SR and NBS calculations.

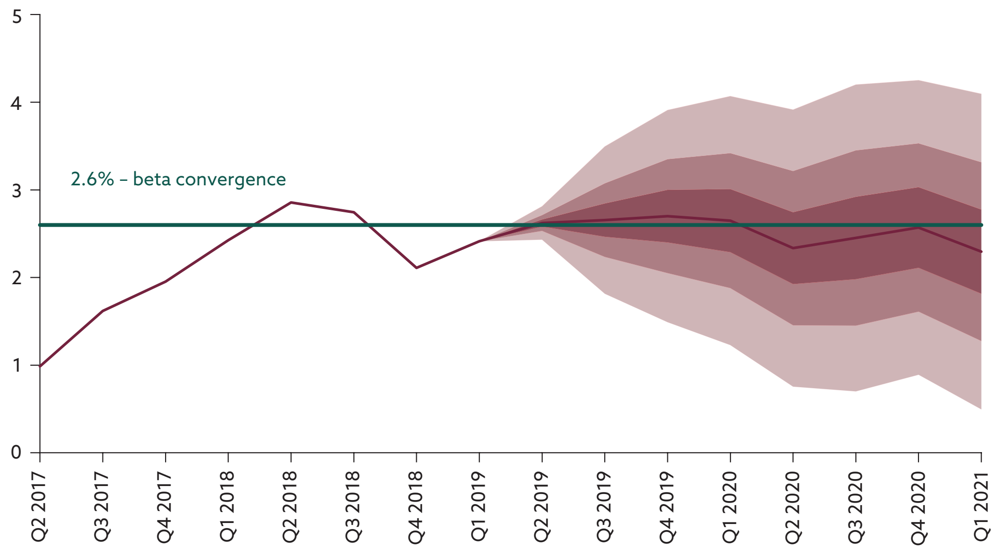
6 Risks to the forecast

The risks to the GDP growth outlook are predominantly on the downside. The principal risks include the possibility of protectionist measures causing a greater than expected slowdown in the global economy, the persisting uncertainty surrounding Brexit, and the deterioration in euro area leading indicators and in Slovak industrial sentiment.

The risks to the inflation outlook are balanced.

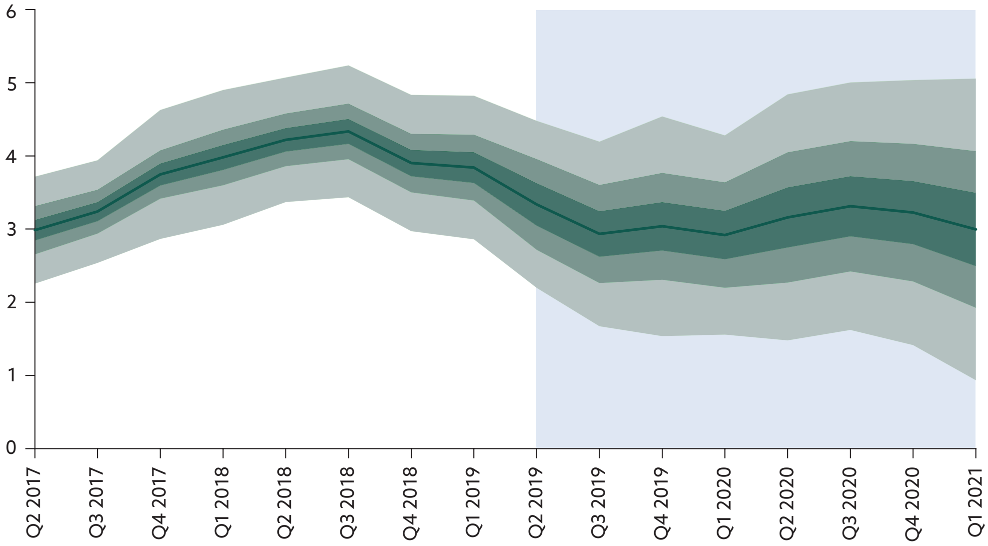
Chart 9

HICP inflation forecast (percentages)



Sources: SO SR and NBS calculations.
Notes: The NBS forecast provides probabilistic best-estimate projections. The projection intervals in the chart (representing coverage probabilities of 30%, 60% and 90%) are calculated using expected quantiles of historical inflation forecast errors (using sieve bootstrap methods). For further details on the construction of the charts, see the Analytical Commentary entitled "Putting new fan-charts into use".
Beta convergence – the situation where countries with lower GDP (per capita) tend to have stronger economic growth than do countries with higher GDP, thereby giving rise to a process of catch-up with advanced economies. The same applies to price level catch-up. Further information is available, in Slovak, in the following Analytical Commentary:
"Perspektívy dlhodobejšieho vývoja slovenskej ekonomiky (do roku 2020)" (Longer-term outlooks for the Slovak economy – up to 2020).

Chart 10
GDP growth forecast (percentages)



Sources: SO SR and NBS calculations.
Notes: The NBS forecast provides probabilistic best-estimate projections. The projection intervals in the chart (representing coverage probabilities of 30%, 60% and 90%) are calculated using expected quantiles of historical inflation forecast errors (using sieve bootstrap methods). For further details on the construction of the charts, see the Analytical Commentary entitled "Putting new fan-charts into use".
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7 Comparison with the previous forecast

Compared with the March forecast (MTF-2019Q1), the largest change in the technical assumptions was in the assumptions for growth in foreign demand for Slovak exports, which were revised down throughout the projection period (cumulatively by around 1.4 percentage points). This, together with recent lower than expected domestic demand growth, prompted downward revisions to the GDP growth projections. As a result, labour market projections are now less optimistic, too, and therefore the inflation forecast for 2021 has been revised down slightly.

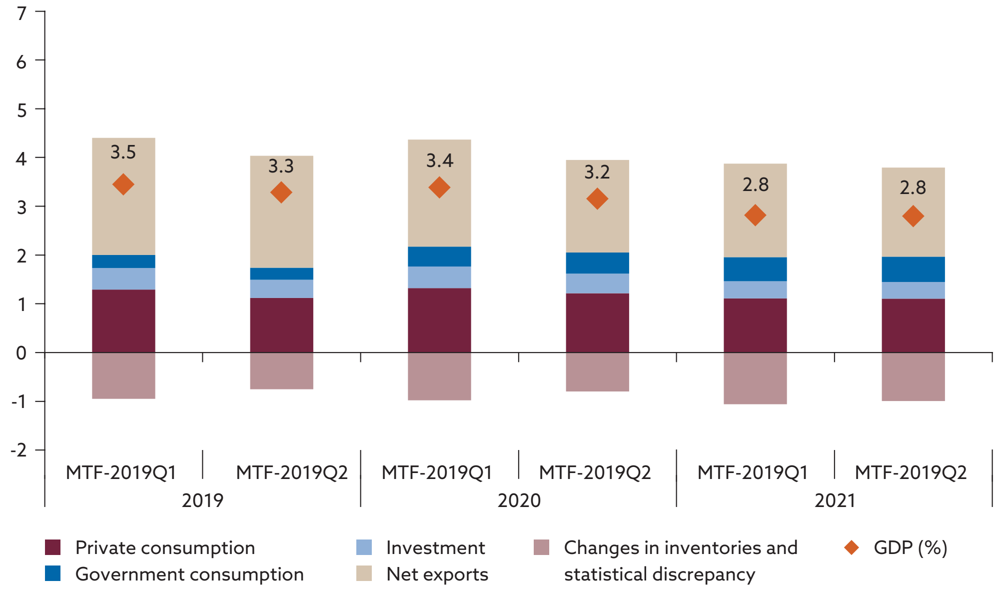
Slower economic growth

Compared with the March forecast, the projections for Slovakia's GDP growth in 2019 and 2020 have both been revised down owing mainly to lower foreign demand, the negative impact of which should be partly offset in 2019 by the better than expected performance of exports in the first quarter of the year. Indicator readings from the first quarter pointed to a softening of domestic demand. Downward revisions to private consumption projections were based on the most recent data, including slower growth in income from work. The investment demand forecast was revised down in the light of the first quarter's lower than expected growth in investment and in GDP.

The recent loss of momentum in both domestic and foreign demand appears to be cyclical in nature, without an impact on potential GDP. Hence, compared with the March forecast, the projections for cyclical overheating of the economy have been revised down.

Chart 11

GDP and its components[4] (annual percentage changes; percentage point contributions)



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

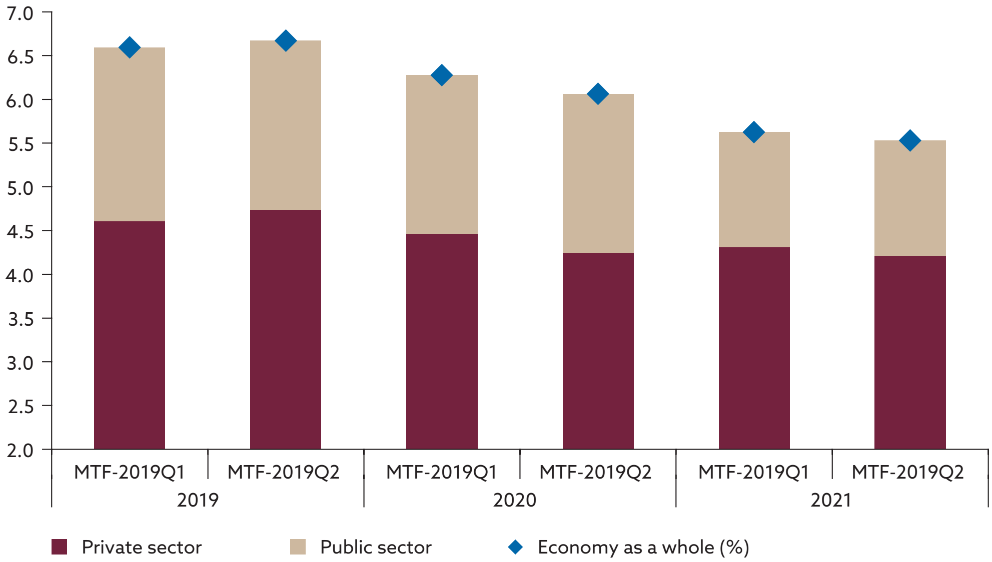
Moderately worse labour market outlook

Looking at the labour market, the projections for employment growth and wage growth are lower in this forecast than in the March forecast. Although recent figures for employment and wages have been slightly better than expected, the more important factor for their projections has been the deterioration in the economic outlook. Therefore, the projections for employment have been revised down and those for the unemployment rate have been revised up. While wage growth is expected to accelerate this year given recent trends, its rate over the rest of the projection period will reflect weaker growth in labour productivity.

[4] 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

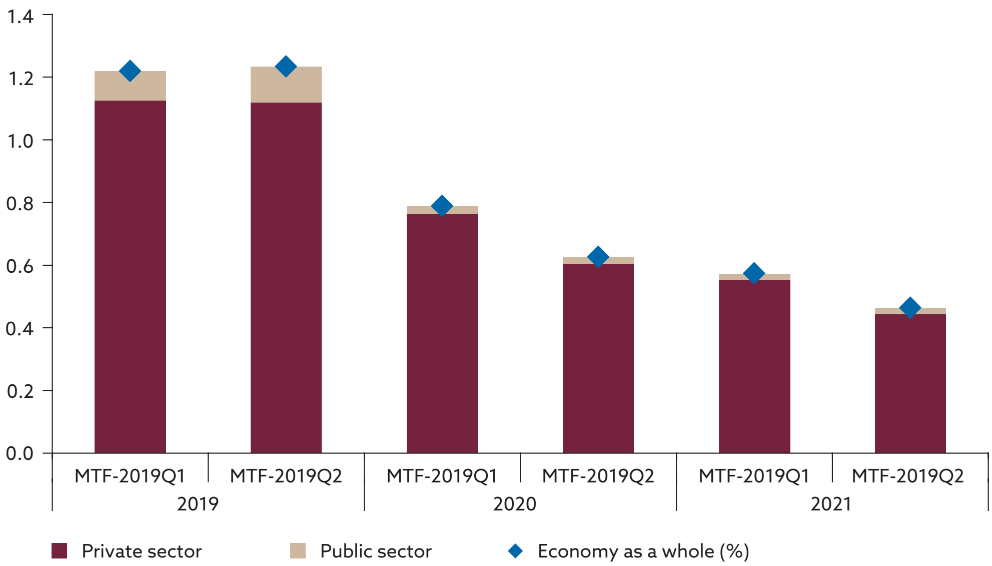
Average wage broken down by public sector and private sector contributions to its rate of change (annual percentage changes; percentage points)



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.

Chart 13

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



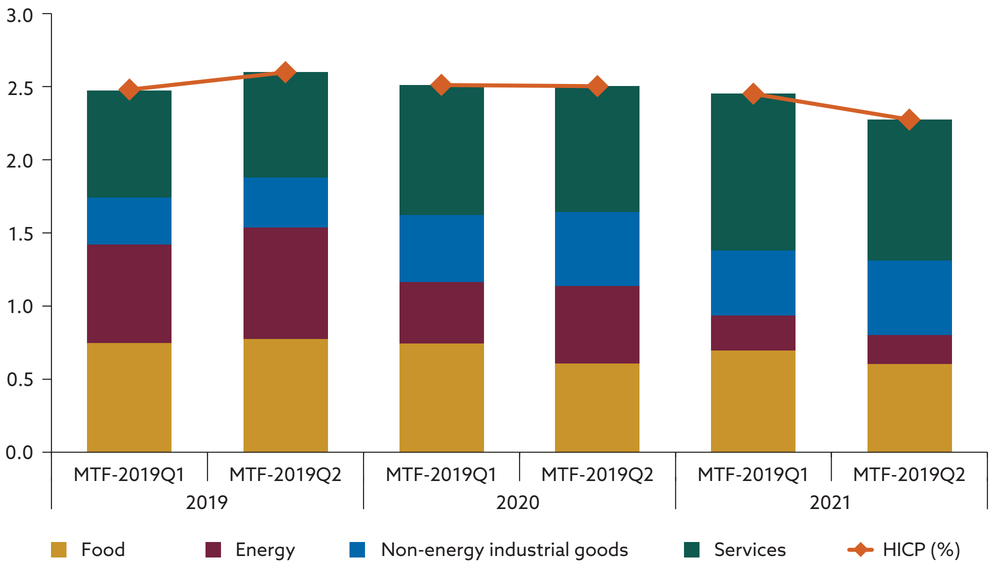
Sources: SO SR and NBS.
Note: The public sector comprises sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities.

Slightly lower inflation in 2021

The average headline inflation rate for 2019 is expected to be slightly higher than previously forecast taking into account recent developments, mainly higher motor fuel prices. The inflation projection for 2020 was left unchanged, with lower food prices expected to cancel out the impact of increases in electricity prices (reflecting wholesale price movements). The projection for 2021 has been revised down slightly on expectations of lower rates of increase in food and energy prices. The contribution of demand-pull inflation is also expected to be lower following a revision to the output gap projection.

Chart 14

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



Sources: SO SR and NBS calculations.

Box 1
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.

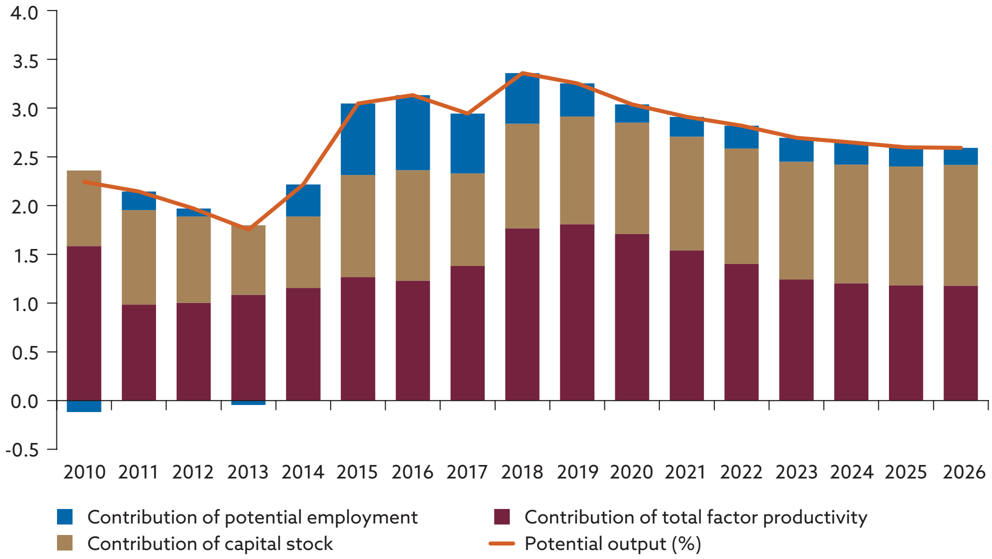
Trend path of potential output growth

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 2.8% in the 2019–2026 period.**

The decline in potential growth is expected to be caused mainly by a slowdown in total factor productivity (TFP) growth (which in the pre-crisis period benefited from large inflows of foreign direct investment), as well as by a deceleration in potential employment growth reflecting the demographic situation. TFP growth is currently still supported by new production launched in the car industry, but over the long term it is expected to stabilise at lower levels.[5] The contribution of capital stock to potential growth will be relatively stable over the long term.

Chart A

Components of potential output growth (annual percentage changes; percentage point contributions)



Source: NBS calculations.

Projections for the cyclical position

The long-term outlook for Slovakia's economic activity was simulated using a model called PREMISE[6] and the following technical assumptions: foreign demand growth remains stable at 3.7% throughout the years 2022 to 2026;[7] foreign (imported) inflation[8] declines from 2.2% in 2021 to 1.5%

5 More information about the post-crisis slowdown in productivity growth and the sources of that growth is provided, in Slovak, in the Analytical Commentary entitled "Dlhodobé trendy vývoja slovenskej ekonomiky (do roku 2026)" *(Long-term trends in the Slovak economy – up to 2026)*, published on the NBS website at www.nbs.sk/_img/Documents/_komentare/AnalytickeKomentare/2019/AK66_Dlhodobe_trendy.pdf.

6 PREMISE – a standard DSGE model of Slovakia's small open economy.

7 IMF World Economic Outlook: http://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD

8 Weighted average of export prices of Slovakia's trading partners.

at the end of the projection period;[9] and the average short-term nominal interest rate increases gradually, up to 2.0% in 2026.[10]

On the basis of this MTF-2019Q2 forecast, the positive output gap is expected to peak in mid-2021. Real GDP growth is projected to have fallen below potential by as early as the second half of that year and to remain so through the end of 2026; consequently, the positive output gap is expected to close gradually. This development is attributable to foreign demand growth running below its long-run average and to declining foreign prices. In the longer term, from 2022 to 2026, the contribution of low economic productivity, a corollary of the post-crisis trend, is expected to become less negative. By contrast, after several years of rising labour costs and falling margins, firms expect their margins to increase gradually, which should have an upward impact on prices and therefore a downward impact on GDP growth. These pressures were largely subdued in recent years, when the pass-through of gradually rising labour costs to inflation was insufficient.

Demand-pull inflation as measured by the HICP excluding energy and food is expected to increase from 1.8% in 2019 to 2.7% in 2023, when it is projected to peak. This trend is predicated mainly on an increase in domestic production costs, which is expected to decelerate from 2021 in conjunction with the narrowing of the positive output gap. Among these costs, wages are expected to record the most marked slowdown; nevertheless, wage growth is expected to remain above its long-run average and therefore to have a positive impact on inflation. Like the output gap, the demand-pull inflation rate is expected to be slightly higher than optimal (from the convergence perspective) in the years 2023 to 2026.

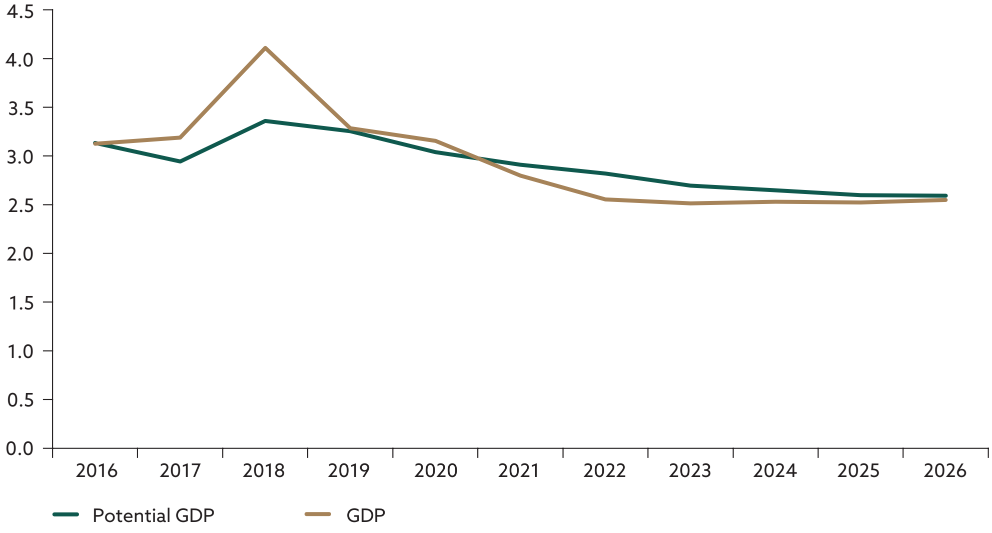
Table A Long-term macroeconomic outlook

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Real GDP (annual percentage change)	3.2	4.1	3.3	3.2	2.8	2.6	2.5	2.5	2.5	2.5
Output gap (percentage of potential GDP)	-0.1	0.6	0.6	0.7	0.6	0.4	0.2	0.1	0.0	-0.1
HICP excluding energy and food (annual percentage change)	1.4	2.0	1.8	2.3	2.5	2.5	2.7	2.6	2.6	2.6

Source: NBS calculations.

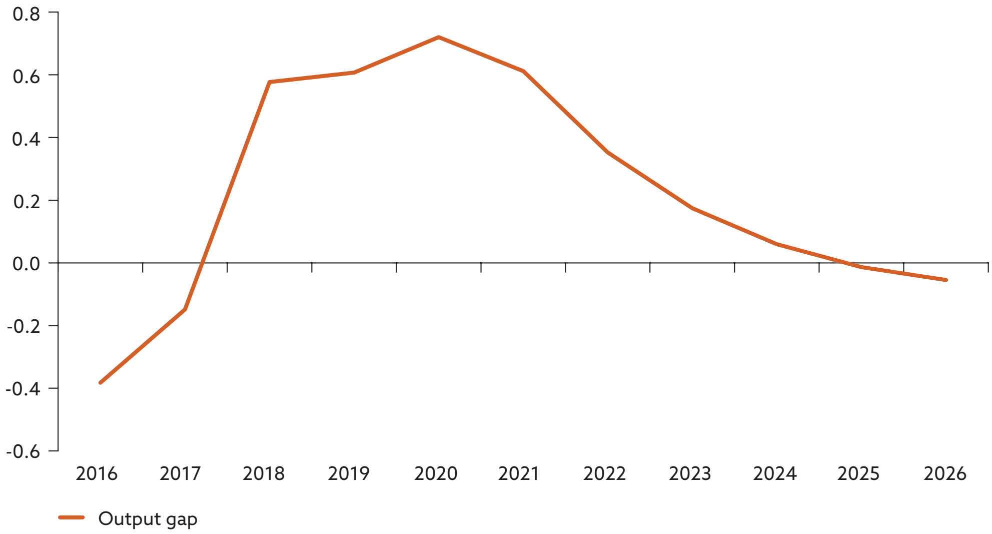
9 Average level since 2010.
10 Expert technical assumption for a gradual return to equilibrium.

Chart B
Long-term outlook – real GDP (annual percentage changes)



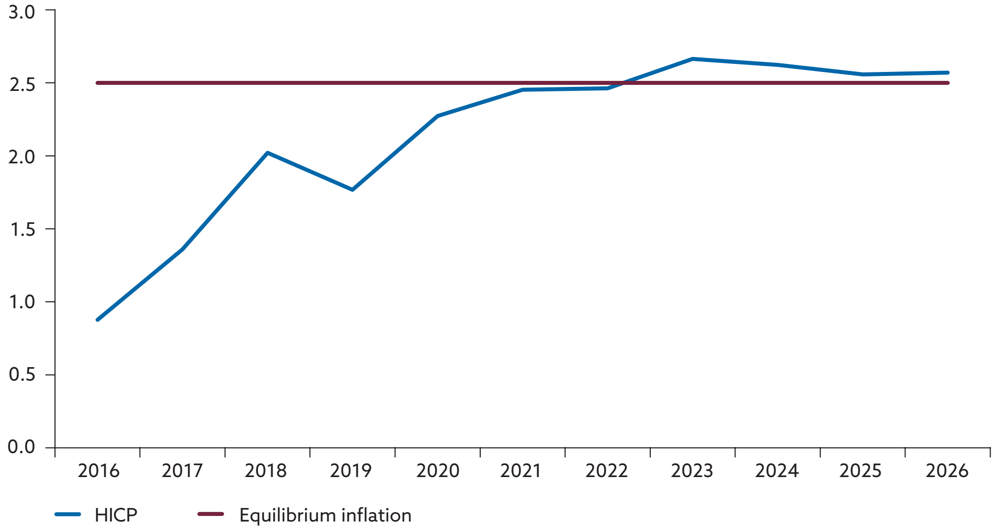
Source: NBS calculations.

Chart C
Long-term outlook – output gap (percentages of potential GDP)



Source: NBS calculations.

Chart D
Long-term outlook – HICP excluding energy and food (annual percentage changes)



Source: NBS calculations.

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Table 4 Medium-Term Forecast (MTF-2019Q2) for key macroeconomic indicators

Indicator	Unit	Actual data	MTF-2019Q2			Difference vis-à-vis MTF-2019Q1		
		2018	2019	2020	2021	2019	2020	2021
Prices								
HICP inflation	annual percentage change	2.5	2.6	2.5	2.3	0.1	0.0	-0.1
CPI inflation	annual percentage change	2.5	2.5	2.5	2.3	0.0	0.0	-0.2
GDP deflator	annual percentage change	2.1	2.8	2.4	2.4	0.4	-0.2	-0.1
Economic activity								
Gross domestic product	annual percentage change, constant prices	4.1	3.3	3.2	2.8	-0.2	-0.2	0.0
Private consumption	annual percentage change, constant prices	3.0	3.1	3.4	3.1	-0.5	-0.3	0.0
Final consumption of general government	annual percentage change, constant prices	1.9	1.5	2.7	3.2	-0.1	0.2	0.1
Gross fixed capital formation	annual percentage change, constant prices	6.8	3.3	3.6	3.0	-0.6	-0.3	-0.1
Exports of goods and services	annual percentage change, constant prices	4.8	6.0	4.8	4.6	-0.3	-0.8	-0.2
Imports of goods and services	annual percentage change, constant prices	5.3	5.6	5.0	4.9	-1.3	-0.8	-0.2
Net exports	EUR millions at constant prices	5,814	6,456	6,613	6,596	831.8	830.5	820.3
Output gap	percentage of potential output	0.6	0.6	0.7	0.6	-0.1	-0.3	-0.3
Gross domestic product	EUR millions at current prices	90,202	95,796	101,223	106,548	202.7	-206.0	-383.0
Labour market								
Employment	thousands of persons ESA 2010	2,420	2,450	2,465	2,477	0.4	-3.6	-6.3
Employment (dynamics)	annual percentage change ESA 2010	2.0	1.2	0.6	0.5	0.0	-0.2	-0.1
Number of unemployed	thousands of persons[1)]	180	161	162	166	-3.0	3.5	7.1
Unemployment rate	percentage	6.5	5.9	5.9	6.1	-0.1	0.1	0.3
NAIRU estimate[2)]	percentage	7.4	7.1	7.0	7.1	-0.1	-0.1	0.0
Labour productivity[3)]	annual percentage change	2.1	2.0	2.5	2.3	-0.2	-0.1	0.1
Nominal labour productivity[4)]	annual percentage change	4.4	5.0	5.0	4.8	0.2	-0.3	0.0
Nominal compensation per employee	annual percentage change ESA 2010	5.4	6.8	6.1	5.3	0.1	-0.2	-0.1
Nominal wages[5)]	annual percentage change	6.2	6.7	6.1	5.5	0.1	-0.2	-0.1
Real wages[6)]	annual percentage change	3.6	4.0	3.5	3.2	0.0	-0.1	0.2
Households and non-profit institutions serving households								
Disposable income	annual percentage change, constant prices	3.0	3.6	3.3	3.1	0.1	-0.2	0.0
Saving ratio[7)]	percentage of disposable income	8.5	8.9	8.8	8.8	0.5	0.6	0.6
General government sector[8)]								
Total revenue	percentage of GDP	39.9	39.9	40.0	39.8	0.1	0.2	0.2
Total expenditure	percentage of GDP	40.6	40.6	40.8	40.6	0.1	0.3	0.3
General government balance[9)]	percentage of GDP	-0.7	-0.7	-0.8	-0.8	0.0	-0.1	-0.2
Cyclical component	percentage of trend GDP	0.2	0.2	0.2	0.2	-0.1	-0.2	-0.1
Structural balance	percentage of trend GDP	-0.9	-0.9	-1.0	-1.0	0.0	0.0	0.0
Cyclically adjusted primary balance	percentage of trend GDP	0.5	0.3	0.1	0.1	0.1	0.0	-0.1
Fiscal stance[10)]	year-on-year change in p. p.	-0.2	-0.2	-0.1	0.0	-0.1	0.0	0.0
General government gross debt	percentage of GDP	48.9	47.9	47.1	46.8	-0.1	0.2	0.3

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Table 4 Medium-Term Forecast (MTF-2019Q2) for key macroeconomic indicators (continued)

Indicator	Unit	Actual data	MTF-2019Q2			Difference vis-à-vis MTF-2019Q1		
		2018	2019	2020	2021	2019	2020	2021
Balance of Payments								
Goods balance	percentage of GDP	0.1	0.2	0.2	0.0	0.7	0.9	0.9
Current acount	percentage of GDP	-2.5	-2.0	-2.0	-2.0	0.9	1.1	1.2
External environment and technical assumptions								
Slovakia's foreign demand	annual percentage change	3.9	3.0	3.2	3.6	-0.4	-0.8	-0.2
Exchange rate (EUR/USD)[11), 12)]	level	1.18	1.12	1.12	1.12	-1.0	-1.4	-1.4
Oil price in USD[11), 12)]	level	71.1	68.1	65.8	62.7	4.6	1.7	-0.2
Oil price in USD[11)]	annual percentage change	30.7	-4.1	-3.5	-4.7	4.2	-2.7	-1.9
Oil price in EUR[11)]	annual percentage change	25.0	0.7	-3.1	-4.7	5.4	-2.4	-1.9
Non-energy commodity prices in USD	annual percentage change	3.9	-3.4	3.9	3.8	-4.7	-0.4	-0.4
Three-month EURIBOR	percentage per annum	-0.3	-0.3	-0.3	-0.2	0.0	-0.1	-0.2
Ten-year Slovak government bond yields	percentage	0.9	0.6	0.6	0.8	-0.3	-0.4	-0.4

Sources: NBS, ECB and SO SR.
Notes:
1) Labour Force Survey.
2) Non-accelerating inflation rate of unemployment
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) Sector S.13.
9) B9n – Net lending (+) / net 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-à-vis the previous forecast are calculated from unrounded figures.
12) Changes vis-à-vis the previous forecast (percentages).

More detailed time series of selected macroeconomic indicators can be found on the NBS website at:

http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2019/protected/P2Q-2019.xls