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I. The World Economy

The **global economic situation** is at present characterized by galloping inflation, decelerating global trade, recurring supply chain disturbances, tightening monetary policy, volatile financial markets and political conflicts. After an upward trend at the start of the year, confidence indices turned downward again, reflecting the mounting political and economic uncertainty. Before the Russian-Ukrainian war broke out, there had been a hope of slow normalization, along with the easing of the pandemics, in most countries. But since Russia and Ukraine are important suppliers of certain key products (crude oil, gas, grains, metal parts), the impact of the war on the global economy, especially Europe, is far from marginal, even though the respective weight of these two countries within the global economy is relatively low. As a result, global growth forecasts are being revised downward lately: after a 5.8 percent in 2021, the global economy is expected to grow by only 3.5 percent this year, with only a slight acceleration in the next year. On the other hand, we assume that the pandemic will not anymore have a decisive effect, even though the occurrence of new variants and the spread of the infection did not stop. Due to the changes in the global commodity and food markets, inflation will heavily affect the global economy: the high prices of raw materials and foodstuff will be reflected in consumer prices, leading to severe price increases and decreasing real incomes everywhere save Japan. Most central banks have already taken the road of tightening, which will lead to more strict lending conditions and hamper economic growth.

At the moment, **world trade** is affected by contradictory factors. On the one hand, demand is muted by inflation that rose to considerable highs even in the developed countries. On the other hand, the fear of future waves of the pandemic and the Russian-Ukrainian conflict prompts a buildup of inventories in the sectors where such a buildup is physically and financially feasible. As a result, the volume of global trade is likely to continue to grow, even if at a decelerated pace.

Crude oil prices, already having been on a rising trajectory, exploded after the outbreak of the Russia-Ukraine conflict. The monthly average price in March reached 118 USD/barrel, and the situation remains volatile. Besides the political uncertainty, oil prices are fueled by the low level of reserves as well. The possible and potential embargoes imposed on Russian oil can only push oil prices upward since the buyers need to look for alternative oil sources. The efforts on the part of the EU to delink from Russian oil is another compounding factor. According to estimates oil price may reach about 100 USD/barrel this year, with a subsequent easing to 89 USD/barrel in 2023. This is a very rough prediction of course, since the evolution of the war, the effects of the sanctions, the degree of success in delinking from Russian oil deliveries, the possible role of Iran, the change in market equilibrium and outcome of the efforts to rebuild oil reserves are all factors not yet known. The gas market has marred by even more severe tensions since the outbreak of the conflict. For several European countries the delinking from Russian gas is much more difficult than delinking from Russian oil, especially in the short term. In some of the European countries the share of Russia in gas import is 60-90 percent, and the sudden halt of the inflow of Russian gas could cause severe disturbances.

The rising energy prices pushed **non-energy commodity** prices upward as well. By now, food prices increase at a spectacular pace too. The price hike is driven not just by the logistical bottlenecks but also by unfavorable weather conditions. Due to the slowdown of Chinese production, the increase of the prices of industrial metals has decelerated somewhat but it continues nonetheless. All this will be certainly exacerbated further by the Russia-Ukraine conflict. The increase of the prices of materials has already been clearly built in inflation rates, causing considerable headache to central banks around the world.

In the light of all this, it does not come as a surprise that **monetary tightening** is likely to start everywhere. The *FED* raised the reference rate into a band of 0.25-0.5 percent and suggested further gradual rate hike, possibly to 1.9 percent by the end of this year and even to 2.8 percent by the end of 2023. US inflation is steadily accelerating so far and investors fear of a wage-price spiral amid the simultaneous presence high inflation, uncertain inflation outlook and tight labor market. The *ECB* has remained more cautious so far, yet it revved up the tapering of net asset purchases and expressed its willingness to start raising interest rates this year if necessary. In March the eurozone inflation rate exceeded expectations by accelerating to 7.5 percent, and even core inflation reached 3 percent. British inflation was 6.2 percent and is still on the rise, hence the BoE raised the reference rate by 25 basis points to 0.75 percent, and further rate hikes are on the table. The pace of inflation is even higher in the Eastern European member states than in Western Europe. As a result, the Czech central bank responded to the 10 percent inflation with successive rate hikes to 5 percent while the Hungarian central bank raised the reference rate to 4.4 percent in March and to 5.4 percent April while inflation stood at 8.5 percent in April. In Poland the policy rate was raised by 0.75 percentage point to 3.5 percent in March, due to the inflation rate exceeding 8 percent in January-February.

Economic growth is to slow down **outside the EU**. In the **US**, GDP is expected to grow by about 3 percent, a considerable slowdown from the 5.3 percent recorded in 2021, due to high inflation, tightening monetary conditions and the geopolitical tension. Annual inflation may rise to as high as 7 percent, while it can decelerate to about 3 percent in 2023, still above the FED target, if energy prices normalize. Labor markets remain stable, the unemployment rate may even decrease to pre-pandemic levels (3-4%), due to the labor shortage. In **Japan** the effects of the pandemics are still badly felt. GDP grew by 1.7 percent in 2021 and the growth rate is unlikely to surpass 1 percent this year. Japan is the only country where monetary tightening has not started yet, which led to a considerable weakening of the Yen.

Chinese economic growth is certain to slow down after the 8.1 percent achieved in 2021. The official target, announced in mid-March, is a growth rate of 5.5 percent. This is deemed overly optimistic by several prominent international organizations. The OECD projection is 5.1 percent while the UNCTAD predicts 4.8 percent in their respective March forecasts. The slowdown is amplified by two unexpected factors, the new Covid outbreaks in China and the consequences of the Russian-Ukrainian war. In the short run, the war exerts its impact mainly by rising global prices and the closure of the road routes to Europe. China's interest, both in geopolitical and economic terms, is the quick achievement of a peace accord, and it tries to intervene to facilitate that while keeping up the good relationships with both parties. In the medium term, China faces difficult tasks regarding addressing various disequilibria, including a shift of policy focus from

external to internal demand, a transition from an investment and industry-driven growth model to a consumption and services-driven one, rearrange the priorities from state control and regulation to a larger role of the market and the private sector, and the green transition – all of these pose difficult challenges for Chinese policymakers.

The growth prospects of the **euro area** are severely hit by the so far uncalculable consequences of the Russia-Ukraine war, the uncertainties regarding energy supply, the supply chain disturbances, mounting inflationary wave fed by the galloping energy and food prices, the volatile financial markets and the monetary tightening. Inflation has been accelerating since the last autumn and while earlier it was deemed temporary, by now it affects a widening segment of the consumption basket. The price index reached 7.5 percent by March, which reduces real household incomes, the energy price hike increases production costs and becomes felt in more and more segments of the economy. This situation, unsurprisingly, exerts a downward pressure on confidence indexes – businesses are becoming more pessimistic. Manufacturing growth has been slowing down since mid-2021 and the largest economy of the eurozone, Germany, has been experiencing negative growth rates again. Growth predictions are revised downward. We also revise our eurozone growth forecast from 4.9 percent in last December to 2.9 percent, and we expect only slight acceleration, to 3.1 percent, in the next year. Even so, additional downward risks are attached to this projection. The annual average inflation rate may reach 5.2 percent in the euro area (after the 2.6 percent in 2021), which may slow down, in part due to the statistical base effect, to about 3 percent in 2023. Unemployment will remain low during the forecast period. Since various government measures helped stabilize labor market conditions and avoid a jump in unemployment, the unemployment rate may decrease further from 7.7 percent in 2021 to 6.8 percent this year and 6.4 percent in 2023.

In the **EU27**, we expect an average growth rate of 2.9 percent in 2021 and 3 percent the next year – that is, the conjunctural development in the member states outside the eurozone will be largely in step with the euro area. Overall inflation will be somewhat higher than in the EU19: 5.6 and 3.1 percent in 2022 and 2023, respectively. The unemployment rate – about 6 percent – is to remain slightly below the average of the euro area.

The **German** growth prospects are severely dragged down by the Ukraine-Russia war. While the impacts of the pandemics seem to become milder, the growth expectations were lowered by analysts from about 5 percent at the end of the last year to 2.1 percent, due to the skyrocketing inflation, the rising cost of raw materials, the reappearing bottlenecks and the drying up of sales opportunities. In the first half of the year the GDP will stagnate at best – it is even likely to decrease in the first quarter. Growth may rebound in the second half, provided that the external conditions do not deteriorate further and there is not another severe wave of pandemics. The worsening sentiment among firms is reflected by a drop of the IFO index to 90.8 points in March from 98.5 points in February – the firms' expectations deteriorated more spectacularly than at the time of the Covid crisis. The efforts of the German government to become independent from Russian energy import may lead to a lasting period of costlier energy import, and the shift toward alternative energy sources will also have significant costs. Annual inflation may rise to about 6 percent, an unprecedented high in the history of reunited Germany.

The **British economy** recovered from the losses accumulated during the pandemics and the GDP has already reached again its pre-pandemic level. At the moment, as in elsewhere, inflation is one of the main problems in the UK. The other main problem is the labor shortage: due to the Brexit, several hundreds of thousand workers are absent from the British labor market and there is full employment in the country. British analysts expect inflation to be the main determinant of the economic prospects. The inflation rate may peak in April, but even in case of a subsequent normalization, it will not return to the central bank target of 2 percent before 2024. Last year, the GDP was up 7.3 percent in the UK. In 2022, a less steep but still relatively dynamic growth rate of 4.8 percent seems likely. The growth will be driven by private consumption and investments.

II. New EU Member States

Within the European Unions, the economies and societies of the Eastern European new member states are the most affected by the Russian-Ukrainian conflict. The refugee situation worsened significantly in most new member states, especially in Poland and Romania. In purely economic terms, Ukraine is a less-than-prominent trade partner of the region: only 1% of the region's import comes from Ukraine while 1.5% of its export has Ukraine as its destination. Regarding imports, Bulgaria may suffer the most, with 2% of its import coming from Ukraine, while on the export side Lithuania (3.8%), Hungary (2.4%) and Poland (2.2%) may face the most problems due to the potential cancellation of purchase orders. In the case of a few product groups, however, Ukraine has a key role within the region. One such product group is animal and vegetable oils and fats and waxes: 25% of the Polish import of such products comes from Ukraine, while the respective ratio is 12% for Estonia, Malta and Lithuania. For Hungary, non-food raw materials (excluding fuels) are the neuralgic point because 7% of its relevant (mostly fertilizer-based) import comes from Ukraine. On the export side, the most important products exported to Ukraine are in the category of mineral fuels, lubricants and related materials, more specifically, electric current. Regarding the export of this section of products, Ukraine has a share of 20% of Hungarian exports, 16% of Lithuania's exports and 6% of Bulgarian exports. On the whole, trade relations with Ukraine are relatively weak but in the case of a few selected products Ukraine is a significant trade partner in both the export and the import side, the loss of which will be painful for the several countries within the region.

External trade balance (goods and services) of the new EU member states vis-à-vis Russia in 2020 (EUR million)

| | Export | Import | Balance |
|------------------|---------|---------|----------|
| Bulgaria | 537.3 | 1 862.0 | -1 324.7 |
| Czechia | 3 995.3 | 2 686.3 | 1 309.0 |
| Estonia | 574.4 | 833.0 | -258.6 |
| Croatia | 197.8 | 226.6 | -28.8 |
| Cyprus | 2 561.0 | 354.0 | 2 207.0 |
| Latvia | 1 395.0 | 1 184.0 | 211.0 |
| Lithuania | 2 509.6 | 2 926.1 | -416.5 |
| Hungary | 993.9 | 2 379.7 | -1 385.8 |
| Poland | 7 513.0 | 9 952.3 | -2 439.3 |
| Romania | 879.4 | 1 704.9 | -825.5 |
| Slovenia | 920.5 | 426.6 | 493.9 |
| Slovakia | 1 563.2 | 3 447.1 | -1 883.9 |

Source: Eurostat

The new member states' trade relations with Russia differ regarding their economic weight, mostly depending on these countries' dependence on Russian energy sources. It should be also noted that the number of tourism nights spent in the Central Eastern European member states by Russian tourists is significant, and this is reflected in the member states' current account as export of services. The aggregate trade balance of the new member states with Russia is clearly negative, amounting to a total of about EUR 4 billion. From the twelve member states (Malta is absent from the statistics, due to lack

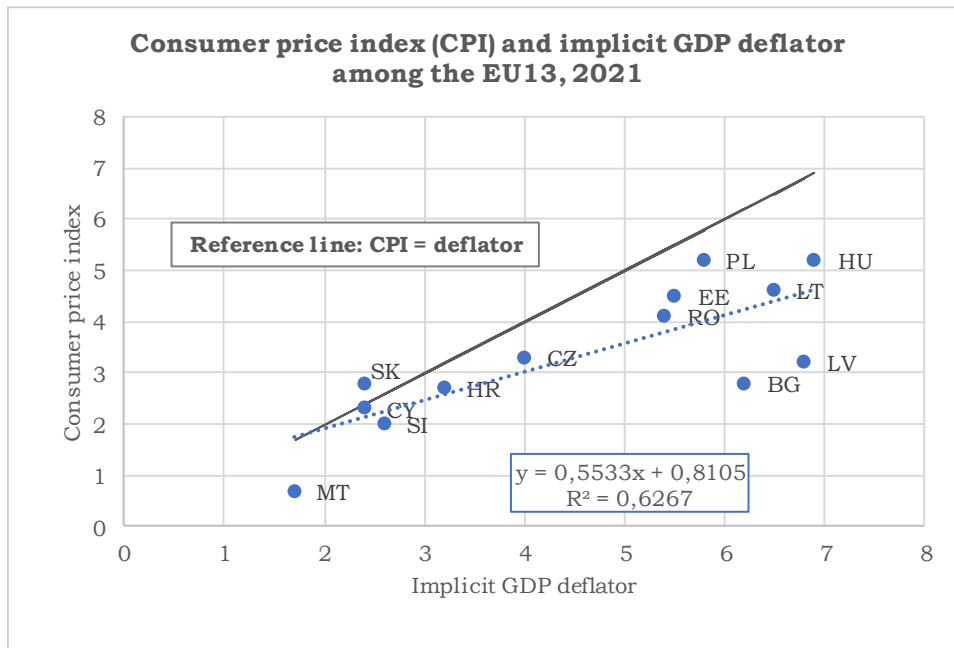
of data) eight has a negative trade balance vis-à-vis Russia, but it is also worth noting that several countries with serious energy dependence on Russia (e.g. Czechia, Latvia) had a positive trade balance in relation to Russia in 2020.

This means that the reverberations of the trade and financial sanctions imposed on Russia will be uneven among the countries of the region. In any case, they will certainly affect negatively the countries current accounts in the short term.

The combined GDP of the EU13 was up 5.9% in the last quarter of 2021 on an annual basis, the same pace as in the previous quarter. The annual average growth rate of 5.6% in the last year, a relatively good pace in the light of the pandemics-related lock-down measures. The seasonally and calendar adjusted year-on-year growth rate remained above or at 10% even in the fourth quarter in Slovenia (10.5%) and Malta (10%) while Croatia came close (9.8%). Even if somewhat lower, the 7.9% growth rate in Poland should be highlighted since it contributed to region-level growth by 2.7 percentage points. The second latest contribution (0.7 percentage point) came from Hungary, with a rate of 7% growth, surpassing the Romanian and Czech contributions (achieving 3.9% and 3.6%, respectively) even if the respective economic weights of those two countries are larger. Also, Slovakian GDP grew at a weak pace (1.6%), mostly because of the global chip shortage. The Slovakian automotive plants had to stop production several times during the last year – similarly to the Czech plants – due to supply problems.

The region's economic growth is at present driven by private consumption that grew by an average 6.2% in the last quarter. By contrast, investments climbed only 3.2%, which points to supply side problems. The consumption growth of the last quarter brought about significant import growth (8.6%) that exceeded export growth (5.8%) significantly. Apparently, the domestic firms could only benefit from the fiscal stimulus measures (tax allowances, low-cost credit, etc.) only to a limited degree, because they could not significantly increase their investments and their export. This highlights the impact of crisis management packages on the external balances.

The most pressing problem for the region at present is the struggle to keep inflation under check. While the average inflation rate was 4.2% among the EU13 in 2021, the implicit GDP deflator (GDP growth at current prices divided by GDP growth at fixed prices) was 5.2%, with a spread of nearly 1.5 percentage points, mostly due to the Baltic states and Bulgaria. The GDP deflator includes not just consumer prices but also investment prices (including household investments, e.g. housing investments) and the prices of government consumption. Since the Covid outbreak the shortage in investment goods (especially building materials and construction basic materials like steel and timber) and the strong wage growth led to a dramatic rise of investment costs not just in the region but worldwide. This was one of the reasons of the fact that between 2015 and 2020 among the OECD member states housing prices grew at a fastest rate in Hungary, approximately by a cumulative 80%.



The inflationary pressure is increasing and in most places the price-wage spiral started as well. The central banks began monetary tightening everywhere. During the last four months the Polish central bank raised the reference rate to 3.5%, the Czech central bank to 5%, the Hungarian to 4.4% and the Romanian central bank to 2.5%. There is still a visible room for further rate hikes in the region – moreover, there is strong speculative pressure on the regional currencies that pushes toward further tightening. But these hikes have only limited effect on the inflation imported through the price of energy import, hence inflation is expected to rise further in the first half of the year. From July the effect of the high statistical base will gradually become visible, leading to lower price indexes. But the central banks will not be in the position to start monetary easing even then – although the governments might try to pressure them to do so. The combined annual inflation is likely to hit 9.5% in the region in 2022 and ease to about 5% in 2023.

The region's growth prospects are unusually uncertain due to the Russia-Ukraine conflict but there seem to be no danger of recession at present. Still, a substantial slowdown is likely in most new member states: we expect an average growth rate of about 3% for this year, while the growth rate in 2023 is likely to be somewhere between 2.5 and 3.5 percent. It should be noted that momentarily the risks overwhelmingly point downward, even with no further negative shock. But a peace agreement may shift the growth prospects in the positive direction while a further escalation can have incalculable economic and social consequences.

Table 2/1.

Economic Growth in the EU Member States

(Percentage change of real GDP over the previous year)

| | Weight | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022* | 2023* |
|-----------------------------|-------------|------------|------------|------------|------------|-------------|------------|------------|------------|
| Germany | 25.0 | 2.2 | 2.7 | 1.1 | 1.1 | -4.6 | 2.9 | 2.1 | 3.6 |
| France | 17.3 | 1.1 | 2.3 | 1.9 | 1.8 | -7.9 | 7.0 | 3.0 | 2.4 |
| Italy | 12.4 | 1.3 | 1.7 | 0.9 | 0.5 | -9.0 | 6.6 | 2.8 | 2.5 |
| Netherlands | 6.0 | 2.2 | 2.9 | 2.4 | 2.0 | -3.8 | 5.0 | 2.7 | 2.9 |
| Belgium | 3.4 | 1.3 | 1.6 | 1.8 | 2.1 | -5.7 | 6.3 | 2.5 | 2.4 |
| Luxembourg | 0.5 | 5.0 | 1.3 | 2.0 | 3.3 | -1.8 | 6.9 | 1.4 | 2.8 |
| Ireland | 2.7 | 2.0 | 8.9 | 9.0 | 4.9 | 5.9 | 13.5 | 1.8 | 3.5 |
| Greece | 1.2 | -0.5 | 1.1 | 1.7 | 1.8 | -9.0 | 8.3 | 2.8 | 3.2 |
| Spain | 8.4 | 3.0 | 3.0 | 2.3 | 2.1 | -10.8 | 5.0 | 5.1 | 4.4 |
| Portugal | 1.5 | 2.0 | 3.5 | 2.8 | 2.7 | -8.4 | 4.9 | 5.1 | 3.5 |
| Austria | 2.8 | 2.0 | 2.3 | 2.5 | 1.5 | -6.7 | 4.5 | 3.9 | 2.0 |
| Finland | 1.8 | 2.8 | 3.2 | 1.1 | 1.2 | -2.3 | 3.5 | 1.1 | 2.1 |
| Estonia | 0.2 | 3.2 | 5.8 | 4.1 | 4.1 | -3.0 | 8.3 | 3.0 | 3.5 |
| Slovakia | 0.7 | 1.9 | 3.0 | 3.8 | 2.6 | -4.4 | 3.0 | 3.0 | 3.1 |
| Slovenia | 0.3 | 3.2 | 4.8 | 4.4 | 3.3 | -4.2 | 8.1 | 3.8 | 3.5 |
| Cyprus | 0.2 | 6.5 | 5.9 | 5.7 | 5.3 | -5.0 | 5.5 | 2.5 | 3.0 |
| Malta | 0.1 | 3.4 | 11.1 | 6.0 | 5.9 | -8.3 | 9.4 | 6.4 | 4.5 |
| Latvia | 0.2 | 2.4 | 3.3 | 4.0 | 2.5 | -3.8 | 4.7 | 2.9 | 2.8 |
| Lithuania | 0.4 | 2.5 | 4.3 | 4.0 | 4.6 | -0.1 | 4.9 | 2.9 | 3.3 |
| Euro Area | 85.1 | 1.9 | 2.6 | 1.8 | 1.6 | -6.4 | 5.3 | 2.9 | 3.1 |
| Denmark | 2.3 | 3.2 | 2.8 | 2.0 | 2.1 | -2.1 | 4.1 | 2.8 | 2.3 |
| Sweden | 3.6 | 2.1 | 2.6 | 2.0 | 2.0 | -2.9 | 4.8 | 2.7 | 2.5 |
| Hungary | 1.0 | 2.2 | 4.3 | 5.4 | 4.6 | -4.7 | 7.1 | 4.0 | 4.0 |
| Czech Republic | 1.6 | 2.5 | 5.2 | 3.2 | 3.0 | -5.8 | 3.3 | 2.2 | 2.7 |
| Poland | 3.9 | 3.1 | 4.8 | 5.4 | 4.7 | -2.5 | 5.7 | 3.8 | 2.9 |
| Romania | 1.6 | 4.7 | 7.3 | 4.5 | 4.2 | -3.7 | 5.9 | 3.0 | 3.5 |
| Bulgaria | 0.5 | 3.0 | 2.8 | 2.7 | 4.0 | -4.4 | 4.2 | 2.5 | 3.0 |
| Croatia | 0.4 | 3.5 | 3.4 | 2.9 | 3.5 | -8.1 | 10.4 | 4.1 | 3.7 |
| EU14 | 88.9 | 1.9 | 2.7 | 1.8 | 1.6 | -6.1 | 5.3 | 2.8 | 3.0 |
| New EU13 | 11.1 | 3.2 | 5.0 | 4.5 | 4.1 | -3.8 | 5.5 | 3.3 | 3.2 |
| EU27 | 100 | 2.0 | 2.8 | 2.1 | 1.8 | -5.9 | 5.3 | 2.9 | 3.0 |
| Memorandum items | | | | | | | | | |
| USA | | 2.9 | 1.6 | 3.0 | 2.3 | -3.4 | 5.7 | 3.1 | 2.2 |
| Japan | | 1.1 | 1.0 | 1.9 | 0.7 | -4.7 | 1.7 | 1.0 | 1.8 |
| United Kingdom | | 1.7 | 1.7 | 1.3 | 1.4 | -9.4 | 7.3 | 4.8 | 1.3 |
| China | | 7.0 | 6.7 | 6.8 | 6.1 | 2.3 | 8.1 | 5.1 | 5.1 |
| Russia | | -2.8 | -0.2 | 2.2 | 1.3 | -3.0 | 4.7 | -7.3 | 2.6 |
| South-Eastern Europe | | | | | | | | | |
| Serbia | | 3.3 | 2.1 | 4.5 | 4.3 | -0.9 | 6.7 | 4.3 | 4.3 |
| Turkey | | 3.2 | 7.4 | 3.0 | 0.9 | 1.8 | 9.0 | 4.0 | 4.0 |

* Kopint-Tárki forecast

EU-14 = Countries that joined the European Union before 2004 ("Old EU Member States")

Új EU-13 = Countries that joined the European Union in 2004, 2007 and 2013 ("New EU Member States")

Source: Eurostat, national statistical offices, OECD

Table 2/2.

Inflation in the EU Member States

(Harmonized consumer price indices, percentage change over the previous year)

| | Weight | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022* | 2023* |
|--------------------------------------|--------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| Germany | 24.6 | 0.4 | 1.7 | 1.9 | 1.4 | 0.4 | 3.2 | 6.0 | 3.4 |
| France | 17.4 | 0.3 | 1.2 | 2.1 | 1.3 | 0.5 | 2.1 | 4.0 | 2.3 |
| Italy | 14.1 | -0.1 | 1.3 | 1.2 | 0.6 | -0.1 | 1.9 | 5.3 | 2.1 |
| Netherlands | 4.9 | 0.1 | 1.3 | 1.6 | 2.7 | 1.1 | 2.8 | 6.6 | 3.2 |
| Belgium | 3.3 | 1.8 | 2.2 | 2.3 | 1.2 | 0.4 | 3.2 | 7.1 | 2.9 |
| Luxembourg | 0.2 | 0.0 | 2.1 | 2.0 | 1.6 | 0.0 | 3.5 | 5.1 | 2.9 |
| Ireland | 1.4 | -0.2 | 0.3 | 0.7 | 0.9 | -0.5 | 2.4 | 5.2 | 3.6 |
| Greece | 1.7 | 0.0 | 1.1 | 0.8 | 0.5 | -1.3 | 0.6 | 5.3 | 2.5 |
| Spain | 9.1 | -0.3 | 2.0 | 1.7 | 0.8 | -0.3 | 3.0 | 5.7 | 2.7 |
| Portugal | 1.9 | 0.6 | 1.6 | 1.5 | 0.3 | -0.1 | 0.9 | 3.9 | 2.9 |
| Austria | 2.7 | 1.0 | 2.2 | 2.1 | 1.5 | 1.4 | 2.8 | 5.7 | 3.2 |
| Finland | 1.7 | 0.4 | 0.8 | 1.2 | 1.1 | 0.4 | 2.1 | 3.8 | 2.4 |
| Estonia | 0.2 | 0.8 | 3.7 | 3.4 | 2.3 | -0.6 | 4.5 | 10.0 | 2.9 |
| Slovakia | 0.8 | -0.5 | 1.3 | 2.5 | 2.8 | 2.0 | 2.8 | 9.8 | 2.5 |
| Slovenia | 0.3 | -0.2 | 1.6 | 1.9 | 1.7 | -0.3 | 2.0 | 5.0 | 3.0 |
| Cyprus | 0.2 | -1.2 | 1.0 | 0.8 | 0.5 | -1.1 | 2.3 | 3.7 | 1.5 |
| Malta | 0.1 | 0.9 | 1.3 | 1.7 | 1.5 | 0.8 | 0.7 | 2.6 | 1.5 |
| Latvia | 0.2 | 0.1 | 2.9 | 2.6 | 2.7 | 0.1 | 3.2 | 8.8 | 2.9 |
| Lithuania | 0.4 | 0.7 | 3.8 | 2.5 | 2.2 | 1.1 | 4.6 | 11.0 | 3.0 |
| Euro Area | 85.3 | 0.2 | 1.5 | 1.8 | 1.2 | 0.3 | 2.6 | 5.2 | 2.8 |
| Denmark | 2.0 | 0.0 | 1.1 | 0.7 | 0.7 | 0.3 | 1.9 | 4.5 | 2.3 |
| Sweden | 3.0 | 1.1 | 1.9 | 2.0 | 1.7 | 0.7 | 2.7 | 3.8 | 2.5 |
| Hungary | 1.0 | 0.4 | 2.4 | 2.9 | 3.4 | 3.4 | 5.2 | 9.7 | 6.7 |
| Czech Republic | 1.5 | 0.7 | 2.3 | 2.0 | 2.6 | 3.3 | 3.2 | 11.0 | 3.5 |
| Poland | 4.3 | -0.2 | 1.6 | 1.2 | 2.1 | 3.7 | 5.2 | 10.0 | 7.0 |
| Romania | 1.9 | -1.1 | 1.0 | 4.1 | 3.9 | 2.3 | 4.1 | 9.5 | 5.0 |
| Bulgaria | 0.5 | -1.3 | 1.0 | 2.6 | 2.5 | 1.2 | 2.8 | 10.0 | 4.5 |
| Croatia | 0.4 | -0.6 | 1.3 | 1.6 | 0.8 | 0.0 | 2.7 | 6.0 | 3.0 |
| EU14 | 88.1 | 0.4 | 1.7 | 1.9 | 1.4 | 0.5 | 2.6 | 5.1 | 2.8 |
| New EU13 | 11.9 | -0.2 | 1.7 | 2.2 | 2.6 | 2.6 | 4.2 | 9.6 | 5.1 |
| EU27 | 100.0 | 0.2 | 1.7 | 1.9 | 1.5 | 0.7 | 2.9 | 5.6 | 3.1 |
| Memorandum items ^a | | | | | | | | | |
| USA | | 1.6 | 0.1 | 1.3 | 1.5 | 1.2 | 4.3 | 6.9 | 3.0 |
| Japan | | 2.7 | 0.8 | 0.5 | 0.5 | 0.0 | -0.2 | 1.8 | 1.0 |
| United Kingdom | | 0.7 | 2.7 | 2.5 | 1.8 | 0.9 | 2.6 | 5.9 | 3.3 |
| China | | 2.0 | 1.4 | 2.0 | 2.9 | 2.5 | 0.5 | 1.7 | 2.5 |
| Russia ^b | | 15.5 | 7.0 | 2.9 | 4.5 | 2.6 | 5.9 | 25.0 | 18.0 |
| South-Eastern Europe | | | | | | | | | |
| Serbia | | 1.1 | 3.1 | 2.0 | 1.9 | 1.7 | 3.6 | 3.6 | 2.6 |
| Turkey | | 7.7 | 11.0 | 16.4 | 15.2 | 12.3 | 17.8 | 17.7 | 15.4 |

a Non-harmonized consumer price indices

b December/December

* Kopint-Tárki forecast

EU-14 = Countries that joined the European Union before 2004 ("Old EU Member States")

New EU-13 = Countries that joined the European Union in 2004, 2007 and 2013 ("New EU Member States")

Source: Eurostat, national statistical offices, OECD

Table 2/3.

Harmonized Unemployment rates in the EU Member States

(Unemployed as a percentage of the labor force aged 15-74, ILO-Eurostat)

| | Weight | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022* | 2023* |
|-------------------------------------|--------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| Germany | 20.3 | 4.1 | 3.8 | 3.4 | 3.1 | 3.6 | 3.6 | 3.1 | 2.9 |
| France | 14.0 | 10.1 | 9.4 | 9.0 | 8.4 | 8.0 | 7.9 | 7.2 | 6.8 |
| Italy | 12.1 | 11.7 | 11.2 | 10.6 | 10.0 | 9.6 | 9.6 | 8.7 | 8.4 |
| Netherlands | 4.3 | 6.0 | 4.9 | 3.8 | 3.4 | 3.3 | 4.2 | 3.2 | 3.0 |
| Belgium | 2.4 | 7.8 | 7.1 | 6.0 | 5.4 | 6.4 | 6.3 | 5.2 | 4.9 |
| Luxembourg | 0.1 | 6.3 | 5.5 | 5.6 | 5.6 | 5.8 | 5.5 | 5.2 | 5.1 |
| Ireland | 1.1 | 8.4 | 6.7 | 5.8 | 5.0 | 6.7 | 6.3 | 5.1 | 4.5 |
| Greece | 2.2 | 23.6 | 21.5 | 19.3 | 17.3 | 15.3 | 14.8 | 13.1 | 12.8 |
| Spain | 10.9 | 19.6 | 17.2 | 15.3 | 14.1 | 15.2 | 14.8 | 12.3 | 11.5 |
| Portugal | 2.4 | 11.2 | 9.0 | 7.1 | 6.5 | 6.7 | 6.6 | 6.2 | 5.9 |
| Austria | 2.1 | 6.0 | 5.5 | 4.9 | 4.5 | 6.4 | 6.2 | 4.9 | 4.7 |
| Finland | 1.3 | 8.8 | 8.6 | 7.4 | 6.4 | 7.7 | 7.7 | 6.7 | 6.4 |
| Estonia | 0.3 | 6.8 | 5.8 | 5.4 | 4.4 | 6.8 | 6.2 | 5.7 | 5.2 |
| Slovakia | 1.3 | 9.7 | 8.1 | 6.5 | 5.8 | 6.8 | 6.8 | 6.4 | 5.6 |
| Slovenia | 0.5 | 8.0 | 6.6 | 5.1 | 4.5 | 4.6 | 4.8 | 4.5 | 4.4 |
| Cyprus | 0.2 | 13.0 | 11.1 | 8.4 | 7.1 | 7.5 | 7.5 | 7.1 | 6.6 |
| Malta | 0.1 | 4.7 | 4.0 | 3.7 | 3.6 | 4.0 | 3.5 | 3.8 | 3.7 |
| Latvia | 0.4 | 9.6 | 8.7 | 7.4 | 6.3 | 7.3 | 7.6 | 6.9 | 6.6 |
| Lithuania | 0.7 | 7.9 | 7.1 | 6.2 | 6.3 | 7.1 | 7.1 | 6.3 | 6.0 |
| Euro Area | 76.8 | 10.1 | 9.1 | 8.2 | 7.6 | 8.0 | 7.7 | 6.8 | 6.4 |
| Denmark | 1.4 | 6.0 | 5.8 | 5.1 | 5.0 | 5.3 | 5.1 | 4.8 | 4.3 |
| Sweden | 2.5 | 6.9 | 6.7 | 6.4 | 6.8 | 8.9 | 8.8 | 7.4 | 6.8 |
| Hungary | 2.2 | 5.0 | 4.0 | 3.6 | 3.3 | 4.1 | 4.1 | 3.7 | 3.5 |
| Czech Republic | 2.5 | 4.0 | 2.9 | 2.2 | 2.0 | 2.7 | 2.8 | 2.6 | 2.4 |
| Poland | 8.0 | 6.2 | 4.9 | 3.9 | 3.3 | 3.3 | 3.4 | 3.1 | 3.0 |
| Romania | 4.2 | 5.9 | 4.9 | 4.2 | 3.9 | 5.0 | 5.6 | 4.8 | 4.5 |
| Bulgaria | 1.6 | 7.6 | 6.2 | 5.2 | 4.2 | 5.1 | 5.3 | 4.6 | 4.4 |
| Croatia | 0.8 | 13.1 | 11.2 | 8.5 | 6.6 | 6.7 | 7.7 | 6.2 | 5.8 |
| EU-14 | 77.2 | 9.2 | 8.4 | 7.5 | 7.1 | 7.9 | 7.8 | 6.8 | 6.4 |
| New EU13 | 22.8 | 6.6 | 5.5 | 4.5 | 4.1 | 4.4 | 4.6 | 4.1 | 3.9 |
| EU27 | 100.0 | 9.3 | 8.3 | 7.4 | 6.8 | 7.2 | 7.1 | 6.2 | 5.8 |
| Memorandum items^a | | | | | | | | | |
| USA | | 5.3 | 4.9 | 3.9 | 3.7 | 8.1 | 5.4 | 3.6 | 3.6 |
| Japán | | 3.4 | 3.1 | 2.8 | 2.4 | 2.8 | 2.8 | 2.7 | 2.6 |
| Egyesült Királyság | | 4.8 | 4.4 | 4.1 | 3.8 | 4.5 | 4.5 | 3.9 | 4.2 |
| Kína ^b | | 4.1 | 4.0 | 4.0 | 3.8 | 3.6 | 4.0 | 3.8 | 3.8 |
| Oroszország ^d | | 5.6 | 5.7 | 5.4 | 4.6 | 6.0 | 5.9 | 7.9 | 6.8 |
| Délkelet-Európa | | | | | | | | | |
| Szerbia ^e | | 15.3 | 13.5 | 12.7 | 10.4 | 9.0 | 10.7 | 10.0 | 9.2 |
| Törökország | | 10.9 | 10.9 | 10.9 | 13.7 | 13.2 | 12.8 | 12.7 | 12.3 |

a Non-harmonized unemployment rates

b Urban unemployment

c ILO, LFS

d OECD statistics, unemployment rates for the age group 15-64

e National statistics, unemployment rates for the age group 15-64

* Kopint-Tárki forecast

EU-14 = Countries that joined the European Union before 2004 ("Old EU Member States")

New EU-13 = Countries that joined the European Union in 2004, 2007 and 2013 ("New EU Member States")

Source: Eurostat, national statistical offices, ILO, OECD

Macroeconomic indicators for Hungary and Kopint-Tárki forecast

(year-on-year change, percentage)

| | Data | | | Forecast | | |
|---|------|------|-------------------|--------------|--------------|--------------|
| | 2020 | 2021 | 2022 | 2022 | | 2023 |
| | | | Q1 | 2021 Nov. | 2022 May. | 2022 Nov. |
| GDP aggregates, real growth | | | | | | |
| GDP total | -4.7 | 7.1 | | 5.0 | 4.0 | 4.0 |
| Domestic Demand | -2.7 | 5.6 | | 5.0 | 4.6 | 3.6 |
| Private Consumption | -2.0 | 4.3 | | 4.8 | 5.6 | 3.5 |
| Public Consumption | 5.2 | 4.8 | | 0.0 | 2.0 | 0.0 |
| Gross Fixed Capital Formation | -6.9 | 6.0 | | 7.3 | 3.7 | 5.2 |
| Gross Capital Formation | -7.0 | 8.7 | | 7.3 | 3.5 | 5.2 |
| Export | -5.9 | 10.1 | | 6.6 | 4.1 | 5.0 |
| Import | -3.5 | 8.2 | | 6.6 | 4.7 | 4.6 |
| Industrial production | -6.0 | 9.6 | 5.5 | 6.0 | 4.0 | 4.5 |
| Consumer Price Index | 3.3 | 5.1 | 8.2 | 5.5 | 9.7 | 6.7 |
| Employment, earnings | | | | | | |
| Number of Employed, growth ^a | -0.9 | 0.7 | 2.2 ^f | 0.5 | 0.8 | 0.4 |
| Employment rate ^a | 62.1 | 63.0 | 63.7 ^f | 63.0 | 64.1 | 64.5 |
| Unemployment Rate ^a | 4.1 | 4.1 | 3.8 ^f | 3.6 | 3.7 | 3.5 |
| Unit Labor Costs, in EUR ^b | 3.6 | -1.4 | | 3.3 | 4.3 | 4.0 |
| Gross Nominal Wages ^c | 9.7 | 8.7 | 22.8 ^e | 9.6 | 14.5 | 9.0 |
| Net Real Wages | 6.2 | 3.4 | 13.6 ^e | 3.9 | 4.4 | 2.2 |
| Savings Rate, % of GDP ^d | 6.4 | 6.5 | | 5.4 | 6.5 | 5.8 |
| Current and Capital Accounts Balance, % of GDP | 0.9 | -0.5 | | 1.0 | -3.0 | -3.0 |
| General government | | | | | | |
| Fiscal Balance, ESA-2010, % of GDP | -8.0 | -6.8 | | -5.9 | -6.5 | -5.0 |
| Gross Government Debt, % of GDP | 79.6 | 76.8 | | 79.0 | 75.0 | 74.0 |
| Short-term Government Yields (3M), eop | 0.28 | 2.16 | 5.7 | 1.3 | 6.0 | 6.0 |
| Long-term Government Yields (10Y), eop | 2.08 | 4.51 | 5.9 | 3.0 | 6.5 | 6.5 |
| External assumptions | | | | | | |
| Internat. Trade in Goods and Services ^d | -8.3 | 9.3 | | 7.0 | 6.0 | 4.9 |
| Brent Oil Price (\$/bbl, p. avg.) | 41.8 | 70.8 | 100.3 | 70.0 | 100.0 | 89.0 |
| GDP Real Growth, Eurozone | -6.4 | 5.3 | | 4.6 | 2.9 | 3.1 |
| GDP Real Growth, New EU Members | -4.0 | 5.6 | | 4.7 | 3.3 | 3.2 |
| EUR-HUF, period average | 351 | 359 | 364 | 356 | 370 | 370 |
| EUR-USD, period average | 1.14 | 1.18 | 1.12 | 1.20 | 1.12 | 1.13 |

a ILO methodology, period averages, aged 15-74, public workers are counted as employed.

b Manufacturing, based on gross value added and the monthly average compensation of employees in euro, cumulated from the beginning of the year

c Enterprises with at least 5 employees, all budgetary institutions, and major non-profit institutions

d Net lending of households according to the financial accounts statistics, percentage of GDP, four-quarter cumulative data

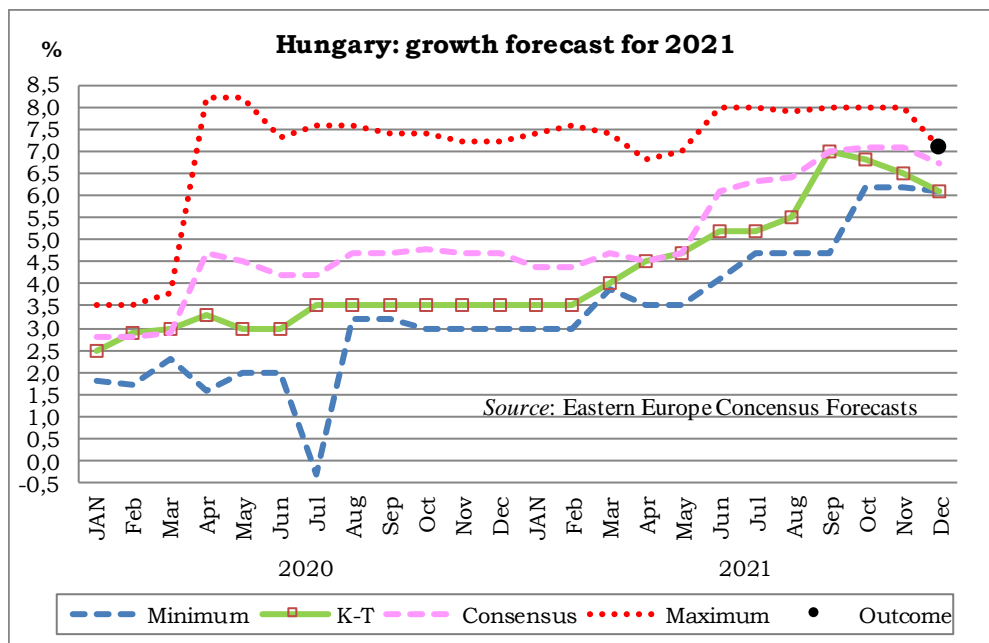
e January-February

f December-February

III. Hungarian Economy

Based on the recorded growth rates, the Hungarian economy performed remarkably well in 2021: the seasonally adjusted quarterly volume of GDP steadily rose in all four quarters, and by the end of the year it surpassed the pre-pandemic peak by more than 3%. As for the year-in-year indexes, they fluctuated depending on the variation in the base period, but on the whole, the annual growth rate was quite dynamic and surpassed the expectations of most analysts. The 7.1% growth in the last quarter might give the appearance that the rapid growth can continue even after the recovery period.

But the shifts in the *structure* of growth warn against such sanguine expectations. In the second half of the year, the external trade of goods contributed to economic growth negatively. (On the production side, that was reflected by the spectacular slowdown of industrial growth in the second half.) While in the last quarter the external trade of services could support GDP growth substantially, and the export of goods began to revive



as well, the upturn of the import of goods largely offset this positive change. This suggests that – unlike in the first half of 2021 – external trade cannot be relied on as a driver of growth anymore.

The Covid-crisis has somewhat surprising reverberations. At the end of 2020 it seemed that the initial supply-side shock was already over, and only the demand-side problems remained to worry about, due to the periodical lockdown measures with the coming and going of the new waves of the epidemic. By now, however, the picture is quite different. Even though the epidemic is still here, the restrictions are revoked almost everywhere, and consumer demand has recovered or is on its way to recover. By contrast, the spillover effects of the supply-side shock – chip shortage, the shortage of other materials and parts and components, drastic price hikes – are still with us, **hindering and hobbling economic growth relentlessly, although with fluctuating intensity.**

The attack on Ukraine by Russia elevated the level of uncertainties to a whole new level. The war and the sanctions caused new disruptions in the supply chains, brought about

another price shock and made acquiring the inputs necessary for chip production even more difficult. The oil price jumped above 100 USD/barrel very fast, even though the sanctions affected fuels the least – although this is changing now. Thus – even if the direct export from Hungary to Ukraine and Russia is not especially significant – the war dims further the prospects of industry and construction and the prospects of export growth. Besides, the war exacerbates the deterioration of the terms of trade, worsening the external balances.

The degree of the impact is still uncertain – we do not know how long the war will last, where the escalation of sanctions will stop and, in case of an end of the war, how long the sanctions remain active, or how long it will take to normalize the economic links with Russia. The developments of the past months is far from encouraging.

As a result, the relatively good start in January and February, this year is characterized by weakened industrial prospects and a disrupted construction outlook. Against these factors is the large-scale fiscal package that primarily stimulate **household consumption**, at least in the first half of the year.

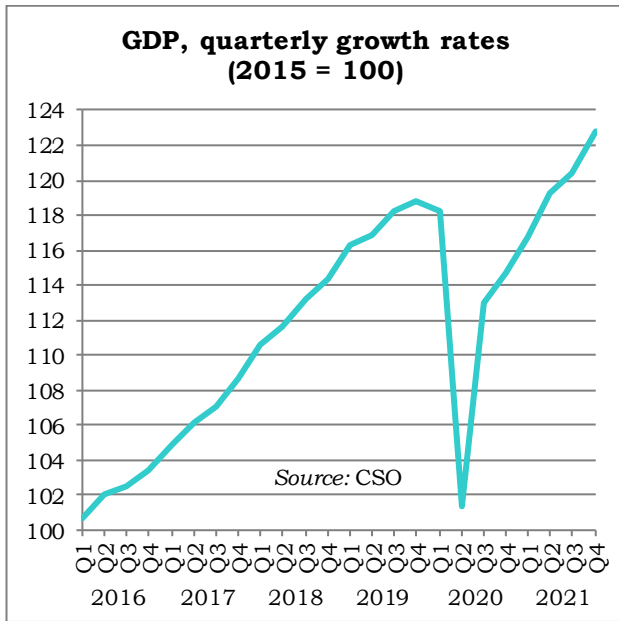
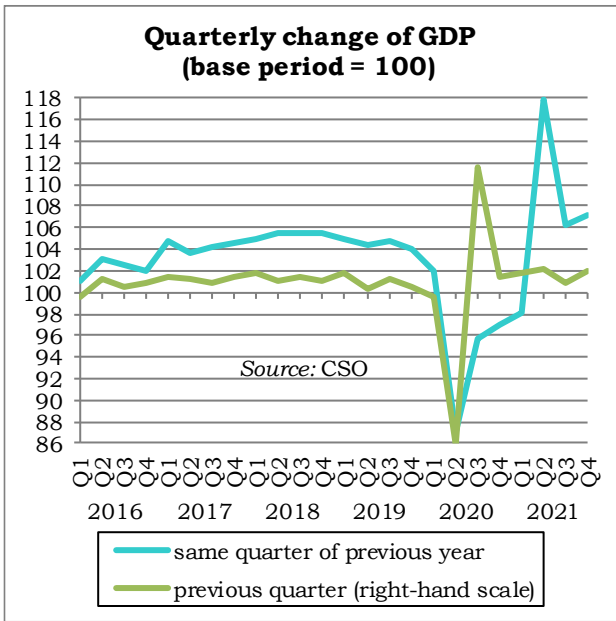
The growth of household incomes got an enormous boost from this government package that amounted to more than HUF 1200 billion (about 2% of GDP). The same package, however, leads to a deterioration of the fiscal situation. On the other hand, the fiscal deficit-to-GDP ratio will be eased by the high nominal value of GDP, due to the very high GDP deflator, fueled by producer and consumer inflation. But even so, to keep the annual deficit under check, a very disciplined fiscal policy will be necessary for the rest of the year, which may lead to further delays in government investment projects or even the reconsideration of the degree of market support regarding the prices of certain consumer goods. Economic policy needs to find the narrow path that avoids the uncontrollable explosion of inflation but also keeps the fiscal deficit under control. This will be necessitated also by the dramatic rise of interest rates and government yields which increases the cost of state debt financing considerably.

The outcome regarding the EU subsidies – either from the structural and cohesion funds available for Hungary in the current programming period, or from the Recovery and Resilience Fund – is another point of uncertainty. The EU triggered the rule of law procedure against Hungary in early April. If the Hungarian government cannot give sufficient guarantees regarding the compliance with the rules and the transparency in using the EU funds, the access to the EU subsidies will be in danger. In any case, an agreement is unlikely before the end of this year, which means that during much of the year no transfer from these funds can be expected. Although the government continues to pre-finance the assumed subsidies, this practice may be limited by the fiscal situation.

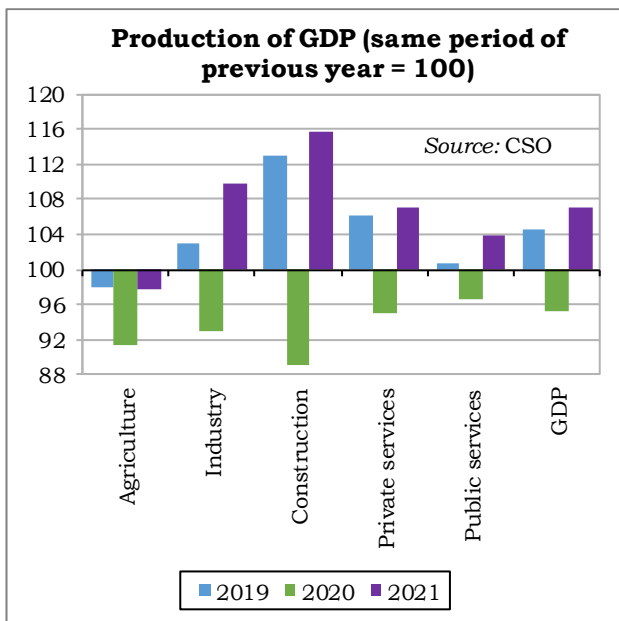
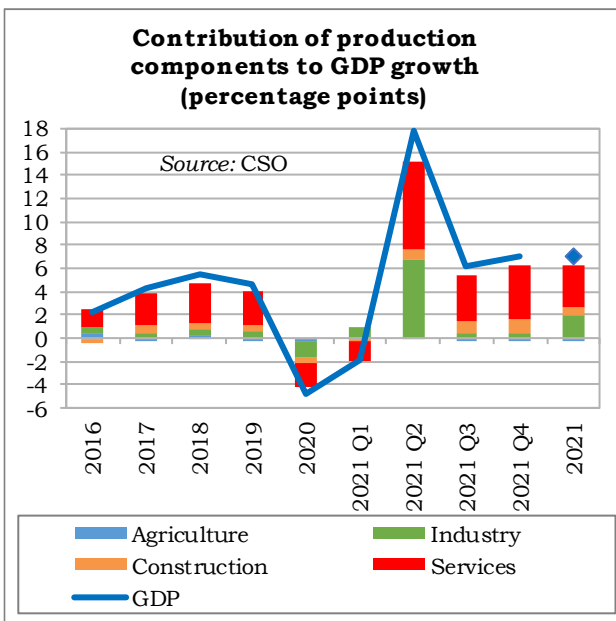
All this, with the need to rein in state investments, suggests that in 2022 economic growth will be mostly driven by consumption. In the second half, consumption growth is likely to decelerate, due to the new inflationary wave after the lifting of the price controls, the rising interest rates and – probably – the introduction of fiscal consolidation measures. But even so, domestic demand will expand at a good pace this year, even amid sluggish investment growth, which will boost import while the export outlook is highly uncertain due to the reasons discussed above. In sum, we expect a GDP growth of about **4% in 2022**.

The GDP and its components

After the slowdown in the third quarter economic growth reaccelerated in the fourth quarter to 7.1%, a rate well above expectations, despite the fourth, “delta” wave of the pandemics. Compared to the previous quarter, GDP was up 2%. The annual average growth rate in 2021 was also 7.1%. With these growth rates, Hungary’s growth performance was among the top third among the EU member states in both the fourth quarter and in 2021 as a whole.



On the **production side**, the accelerating growth of services kept driving economic expansion. While public services (more specifically, the health and social worker sector) contributed somewhat to this acceleration, the growth in transport and storage services was the main factor. While freight transport was sluggish, along with the external trade



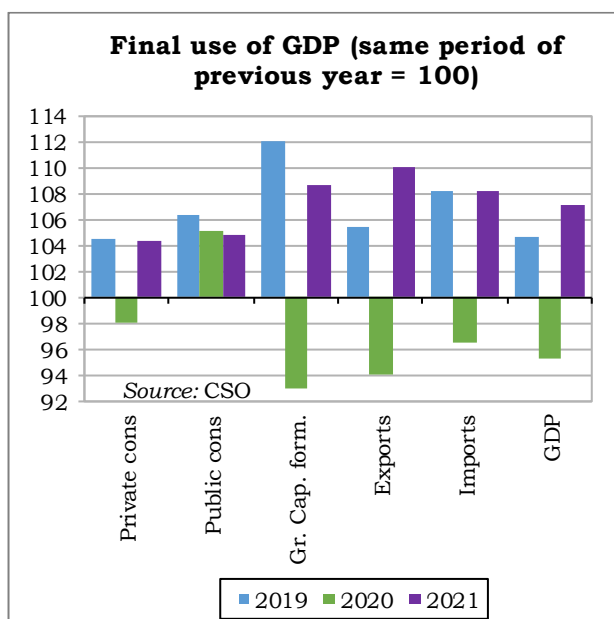
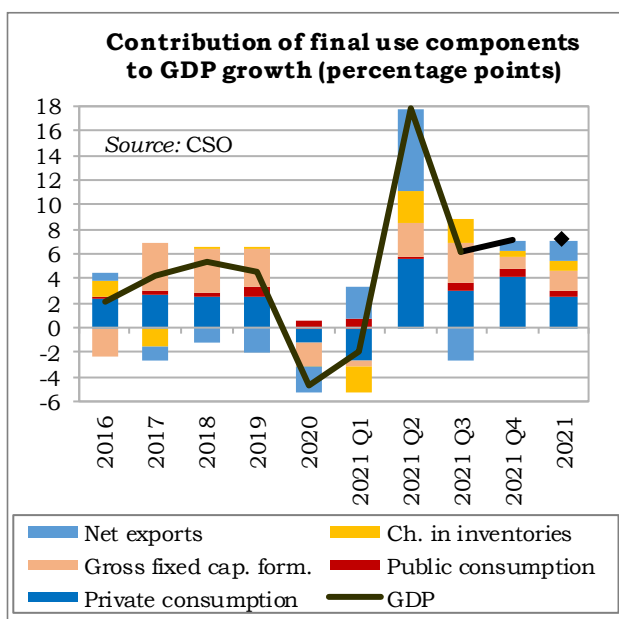
flows, the *passenger transport* leaped ahead (from a very low base level) a reflection of the ongoing recovery of tourism.

Industrial value added grew only very modestly in the last quarter, but still it contributed to expectation-defying growth simply by not decelerating further after the third quarter. The steep growth in construction even gathered some additional speed at the end of the year while agricultural value added fell substantially, by 6.1%.

On the **expenditure side**, the largest component of domestic use, *household consumption*, accelerated to 7.1 percent in the last quarter, partly due to the income boost coming from the significant supplementary pensions paid in November. The consumption of services expanded at a double-digit rate but the consumption of consumer durables and semidurables accelerated too. On the other hand, the growth of *fixed capital formation* lost momentum spectacularly, to a mere 3.3%, in the last quarter. This was mostly a result of the sudden slowdown in business investment growth. Besides, the steep fall of public investments became even steeper and – as the completion of dwellings fell – the recorded investment activity of households also decreased and exerted a significant downward pull on overall investment growth.

Due to the softening investment activity, the growth of *final domestic use* decelerated to 6.4% in the last quarter from its earlier pace of about 10%. But another peculiarity of the fourth quarter was the positive growth contribution of overall *net export* despite the very unfavorable trends in the external trade of goods. The year-on-year decline of merchandise export even accelerated in the fourth quarter – due to the continuation of supply-side bottlenecks – while merchandise import also decreased minimally, despite growing domestic demand. In sum, the growth contribution of the external trade of goods was negative. On the other hand, the growth rate of the *export of services* accelerated above 28%, which led to a positive contribution of the external trade of services, despite the quite dynamic expansion of the import of services.

It should be noted that the structure of the growth in the last quarter differs at various points from the structure of growth in the whole last year. On the production side, due to the extraordinary growth rate in the second quarter, industry was a quite prominent growth driver in 2021, unlike in the last quarter. On the expenditure side, private



consumption was much less of a dominant growth factor for the whole year and the annual average growth contributions of both investments and net export were more significant than in the fourth quarter alone.

According to the monthly data, **this year** started remarkably well, with galloping construction and industry growing at a relatively good pace in January-February. The large-scale tax reimbursement and a series of other stimulus measures in February will probably result in very strong consumption growth rate in the first third or half of this year. Construction, industrial production and exports, however, will be hit hard by the outbreak of the war, mostly because of the worsening of the already existing supply chain problems and the explosion of input costs. Also, the strict local and regional lockdowns in Covid-infected areas of China make the supply chain situation even more difficult. The increasing uncertainty and the rising costs will affect business profitability and investment activity as well, while the war makes the fiscal problems even more pressing, possibly putting a brake on government investments. The future fate of some Russia-related investment projects, like the Paks II nuclear power plant expansion project, may become uncertain. From July consumption growth will be held back by the ending of the price cap. At present, we do not expect a crisis that would completely overwrite the growth outlook, hence we revise our earlier growth prediction only by 1 percentage point, **to 4%**, for 2022. But substantial downward risks are attached to this projection.

3.1. The production side of GDP

3.1.1. Industry

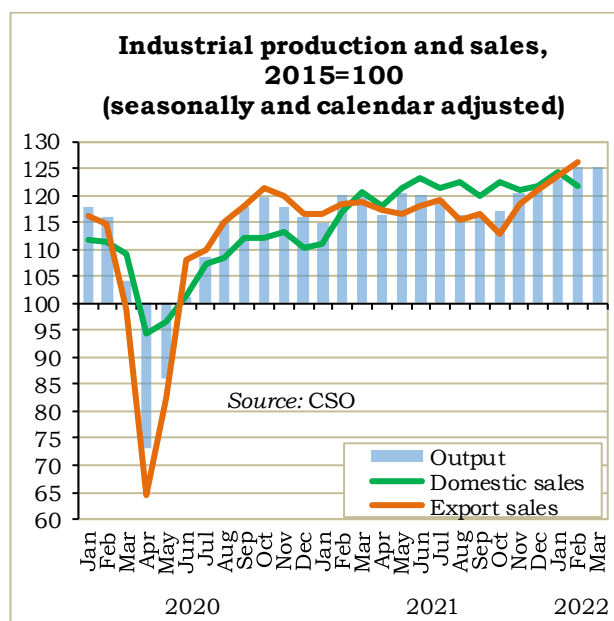
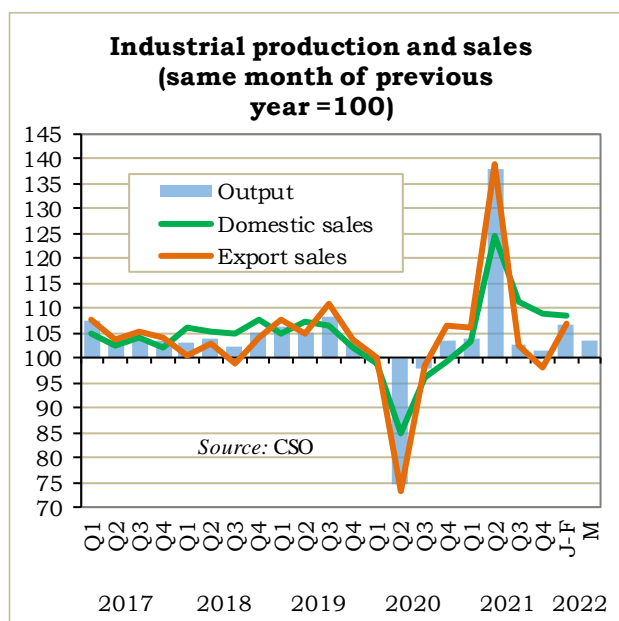
Industrial growth was decelerating in the second half of the last year – the year-on-year growth rate was just 1.5 in the last quarter. This is not just a result of the higher statistical base: the seasonally adjusted output basically stagnated after October 2020 and even dipped in August-October 2021. Seasonally adjusted export sales were even on a slightly downward trend between October 2020 and October 2021. The main reason is the severe chip shortage that has been accompanied by other shortages (e.g. steel) and rising input costs.

Still, the annual average growth rate was 9.6% in 2021, due to the low statistical base. But the upturn in November-December also helped – export sales reached record high in December. At that point, at least some easing of the chip shortages could be hoped for. It should be noted that the annual growth was primarily driven by the 11.4% expansion of domestic sales in 2021 while export sales grew by only 8.9%.

It is a characteristic of the last year that the largest industrial branch – auto industry – posted negative growth and the second largest – electronic industry – grew at a below-average pace. The supply-side bottlenecks primarily affect these two areas, but they were also primarily involved in the upturn in last November-December. Still, the automotive industry output remained well below its pre-pandemic peak levels.

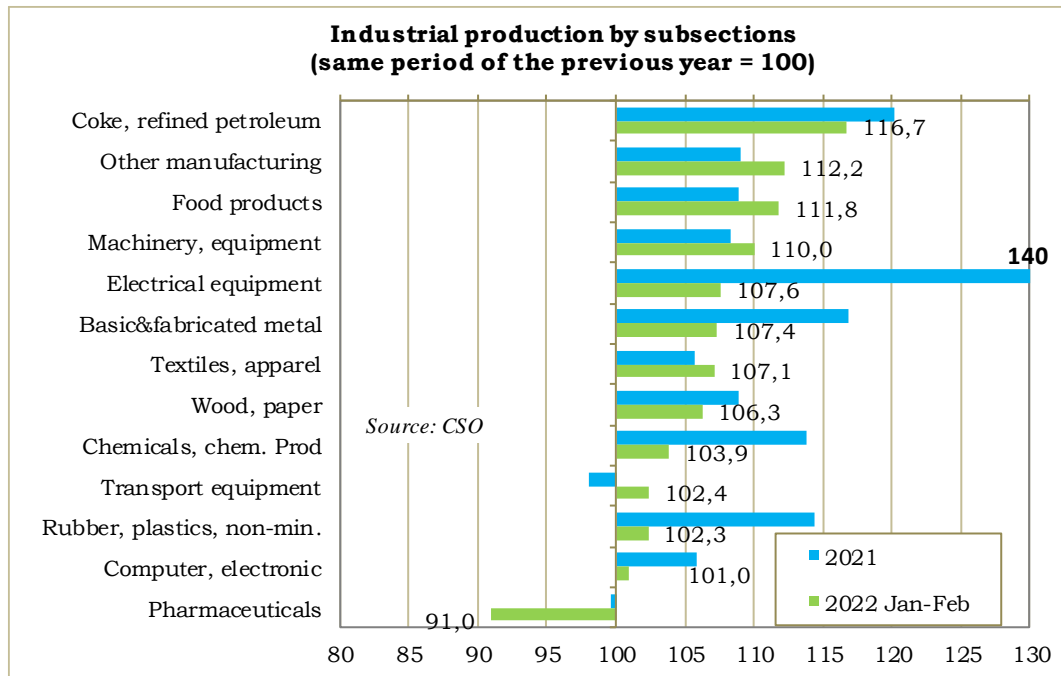
The rising trend continued in *the first two months of this year*, especially regarding export sales, resulting in a cumulative production growth of 6.6% and a cumulative export sales growth of 6.9% in January-February. The positive trend remained in the automotive and the electronic industry as well.

The demand situation was still favorable in the export-oriented industrial branches in February, even if domestic demand apparently cooled significantly. But the supply-side problems not simply remained but they are about become even more biting due to the Russian-Ukrainian war and several bouts of lockdown in important Chinese economic hubs. In March, according to the preliminary data, the impact was not yet drastic: the



former rising trend in the seasonally adjusted output only gave way to stagnation, not to decline. But the auto industry was already hit in March, according to the preliminary report by the CSO. Right now, the hopes for a fast peace seem to slowly evaporate. But even in the case of a fast peace it would take time reestablishing the disrupted supply chains, not to say about the damage in industrial capacities suffered by Ukraine. Besides, the EU seems to choose a path of delinking from Russia that will permanently rearrange the formerly existing system of supply links, with an incalculable impact on the continent's long-term industrial perspectives.

In any case, at present we expect industrial production to grow **by 4-4.5% in 2022**.



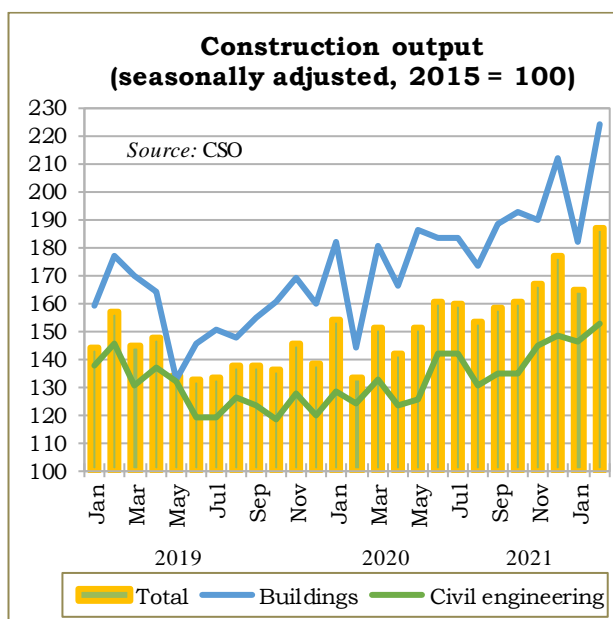
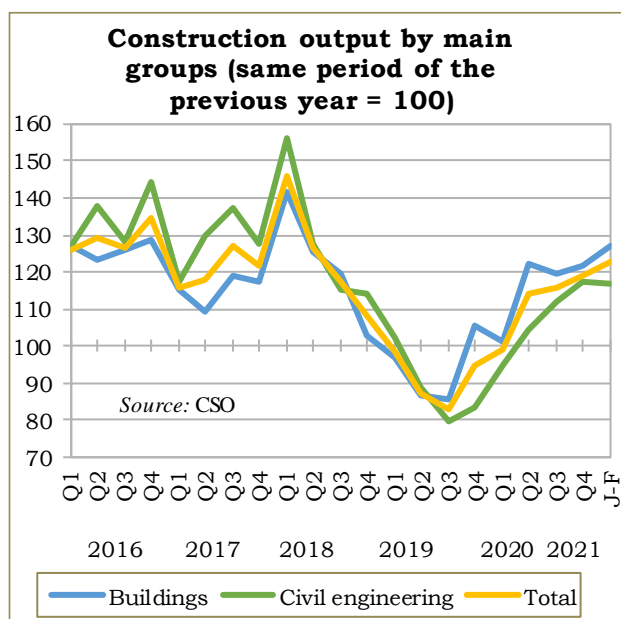
3.1.2. Construction

The last year was characterized by a steadily increasing dynamism of construction growth – in the last quarter, the year-on-year growth rate surpassed 19%. The construction of buildings remained the primary growth driver, but the seasonally adjusted volume was rising in both section of construction. In the fourth quarter the overall growth rate surpassed 20% while civil engineering growth surpassed 15%. In 2021, construction output climbed 13.3% on an annual basis and exceeded the output in 2019 by almost 2%.

In the first two months of 2022 the overall growth rate accelerated further, but civil engineering growth took over the place of growth leader while the construction of buildings expanded at a dynamic pace as well. By the end of February, the stock of orders was higher than one year ago in both sections, which is welcome news. But at present it is not the demand side but the supply side that primarily casts doubt about the growth prospects in the construction sector, and the severity of the supply-side problems – including both input costs and problems with access to crucial inputs – just increased markedly due to the outbreak of the Russia-Ukraine war. As a result, the mood within the sector suddenly became much gloomier: the profitability outlook worsened while the time needed for the completion of construction projects will increase further. The negative turn may already be reflected in the March growth numbers and afterwards. The labor shortage remains a crucial hindering factor as well.

Eventually, rising costs may also lead to the suspension or cancellation of certain projects and the fiscal constraints may result in putting off government investment projects. Hence, despite the strong year start, demand problems may arise during the course of the year as well.

At present we expect a moderate construction growth of **4-5%** in 2022.

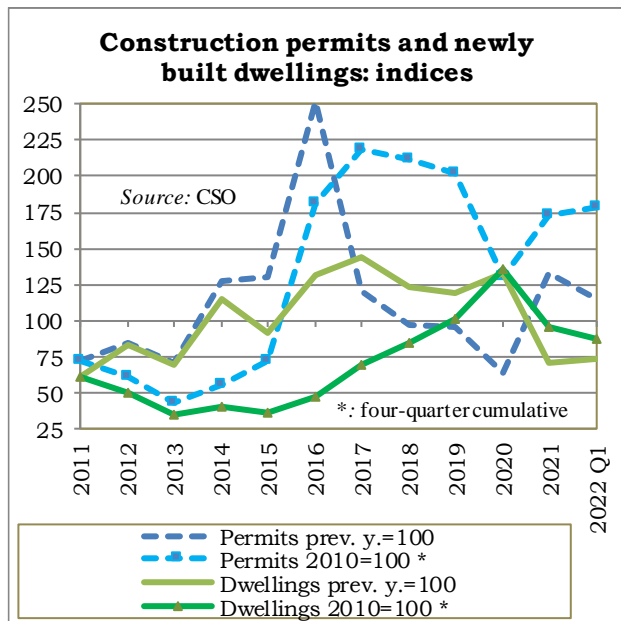


3.1.3. Housing construction

In 2021, the initial increase in the number of dwellings built turned into a fall from the second quarter that accelerated to 52.6% in the fourth quarter. In 2021 as a whole, the annual average rate of decrease was 29.5%. (This spectacular drop, on the other hand, took place against a record high in the base period, 2020.) Especially the number of completed family houses fell in the last year. The steep decrease continued in the first quarter of 2022 as well. While the mounting supply side problems – shortage of materials, skyrocketing input prices – contributed to this downward trend, there is a cyclical element: the number of housing permits/notifications continuously decreased in 2018-2020, which suggests that the dwelling construction projects started also decrease during this period.

According to the iBuild database, the number of *newly started* multi-dwelling building construction projects grew by more than 40% in the last year compared to 2020. Besides, an upturn in the number of housing construction permits/notifications began in 2021, with an annual growth rate of 33%.

So it is only a question of time that the volume of ongoing housing construction activity – and eventually, completed dwellings – start to grow again. But the war creates new obstacles to the housing construction. The rise of interest rates makes housing borrowing less attractive, and the “green home” preferential credit program is basically defunct. On the other hand, the temporarily lowered VAT rate on the construction of new dwellings covers only projects announced by the end of 2022 and this will hasten the inflow of permit requests and notifications. In the first quarter of 2022, the number of permits issued/notifications was up 15.2% on an annual basis.



3.2. The final use of GDP

3.2.1. Household income, consumption and saving

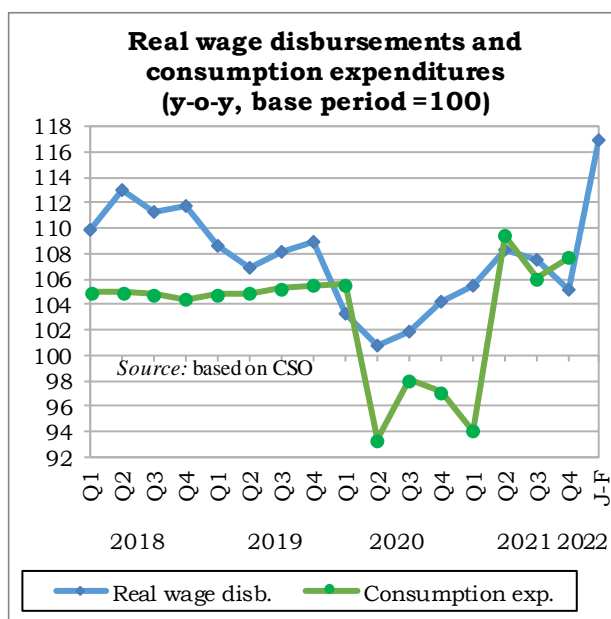
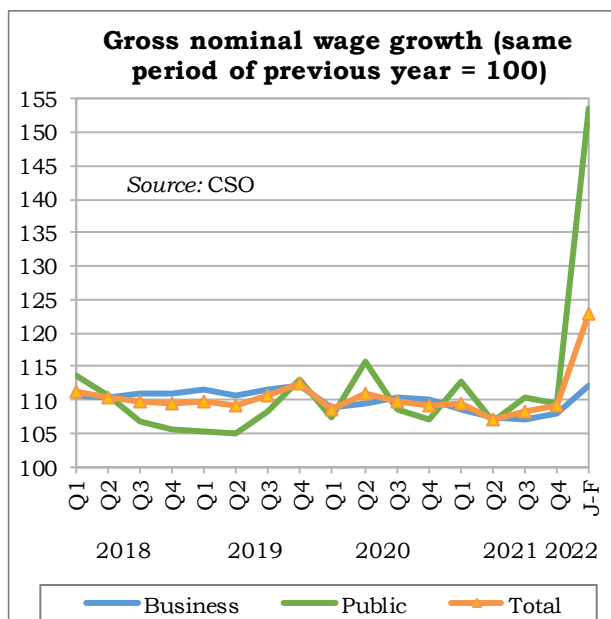
Wage growth continued at a slightly accelerated pace in the last quarter of 2021 and the annual average growth rate was 8.9% (or 8.7%, excluding public workers) in the whole last year. Wages rose at somewhat slower pace, by 7.8%, in the business sector while in the public sector – mostly due to the drastic raise of the wages of medical doctors – the average growth rate was 9.5%.

Real wages were up 2.1% in 2021, a pace subdued by the high inflation. **Net real wage disbursements** rose somewhat more substantially, by 5.2%, due to the 3% growth in the number of employees.

The **consumption expenditures of households**, on the other hand, accelerated to 7.7% in the last quarter, which means that the dynamism of consumption expenditures again surpassed the growth of real wage disbursements. This was helped by the pension premium paid in last November. As a result, in 2021 as a whole **private consumption grew by 4.3%**, despite the initial fall of consumption at the start of the year.

This year, nominal wages will rise at a much higher pace – by 14% or more. This is partly because of the drastic raise of both types of minimum wages (by 20%). Also, because a combination of a tight labor market and a further spectacular acceleration of inflation, the firms will find difficult to avoid paying higher wages to their employees. And finally, public wages continue to grow at a double-digit pace, further boosted by a drastic one-off event in February, when the army and law enforcement services were given a bonus amounting to a six-month salary. As a result, the cumulative wage growth in January-February was as high as 22.8%.

Besides, other large-scale government measures (tax rebate for families with children, full reintroduction of the 13th month pension, etc.) will give a boost to household incomes. The full impact is hard to estimate, and in the second half of the year many indebted households will experience an increase of their debt burdens, due to the suspension of the interest rate cap. In any case, GDP growth will be basically driven by household

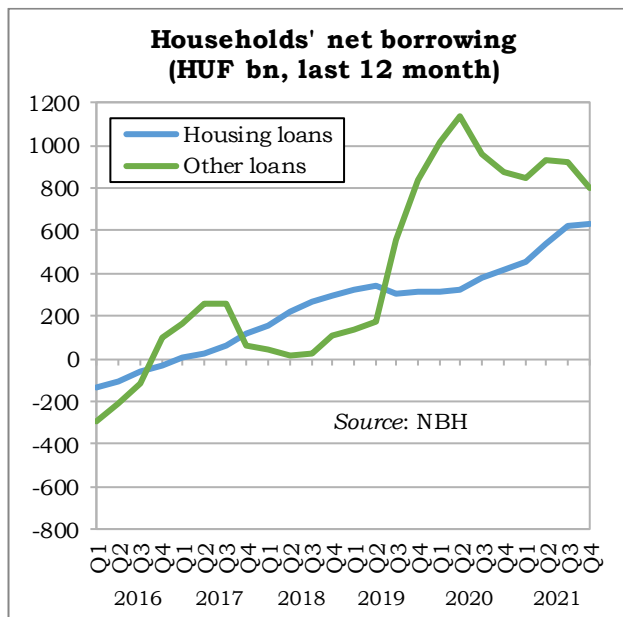
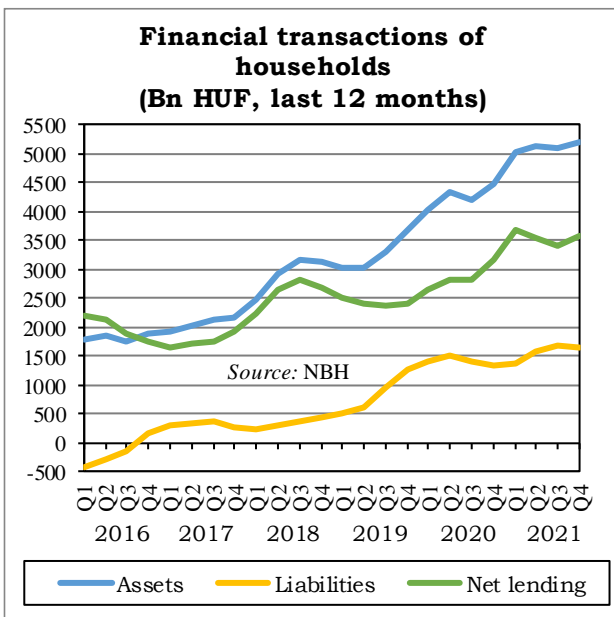


consumption in 2022, especially in the first half of the year. This expectation is underlined by the retail trade data: in the first quarter, the volume of retail trade turnover jumped by a whopping 10.5%. Hence annual private consumption growth is expected to surpass 5% considerably. A negative risk is a possible disruption of labor market trends by the Russian-Ukrainian war, but we do not expect any fundamental rupture in employment trends at the moment.

The households' cumulative nominal **net financing capacity** peaked in the first quarter of 2021 but decreased in the second and third quarters, due to the near-stagnation of gross savings and especially the rise of net borrowing. In the fourth quarter, some upward correction took place: gross savings rose again while net borrowing slightly subsided.

During the fourth quarter of the last year, the former steady rise of net *housing* borrowing almost came to a standstill, due to the slowdown of new borrowing in the wake of the increase of interest rates, and also because the value of loans still being under the repayment moratorium decreased considerably. At the same time, the decrease in net *consumption* borrowing resumed.

The annual cumulative household net saving rate (as a percentage of GDP) stood at 6.5% at the end of the last year, the same as one year before. In the fourth quarter alone, on the other hand, the savings rate was only 6%.



3.2.2. Investments

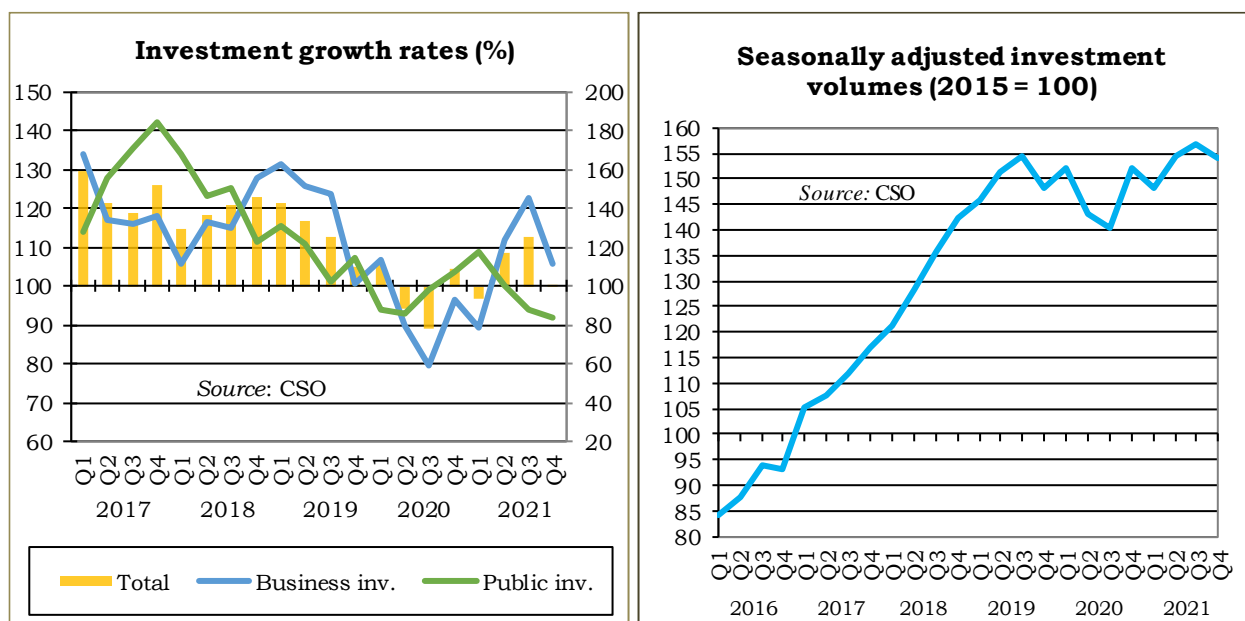
Investment growth basically came to a halt in the fourth quarter of the last year. The dynamism subsided in all three sectors, albeit not to the same degree. The investments of medium and large firms only grew by 6%, after the 23% recorded in the third quarter. Public investments, on the other hand, fell by 16 percent, and even more drastic rate than in the previous quarter. According to the NBH household investments also contributed negatively – and significantly – to overall investment growth. (This is related to the steep fall in the number of dwellings *completed*.) The investments in construction still grew at a moderate rate in the fourth quarter but the investments in machinery fell by 5%.

Public investments fell to the largest degree (by more than 30%) in public administration and the healthcare-social work sector. In addition, largely state-related investments in the energy and the water/wastewater/waste management sectors decreased in the last quarter.

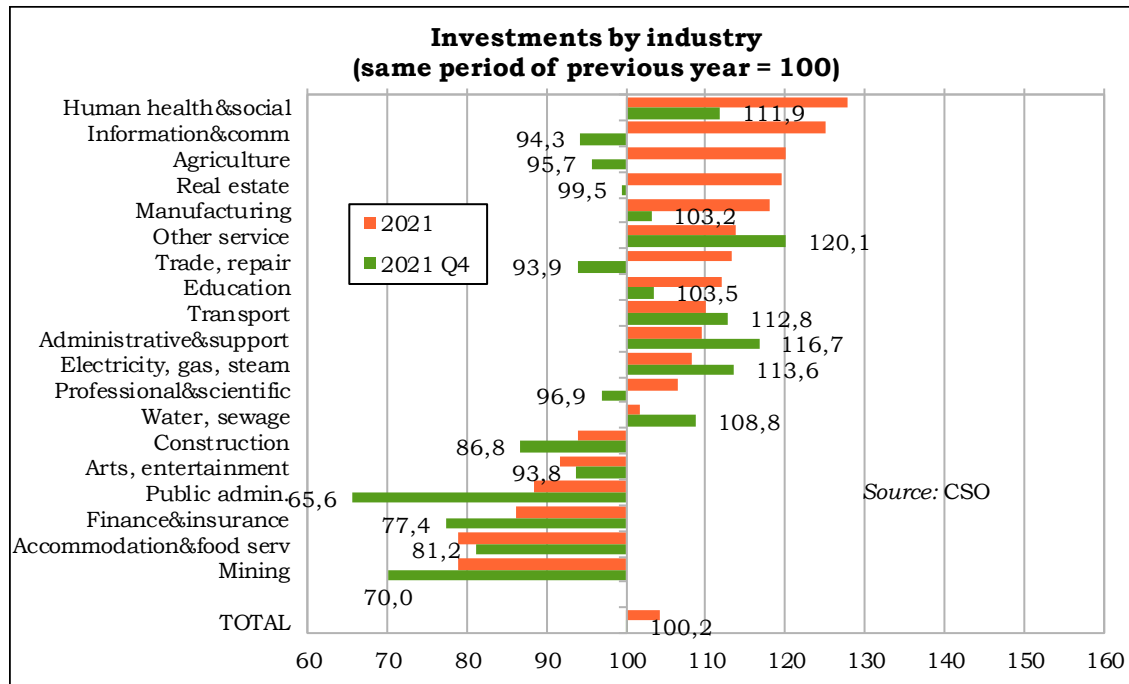
Actually, more than half of the economic branches posted negative investment growth in the fourth quarter. Among the more important branches, *real estate* investments dropped by 17%, mostly due to the plummeting number of completions of newly built dwellings. On the other hand, the largest sector, *manufacturing*, still recorded double-digit growth and the investments of the *transport and storage* sector – in which the weight of the so-called quasi-fiscal entities is high – expanded by about 20%. Within manufacturing, the investments grew in the automotive sector as well – apparently the supply-side difficulties do not block the investment cycle within the sector.

The halt of the year-on-year investment growth also meant that the *seasonally and calendar adjusted* absolute volume of investments substantially decreased in the last quarter.

The outlook for **this year** is rather mixed. The continuation of economic growth, even at a lesser pace, should lead to moderate optimism among the firms. But the war and the sanctions on the one hand, and the serial, even if temporary, lockdowns in several Chinese economic hubs on the other, result in rapidly rising costs and further supply



chain problems, which can dampen the firms' willingness to invest. The fact that the number of housing construction permits skyrocketed in 2021 points toward an upturn in housing construction activity this year, but the rising costs and interest rates may limit this upturn. As for public investments, the low statistical base points toward growth but the coming fiscal consolidation measures may prevent positive growth. In sum, at present we expect a moderate investment growth of **4%** in 2022.

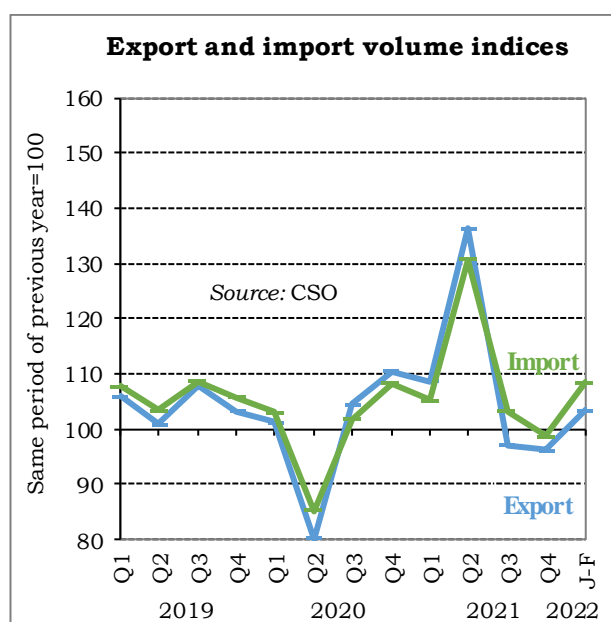
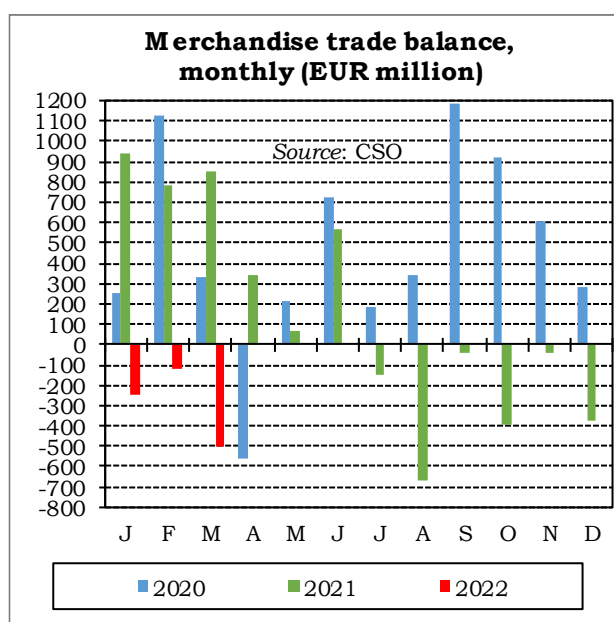


3.2.3. External trade

In the second half of 2021, external trade trends became distinctly less favorable than before. Merchandise export decreased in both the third and the fourth quarter, and while the negative difference between export and import growth somewhat narrowed in the fourth quarter, it still remained negative. This – and the substantial deterioration in the terms of trade – resulted in a substantial trade deficit in the second half of the year, while in 2021 as a whole the trade surplus amounted only 34% of the surplus in 2020 in euro terms, by far the lowest level in the past decade.

In the fourth quarter, only the volume of export of manufactured goods grew minimally, while the export of the other product goods decreased. As for the most important product category, machinery and transport vehicles, export dropped by 5.4%, a result of the protracted supply side bottlenecks.

Unlike in the third quarter, import also declined in the fourth quarter, due to the fall of the import of fuels and machinery-transport equipment, even if the import of food and



crude materials continued to grow.

At the start of this year, both export and import seem to begin to recover. But import volume grew by 8.5% in January-February, as opposed to the merely 3.4% in the case of export (export growth remained weak in the case of machinery and transport equipment), the trade balance remained negative. The preliminary nominal data suggests that export volume growth turned into decline in March while import might have come close to stagnation. In any case, the trade deficit hit EUR 0.9 billion in the first quarter, as opposed to the EUR 1.7 surplus in the same quarter of the previous year.

The *seasonally and calendar adjusted data* shows that – at least up to February – both export and import are on the rise but import is apparently ahead of export, and – due to the very steep rise in domestic consumption and the mounting supply side problems of the export sector – this trend is likely to continue in the near future. As a result, while at the moment we expect the annual trade balance to reach zero, a large downward risk remains.

3.2.4. Balance of payments and net external financing in 2021

The external financial position of Hungary became definitely more unfavorable in 2021: the deficit of merchandise trade and net incomes grew substantially, which could not be offset by the modest growth in the balance of services. As a result, the current account deficit rose to EUR 4.7 bn from the EUR 1.6 bn in 2020. Due to the strong rise of the euro-denominated GDP, the rise of the current account deficit-to-GDP ratio, from -1.1% to -3.1%, suggests a less dramatic deterioration.¹

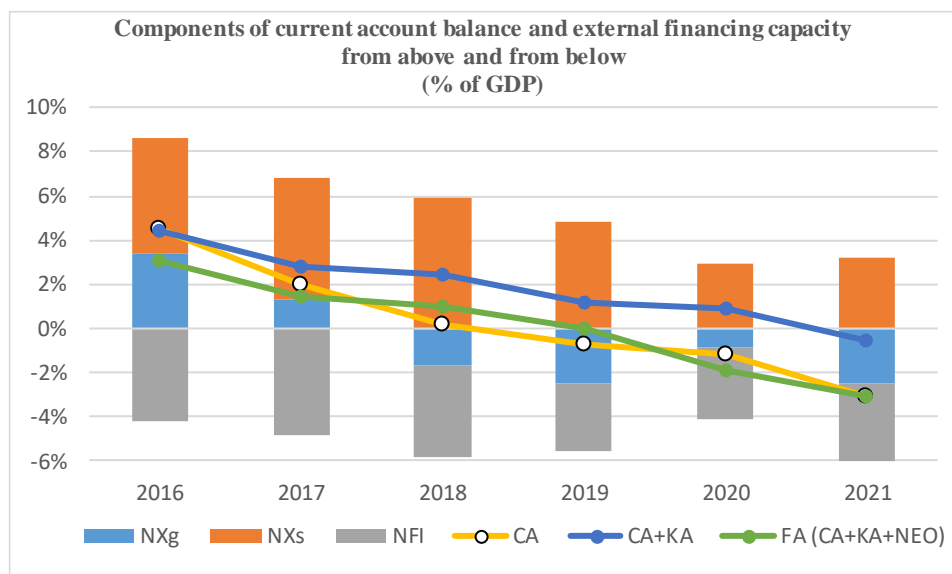
The extent and impact of the terms of trade deterioration

Out of the components of current account, merchandise trade is worth highlighting: here the rise of the deficit (from 0.9% to 2.5% of GDP) clearly a result of the worsening of terms of trade by 3.4% since in volume terms the export of goods (as shown in the *GDP statistics*) grew faster than the import of goods). Due to some improvement in the external trade of services, the total terms of trade deteriorated “only” by 2.9%. To give an idea about the impact, about one-third of the total 7.1%-strong GDP growth was eaten up by the losses suffered from the worsening terms of trade, hence the gross domestic income (the GDP adjusted for the terms of trade effect) which represents a real source for increasing consumption and investment, only grew by 4.6%.

The capital account surplus (that includes the transfer of resources for investments by the EU) grew to 2.5% of GDP from 2% in 2020. As a result, the combined balance of current and capital account – the external financing capacity calculated “from above” – deteriorated less than the current account, but still turned from a surplus of 0.9% of GDP in 2020 to a deficit (that is, external financing need) amounting to 1.6% of GDP in 2021. The balance of the financial account – the external financing capacity calculated “from below” – already showed deficit (amounting to 2% of GDP) in 2020, but in 2021 the deficit rose to 3% of GDP. In addition, the net FDI inflow as a percentage of GDP decreased from 1.7% in 2020 to 1.4% in 2021.

The chart below shows the changes in the main components of the balance of payments during the past six year.

¹ The terms „improvement” and „deterioration“ do not express a value judgement; they are used in the usual descriptive way (the decrease of deficit and increase of surplus is „improvement“ while their opposites constitute a „deterioration“).

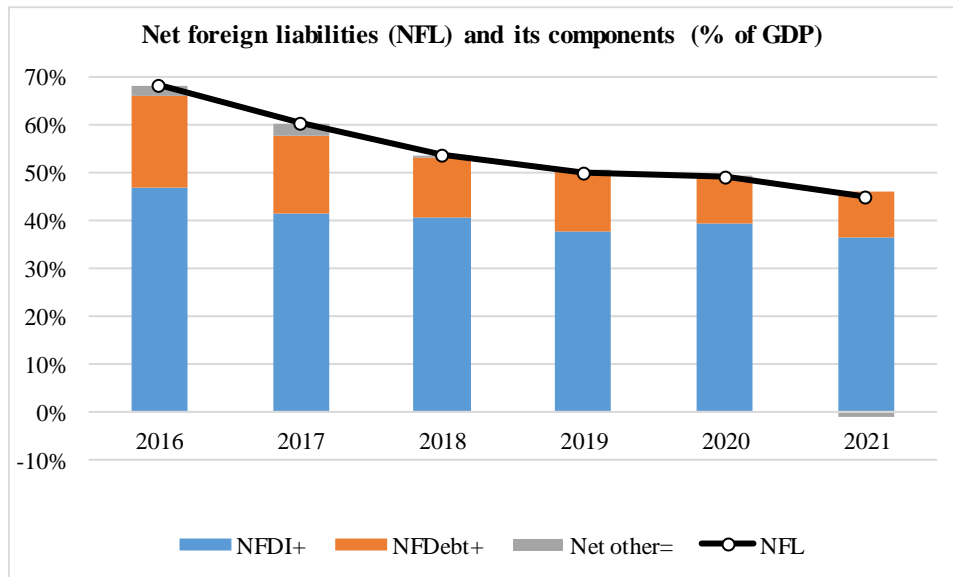


Source: NBH

Codes: CA (current account) = NXg (net export of goods) + NXs (net export of services) + NFI (net income); KA: capital account; CA+KA: external financing capacity from above; NEO: net errors and omissions; CA+KA+NEO: external financing capacity from below (financial account balance).

The most important information provided by the chart is that all three main components of the balance of payments – the current account (yellow line), the external financing capacity from above (blue line) and the external financing capacity from below (green line) – has been deteriorating virtually without interruption, since 2016, and the developments of 2021 are in line with this trend. Although it is still very difficult to assess the impact of the Russian military aggression against Ukraine on the global and the Hungarian economy, there is good reason to predict not just the continuation, but possibly even the intensification, of the unfavorable trends.

While the previous chart showed the changes in the balances of external economic transactions, the evolution of the net foreign liabilities is no less interesting. The net foreign liabilities (NFL – black line) has two main components, net FDI (NFDI – blue line) and net foreign debt (NFDebt – orange line). The chart below shows these indicators as a percentage of GDP.



Source: NBH

Codes: NFDI: net FDI inflow, NFDebt: net external debt

Until 2019, the downward trend in foreign liabilities was in line with the ongoing surpluses in the financial account (see the previous chart). In the subsequent two year, however, the continuing decline was only possible because the positive effect of the revaluation of stocks more than compensated for the negative effect of the deteriorating net transactions. But the revaluation effect is volatile (in Hungary, it usually tends to increase the stock of foreign liabilities in the longer term). And the fact that in 2021 the decrease of foreign liabilities was due to net FDI, rather than net debt, is far from reassuring.

In 2022, the current account deficit may even exceed 5% of GDP while the combined deficit of the current and capital accounts may exceed 3%.

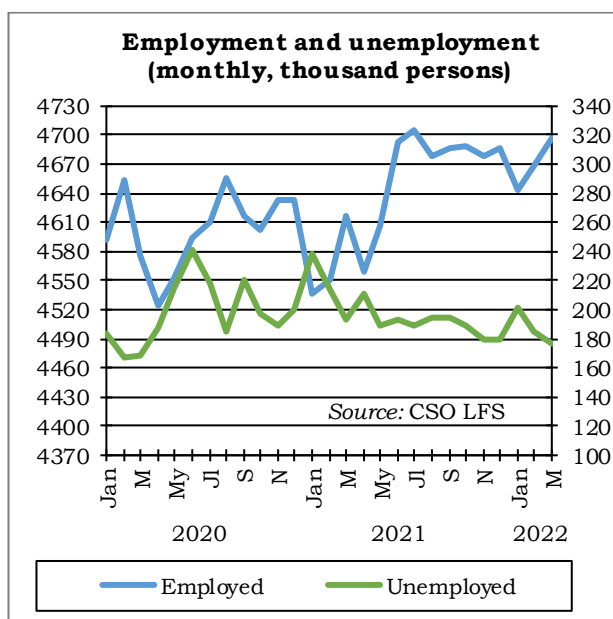
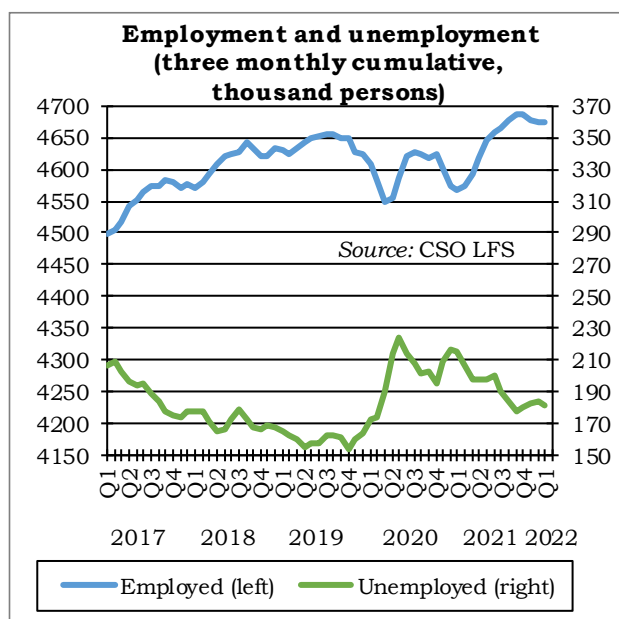
3.2.5. Employment, unemployment

According to the *labor force survey* (LFS), the year-on-year improvement of the employment situation ongoing since the second quarter of 2021 has continued in early 2022. The annual growth rate of the *number of employed* accelerated to 1.4% in the fourth quarter of 2021 and 2.3% in the first quarter of this year. This is partly due to the low statistical base: the end of 2020 and the start of 2021 was marred by the second and third waves of the epidemic, along with the accompanying movement restrictions. In any case, much of the recorded employment growth is still a result of the expansion of the domestic primary labor market. At the same time, the number of public workers continued to decline but on the other hand, the number of persons employed abroad has been growing at an accelerating pace (by 19.4% in the first quarter). It is worth noting that in the business sector the number of vacancies in the second half of the last year came close to the average level of the year 2019.

The *unemployment rate* reached 3.8% by last August and hovered around 3.6-3.8% since then. In the first quarter of 2022, it stood at 3.7%. This apparent stagnation is at least partly a result of seasonal effects – the seasonally adjusted unemployment rate has been showing a more consistent downward trend.

It is also noteworthy, however, that the number of *employees* kept growing at a slower pace than the total number of employed – even if the difference decreased by the first quarter of this year. On the other hand, the number of individual entrepreneurs/self-employed is still expanding at a double-digit pace.

The prospect of further improvement became murkier because of the rising statistical base and, more importantly, by the outbreak of the war. At the moment we expect a decrease of the yearly unemployment rate from 4.1% in 2021 to **3.7% in 2022**.



3.3. Fiscal, monetary and financial developments

3.3.1. Fiscal developments

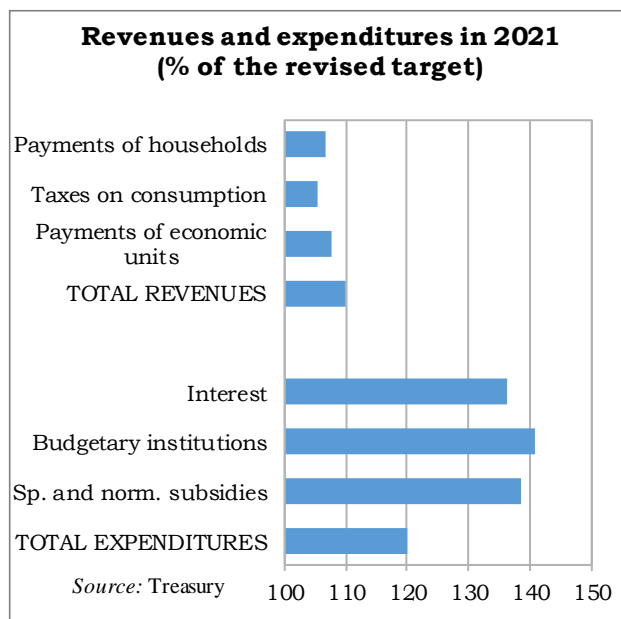
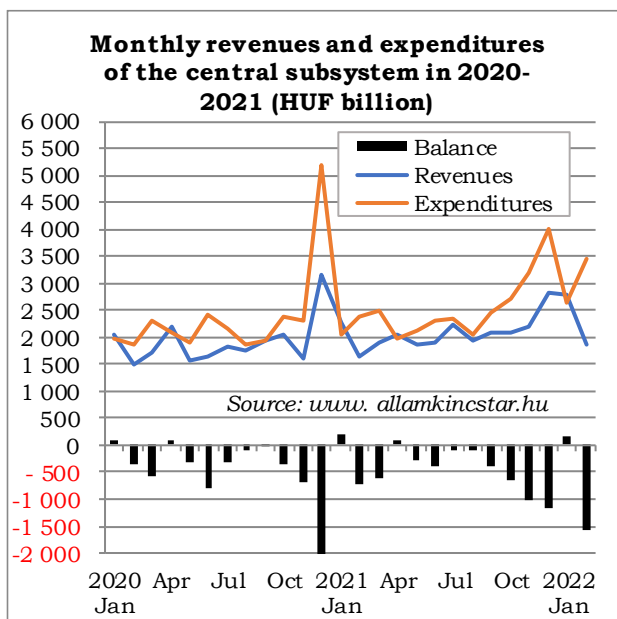
3.3.1.1. Fiscal developments in 2021

In 2021 the cash flow deficit amounted to HUF 5.1 trillion, as opposed to the original target of HUF 1.5 trillion set in May 2020 and the amended target of HUF 2.3 trillion adopted in May 2021. The actual deficit was way more than twice the revised target and more than thrice the original target set in the budgetary act, even though the revenues surpassed the target. But the jump in expenditures more than offset the revenue gains.

The revenues of the central subsystem surpassed the revised target – in part due to the higher-than-expected economic growth and in part because of the “surprise inflation” – by about 10%. The payments of economic units surpassed the target by 7.5% (and the corporate income tax revenues by almost 25%), while revenues from the taxes on consumption and from the payments of households exceeded the targets by 7.5% and 6.8%, respectively.

The the same time, fiscal expenditures exceeded the amended target by 20% (and the 2020 expenditures by 6.8%). While the budgetary act originally envisaged a decrease of expenditures from its 2020 level, they actually increased substantially. Again, a smaller part of the overshoot is due to the higher inflation, for example the annual pension raise needed to be complemented in May and November to achieve parity with the actual inflation rate. The one-off “pension premium”, paid in November as well, was an additional government decision that raised pension expenditures further.

Interest expenditures also exceeded the target, which can be explained by the substantial growth of outstanding fiscal debt (due to the loans taken as a response to the suspension of EU transfers) and by the general rise in government yields. The Hungarian government has not received advance payments from the EUR 7.2 billion-strong Recovery and Resilience Fund, amounting to 30% of the total allotment, because the government did not provide sufficient guarantees that the EU subsidies will be



spent free of corruption. Besides, the government refused at that time to make use of the preferential credit line (amounting to EUR 9.3 billion). Borrowing a similar amount from the capital markets instead would mean a much higher interest rate cost for the government.

The spending on chapter-administered appropriations also exceeded the target by far. But it is almost impossible to precisely track the differences between the targets and actual outcomes in the case of individual budget lines since – according to the calculations of the Portfolio news site – the government has moved funds between various budgetary chapters and expenditure programs 85 different times, in the amount of HUF 3,354 billion cumulatively.

In sum, the cash-flow deficit of the central budgetary subsystem (that does not include the local governments) amounted to 9.3% of GDP, even though the GDP itself surpassed the target specified in the budgetary act substantially. The budgetary act envisaged a real growth rate of 4.3% and a GDP deflator of 3.7% – instead, both real GDP growth and the deflator was as high as 7.1%, resulting in a nominal GDP higher by almost 10% than originally expected.

According to the CSO, the accrual-based ESA deficit was much lower than the cash-flow deficit: it amounted to 6.8% of GDP, even though the sizeable PIT refund for families paid in early 2022 is debited on the year 2021. So, this expenditure will not affect the accrual-based fiscal balance in 2022. The ESA bridge corrects for interest payments, EU transfers and funds transferred by the government to state organizations but not yet spent by them.

3.3.1.2. The 2022 budget

In the first three months of this year, the deficit reached HUF 2.3 trillion, 73% of the deficit target for the whole year. (In January, the fiscal balance still was slightly positive.) February alone saw an enormous deficit of HUF 1.6 trillion, due to the previously announced welfare spending measures. The PIT refund for families with children amounted HUF 680 billion, the cost of the 13th month pension was HUF 330 billion, the cost of the “firearms money” was HUF 250 billion (the net cost is HUF 150 billion). These items themselves increase the cash-flow deficit by 2 percentage points (calculated with the already raised GDP target). At the same time, other costly projects are going ahead at full speed, the tourism appropriation (that was unwarranted even before), subsidies for churches and the sport sector, spending under the heading of the Modern Cities program and other state programs, to the amount of several hundred billion forints. Even though it cannot be gleaned from the monthly report of the ministry of finance exactly how many was spent on the particular programs, the effect of the deferment of investment projects amounting to HUF 755 billion, declared in December, is not really discernible. The question is, how the fiscal policy will be able to consolidate the severe imbalance accumulated in February-March and achieve an acceptable deficit-to-GDP ratio by the end of the year.

The budgetary bill for 2022 was introduced in May 2021 and adopted by the Parliament in June – at a time when even the economic outcome in 2021 was unknown. Due to

the turbulent events since then, by now virtually no figure is in line, even approximately, to the numbers stipulated in the law.

The budgetary act set the gross sum of expenditures at HUF 25,352 billion and the expenditures at HUF 28,505 billion, which would mean a deficit of HUF 3152 billion, a significant decrease from 2021 and a deficit-to-GDP ratio of 5.9% (calculated with a GDP growth projection of 5.2% and a deflator projection of 3.8%).

The Fiscal Council said in its assessment of the budget bill that in the prevailing economic situation a faster deficit reduction would be possible because there is no apparent need for further economic stimulus by fiscal means. Hence, bringing the deficit closer to 3% of GDP would be more optimal. Other expert opinions, including the Kopint-Tárki in its 2021/2 economic report, also argued for a lower deficit.

In December 2021, the government announced that it reduced its 2022 deficit target from 5.9 to 4.94% of GDP. It declared that the growth data shows the success of economic restart and in 2022 the GDP may grow by 5% even with less expansive fiscal policy. This growth projection did not exactly support a lower deficit target since the original growth projection of the budgetary act was 5.2% as well. The difference was in the *nominal* level of GDP: although in December the expected inflation was not yet close to 10% in 2022 and especially the expected GDP deflator was not yet above 10%, it was already clear that the nominal GDP in 2021 will be significantly higher than the macroeconomic projection upon which the 2022 budget had been based. From that higher base will the nominal GDP expand further in 2022, again amid higher-than-expected inflation.

The nominal GDP was HUF 55 trillion in 2021 while the 2022 budgetary act envisages a nominal GDP of only HUF 56.4 trillion for this year, with a real growth of 5.2% and a deflator of 3.8%. Now we know that a GDP deflator of 10-12% is actually an optimistic scenario. At the same time, the growth prediction of 5.2% now seems an overshoot, in the light of the still incalculable consequences of the Russian attack against Ukraine. Now the experts tend to predict an economic growth rate of 3-4%, with great uncertainty. On the whole, a nominal GDP of about HUF 63 trillion seems likely in 2022, which provides considerably wiggle room for the government.

The higher price index reduces the deficit-to-GDP ratio in two ways. First, the higher prices pump up nominal revenues, primarily those from the taxes on consumption. Second, it increases the nominal value of the denominator – the GDP – thereby reducing the value of the coefficient. True, some inflation-linked items exist on the expenditure side as well (e.g. pension) and items linked to the level of debt (e.g. interest expenditures), but in the case of several expenditure lines the government has a choice whether or not to increase the appropriations in line with the inflation.

Now let us see how all this affects the fiscal deficit in the light of the 2022 fiscal data so far.

The revenue inflow can be estimated, albeit with a large margin of error. The consumption tax revenues are likely to surpass the target by HUF 6-700 billion, assuming an inflation rate of nearly 9% and a volume growth of 3,5-4%. The payments of households are likely to exceed the target despite the tax refund. The payments of economic units may surpass the target by HUF 100-200 billion.

These items affect the cash-flow deficit. It needs to be kept in mind that on an accrual basis, the tax refund is charged on the previous year, thus leaves the deficit of this year unaffected. As a result, the ESA deficit will be lower in 2022, even if the current financing need remains the same.

So the revenue side provides some wiggle room for the budget, even if it is indeed a mixed blessing since the high inflation may at the same time disrupt the fabric of the economy and even reduce consumption growth, which may lead to lower VAT revenue.

The expenditure side is marred by larger uncertainties, even if the government – due to the fiscal constraints – probably will not act the same way as in the past couple of years when the inflation-induced additional incomes were distributed among beneficiaries with friendly ties to the government in the form of non-refundable state subsidies. Even if that does not happen in 2022, several threats on the deficit outlook remain.

One of these is the problem of the EU subsidies. The Hungarian government has been not able so far to reach an agreement with the EU about the conditions linked to the resources allocated to the Recovery and Resilience Fund, the guarantees regarding their transparent use. If no agreement is reached by the end of this year, the fiscal situation may deteriorate dramatically since the government is already prodigiously spending on the projects under the aegis of the RRF program. By the end of March, the cumulative sum of expenditures of EU programs reached almost HUF 1.2 trillion while the financial backing of these projects by the EU is still uncertain.

The other risk is the fast rise in the costs of fiscal debt. In the first three months of 2022 the fiscal debt rose by HUF 1.6 trillion, as opposed to the HUF 4 trillion in the whole last year. If, additionally, we consider the rising government yields (a global phenomenon but especially drastic in the case of Hungary), the dramatic rise of interest costs is definitely in the cards. The budgetary act envisaged an interest expenditure slightly lower than in 2021, but in fact the actual interest expenditures may even come close to 3% of GDP.

All in all, if the government refrains from throwing away free money during the rest of the year, reduces state investment expenditures and thus manages to keep the monthly deficits at an average HUF 250-300 billion, it may get through the year with a cash-flow deficit of 7% of GDP and an ESA deficit of 6,5%.

3.3.1.3. State debt

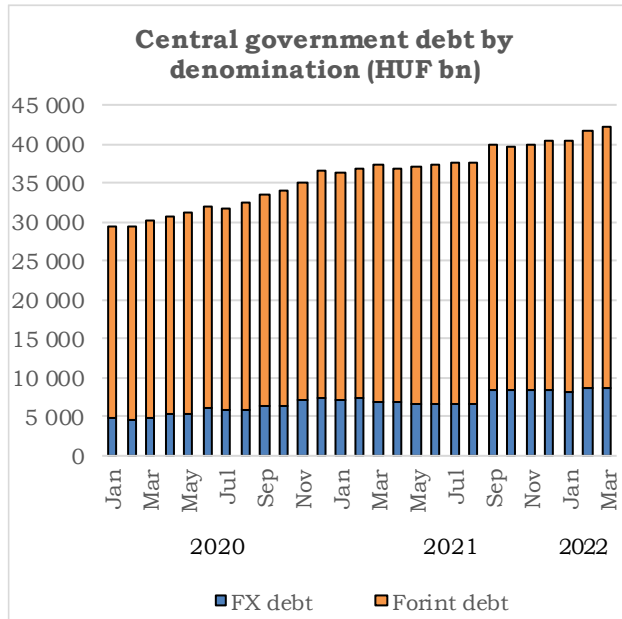
According to the Government Debt Management Agency (ÁKK), the fiscal debt rose from HUF 36.7 trillion at the end of 2020 to HUF 40.8 billion at the end of 2021. The 4 trillion increase came for a HUF 2.9 trillion increase of forint-denominated debt and a HUF 1.1 trillion increase in FX debt. Forint debt rose primarily due to the net sales of government bonds (HUF 2 trillion) while the stock of discount treasury bonds slightly decreased, and the stock of retail securities continued to grow.

The rise in FX debt was almost entirely due to new FX issues – the revaluation effect was minimal because the euro exchange rate was approximately the same at the end of 2021 (369 EUR/HUF) as at the end of 2020 (365 EUR/HUF). The FX bond issue in September 2021 was necessary because of the EU subsidies of EUR 4.5 billion that

was expected but did not materialize in 2021. The share of FX debt within total debt rose from 19.9% to 20.6% between end-2020 and end-2021.

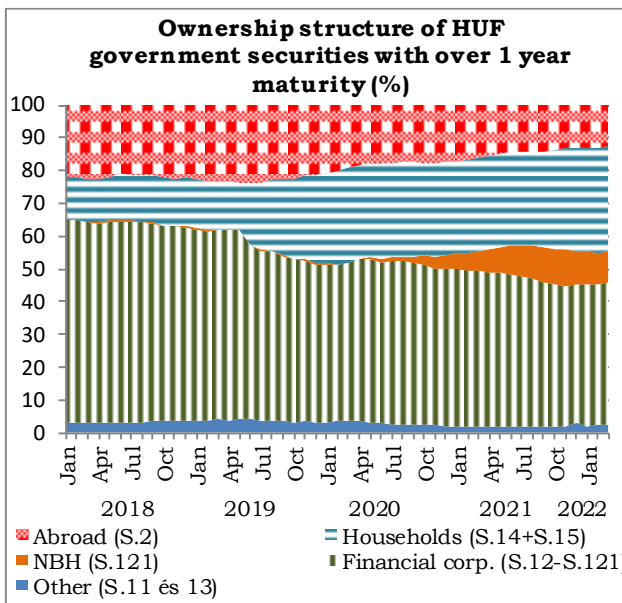
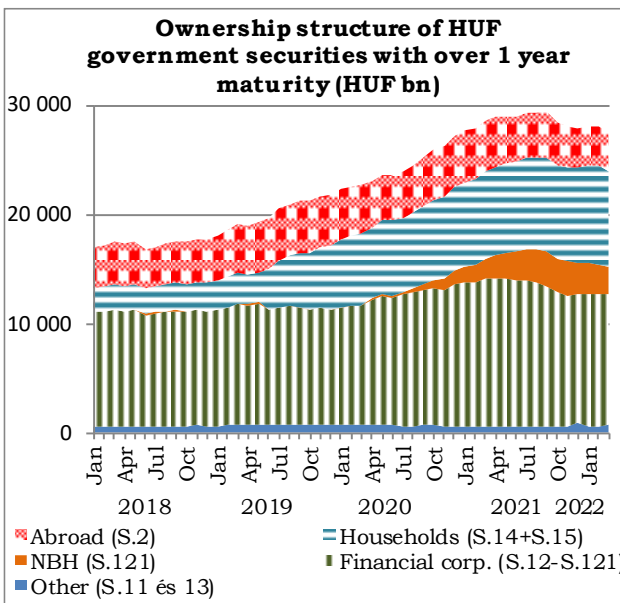
In 2021 gross fiscal debt decreased to 74.5% of GDP – 76.8% including the Eximbank – from the respective ratios of 78.1% and 80% at the end of 2020. The high inflation had a “beneficial” effect on the debt-to-GDP ratio as well.

In the first three months of 2022, fiscal debt rose considerably. The growth actually took place in February and – to a much lesser degree – in March, after a slight decrease in January. The increase in February was almost exactly equal with the cost of the one-off welfare expenditures in that month: the measures under question *were entirely debt-financed*. In February, forint debt rose by HUF 740 billion while FX debt rose by HUF 500 billion.



As for the ownership structure of government papers, it is noteworthy that in the case of forint-denominated papers maturing over a year (that make up 76% of all government securities) the share of households continued to rise and reached 32% in February.

The asset purchase program of the NBH was initiated in May 2020 and the stock of assets reached its peak level (HUF 3.1 trillion, 11% of all forint-denominated government securities with maturities over a year) in November 2021. Since the central bank decided to “gradually phase out” the program in August 2021 and in December it announced its termination, both the forint level and the share of outstanding assets have been on a decrease after last November, reaching 9.3% by March 2022.



The share of government securities with maturities less than one year was steadily decreasing in the past years, from the peak level of 18-20% in 2018 to about 5% by now. Most of them are retail securities.

It is also worth noting that among the owners of the FX denominated government securities the dominance of foreign owners has decreased somewhat. Also, the share of households has been rising and surpassed 4% in February. Also, domestic non-financial firms buy more and more of these securities, even if their share is still negligible.

3.3.2. Inflation

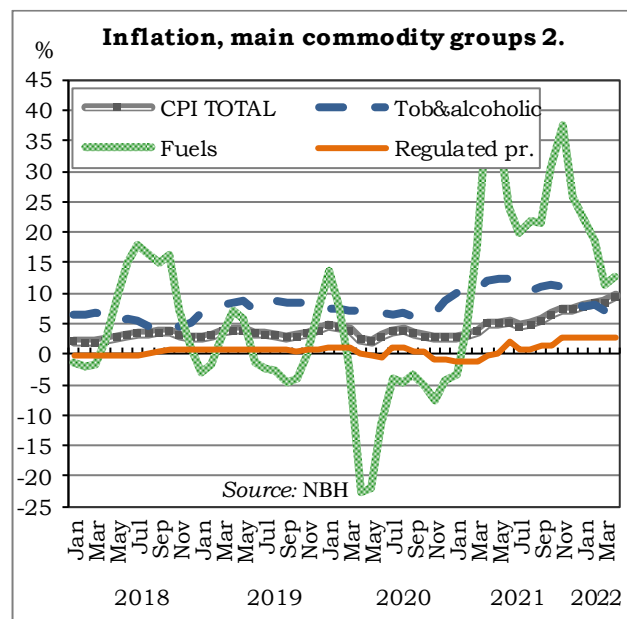
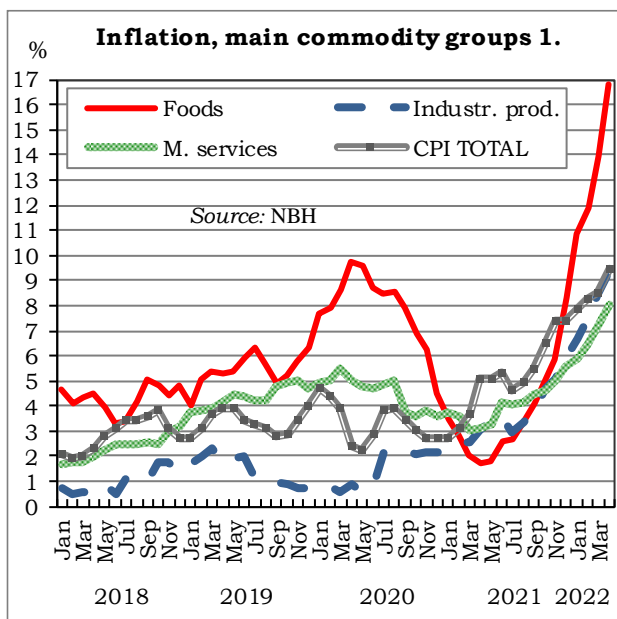
In 2021 the annual inflation rate was 5.1%. The last quarter saw an acceleration, with the year-on-year price index reaching 7.4% in December and rising further afterwards, to as high as 9.5%, by April 2022.

The price hike is in line with the global trends. The recovery from the COVID crisis brought fast growth and demand expansion while the recovery of the supply chains remained partial. Disturbances in the supply of parts, logistical problems, bottlenecks in the production of certain inputs led to widespread shortages, resulting in a fast rise in prices. The most severe disbalance occurred in the oil market but there are shortages in the case of many other commodities as well. The situation is difficult in agriculture, a sector vulnerable to the prices of many inputs based on natural gas and crude oil, for example, fertilizers.

The Russian aggression against Ukraine further exacerbated the problems, especially regarding grains, since Russia and Ukraine together make up about one-third of global grain exports. Since the outcome of the fight is uncertain and a protracted war seems likely, the future consequences on global food prices are incalculable.

The high inflation rate in Hungary in 2021 was primarily caused by rising food and fuel prices but by the end of the year prices rose at a fast pace in almost every group of products and services. In the first half of 2021, mostly fuel prices rose at a galloping pace (partly due to the low statistical base, i.e. the extremely low fuel prices in 2020), while in the second half of the year, food prices began skyrocketing. The latter is especially important since food products constitute about 27% of the consumer basket. By the last quarter of 2021, however, the price indexes of industrial products, alcoholic and tobacco products also gathered momentum (in the case of the latter, an excise tax hike contributed to the price hike). Unlike in the previous years, the prices of market services also grew at a significant pace in 2021, which is probably connected to the fast wage growth.

The further acceleration of inflation in the first four months of 2022 indicate that the repricing did not stop in January. Those producers and traders that did not responded



– or only responded hesitantly – to the new high-inflation environment, catch up afterwards. The inflation expectations remain high, which in itself is an additional inflationary factor besides the heavily rising input prices.

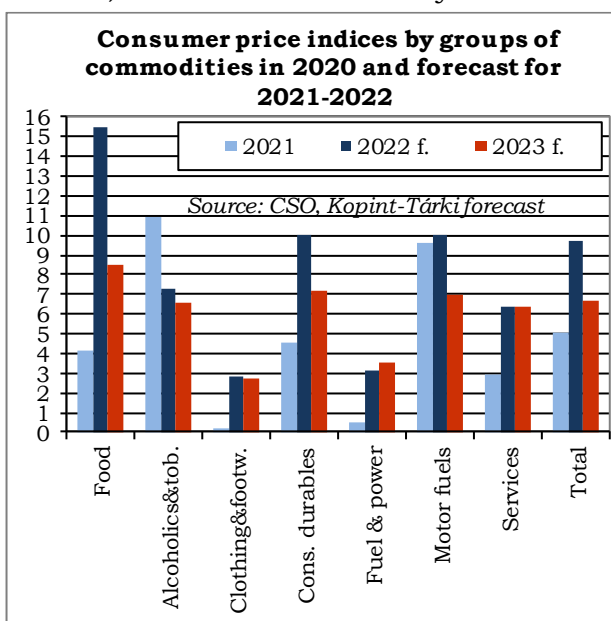
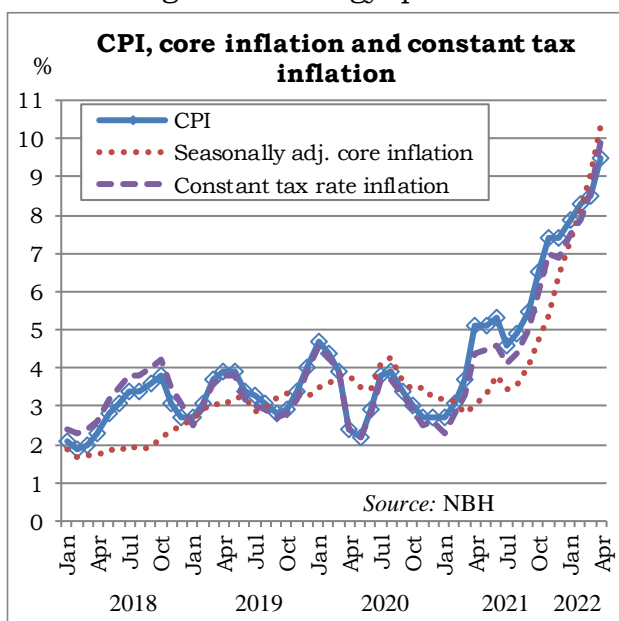
In January-April 2022, food and fuel prices soared at the highest rate. As for the month-on-month rates, food prices stood out with an average rate of 2.6% in the four months. The agrarian industry experts expect further food price increase since the prices of most products are not affected not just by the post-Covid effects and the high oil price but also by the Russian invasion of Ukraine. Due to the introduction of regulated prices, the month-on-month fuel price index remained relatively mild – the high year-on-year rates are mostly due to the carryover effect of the price hike in 2021.

Several other factors contribute to high inflation as well in 2022. After the spring elections, it cannot be avoided to address the problem of fuel prices because the present price cap is not sustainable in the long run. The price cap predominantly affects the operators of petrol stations, many of which have already went bust. It is not known so far when the government will let the global acquisition price be reflected in the consumer price, and whether the price cap will be abolished in one step or gradually, or even some price subsidy will remain in force. The eventual decision may affect the annual price index by several tenth of percentage points.

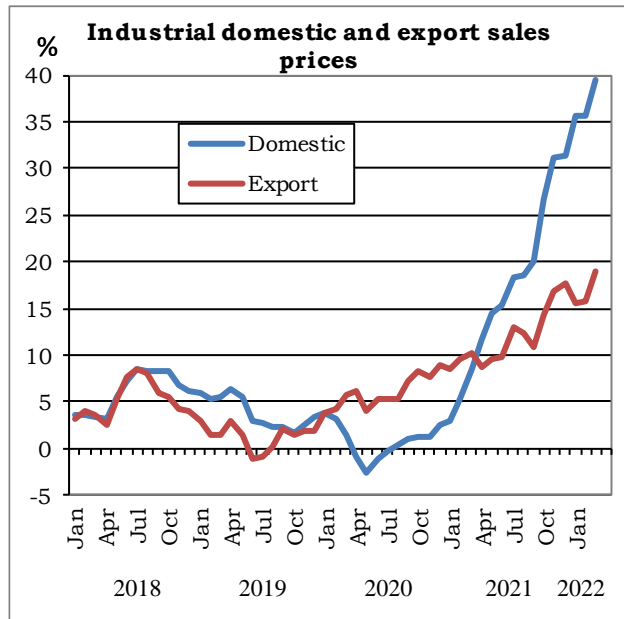
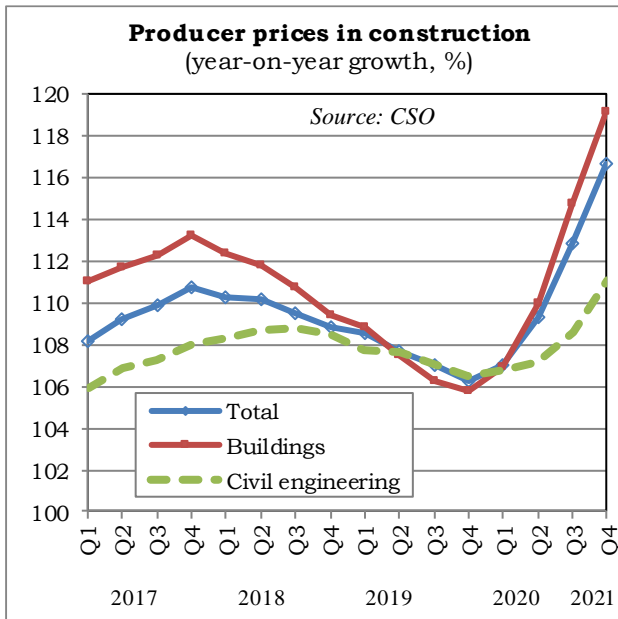
The phasing-out of the price cap on the 6 covered food product, on the other hand, will not heavily affect the CPI since the introduction of this price cap itself did not substantially lowered the price index, due to the low weight of the products under question and the fact that the price cap had only modest cheapening effect.

It is worth noting that the core inflation rate, that remained below the headline rate by 1-2 percentage points in 2021, surpassed it in March and April 2022. This shows that the fast rise of prices has spread to virtually every groups of products and services.

At present, we expect an **annual inflation rate of 9,7% in 2022**. In this prediction, the possible abolition of the energy and fuel price cap is incorporated only to a small extent since we do think it likely that the government will let the global prices be reflected in the domestic consumption prices only very gradually. At the same time, the present low level of regulated energy price is unsustainable, due to the necessity of a fiscal



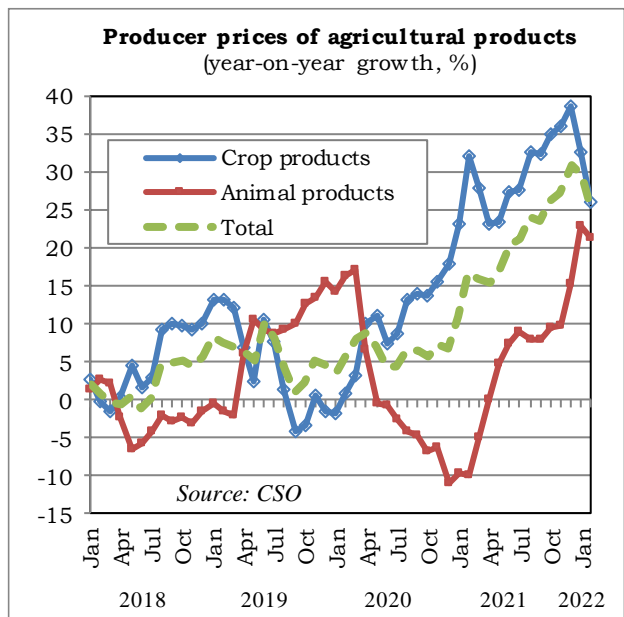
consolidation (see our previous section). The fixed prices cause such severe losses for the service providers that the government sooner or later will have to give them compensation.



The fast rise of the industrial, agricultural and construction producer price indexes suggests the continuation of high inflation. The producer price index of the construction sector has been rising at a steep pace since the second half of 2021 – in the last quarter of 2021, construction prices were more than 16% higher than one year earlier. In 2022, according to construction sector experts, this trend will continue, due to both wage growth and the rising prices of housing materials.

Industrial producer prices also grew by about 21% between the last quarter of 2021 and the same period of 2020, with further acceleration in the first quarter of 2022. Especially domestic sales prices skyrocketed (with a year-on-year rate of 30% in the last quarter of 2021 and 37% in the first quarter of 2022).

Agricultural producer prices climbed 27.3%, on average, in January-February 2022. The prices of agricultural inputs soared – more specifically, the world price of fertilizers tripled in the second half of 2021. Thus, the trajectory of input prices points toward a further rise in the agrarian sector.



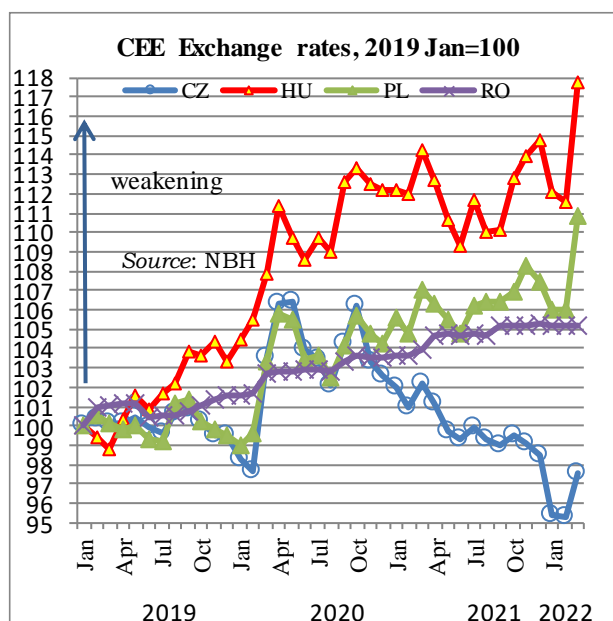
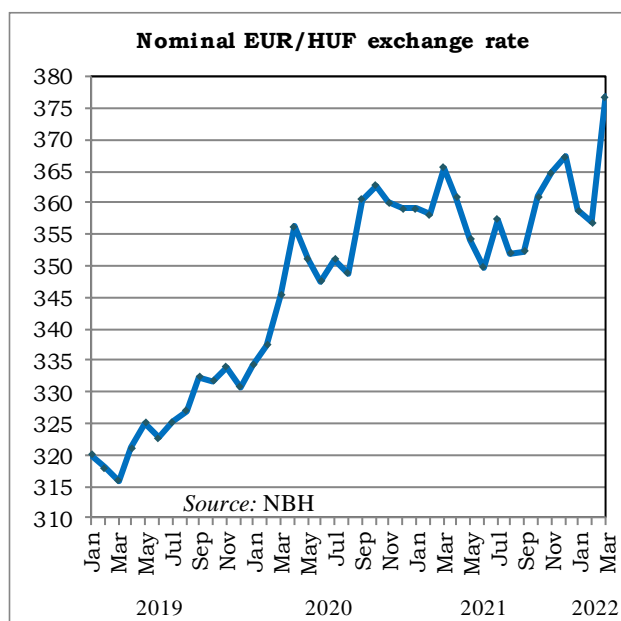
3.3.3. Financial and capital markets

Central bank policy rates and exchange rate

During the course of 2021, the forint-euro exchange rate did not change substantially: in December 2021, it was only 2.3% weaker (at 367,5 EUR/HUF) than one year earlier. In 2022, however – after some strengthening in January-February – a steep depreciation started from March, due to the Russian aggression. The average exchange rate in March was 377 EUR/HUF but in early March at a point it came close to 400 EUR/HUF. Since then, some consolidation has taken place – the exchange rate mostly fluctuates between 370-380 EUR/HUF but the exchange rate remains highly volatile. The currency market strongly reacts to any news about monetary policy changes or war-related events.

The central bank responded to the rising consumer price index (and partly to the forint weakening) by raising the policy rates. During the three months following the start of the tightening cycle in June 2021 with raising the reference rate by 30 basis points three times in a row, the forint temporarily strengthened below 350 EUR/HUF. After that, however, the subsequent two rate hikes surprisingly were smaller (only 150 basis points each), despite the acceleration of inflation. Seeing the renewed forint weakening and the worsening of inflation, the central bank raised the reference rate again by 30 basis point in November and December. What is more, the rate hikes became steeper in 2022: 50 basis points in January and February and as much as 100 basis points in March and April. The latter was in part a reaction to the temporary but dramatic forint weakening in late February and early March and in part a response to the inexorable acceleration of inflation. The forint exchange rate, after short-lived strengthening spells, generally reacted only moderately to each rate hike.

In the meanwhile, the reference rate has lost most of its role and the interest rates on overnight deposits and overnight loans have become the dominant monetary policy instruments. These two interest rates were also raised by 100 basis points in March and April 2022. As a result, the O/N collateralized loan rate reached 8.4% while the O/N deposit rate rose to 5.4%, the same as the reference rate.



At the same time, the central bank raised the one-week deposit rate above the reference rate. By the end of April 2022, the fixed interest rate of one-week deposit tender reached 6.45%, from 4% in January.

The central bank proclaimed that the reference rate would catch up in the near future to the one-week deposit rate. Until that, mostly the latter instrument provides the means of dealing with the short-term risks in a flexible way. The central bank cites the rising inflationary expectations and emphasizes the need of the continuation of monetary tightening. Hence we expect further rate hikes by 100 basis points in the coming months.

Since the start of the Russian invasion, the forint weakened roughly the same degree as the Polish zloty. The Czech koruna weakened at a lesser extent than the other two regional Visegrad currencies. On the other hand, the Romanian leu has remained stable because the Romanian central bank manages the exchange rate with continues intervention, which is made feasible by the high level of currency reserves.

Government yields

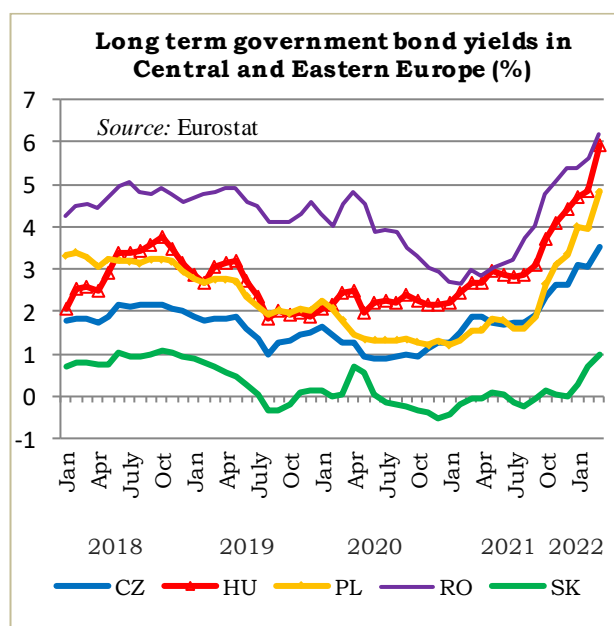
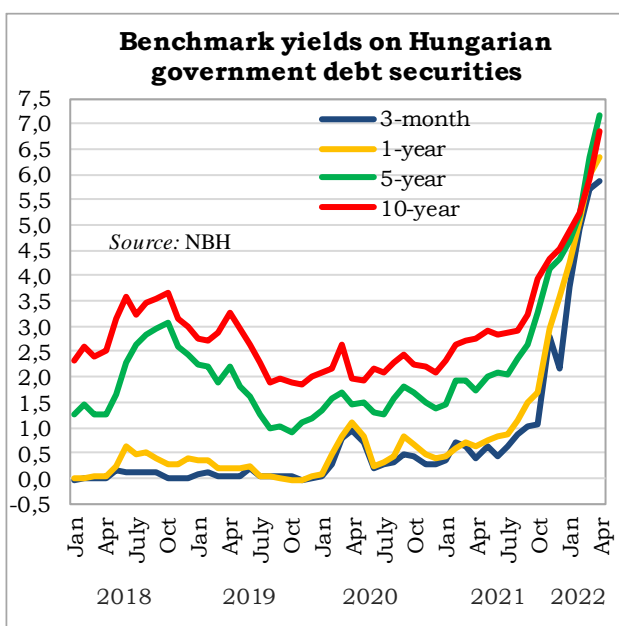
The rate hike started by the NBH in Jun 2021 and the gradual phasing-out of government security purchases already led to an increase of yields even before the Russian invasion. The gigantic fiscal deficit and the government's massive financing need pointed to further yield increases in the first two months of the year. The impact of the Russian invasion TOPPED THAT as it sapped the investors' risk appetite, especially regarding the relatively risky emerging markets.

In the first months of 2022, yields rose at a steep pace at every maturity. The yields of short-term securities rose the most, leading to an anomalous convergence of yields at different maturities. The yield curve became almost flat. By early April the situation improved, due to the faster rise of long yields.

By the end of April, the three-month government yield rose to 5.86% (thus more than doubling from the 2.16% in December 2021) while the one-year yields reached 6.32% (from 3.57%, an 80% growth rate). In terms of growth rate, long yields increased less drastically but still the rise was substantial. The 5-year yield reached 7.15% and the 10-year yield hit 6.86% by the end of April: the respective growth rates since last December were 52% and 41%.

While the rise of 10-year yields in Hungary is roughly in line with the yield trajectory at a European or global level, it is unusually high compared to other countries within the region. The eurozone member Slovakia could sell 10-year government bonds at 0.99% as late as in end-March, while the 10-year average yield stood at 3.53% in Czechia and 4.83% in Poland. Only the Romanian long yield keeps exceeding the Hungarian yield, but the gap markedly narrowed down during the first three months of 2022.

The rapid rise of government yields poses a severe threat to the Hungarian fiscal position and exacerbates the already growing burden of servicing of public debt.



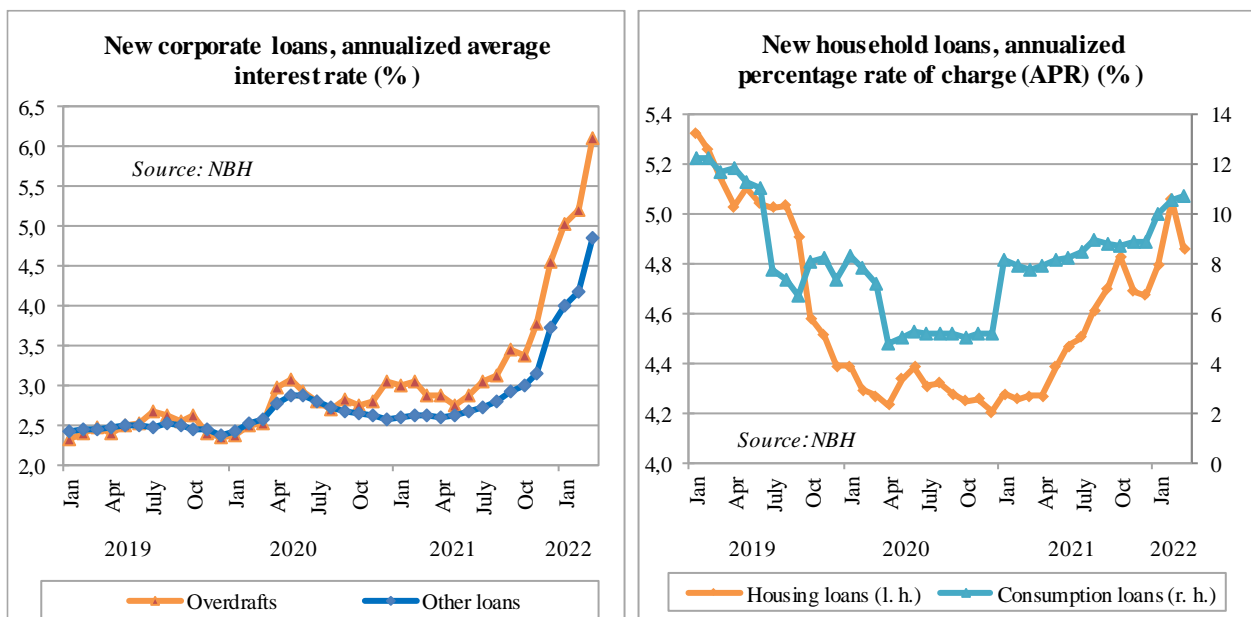
3.3.4. Interest rates of corporate and household loans

According to the NBH data, the rising trend in interest rates that started in mid-2021 has already a strong impact on corporate loans and has been spilling over to household lending as well.

The steep rise of the interest rates of *overdrafts* has an especially biting impact on working capital lending to firms: from the 2.99% in January 2021, the average overdraft interest rate soared to 6.11% by March 2022. As for *other corporate loans*, much of which is used for investments, the interest rates increased somewhat less drastically, from 2.61% in January 2021 to 4.84% in March 2022. In the case of other loans with maturities over 5 years, the interest rate was 4.89% in March while the average interest rate of long-term loans with maturities up to 5 years stood at 4.54%. But interest rates of loans for non-financial enterprises rose at every maturity.

The annualized percentage rate of charge (APR) of *consumption loans* for households also significantly rose and exceeded 10% in February and March. The APR of *housing loans* is still significantly lower, but the trend is clearly rising and in February the rate even temporarily climbed above 5%, as opposed to the 4.2% recorded in January 2021. The sum of monthly new housing loan placements was steadily above HUF 100 billion during the past 12 months, with a clearly rising share of subsidized loans (in March 2022 the share was as high as 47%, as opposed to the 10% at the start of 2021).

The average duration of initial rate fixation of new housing loans is steadily increasing: it reached 180 months – that is, 15 years – in March 2022. In the past years, the NBH repeatedly warned households about the importance of lengthening the time of rate fixation, to be protected from the adverse effects of the likely rise of interest rates in the future.



Economic Indicators 2014-2021, forecast 2022-2023 (percentage change)

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022* | 2023* |
|--|------|------|-------|-------|------|-------|------|------|-------|-------|
| GDP AGGREGATES, ANNUAL REAL GROWTH | | | | | | | | | | |
| GDP total | 4.2 | 3.7 | 2.2 | 4.3 | 5.4 | 4.6 | -4.7 | 7.1 | 4.0 | 4.0 |
| Domestic Demand | 5.3 | 2.0 | 1.8 | 5.7 | 7.1 | 6.8 | -2.7 | 5.6 | 4.6 | 3.6 |
| Private Consumption | 2.2 | 3.6 | 4.1 | 4.5 | 4.2 | 4.5 | -2.0 | 4.3 | 5.6 | 3.5 |
| Public Consumption | 8.9 | 1.3 | 0.5 | 3.8 | 4.2 | 6.4 | 5.2 | 4.8 | 2.0 | 0.0 |
| Gross Capital Formation | 12.5 | -1.6 | -3.5 | 10.1 | 15.9 | 12.1 | -7.0 | 8.7 | 3.5 | 5.2 |
| of which: Fixed Capital Formation | 12.2 | 4.9 | -10.6 | 19.7 | 16.3 | 12.8 | -6.9 | 6.0 | 3.7 | 5.2 |
| Export | 9.2 | 7.4 | 3.8 | 6.5 | 5.0 | 5.4 | -5.9 | 10.1 | 4.1 | 5.0 |
| Import | 10.9 | 5.7 | 3.5 | 8.4 | 7.0 | 8.2 | -3.5 | 8.2 | 4.7 | 4.6 |
| PRODUCTION INDICES | | | | | | | | | | |
| Agricultural Production (gross) | 11.4 | -2.5 | 9.4 | -4.1 | 2.6 | -0.1 | -2.4 | -2.1 | 0.0 | 0.0 |
| Industrial Production | 7.7 | 7.4 | 0.9 | 4.6 | 3.5 | 5.6 | -6.0 | 9.6 | 4.0 | 4.5 |
| Retail Trade Volume | 5.2 | 5.8 | 4.8 | 5.6 | 6.7 | 6.3 | -0.1 | 3.5 | 4.5 | 3.3 |
| EMPLOYMENT, EARNINGS | | | | | | | | | | |
| Number of Employed | 4.8 | 2.7 | 3.4 | 1.5 | 1.3 | 0.8 | -0.9 | 0.7 | 0.8 | 0.4 |
| Unemployment Rate | 7.5 | 6.6 | 5.0 | 4.0 | 3.6 | 3.3 | 4.1 | 4.1 | 3.7 | 3.5 |
| Gross Nominal Wages | 3.0 | 4.3 | 6.2 | 12.9 | 11.3 | 11.4 | 9.7 | 8.7 | 14.5 | 9.0 |
| Net Real Wages | 3.2 | 4.4 | 7.4 | 10.3 | 8.3 | 7.7 | 6.2 | 3.4 | 4.4 | 2.2 |
| PRICES, EXCHANGE RATES | | | | | | | | | | |
| Consumer Price Index | -0.2 | -0.1 | 0.4 | 2.4 | 2.8 | 3.4 | 3.3 | 5.1 | 9.7 | 6.7 |
| EUR/HUF Exchange Rate (annual average) | 309 | 310 | 311 | 309 | 319 | 325 | 351 | 359 | 370 | 370 |
| EUR/USD Exchange Rate (annual average) | 1.33 | 1.11 | 1.11 | 1.13 | 1.18 | 1.12 | 1.14 | 1.18 | 1.12 | 1.13 |
| Short-term Interest Rates (3M), eop | 1.43 | 0.80 | 0.06 | -0.01 | 0.00 | -0.01 | 0.28 | 2.16 | 6.0 | 6.0 |
| Long-term Interest Rates (10Y), eop | 3.60 | 3.33 | 3.16 | 2.02 | 3.01 | 2.01 | 2.08 | 4.51 | 6.5 | 6.5 |
| BALANCE OF PAYMENTS | | | | | | | | | | |
| Current and Capital Accounts, % of GDP | 4.9 | 6.9 | 4.5 | 2.8 | 2.4 | 1.2 | 0.9 | -0.5 | -3.0 | -3.0 |
| GOVERNMENT BUDGET | | | | | | | | | | |
| General Government Balance, ESA-95, % of GDP | -2.8 | -2.0 | -1.8 | -2.5 | -2.1 | -2.1 | -8.0 | -6.8 | -6.5 | -5.0 |
| Gross Government Debt, % of GDP ^a | 76.5 | 75.7 | 74.8 | 72.1 | 69.1 | 65.5 | 79.6 | 76.8 | 75.0 | 74.0 |

^a Including the balance sheet of Eximbank

* Kopint-Tárki forecast

Source: CSO, NBH

ECONOMIC TRENDS IN EASTERN EUROPE

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