

June 30th, 2022

Economic growth held back by rising energy prices

Macroeconomic forecast for 2022 – 2025

Daniel Dujava, Miroslav Klúčik, Martin Pažický

The Slovak economy will grow by 1.9 per cent in 2022. The Russian invasion of Ukraine slows down the economic growth of our trade partners and has resulted in a significant rise in energy prices. High inflation decreases real wages and will limit household consumption both this year and in 2023. The labour market remains resilient and is supported by the employment of Ukrainian refugees. While we expect inflation to hinder economic growth over the course of next year as well, the pro-family stimulus package will lower the impact of higher prices on real household income and GDP will increase by 2.6 per cent.

The Slovak economy will grow by 1.9 per cent in 2022. Slower export dynamics resulting from the Russian invasion of Ukraine and accelerating inflation related to rising prices of energy will lower the speed of economic growth. We expect export activity to bottom out in the second quarter of the year, though lost market shares will not be regained until 2023 due to ongoing global supply chain problems. Household consumption will be dampened by rising consumer prices which lower real disposable income. Households will be forced to reduce their savings and as a result, their savings rate will reach historical lows. Aggregate demand will be helped by the spending of Ukrainian refugees and in the final quarter of the year, the approved tax bonus which is a part of a stimulus package aimed at supporting families with children. Despite slower economic growth, the labour market will remain in good condition. Employment growth will benefit from the participation of refugees in the labour market, nominal wage growth, however, will fall short of inflation. Relative to the previous forecast, we expect a smaller contribution to economic growth from the EU's Recovery and Resilience Plan (RRP) due to the delay of several fund calls¹.

In accordance with forecasts by international institutions, we expect slower economic growth for our main trading partners, with Eurozone GDP rising by 2.8 per cent in 2022. The economy is supported by post-COVID recovery in the services sector. Euro area imports decreased in the first quarter of the year and weaker demand for foreign production will limit the growth of the Slovak economy in the quarters to come. We assume that sanctions against Russia and the related disruptions to international trade will be present throughout the whole forecasting horizon.

In 2023, Slovakia's output growth will be dampened mainly by a decrease in real consumption which is affected by high inflation, and the economy will grow by 2.6 per cent. Output growth will be aided by the pro-family stimulus package through lowering the negative impact of inflation on private consumption, RRP resources, as well as the last-minute drawing of funds from the EU's third programming period. In the second half of the year we expect exports to pick up, although uncertainty related to the duration of global supply bottlenecks remains high.

¹ We assume no changes in overall RRP allocation. Funds not used over the course of this year will contribute to growth in the years to follow.

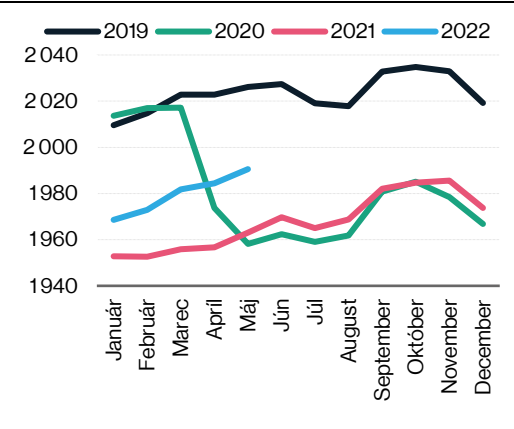
The war in Ukraine slows down economic growth and fuels inflation

The recovery in services supports growth in the Eurozone

EU resources will compensate for lower household consumption next year

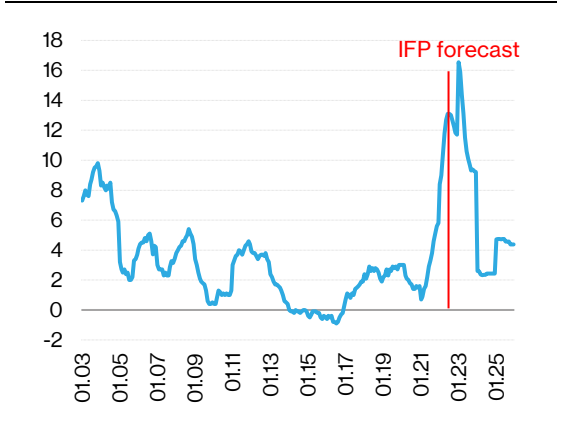
In 2024, output growth will accelerate mainly owing to stronger private consumption, as inflation slows down. Economic growth will once again slow down towards the end of the forecasting horizon due to an inflationary shock caused by the expiration of the government's agreement with Slovenské elektrárne regarding fixed electricity prices. From next year onwards, the economy will be pulled back by fiscal consolidation.² The return to regular EU fund spending at the beginning of the new programming period, as well as a lower influx of young workers on the labour market owing to demographic changes, will also negatively contribute to GDP growth.

Figure 1: Employment continues to grow (employment contracts in ths.)



Source: Sociálna poisťovňa

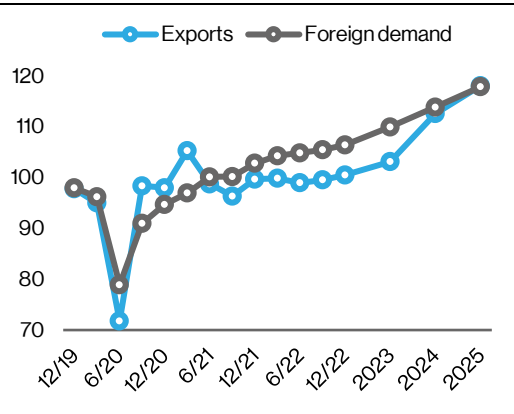
Figure 2: Inflation will reach its highest value in the past 20 years (year-on-year change in %)



Source: ŠÚ SR, IFP

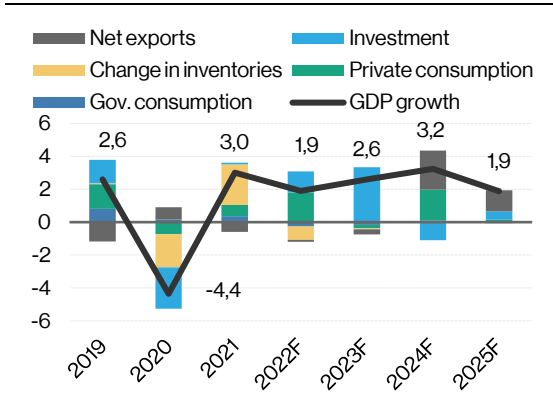
The risks of the forecast are mainly negative. The escalation of the war in Ukraine and the resulting negative development of energy commodity prices, supply bottlenecks and foreign demand are the main risks of the forecast. Natural gas shortages also represent a significant threat to growth. New mutations of the coronavirus leading to new pandemic waves in the summer or autumn, requiring the re-introduction of government restrictions, continue to be a risk of the forecast.

Figure 3: Lost market shares will be gradually regained from 2023 (real, 2021 = 100)



Source: IFP

Figure 4: Contributions to GDP growth (constant prices, percentage points)



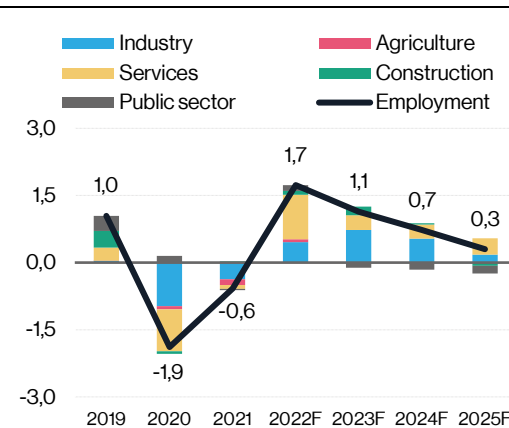
Source: ŠÚ SR, IFP

² The introduction of spending limits will require fiscal consolidation of 0.5 pp annually relative to the no policy change scenario. Previous forecasts assumed a consolidation of 1.0 pp each year. The June forecast hence assumes more modest fiscal restrictions than the March forecast.

Price increases affect mainly energy bills and food

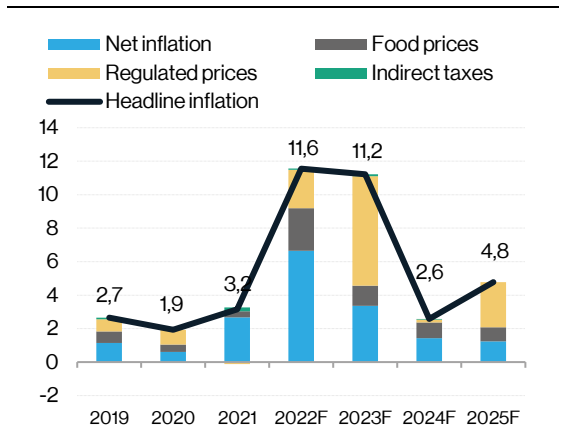
Inflation will reach 11.6 per cent this year. The prices of energy, agriculture and other commodities, which had already been high at the beginning of the year, were pushed even higher following the Russian invasion of Ukraine. This price growth translates into higher food and fuel prices, but rising input costs and higher wage setting are affecting the prices of other goods and services as well. These effects are accompanied by the rise in regulated energy prices for households in January this year. Imputed rent contributes to inflation significantly, reflecting higher energy prices and building costs. Inflation will reach its peak during the summer, though price growth will remain in double digits until the end of the year.

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



Source: ŠÚ SR, IFP

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



Source: ŠÚ SR, IFP

Gas and heat prices will fuel inflation next year

Prices will grow by 11.2 per cent in 2023. The war in Ukraine as well as the pandemic-induced rise in demand for goods have significantly raised the prices of energy futures contracts. This will raise gas and heat bills for households in 2023 as well. Following an agreement between the government and major electricity producer Slovenské elektrárne, electricity prices for households will not rise further over the next two years. At the time of forecasting, no final details were available regarding the regulation of gas prices. According to the latest available information, lower gas prices would lead to slower inflation at 8.5 per cent in 2023. On the other hand, another round of approved excise tax increases for tobacco products will contribute to inflation. Energy prices will remain high in the years to come, though a mild decrease is expected for gas and heat prices in 2025. Electricity prices, however, will jump as the agreement between the government and the power plants expires after two years. On the medium-term horizon price growth will be dampened by the expected consolidation of public finances, while the pro-family stimulus package will increase inflation by 0.6 pp. cumulatively.

The labour market remains resilient as Ukrainian refugees help employment growth

The war in Ukraine has not stopped the post-COVID recovery of the labour market. Employment grew in the first half of the year and will benefit from the arrival of Ukrainian refugees. Due to lacking language skills, refugees are mainly taking on low-skilled jobs in manufacturing, the demand for which has generally been weak among domestic workers. Following two years of pandemic restrictions, services are expecting a rebound followed by a pick-up in employment growth. In 2023, employment will be aided by investment from the EU, as well as the recovery in industrial production which will no longer be affected by supply side problems from the second half of the year onwards. Due to lower marginal taxation, the government's pro-family stimulus package will increase the lowest-earning households' motivation to work, and hence increase employment from 2023 onwards.

The unemployment rate surprised to the upside in the first quarter of the year and will decrease to 6 per cent in 2022. Due to the methodological reasons, however, the decrease in unemployment will be less pronounced relative to the increase in employment, as we assume that Ukrainian refugees will not be included in the official unemployment figures. Further decreases in unemployment will be aided by RRP investment, stronger manufacturing recovery next year, as well as the government approved pro-family package. The unemployment rate will fall below 5 per cent towards the end of the forecasting horizon.

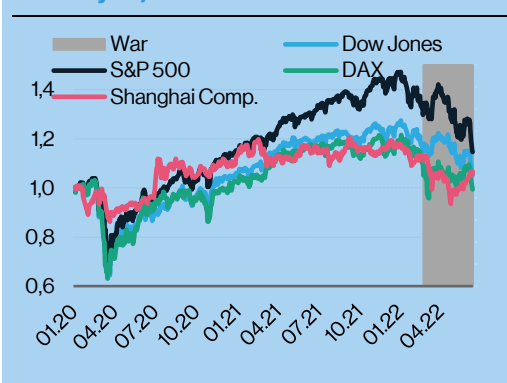
Nominal wages will grow significantly, though falling short of inflation both in 2022 and 2023, resulting in a mild decrease in real wages. This year, average wage growth is pulled down by the public sector where we expect the valorisation of wage tariffs at 3 per cent, starting in the second half of the year. In 2023, nominal wage growth will reach two-digit figures. The forecast assumes that public sector wages will lag behind wages in the rest of the economy, due to a decrease in public sector spending.

Real wages will lag behind in the years to come

BOX 1: External environment assumptions

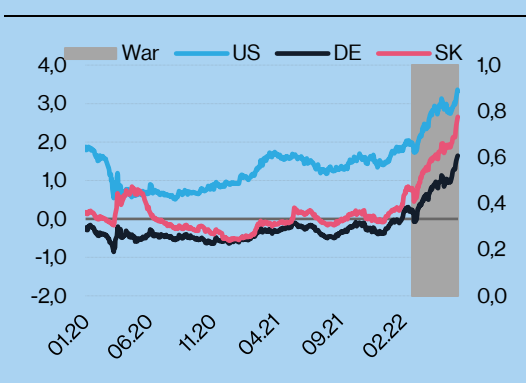
Risks related to the war in Ukraine and steep inflation are the main driving forces behind movements on financial markets. The war conflict is undermining investors' confidence which mainly leads to a decrease in European stock prices (Figure A). Rapid price growth fuels concerns over a potential recession and increases in interest rates. As a result, stock markets are falling (Figure A), as investors are opting for debt instruments which are generally perceived to be safer. Increases in interest rates by central banks to combat inflation are translating into rising government bond yields (Figure B). As a reaction to the war, the euro has weakened against the American dollar and the exchange rate decreased also owing to a worse economic outlook in the Eurozone, as well as more hawkish reactions of the American central bank. Energy prices skyrocketed after the outbreak of the war and remain on elevated levels. Brent oil prices hover around 120 USD per barrel and will remain on high levels on the medium-term horizon.

Figure A: Stock market developments (2nd January = 1)



Source: Bloomberg, IFP

Figure B: 10-year government bond yields (%)



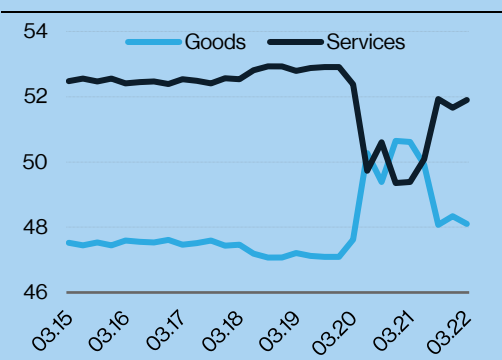
Source: Bloomberg, IFP

Inflationary pressures are gaining ground in several regions. In the US, after extraordinarily high inflation figures for May (8.6 per cent year-on-year, highest rate since December 1981), the American FED increased its base rate by 0.75 basis points in the middle of June, moving the target range to 1.50 – 1.75 per cent. It is expected that by the end of 2022, rates will increase by another 175 basis points and reach 3.4 per cent. Inflation is causing concern in the Eurozone as well. The ECB has reacted to steep price increases by announcing an earlier tightening of its monetary policy, ending its quantitative easing (QE) programme in June and increasing its base rate for the first

time at its July meeting. In the past months, government bond yields of Southern European states increased more significantly than in Germany. Increases in the risk premium are likely to moderate the monetary policy response of the ECB.

The war in Ukraine will negatively impact the economic developments in the Eurozone. The first quarter results exceeded expectations thanks to a strong recovery in the services sector (Figure C). The effects of the recovery will, however, grow weaker as accelerating inflation diminishes the purchasing power of households. In some countries, households will likely use their savings accumulated during the pandemic when spending was limited by restrictions and uncertainty. Future development is uncertain mainly due to the war which depresses overall economic sentiment. After the initial deterioration in sentiment at the beginning of the invasion, the situation has now stabilised as households and firms are cautiously watching further developments (Figure D). Foreign demand will not boost economic growth, since global supply bottlenecks deteriorated following the outbreak of the conflict. When it comes to foreign trade, the position of Europe has worsened since the start of the war and import prices have grown faster than the prices of exports. The economy is benefiting from investment from the RRP and regular EU funds. Investment activity, however, will probably remain subdued due to the high levels of uncertainty, increased inflation and rising interest rates.

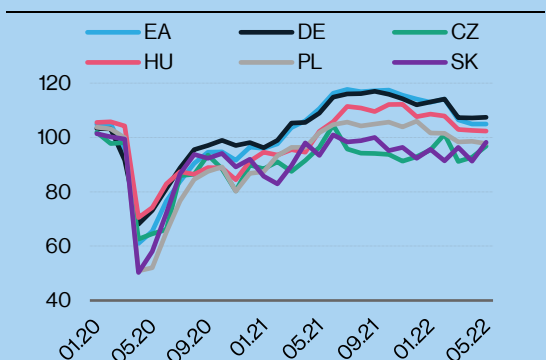
Figure C: Shares of household spending on goods and services in the Eurozone* (%)



Source: IFFP, Eurostat

Note (*) The graph depicts the shares of overall household spending on goods and services, aggregated for EA countries with available data (DE, EE, IE, FR, IT, LV, LU, MT, NL, AT, SK, FI).

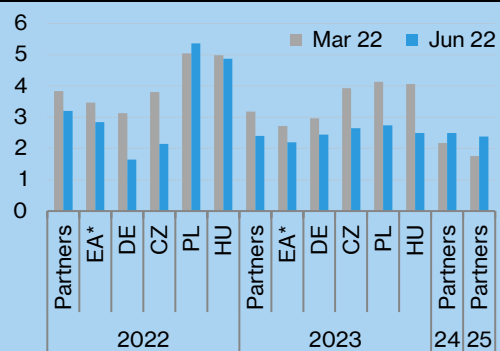
Figure D: Sentiment has stabilised following the initial decreases (ESI index)



Source: European Commission

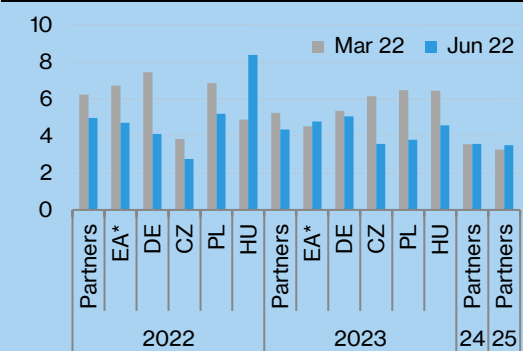
Further deterioration in global supply chains, weak foreign demand, high inflation, rising interest rates and overall uncertainty will weigh on economic growth in 2022. Despite stronger output growth in the first quarter, we revise our forecast for the Eurozone downwards by 0.6 pp. (to 2.8 per cent) and by 0.5 pp. in 2023 (to 2.2 per cent). Since V3 countries have stronger ties to the Russian economy, we expect slower growth in these countries both in 2022 and 2023 (Figure E). Partial recovery should follow in 2024. The economic slowdown caused by the war will also manifest itself through slower import growth of our trading partners (Figure F). The cut-off date for the assumptions about the external environment, including interest rates, commodity prices, and exchange rates, was May 31st, 2022.

Figure E: GDP growth forecast of the external environment



Source: IFP

Figure F: Import growth forecast of the external environment

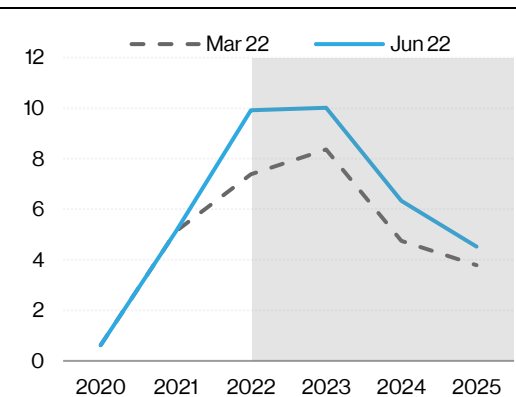


Source: IFP

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 March 2022. The overall impact of the macroeconomic forecast on tax and social contributions was subjected to further scrutiny at the Tax Forecast Committee's (TFC) meeting held on June 27th, 2022.

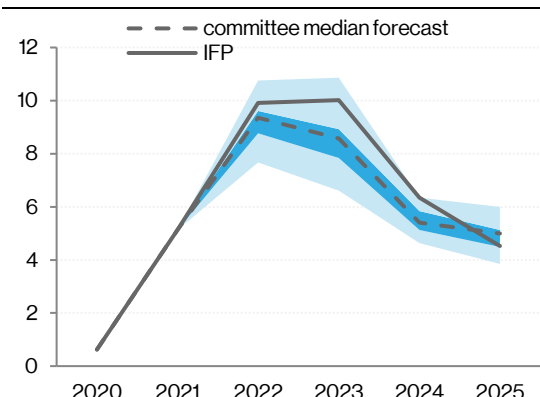
The medium-term forecast prepared by the Ministry of Finance was discussed at the Macroeconomic Forecast Committee's (MFC) meeting held on June 15th, 2022. **The forecast was evaluated as realistic by all members of the Committee** (NBS, RRZ, SLSP, Tatrabanka, Infostat, SAV, Unicredit, and VÚB). Detailed 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 forecasts³ by members of the MFC



Source: IFP

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%.

BOX 2: The impact of the government's pro-family stimulus package

The increase in household transfers through higher child benefits, a tax bonus and allowances for extra-curricular activities for children will temporarily increase real GDP growth by 0.6 percentage points in 2023. These transfers will directly increase disposable income and translate into higher private consumption. Given the limited demand for extra-curricular activities among low-income households, we expect the absorption of the allowances to increase gradually from 70 per cent of the allocated resources to 85 per cent in 2025. Besides representing additional income for families, the tax bonus will also have a positive effect on the labour market, as lower marginal taxation will motivate low-earning individuals to work. Economic activity will increase by 0.3 percentage points, which represents approximately ten thousand people. The overall macroeconomic impulse of these policies is of permanent character and from 2023 onwards it will reach 1 billion euros annually, representing around 0.8 per cent of GDP.

Table 1: Adjusted macroeconomic impulse from stimulus package (mil. EUR)

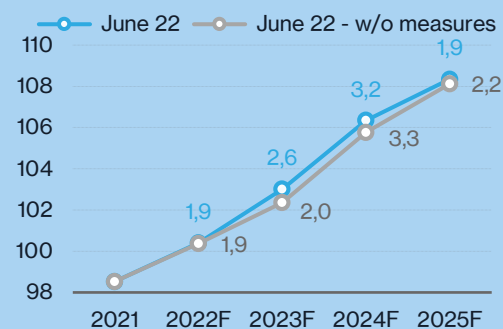
Measure	2022	2023	2024	2025
Increased tax bonus for children	143	544	506	495
Increase in child benefits		152	139	130
Services for children – free time activities		320	387	411
Total	143	1 016	1 032	1 036

Source: IFP

The increase in the tax bonus will decrease personal income tax revenue, which represents a source of funding for local governments. We assume that local governments will substitute a third of revenue loss with other resources (e.g. higher property tax, increasing fees, etc.), they will absorb a third by lowering expenditure and another third through higher debt. Local governments will hence dampen the negative impact on public finances, while at the same time limiting the short-term benefits of these policies on the economy.

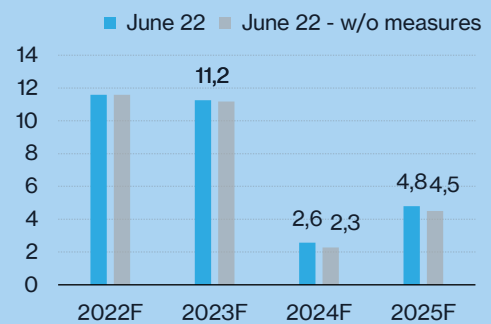
The pro-family stimulus package will mostly have demand-side effects. The price level will increase cumulatively by 0.6 pp. by 2025. GDP growth in 2023 will be higher by 0.6 pp., though on the long-term horizon it will only be moderately higher (0.2 pp. in 2025).

Figure G: Real GDP in baseline forecast and alternative scenario without stimulus package (index, 2019 = 100)



Source: IFP

Figure H: Inflation in the baseline forecast and the alternative scenario without stimulus package (CPI, %)



Source: IFP

MF SR FORECAST - MAIN ECONOMIC INDICATORS (June 2022)

indicator (growth in % unless otherwise noted)	2021	forecast				diff. from March 2022			
		2022	2023	2024	2025	2022	2023	2024	2025
Gross Domestic Product									
GDP, real	3.0	1.9	2.6	3.2	1.9	-0.2	-2.7	1.4	0.1
GDP, nominal (bn. €)	97.1	105.1	118.3	126.0	133.9	-1.4	0.4	3.2	6.2
Private consumption, real	1.2	3.2	-0.4	3.3	0.3	1.8	-2.7	0.5	-1.8
Private consumption, nominal	4.5	15.8	11.1	6.1	5.3	6.1	2.0	1.2	1.4
Government spending	1.9	-1.3	-0.9	0.6	-0.4	2.6	-1.1	1.3	0.1
Fixed investment	0.6	6.5	16.3	-4.7	2.3	-8.7	1.2	-2.2	2.9
Export of goods and services	10.2	-0.6	3.4	9.2	4.9	-2.1	-5.6	4.5	1.8
Import of goods and services	11.2	-0.5	3.8	6.8	3.7	-2.3	-4.6	2.9	1.4
Labour market									
Registered employment	-0.7	1.8	1.1	0.7	0.3	1.4	-0.5	0.1	0.3
Wages, nominal	6.9	7.3	10.2	6.5	4.4	0.4	3.1	1.7	0.3
Wages, real	3.6	-3.8	-1.0	3.8	-0.4	-2.3	-1.6	1.1	-2.4
Unemployment rate	6.9	6.2	5.6	5.1	4.8	-0.4	0.0	-0.3	-0.4
Inflation									
CPI	3.2	11.6	11.2	2.6	4.8	3.1	4.7	0.5	2.7

Source: ŠÚ SR, IFP

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

	2022	2023	2024	2025	2026
RRP total	449	1 441	2 098	1 805	446
Public investment	175	844	1435	1235	262
Compensations	69	68	68	65	18
Intermediate consumption	46	59	75	41	15
Soc. transfers in kind	3	6	5	2	0
Social transfers	24	23	14	14	0
GFCG firms	49	329	388	336	71
GFCG households	84	112	112	112	80

Source: IFP