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Third wave slows economic growth

Macroeconomic forecast for 2021 – 2024

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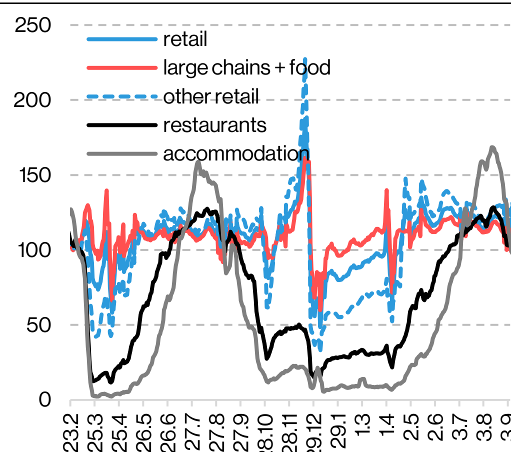
The third wave of the pandemic will hinder Slovakia's economic recovery, with output projected to grow by 3.7 per cent in 2021. Household consumption will decrease towards the year-end and the revival of the labour market will be postponed. At the same time, the pandemic's impact on output and employment will be somewhat milder than it was at the end of 2020. The imbalance between supply and demand and the resulting higher inflation will also curb real economic growth. In 2022, output growth will increase to 4.2 per cent, owing mainly to investments from the EU's Recovery and Resilience Plan, while private consumption too will recover. Growth will culminate in 2023 with the last-minute drawing of resources from the EU's current programme period. In the alternative scenarios, we consider the economic impact of a new lockdown, as well as the effect of EU funds being drawn below expectations.

Slovak GDP will increase by 3.7 per cent in 2021. The easing of restrictions following the second wave had already manifested itself in the second quarter. Hence, the economy will be operating close to its pre-crisis potential in the third quarter. Meanwhile, eKasa data suggests that the faster spending of pandemic savings did not continue significantly over the summer months.

The third wave will hinder economic growth

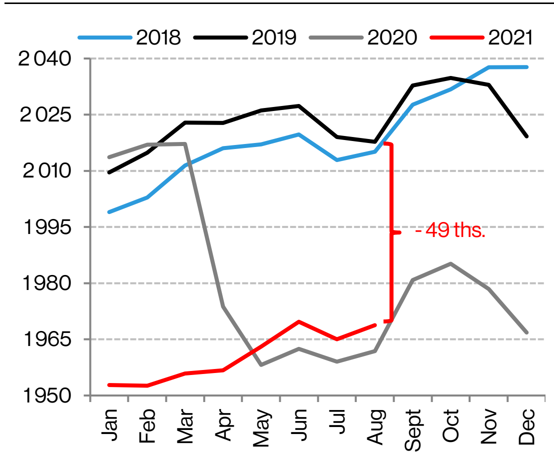
The economic recovery towards year-end will be hindered by the third wave of the pandemic. In accordance with the COVID Automat currently in place, we assume that restrictions will be milder than they were at the end of 2020. Household consumption will decrease by 1.9 per cent in the fourth quarter, with accommodation, restaurants, culture and recreation being the most severely affected sectors. In contrast, industrial production will remain intact, and GDP will hence decrease by only 0.1 per cent. While the third wave will not increase unemployment significantly, total employment in 2021 will lag behind 2019 figures by 66 thousand persons.

Figure 1: Sales reached similar levels than last year (eKasa, current prices)



Note: 7-day averages relative to beginning of Feb 2020.
Source: eKasa, FSSR, IFP

Figure 2: Labour market is recovering gradually, while employment lags behind (ths. contracts)



Source: Sociálna poisťovňa

Shortages lead to higher prices and production outages

Component shortages will limit Slovak exports. The global demand for goods remains high and supply is insufficient. As a result, inflationary pressures are rising and so is the number of production outages. We expect these factors to hinder export activity and the real economy until the end of this year, as well as over the course of next year.

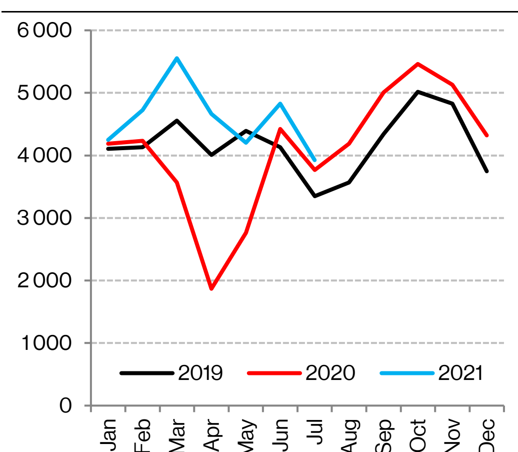
Investment will drive growth in 2022

In 2022, GDP will grow by 4.2 per cent, owing mainly to higher investment. The pandemic will retreat at the beginning of the year, uncertainty will decrease and firms will resume their investment activities. With the end of the EU's third programme period approaching, we expect the drawing of funds to accelerate. In addition, first resources from EU's Recovery and Resilience Plan (RRP) will also start flowing into the economy. Overall investment will thus increase by almost 17 percent year-on-year. This will not only help decrease the negative output gap, but also contribute to faster growth of potential output in the years to follow.

The last-minute drawing of EU funds will boost output in 2023

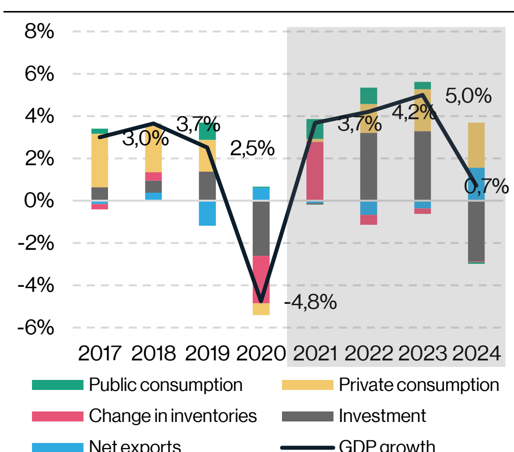
The drawing of EU funds will affect growth dynamics towards the end of the forecasting horizon. Output growth will accelerate to 5 per cent in 2023, due to the higher drawing of funds before the end of the programme period, similarly to 2015. This will cause the economy to overheat moderately. Output growth will slow down in 2024, as the drawing of funds from the fourth programme period is assumed to be gradual.

Figure 3: Production outages have slowed down export activity (NSA, current prices)



Source ŠÚ SR

Figure 4: Contributions to GDP growth (constant prices, p.p.)



Source: ŠÚSR, IFP

Table 1: Preliminary plan of allocating RRP resources (mil. EUR, excl. VAT)[1]

	2021	2022	2023	2024	2025	2026
RRP Total	***114***	***1 298***	***1 337***	***1 352***	***987***	***520***
Investment	*74*	*809*	*871*	*893*	*614*	*331*
Compensations	*27*	*107*	*109*	*110*	*101*	*58*
Intermediate consumption	*11*	*84*	*61*	*61*	*48*	*36*
Soc. transfers in kind	*0*	*2*	*2*	*3*	*4*	*2*
Social transfers	*0*	*9*	*14*	*21*	*14*	*7*
GFCF firms	*1*	*224*	*185*	*166*	*108*	*15*
GFCF households	*0*	*62*	*96*	*98*	*98*	*71*

[1] The current forecast assumes a lower allocation of RRP resources compared to the previous forecast, based on EC guidelines, according to which the Slovak economy was relatively more resistant during the pandemic and will hence receive a smaller amount of funds.

RRP will provide an impulse for labour market recovery

The third wave will yet again postpone labour market recovery. Backed by favourable epidemic development, the labour market started creating new jobs in the second quarter. Relative to the first quarter, employment expanded in all sectors, and increased by a total of 18 thousand persons. The onset of the third wave and the resulting economic restrictions will halt the positive development from the summer months. We expect employment to start growing again in the second quarter of 2022. The labour market should continue recovering from the pandemic in 2023, aided by EU funds.

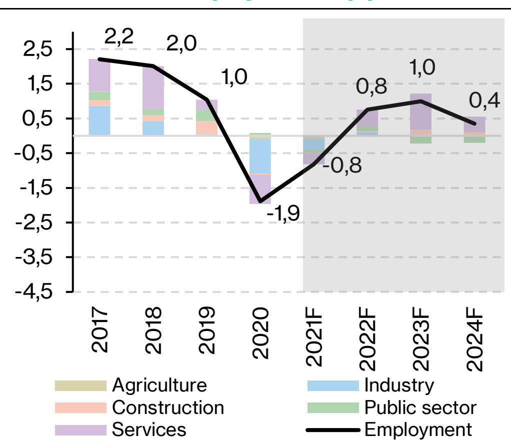
The unemployment rate will exceed 7 per cent in 2021, but will start declining in the years to come. In 2022, the unemployment rate is projected to reach 6.7 per cent, followed by a significant decline supported by RRP investment. A faster decrease in unemployment at the end of the forecasting horizon will be dampened by consolidation in the public sector.

Average nominal wage will increase by 5.4 per cent in 2021. Wages are greatly affected by the low base from 2020, but also by the different waves of the pandemic. High infection rates are increasing the number of sickness and nursing benefits recipients, which manifests itself in lower pay checks and reported average wages.[2] In 2022, higher inflation will translate into nominal wages, which will grow by 5.5 per cent, while real wages (adjusted for inflation) will increase only mildly (by 1.3 per cent). The average wage will maintain its rate of growth over the following years, hand in hand with economic recovery and new job creation. The forecast expects wages in the public sector to lag behind those in the rest of the economy, owing to cuts in public sector spending.

Inflationary pressures are rising, though they should be only temporary

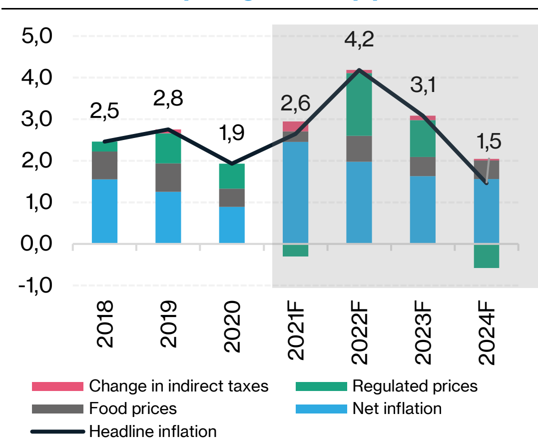
Inflationary pressures will increase in the second half of the year. Based on the forecast, prices will by grow by 2.5 per cent in 2021. The increase in building material costs has translated into higher imputed rents, contributing to higher prices of services. Rising oil prices are increasing the price of fuels, while a surge in the global demand for goods has led to temporary price increases of materials and inputs. These will increase the prices of tradeable goods and will contribute to inflation well into next year.

Figure 5: Contributions of various sectors to the increase in ESA employment (in p.p.)



Source: ŠÚ SR, IFP

Figure 6: Actual and forecasted inflation, with contributions to price growth (in p.p.)



Source: ŠÚ SR, IFP

Energy prices jump

Inflation will exceed 4 per cent next year. Renewed demand on global markets, rising prices of emission allowances, as well as other global factors have led to a spike in energy futures prices. This will lead to an increase in regulated prices in 2022 and 2023. We expect the growth of prices of materials to slow down in the second half of next year,

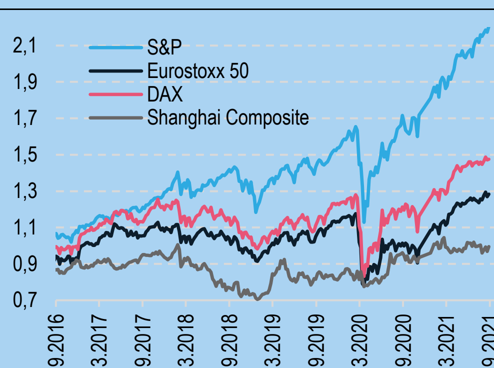
[2] Wages do not include health benefits, but their recipients are still classified as employed. The reported average wage hence decreases.

resulting in stable input prices. Demand inflation too will stabilise, limited by lower employment and wage growth in the public sector. In 2023, prices will rise further following another round of approved excise tax increases for tobacco products.

BOX 1: External environment assumptions

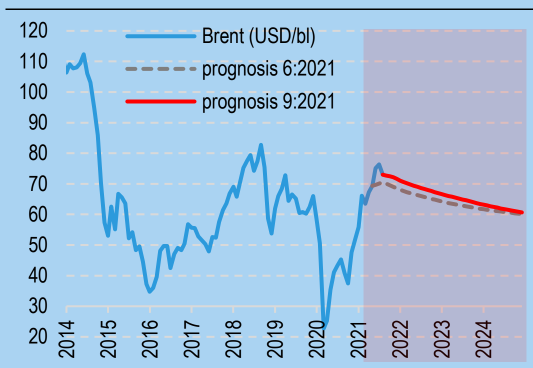
Stock markets continued to grow over the summer months and reached new historic highs (*Figure A*). Investors are optimistic given the high vaccination rates in major economies and as a result, perceive the probaility of another severe wave of the pandemic as relatively low. Markets count with continuing monetary and fiscal stimuli, which decreases government bond yields. Rising energy and fuel prices, as well as component shortages and delivery delays are causing strong inflationary pressures. Since higher inflation is mostly brought about by supply side factors and not the economies' overheating, price increases are considered to be temproary, even though prices could remain high for some time. **The price of Brent oil reached 80 USD/bl before decreasing slightly** (*Figure B*). At the forecasting horizon, we expect oil prices to stabilise around 60 USD/bl.

Figure A: Stock indices continue to grow (January 2016 = 100)



Source: Bloomberg, IFP

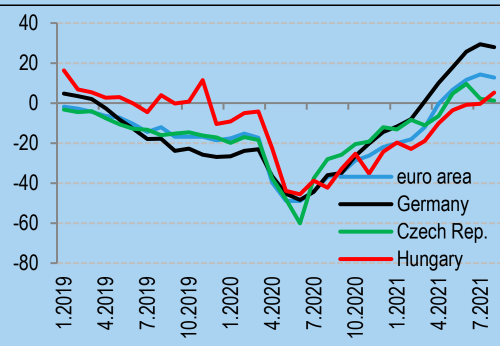
Figure B: Oil prices have risen, but should decrease at the forecasting horizon (USD/bl.)



Source: Bloomberg, IFP

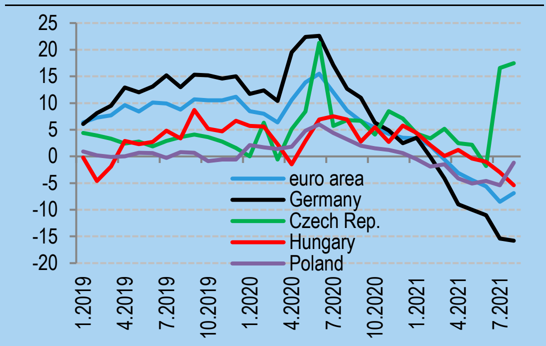
The easing of epidemic restrictions over the summer months has contributed to a brisk recovery in services, which caught up with industrial production in Europe. Manufacturing continues to grow, but its growth dynamic eased towards the end of the summer. Despite long delivery times and higher input prices, purchasing managers have remained optimistic. One reason behind this optimism is the growing number of new orders (*Figure C*). On the other hand, component shortages together with more expensive inputs create bottlenecks in production, resulting in a decrease in the number of finished manufactured goods (*Figure D*). **As a result, demand exceeds supply, pushing the overall price level up.**

Figure C: New industrial orders are up according to firms' assessment (ESI index)



Source: EK, IFP

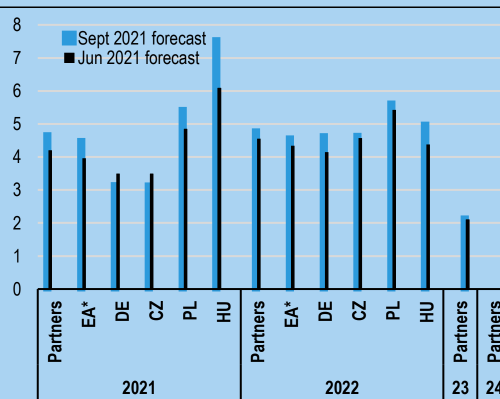
Figure D: The number of finished manufactured goods is decreasing (ESI index)



Source: EK, IFP

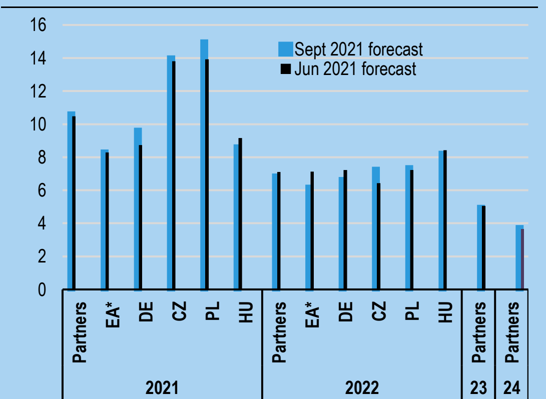
Better GDP results in the second quarter have contributed to stronger growth in 2021, as most partner countries have relaxed restriction and opened their economies. The holiday season was comparable to that of last year, reviving economic activity in the summer months. Future development depends on the next wave of the pandemic this autumn, which should be milder given the progress in vaccination. In the second half of 2021, economies should benefit from additional resources from the RRP. We therefore revise our forecasts for 2021 in partner economies upward, which will have a positive impact on growth in the following year as well (*Figure E*). Weaker global trade, with China and the US at the front, will mean that better GDP figures for our trading partners will not translate fully into import growth (*Figure F*). The cut-off date for the assumptions about the external environment, including interest rates, commodity prices, and exchange rates, was August 31st, 2021.

Figure E: GDP growth forecast of the external environment



**weighted Eurozone based on exports* *Source: IFP*

Figure F: Import growth forecast of the external environment



Source: IFP

Alternative scenarios

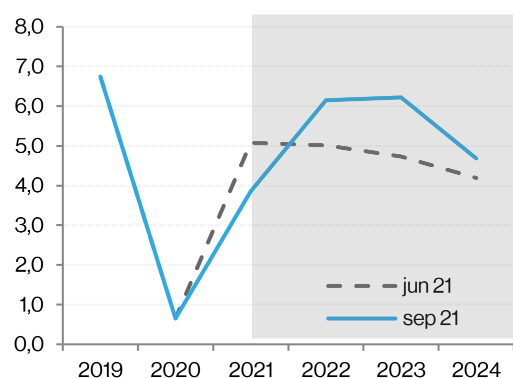
The alternative scenarios model economic growth in the event of another lockdown and a lower than expected drawing of EU funds. Israel is at the forefront with regards to vaccination rates, yet it was considering a lockdown over the summer. In the first scenario, we modelled the impact of a potential lockdown on the Slovak economy. The introduction of stricter rules beyond the current COVID automat, in the form of another lockdown, would decrease GDP growth by 0.3 percentage points this year. This scenario is discussed in more detail in Box 2. The main factor driving growth in 2023 will be the last-minute drawing of EU funds from the current programme period. The second risk scenario considers the impact of using only 70 % of the available resources relative to

the baseline forecast. In this scenario, output growth would be 1.7 percentage points lower in 2023 (see Box 3).

The overall impact of the updated macroeconomic forecast on tax bases is mixed. The third wave will decrease the growth of tax bases this year and postpone it to 2022, together with a broader recovery in economic activity. The overall impact of the macroeconomic forecast on tax and social contributions will be subjected to further scrutiny at the Tax Forecast Committee's (TFC) meeting held on September 23rd, 2021.

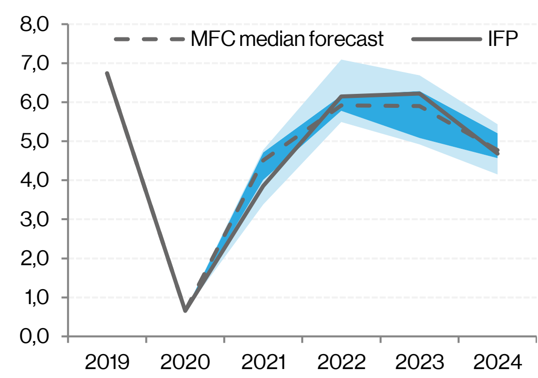
The medium-term forecast prepared by the Ministry of Finance was discussed at the Macroeconomic Forecast Committee's (MFC) meeting on September 16th, 2021. **The forecast was evaluated as realistic by all members of the Committee** (NBS, RRZ, SLSP, Tatrabanka, Infostat, SAV, Unicredit, and ČSOB). Detailed macroeconomic projections as well as the minutes from the meeting and all supporting documents are available at the IFP's website.

Figure 7: Growth of macroeconomic bases compared to previous forecast



Source: IFP

Figure 8: Comparison of tax base forecasts[3] by members of the MFC



Source: IFP

BOX 2: Scenario with lockdown

An unfavourable development of the pandemic could potentially lead to debates about re-introducing a lockdown. To support well-informed public debate, we model the impact of a lockdown in our first scenario. A potential lockdown would affect household consumption and the scope of the impact would be approximately two thirds of the magnitude experienced during the lockdown of the second wave of the pandemic. In this scenario, GDP would increase by 3.4 per cent in 2021, which is 0.3 percentage points lower than in the baseline forecast.

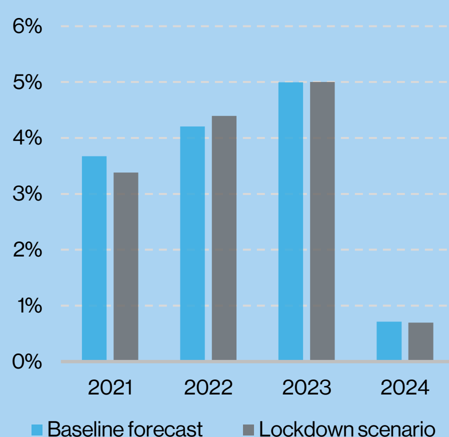
Experience with the delta variant of COVID from countries, such as Israel and the US, show that higher inoculation rates may not be sufficient to prevent a rise in hospitalisations. Some US states with similar vaccination rates as Slovakia saw the number of new hospitalisations per million inhabitants rise to levels seen in Slovakia at the peak of the second wave. Hospitalisations increased significantly in Israel, one of the world leaders in inoculation against COVID, where a re-introduction of lockdown was debated. For a well-informed public debate in Slovakia in the event of a worsening pandemic situation, the first scenario outlines the economic consequences of re-

[3] Macroeconomic bases for budget revenues (weight of indicators depends on a proportional share of particular taxes on total tax revenues): Wage base (employment + nominal wage) – 51.1 %; Nominal private consumption – 25.7 %; Real private consumption – 6.6 %; Nominal GDP growth – 9.9 %; Real GDP growth – 6.7 %.

introducing a lockdown. **The scenario assumes that a lockdown will be in effect throughout October and November**, and will entail the closure of all but essential stores and services, as well as the closure of schools, restaurants, hotels, and restrictions to free movement. The economic impact of these measures is estimated based on the drop in consumption during the previous waves of the pandemic. The full closure of the economy in Spring 2020 and in the first quarter of 2021 led to a fall in consumption by 600 million euros (constant prices). We consider a shorter lockdown in this scenario, with an effect on consumption two thirds the impact observed during previous waves of the pandemic.

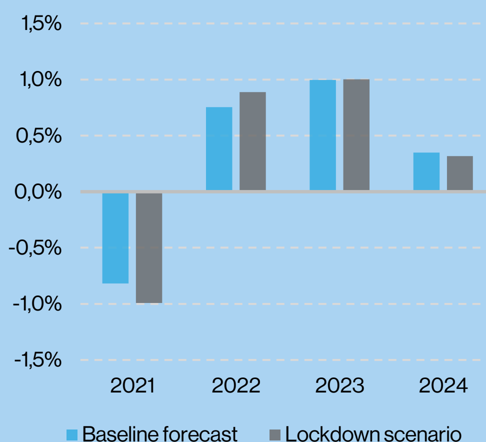
In this scenario, GDP would increase by 3.4 per cent, which is 0.3 percentage points less than in the baseline forecast. The scenario assumes that the pandemic will not retreat completely at the beginning of next year, but its intensity and economic impact will no longer be significant. This will swiftly return the economy on its original growth trajectory. In the final quarter of this year, employment would decrease by 17 thousand persons relative to the baseline forecast. The labour market would recover during the first half of 2022.

Figure G: GDP growth in baseline forecast and lockdown scenario



Source: IFP

Figure H: Employment growth in the baseline forecast and lockdown scenario



Source: IFP

BOX 3: Scenario with lower drawing of EU funds

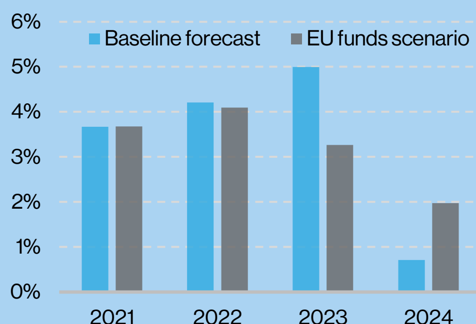
EU funds will be one of the main drivers of economic growth in the years to follow. The baseline forecast assumes an almost full drawing of EU funds by 2024 (more than 11 bn. EUR). Most of these resources come from the EU's current programme period which is set to end in 2023. Most members of the MFC assume that these resources will be fully allocated and drawn. The scenario hence firstly quantifies the contribution of EU resources to the growth of Slovakia's economy in the years to come. In the event of drawing only 70 per cent of the resources allocated in the baseline forecast, GDP would grow by 1.7 percentage points slower at the end of the forecasting horizon, relative to the original projections. As a result, GDP would be lower by 500 mil. EUR.

Similarly to the programming period which ended in 2015, there is a large amonut of EU funds to be drawn during the last years of the programme period. The baseline forecast assumes that most of these resources will be used successfully this time as well, which will raise the growth rate to almost 5 per cent in 2023. Based on a survey among MFC members, the majority of members assume in their respective forecasts that most EU resources will be drawn successfully. To illustrate the economic importance of the successful drawing of funds from the

current programme period, we model a situation where only 70 per cent of the available resources is drawn. This constitutes the lowest value among the members of the MFC. The amount of resources drawn until 2024 is lower by 2.5 bn. EUR, and the main effects of the less efficient drawing manifest themelves in 2023, when the amount of used funds is lower by 2 bn. EUR.

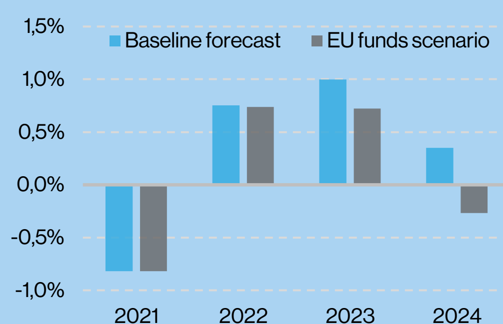
GDP would increase by 3.3 per cent in 2023, which is 1.7 percentage points lower than in the baseline forecast. Faster growth in 2024 is the result of a base effect from the previous year, but the level of GDP would be lower than in the baseline forecast regardless. The labour market would react to the gap in resources with a delay, and the most significant effects will be visibile in 2024, when employment would be 22 thousand persons lower compared to the baseline forecast.

Figure G: GDP growth in baseline forecast and scenario with lower drawing of EU funds (in %)



Source: IFP

Figure H: Employment in baseline forecast and scenario with lower drawing of EU funds (in %)



Source: IFP

MF SR FORECAST – MAIN ECONOMIC INFICATORS (September 2021)

indicator (growth in %, unless otherwise noted)	2020	forecast 2021	2022	2023	2024	difference from Jun 2021: 2021	2022	2023	2024
Gross domestic product									
GDP, real	-4.8	3.7	4.2	5.0	0.7	-0.9	-0.8	0.2	-0.3
GDP, nominal (bn. €)	91.6	96.9	104.9	113.2	116.5	-0.1	1.1	2.2	2.8
Private consumption, real	-1.0	0.2	2.4	3.6	3.9	-2.6	0.4	2.8	1.0
Private consumption, nominal	1.1	2.5	6.9	6.8	5.6	-1.6	1.8	3.6	1.8
Public consumption	0.3	4.9	4.1	1.8	-0.4	1.4	7.5	-2.7	-1.7
Fixed investment	-12.0	-0.3	16.7	15.2	-12.2	-2.2	-3.8	0.1	-2.7
Export of goods and services	-7.5	10.5	3.1	6.0	4.0	-4.4	-3.4	0.1	0.4
Import of goods and services	-8.3	10.9	3.9	6.5	2.4	-4.5	-2.3	0.6	0.2
Labour market									
Registered employment	-1.8	-0.8	0.6	1.0	0.4	-0.4	-0.3	0.3	-0.3
Wages, nominal	3.8	5.4	5.5	5.1	4.8	-0.8	1.4	0.2	0.2
Wages, real	1.8	2.8	1.3	1.9	3.2	-1.8	0.1	-0.5	-0.5
Unemployment rate	6.7	7.0	6.7	5.7	5.2	0.0	0.4	0.0	0.1
Inflation									
CPI	1.9	2.5	4.2	3.1	1.5	1.0	1.3	0.7	0.6

Source: ŠÚ SR, IFP