NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

MEDIUM-TERM FORECAST

Q4
2018

Published by:
© Národná banka Slovenska

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

Contact:
info@nbs.sk

http://www.nbs.sk

Discussed by the NBS Bank Board on
18 December 2018.

ISSN 1338-1474 (online)

Contents

1 Overview

The Slovak economy expanded by 1.1%, quarter on quarter, in the third quarter of 2018. Its growth was driven by consumer demand and exports. Despite a slowing global economy and the difficulties faced by euro area carmakers in meeting new emission standards, Slovakia's export growth remained robust. Car production in particular performed well; nevertheless, car industry suppliers were affected by headwinds from the euro area and were largely producing for inventory. Slovakia's GDP growth for the whole of 2018 is projected to be 4.2%. Recent labour market developments have indicated a slight slowdown in employment growth, stemming from labour shortages and resulting in upward pressure on wage growth.

With foreign demand projected to pick up and with production at Slovakia's newest car plant gradually coming on stream, GDP growth is expected to be even higher in 2019 (4.3%). Production capacity growth will also be reflected in higher domestic demand, given the positive income effect on private consumption growth. The impact of these factors should still be in play in 2020, and GDP growth for that year is projected to be 4.0%. In 2021, when the supply-side shock fades, GDP growth is expected to fall back to 3.1%. Compared with the previous forecast, the economy's projected growth in 2018 has been revised up by 0.2 percentage point due mainly to historical data revisions. By contrast, the growth projection for 2019 has been revised down by 0.2 percentage owing to a base effect.

Employment growth is expected to moderate over the projection period. Labour shortages are expected to reflect adverse demographic trends, as well as a decreasing unemployment rate. Labour market tightening may be partly mitigated by foreign labour inflows, boosted by measures to simplify work permit processing. The tightening should also be reflected in wage growth, which, due also to public sector wage hikes, is projected to accelerate in 2019. Thereafter, wage growth is expected to ease somewhat, while remaining relatively robust.

The average annual inflation rate is projected to be 2.6% in 2018, before accelerating to 2.9% next year and then recording a more moderate 2.5% in the subsequent years of the forecast period. Its acceleration in 2019 is largely predicated on energy price increases. This impact will subsequently fade, leaving increases in labour costs and consumer demand as the main components of wage growth. Compared with the previous forecast, the inflation projection for next year has been revised up slightly on the expectation of higher commodity prices.

The risks to the medium-term outlook for the real economy are on the downside. A downward risk is that the global economic slowdown and global protectionism will be greater than expected. As for inflation, the risks to the outlook for 2019 are on the upside (reflecting the impact of a new levy on retail chains), while the risks to the 2020 outlook are on the downside (the impact of administrative measures).

In this medium-term forecast, the projection horizon has been extended to 2021.

2 Recent developments in the external environment and in Slovakia

Euro area GDP growth slowed in the third quarter.[1]

The euro area economic expansion eased to 0.2%, quarter on quarter, in the third quarter of 2018, down by 0.2 percentage point from its rate in the previous period. This slowdown was caused by the one-off factor of new emission standards in the automotive industry (in force from September 2018), by weakening consumer demand, and by lower export performance. According to short-term indicators[2] growth in construction production and in retail trade moderated, while industrial production fell slightly. Incoming leading indicator data imply that euro area economic growth will slow further in the fourth quarter. Annual HICP inflation fell to 2.0% in November (from 2.2% in October), with energy inflation, services inflation, and food inflation all decelerating.

Slovakia's economic growth supported by household consumption and exports.

The Slovak economy maintained its strong growth trend in the third quarter of 2018, expanding by 1.1% in quarter-on-quarter terms. The growth was driven by household expenditure and, to a lesser extent, exports, which received a boost from the launch of production at a new car plant. Carmakers in Slovakia, unlike in other EU countries, were not affected by legislative changes related to more stringent emission limits and to emission measurements. New car models made in Slovakia already met the tighter standards and were fully homologated. Car industry suppliers, however, were adversely affected, so their inventories increased and their export performance was dampened. Investment corrected after recording a high figure in the second quarter; hence it contributed negatively to GDP growth.

As part of a regular revision of data by the Statistical Office of the Slovak Republic (SO SR), GDP figures for the years from 2015 to 2018 were adjusted. A downward revision to GDP in 2017 resulted in a 0.2 percentage increase in GDP in 2018.

Employment increased by 0.4% in third quarter. As expected, however, its growth is moderating due to labour shortages. With the unemployment rate at its lowest ever level, the domestic labour force offers an increasingly shrinking pool of suitably qualified workers to recruit from. Labour shortages are putting upward pressure on wages, whose year-on-year growth remains strong (6.1% in the third quarter).

The annual HICP inflation rate is experiencing a temporary slowdown. In October 2018, headline inflation fell to 2.5%, owing to an expected fading of the previous year's food price (cost-push) shock. Petrol and diesel prices remain relatively elevated, but will drop as a result of recent oil price developments. Demand-pull inflation is gradually accelerating, also reflecting labour market tightening and rising wage growth.

1 *For further details, see the September 2018 issue of NBS's Report on the International Economy.*
2 *Data for individual indicators are available for the whole of the third quarter (the average for the quarter is calculated from the available monthly data for the quarter).*

3 Technical assumptions of the forecast[3]

3.1 COMMODITIES AND THE EXCHANGE RATE

Between the cut-off dates for the September 2018 forecast and this forecast, the **exchange rate**[4] of the euro against the US dollar followed a depreciation trend that stemmed both from the slowing of euro area economic growth and from dollar appreciation in response to US monetary policy tightening. The assumption for the average exchange rate is therefore 1.8% weaker in this forecast than in the September forecast, at USD 1.16 per euro. The nominal effective exchange rate (NEER), calculated with respect to Slovakia's 15 most significant trading partners, is 0.3% lower in this forecast than in the previous forecast.

Between the September forecast's cut-off date and early October, the average **price of a barrel of Brent crude oil** had an upward trend that reflected expectations surrounding the impending reimposition of sanctions on Iran, as well as the unwillingness of OPEC to raise oil output. Subsequently, however, until mid-November, oil prices slumped on the back of increasing output in the United States and the exemption of certain countries from the reimposition of sanctions on Iran. The assumptions for oil prices in US dollars are significantly lower in this forecast than in the previous one; they decrease gradually from USD 72 in 2018 to USD 66 in 2021, at the projection horizon. The assumptions for the oil price in euro have been revised down, by around 1% in 2018, 8% in 2019 and 5% in 2020.

3.2 FOREIGN DEMAND

After its robust growth in 2017, euro area economic activity is expected to continue growing, albeit at a more moderate pace, according to the December 2018 Eurosystem staff macroeconomic projections for the euro area.[5]

Expectations of decelerating global economic growth amid the normalisation of accommodative monetary policies and ongoing trade tensions have been reflected in a revision of the assumptions for foreign demand for Slovak exports. Weaker growth in export markets than that projected in the previous forecast is also implied by the softening of the euro area's economic growth in 2018 as well as by a deterioration in leading indicators. The growth assumptions for foreign demand have been revised down by 0.3 percentage point in both 2018 and 2019, to 3.9% and 4.2% respectively. In 2020, however, when import trends in Slovakia's EU trading partners should be more favourable, the assumption for foreign demand growth has been revised up to 4.3% (by 0.3 percentage point). The rate is assumed to slow in 2021, at the projection horizon, to 3.9%.

3 The technical assumptions of this Medium-Term Forecast are based on the "December 2018 Eurosystem staff macroeconomic projections for the euro area", with a cut-off date of 21 November 2018.

4 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.

5 December 2018 Eurosystem staff macroeconomic projections for the euro area.

4 Macroeconomic forecast for Slovakia

4.1 ECONOMIC GROWTH

Market share gains underpinned by carmakers

The gradual slowdown of economic growth in Slovakia's major trading partners is having an impact on the country's export performance. Export growth has lost some momentum this year owing to the difficulties faced by EU countries' car industries in recent months. The repercussions have been felt by car parts suppliers in Slovakia, while other Slovak exporters (including car manufacturers) have continued to report rising export growth. The recent launch of production at Slovakia's newest car plant is expected to have a significant upward impact on export growth in 2019. Thereafter, as this supply-side shock fades, export growth is projected to ease; nevertheless, it should remain slightly higher than export market growth, partly because of catch-up to advanced economies.

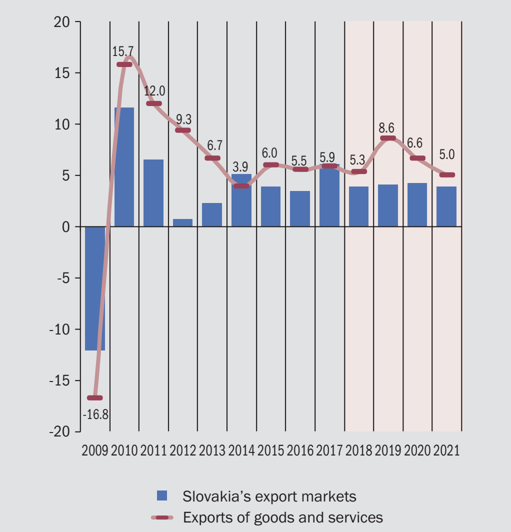
Investment activity to moderate over the medium term

Investment activity has gathered pace in 2018 owing to significant investment in the automotive industry. Even after this effect has faded, investment activity in the private sector is expected to remain elevated. This outlook assumes that firms will seek to mitigate persistent labour market tightening by investing in machinery and equipment, and thereby increasing labour productivity. The public sector, too, is expected to supported investment growth via the absorption of EU funds and increased spending on major infrastructure projects and defence.

Consumer demand expected to strengthen

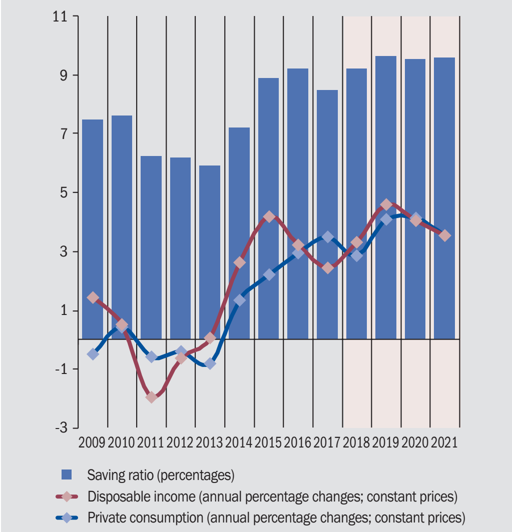
After moderating somewhat this year, private consumption growth is expected to pick up appreciably over the next two years due to increasing economic activity, which will have an upward impact on real compensation of employees. Disposable income growth should be further boosted by government measures (including, for example, public sector wage hikes, Christmas benefit increases, a doubling of the tax credit for children aged up to six, and the introduction of free lunches for primary schoolchildren). In 2021, amid a moderate cooling of the economy and a related easing of real com-

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 (percentages)



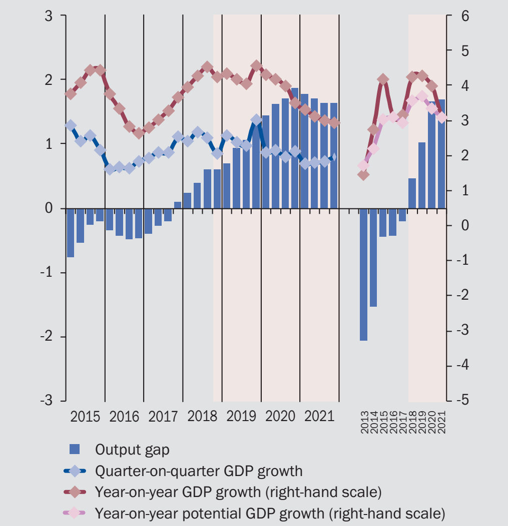
Sources: SO SR and NBS.

pensation growth, private consumption growth is expected to decelerate.

Economic growth to accelerate next year, with a cyclical slowdown to follow

Slovakia's economic growth is expected to accelerate to 4.2% in 2018, thanks to the completion of a major investment and to consumer demand. Going forward, domestic demand growth is expected to be accompanied by stronger export growth following the recent production launch at a new car plant; hence GDP in 2020 is projected to be 4.3%. The positive impact of the new car plant should continue to be seen in 2020, keeping GDP growth up at 4.0%. It is expected that the economy will operate above potential in coming years and that the output gap will gradually increase. Once the impact of new investments has waned, and with the labour market increasingly tight and foreign demand growth moderating, the economy should experience a cyclical slowdown (GDP growth of 3.1% in 2021).

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



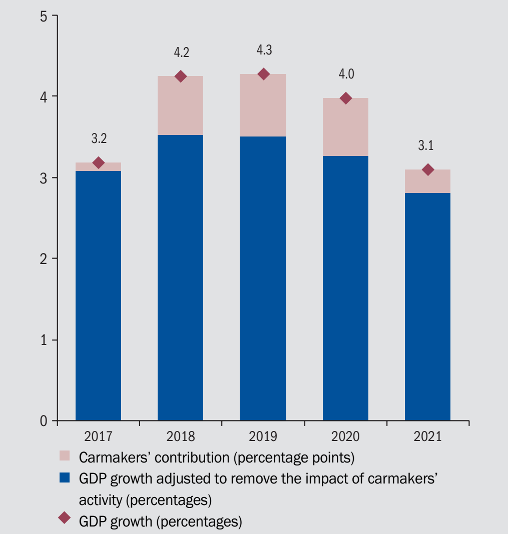
Sources: SO SR and NBS.

Box 1

ECONOMIC ACTIVITY SLOWDOWN IN THE MEDIUM TERM

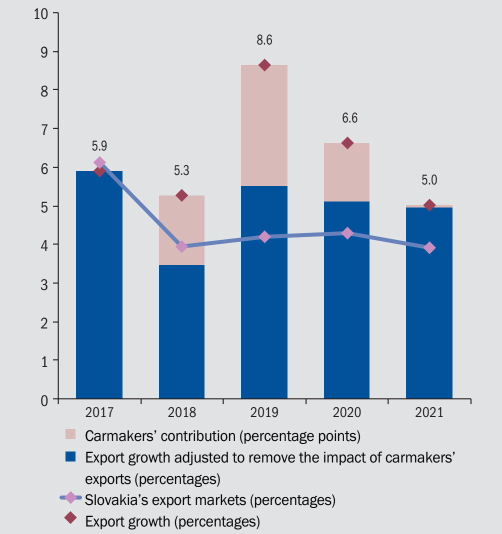
Slovakia's economic growth is expected to exceed 4% in the years to come. On the one hand, GDP growth should be driven by relatively strong domestic demand – supported both by investment activity and by consumption activity reflecting strong labour market dynamics. On the other hand, a major part of the expected above-average growth will be attributable to the launch of new production in the car industry and its upward impact on export growth in 2019 and, to a lesser extent, 2020. The macroeconomic forecast assumes that the upward impact of this new production on the economy's productive capacity will add 0.7 percentage point to GDP growth in 2018, 0.8 percentage point in 2019, 0.7 percentage point in 2020, and 0.3 percentage point in 2021 (this assumption takes into account not only direct effects, but also the impact on car parts suppliers).

Chart A Impact of the car industry on GDP growth (percentage points; annual percentage changes)



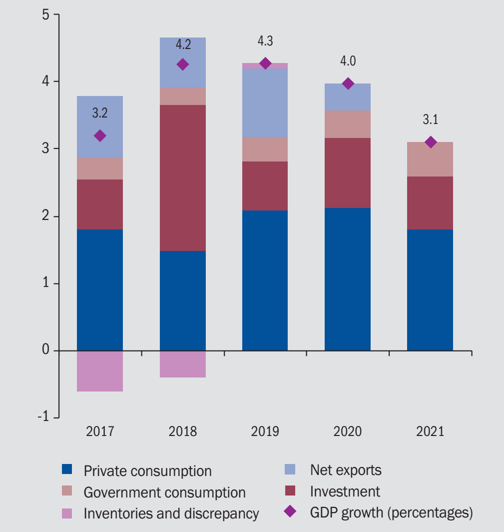
Sources: SO SR and NBS calculations.

Chart B Impact of the car industry on exports (percentage points; annual percentage changes)



Sources: SO SR and NBS calculations.

Chart C Decomposition of GDP growth (percentage points; annual percentage changes)



Sources: SO SR and NBS calculations.

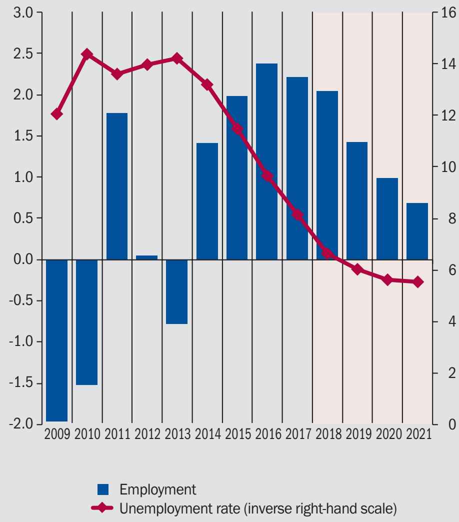
After the positive effects resulting from car industry output have faded, export growth is expected to moderate in line with the assumed softening of foreign demand growth in the latter part of the projection period. The combination of weaker export performance and gradual sapping of labour market capacity is expected to be reflected in slower economic activity growth towards the projection horizon. The negative impact on 2021 GDP growth of the fading of the stimulus from automotive production is projected to be around -0.4 percentage point, while that of the deceleration foreign demand growth is projected to be an additional -0.1 percentage point. The rest of the slowdown in GDP growth may be attributed to a cooling of domestic demand, since it is expected that the business cycle will have already turned. In this context, GDP growth in 2021 is expected to be driven entirely by domestic demand.

4.2 LABOUR MARKET

Employment growth to ease over the projection period

Recent data indicate that employment growth is beginning to slow. This trend is expected to become more pronounced over the projection period given the negative impact of demographics and a cyclical economic slowdown. Net job creation will remain positive, but more moderate compared with the recent period; at the same time, it will be increasingly difficult to fill the jobs created, partly because the unemployment rate is expected to fall to historical lows. The job vacancies are expected to be filled to some extent by Slovaks returning from work abroad, by foreign workers, and via increasing labour force participation.

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



Sources: SO SR and NBS.

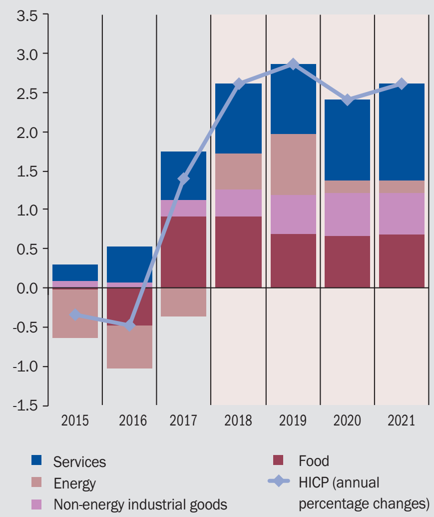
Ongoing labour market tightening is expected to put upward pressure on wage growth. The average wage in the economy is envisaged to increase at a relatively strong pace over the projection period. Rising wages should generate inflationary pressure, as their growth should be outpacing labour productivity growth. As this trend continues, it may lead to a further diminution of the Slovak economy's price competitiveness. Wage growth is projected to be higher in the public sector than in the private sector, given the increases in public sector wage scales which are planned for 2019 and 2020.

4.3 PRICE DEVELOPMENTS

Inflation increase to be driven by demand and, next year, also by energy prices

Annual HICP inflation is expected to accelerate this year amid cyclical developments and an increase in the energy price component. In 2019, the inflationary impact of energy prices is expected to be even stronger, owing to the raising of administered energy prices.[6] Cyclical economic developments, together with sharply rising labour costs, are expected to be reflected in services

Chart 5 HICP inflation and its components (percentage points)



Sources: SO SR and NBS.

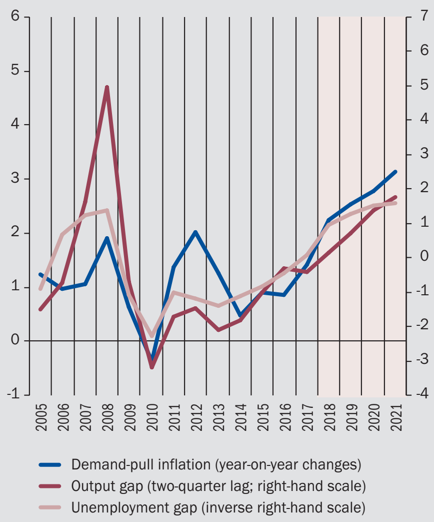
Table 1 Wages (annual percentage changes)

	2018	2019	2020	2021
Nominal labour productivity	4.6	5.8	6.0	5.4
Whole economy – nominal	6.3	7.0	6.5	5.9
Whole economy – real	3.6	3.9	3.9	3.1
Private sector ¬– nominal	6.2	6.6	6.1	5.9
Private sector – real	3.5	3.5	3.5	3.1
Public administration, education and health care – nominal	6.5	8.8	8.2	5.9
Public administration, education and health care – real	3.9	5.6	5.6	3.1

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 6.4% in 2018, 9.0% in 2019, 8.4% in 2020, and 5.9% in 2021. Nominal labour productivity – GDP divided by persons in employment according to statistical reporting methodology.

6 *In the forecast for 2019, electricity prices are projected to rise by 7.5%, gas prices by 7%, and heat prices by 5.6%.*

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



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

price inflation, projected to be the component making the strongest contribution to headline inflation. In addition, non-energy industrial goods inflation is expected to pick up as result of increasing consumer demand. Headline inflation over the projection period is therefore expected to be close to 2.6%, a level corresponding to the phase and pace of the Slovak economy's convergence.

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**	**2.6**	**2.9**	**2.4**	**2.6**
Food	3.6	3.1	3.6	3.6	2.8	2.7	2.8
Non-energy industrial goods	0.2	0.3	0.7	1.2	1.7	1.9	1.8
Energy	8.3	2.3	-2.5	3.2	5.2	1.0	0.9
Services	5.3	2.5	2.0	2.8	2.9	3.3	3.9
Demand-pull inflation	1.8	1.0	1.4	2.2	2.5	2.8	3.1

Sources: SO SR and NBS calculations.

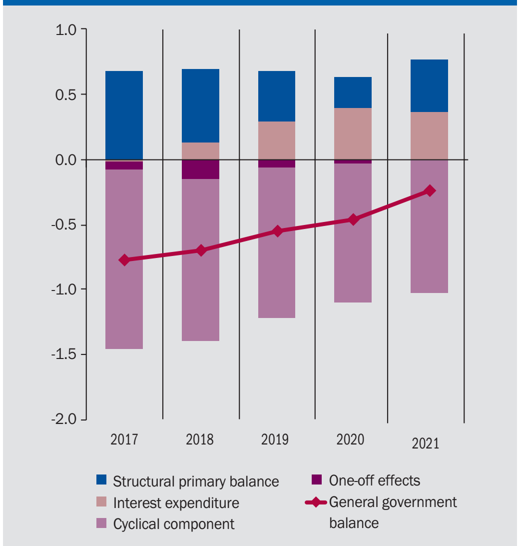
5 Fiscal outlook

Expenditure growth to act as a drag on public finance consolidation

Slovakia's general government deficit is projected to be 0.7% of GDP in 2018, 0.1 percentage point lower than its level in 2017. The deficit is expected to fall further in 2019, to 0.5% of GDP,[7] owing to a favourable macroeconomic environment (higher tax and social contribution revenues), as well as a fall in interest expenditure. The positive impact of these factors is, however, largely offset by planned increases in public sector salaries, an acceleration of healthcare expenditure, and several government measures.[8] By the end of the forecast period, the public finance deficit is expected to have fallen to 0.2% of GDP, due mainly to growth in tax and social contribution revenues (supported by the continuing upturn in the labour market and robust economic growth).

Public debt is expected to fall by 2.4 percentage point in 2018, to 48.5% of GDP. That figure is below the lower range of the debt ceiling path set by the Fiscal Responsibility Act. The debt is expected to remain below that level over the whole projection period, falling to 44.5% of GDP in 2021. The main contributors to this downward trend are expected increases in the primary surplus, falling debt servicing costs, and 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.

The fiscal stance is expected to be moderately expansionary until 2020, and then to be slightly restrictive in 2021, when it should therefore be supporting the consolidation of the nominal fiscal balance.

Acceleration of intermediate consumption and healthcare expenditure; slowdown in investment activity growth

Real government final consumption expenditure is expected to accelerate over the projection period, owing mainly to strong growth in nominal expenditure on goods and services, on health care, and on compensation of public sector employees. In real terms, however, final consumption growth will be lower due to rising inflation.

7 *Compared with the General Government Budget for 2019-2021, which envisages a balanced budget in 2019, this forecast is more conservative in its projections for certain revenue measures (the emergency oil stock maintenance fee, the 'eKasa' online revenue registration system, and the labelling of fuel via nanomarkers), and it also projects higher levels of investment and intermediate consumption. The risks to the budget are analysed in more detail in the following Slovak-only document: "Analýza Návrhu rozpočtu verejnej správy na roky 2019 – 2021" (Analysis of the Draft General Government Budget for 2019-2021).*

8 *An increase in Christmas benefits; the introduction of free lunches for primary schoolchildren and children in the last year of nursery school; a doubling of the tax credit for children aged up to six; the reduction of end-user electricity prices for firms in energy-intensive industries; the partial reimbursement of taxes on mineral oils used in the production of agricultural products.*

Government investment activity growth is expected to moderate in 2019, owing to a slowdown in local government investment activity. Over the forecast period, however, domestically sourced investment is expected to maintain relatively strong growth, as is investment funded from the EU budget.

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

	2017	2018	2019	2020	2021
General government final consumption	1.7	1.4	2.0	2.3	2.9
Government investment	2.2	16.5	8.2	8.1	5.0
contribution of EU funds to rate of change (percentage points)	*-4.2*	*8.2*	*7.4*	*5.1*	*2.2*
General government balance (percentage of GDP)	-0.8	-0.7	-0.5	-0.5	-0.2
Fiscal stance (year-on-year change in percentage points)	0.9	-0.2	-0.1	-0.1	0.2
Gross debt (percentage of GDP)	50.9	48.5	47.0	45.3	44.5

Sources: SO SR and NBS calculations.

6 Risks to the forecast

The principal downside risks to the real economy outlook over the projection period are external: an increase in protectionism; geopolitical tensions, Brexit; the size of the global economic slowdown; and the extent and timing of the decline in the EU's car industry production. Domestic risks include the phasing-in of new production in the car industry and the absorption of EU funds.

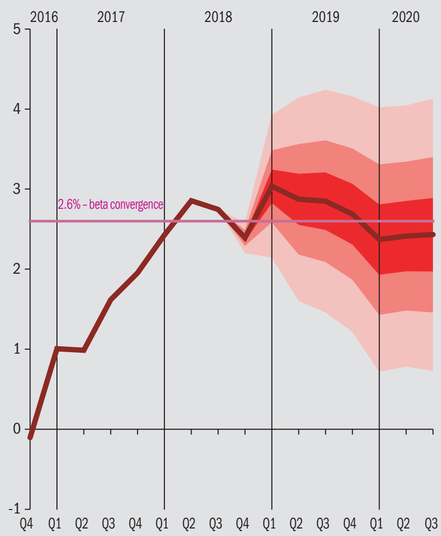
The risks to the inflation outlook for 2019 are largely on the upside. The newly passed law on a special levy on retail chains represents an upward risk. There may inflationary pressures from the domestic side of the economy as a result of rising labour costs. In 2020 a downside risk may materialise in relation to an administrative measure that will introduce free school lunches.

Table 4 Risks to the forecast

	2019	2020	2021
GDP	↓	↓	↓
Inflation	↑	↓	Balanced

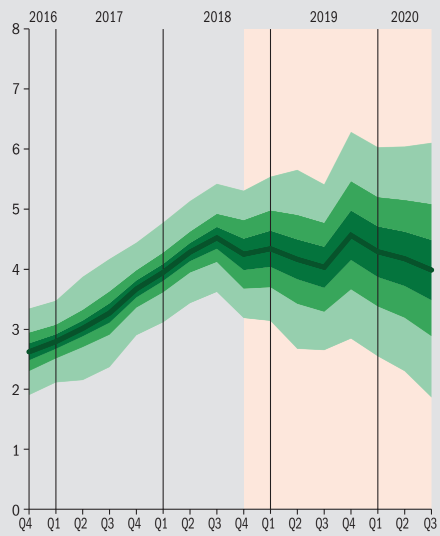
Source: NBS.

Chart 9 HICP inflation forecast (percentages)



Note: 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. Further information is available in the following Slovak-only 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)



Note: 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. Further information is available in the following Slovak-only Analytical Commentary: "Perspektívy dlhodobejšieho vývoja slovenskej ekonomiky (do roku 2020)" (Longer-term outlooks for the Slovak economy – up to 2020).

Box 2

ESTIMATING THE IMPACT OF THE NEW LEVY ON RETAIL CHAINS

Under a newly passed law introducing a special levy on retail chains, retail chains will be required to pay a special levy equivalent to 2.5% of their net turnover. A company will not be treated as a retail chain if it operates in less than 15% of all the districts in Slovakia or if less than 25% of its turnover is generated from the sale of food to final consumers.

Retail chains say the levy will reduce their profits and may, to varying degrees, be passed on to prices (this may be expected in the current situation of strong domestic consumption demand).

In order to estimate the upper end of the range of this law's potential impact on the price level, it is necessary to assume that retail chains will seek to maintain their profits at the pre-levy level.

On the assumption that the level of profits of retail chains remains unchanged, the impact of the levy on inflation is estimated to be 0.3 percentage point and was calculated under the following conditions:

- The gross proceeds of the levy, set at 2.5% of the net turnover of retail chains, constitute a budgetary revenue estimated at €109 million (or €87 million taking into account the levy's negative impact on corporation tax revenues). Thus, the levy is assumed to be applied on an aggregate net turnover of €4,360 million.
- Around 80.5% of retail chains' sales comprise sales from food.[9]
- Assuming that retail chains will seek to maintain profit levels, they are expected to raise food prices by around 3%, i.e. more than the rate of the levy.
- Of total sales from food in Slovakia, 40.5% are accounted for by retail chains.
- The weight of food in the consumption basket is around 25%.

Assuming full pass-through of the 2.5% levy (covering all sales, not only sales from food) in an environment of strong competition (in retail sale of non-food specialised goods), the impact on food prices will be higher, at around 3%. **Depending on how retail chains pass on the new levy to consumer prices, its impact on the inflation rate in 2019 may be estimated at between 0 and 0.3 percentage point.** The calculated impact will also depend on the sample of retailers used in the collection of consumer price data.

9 *https://www.tovarapredaj.sk/2016/11/26/top-10-potravinarskeho-nepotravinarskeho-obchodu-za-rok-2015/*

Box 3

ESTIMATING THE IMPACT OF THE INTRODUCTION OF FREE SCHOOL MEALS

Under a law approved on 4 December 2018 (after the cut-off date for this forecast), free lunches will be provided to children attending nursery school (with effect from 1 January 2019) and to primary schoolchildren (with effect from 1 September 2019).[10]

From an HICP inflation perspective, the approved measure will directly affect prices of two items in the consumption basket:
Nursery schools – school meal payments (weight in 2018: 1.14 parts per thousand)
Primary schools – lunches for children in grades one to four (weight in 2018: 1.84 parts per thousand)

Since the law will enter into force at different times for the different groups of schoolchildren concerned, it has an impact on the inflation outlook for both 2019 and 2020. Compared with the this forecast (MTF-2018Q4), the inflation projections for 2019 and 2020 should be revised down by, respectively, 0.10 percentage point and 0.12 percentage point.

10 Act amending Act No 544/2010 Coll. on the provision of subsidies within the competence of the Ministry of Labour, Social Affairs and Family of the Slovak Republic, as amended, and amending Act No 245/2008 Coll. on education and training (the Education Act) (and amending certain laws), as amended.

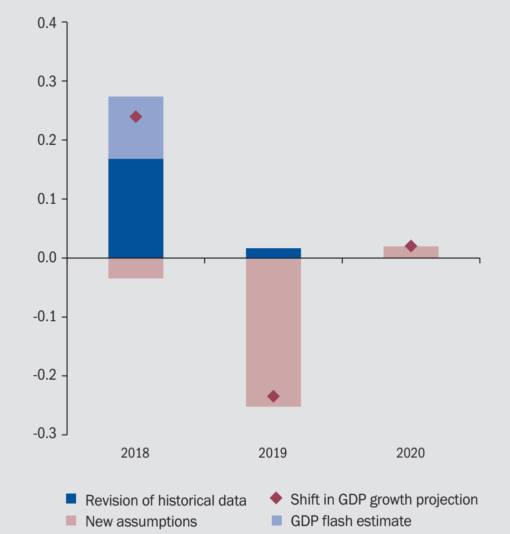
7 Comparison with the previous forecast

Compared with the September 2018 Medium--Term Forecast (MTF-2018Q4), the technical assumptions for foreign demand growth in 2018 and 2019 have been revised down. The oil price assumptions through the projection period have also been revised down.

Moderately lower economic growth in 2019

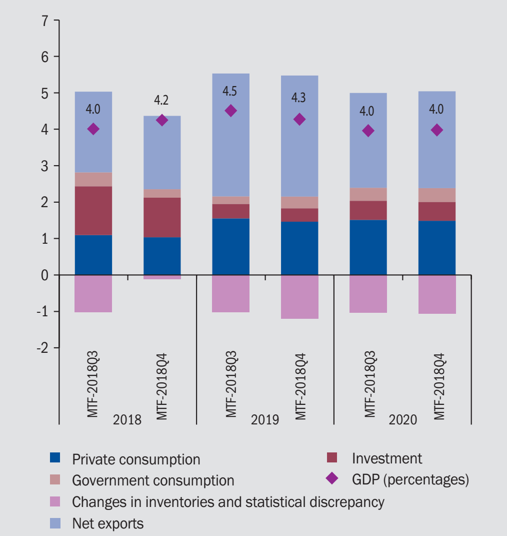
Owing to the revision of national accounts data after the second quarter of 2018, the economic growth outlook for 2018 has been revised up by approximately 0.2 percentage point. The slightly better than expected GDP growth in the third quarter of 2018 would have translated into a further upward revision of 0.1 percentage point, but its impact was partly offset by lower than projected foreign demand growth in the second half of the year. Due to the base effect of that softening of foreign demand, the GDP growth projection for 2019 has been revised down by 0.2 percentage point. The economic growth outlook for the end of projection period remains unchanged.

Chart 12 Shift in the projection vis-à-vis the MTF-2018Q3 forecast (percentage point contributions)



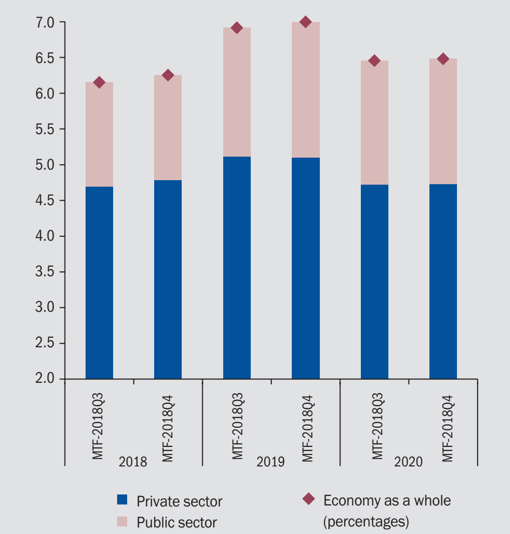
Sources: SO SR and NBS.

Chart 11 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.

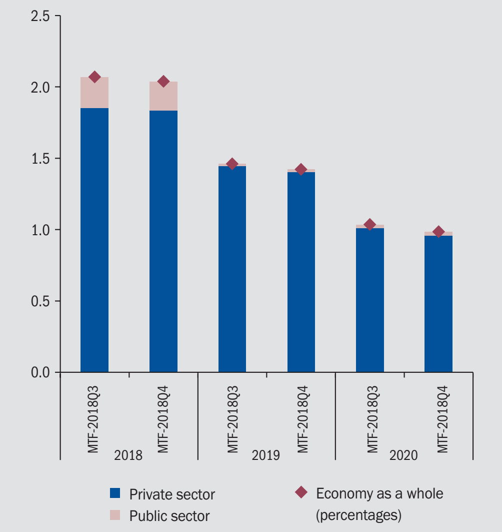
Chart 13 Average wage broken down by public sector and private sector contributions to its rate of change (annual percentage changes; percentage points)



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.

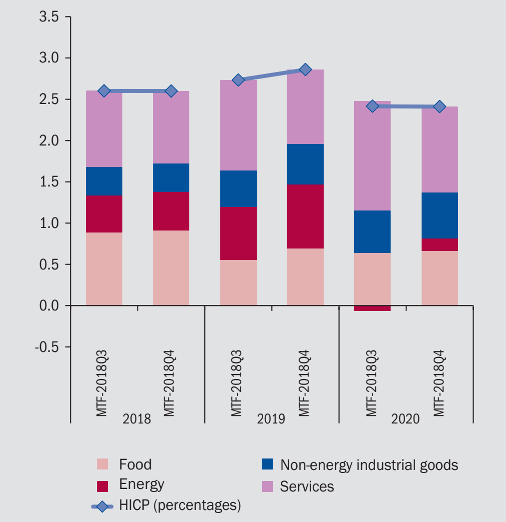
11 The composition of GDP growth is calculated as the contributions of components to GDP growth after deducting their import intensity. In this case the calculation uses the constant import intensity of the different GDP components (household final consumption – 30%, government consumption – 7%, investment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

Chart 14 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 15 Comparison of projections for headline inflation and its components (annual percentage changes; percentage point contributions)



Sources: SO SR and NBS calculations.

Little change in the labour market

Labour market indicator data have been in line with the September forecast, so there has been no need to revise the outlook for labour market developments.[12]

Rising energy prices offsetting the impact of lower services inflation

The projections for energy inflation and food inflation have been revised up in response to higher commodity prices. By contrast, services inflation is expected to be lower than previously projected, given recent developments and the fact that VAT on accommodation is to be reduced from 2019.

12 *Marginal changes in the growth rates for wages and employment resulted solely from rounding.*

Table 5 Medium-Term Forecast (MTF-2018Q4) for key macroeconomic indicators

Indicator	Unit	Actual data	MTF-2018 Q4				Difference vis-à-vis MTF2018Q3		
		2017	2018	2019	2020	2021	2018	2019	2020
Prices									
HICP inflation	annual percentage change	1.4	2.6	2.9	2.4	2.6	0.0	0.2	0.0
CPI inflation	annual percentage change	1.3	2.6	2.9	2.4	2.7	0.0	0.1	-0.1
GDP deflator	annual percentage change	1.2	2.3	2.9	2.9	3.0	-0.1	-0.1	-0.2
Economic activity									
Gross domestic product	annual percentage change, constant prices	3.2	4.2	4.3	4.0	3.1	0.2	-0.2	0.0
Private consumption	annual percentage change, constant prices	3.5	2.8	4.1	4.2	3.5	-0.2	-0.2	0.0
Final consumption of general government	annual percentage change, constant prices	1.7	1.4	2.0	2.3	2.9	-0.9	0.7	0.0
Gross fixed capital formation	annual percentage change, constant prices	3.4	10.0	3.2	4.6	3.4	-2.4	-0.2	0.1
Exports of goods and services	annual percentage change, constant prices	5.9	5.3	8.6	6.6	5.0	-0.6	-0.2	0.1
Imports of goods and services	annual percentage change, constant prices	5.3	4.9	8.3	6.8	5.4	-1.0	0.2	0.1
Net exports	EUR millions at constant prices	5,903	6,510	7,384	7,746	7,743	43.9	-148.9	-108.2
Output gap	percentage of potential output	-0.2	0.5	1.0	1.7	1.7	0.2	-0.1	-0.1
Gross domestic product	EUR millions at current prices	84,851	90,494	97,129	103,951	110,334	-56.2	-348.9	-524.0
Labour market									
Employment	thousands of persons ESA 2010	2,372	2,421	2,455	2,479	2,496	-0.6	-1.7	-2.9
Employment (dynamics)	annual percentage change ESA 2010	2.2	2.0	1.4	1.0	0.7	-0.1	-0.1	0.0
Number of unemployed	thousands of persons[1)]	224	182	165	154	151	-4.6	-6.5	-5.2
Unemployment rate	percentage	8.1	6.6	6.0	5.6	5.5	-0.2	-0.3	-0.2
NAIRU estimation[2)]	percentage points	8.2	7.6	7.3	7.2	7.1	0.1	-0.1	-0.1
Labour productivity[3)]	annual percentage change	1.0	2.2	2.8	3.0	2.4	0.3	-0.2	0.1
Nominal labour productivity[4)]	annual percentage change	2.6	4.6	5.8	6.0	5.4	0.1	-0.3	-0.1
Nominal compensation per employee	annual percentage change ESA 2010	5.2	5.6	7.1	6.5	5.7	-0.6	0.1	0.0
Nominal wages[5)]	annual percentage change	4.6	6.3	7.0	6.5	5.9	0.1	0.1	0.0
Real wages[6)]	annual percentage change	3.3	3.6	3.9	3.9	3.1	0.1	-0.1	0.0
Households and non-profit institutions serving households									
Disposable income	constant prices	2.5	3.3	4.6	4.0	3.6	0.9	0.2	-0.2
Saving ratio[7)]	percentage of disposable income	8.5	9.2	9.6	9.5	9.6	0.8	1.2	1.2
General government sector[8)]									
Total revenue	percentage of GDP	39.4	39.5	39.1	38.9	38.6	0.2	-0.1	0.0
Total expenditure	percentage of GDP	40.2	40.2	39.7	39.3	38.8	0.0	0.1	0.2
General government balance[9)]	percentage of GDP	-0.8	-0.7	-0.5	-0.5	-0.2	0.2	-0.1	-0.3
Cyclical component	percentage of trend GDP	0.0	0.1	0.3	0.4	0.4	0.0	0.0	0.0
Structural balance	percentage of trend GDP	-0.7	-0.7	-0.8	-0.8	-0.6	0.2	-0.1	-0.2
Cyclically adjusted primary balance	percentage of trend GDP	0.6	0.4	0.3	0.2	0.4	0.2	-0.1	-0.2
Fiscal stance[10)]	year-on-year change in p. p.	0.9	-0.2	-0.1	-0.1	0.2	0.0	-0.3	-0.1
General government gross debt	percentage of GDP	50.9	48.5	47.0	45.3	44.5	-0.5	0.1	0.6

Table 5 Medium-Term Forecast (MTF-2018Q4) for key macroeconomic indicators (continued)

Indicator	Unit	Actual data	MTF-2018 Q4				Difference vis-à-vis MTF2018Q3		
		2017	2018	2019	2020	2021	2018	2019	2020
Balance of Payments									
Trade balance (goods)	percentage of GDP	0.8	1.1	1.6	1.6	1.3	-0.2	-0.7	-0.9
Current acount	percentage of GDP	-2.0	-1.6	-1.0	-0.9	-1.1	-0.2	-0.7	-0.9
External environment and technical assumptions									
Slovakia's foreign demand	annual percentage change	6.1	3.9	4.2	4.3	3.9	-0.3	-0.3	0.3
Exchange rate (EUR/USD)[11),12)]	level	1.13	1.18	1.14	1.14	1.14	-0.5	-2.4	-2.4
Oil price in USD[11), 12)]	level	54.4	71.8	67.5	66.8	65.9	-1.9	-10.2	-6.9
Oil price in USD[11)]	annual percentage change	23.5	32.0	-6.0	-1.1	-1.3	-2.6	-8.6	3.5
Oil price in EUR[11)]	annual percentage change	21.0	26.4	-2.3	-1.1	-1.3	-1.9	-6.9	3.5
Non-energy commodity prices in USD	annual percentage change	7.9	3.0	-1.4	4.4	4.3	1.1	1.2	0.2
Three-month EURIBOR	percentage per annum	-0.3	-0.3	-0.3	0.0	0.3	0.0	0.0	0.0
Ten-year Slovak government bond yields	percentage	0.9	0.9	1.1	1.4	1.5	0.0	0.0	0.0

Sources: NBS, ECB a SO SR.
Notes:
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).*

More detailed time series of selected macroeconomic indicators can be found on the NBS website at:
http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2018/protected/P4Q-2018.xls