Medium-Term Forecast

Q3 2020

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1 Overview

The Slovak economy's contraction in 2020 will probably not be as severe as was expected in June. Thereafter, however, the economic outlook remains largely unchanged. After their downturn in the spring months, the gradual return of businesses and operations to a higher level of activity is ushering in the expected return to economic growth and a V-shaped recovery. Going forward, however, the recovery will be slower than projected in June's Medium-Term Forecast (MTF-2020Q2).

Slovakia's GDP is expected to decrease in 2020 by 8.2%, year on year, and is not expected to return to its pre-crisis level until mid-2022. GDP is projected to increase by 5.6% in 2021 and by 4.2% in 2022.

The evolving coronavirus (COVID-19) pandemic is continuing to generate widespread uncertainty, which adds substantial risk to the projections in this latest Medium-Term Forecast (MTF-2020Q3). The forecast reckons on the spread of the virus, but does not envisage a lockdown of the whole economy. It is expected that the situation will gradually improve and that the pandemic will fade away once a vaccine becomes available next year.

The changes to the projections stem largely from the fact that developments in the first half of this year were better than assumed in June. The economies of both Slovakia and the euro area as a whole outperformed expectations, probably with help from a greater than expected fiscal and monetary policy relief effort.

It remains the case that the decline in Slovakia's economic performance reflects the weakening of both foreign and domestic demand. The largest negative contribution to GDP growth has come from net exports. With the coronavirus pandemic ravaging economic activity across the world, the global downturn has also hit the Slovak economy, which has not experienced such a contraction in its modern history. GDP declined, quarter on quarter, by 8.3% in the second quarter of 2020, and having also fallen in the first quarter, it is now back down to its 2015 level. The domestic side of the economy has been affected by the export slump and by a decline in household demand for services resulting from consumer caution.

Government measures have managed to cushion the decline in employment, although the adverse impact of the pandemic crisis on the labour market is expected to continue in the near term. The Slovak economy shed around 45 thousand jobs in the first half of 2020. Government measures managed to reduce firms' labour costs, so jobs did not have to be cut to the same extent as happened in the previous crisis. Employment figures in coming quarters are still expected to reflect a fading of the coronavirus shock, while a more enduring improvement in the labour market is not expected to occur until the economy gathers significant momentum in the second half of next year. Real compensation per employee is projected to decline this year, amid a decline in hours worked and rising prices. Purchasing power will therefore drop. In subsequent years, however, real incomes are expected to rebound.

Inflation is expected to decelerate. Cost factors and administered price increases will continue to have an impact in coming months. Gradually, however, the impact of weaker demand pressures, reductions in administered prices, and low import prices will come to the fore. Inflation is not expected to start accelerating again until economic activity recovers more robustly in 2022.

The economic contraction and the government measures to support employment will seriously impair the Government's fiscal performance. It is projected that the fiscal deficit will increase to 6.0% of GDP this year and the public debt will climb above 62% of GDP. Once the current crisis has faded, public finances will face challenges in regard to their long-term sustainability.

In this forecast, the risks to the real economy outlook are tilted largely to the downside. The principal risk concerns the spread of the virus and the assumption about when a vaccine may be deployed and the subsequent recovery of the global economy. As regards domestic demand, there is a risk in the form of a greater restriction of consumer demand for services. On the other hand, an upside risk to the outlook for economic developments both abroad and in Slovakia is the effective implementation of the EU's planned budget package to support economic recovery.

2 Recent developments in the external environment and in Slovakia

After falling in the first quarter, euro area GDP dropped even more sharply in the second quarter. With pandemic containment measures reaching their height early in the second quarter and being eased only gradually in subsequent months, the euro area economic contraction became more pronounced during that period. After decreasing by 3.7% in the first quarter, euro area GDP fell by 11.8% quarter on quarter. The services sector accounted for much of that decline, and industry also had a significant negative impact. The euro area economy thus shrank back to a level last seen in the first quarter of 2005. The GDP components that made the largest negative contributions in the second quarter were private consumption and investment demand. Government consumption and net exports also had a negative impact. Forward-looking as well as high-frequency indicators suggested that the economy has been gradually rebounding since May. Economic growth is therefore expected to be relatively strong in the third quarter, though not sufficient to bring GDP back to pre-crisis levels. The outlook, however, remains subject to risks surrounding the pandemic situation and the pace of economic reopening.

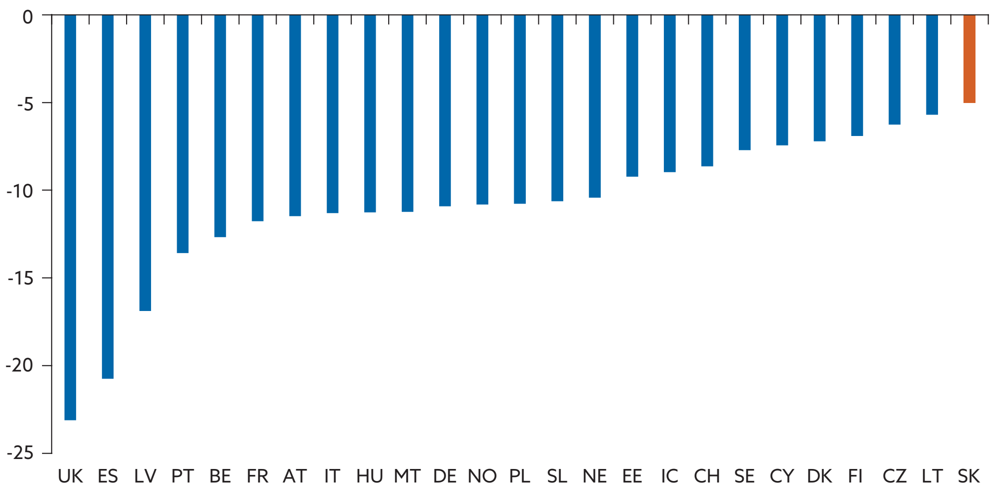
The annual inflation rate was dampened during the first quarter, decelerating from 0.7% in March to 0.3% in June. The slowdown was largely due to a decline in energy prices related to oil price developments. From June, however, energy prices were decreasing at a more moderate pace. After accelerating in June and July, headline consumer price inflation turned slightly negative in August, probably affected by the shifting of summer sales from July to August, which had an upward impact on inflation in July and vice versa in August. The headline rate has been further dampened by a VAT rate cut in Germany starting from July and by decreasing food price inflation.

In Slovakia, the economy contracted by 8.3% in the second quarter of 2020 vis-à-vis the previous quarter, which was a historically high drop. Domestic demand was being constrained mainly by pandemic containment measures. As households were severely restricted in their consumption of services, their savings increased by default. Firms have been halting investment activity and running down inventories. Foreign trade has reflected the impact of global supply chain disruptions, with both exports and imports having fallen sharply.

Box 1
Consumer behaviour in Slovakia during the COVID-19 crisis

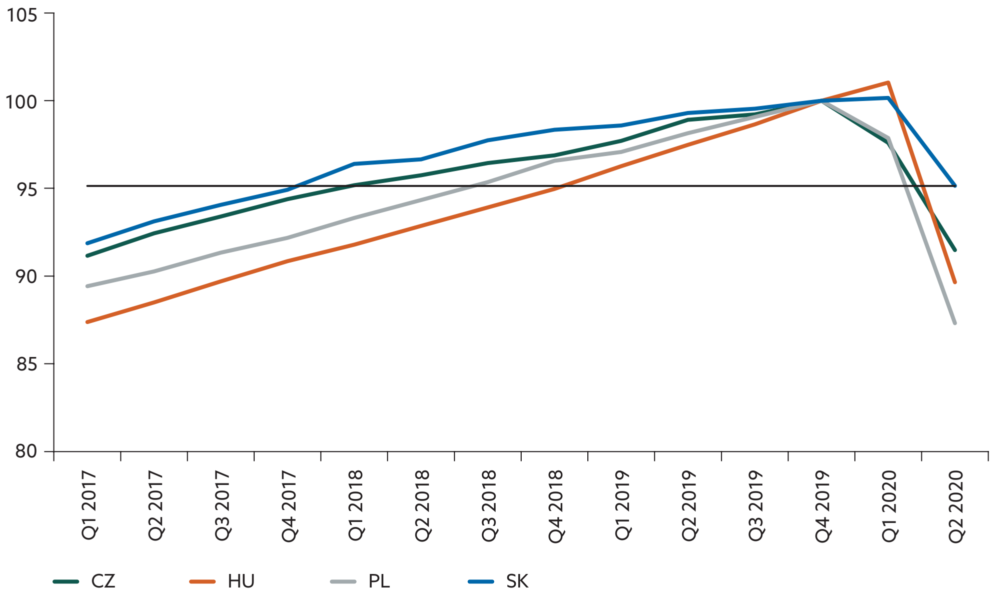
Private consumption surprised on the upside in the second quarter of 2020. **In this period, when the coronavirus (COVID-19) crisis was having the greatest impact, household consumption dropped by just 5.0% quarter on quarter, according to SO SR data.** This decline in consumption was the most moderate in any European country for which data are available (Chart A). Household consumption expenditure fell back to its level of early 2018, which set against the overall drop in GDP (to its 2015 level) represents a far more moderate change. The second quarter decrease was similar to that in neighbouring countries, but because Slovakia saw consumer demand increase in the first quarter, it is reporting significantly higher household spending. In most European countries, consumption was already falling in the first quarter, while Slovak household spending actually increased slightly during that period. Across the Visegrad Four (V4) countries as a whole, consumption expenditure dropped back to its level of three years earlier (Chart B).

Chart A
Household final consumption expenditure in Q2 2020 (annual percentage changes)



Sources: Eurostat, and NBS calculations.

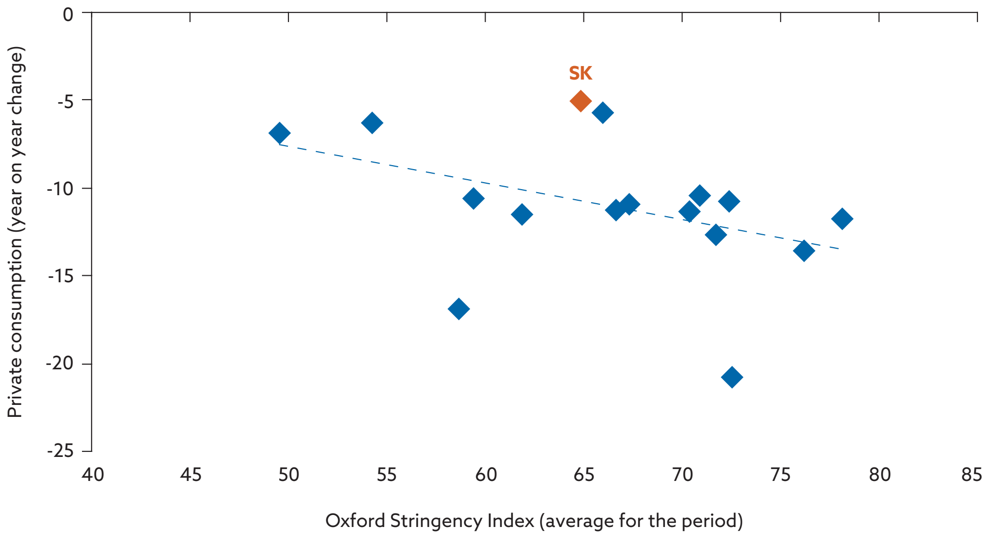
Chart B
Private consumption in V4 countries (Q4 2019 = 100)



Sources: Eurostat, and NBS calculations.

The fact that private consumption declined less in Slovakia than in other EU countries was not related to the stringency of the containment measures adopted here (Chart C). Slovakia's measures were in place for a longer period of time, albeit they were not as stringent as those in most countries. Nevertheless, it appears that the decline in consumer demand should have been greater than it actually was. In most countries, households were constrained to reduce consumption and increased precautionary savings; hence a surge in the saving ratio. This was in marked contrast to the situation in Slovakia, where the saving ratio increased slightly in the second quarter, but remained far below levels in other euro area countries.

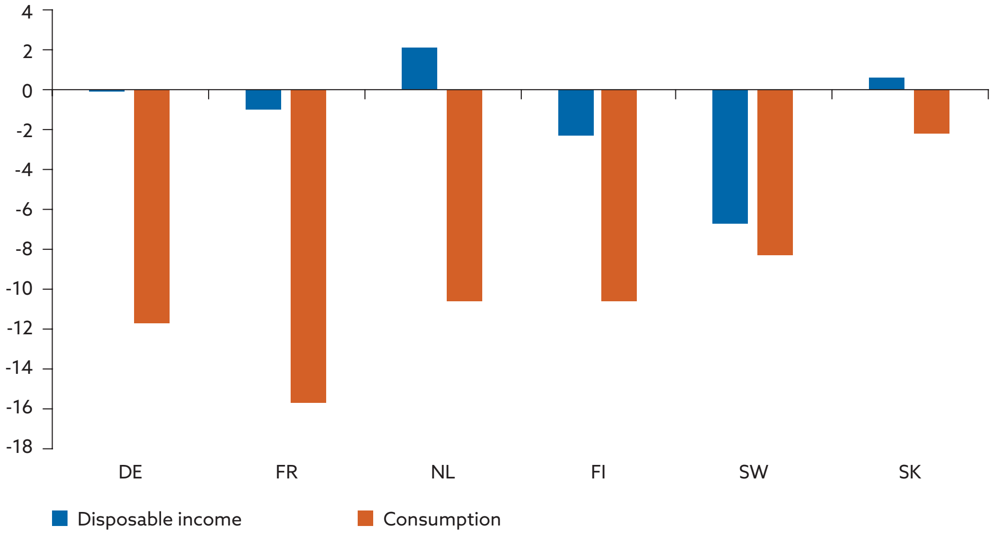
Chart C
Private consumption and the stringency of pandemic containment measures in Q2 2020



Sources: Eurostat, and Oxford University.

Chart D

Household income and consumption in Q2 2020 (annual percentage changes; current prices)



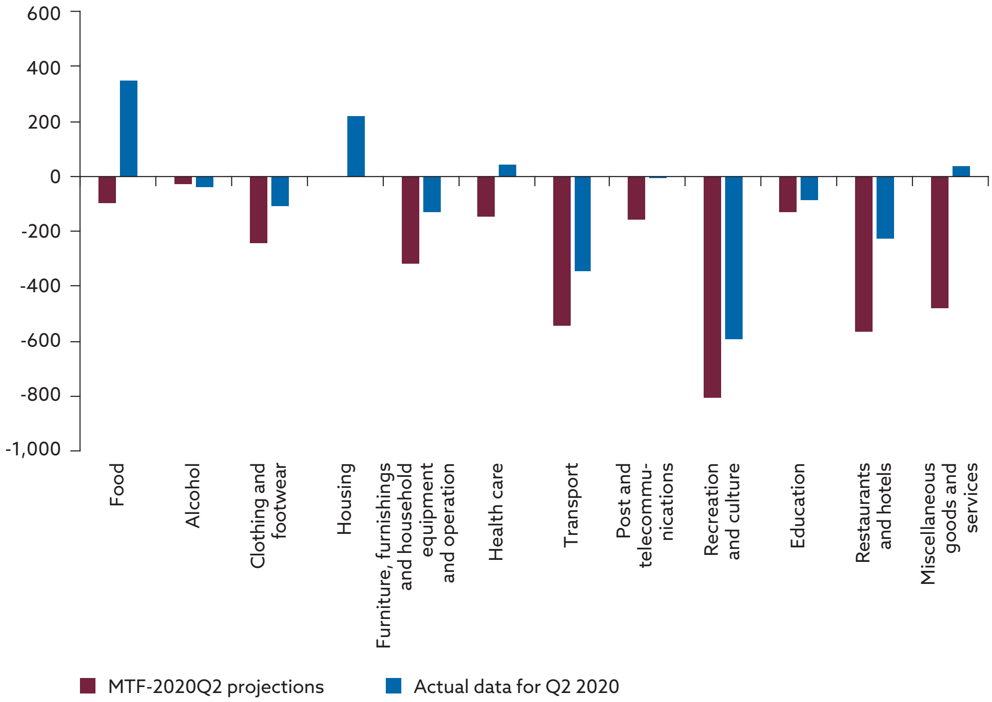
Sources: Macrobond, and NBS calculations.

Looking, however, at the available data for household disposable income in EU countries for the second quarter (data for all countries are not as yet available), Slovakia stands out for a small drop in private consumption vis-à-vis developments in household disposable income (Chart D). It may seem that household behaviour in Slovakia was notably different from that in other countries. The impact on savings of the closure of large swathes of the services and trade sectors was far lower. As a result, there remains great uncertainty about the future situation.

The decline in private consumption in the second quarter was much more moderate than projected in the June forecast (Chart E). Broken down by COICOP categories, consumption expenditure declined across all categories apart from food, housing and health (autonomous expenditures whose share is slightly higher in Slovakia than in the EU as a whole). This may explain the difference in private consumption decline between Slovakia and other EU countries. In sectoral terms, the largest drop was in expenditure related to tourism services (hotels, restaurants, transportation), which fell by around 30% year on year. Given, however, that businesses in these segments were closed almost until the end of May—with lodging sales falling by more than 70% year on year, and restaurant sales by more than 25%—that drop was relatively moderate. The latest available sales data[1] also indicate a significant decline. Although the lodging and restaurant industries have benefitted from the economy's gradual reopening, they did not return to their pre-pandemic levels until the end of June. The only sector that maintained stable income was retail trade. Increases in food and housing expenditure were probably a consequence of more people working from home. This is further indicated by the consumption basket, as the share of autonomous expenditures increased at the expense of tourism-related expenditure (transport, hotels, restaurants, recreation, and culture).

1 Source: eKasa data from the Financial Administration of the Slovak Republic.

Chart E
Household consumption vis-à-vis projections in the first half of 2020
(EUR millions; constant prices)

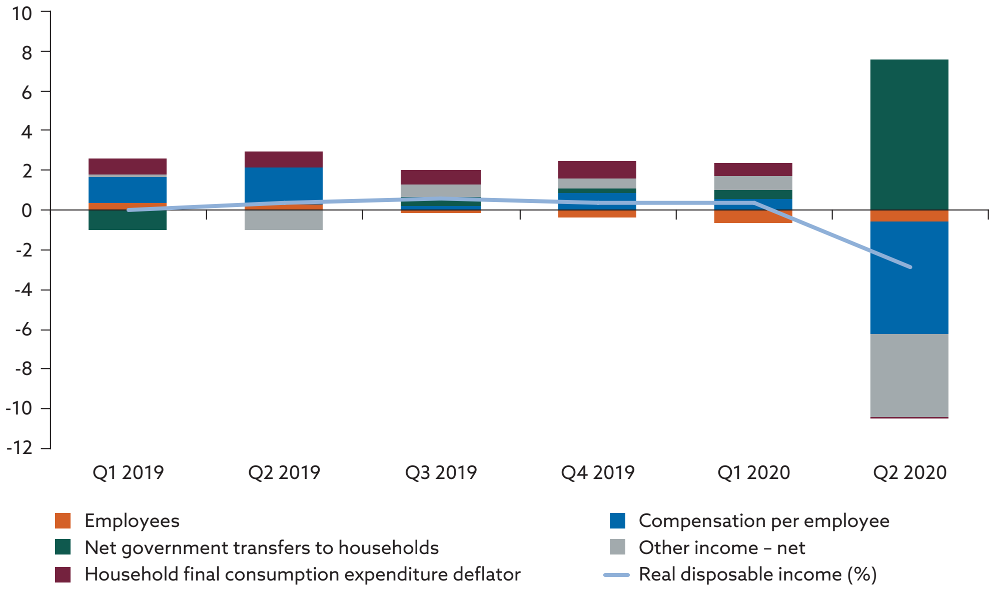


Sources: SO SR, and NBS calculations.

As expected, real household income fell more moderately than consumption, by 2.9% quarter on quarter, owing to the implementation of government measures (Chart F). The expected decrease in consumer demand was caused largely by business closures and only to a small extent by households' cautiousness in regard to future developments. To alleviate the worsening labour market situation, the government introduced short-time work schemes and, to assist employees, pandemic-related carer payments and sick leave payments. Households were thus partly compensated for their loss of income from work caused by a reduction in the number of hours worked. Another measure, allowing borrowers to defer loan repayments, could have an upward impact on private consumption, provided that households do not give savings preference over consumption. The funds made available to households by this measure did not constitute disposable income but could be used for consumption. The ending of this measure may have a slightly dampening effect on private consumption growth.

Chart F

Household disposable income (quarter-on-quarter percentage changes; percentage point contributions; constant prices)



Sources: SO SR, and NBS calculations.

The labour market situation continued to deteriorate in the second quarter of 2020, although government measures to preserve jobs provided relief. Employment in Slovakia fell by 1.1%, quarter on quarter, in the second quarter. The number of people in employment dropped by around 26 thousand in the quarter and around 45 thousand in the first half of the year. The hardest hit sectors were those requiring social contact, especially services. In manufacturing industry, in which rationalisation has been a trend since the second half of last year, the situation became still more negative. But despite the sharp drop in economic activity, the decline in employment was kept moderate by government measures. The same developments were seen across EU countries. Governments were focusing their measures on stabilising household income and preserving jobs. Another pandemic-related feature of the labour market in the second quarter was a significant decrease in the number of hours worked across the economy. This was reflected in a year-on-year decline in compensation per employee.

Inflation decelerated in the second quarter of 2020 owing to falling commodity prices. The slowdown in the headline rate stemmed largely from reduced global demand for commodities. Lower prices of oil and agricultural commodities translated into declines in prices of food and automotive fuel. Inflation excluding energy and food did not yet, however, reflect the decline in domestic demand. On the contrary, it seems that prices were adjusted upwards because of cost factors and also because the summer months saw the release of pent-up demand from earlier in the pandemic crisis.

3 Technical assumptions of the forecast[2]

3.1 Commodities, the exchange rate, and interest rates

The exchange rate of the euro against the US dollar[3] has not changed significantly since the cut-off date for the technical assumptions of this forecast. The average exchange rate over the projection period is assumed to be USD 1.1854 per euro, which is 9.5% stronger compared with the assumption used in June's forecast. Compared with that forecast, the nominal effective exchange rate (calculated with respect to Slovakia's 15 most significant trading partners) has appreciated moderately.

Compared with the June forecast, the price of a barrel of Brent crude oil in US dollars is assumed to be almost 19% higher in 2020, 28% higher in 2021 and 21% higher in 2022. The oil price is assumed to be around USD 43 in 2020 and then to accelerate gradually up to USD 50.

Market interest rates are expected to reflect the impact of the ECB's measures aimed at mitigating the economic repercussions of the pandemic crisis. While the assumption for short-term interest rates has been revised only slightly compared with the June forecast (down by 0.1 percentage point), the assumption for long-term interest rates on Slovak government bonds over the projection period has been reduced by around 0.8 percentage point. Both short-term and long-term interest rates are expected to remain negative over the projection period. It is assumed that ten-year government bond yields will be zero in 2020 and will then gradually decline in subsequent years to between around -0.1% and -0.2%.

3.2 Foreign demand

After contracting sharply in the first two quarters of 2020, the euro area economy is projected to grow quite strongly in the third quarter, according to the September 2020 ECB staff macroeconomic projections. Thereafter, the baseline assumes that economic activity will remain dampened by the continuance of certain containment measures. In addition, a COVID-19

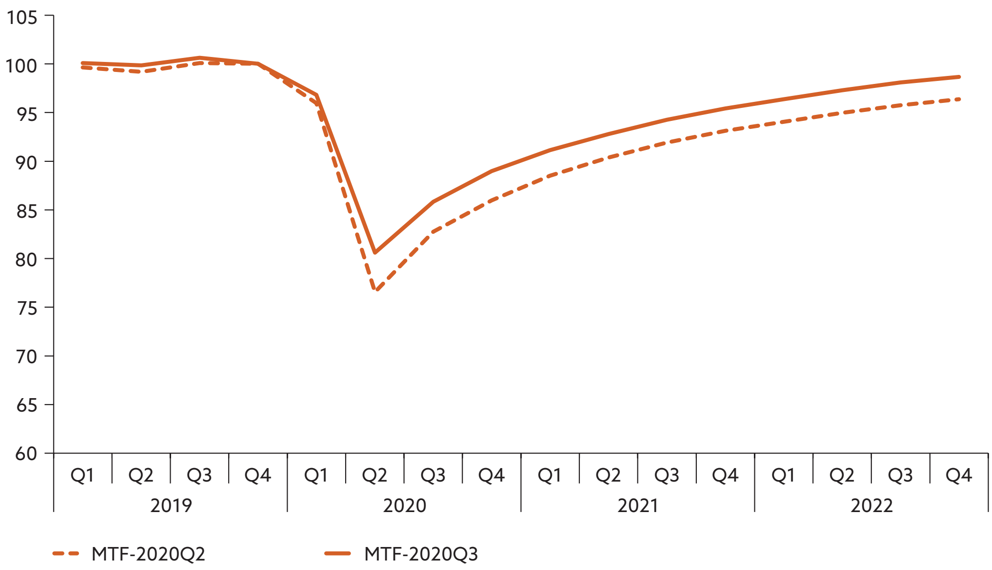
2 The technical assumptions of this Medium-Term Forecast are based on the September 2020 ECB staff macroeconomic projections for the euro area.

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.

vaccine is assumed to become available in mid-2021. These containment measures, together with elevated uncertainty and worsened labour market conditions, are expected to continue to weigh on supply and demand. Nevertheless, support from monetary, fiscal and labour market policies should limit the adverse repercussions on the economy.

As regards **foreign demand** for Slovak exports, recent developments indicate that its decline in the second quarter was more moderate than previously projected. The further decline in demand from within the euro area, attributable to Germany, was more than offset by improved demand from outside the bloc (especially from Czechia, the United Kingdom, and Russia). Overall foreign demand is assumed to decrease by around 12% in 2020. Its recovery in the second half of the year and during 2021 is expected to be slower than projected in the June forecast, owing to the emergence of a second wave of the pandemic and the resulting weakening of economic recovery in Slovakia's trading partners.

Chart 1
Foreign demand (index, Q4 2019 = 100)



Source: NBS calculations.

4 Macroeconomic forecast for Slovakia

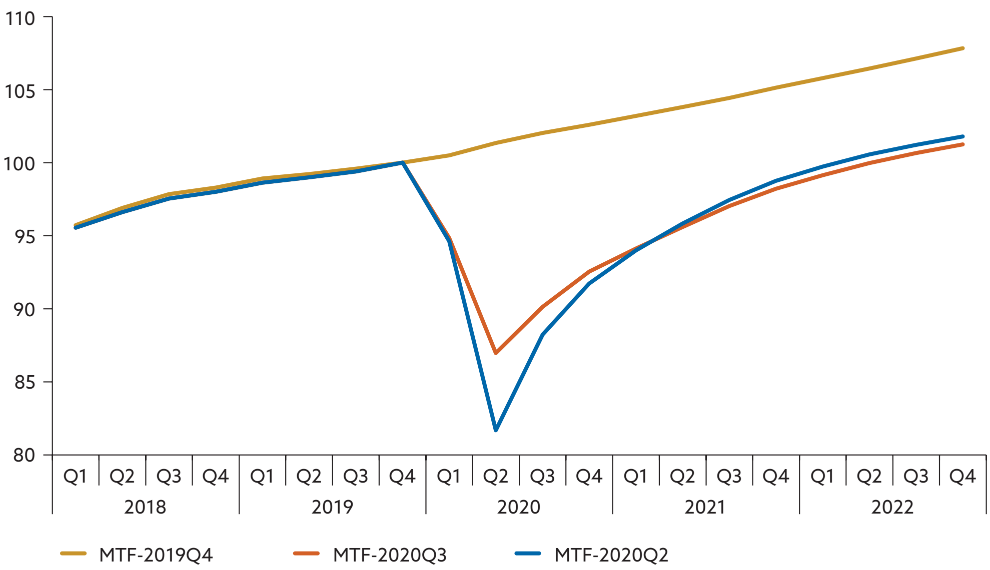
4.1 Economic growth

The Slovak economy is projected to contract by 8.2% in 2020 before growing by 5.6% in 2021 and by 4.2% in 2022. The economic recovery is expected to be driven mainly by foreign demand.

The pandemic crisis caused severe damage to the Slovak economy in the first half of the year, and the economic ground lost will take a longer period to make up. Although the contraction was not as large as projected in the June forecast, the risk of a weaker recovery is starting to materialise as COVID-19 infection rates surge again across Europe. The containment measures and persisting uncertainty will therefore prevent a speedier return to pre-crisis levels.

The baseline of this MTF-2020Q3 forecast rests on the assumption of a partial success in containing the virus, necessitating restrictions on certain economic activities, particularly in the services sector. This response, however, will be localised and there is not expected to be another broad shutdown of the economy. This situation is assumed to continue until the successful deployment of a vaccine in mid-2021. Thereafter, the economic recovery is expected to gather significant pace, both globally and domestically.

Chart 2
GDP growth forecasts (index, Q4 2019 = 100)



Source: NBS calculations.

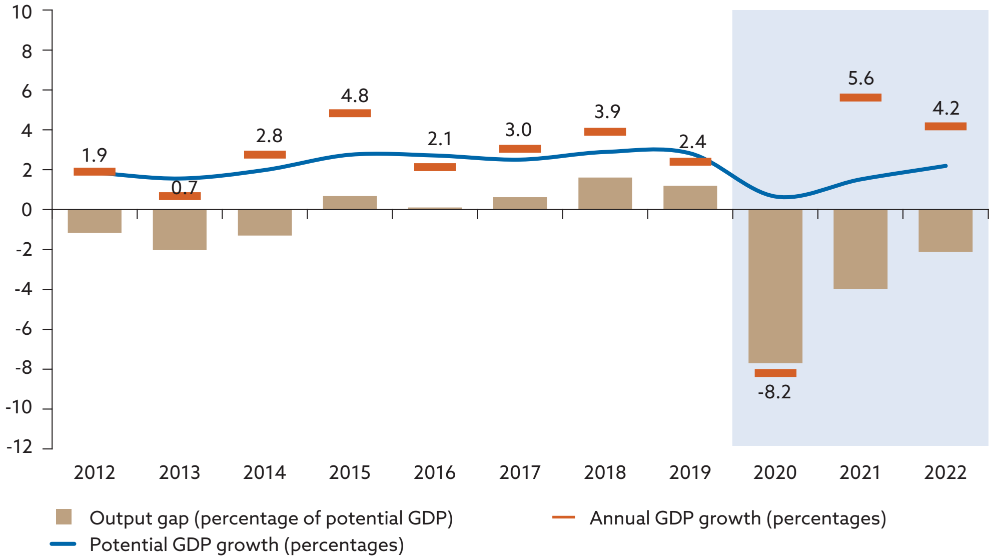
Slovakia's GDP is not expected to return to the level reached in the fourth quarter of 2019, before the pandemic crisis, until mid-2022. The economy is expected to suffer permanent losses related to global trade problems (the weakening of globalisation), with an increasing number of firms going bankrupt and out of business. This will have a downward impact on investment and on total factor productivity growth.

The current pandemic-affected economic developments will have an impact on both the demand and supply sides of the economy. Amid such a severe economic contraction, the uncertainty surrounding the estimation of these effects remains high.[4] In 2020 there is no scope for growth in the economy's productive capacity, and potential output is projected to remain flat. In the short term, the state of emergency necessitated the shutdown of much productive capacity and restrictions on labour supply. With the gradual easing of containment measures, the above-mentioned effects will gradually fade; nevertheless, longer-term production factor losses are also to be expected, owing to global supply chain disruptions as well as to firm bankruptcies. This may result in one-time capital depreciations and reduced investment activity. In such circumstances, structural unemployment will increase. The gradual normalisation of the economic environment from mid-2021 will lead to a recovery of potential output. Compared with the pre-crisis projection, the economy's productive capacity at the end of 2022 is expected to be around 3% lower.

The crisis, however, is expected to be largely demand-side in nature, in the form of a significantly impaired cyclical position. In 2020 the economy is projected to operate at almost 8% below capacity after bottoming out in the second quarter of 2020. This decline has been driven by both domestic and foreign demand. Although subsequent years are expected to see a gradual improvement, the ground lost will not be made up by the end of the projection period, and the economy's cyclical position is envisaged to still be negative in 2022.

[4] The uncertainty stemming from the use of conventional analytical tools for estimating potential output and the cyclical component was examined in Box 1 of NBS's June 2020 Medium-Term Forecast (MTF-2020Q2) (https://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2020/MTF-2020Q2.pdf)

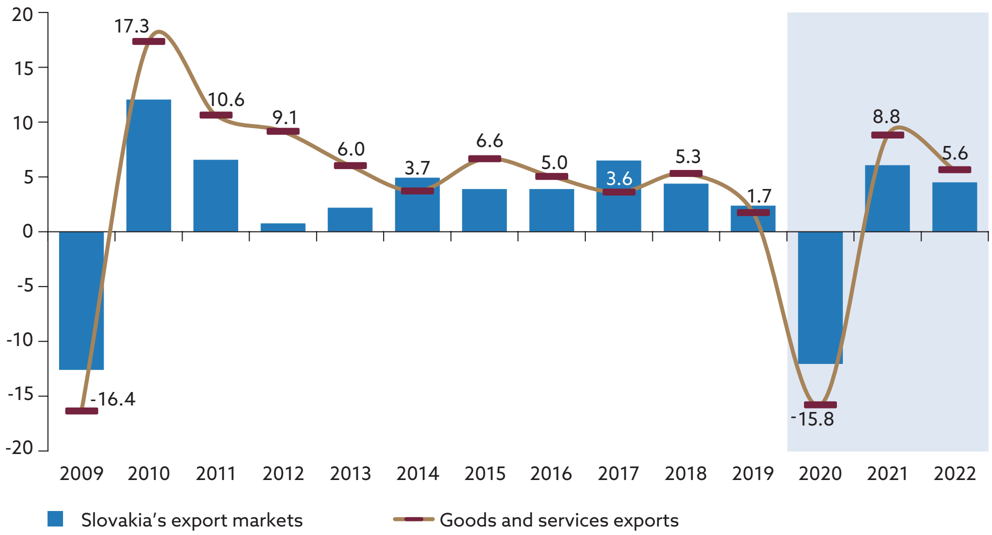
Chart 3
GDP and the output gap (percentages)



Sources: SO SR, and NBS calculations.

Value chain disruptions have been weighing on Slovak exports. The Slovak economy has been severely impacted through the foreign trade channel and decline in export performance. Based on monthly data in the third quarter, exports are expected to recover appreciably, especially through car industry exports. Going forward, the market shares lost during the pandemic crisis are expected to be regained. But despite showing relatively strong growth, exports are not projected to return to their pre-crisis level until the end of 2022.

Chart 4
Slovakia's foreign demand and exports of goods and services (annual percentage changes; constant prices)



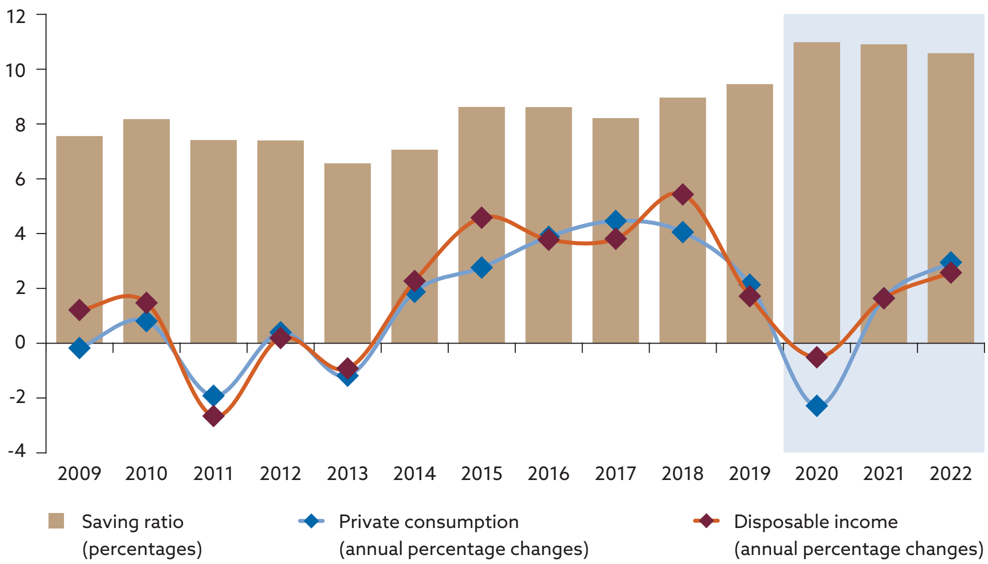
Sources: SO SR, ECB, and NBS calculations.

The economy in 2020 will be weakened by depressed investment. Investment activity contracted sharply in the first half of 2020 amid a climate of uncertainty. It is expected that firms will remain cautious in the second half of the year and will defer planned investments. Thereafter, investment activity is expected to pick up again as uncertainty diminishes. Government investment will show strong growth, given higher absorption of EU funds towards the end of the EU budget period. The overall amount of investment is projected to rebound back to its pre-crisis level by the end of 2022.

Consumer demand will decline in 2020, before making a relatively quick return to its pre-crisis level. In the first half of the year, consumer expenditure was hit by two factors. One was the decline in disposable income resulting from the downturn in economic activity. The other factor was the mandatory closure of businesses. Households were therefore unable to use a large swathe of services. The third quarter is expected to see a pick-up in private consumption, as is being indicated by monthly indicators (sales, eKasa data). Household income is increasing and pent-up household demand is being released. It is expected, however, that the current resurgence of infection rates could increase cautiousness among households and therefore restrict their expenditure, in particular spending related to services (tourism, sport, culture, and similar activities). This effect could persist into the middle of next year. Thereafter, with the economy and incomes gradually recovering, private consumption is projected to accelerate.

Chart 5

Household income, household consumption and the household saving ratio



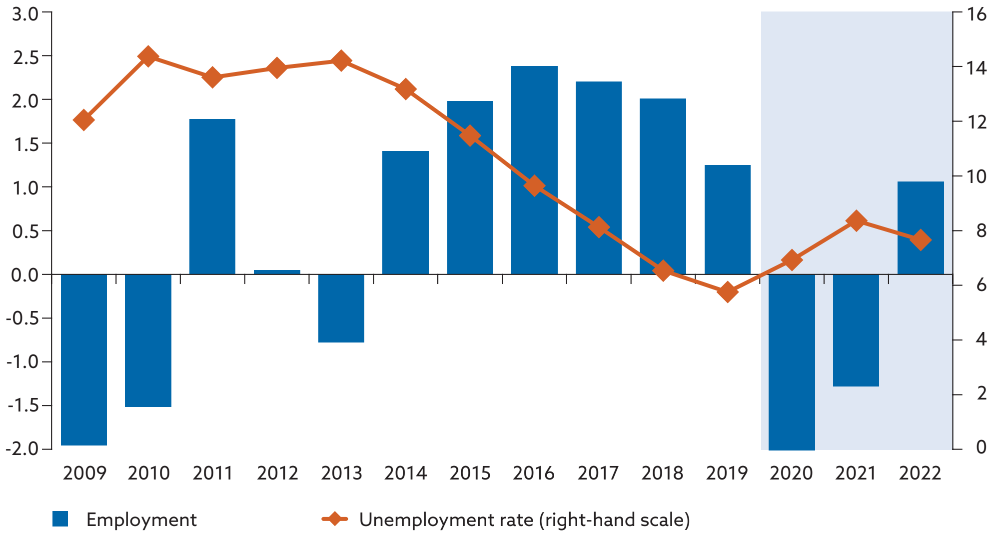
Sources: SO SR, and NBS calculations.

4.2 Labour market

The recession will take a toll on the labour market. Employment will decline and is not expected to start recovering until mid-2021. In the second quarter, the labour market was hardest hit by the impact of the pandemic crisis. The situation would have been worse but for the implementation of government relief measures. As their effect fades, there is expected to be a decline in employment and an appreciable increase in the unemployment rate. Given the still prevailing climate of uncertainty, firms will take a cautious approach to job creation. As the labour market lags economic recovery, employment is not expected to return to growth before the middle of next year.

Chart 6

Employment and the unemployment rate (annual percentage changes)



Sources: SO SR, and NBS calculations.

As regards nominal income from work, its growth rate is expected to remain positive in 2020. With prices increasing, however, purchasing power will decrease. Despite surprising on the upside, wage developments remained subdued in the second quarter owing mainly to the pandemic-related slump in productivity and firms' profitability. Over the rest of the projection period, however, wage growth is expected to accelerate on the back of economic recovery. As for the impact on wage growth of an increase in the minimum wage at the start of next year and the simultaneous delinking of wage premia to the minimum wage, it is expected to be negligible (up to 0.1 percentage point).

Wage developments across the economy as a whole mask a significant difference in trends between the public and private sectors. While both nominal and real wages in the private sector are expected to decline this year, the purchasing power of public sector wages will rise significantly as a result of approved wage increases.

Table 1 Wages (annual percentage changes)

	2019	2020	2021	2022
Nominal labour productivity	4.1	-5.2	6.6	4.7
Whole economy – nominal wages	7.8	1.3	4.9	4.2
Whole economy – real wages	5.0	-0.6	4.0	2.7
Private sector – nominal wages	6.3	-0.6	4.6	4.2
Private sector – real wages	3.5	-2.4	3.7	2.8
Public administration, education and health care – nominal wages	13.4	7.4	5.8	4.1
Public administration, education and health care – real wages	10.4	5.4	5.0	2.6

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.

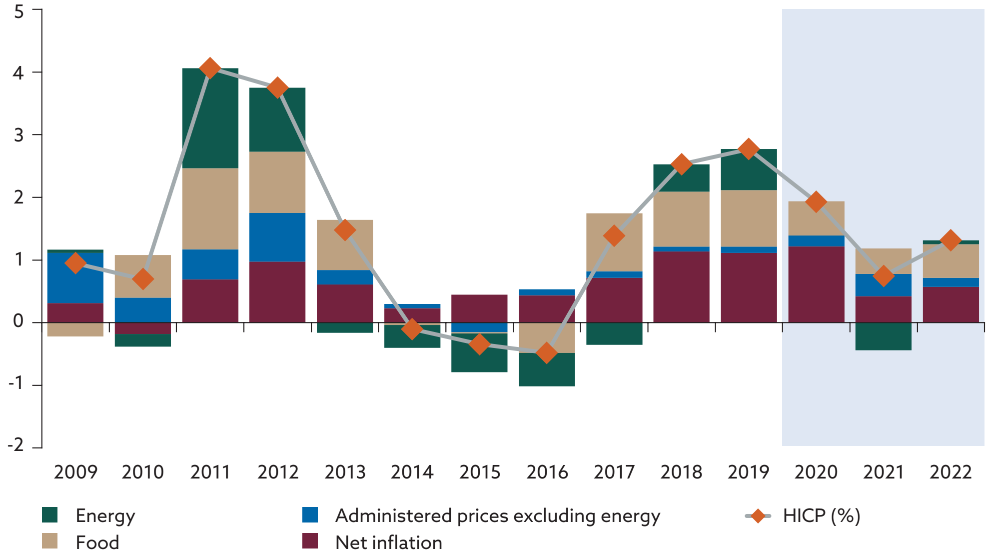
4.3 Price developments

Annual HICP inflation is projected to decelerate because of falling energy prices and weak consumer demand. Although energy commodity prices have gradually stopped falling, the pass-through of their previous decline to domestic energy prices will continue in coming months, particularly in the area of administered prices.

In the short term, service prices are expected to be affected mainly by cost factors resulting from sales losses during the state of emergency. Inflation projections for 2021 explicitly factor in inflation-accelerating administrative measures (a cigarette excise tax increase and the ending of free school lunches). These effects are expected to more than offset the impact of a decline in consumer demand next year. Also taking into account lower external prices, the inflation rate in 2021 is expected to slow to below 1%.

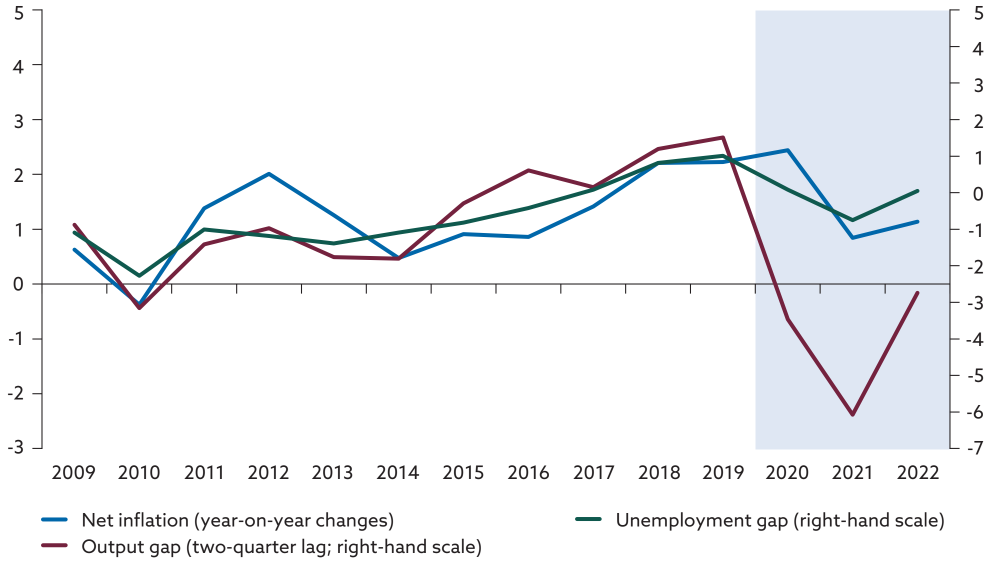
Headline inflation is projected to accelerate in 2022, on the back of the recovery of both domestic and foreign demand.

Chart 7
HICP inflation and its components (annual percentage changes; percentage point contributions)



Sources: SO SR, and NBS calculations.

Chart 8
Net inflation and the output gap (percentages)



Sources: SO SR, and NBS calculations.
Note: Net inflation is headline HICP inflation excluding energy prices, food prices, administered prices and automotive fuel prices.

Table 2 Components of HICP inflation (annual percentage changes)

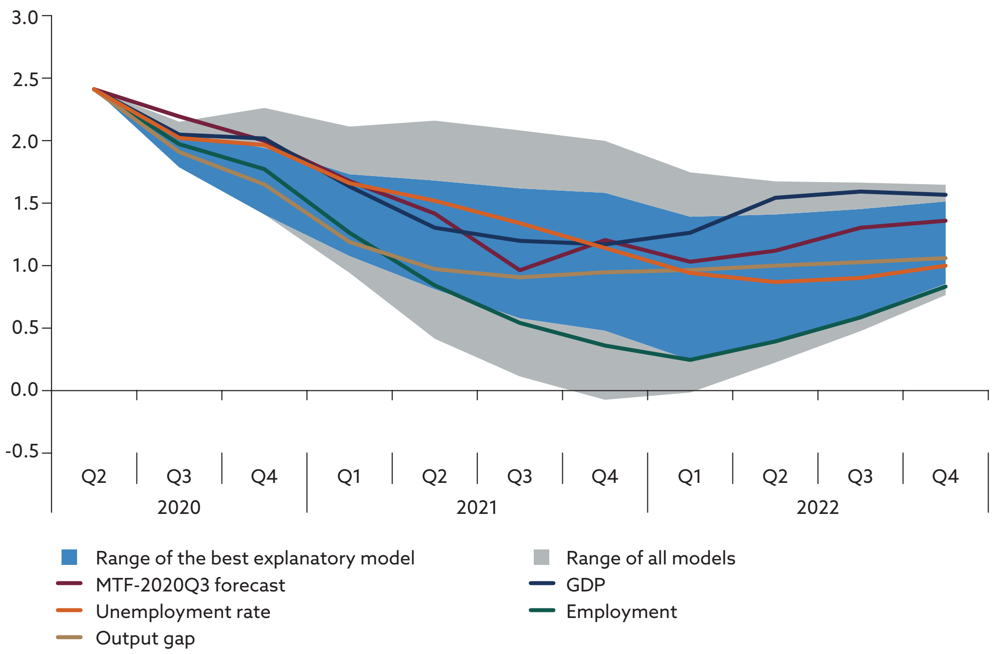
	Average 2004-2008 (pre-crisis period)	Average 2010-2014 (post-crisis period with euro currency)	2018	2019	2020	2021	2022
HICP	**4.1**	**2.0**	**2.5**	**2.8**	**1.9**	**0.7**	**1.3**
Food	3.6	3.1	3.4	3.7	2.1	1.5	2.1
Non-energy industrial goods	0.2	0.3	1.1	1.1	1.6	0.7	0.7
Energy	8.3	2.3	3.0	4.2	0.0	-3.0	0.5
Services	5.3	2.5	2.8	2.8	3.0	2.0	1.7
Net inflation	1.8	1.0	2.2	2.2	2.4	0.8	1.1

Sources: SO SR, and NBS calculations.

The slowdown in net inflation will reflect the impact of the economy's negative cyclical position, which until the end of 2021 is expected to outweigh the impact of cost factors. This is corroborated by estimates based on a broad range of Phillips curves, according to which dampening demand factors are expected to peak at the beginning of 2022. Thereafter, net inflation is expected to return to an upward path.

Chart 9

Inflation net of energy and food vis-à-vis Phillips curves estimates (annual percentage changes)



Source: NBS calculations.

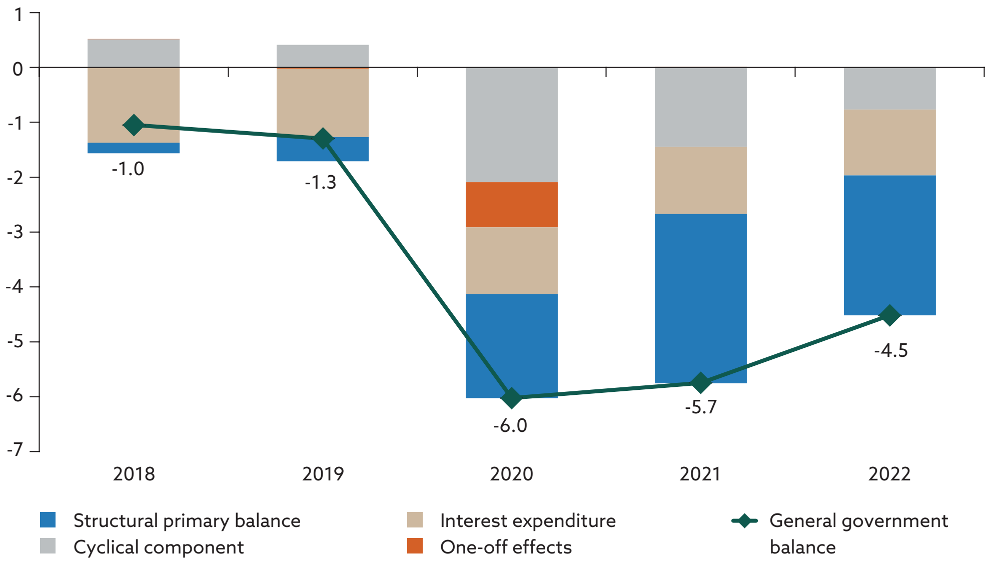
5 Fiscal outlook

The general government deficit is projected to climb to 6.0% of GDP in 2020, before improving moderately in subsequent years. This year's high deficit stems largely from the economy's expected sharp contraction, which will weigh on tax revenues and cause a sharp year-on-year increase in current expenditure (in particular social expenditure on households and subsidies for firms). Thereafter, the fiscal performance is expected to improve, largely owing to a pick-up in cyclical conditions and to the ending of temporary measures. At the same time, the expansionary fiscal stance in 2021 is expected to constrain fiscal consolidation to some extent.

Compared with the June 2020 forecast (MTF-2020Q2), the fiscal deficit projection for 2020 has been revised down, largely because of a milder than expected decline in economic performance and a lower than expected increase in social expenditure (mainly related to the pandemic crisis). The fiscal performance is not expected to improve significantly over the rest of the projection period. The positive impact expected from the revision to revenues should be tempered by the impact of announced measures.

Chart 10

Breakdown of the general government balance (percentages of GDP)

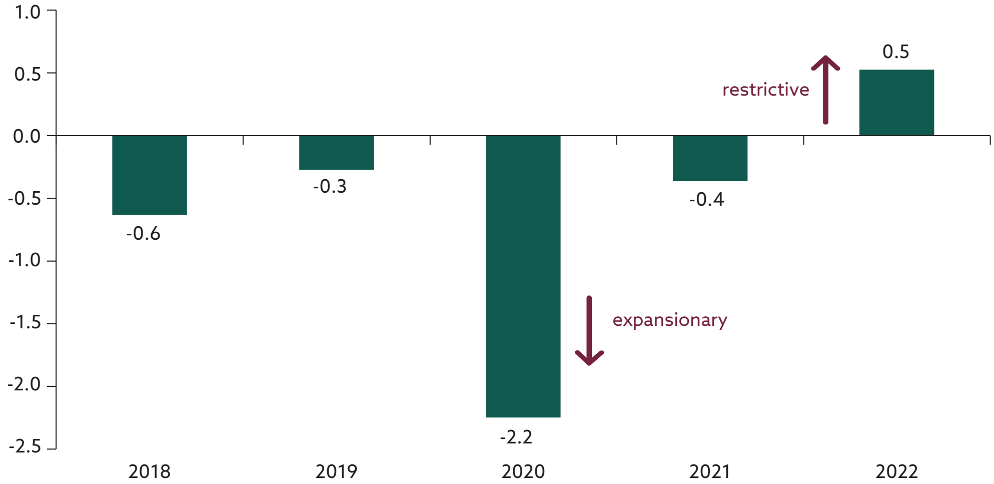


Sources: SO SR, and NBS calculations.
Note: One-off factors include non-cyclical effects that have a temporary impact on the general government balance and should be eliminated in the future.

The fiscal balance projections in this forecast factor in updated information on the implementation of existing measures and the adoption of new measures (mainly the abolition of the special levy on financial institutions and an increase in excise tax on tobacco products), some of which are included in the Government's announced package of social measures (new allowances for pregnant women, the abolition of out-of-pocket payments for medicines for certain groups of people, changes in so-called 13th pension payments, and the replacing of free school lunches with a doubling of the tax allowance for children of up to 15 years of age). The NBS projections do not as yet take into account the money made available to Slovakia through the EU's new recovery fund, since there are still no details about the reforms and investment on which this money will be spent.

Chart 11

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.

Public debt is projected to soar in 2020 by 14.6 percentage points, year on year, to 62.6% of GDP. The main components of that increase are expected to be an elevated primary deficit, a substantial decline in GDP, and the issuance of bonds beyond the extent of projected financial requirements. Moderate consolidation of the primary balance is expected to occur over the projection period, thus reducing borrowing growth. Slovakia's public debt in 2022 is projected to be 64.2% of GDP.

General government final consumption expenditure in 2020 is projected to decline, year on year, owing to price developments. Another negative impact is the SO SR's interim methodological adjustments[5] made in response to the situation during the economic shutdown. A lower base in 2020 will result in the acceleration of government spending growth in 2021. Given the high general government budget deficit, growth rates for compensa-

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5 At the methodological level, in response to school closures in the second quarter of 2020, a proportion of the wages paid in the public sector were shifted into social expenditure. At the same time, part of health insurers' expenditure was shifted to capital transfers owing to the restricted operation of outpatient services. These methodological adjustments affected the structure but not the overall amount of public expenditure.

tion and for purchases of goods and services are expected to slow over the projection period, so contributing to a further deceleration in final consumption growth.

Public investment is expected to decline in 2020, partly because the Government has decided not to proceed with the purchase of the newly built National Football Stadium in Bratislava and mainly because of the deferral of own investment, particularly in the local government sector. However, as the absorption of EU funds accelerates and own investment gradually rebounds, government investment is expected to gather momentum in 2021. In 2022 own investment activity is expected to be further supported by a delivery of military technology.

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

	2018	2019	2020	2021	2022
General government final consumption expenditure	0.2	4.6	-1.3	3.8	1.8
Government investment	14.9	-1.2	-4.1	13.5	15.3
Contribution of EU funds to rate of change (percentage points)	*11.4*	*-4.3*	*1.8*	*8.3*	*8.1*
General government balance (percentage of GDP)	-1.0	-1.3	-6.0	-5.7	-4.5
Fiscal stance (year-on-year change in percentage points of GDP)	-0.6	-0.3	-2.2	-0.4	0.5
Gross debt (percentage of GDP)	49.5	48.0	62.6	64.0	64.2

Sources: SO SR, and NBS calculations.

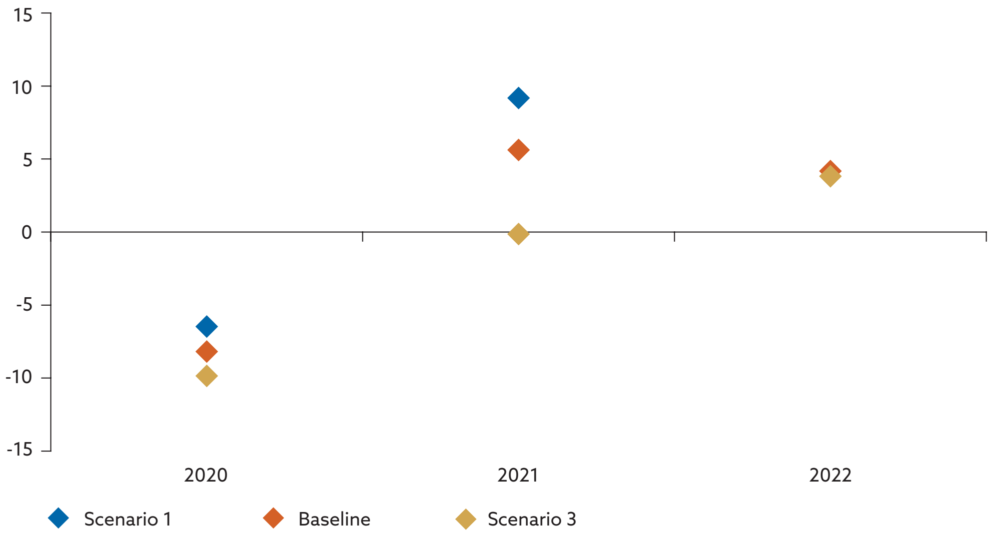
6 Risks to the forecast

The risks to the current forecast are tilted to the downside. In the context of the evolving COVID-19 pandemic crisis, there remains a high degree of uncertainty across the economy. Hence the forecast again includes two alternative scenarios based on how the situation may develop. The basic assumptions of the scenarios are similar to those in the previous forecast and are based on the assumptions of the pandemic scenarios featured in the September 2020 ECB staff macroeconomic projections. The current outlook is subject to the risk of an earlier than projected unwinding of fiscal policy relief measures, which could jeopardise the expected economic recovery via its adverse impact on the household and non-financial corporation sectors.

The positive scenario (scenario 1) assumes that the current increase in COVID-19 infection rates will be successfully contained in the near term, aided by the introduction and wide deployment of a COVID-19 vaccine in late 2020/early 2021. It also assumes that the suppression of the pandemic will enable the ongoing gradual easing of containment measures, thereby minimising the adverse impact on the economy. In this scenario, it is assumed that macroeconomic losses resulting from the pandemic will be only short term in nature and that the economy will rebound relatively quickly back to pre-crisis levels. Besides assuming a successful medical solution to the pandemic, this scenario envisages also effective fiscal and monetary policy measures across the globe.

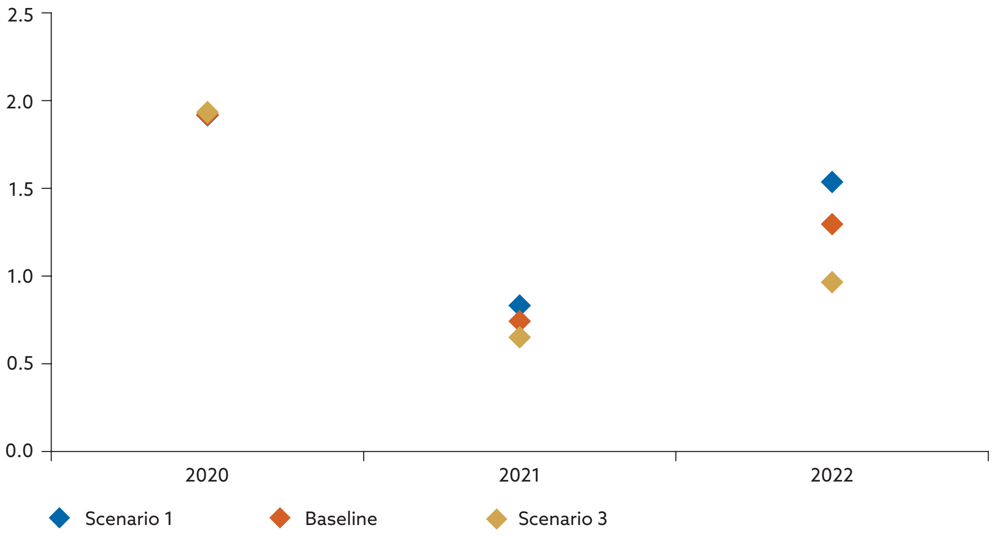
The adverse scenario (scenario 3) assumes that the current increasing spread of the virus lasts for a longer period and that a medical solution in the form of a vaccine may not necessarily be successfully deployed, thus possibly resulting in a more severe second wave of the pandemic which necessitates further tightening of social distancing measures. Nor can it be ruled out that several economic activities, especially in the services sector, will be shut down, albeit to a lesser extent compared with the situation during the pandemic's first wave in the first half of 2020. Longer-term restrictions could have a negative impact on many firms' economic performance, leading both to financial problems in the corporate sector and to a deterioration in the banking sector's position. Under this scenario, a return to normal will happen only slowly and the permanent economic losses will be greater. Furthermore, the labour market situation is expected to deteriorate significantly, with the unemployment rate approaching double digits.

Chart 12
GDP growth (annual percentage changes)



Source: NBS calculations.

Chart 13
Inflation (annual percentage changes)



Source: NBS calculations.

Table 4 Comparison of scenarios (annual percentage changes, unless otherwise stated)

	Scenario 1			Baseline			Scenario 3		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
GDP	-6.5	9.2	4.2	-8.2	5.6	4.2	-9.9	-0.1	3.8
– private consumption	-1.9	3.5	3.1	-2.3	1.6	3.0	-2.6	-1.4	1.6
– government consumption	-1.3	3.8	1.8	-1.3	3.8	1.8	-1.3	3.8	1.8
– fixed investment	-13.5	15.4	10.3	-15.0	9.0	10.9	-16.3	-0.7	11.2
– exports	-12.1	15.1	6.0	-15.8	8.8	5.6	-19.5	-2.1	5.5
Employment	-2.0	-0.8	0.9	-2.2	-1.3	1.1	-2.4	-2.8	0.1
Unemployment rate (percentage)	6.7	7.7	7.1	6.9	8.4	7.7	7.1	9.9	10.1
Wages	1.6	6.5	4.5	1.3	4.9	4.2	1.1	2.8	3.7
Inflation	1.9	0.8	1.5	1.9	0.7	1.3	1.9	0.7	1.0
Foreign demand	-8.1	12.1	4.8	-12.1	6.1	4.5	-15.1	-2.2	4.3

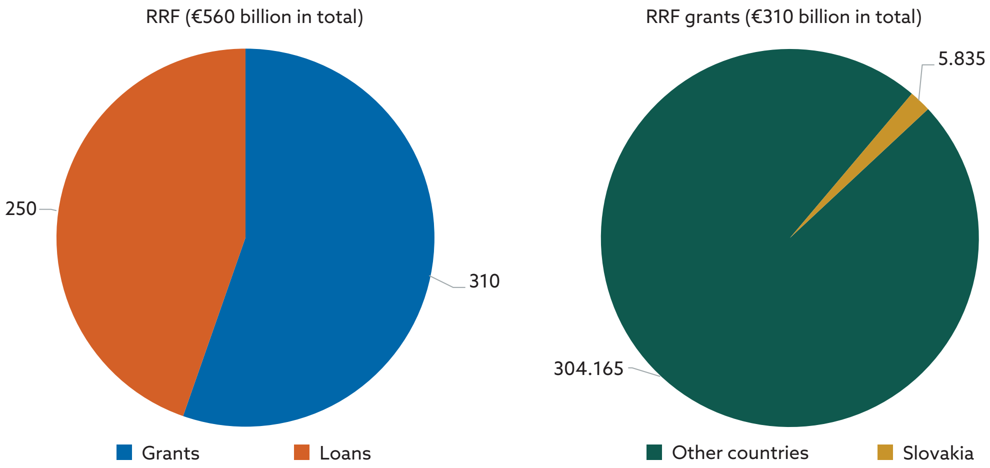
Source: NBS calculations.

Box 2
Illustrative scenarios for the impact of EU grants under the NGEU programme

At this time of heightened uncertainty surrounding the progress of the COVID-19 pandemic and its economic impact, we are presenting a forecast that envisages, besides negative risks related to the pandemic, positive risks related to the receipt of funding from the EU's new Next Generation EU (NGEU) recovery fund. This box employs alternative scenarios to look at the potential macroeconomic impact of only part of the NGEU funding.

These funds are expected to be available from 2021 to 2026. The total size of the NGEU recovery fund, to be split between all Member States, is €750 billion. This includes a €560 billion Recovery and Resilience Facility (RRF), which will be equipped with a grant facility of up to €310 billion and will be able to make up to €250 billion available in loans. Before they can access the funding, Member States will have to submit national recovery and resilience plans.

Chart A
Breakdown of RRF fund



Source: European Commission.

The amount available to individual Member States in 2021 and 2022 is determined on the basis of a pre-defined allocation key that takes into account the following indicators: unemployment over the period 2015–2020, GDP per capita, and population. The determining indicators for the 2023 allocation will include the decline in GDP in 2020, the decline in GDP in 2020–21, GDP per capital, and population.

Based on the above, Slovakia is entitled to €5.835 billion from the RRF (at 2018 constant prices), including an allocation of €4.333 billion for the 2021-22 period.[6] At present, there is no detailed national plan for how to distribute this funding between particular areas and projects. At the same time, given previous experiences in the absorption of EU funds, there is a risk related to how effectively and to what extent Slovakia will be able to use the NGEU funds.

Our analysis here is based on two illustrative scenarios for the funding received by Slovakia under the NGEU programme. In the first scenario (**scenario 1**), Slovakia manages to draw only a small amount, €230 million (0.26% of GDP), of its allocation for 2021 and 2022. This scenario is based on the experience of drawing EU funds under individual programming periods. The second scenario (**scenario 2**) assumes that the tapping of NGEU funds is more successful and efficient, with the amount received standing at around €1.6 billion (1.8% GDP). Even this amount represents less than half of the allocation for 2021–22.

Table A Scenarios for the receipt of grants from the NGEU fund in 2021–22

	Scenario 1			Scenario 2		
	2021	2022	Total	2021	2022	Total
Government investment (EUR millions)	34	196	230	536	1,072	1,607
Government investment (percentage of 2019 GDP)	0.04	0.22	0.26	0.60	1.20	1.80

Source: NBS calculations.

For simplicity, both scenarios assume that all the funds received are used solely to finance investment activities. The macroeconomic effects were modelled at NBS using two macroeconomic models: an NBS macroeconomic model (**model 1)**; and a DSGE model called the Euro Area and Global Economy (EAGLE) model **(model 2)**. The resulting effects take into account also the indirect effect of the NGEU's estimated impact on Slovakia's trading partners.

In 2021–22 the cumulative positive impact of macroeconomic stimuli on Slovakia's GDP growth **is estimated at between 0.2% and 1.0%** (the average of both models). Of that impact, around 0.1 percentage point represents an indirect contribution via Slovakia's trading partners. The impact is expected to be greater in 2022, as preparations for individual projects are gradually started. The impact on the inflation rate is expected to be negligible.

6 Source: European Commission.

Table B The impact of the grants received on GDP growth (percentage points)

	Scenario 1		Scenario 2	
	2021	**2022**	**2021**	**2022**
Model 1	0.05	0.18	0.28	0.62
Model 2	0.04	0.18	0.35	0.72
Average	**0.04**	**0.18**	**0.31**	**0.67**

Source: NBS calculations.

7 Comparison with the previous forecast

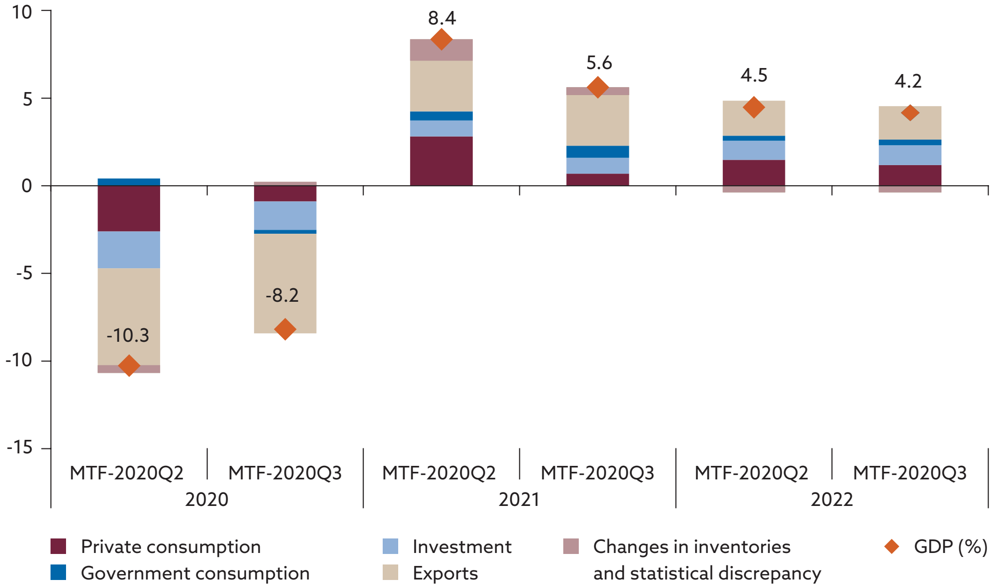
The projection for foreign demand growth in 2020 has been revised up in this forecast, after its rate in the second quarter was stronger than previously projected. Over the whole projection period, however, foreign demand growth is expected to be more moderate compared with the June projection, owing to a deterioration in the pandemic situation and a weaker than expected pick-up in economic growth. Despite its better reading for the second quarter, foreign demand will not return to its pre-crisis level before the end of the projection period.

After surprising on the upside in the second quarter, Slovakia's economy is not expected to contract as severely as projected in June. The main improvement has been in the domestic side of the economy. The negative impact of the pandemic crisis on private consumption has not been as extensive as expected; it does mean, however, that the recovery of consumer demand in 2020 may not necessarily be as strong as previously projected. It is expected that households will behave cautiously at a time when COVID-19 infection rates are increasing, in particular by partly restricting their use of services in the short term. The economy's performance over the medium-term is expected to be weaker than projected in June, with a consequent negative impact on compensation growth and therefore on private consumption.

The projection for business investment in 2020 has been revised up on the basis of better developments in the second quarter. The projections for subsequent years have been revised down slightly, partly reflecting an increase in firms' borrowing costs amid the unwinding of fiscal relief measures and an increase in non-performing loans.

Chart 14

GDP and its components[7] (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.

The employment situation in coming months is expected to be slightly worse than envisaged in June, but its return to growth is projected to be speedier. The downward revision of the economic growth projection for the medium term has had a downward impact on the projected pace of recovery in employment. Compared with the June projection, the rate of decline in employment in coming months is expected to be greater, given the weaker trends in the services sector and continuing job cuts in manufacturing industry. On the other hand, the downward revision of projected compensation growth and therefore of labour costs is expected to accelerate job creation in the medium term. As regards labour costs, the better than projected trends in the second quarter resulted in a moderation of the projected decline in real compensation in 2020. Over the medium term, however, its growth rate is expected to be slower than previously projected.

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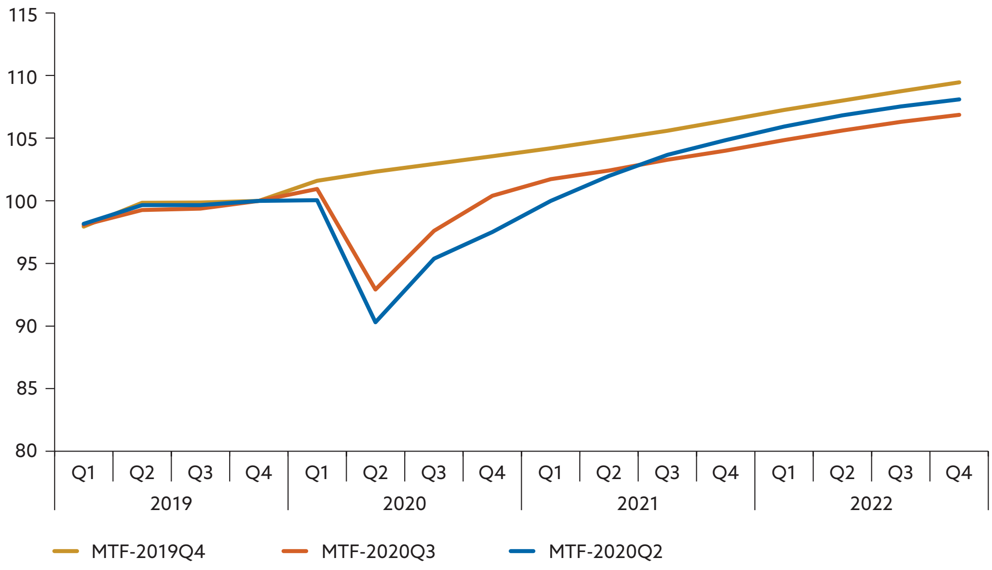
[7] The composition of GDP growth is calculated as the contributions of components to GDP growth after deducting their import intensity. In this case the calculation uses the constant import intensity of the different GDP components (household final consumption – 30%, government consumption – 7%, investment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

Chart 15

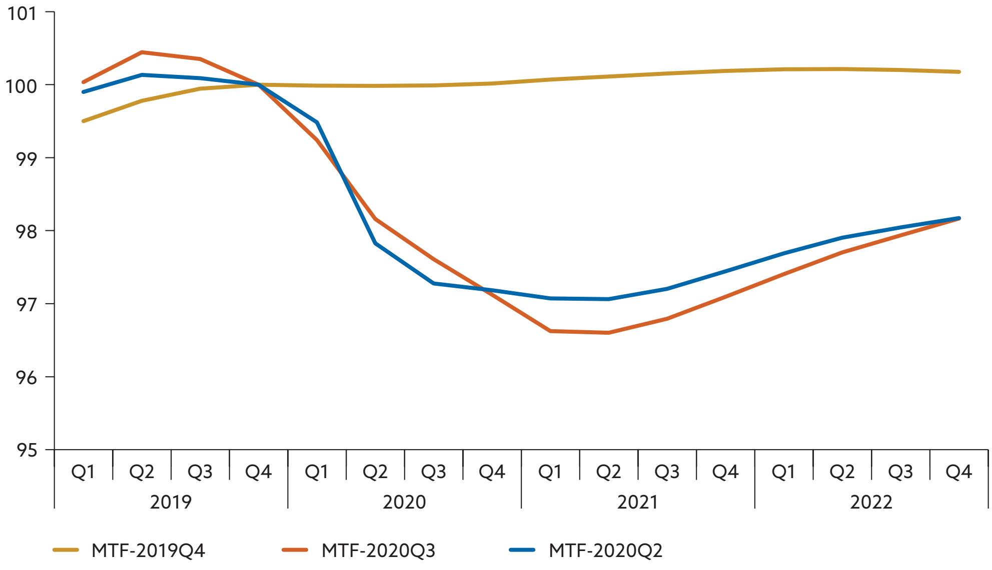
Real compensation per employee (index, Q4 2019 = 100)



Sources: SO SR, and NBS calculations.

Chart 16

Employment (index, Q4 2019 = 100)

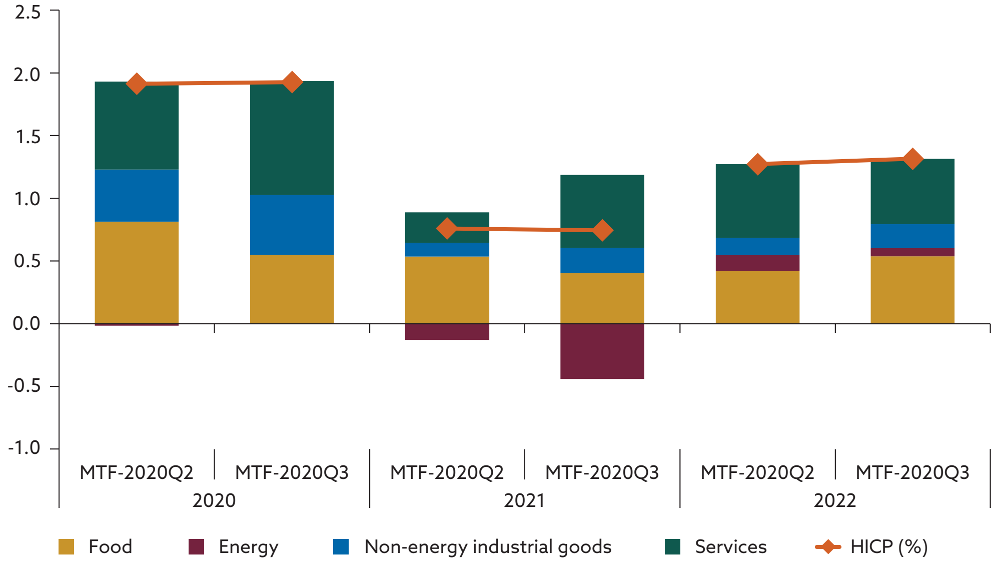


Sources: SO SR, and NBS calculations.

The projection for the inflation rate remains unchanged from the June forecast. This is due to the mutually offsetting impacts of several factors. Services inflation, currently higher than projected owing to the pass-through of cost factors, is expected to have an upward impact on headline inflation in coming months. At the same time, the latest inflation projection explicitly factors in two administrative measures (an increase in the cigarette excise tax and the ending of free school lunches), which add around 0.5 percentage point to the projection. On the other hand, energy prices are expected to have a downward impact, and lower consumer demand in particular is expected to have a dampening effect in the medium term. Towards the end of the projection period, a shift in the economy's cyclical position is expected to cause a moderate increase in demand pressures.

Chart 17

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



Sources: SO SR, and NBS calculations.

Table 5 Medium-Term Forecast (MTF-2020Q3) for key macroeconomic indicators

Indicator	Unit	Actual data	MTF-2020Q3			Difference vis-à-vis MTF2020Q2		
		2019	2020	2021	2022	2020	2021	2022
Prices								
HICP inflation	annual percentage change	2.8	1.9	0.7	1.3	0.0	-0.1	0.0
CPI inflation	annual percentage change	2.7	1.9	0.8	1.4	0.0	0.0	0.0
GDP deflator	annual percentage change	2.6	0.9	-0.4	1.6	-0.5	-0.2	0.0
Economic activity								
Gross domestic product	annual percentage change, constant prices	2.4	-8.2	5.6	4.2	2.1	-2.8	-0.3
Private consumption	annual percentage change, constant prices	2.1	-2.3	1.6	3.0	4.4	-5.3	-0.7
Final consumption of general government	annual percentage change, constant prices	4.6	-1.3	3.8	1.8	-3.8	1.1	0.2
Gross fixed capital formation	annual percentage change, constant prices	6.8	-15.0	9.0	10.9	4.4	-0.3	-0.2
Exports of goods and services	annual percentage change, constant prices	1.7	-15.8	8.8	5.6	-0.4	0.3	-0.3
Imports of goods and services	annual percentage change, constant prices	2.6	-14.3	8.1	5.9	-1.3	0.9	-0.2
Net exports	EUR millions at constant prices	2,393	739	1,281	1,178	701.3	262.9	268.5
Output gap	percentage of potential output	1.2	-7.7	-4.0	-2.1	1.6	-0.2	-0.4
Gross domestic product	EUR millions at current prices	94,171	87,246	91,740	97,082	1,556.7	-916.6	-1,284.3
Labour market								
Employment	thousands of persons ESA 2010	2,450	2,397	2,366	2,391	-2.0	-14.4	-7.9
Employment (rate of change)	annual percentage change ESA 2010	1.2	-2.2	-1.3	1.1	-0.1	-0.5	0.3
Number of unemployed	thousands of persons[1)]	158	187	226	207	-13.6	-4.9	-9.1
Unemployment rate	percentage	5.8	6.9	8.4	7.7	-0.5	-0.1	-0.3
NAIRU estimate[2)]	percentage	6.8	7.0	7.6	7.7	-0.7	-0.3	-0.1
Labour productivity[3)]	annual percentage change	1.1	-6.2	7.0	3.1	2.2	-2.2	-0.6
Nominal productivity[4)]	annual percentage change	4.1	-5.2	6.6	4.7	1.9	-2.4	-0.6
Nominal compensation per employee	annual percentage change ESA 2010	7.1	0.7	5.7	4.3	2.5	-2.2	-1.5
Nominal wages[5)]	annual percentage change	7.8	1.3	4.9	4.2	3.0	-3.1	-1.5
Real wages[6)]	annual percentage change	5.0	-0.6	4.0	2.7	2.9	-3.1	-1.6
Households and non-profit institutions serving households								
Disposable income	annual percentage change, constant prices	1.7	-0.5	1.6	2.6	1.8	-1.9	-1.1
Saving ratio[7)]	percentage of disposable income	9.5	11.0	10.9	10.6	-2.3	0.5	0.2
General government sector[8)]								
Total revenue	percentage of GDP	41.5	43.5	43.5	43.6	1.0	1.0	0.7
Total expenditure	percentage of GDP	42.8	49.5	49.3	48.1	-1.3	0.8	0.8
General government balance[9)]	percentage of GDP	-1.3	-6.0	-5.7	-4.5	2.2	0.2	-0.1
Cyclical component	percentage of trend GDP	0.4	-2.1	-1.5	-0.8	0.4	0.0	-0.1
Structural balance	percentage of trend GDP	-1.7	-3.1	-4.3	-3.7	1.8	0.1	0.0
Cyclically adjusted primary balance	percentage of trend GDP	-0.5	-2.7	-3.1	-2.5	1.8	0.1	0.0
Fiscal stance[10)]	year-on-year change in p. p.	-0.3	-2.2	-0.4	0.5	1.8	-1.6	-0.2
General government gross debt	percentage of GDP	48.0	62.6	64.0	64.2	2.0	3.0	2.4

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Table 5 Medium-Term Forecast (MTF-2020Q3) for key macroeconomic indicators (continued)

Indicator	Unit	Actual data	MTF-2020Q3			Difference vis-à-vis MTF2020Q2		
		2019	2020	2021	2022	2020	2021	2022
Balance of Payments								
Goods balance	percentage of GDP	-1.0	-3.1	-3.5	-3.5	-0.6	-1.7	-1.6
Current acount	percentage of GDP	-2.7	-4.2	-4.8	-5.1	0.2	-0.6	-1.0
External environment and technical assumptions								
Slovakia's foreign demand	annual percentage change	2.4	-12.1	6.1	4.5	2.4	-0.5	-0.2
Exchange rate (EUR/USD)[11), 12)]	level	1.12	1.14	1.19	1.19	4.8	9.5	9.5
Oil price in USD[11), 12)]	level	64.0	42.8	47.5	49.4	18.8	27.7	21.3
Oil price in USD[11)]	annual percentage change	-9.9	-33.1	10.9	4.0	10.6	7.7	-5.5
Oil price in EUR[11)]	annual percentage change	-5.0	-34.3	6.7	4.0	7.7	3.0	-5.5
Non-energy commodity prices in USD	annual percentage change	-3.7	1.5	5.8	2.7	5.1	8.3	8.1
Three-month EURIBOR	percentage per annum	-0.4	-0.4	-0.5	-0.5	0.0	-0.1	-0.1
Ten-year Slovak government bond yields	percentage	0.2	0.0	-0.2	-0.1	-0.5	-0.9	-0.8

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; fiscal outlook.
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/2020/protected/P3Q-2020.xls