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Recovery closely watched by inflation

Macroeconomic forecast for years 2021 – 2025

Daniel Dujava, Dávid Hojdan, Ján Šilan, Branislav Žúdel

Omicron, inflation and component shortages will delay the full recovery of the Slovak economy, which is projected to grow by 3.5 per cent in 2022. The economy will stagnate at the beginning of the year due to temporary staff shortages, but high inflation will also weigh in by decreasing real wages and household consumption. Economic activity will revive after the pandemic eases in the second quarter, with job creation speeding up. Resources from the Recovery and Resilience Plan (RRP) will be responsible for the half of this year's output growth, provided that all necessary reforms are implemented. We expect GDP to grow by 5.3 per cent next year, partly owing to higher EU funds absorption at the end of the current programming period. Given the uncertainty related to the economic consequences of the omicron variant, the forecast also includes an alternative scenario with a more sizeable impact of the fourth wave. Energy prices too feed into the uncertainty, but we expect them to decrease somewhat and stabilise during the summer months.

Due to the pandemic and component shortages, the economy recovered only partially in 2021

The Slovak economy had partially recovered from a steep decline and GDP grew by 3.1 per cent in 2021. Domestic demand was the main contributor to growth, yet household consumption would have grown even more significantly, had the pandemic situation not deteriorated at the beginning and the end of the year. Public spending aided the economy and supported household disposable income. Employment has yet to recover, though wages grew dynamically. The pandemic has shifted global demand from services to goods and while the beginning of the year saw solid growth, component shortages had hindered Slovak export activity for the most part the year. Shortages weakened manufacturing and an increase in unfinished production contributed to the rise in inventories.

In 2022, growth will be supported by RRP funds, yet certain limitations remain

We expect real GDP to grow by 3.5 per cent in 2022, with the recovery still being limited to some extent. While RRP will increase investment activity, economic growth will be hindered by three factors. Firstly, the omicron variant will spread at unprecedented rates, leading to a large number of new infections and hence a rise in temporary staff shortages. These will be short-lived and their impact mild relative to previous pandemic waves. Rising consumer prices represent the second limiting factor, affecting real income and hence household consumption (see Box 1). Thirdly, industrial production will be influenced by continuing delivery disruptions during the first half of the year. We expect exports to pick up significantly afterwards which will also manifest itself on output growth over the course of next year.

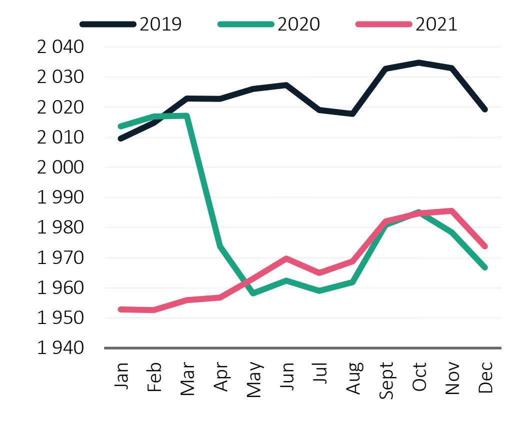
EU funds absorption will increase next year and the pandemic will no longer affect the economy

GDP growth will peak in 2023 and reach 5.3 per cent, mainly due to the last-minute absorption of EU funds. We do not expect further significant impact from the pandemic following the end of the omicron wave. Job creation will fully renew and so will investment activity which was being postponed due to higher levels of uncertainty. Industrial production and exports will no longer be affected by component shortages and bottlenecks in logistics. The economy will start to overheat mildly, dampened by the expected consolidation of public finances.

Investment activity will ease towards the end of the forecasting horizon

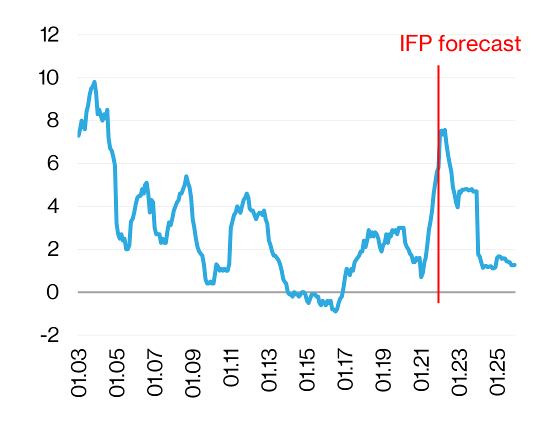
In 2024 and 2025, economic growth will slow to just below 2 per cent when EU funds absorption returns to standard levels. The positive output gap will decrease, lowering inflationary pressures. Employment will recover to pre-pandemic levels, but new jobs will be added only slowly. Demographic shifts will start to manifest themselves through lower influx of young adults on the job market, which will slow down overall economic activity.

Figure 1: Employment not significantly affected by third wave (empl. contracts in ths.)



Source: Social Insurance Agency

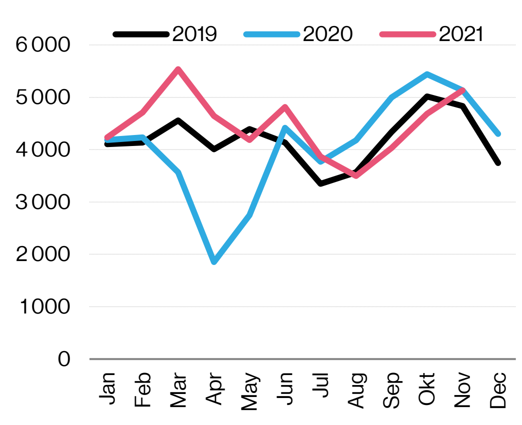
Figure 2: in 2022, inflation will reach levels last seen 18 years ago



Source: ŠÚ SR, IFP

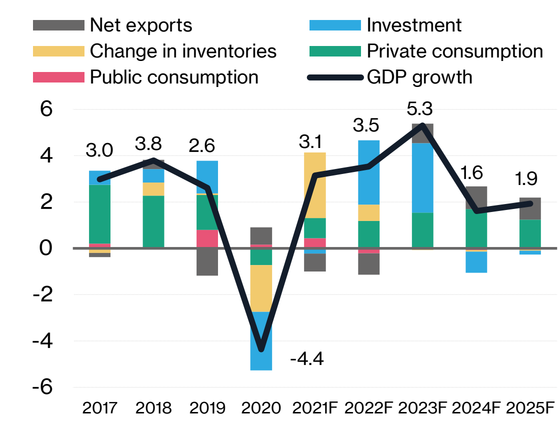
The risks of the forecast are mainly negative. Potential new mutations of the coronavirus, leading to another pandemic wave in the autumn with the possibility of a lockdown, remain a negative risk for the forecast. In the alternative scenario, we model the impact of the omicron wave under the assumption that its effect will be stronger than in the baseline projection (see Box 3). At the same time, the continuation of the pandemic could lead to local outages in partner economies, leading to further supply chain disruptions, component shortages and inflationary pressures. Energy markets may be affected by potential tensions between Russia and Ukraine.

Figure 3: Export of machinery and cars was affected by factory outages (NSA, nominal)



Source: ŠÚ SR

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

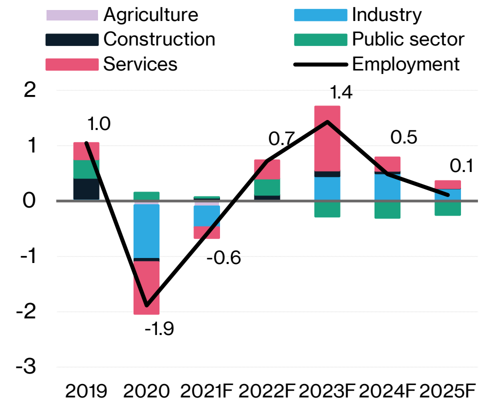


Source: ŠÚSR, IFP

Energy and food prices are rising

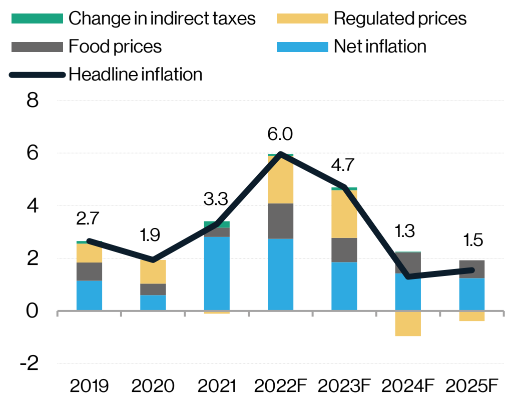
We expect inflation to increase sharply in 2022. Average prices will rise by 6 per cent. The main cause of higher inflation is the significant rise in energy prices for households in January, when the regulatory authority adjusted its pricing based on higher commodity prices witnessed last year. Rise in energy prices and agricultural commodities will also affect food prices. Higher input costs will, to a smaller extent, affect the prices of other goods and services. During the first half of the year, the inflation rate will be influenced by certain price increases from last year, such as higher tobacco taxes, the cancellation of free school meals, and the significant increase in imputed rent. The flash estimate of HICP in January, which was released after the finalisation of the forecast, suggests that this year's inflation may be even higher than we projected. This, however, was not incorporated into our forecast.

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 will rise significantly

Price growth will approach 5 per cent next year. The sudden increase in global demand for goods and the tensions between Russia and Ukraine have increased the current prices of energy futures contracts. This will lead to an increase in energy prices in 2023 (see Box 1). At the same time, the economy will receive an impulse from RRP funds, which will lead to a moderate overheating and price increases across sectors. In addition, inflation will rise further following another round of approved excise tax increases for tobacco products. We expect energy prices to ease in the years to follow, while settling at higher levels than before the crisis. Nevertheless, overall inflation will decrease. On the medium-term horizon price growth will be dampened by the expected consolidation of public finances.

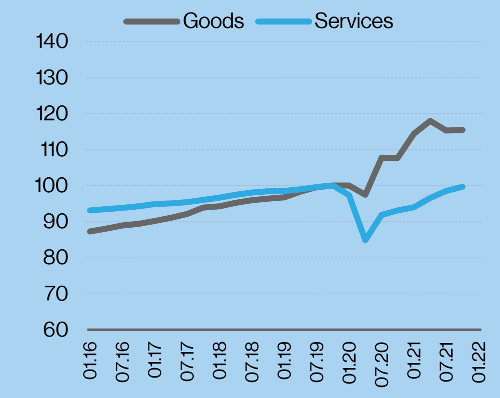
BOX 1: Consumer inflation

Based on our forecast, inflation is set to grow by 6 and 4.7 per cent in 2022 and 2023, respectively. Rising input costs and energy prices are among the prime contributors to this price growth. Input costs are rising mainly due to the global shift of demand from services to goods (*Figure A*). The production of goods is more capital and material intensive and requires transportation and logistics to a greater extent. In addition, the uncertainty surrounding the geopolitical situation related to gas exports from Russia is pushing energy prices upward.

Part of the increase in current and future electricity and gas prices can be attributed to higher uncertainty. **Following the current heating season, we expect electricity and gas exchange prices for 2023**, which influence the maximum price for households set by ÚRSO, **to stabilise around their values from autumn 2021** (*Figure B*). Even this lower level of prices is however significantly higher than the one which serves as a basis for setting energy prices for 2022. Moreover, ÚRSO has changed the formula it uses to calculate regulated electricity prices, and now uses the average daily electricity price from April to September 2022 as an input for setting prices for 2023. The reference period for calculating gas prices has thus far remained the same (from October 2021 to September 2022) and hence also captures the currently higher price level. **The current price**

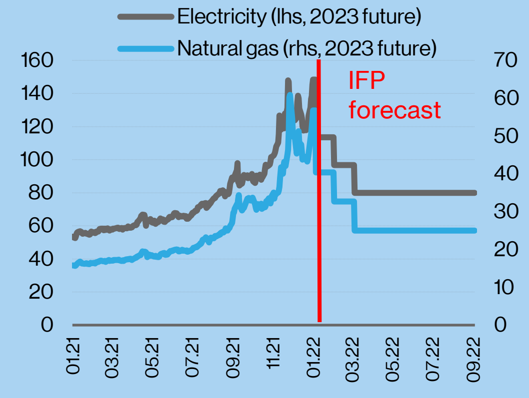
development will be therefore reflected in electricity, gas, and heat prices for households until 2023, when prices will exceed even those in 2022. Exchange prices are expected to decrease afterwards and lead to cheaper energy bills in 2024 and 2025 (*Figure C*), yet they will not instantly return to their level from previous years.

Fig. A: Expenditure on goods in the US grows faster than on services (real, Q419 = 100)



Source: FRED

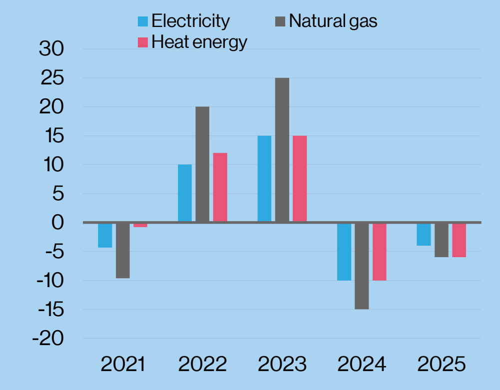
Fig. B: Stock prices of energy commodities for 2023 have yet to decrease (EUR/MWh)



As of 31.1.2022). Source: Bloomberg, EEX, IFP

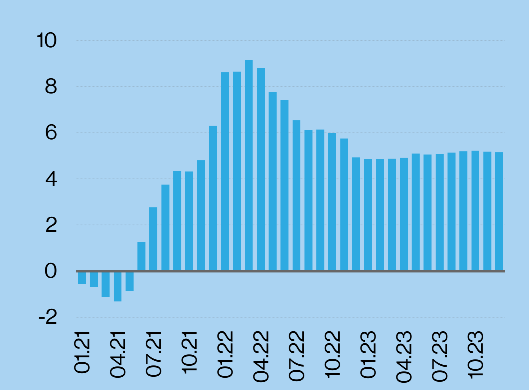
Higher input costs will lead to an increase in food prices and the prices of other goods and services. Food price inflation will reach 9 per cent at the beginning of 2022 (*Figure D*) and will rise by an overall 7.2 per cent in 2022, while inflation will be milder for other goods and services.

Figure C: Energy prices will rise next year (year-on-year growth in %)



Source: ŠÚSR, IFP

Graf D: Food prices are projected to peak in spring 2022 (year-on-year growth in %)



Source: ŠÚ SR, IFP

RRP will provide an impulse for labour market recovery

The pandemic will yet again postpone labour market recovery, but RRP will support job creation towards the year-end. At the end of 2021, the labour market fared slightly better than we expected but the omicron variant will halt the increase in employment in the first quarter of 2022. Higher input costs, energy prices, and global supply chain disruptions will continue to limit new job creation during 2022. Component shortages will mainly affect manufacturing, where we expect employment to stagnate. With slower growth in the coming months we expect employment to start growing more significantly in the second quarter of 2022, aided by RRP investment. Once the pandemic is over, the private sector will pull employment growth, especially services, which have until now been under pressure. The labour market should hence continue recovering in 2023, also supported by the last-minute drawing of EU funds.

The third wave of the pandemic did not significantly affect the unemployment rate, which reached under 7 per cent in 2021, and should start to gradually decrease in the years ahead. **In 2022, the unemployment rate is projected to decline to 6.2 per cent**, followed by further decreases owing to investments from the EU's RRP. Faster decreases in unemployment towards the end of the forecasting horizon will be limited by a potential public sector consolidation.

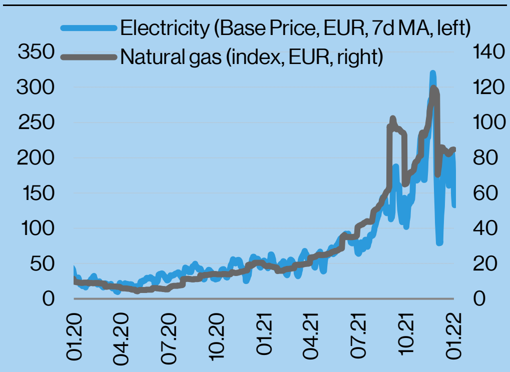
Wages remained resilient towards the end of the last year and rose by 6.8 per cent in 2021. Last year's wage growth was to a great extent affected by the base effect from 2020.[1] Wages remained stable during the third wave and average wage growth was affected by the one-time bonus of 350 euro for public sector employees in the final quarter. **High inflation and the economic recovery will manifest themselves in nominal wages in the years to follow.**

Wage bargaining will partly reflect higher price growth and wages will hence increase by more than 6 per cent in 2022 and 2023. However, real wages (accounting for inflation) will increase only mildly (0.6 per cent and 1.6 per cent, respectively). The average wage will maintain its stable growth in the years ahead, backed by economic recovery and new job creation. The forecast estimates that public sector wages will lag behind those in the rest of the economy due to decreases in public spending.

BOX 2: External environment assumptions

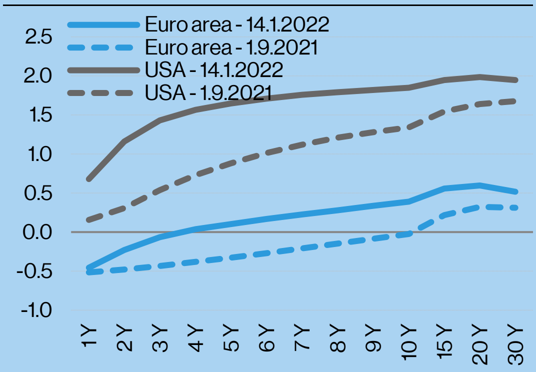
Accounting for risks related to the omicron variant and the ongoing supply bottlenecks, stock markets slowed their dynamic growth mildly. Only the hawkish statements made by the American FED led to a correction in stock markets at the end of January, but the indices recovered quickly. The key factor for financial market development has been inflation and the resulting reactions of central banks. Rapid price growth affects economies globally and (in the euro area) is mainly caused by supply side factors. Fast economic recovery following the pandemic combined with delivery delays and component shortages create supply bottlenecks, which are increasing the cost of inputs in production. More expensive energy commodities, which have reached historic highs in the past months (*Figure A*), have also contributed to rising inflation. **Brent oil price has reached 90 USD/bl, before decreasing slightly.** At the forecasting horizon, we expect oil prices to stabilise around 70 USD/bl.

Figure A: Energy commodities rose sharply (price index in EUR)



Source: Bloomberg, IFP

Figure B: Government bond yields have increased both in the US and the Eurozone



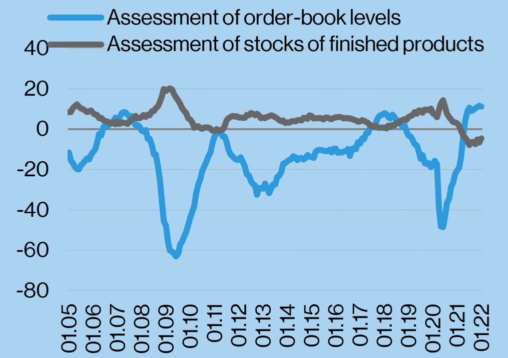
Source: Bloomberg, IFP

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

In response to steep price increases in the US, tense labour markets and above-target inflation expectations, **the US FED adopted stricter monetary policy** in the form of ending its quantitative easing programme from March 2022. At the same time, relatively fast increases in the policy interest rate are expected, raising US and euro area government bond yields (*Figure B*). Inflationary pressures are more moderate in the euro area and mainly reflect soaring energy prices. The ECB thus considers the current inflation rate to be only temporary and expects it to decline after supply bottlenecks are resolved and commodity prices decrease. In the short-term horizon, several other factors can contribute to rising inflation, such as rising food prices, as well as the price of gas, whose supply is currently at lower levels than is usual for the given phase of the heating season. The ECB will end its pandemic programme in March 2022 and first rate hikes could follow at the end of 2023.

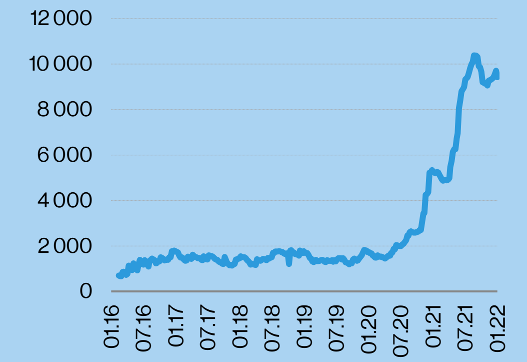
Industrial production in the euro area is affected by supply bottlenecks which emerged during the rapid easing of restrictions and the consequent inability of supply to adjust to higher demand. In Europe, this was reflected in the rising number of industrial orders, while the level of finished production is extremely low (*Figure C*). Given the strong demand for goods globally, purchasing managers in manufacturing remain optimistic, but prices of global container transport are significantly higher than before the pandemic (*Figure D*).

Figure C: Industrial orders are plentiful, but finished production lags behind (ESI index))



Source: EK, IFP

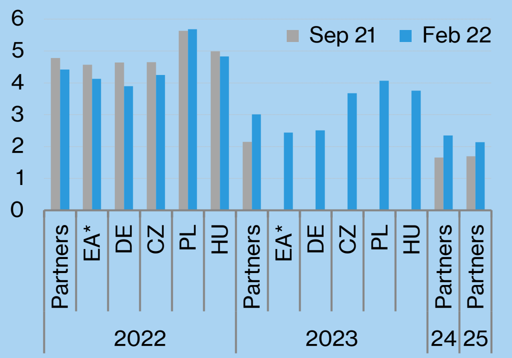
Figure D: Container shipping prices remain high (World Container Index DREWRY)



Source: DRWERY

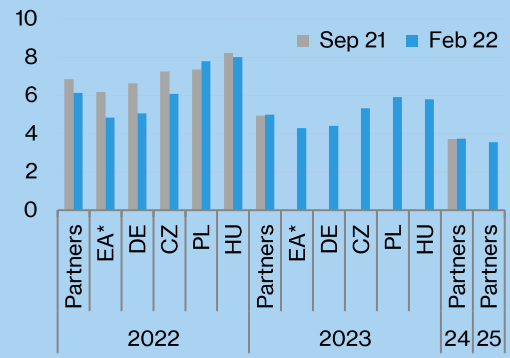
Slower growth in 2021 was mainly caused by weaker growth in the manufacturing-oriented German economy. The biggest contributors to growth are France and Italy, both of which are more oriented towards the recovering sector of services. Slower growth in Germany will continue in 2022, as supply bottlenecks will limit economic output at least in the first quarter of the year. Lower industrial activity currently concerns other partner economies in the V4 as well, where the industry-oriented Czechia and Hungary are pulling the region's growth downward. In contrast, we expect a small but positive contribution from Poland. We revise our GDP forecasts for 2021 downward for most of Slovakia's trading partners (*Figure E*). Weaker manufacturing is also reflected in our forecast of import growth (*Figure F*). The cut-off date for the assumptions about the external environment, including interest rates, commodity prices, and exchange rate, was January 18th, 2022.

Figure E: GDP growth forecast of the external environment



Source: *IFP*

Figure F: Import growth forecast of the external environment

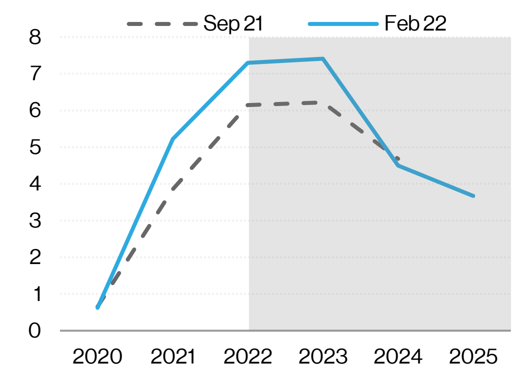


Source: *IFP*

The overall impact of the updated macroeconomic forecast on tax bases is positive on the whole forecasting horizon. The main reason is higher inflation than forecasted in September 2021. 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 February 10th, 2022.

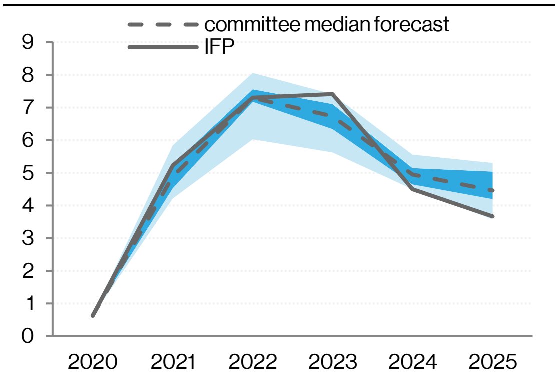
The medium-term forecast prepared by the Ministry of Finance was discussed at the Macroeconomic Forecast Committee's (MFC) meeting on February 2nd, 2022. **The forecast was evaluated as realistic by all members of the Committee** (NBS, RRZ, SLSP, Tatrabanka, Infostat, SAV, Unicredit, and ČSOB). Detailed 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*

Graf 8: Comparison of tax base forecasts[2] by members of the MFC



Source: *IFP*

[2] 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 %.

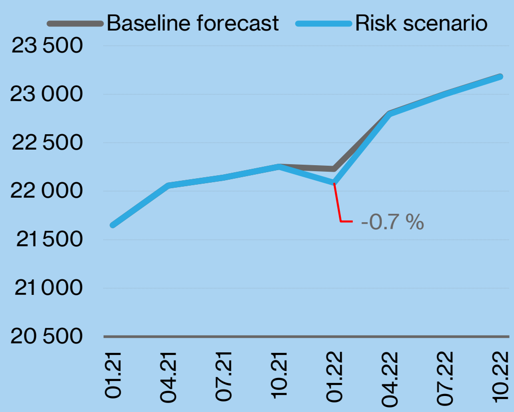
BOX 3: Scenario with a high number of people in self-isolation due to the omicron variant

The omicron wave will affect the economy mainly through temporary staff shortages. Given the high infection rate of omicron, social-distancing measures are not as effective as before and hence we do not expect the re-introduction of lockdown. No country, with the exception of the Netherlands, has introduced a lockdown during the omicron wave.

Following consultations with the Institute of health analyses, we anticipate that nearly half of the working-age population in Slovakia (20-64) will contract the omicron variant. New regulation regarding self-isolation in the event of a positive COVID test or after being in contact with an infected person, extends the range of accepted tests beyond PCR tests, which increases the testing capacity of the country. In the alternative scenario, we assume that half of the infected population is discovered through testing and subsequently remains in self-isolation for 5 to 7 days, depending on the presence of symptoms. We extend this group by the number of unvaccinated persons or those who have not yet contracted and recovered from COVID, who need to self-isolate for 5 days. We estimate their number to be around 170 thousand. We assume that 37 per cent of asymptomatic people in self-isolation will be able to work from home (estimate based on Hojdan – Vitáloš, 2020)[3]. **The overall estimated decrease of man-hours corresponds to 1.8 per cent of quarterly GDP.** In addition, we model the effect of lower consumer spending of self-isolated household on recreation, accommodation, restaurant, and transport, in the magnitude of 0.4 per cent.

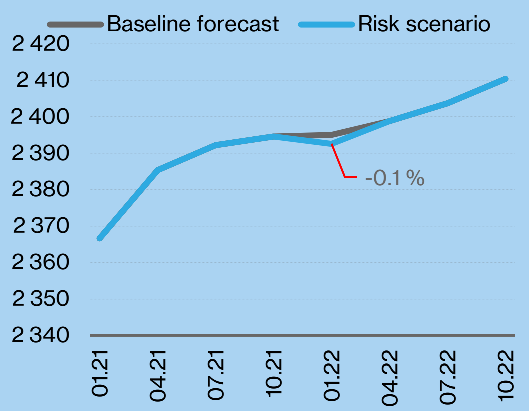
In this alternative scenario, real GDP would decrease 0.7 per cent relative to the previous quarter and economic growth in 2022 would reach 3.3 per cent, which is 0.2 percentage points lower than in the baseline forecast. Employment would remain resilient and would only lower the yearly projection by 0.1 percentage points. Despite the large amount of infections, we expect omicron to have a small and short-lived effect on the economy.

Figure G: Real GDP growth in baseline forecast and scenario (mil. EUR, SA)



Source: IFP

Figure H: Employment growth in the baseline forecast and scenario (ths. persons, SA)



Source: IFP

[3] Hojdan, Dávid – Vitáloš, Matej (2020): Chráni možnosť práce z domu pracovné miesta v čase pandémie? Monitor Hospodárskej Politiky 4/2020.

MF SR FORECAST – MAIN ECONOMIC INDICATORS (February 2022)

indicator (growth in %, unless otherwise noted)	2020	forecast 2021	2022	2023	2024	2025	diff. from Sept 2022 2021	2022	2023	2024	2025
Gross domestic product											
GDP, real.	-4,4	3,1	3,5	5,3	1,6	1,9	-0,6	-0,7	0,3	0,9	1,9
GDP, nominal (bn €)	92,1	97,4	106,5	116,4	120,3	124,6	0,5	1,6	3,2	3,8	124,6
Private consumption, real	-1,3	1,5	2,1	2,8	3,1	2,2	1,3	-0,3	-0,8	-0,8	2,2
Private consumption, nominal	0,8	4,8	8,4	7,7	4,2	3,5	2,3	1,5	0,9	-1,4	3,5
Public consumption	0,9	2,3	-1,1	-0,3	-0,4	-0,1	-2,6	-5,2	-2,1	0,0	-0,1
Fixed investment	-11,6	-1,2	14,4	14,0	-4,0	-0,8	-0,9	-2,3	-1,2	8,2	-0,8
Export of goods and services	-7,3	8,9	1,2	9,2	4,7	3,3	-1,6	-1,9	3,2	0,7	3,3
Import of goods and services	-8,2	10,0	2,2	8,4	3,8	2,4	-0,9	-1,7	1,9	1,4	2,4
Labour market											
Registered employment	-1,8	-0,7	0,8	1,4	0,5	0,1	0,1	0,2	0,4	0,1	0,1
Wages, nominal	3,8	6,8	6,7	6,4	5,0	4,1	1,4	1,2	1,3	0,2	4,1
Wages, real	1,8	3,5	0,6	1,6	3,6	2,6	0,7	-0,7	-0,3	0,4	2,6
Unemployment rate	6,7	6,9	6,2	5,3	4,9	4,7	-0,1	-0,5	-0,4	-0,3	4,7
Inflation											
CPI	1,9	3,2	6,0	4,7	1,3	1,5	0,7	1,8	1,6	-0,2	1,5

Source: ŠÚ SR, IFP

Preliminary plan of allocating RRP resources (mil. EUR. Excl. VAT, ESA2010)

	2022	2023	2024	2025	2026
RRP total	**1 412**	**1 337**	**1 352**	**987**	**520**
Public investment	884	871	893	614	331
Compensations	134	109	110	101	58
Intermediate consumption	95	61	61	48	36
Soc. transfers in kind	2	2	3	4	2
Social transfers	9	14	21	14	7
GFCG firms	225	185	166	108	15
GFCF households	63	96	98	98	71