

**Economic  
Trends in**

# **Eastern Europe**

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# **Economic Trends in Eastern Europe**

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*Economic Trends in Eastern Europe* is an insightful publication providing subscribers with a comprehensive picture of Eastern European economic developments.

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# **Economic Trends in Eastern Europe**

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## I. The World Economy

The **global economic outlook** has markedly deteriorated during the past months. The strict no-Covid policy in China muted Chinese economic growth, the escalation of the Russian-Ukrainian conflict pushes global inflation even further, the bottlenecks in global shipping and the shortages in various products remained biting. The high inflation rates reduce the purchasing power of households and the profits of businesses. The business sector is anxious due to the uncertainties and the unpredictability of how this all will end. The central banks resort to monetary tightening, to various degrees, which means that **AT/IN** this difficult juncture neither monetary nor fiscal policy will not support economic growth as it did during the Covid-crisis. As a result, growth forecasts tend to become more pessimistic: the latest OECD forecast predicts global growth slow down to 3%, with downward risks. The global growth rate is expected to decline further to 2.5-2.8% in 2023, with downward risks, amid rising recession fears.

**Global trade** remains in great part unaffected by the war, hence the yearly growth rate of about 5% may still materialize, despite the recession fears, in both 2022 and 2023. Still, this entails a significant slowdown compared to the last year. The sanctions imposed on Russian exports and imports by the Euro-Atlantic countries results in a redirection of trade flows, which may fuel further price increases. Much of Russian coal export is now absorbed by China, while the Asian country curbs imports from its most important trade partners. On the other hand, prices of Russian-Chinese trade are decreasing, which means that for now, the diversion of trade did not benefit Russia, and that is likely to remain true in the long run, too. At the same time, Europe faces protracted imported inflation that restrains economic growth.

At present, the **price of Brent oil** is around 120 USD/barrel, a very slight easing compared to the level seen last March, but wide fluctuations remain. Oil prices will remain high in the forecast period. Extraction by the OPEC will only rise moderately, and the increase of the market share of US shale oil is slow. While it is difficult to make predictions, the annual average level of oil price may be 112-118 USD/barrel in 2022 and 100 USD/barrel in 2023. Due to the sanctions, Europe will get less of the Russian oil while China and India jump to absorb the freed-up supply. On the **gas market**, the situation remains volatile, especially in Europe that faces skyrocketing gas prices. The probability that Russia completely halts the flow of natural gas from Russia to Europe during the summer is rising, which poses a very severe threat to the European economy. So far, the various European countries pursue individual paths in dealing with the gas supply problems. In many cases, they want to replace the missing gas supply by revving up coal extraction.

After a long period of rise, the prices of **industrial metals** began to fall, due to several reasons: the lock-down measures in China and the growing recession fears worldwide on the one hand, and the record-high inflation that makes it impossible to make plans regarding large-scale investment projects on the other. It is extremely worrying that food prices have apparently decoupled from industrial metal prices and continue to rise. It is worth noting that the inflation fears did not cause a scramble for precious metals – instead, the tightening by the Fed the funds are channeled toward the USD-denominated assets. Food and beverage prices may continue to rise for years while in the case of industrial metals volatile price fluctuations are likely. If metal extraction is curbed then another round of metal price hike is virtually unavoidable.

The developed countries everywhere saw a dramatic acceleration of inflation this year. They usually cite the Russian-Ukrainian conflict as a cause, and indeed, energy and agricultural prices jumped after the outbreak of the conflict. It should be kept in mind, however, that the prices of some products were already soaring in February, before the war. This suggests that the various fiscal stimulus measures, along with the lax monetary policies pursued, facilitated such an expansion of demand that supply could not meet. In the light of this, it is not surprising that **monetary tightening** is getting more severe everywhere than previously expected. At the same time, central banks face a dilemma because they do not want to suffocate the economic upturn that has just begun by exceedingly drastic rate hikes. The *FED* started the rate hike cycle in March, first with a raise of 25 basis points, then 50 basis points in May, followed by a 75 basis points hike in June. On the whole, the reference rate has been raised by 150 basis points so far in 2022, and further raises are expected. The *ECB* left the reference rate unchanged so far, but it announced that it would raise the rate in July. At the same time, it tries to work out tools that help reduce the burden from managing the debt of the indebted Southern European member states. The ECB has been under fire for a while for its very belated rate hike compared to the FED or the other prominent central banks. With the exception of the Japanese central bank, the other central banks resorted to rate hikes, even though the magnitude of the rate hikes differs widely.

The signs of economic slowdown are becoming more and more visible in the major economies outside the European Union. In the **USA**, the expected meager growth – about 2% – will be accompanied by an inflation rate of about 8%. The monetary tightening hampers growth and several analysts warn about the threat of a technical recession in 2023. In **Japan**, the economy continues to grow by about 1% but inflation is picking up pace here as well, although not as much as in the EU. In the **United Kingdom**, the growth rate is expected to be close to 3%, with an inflation rate of 9% or higher in 2022. The BOE is raising rates too, and the labor shortage also hinders growth.

The **Chinese economy** will lose steam in 2022, compared to the 8.1% growth recorded in 2021. The official target of 5.5% is already unrealistic in the light of the available statistical data. The OECD and the World Bank expect growth rates of 4.4% and 4.3%, respectively, in 2022. The main reason of the slowdown is the zero-Covid policy pursued by the Chinese leadership that involves putting millions in quarantine and results in the paralysis of large parts of the global production and logistical system. China is affected by the Ukrainian war only indirectly, through the global markets, since neither Ukraine nor Russia is an important trading partner for China (very much unlike for the two said countries). Due to the war, China's weight in the world economy is likely to increase further. On the one hand, China will become more and more a key partner regarding both the external trade of goods and services and the flow of FDI. On the other hand, China will increase its role as a supporter of the developing countries that cannot meet their food and energy needs alone, due to the war.

The escalation of the Russian-Ukrainian conflict and the galloping inflation severely worsened the economic outlook in the **eurozone** countries as well. The first-quarter data still shows a respectable growth rate of 5.5% but a slowdown will follow. The European confidence indicators tend to point downward since the spring, and by June, they showed that the situation of businesses was becoming depressing amid the consequences of the war, the mounting shipping and supply bottlenecks, the energy

crisis and the skyrocketing inflation. Manufacturing output even decreased in March and April on an annual basis. Thus, economic growth may reach 3% in 2022 at most, and it is likely to decelerate to 2.6% in the next year. Private consumption is muted by high inflation rates and the grave uncertainties regarding the future, which means an annual growth of 2.5-2.7% this year. The consumption of the governments will hardly grow and – due to the supply problems and the high energy prices – investment is expected to expand only by about 3% in the euro area. The growth rate of the export of goods and services may be halved from the 10% posted in 2021. The high – and rising – inflation rate particularly poses a problem. In the eurozone, the annual inflation rate hit 8.1% in May and rose to 8.6% in June, while back in January the rate still stood at only 4.1%. The differences between the individual member states are significant. The actual inflationary pressures are partially obscured by the fact that several countries resort to various tools of price regulation. we expect a yearly inflation rate of 6-7% in 2022 but it is quite possible that this prediction will need to be revised upward in the coming months.

GDP growth will decelerate in the case of **EU27** as well, to about 3%, in 2022. The growth rate in EU13 will be only marginally higher than in the EU as a whole. Inflation is likely to hit 7.1% in the EU27, an even higher annual rate than in the euro area, and it may turn out to be even higher eventually because in a number of non-euro member states inflation is getting out of control. Unemployment remains low – labor shortage till is the dominant source of labor market problems for now, especially in certain areas.

In **Germany**, business sentiment deteriorated again in June, after some improvement in April-May. While enterprises in the service sector remain moderately optimistic, the manufacturing and retail sectors both the assessment of both the present situation and the near future is on a downward slope. The pessimism is primarily due to the consequences of the Russian-Ukrainian war and the growing tensions regarding the energy supply. The threat of Russia cutting the gas supply as early as in the summer causes a severe headache for Germany, especially for the German chemical industry that absorbs 15% of the country's gas consumption and that cannot easily make a transition to other fuels. Germany has already launched the “alarm stage” of its emergency plan in June, responding to the decrease of gas deliveries from Russia, but it has not yet authorized the shifting of the burden of rising energy costs on consumers by the utility firms. Under such conditions it is not surprising that analysts tend to predict a German growth rate of merely 2% or even lower for 2022, with only a moderate upturn in 2023.

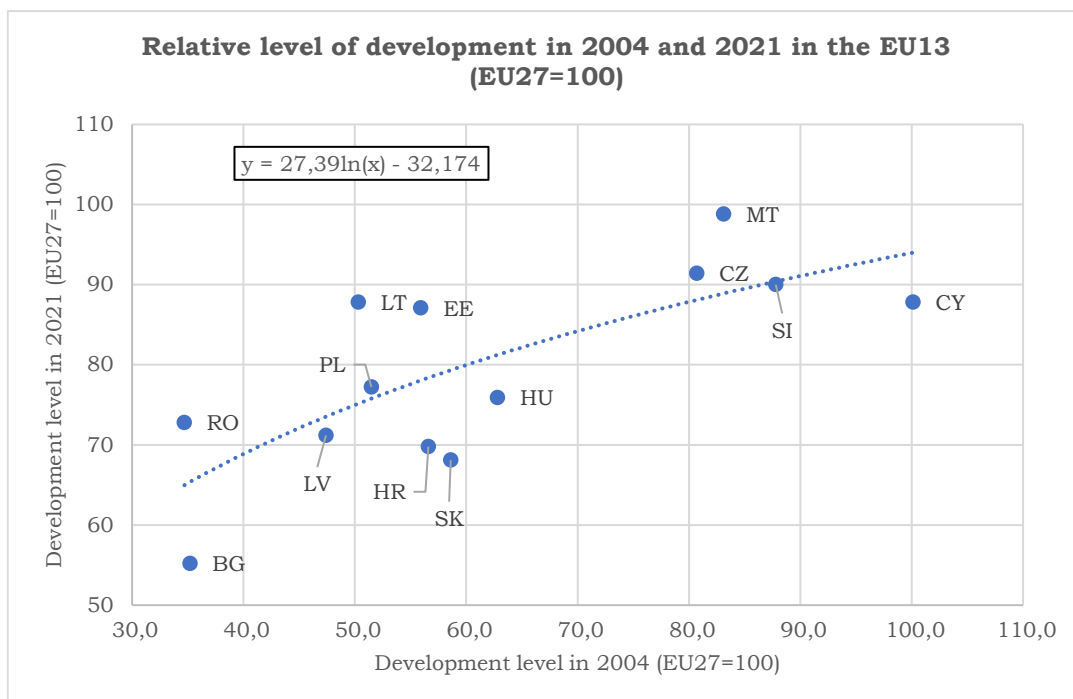
Inflationary pressures remain the greatest source of problems in the **Central Eastern European region**. Regarding the future, downward risk abound – these risks may seriously pull down the pace of economic growth. The member states face a price-wage spiral that is compounded by shortages of raw materials and the imported inflation induced by rising energy prices. In the countries that not yet adopted the euro, central banks fight almost desperately bring inflation under control, further hampering economic growth. The evolution of the war, along with the supply chain-busting Chinese zero-Covid policy, will substantially shape the economic outcomes. Hence we expect annual growth rates of about – or below – 3% in the region for 2022 and 2023.

## II. EU13 countries

In the first quarter of 2022, the Russian-Ukrainian war did not yet affect severely the region's economic activity. Nevertheless, the shortage of base materials, the energy price hike and the inflationary pressure – along with the resulting price-wage spiral – will significantly reduce the annual growth rates in the countries of the region. The average growth rate in the first quarter – 7% on an annual basis – was still akin to the rates seen in the pre-war quarters.

The main driver was clearly the Polish economy, with a growth rate of 9.2%: it contributed by 3.2 percentage points to regional growth. The 8.2% growth rate in Hungary and the 9.8% growth rate in Slovenia are also worth noting. With a combined growth contribution of 4.3 percentage points, more than half of the overall growth in the EU13 can be attributed to these three countries.

Although the respective growth rates of Bulgaria (5%), Slovakia (3.1%) and Czechia (5.1%) are quite impressive compared to the pre-pandemic years, they are somewhat disappointing compared to the other countries of the region. In Slovakia and the Czech Republic, the spell of relatively subdued growth has already been going on for several years even though a number of macroeconomic indicators show more favorable trends than in Poland or in Hungary (interest rates, exchange rate stability). Despite their good financial standing, their development pace was extremely weak during the past 5 years. Slovakia is the only EU member state where the per capita real GDP was farther from the EU average in 2021 than it had been in 2016. At the same time, Czechia got closer by only 2.5 percentage points while Hungary and Poland boast a convergence of 7.1 and 8.3 percentage points, respectively.



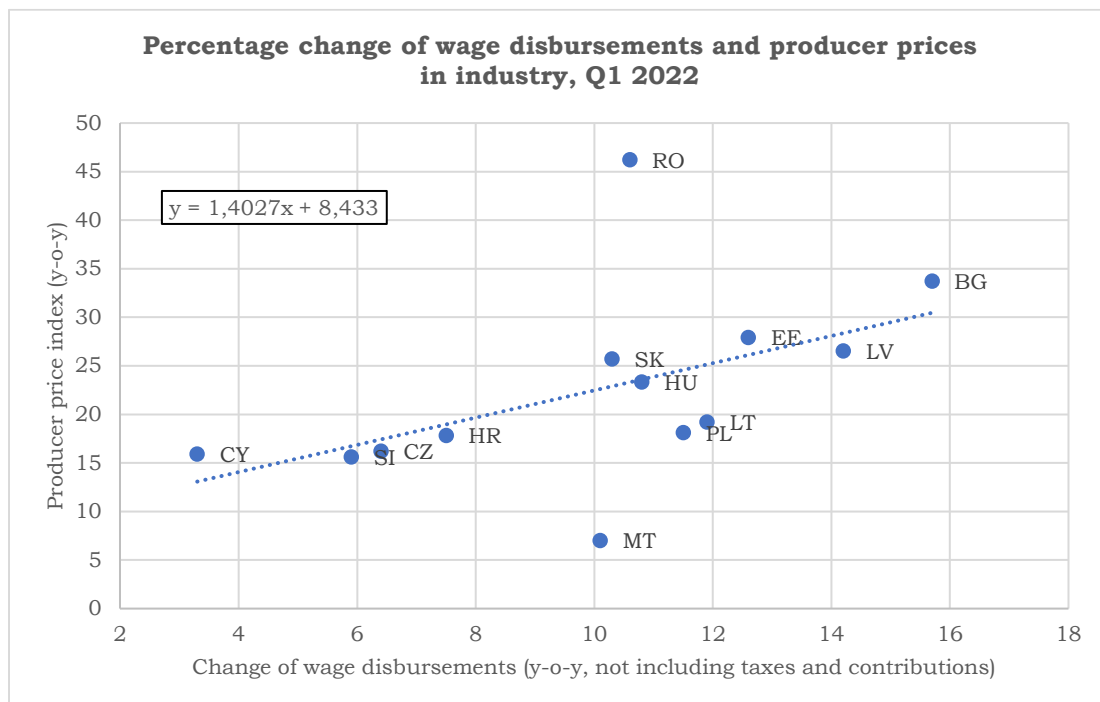
The per capita GDP levels compared to the EU average, calculated by the Eurostat based on purchasing power standard (PPS), is widely used as a measure of development level.



Compared to 2004, every “new member state” achieved great progress, although the picture is still very diverse. In the past 17 years Romania achieved the greatest degree of real convergence – amounting to 38 percentage points – even if the starting level was extremely low (34% of the EU average). By now, Romania boasts 73% compared to the EU average in terms of the level of economic development, a remarkable feat, especially considering that the current Hungarian level is 76%. Despite its fast-paced catching-up, Romania is still only the 9<sup>th</sup> most developed country within the EU13, even if its ranking improved by 4 places compared to 2004. The largest degree of convergence was achieved Lithuania during the same period, by 39 percentage points, advancing by 6 places in the ranking of EU13 countries.

Although Hungary is only the 8<sup>th</sup> among the EU13 (it was 5<sup>th</sup> in 2004) and its pace of development was slower than the regional average, its growth performance was not glaringly bad. If we consider the initial levels of development, Bulgaria, Croatia, Cyprus and Slovakia had a weaker catching-up performance than it could have been expected. While Chechia’s ranking is now lower by 2 places than in 2004, this country could keep its relative development level of about 90%, which means that the Czech growth performance was roughly at par with the EU average. Poland has already left Hungary behind and Latvia and Romania is likely to do the same in a couple of years.

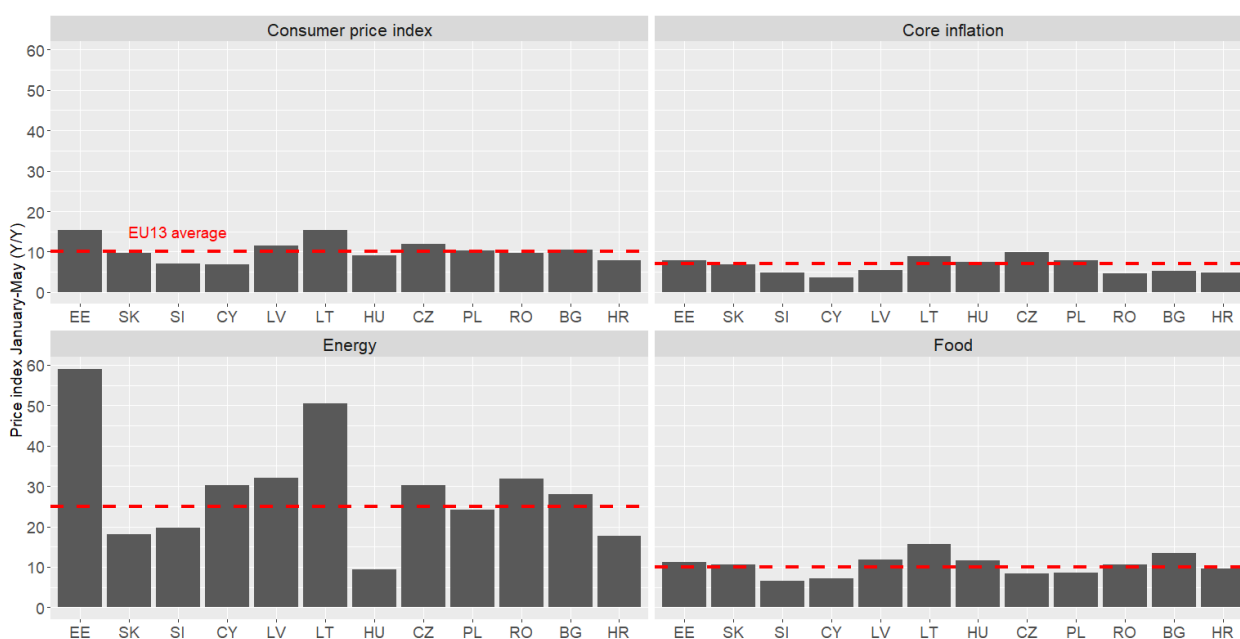
The level of per capita PPS-denominated GDP depends not only on the growth performance but also on price trends, while the latter is indirectly influenced by the evolution of exchange rates. Exchange rate changes were very unfavorable in the past quarter, which somewhat undermines the upturn seen in 2021. Total consumption expanded by 6.7% on average in the region and became a primary supporter of economic growth, especially in Hungary (10.6%), Latvia (11%) and Slovenia (14.7%), but consumption growth surpassed 5% in every EU13 countries. This, however, exacerbated the inflationary pressures, already fueled by galloping energy and raw material prices, and initiated a price-wage spiral in several countries. In industry (excluding construction) wage disbursements soared by 10% on average in the first quarter on an



annual basis while producer prices rose at a rate above 20% in several countries. Producer prices are certainly driven by many factors outside wage costs, but wage costs correlate quite well with the producer price index.

All this is reflected in consumer prices as well, even if the latter is greatly influenced by imported inflation, mostly through global fuel prices and raw material prices. In the first five months of this year, consumer prices rose by 10.3% in the region on average (on an annual basis). By now, the price index is fueled not just by energy prices (25%) but also by food prices that were up 10% in January-May and have a greater weight in the overall consumer price index than energy prices. The energy price hike affects core inflation as well that rose to 7% in the EU13 on average.

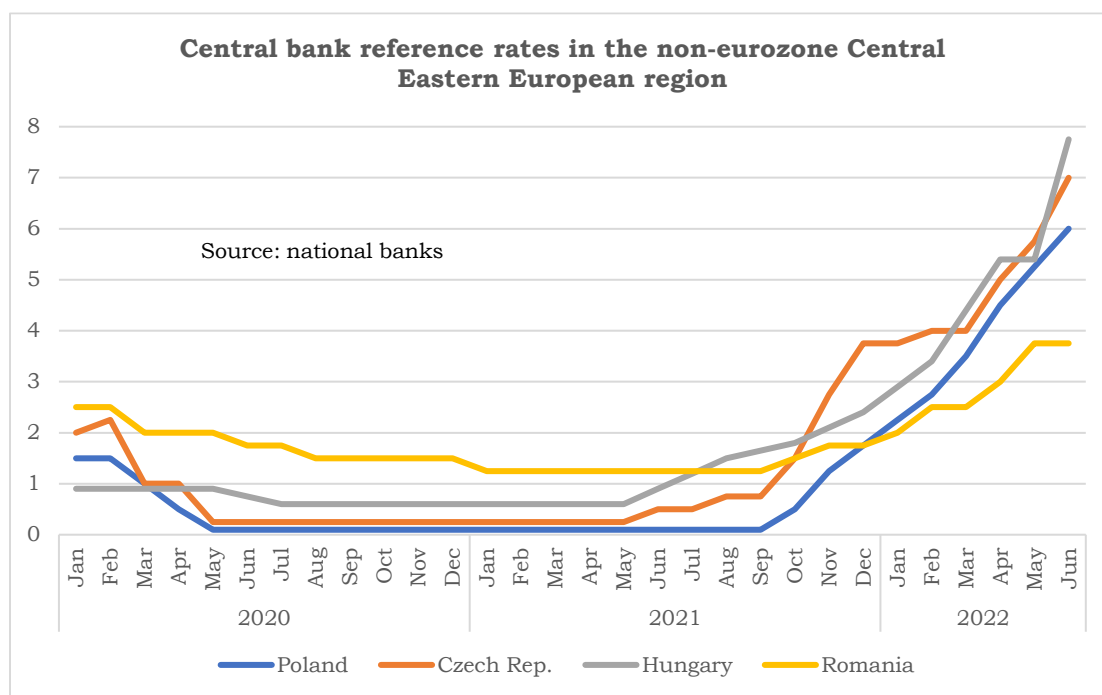
### Consumer price indexes in the EU13 in January-May 2022



Source: Eurostat

Prices keep rising despite the repeated rate hikes by central banks. In the Visegrad countries, gradual rate hikes began from last autumn and the policy rates rose by an average 500 basis points during the course of as few as 9 months. The Romanian monetary council has been trading carefully: interest rates did not dip below 1.25% even in 2020-2021 but monetary tightening was also initiated later, and the reference rate was raised only to 3.75%, despite the record high inflation (12.4% in May). The central bank says economic growth must not be undermined, even if price stability is at stake. This can somewhat undermine the credibility of the central bank and indicates that the monetary council still deems the inflationary wave temporary and mostly supply-driven. Total consumption was up 7.1 percent in the first quarter, which is above the EU13 average – while it falls short of the above-10% growth in Hungary, Latvia or Slovenia, it also surpasses the respective growth rates in Poland (5.1%) and the Czech Republic (5.8%). The fast consumption growth and the 42% (!) industrial producer price index in the first quartet does not really corroborates the still lax stance of the Romanian

monetary council and the latter may be forced to act in soon unless the inflation subsides, a possibility that seems unlikely.



At present, the growth outlook is marred by multiple downward risks – many of them depending on the war developments – with hardly any upward ones. The further rise of energy prices and the possibility of energy shortage severely limits production prospects, which may result in a structural shift, primarily in energy intensive manufacturing. If the oil and natural gas coming from Russia become a scarce and expensive goods, the growth outlook will be severely affected in many countries of the region. The Eastern European region is the most vulnerable, primarily the Baltic states, the Visegrad countries and Romania. A dry-up of the raw materials imported from Russia would portend serious consequences in the short run, possibly even a year-long recession. If supply is not disrupted but becomes costlier, the equilibrium indicators will deteriorate. Our forecast is based on the assumption that the second scenario is more likely. The worsening net export indicators sniffs out one of the major drivers of economic growth while high inflation will put a brake on consumption growth. All this will result in a much slower GDP growth, especially since material shortages and higher prices have a negative impact on the change in inventories as well. Investment activity has not really got back on its feet since the outbreak of the pandemic, so virtually all growth risks are negative.

We predict an average yearly growth rate of 3% in 2022 in the EU13 with a high inflation rate of about 11%. Even though high inflation certainly affects the statistical base in the next year, prices will continue to rise – we predict a 6% inflation for 2023. An end of the war could provide an additional growth impulse, but it does not seem likely, hence economic growth will probably continue at a meager pace of 3% in the next year.

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	3.0
France	17.3	1.1	2.3	1.9	1.8	-7.9	7.0	2.6	2.3
Italy	12.4	1.3	1.7	0.9	0.5	-9.0	6.6	3.1	1.9
Netherlands	6.0	2.2	2.9	2.4	2.0	-3.8	5.0	3.2	2.1
Belgium	3.4	1.3	1.6	1.8	2.1	-5.7	6.3	2.9	2.1
Luxembourg	0.5	5.0	1.3	2.0	3.3	-1.8	6.9	3.4	2.6
Ireland	2.7	2.0	8.9	9.0	4.9	5.9	13.5	6.3	3.0
Greece	1.2	-0.5	1.1	1.7	1.8	-9.0	8.3	5.2	2.8
Spain	8.4	3.0	3.0	2.3	2.1	-10.8	5.0	4.5	3.3
Portugal	1.5	2.0	3.5	2.8	2.7	-8.4	4.9	6.2	2.4
Austria	2.8	2.0	2.3	2.5	1.5	-6.7	4.5	4.2	2.1
Finland	1.8	2.8	3.2	1.1	1.2	-2.3	3.5	2.1	1.7
Estonia	0.2	3.2	5.8	4.1	4.1	-3.0	8.3	2.0	3.0
Slovakia	0.7	1.9	3.0	3.8	2.6	-4.4	3.0	2.5	3.1
Slovenia	0.3	3.2	4.8	4.4	3.3	-4.2	8.1	4.0	3.8
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	4.0	3.7
Latvia	0.2	2.4	3.3	4.0	2.5	-3.8	4.7	2.0	2.5
Lithuania	0.4	2.5	4.3	4.0	4.6	-0.1	4.9	2.4	2.0
<b>Euro Area</b>	<b>85.1</b>	<b>1.9</b>	<b>2.6</b>	<b>1.8</b>	<b>1.6</b>	<b>-6.3</b>	<b>5.4</b>	<b>3.0</b>	<b>2.6</b>
Denmark	2.3	3.2	2.8	2.0	2.1	-2.1	4.1	4.0	2.3
Sweden	3.6	2.1	2.6	2.0	2.0	-2.9	4.8	2.1	2.5
<b>Hungary</b>	<b>1.0</b>	<b>2.2</b>	<b>4.3</b>	<b>5.4</b>	<b>4.6</b>	<b>-4.5</b>	<b>7.1</b>	<b>4.0</b>	<b>3.0</b>
Czech Republic	1.6	2.5	5.2	3.2	3.0	-5.8	3.3	2.2	2.5
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	2.5	3.5
Bulgaria	0.5	3.0	2.8	2.7	4.0	-4.4	4.2	2.3	3.0
Croatia	0.4	3.5	3.4	2.9	3.5	-8.1	10.4	2.9	2.9
<b>EU14</b>	<b>88.9</b>	<b>1.9</b>	<b>2.7</b>	<b>1.8</b>	<b>1.6</b>	<b>-6.1</b>	<b>5.3</b>	<b>3.0</b>	<b>2.5</b>
<b>New EU13</b>	<b>11.1</b>	<b>3.2</b>	<b>5.0</b>	<b>4.5</b>	<b>4.1</b>	<b>-3.8</b>	<b>5.5</b>	<b>3.1</b>	<b>3.0</b>
<b>EU27</b>	<b>100</b>	<b>2.0</b>	<b>2.8</b>	<b>2.1</b>	<b>1.8</b>	<b>-5.9</b>	<b>5.3</b>	<b>3.0</b>	<b>2.6</b>
<b>Memorandum items</b>									
USA		2.9	1.6	3.0	2.3	-3.4	5.7	2.1	1.4
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	2.9	0.4
China		7.0	6.7	6.8	6.1	2.3	8.1	4.4	4.9
Russia		-2.8	-0.2	2.2	1.3	-3.0	4.7	-8.0	-5.5
<b>South-Eastern Europe</b>									
Serbia		3.3	2.1	4.5	4.3	-0.9	6.7	3.0	3.8
Turkey		3.2	7.4	3.0	0.9	1.8	9.0	2.0	4.0

\* Kopint-Tárki forecast

EU14 = Countries that joined the European Union before 2004

EU13 = Countries that joined the European Union in 2004, 2007 and 2013

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	7.4	4.2
France	17.4	0.3	1.2	2.1	1.3	0.5	2.1	5.1	2.9
Italy	14.1	-0.1	1.3	1.2	0.6	-0.1	1.9	6.7	2.8
Netherlands	4.9	0.1	1.3	1.6	2.7	1.1	2.8	9.8	3.7
Belgium	3.3	1.8	2.2	2.3	1.2	0.4	3.2	9.5	3.5
Luxembourg	0.2	0.0	2.1	2.0	1.6	0.0	3.5	8.1	3.5
Ireland	1.4	-0.2	0.3	0.7	0.9	-0.5	2.4	7.1	3.7
Greece	1.7	0.0	1.1	0.8	0.5	-1.3	0.6	8.6	3.2
Spain	9.1	-0.3	2.0	1.7	0.8	-0.3	3.0	8.4	3.7
Portugal	1.9	0.6	1.6	1.5	0.3	-0.1	0.9	6.6	3.7
Austria	2.7	1.0	2.2	2.1	1.5	1.4	2.8	6.8	3.4
Finland	1.7	0.4	0.8	1.2	1.1	0.4	2.1	5.9	2.9
Estonia	0.2	0.8	3.7	3.4	2.3	-0.6	4.5	13.0	4.0
Slovakia	0.8	-0.5	1.3	2.5	2.8	2.0	2.8	9.0	4.0
Slovenia	0.3	-0.2	1.6	1.9	1.7	-0.3	2.0	5.6	3.5
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	10.0	4.0
Lithuania	0.4	0.7	3.8	2.5	2.2	1.1	4.6	13.0	4.0
<b>Euro Area</b>	<b>85.3</b>	<b>0.2</b>	<b>1.5</b>	<b>1.8</b>	<b>1.2</b>	<b>0.3</b>	<b>2.6</b>	<b>6.9</b>	<b>3.5</b>
Denmark	2.0	0.0	1.1	0.7	0.7	0.3	1.9	6.4	3.1
Sweden	3.0	1.1	1.9	2.0	1.7	0.7	2.7	5.9	3.2
<b>Hungary</b>	<b>1.0</b>	<b>0.4</b>	<b>2.4</b>	<b>2.9</b>	<b>3.4</b>	<b>3.4</b>	<b>5.2</b>	<b>13.0</b>	<b>13.0</b>
Czech Republic	1.5	0.7	2.3	2.0	2.6	3.3	3.2	13.0	5.0
Poland	4.3	-0.2	1.6	1.2	2.1	3.7	5.2	12.0	8.0
Romania	1.9	-1.1	1.0	4.1	3.9	2.3	4.1	11.0	6.0
Bulgaria	0.5	-1.3	1.0	2.6	2.5	1.2	2.8	12.0	5.0
Croatia	0.4	-0.6	1.3	1.6	0.8	0.0	2.7	8.0	4.0
<b>EU14</b>	<b>88.1</b>	<b>0.4</b>	<b>1.7</b>	<b>1.9</b>	<b>1.4</b>	<b>0.5</b>	<b>2.6</b>	<b>6.5</b>	<b>3.5</b>
<b>New EU13</b>	<b>11.9</b>	<b>-0.2</b>	<b>1.7</b>	<b>2.2</b>	<b>2.6</b>	<b>2.6</b>	<b>4.2</b>	<b>11.1</b>	<b>6.1</b>
<b>EU27</b>	<b>100.0</b>	<b>0.2</b>	<b>1.7</b>	<b>1.9</b>	<b>1.5</b>	<b>0.7</b>	<b>2.9</b>	<b>7.3</b>	<b>3.8</b>
<b>Memorandum items <sup>a</sup></b>									
USA		1.6	0.1	1.3	1.5	1.2	4.3	8.3	4.1
Japan		2.7	0.8	0.5	0.5	0.0	-0.2	2.2	1.5
United Kingdom		0.7	2.7	2.5	1.8	0.9	2.6	8.8	7.4
China		2.0	1.4	2.0	2.9	2.5	0.5	2.0	3.0
Russia <sup>b</sup>		15.5	7.0	2.9	4.5	2.6	5.9	17.5	13.0
<b>South-Eastern Europe</b>									
Serbia		1.1	3.1	2.0	1.9	1.7	3.6	8.5	4.6
Turkey		7.7	11.0	16.4	15.2	12.3	17.8	63.0	54.0

a Non-harmonized price indexes

b December/December

\* Kopint-Tárki forecast

EU-14 = Countries that joined the European Union before 2004

EU-13 = Countries that joined the European Union in 2004, 2007 and 2013

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	3.0	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	8.2
Netherlands	4.3	6.0	4.9	3.8	3.4	3.3	4.2	3.1	2.8
Belgium	2.4	7.8	7.1	6.0	5.4	6.4	6.3	5.4	5.0
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	4.8	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	13.0	12.0
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	4.5	4.2
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	6.8	6.9
Slovakia	1.3	9.7	8.1	6.5	5.8	6.8	6.8	6.7	6.3
Slovenia	0.5	8.0	6.6	5.1	4.5	4.6	4.8	4.8	4.6
Cyprus	0.2	13.0	11.1	8.4	7.1	7.5	7.5	7.8	7.3
Malta	0.1	4.7	4.0	3.7	3.6	4.0	3.5	3.6	3.6
Latvia	0.4	9.6	8.7	7.4	6.3	7.3	7.6	7.3	7.1
Lithuania	0.7	7.9	7.1	6.2	6.3	7.1	7.1	7.2	7.2
<b>Euro Area</b>	<b>76.8</b>	<b>10.1</b>	<b>9.1</b>	<b>8.2</b>	<b>7.6</b>	<b>8.0</b>	<b>7.7</b>	<b>6.8</b>	<b>6.4</b>
Denmark	1.4	6.0	5.8	5.1	5.0	5.3	5.1	4.5	4.3
Sweden	2.5	6.9	6.7	6.4	6.8	8.9	8.8	7.6	6.8
<b>Hungary</b>	<b>2.2</b>	<b>5.0</b>	<b>4.0</b>	<b>3.6</b>	<b>3.3</b>	<b>4.1</b>	<b>4.1</b>	<b>3.4</b>	<b>3.3</b>
Czech Republic	2.5	4.0	2.9	2.2	2.0	2.7	2.8	2.6	2.6
Poland	8.0	6.2	4.9	3.9	3.3	3.3	3.4	4.1	3.9
Romania	4.2	5.9	4.9	4.2	3.9	5.0	5.6	5.5	5.3
Bulgaria	1.6	7.6	6.2	5.2	4.2	5.1	5.3	5.4	5.3
Croatia	0.8	13.1	11.2	8.5	6.6	6.7	7.7	6.3	6.0
<b>EU-14</b>	<b>77.2</b>	<b>9.2</b>	<b>8.4</b>	<b>7.5</b>	<b>7.1</b>	<b>7.9</b>	<b>7.8</b>	<b>6.8</b>	<b>6.4</b>
<b>New EU13</b>	<b>22.8</b>	<b>6.6</b>	<b>5.5</b>	<b>4.5</b>	<b>4.1</b>	<b>4.4</b>	<b>4.6</b>	<b>4.7</b>	<b>4.5</b>
<b>EU27</b>	<b>100.0</b>	<b>9.3</b>	<b>8.3</b>	<b>7.4</b>	<b>6.8</b>	<b>7.2</b>	<b>7.1</b>	<b>6.3</b>	<b>6.0</b>
<b>Memorandum items<sup>a</sup></b>									
USA		5.3	4.9	3.9	3.7	8.1	5.4	3.6	3.6
Japan		3.4	3.1	2.8	2.4	2.8	2.8	2.7	2.6
United Kingdom		4.8	4.4	4.1	3.8	4.5	4.5	3.8	4.3
China <sup>b</sup>		4.1	4.0	4.0	3.8	3.6	4.0	4.2	4.2
Russia <sup>d</sup>		5.6	5.7	5.4	4.6	6.0	5.9	6.7	6.6
<b>South-Eastern Europe</b>									
Serbia <sup>e</sup>		15.3	13.5	12.7	10.4	9.0	10.7	9.2	8.6
Turkey		10.9	10.9	10.9	13.7	13.2	12.8	12.9	12.7

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

EU-13 = Countries that joined the European Union in 2004, 2007 and 2013

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	Q2	2022 April	2022 July	2023 July
<b>GDP aggregates, real growth</b>							
GDP total	-4.5	7.1	8.2		4.0	<b>4.0</b>	<b>3.0</b>
Domestic Demand	-2.7	5.8	11.5		4.3	<b>5.0</b>	<b>1.5</b>
Private Consumption	-1.9	4.4	11.5		5.2	<b>5.7</b>	<b>1.0</b>
Public Consumption	3.4	3.9	6.4		1.5	<b>2.3</b>	<b>0.0</b>
Gross Fixed Capital Formation	-7.0	5.9	13.2		4.0	<b>4.7</b>	<b>3.0</b>
Gross Capital Formation	-6.6	9.6	17.6		3.6	<b>4.7</b>	<b>3.0</b>
Export	-6.1	10.3	5.2		4.0	<b>3.9</b>	<b>3.8</b>
Import	-4.0	8.7	8.3		4.4	<b>5.2</b>	<b>2.0</b>
<b>Industrial production</b>	-6.0	9.6	5.5	4.7	4.0	<b>4.0</b>	<b>3.7</b>
<b>Consumer Price Index</b>	3.3	5.1	8.2	10.6	8.7	<b>13.0</b>	<b>10.0</b>
<b>Employment, earnings</b>							
Number of Employed, growth <sup>a</sup>	-0.9	0.7	2.3	1.6	0.8	<b>1.5</b>	<b>0.3</b>
Employment rate <sup>a</sup>	62.1	63.0	63.7	64.0	64.1	<b>64.1</b>	<b>64.2</b>
Unemployment Rate <sup>a</sup>	4.1	4.1	3.7	3.2	3.7	<b>3.4</b>	<b>3.3</b>
Unit Labor Costs, in EUR <sup>b</sup>	3.0	-1.4	9.3		4.3	<b>2.9</b>	<b>5.1</b>
Gross Nominal Wages <sup>c</sup>	9.7	8.7	21.0	15.2 <sup>e</sup>	12.3	<b>17.0</b>	<b>9.5</b>
Net Real Wages	6.2	3.4	11.8	5.1 <sup>e</sup>	3.3	<b>3.5</b>	<b>-0.5</b>
Savings Rate, % of GDP <sup>d</sup>	6.5	6.5	5.7		6.5	<b>6.2</b>	<b>5.4</b>
<b>Current and Capital Accounts Balance, % of GDP</b>	0.9	-0.4	-2.4 <sup>h</sup>		-3.0	<b>-3.0</b>	<b>-2.5</b>
<b>General government</b>							
Fiscal Balance, ESA-2010, % of GDP	-8.0	-6.8	-4.8		-6.5	<b>-5.2</b>	<b>-4.0</b>
Gross Government Debt, % of GDP	79.6	76.6	77.3		75.0	<b>75.0</b>	<b>74.0</b>
Short-term Government Yields (3M), eop	0.28	2.16	5.7	6.3	6.0	<b>9.0</b>	<b>9.0</b>
Long-term Government Yields (10Y), eop	2.08	4.51	5.9	8.0	6.5	<b>9.0</b>	<b>9.0</b>
<b>External assumptions</b>							
Internat. Trade in Goods and Services <sup>d</sup>	-8.3	9.3			6.0	<b>5.0</b>	<b>4.4</b>
Brent Oil Price (\$/bbl, p. avg.)	41.8	70.8	100.3	100.9	100.0	<b>116.0</b>	<b>100.0</b>
GDP Real Growth, Eurozone	-6.4	5.4	5.5		2.9	<b>3.0</b>	<b>2.6</b>
GDP Real Growth, New EU Members	5.6	-3.8	7.1		3.3	<b>3.1</b>	<b>3.0</b>
EUR-HUF, period average	351	359	364	386	365	<b>389</b>	<b>400</b>
EUR-USD, period average	1.14	1.18	1.12	1.06	1.12	<b>1.08</b>	<b>1.08</b>

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 of the MNB, percentage of GDP, four-quarter cumulative data

e April-May

f Data seasonally adjusted by the MNB



### III. Hungarian Economy

While it was obvious, considering the gargantuan stimulus package primarily aimed at household demand and timed to February, that GDP growth would be very dynamic in the first quarter, the 8.2% growth rate came as a surprise for the majority of observers.

As expected, economic growth was primarily driven by *household consumption*: both household consumption expenditures (14.6%) and actual household consumption (11.5%) boasted growth rates unprecedented since the system change around 1990. But the other major component of domestic demand, *fixed capital formation*, also boasted a dynamic growth of 13.2%, the highest rate since the outbreak of the pandemic. Business investments were supported by the continuation of government subsidies and the related fact that Hungary has been becoming a popular location for establishing production sites performing tasks related to certain phases of the newly formed global electromobility value chains. But the fact that global growth perspectives looked much better during the first quarter than they are looking now may have also played a role in the good pace of investment growth.

In any case, final domestic use also grew at a record-breaking speed. This, however, caused reverberations in *external trade*. According to the seasonally adjusted volume data from GDP statistics, goods export actually performed relatively well – the absolute volume of export reached a record high level after the dip in the previous three quarters, despite the still-biting supply-side problems. (It should be noted that is a somewhat rosier picture than what the data from external trade statistics suggests.) But at the same time, goods import shot up to an extent that the net export of goods contributed to overall GDP growth negatively, by almost -4 percentage points. The favorable balance of the external trade of services – helped by the ongoing recovery of tourism – could only slightly offset the drastic downward impact of the external trade of goods on GDP growth.

The skyrocketing growth rate in the first quarter was largely a result of one-off factors, whose upward effect on consumption growth will level out gradually. (The available data suggests that in the second quarter consumption growth was probably still dynamic.) During the course of the year, cumulative consumption growth will get closer to the pace that is supported by the growth of *regular* earnings – as opposed to the one-off income elements that were dominant at the beginning of the year.

But not only the automatic flattening of the effect of the one-off shock will put a break on consumption growth. The change of the economic situation and outlook is at least as decisive. Year-on-year *inflation* exceeded 10% in May and 11% in June. Kopint-Tárki expect the annual average inflation rate to reach 12.5% this year while in March the average of inflation forecasts was only 8.5%. The inflation outlook is further dimmed by the government decision of reform the utility price regulation, thus substantially raising the utility costs for a significant segment of the population. The higher inflation will trim the purchasing power of households and push them toward decreasing their consumption or shifting their spending toward cheaper goods.

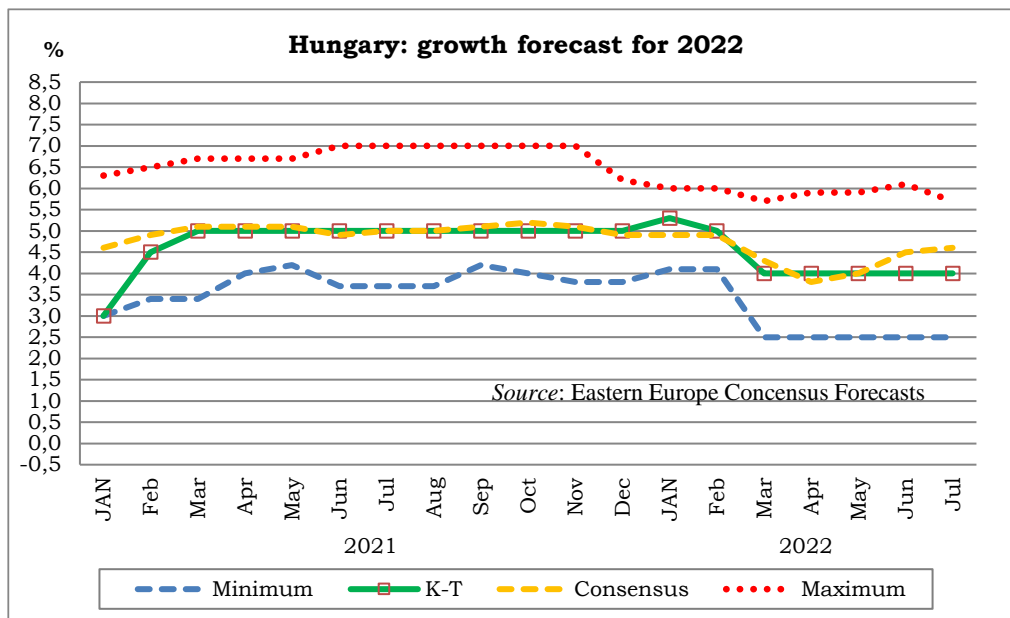
The response of the central bank to soaring inflation – a much steeper monetary tightening than previously expected – will also stifle consumer enthusiasm: in the second half of the year, a sharp rise in consumption loan rates will dampen consumption borrowing and lower consumer sentiments.



Both business investment and export performance perspectives are affected by a shift in the problems of the global economy. On the one hand, the chip shortage seems to ease, along with the on-and-off lockdowns in China. On the other hand, the Russian-Ukrainian war triggered new supply-side shocks, among which the food and energy supply problems are potentially the most explosive.

In addition, the global and European growth outlook is adversely affected by the sharp rate hike by the FED and, most recently, by the ECB. In any case, global growth perspectives worsened markedly in the last couple of months. Instead of stagflation, now the possibility of recession is the dominant subject of discussions.

All this will put a brake on business investments and will probably create a novel hindrance for Hungarian export. This is why we **maintain our growth forecast at 4% for 2022**. This – according to the Consensus Economics survey – is at present a somewhat conservative prediction. Actually, there exist some positive risks – for example, a more gradual than expected decrease in the consumption rate may push overall growth upward. On the other hand, severe negative risks are also present, even



if they are hard to quantify: the degree of havoc potentially caused by a European energy crisis, in case of a complete stoppage of the inflow of Russian natural gas, is hard to measure.

In any case, the still good growth pace is already accompanied by **severe financial imbalance**. The fiscal cash-flow deficit is enormous, the current account balance is rapidly worsening, and the two-digit inflation rate erodes household incomes and disrupts the fabric of the economy. But maybe the precipitous plunge of the forint exchange rate – at least until mid-July – should be mentioned first.

The accrual-based fiscal deficit will remain at a manageable level, partly due to the “windfall” taxes imposed by the government and partly because of the very high inflation that boosts nominal revenues – especially from taxes on consumption – and also reduces the deficit-to-GDP rate by elevating the nominal level of GDP. Still, the high cash-flow deficit (nearly HUF 45 trillion by mid-June) will result in a jump in fiscal debt – furthermore, the higher debt now needs to be financed amid steeply rising government yields. In addition, the extra taxes can only temporarily patch up the fiscal balance if

there is no change in the generally expansive fiscal policy stance (now characterized by large-scale public investment projects and generous subsidies to businesses).

Besides, the “unorthodox” route of fiscal consolidation – that is, the creation of a new tax called “windfall tax” – affects adversely the trust of the business sector toward the government, in a global environment of uncertainty where trust becomes a key factor. The windfall tax imposed on MOL Group – the national – oil and gas conglomerate – can be justified as a typical windfall profit tax imposed amid skyrocketing energy prices. The selection of other areas, however, is ad hoc and hard to justify, especially in the case of retail chains, telecom firms and airline companies. The extra taxes may help stabilize the fiscal situation in the short term but otherwise they cause more harm than good because they cast doubt on the predictability and credibility of economic policy. And credibility in the summer of 2022, amid a was in the neighborhood, has become crucial.

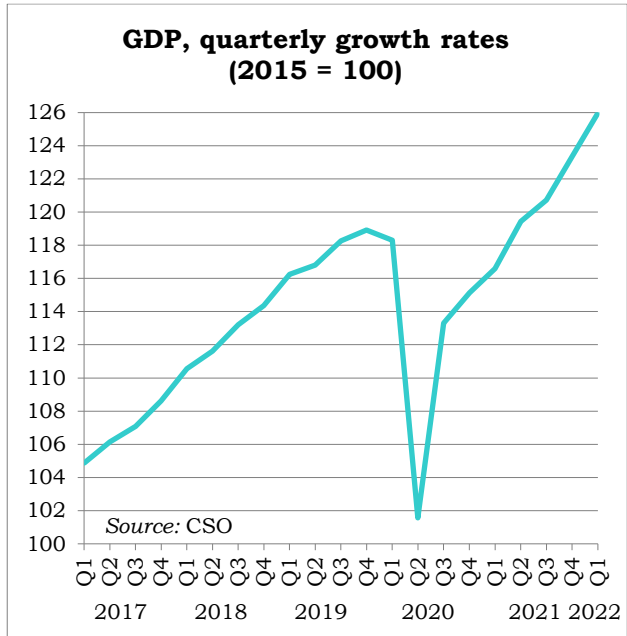
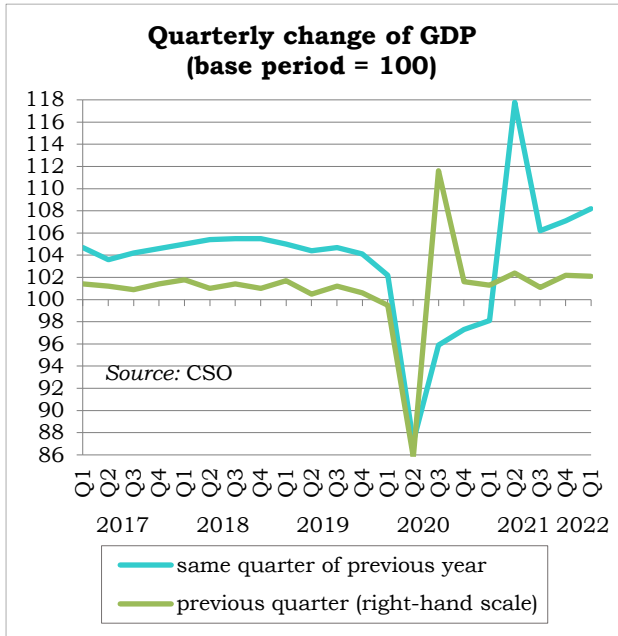
The almost collapse-like weakening of the forint is partially explained by the fast-ballooning current account deficit. Much of the worsening is due to the drastic terms of trade deterioration, a factor outside of policy control. But the extreme fiscal spending to give an enormous boost to domestic demand (consumer demand by mostly one-off welfare spending and investment demand by subsidies to firms) was very much a policy decision that led to a jump in the volume of import, amid the worsening terms of trade. The fuel price cap and, up to the end of summer, the nonselective utility price cap further fueled this trend because it did not encourage in any way to become aware of the actual energy price situation and to try to save energy.

The protracted uncertainty regarding the deal between the EU Commission and Hungary about the Recovery and Resiliency Facility (RRF) is another factor that reduces the trust in the Hungarian economy. By now, Hungary is the only member states that could not reach a deal with the EU. If there is no deal by the end of this year, then the considerations about the accrual-based deficit explained above do not hold. The ESA deficit-to-GDP ratio of about 5% is only realistic if the spending on the RRF projects advanced by the Hungarian government is not included in the ESA deficit because it will be refunded by the EU over the coming years.

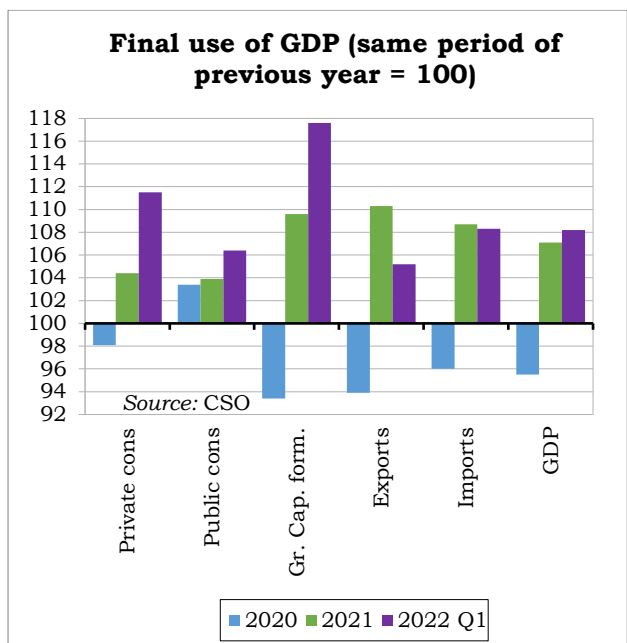
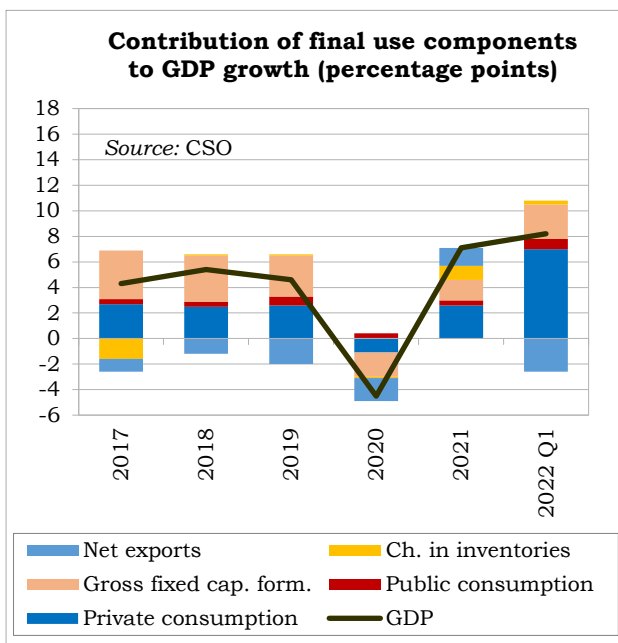
Inflation is fueled, in addition to the global tendencies, by the fast growth of domestic demand that was buttressed by government spending up early 2022. While the MNB started its rate hike cycle back in June 2021, its moves were not consistent and failed to send an unambiguous message toward financial investors. In more than one case, the degree of rate hike was reduced at times when inflation forecasts pointed to further acceleration of inflation. The radical rate hike in June 2022 (by 185 basis points) indicates a break with the former hesitating monetary policy but another radical and extracurricular rise (by 200 basis points) in mid-July was necessary to halt – at least for now – the steep weakening trend.

## The GDP and its components

Although the continued dynamic growth of GDP was generally expected, the 8.2% growth rate in the first quarter came as a surprise. Compared to the previous quarter, GDP climbed 2.1 percent. The first-quarter growth performance is still respectable in international comparison: Hungary achieved the 6<sup>th</sup> highest growth rate among the member states. But the *composition* of growth is quite skewed.



On the **expenditure side**, the growth rate of *actual private consumption* – 11.5% – broke every previous record while household consumption expenditures were up 14.1%, an absolute record as well. As a result, private consumption in itself explains 6.7 percentage points from the overall growth of 8.2%. While consumption growth was helped by dynamic wage growth, the gigantic stimulus package, timed for February, was the primary driving force. The package included the tax rebate, the 13<sup>th</sup> month pension and

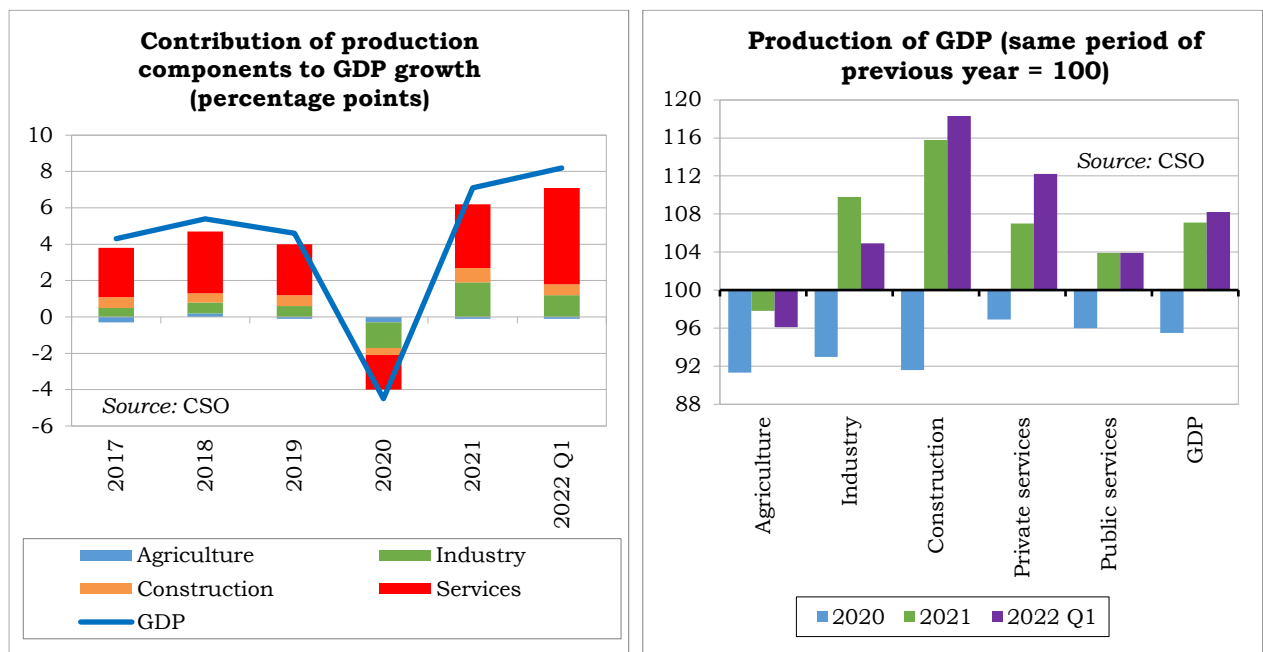


the so-called “arms money” – a bonus equal to cumulative six-month earnings – for the members of armed forces (soldiers and defense employees, policemen, prison guards). Along with the fast growth of government consumption and the higher-than-expected growth rate of *fixed capital formation*, boosted by business and household investments – this resulted in an overall growth of 11.5% of *domestic final use*, an unprecedented pace.

But this steep growth in domestic demand also led to a drastic deterioration of Hungary’s external trade position. Amid a very moderate growth in goods export, goods import shot up, generating a negative growth contribution of almost 4 percentage points by the external trade of goods. The ongoing positive trend in the external trade of services could not offset this by far.

On the **production side**, the one-sidedness of growth was less obvious: while domestic demand-fueled private services were up 12.2% and construction also galloped by about 18%, industry also could expand by a moderate rate of almost 5%. The latter was due to both the moderate growth in export sales and a much more buoyant growth in domestic sale. As for services, retail trade value added was up almost 9%, tourist accommodation and food service shot up by more than 80% and two-digit growth rates were observed in information-communication, the arts-entertainment-recreation sector and the diverse area of professional, scientific, technical and administrative activities. Of course, year-on-year growth rates in many areas within services were buttressed by the low statistical base since the first quarter of 2021 was still marred by Covid-related restrictive measures. Within transport and storage, fast growth was probably greatly helped by storage activities, passenger transport and domestic freight transport.

During the **rest of the year**, the furious pace of domestic demand growth will cool substantially, especially in the second half. Consumption growth will slow down as the effect of one-off incomes wanes, growing inflation eats into real income growth and consumer sentiment is getting frostier. The annual average growth of real wage disbursements probably will not reach 6% and we expect the same regarding yearly private consumption growth. Besides soaring inflation and worsening of economic climate, the simultaneous fiscal and monetary tightening will lower consumer optimism. The smaller domestic firms will be affected by rising interest rates while the export-



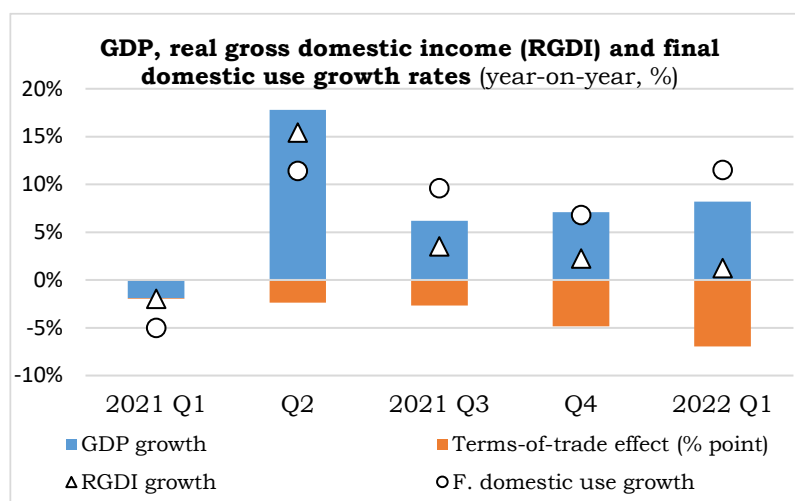
oriented sector, dominated by foreign-owned companies, will feel the effect of the worsening global and European economic outlook, not to mention the introduction of new “windfall taxes” by the government in various economic areas that provoked fierce opposition on the part of the affected corporations.

Cooling domestic demand will also have a moderating effect on import growth but on the other hand, export growth will keep being hampered by the seemingly endless continuation of the Russian-Ukrainian war, along with the sanctions and counter-sanctions and the resulting constraints on the logistical chains, the global food and energy supply and access. Hence, the contribution of external trade is likely to remain negative. On the whole, **we maintain our growth forecast of 4%** for 2022.

### The growth of GDP, real gross domestic income (RGDI) and final domestic use

In 2021 the Hungarian terms of trade declined substantially, and the trend intensified further in the first four months of 2022. with monthly deteriorations of about 7% in February-March, the highest rate in the past 25 years. The price loss has a negative impact not just on the balance of trade and the current account balance (on the latter, see the chapter about the balance of payments) but also keeps down the growth rate of the real gross domestic income (RGDI) compared to that of GDP. In the third and fourth quarters of 2021 and in the first quarter of 2022, the terms-of-trade deterioration devoured 45, 70 and 85% of GDP growth, respectively, hence RGDI growth fell way short of the dynamism of GDP. (Regarding the quantification of terms of trade loss, again, see the chapter about the balance of payments.) As can be seen from the chart, the growth rate of GDP slightly increased during the last three quarters (blue column) while the pace of RGDI growth (triangle) steadily decreased due to the faster increase in relative price loss. In the first quarter of 2022, GDP grew by an impressive 8.2% but RGDI rose by merely 1.2%.

An important message of the chart that at times of severe terms of trade loss, the degree of domestic excessive demand is indicated not by the gap between domestic final use growth (circle) and GDP growth but by the gap between final domestic use growth and RGDI growth. In the first quarter of 2022, the former gap was 3.3 percentage points, but the latter was as much as 10.3 percentage points, which explains the almost unprecedented deterioration in trade and current account balances. The gap between the volume growth rates was compounded by the enormous price loss that is not indicated by the volume data on GDP and domestic use, and that needs external financing.



Source: calculation based on CSO data

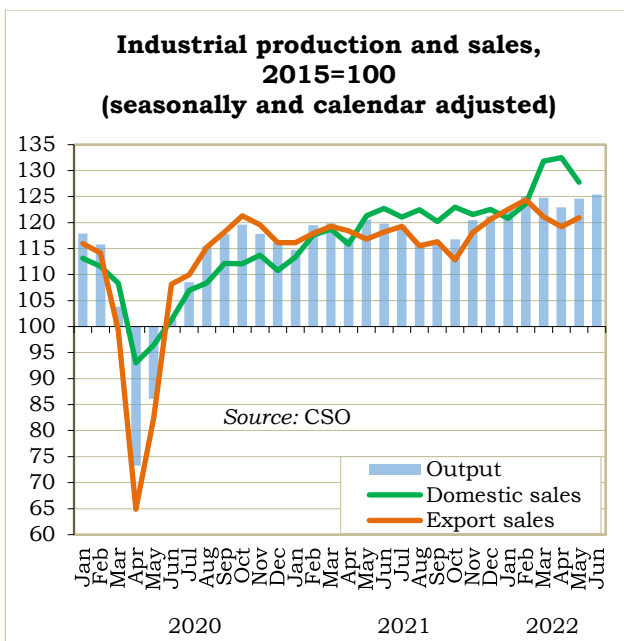
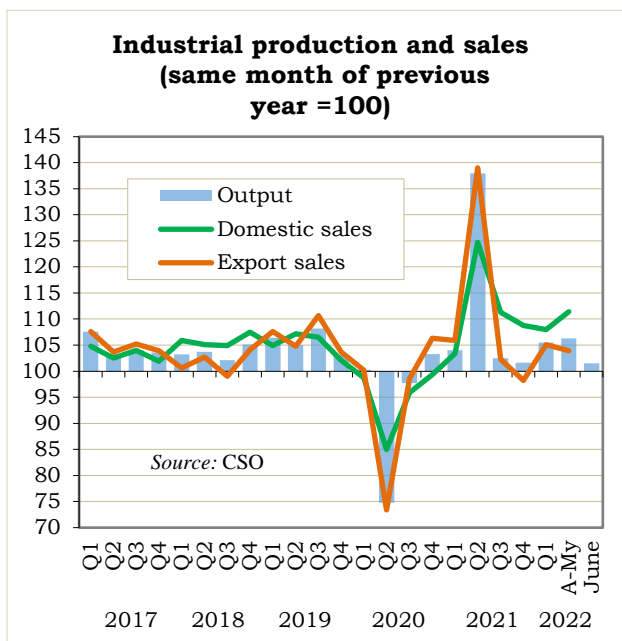
### 3.1. The production side of GDP

#### 3.1.1. Industry

The trend of decelerating growth seen in 2021 reversed in the first half of 2022: industrial growth reached 5.5% in the first quarter and (according to the preliminary data) 4.7% in April-May. In the first quarter, both domestic and export sales grew at a relatively good pace, but export sales growth faltered in April-May while domestic sales remained strong. According to the seasonally adjusted data, monthly output volumes rose in the first quarter and remained more or less stable in April-June – export sales volumes, on the other hand, first briefly exceeded the previous peak in January-February but lost steam in March-May (with a possible uptick in June). It should be noted that *manufacturing* export sales did better after February – in May, it actually reached a new record high after a previous dip – but *electricity* export took a dive during the spring. Domestic sales, on the other hand, remained high according to the seasonally adjusted data, even after some drop in May. It seems that while domestic sales were boosted by the government stimulus package in February, export sales cannot find a steadily rising trajectory amid the still existing supply-side bottlenecks and especially skyrocketing energy prices.

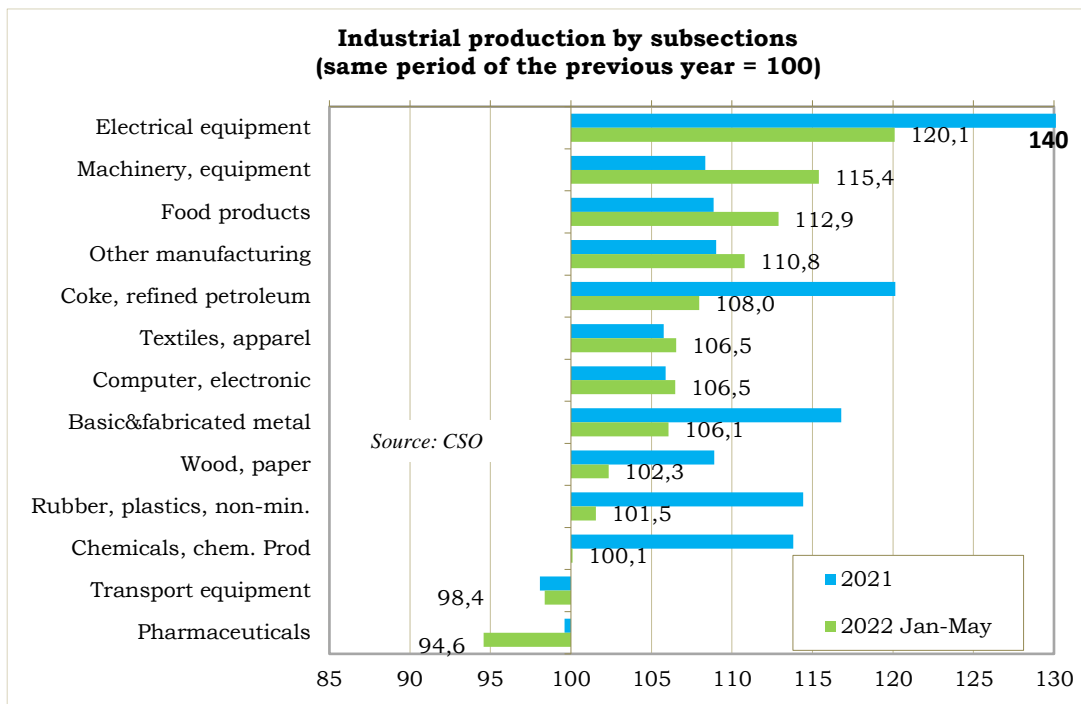
The combined growth in January-May was 5.9% on an annual basis (and 5.1% in the first six months, according to the preliminary data), with a 9.4% growth of domestic sales and a lower rate of 4.6% in the case of export sales. Since much of industrial production is export-oriented, the continued woes regarding global supply – and lately, also global demand – casts a shadow on industrial outlook.

From the four engineering-related industrial branches, the two smaller ones, electrical industry and the production of machinery and equipment displayed fast (double-digit) growth rates while year-on-year growth was relatively subdued – this was, however, due to the statistical base effect: the seasonally adjusted volume data suggests a steady rising trend in electronic industry. The automotive industry, on the other hand, is still stuck, even if it is likely to achieve positive year-on-year growth during the rest of the year, due to the low statistical basis. By contrast, the mostly domestic-oriented food industry grew at a double-digit pace. On an annual basis, only two industrial branches had negative



growth in January-May: manufacturing of transport equipment and pharmaceutical industry.

The data regarding the stock of orders suggests that the Hungarian industry still does not suffer from the lack of demand. The stock of domestic orders continues to decrease on an annual basis, not due to the lack of new orders but because of the completion of many previous orders. The stock of export orders keeps growing at a good pace. The latest PMI-index also suggests that demand still supports industrial growth. But the growing concerns about the threat of a global recession and the risk of rising costs reaching a threshold where they become unacceptable may bring about a negative turn in demand conditions in the second half of the year. By now it became clear that the Russian-Ukrainian war will drag on, and it poses a growing threat to the global energy and food supply. Thus, we **expect only modest industrial growth of about 4% in 2022.**



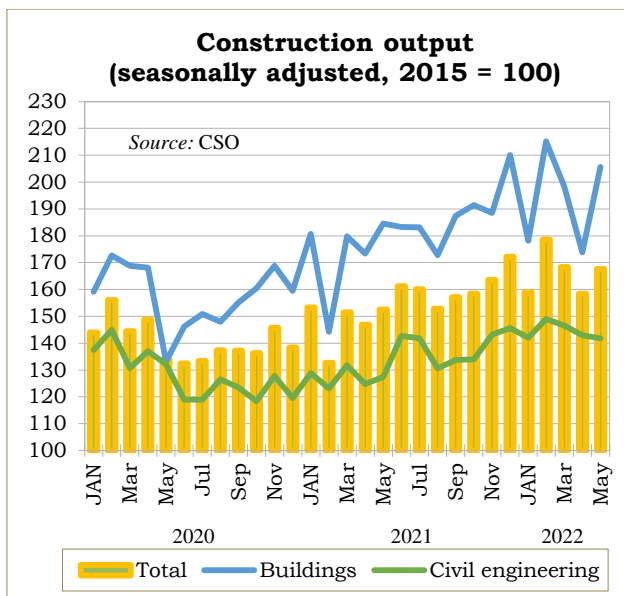
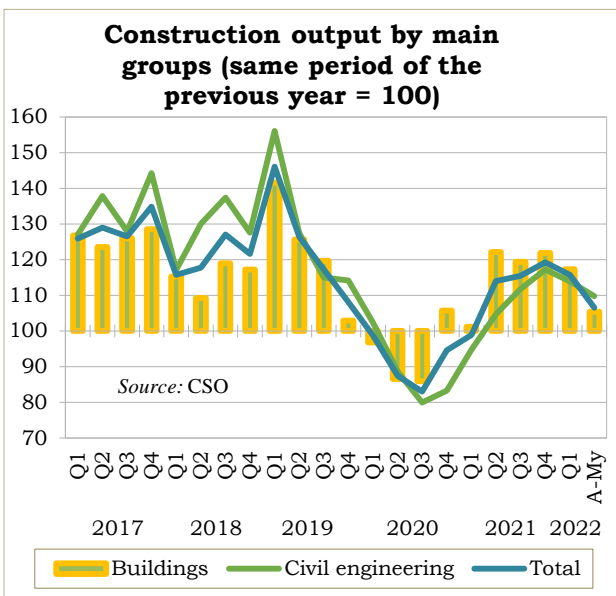


### 3.1.2. Construction

The post-Covid growth cycle peaked in the last quarter of 2021, with an annual growth rate of 19.2%; after that, the pace of growth slowed down to 15.7% in the first quarter of 2022 and 6.5% in April-May. Up until the first quarter, the construction of buildings achieved higher growth rates, although amid wild monthly fluctuations, but that changed in April-May because the slowdown was much steeper in the case of building construction than in civil engineering. The seasonally adjusted data suggests that the rising trend of monthly volumes peaked in February and halted, even slightly dipped, afterwards. The data from the iBuild database suggest a somewhat better future outlook in the case of civil engineering because the *newly started* construction projects reached record level in the first quarter. This, however, does not reflect a general upturn but only the start of two large-scale railway construction projects. At the same time, the value of newly started projects in building construction slightly decreased on an annual basis in the first quarter, due to the weakening of housing construction activity.

The cumulative growth rate was 11.5% in January-May, but the pace of growth is likely to decrease considerably during the rest of the year. The Russian-Ukrainian further exacerbated the existing supply-side problems – soaring energy and building material prices – and this, along with the qualitative and quantitative labor shortage, decreases profitability and makes it difficult to access to the necessary inputs, hindering the progress of construction projects.

As for the demand side, the *volume of stock of orders* is still much higher in civil engineering than in the same period of the last year while it keeps decreasing in the case of building construction – despite the relatively favorable evolution of new orders. But the deferment of several massive public investment projects beyond 2023 will affect the level of orders and may decrease construction activity toward the end of the year. Still, at the moment, the supply-side constraints are the dominant barrier to construction growth. We expect a flattening of the growth trend and a **4-5% annual growth rate in 2022**.

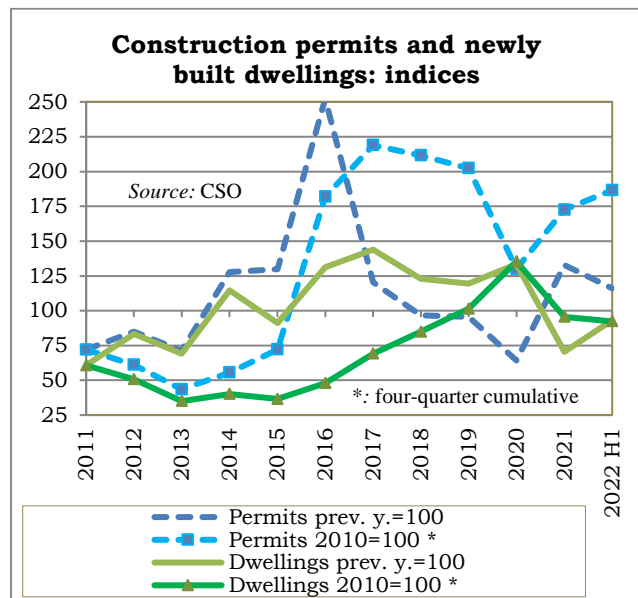


### 3.1.3. Housing construction

The number of dwellings built that has been on a decrease since the second quarter of 2021, and the year-on-year continued in the first quarter of this year at a rate of 29.5%. In the second quarter, however, the downward trend changed direction, and the number of newly built dwellings was up 26.4% on an annual basis – also, the absolute quarterly number of dwellings built was higher than in the second quarter of any years between 2018 and 2021. It is not clear yet whether this is a lasting change in the trend. In any case, most of the growth is due to the jump in the number of dwellings built by natural persons, while the finished output of housing construction activity by businesses only grew marginally.

The number of building permits/notifications continued to rise, for the fifth consecutive quarter, by 16.6%, a rate similar to the previous quarter. This is good news for the future prospects of housing construction activity. But the Russian-Ukrainian war exacerbated the already existing impediments to a sustained growth. According to the spring housing market report by the Hungarian National Bank (MNB), Hungary saw the most severe growth in the cost of housing construction within the EU in 2021, the prices of building materials and energy got a further boost from the war, along with the input shortages. At the same time, housing loan interest rates are rising and the Green Housing Loan program – that offered preferential interest rates for the beneficiaries – is about to be closed.

This may reduce the demand for new dwellings, which may even lead to delays in the construction work of projects that have permits. On the whole, the cumulative number of dwellings built still decreased somewhat in the first two quarters of the year and it is uncertain whether the second half will see an uptick or a downturn.



## 3.2. The expenditure side of GDP

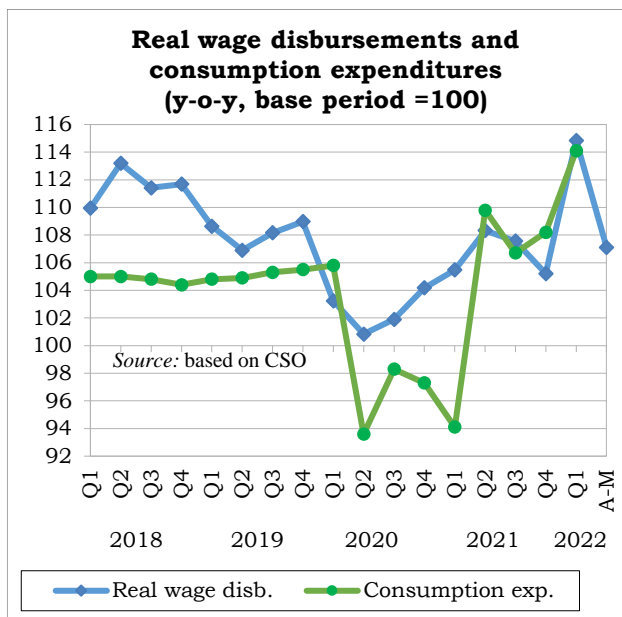
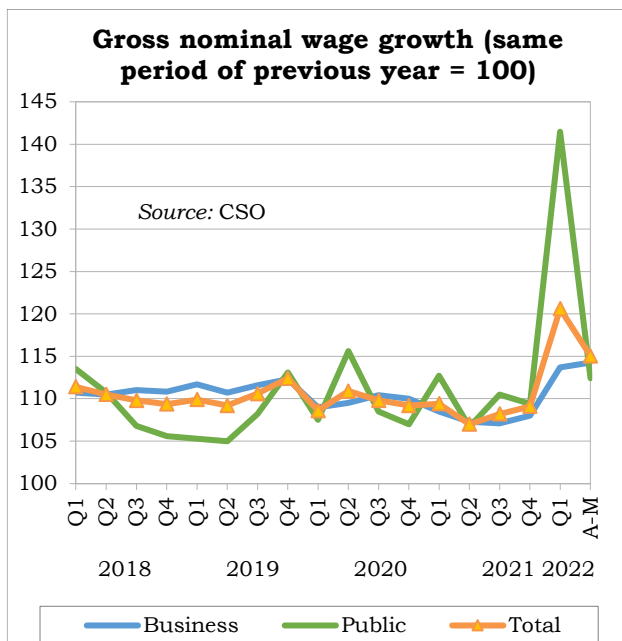
### 3.2.1. Household income, consumption and saving

Nominal wage growth gained further pace in 2021, with a five-month average rate of 18.5%, a sizeable jump compared to the 8.7% recorded in 2021. This was in part helped by the 20% raise of both types of minimum wages – the basic minimum wage and the guaranteed wage minimum for skilled workers. But even more, the jump can be attributed to the huge bonus paid for a specific group of employees, the members and employees of armed bodies (army, police, prison guards) that pushed the February wage growth up to almost 32%. The actual wage growth for the large majority of wage earners is more reflected by the growth of average *regular wages* (14.2% in January-May). Business sector wages were up 13.9%, as opposed to the public sector wages skyrocketing at a pace of 29.5% in the first five months. But even in the public sector, regular wages only climbed 14.7%.

The faster wage growth was partially offset by faster inflation but still, the five-month **real wage growth** was impressive, 9%. *Regular* real wages that are not affected by the said February bonus, were only up 5.1%, however. Due to the continuing growth in the number of employees, **net real wage disbursements** climbed by a respectable 11.9% rate in January-May. (Without the bonus, the growth rate would have been about 8,5%.)

Due to the fast real wage growth, and also the income tax rebate, the payment of 13<sup>th</sup> month pension (both timed for February, in accordance with the sectoral bonus) and some other items, the households' consumption expenditures grew at an absolutely record-breaking rate of 14.1%, while overall private consumption was up 11.5%.

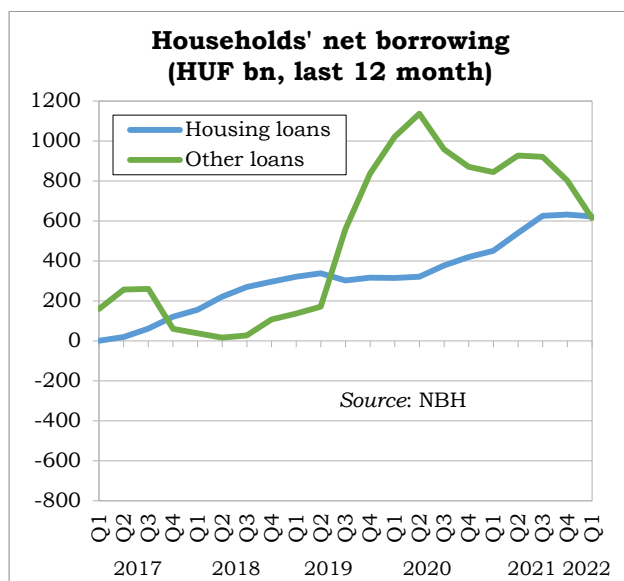
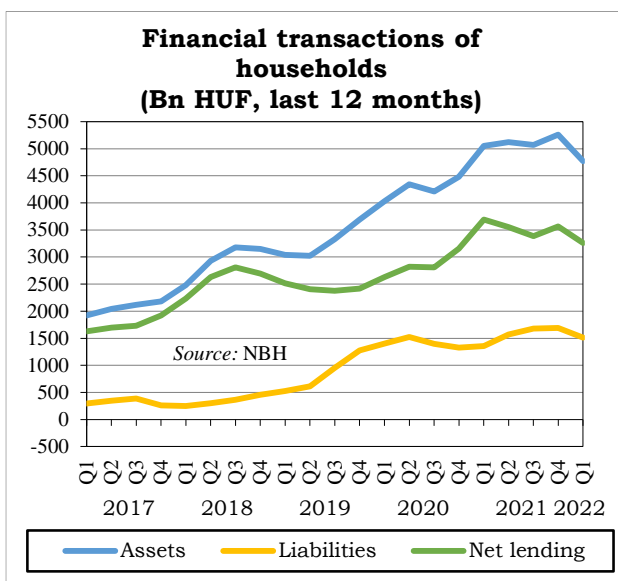
Just as wage growth is bound to decelerate from its speed at the beginning of the year, consumption growth will also lose steam. The inflation rate has already rose above 10% and is about to rise further. This, along with rising interest rates and – from September on – rising utility rates, is making households more pessimistic and lead to a marked slow-down in consumption growth in the third quarter at the latest. Toward the end of the year, the gradual abolishment of the price caps is



likely to be another hit for households. Real wages are likely to grow by a moderate 3-4% in 2022 as a whole – as opposed to the steep rise of 9% in the first five months. (The growth of total household incomes, on the other hand, may expand by about 5%.) The steep rise of interest rates increases the households’ debt service burden and discourages them from taking up new loans.

As a result, while household consumption will grow relatively dynamically, by **5.5-6%** in 2022, this rate implies a sharp deceleration from the double-digit growth rate recorded in the first quarter.

The households’ nominal **net financing capacity** significantly decreased in the first quarter compared to the same period of 2021, amid a drop in gross financial savings and – at least in absolute terms – an even more significant drop in the borrowing/repayment balance. This suggests that the sizeable extra income that arrived in the first quarter to the households was largely spent on consumption and, to a degree, on debt repayment. The repayment wave apparently involved both housing and other loans: the balance of housing borrowing transactions somewhat decreased despite the dynamic rise in taking out new housing loans, while the balance of other borrowing sharply fell amid a stagnation in the value of new other loans taken out. In any case, the **savings rate** (the net lending-to-GDP ratio) fell from above 10% in the first quarter of 2021 to 6.5% in the first quarter of this year, which led to a decrease of the *four-quarter cumulative* savings rate from 6.5% at the end of the last year to 5.7% in the first quarter of 2022.



### 3.2.2. Investments

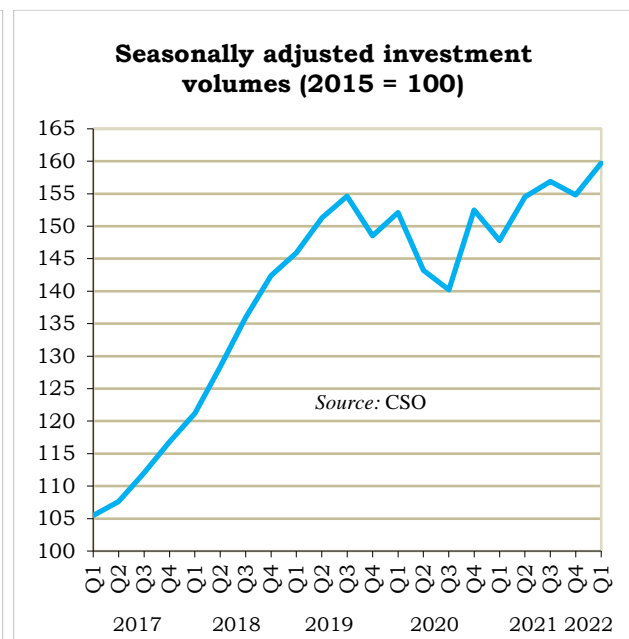
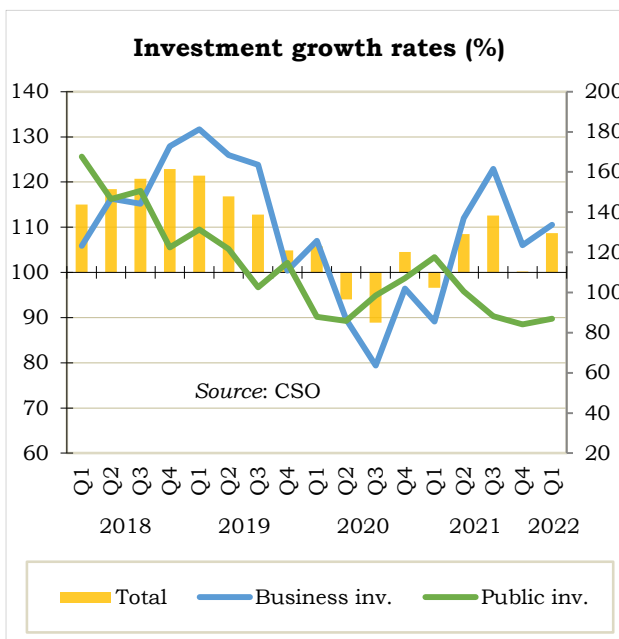
In the first quarter of 2022, investments growth surpassed expectations, with a rate of 8.7%, after the stagnation recorded in the previous quarter. The *seasonally adjusted* investment volume rose significantly compared to the previous quarter and reached a new record level.

The investment growth was in part driven by the upturn in business investments – according to the MNB, mostly the foreign-owned firms were engaged in investment projects – but household investments grew as well. At the same time, the fall of public investments continued at a rate of 13%.

The individual economic areas did not uniformly post positive growth but the two largest economic industries, *manufacturing* and real estate, boasted 15-20% growth rates. On the other hand, the dynamism of investments in transport and storage abated and wholesale and retail investment growth turned into decline. It should be noted that manufacturing itself is far from being homogenous: automotive investments contracted while electrical industry investments are booming (battery and accumulator manufacturing plants). The fall in transport investments is due to a petering out of state infrastructure investments.

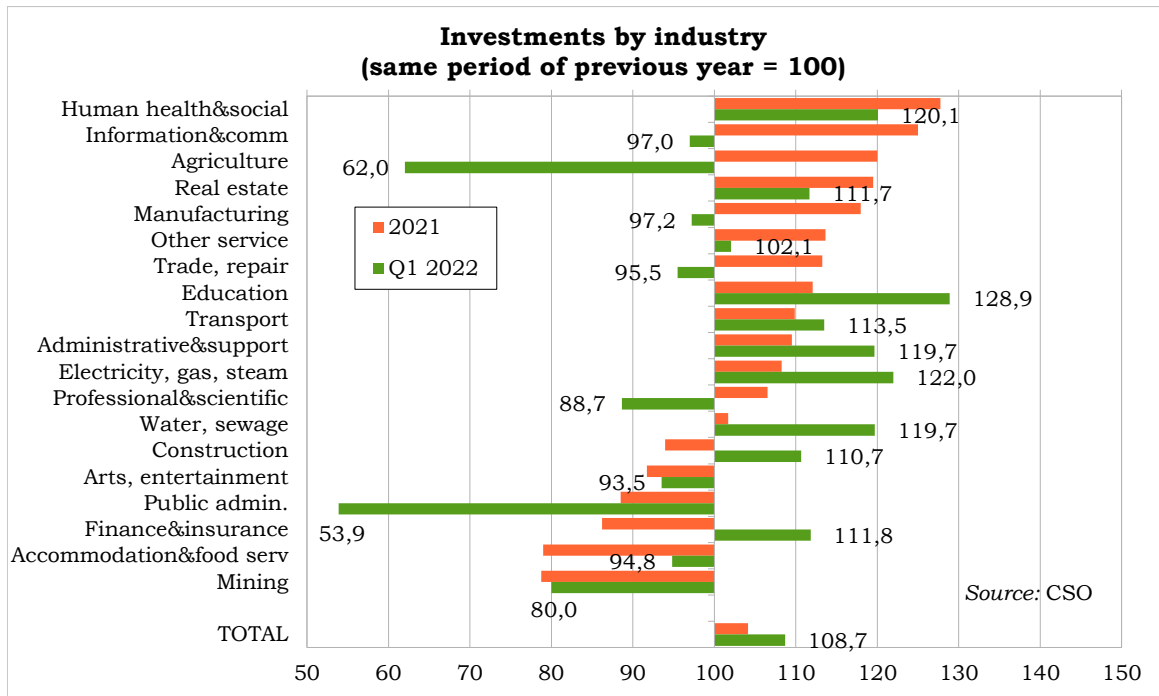
As for other areas of state investments, the pace of decline of public administration investments slow down below 5% while investments in the health and social work sector still contracted by 20% and the decrease in education sector investments accelerated above 10%.

The prospects for the rest of the year are contradictory. The lower statistical base could help state investments start to grow on a year-on-year basis but the decision to put off many large-scale projects 2024 makes this possibility unlikely. The investment activity of private firms may be helped by the fact that the government tries to keep allocating generous investment subsidies to firms even amid a fiscal consolidation program. On the other hand, the general economic climate is deteriorating fast and recessionary fears are becoming acute worldwide. Furthermore, the dramatic change of domestic and European interest rate conditions is likely to put a lid on the firms' willingness to take



out investment loans. Roughly the same factors are likely to affect the housing investment activity of households.

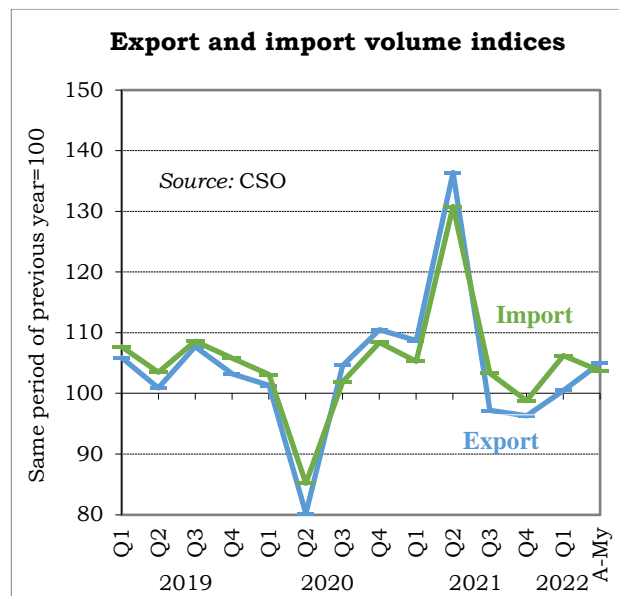
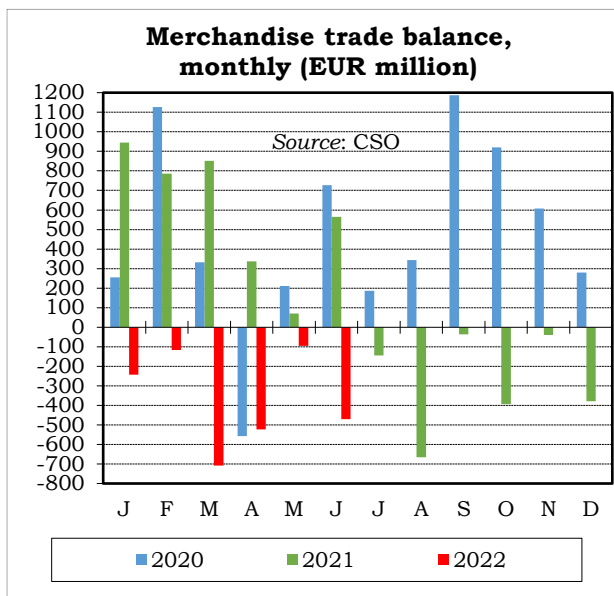
Still, due to the better-than-expected investment growth in the first quarter, we have slightly revised our yearly **investment growth forecast** upward **for 2022 to 4.5-5%**.



### 3.2.3. External trade

After the negative turn in the second half of 2021, the unfavorable trend continued in the first five months this year. In January-May, the volume of export climbed 2.3%, as opposed to the 5.2% growth of import. Export growth was muted by the slow expansion of the export of machinery and transport vehicles and the fall of food exports. At the same time, import growth was buttressed by the rapid rise in the export of foods and manufactured products. The expansion of domestic demand had an upward effect on import even if the machinery and transport vehicle export remained flat in January-May. This negative gap between the respective growth rates of export and import was dramatically compounded by the deterioration of terms of trade by as much as 6.1% in the first five months. As a result, the cumulative trade deficit amounted to EUR 2.4 billion in January-June, while during the same period of the last year a trade surplus of EUR 4.3 billion was recorded. 2022 will be the first year with negative merchandize trade balance since 2008.

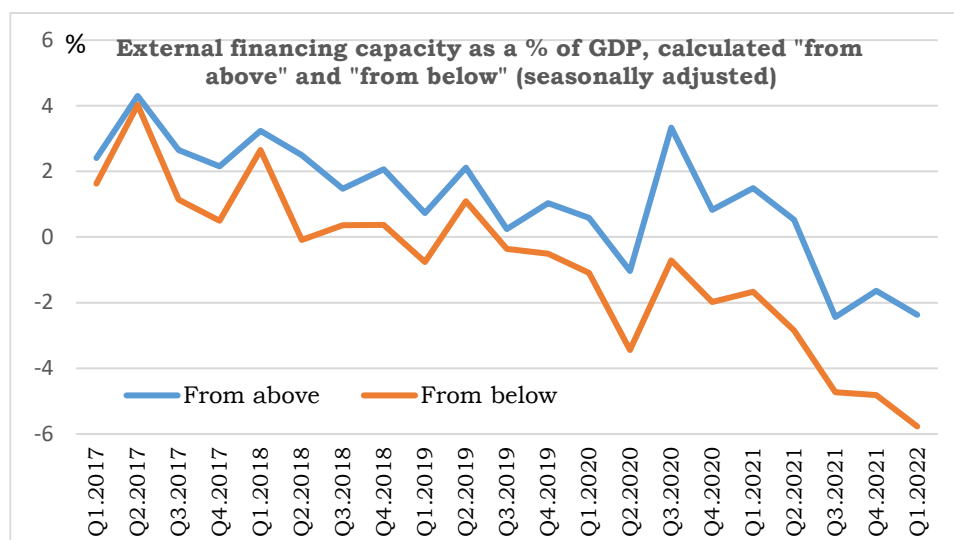
No fundamental improvement is expected for the rest of the year. While import growth will become more subdued due to the souring of consumer and business sentiment and a softening of domestic demand in the face of soaring inflation and interest rates, the external conditions do not facilitate a spectacular comeback of export growth. Apparently, the Russian-Ukrainian war is becoming a virtually endless quagmire and its spillover effects, primarily on energy prices and energy security, will be lasting as well. With no significant upturn in export, the monthly trade balances are likely to remain negative. At present, we expect an annual trade deficit of almost 4 billion euros in 2022.





### 3.2.4. Balance of payments and the impact of terms-of-trade deterioration

In the first quarter of 2022, the five-year-old trend of deterioration of the external balances continued, and by now this deterioration means the growth of external deficits, rather than simply the erosion of surpluses. The chart below shows the worsening trajectory of net external financing, calculated both “from above”, as a consolidated balance of current account and capital account balances (the latter includes most of the EU transfers), and “from below”, from the financial account numbers, based on the seasonally adjusted data provided by the MNB.



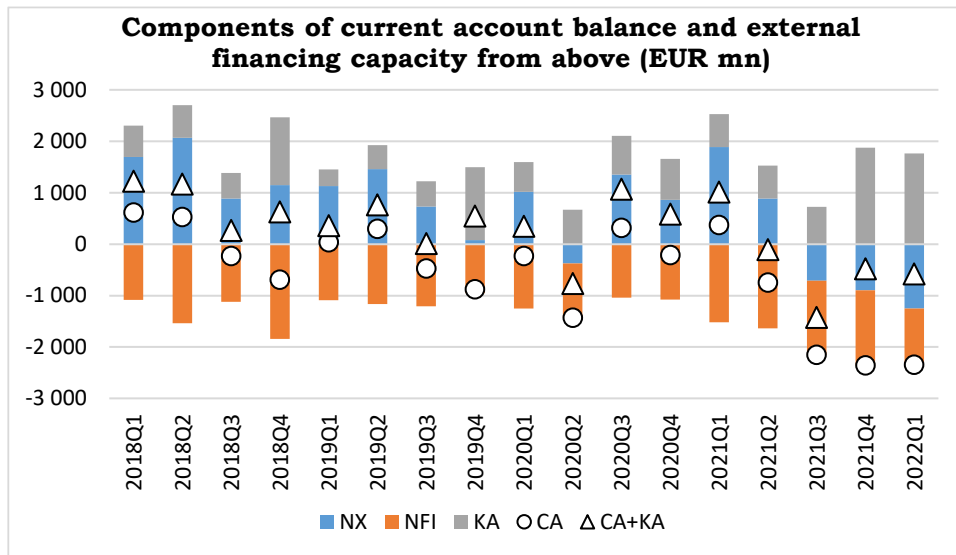
Source: MNB

The growing negative gap between the net external financing capacity calculated from above and from below – that is, the so-called net errors and omissions (NEO) indicates that the statistics fails to entirely capture some of the processes that adversely affect net external financing. This may be a result of either the undermeasurement of import, or the undermeasurement of capital outflow, but in any case, the change of stock of net external liabilities depends on the evolution of the financial account – that is, the orange line. The clear downward trend of the latter indicates an accelerating accumulation of net financial liabilities. In the first quarter of 2022, the growth of net liabilities was due to the growth of debt-type liabilities: the net inflow of FDI was negative.

Henceforth we will focus on net external financing capacity calculated from above, especially on the current account balance, to which the balance of the external trade of goods and services kept contributing positively until the second quarter of 2021 but has turned to an ever-growing deficit since then (see the blue columns on the chart).

In the first quarter of 2022 the year-on-year deterioration of the balance of the external trade of goods and services amounted to more than EUR 3.1 billion. To give a picture about the magnitude of this deterioration, it makes up as much as 55% of the annual growth of GDP in the same quarter. It was the net result of a worsening of the net export of goods – by EUR 3.7 billion – and an improvement in the net export of services. The worsening of overall net export can be attributed to a terms-of-trade deterioration of 7% in the first quarter, the biggest year-on-year deterioration in the past quarter of century,





Source: MNB

Codes: CA (current account) = NX (net export of goods and services) + NFI (net income); KA: capital account; CA+KA: net external financing capacity calculated from above



Source: calculation based on data by the CSO

Any change in net export can be disaggregated to three components: price level effect, volume effect and terms-of-trade effect.

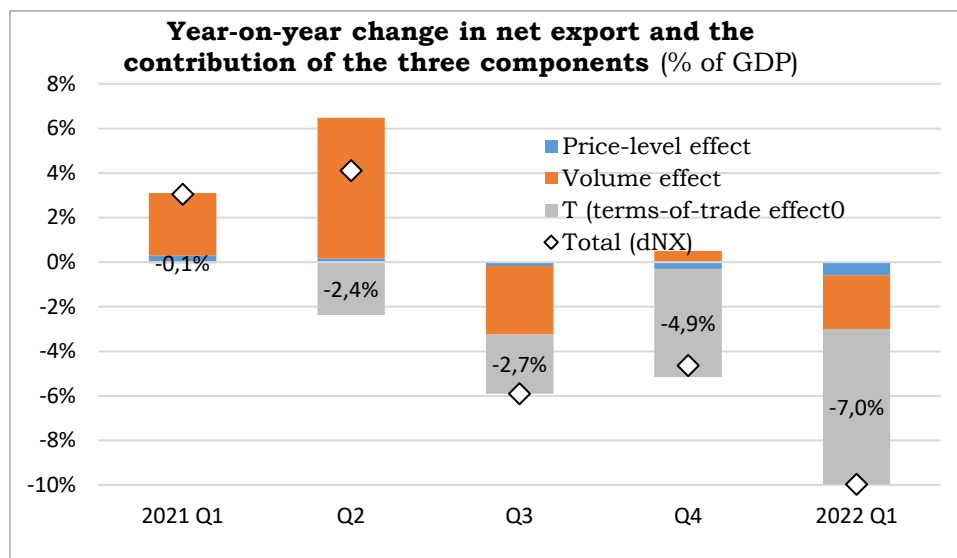
$$(X_1 - M_1) - (X_0 - M_0) = \underbrace{(X_1 - M_1) - \frac{X_1 - M_1}{P_{xm}}}_{\text{Volume effect}} + \underbrace{\left(\frac{X_1}{P_x} - \frac{M_1}{P_m}\right) - (X_0 - M_0)}_{\text{Terms of trade effect}} + \underbrace{\frac{X_1 - M_1}{P_{xm}} - \left(\frac{X_1}{P_x} - \frac{M_1}{P_m}\right)}_{\text{Price level effect}}$$

where X and M denote export and import, respectively, 0 and 1 denote the reference base period and the current period, respectively, Px and Pm denote the import and export price indexes, respectively, and Pxm denotes the average of those price indexes.

The first part of the formula shows the effect of the mean price level change. The second part shows the effect of volume changes, that is, the difference between the net export in the current period and the base period, expressed in constant prices – this also constitutes the contribution of net export to GDP growth. Finally, the

third part shows the difference between the net export deflated by the average external trade price index on the one hand and the constant-price net export on the other, which expresses the impact of the change in relative prices, that is, of the change in the terms of trade. Under the present Hungarian conditions, the gap between the export and import price indexes is of course negative ( $P_x < P_m$ ), but the terms-of-trade effect depends not only on the terms of trade (the ratio of export and import price indexes) itself but also depends on how much the current value of import exceeds the current value of export.

The next chart shows the change in net export and the three components of that change, expressed as percentages of the GDP of the reference base period (that is, the same quarter of the previous year).



Source: calculation based on data by the CSO

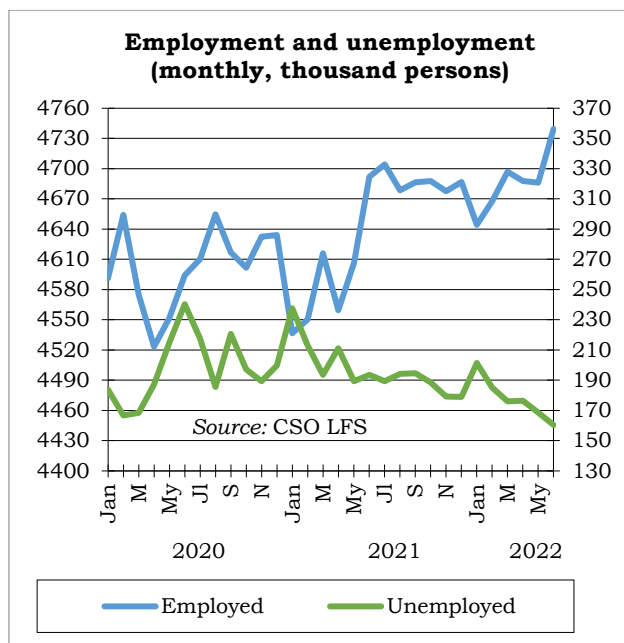
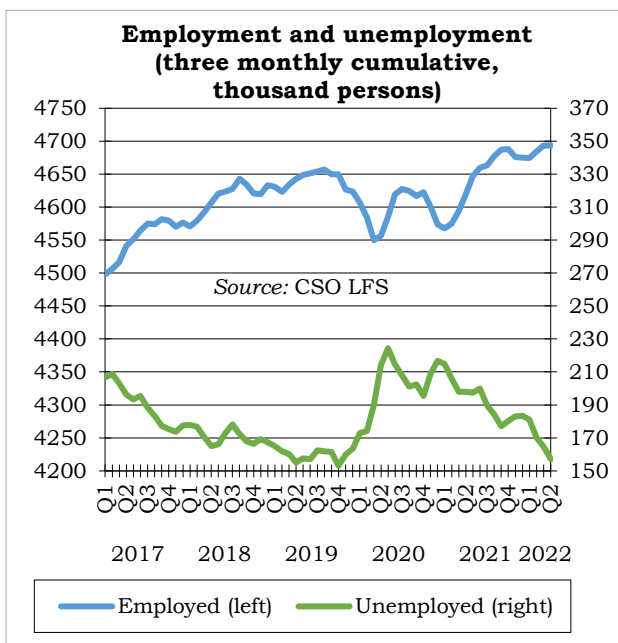
It can be seen from the chart that the terms-of-trade loss was the key factor behind the deterioration of the net export of goods and services in both the fourth quarter of 2021 and the first quarter of 2022. The minus 7 percentage points contribution of the terms-of-trade loss (displayed as grey column) in Q1 2022 also shows that out of the 8.2% growth of GDP, 7 percentage points were taken away by the deterioration of terms of trade, hence the real gross domestic income (RGDI) only grew by 1.2%. (See the box attached to the chapter on the GDP and its components.)

### 3.3. Employment, unemployment

According to the *labor force survey* (LFS) data, the employment situation kept improving in the first half of 2022. The rolling 3-month average number of employed was up 2.3% in the first quarter on an annual basis and 1.6% in the second. At the same time, the number of public workers kept edging downward but the number of those working abroad has been on the rise since last November-January. The number of those employed on the domestic primary labor market climbed 1.5% in the second quarter while the number of those working abroad grew by 16%. Still, the number of people working abroad is below the numbers recorded before the pandemic.

The rolling 3-month average *unemployment rate* dipped to merely 3.2% in the second quarter of this year, a rate equal to the lowest rate before the pandemic but amid a higher rate of labor market participation.

As it seems, the Russian-Ukrainian war and the other mounting problems have not yet affected employment levels so far. This may change somewhat in the second half of the year, but at the moment, the once more acute labor shortage is the principal labor market problem. The latter, along with record-high employment and nearly record-low unemployment, is the *main impediment of further improvement*. While the labor shortage in the business sector has not yet reached the highest levels recorded around 2018, the vacancy rate is at an unprecedented high in the budgetary sector, particularly in the health and social work sector.



### 3.4. Fiscal, monetary and financial developments

#### 3.4.1. Fiscal developments

##### 3.4.1.1. Fiscal revenue, expenditure, deficit

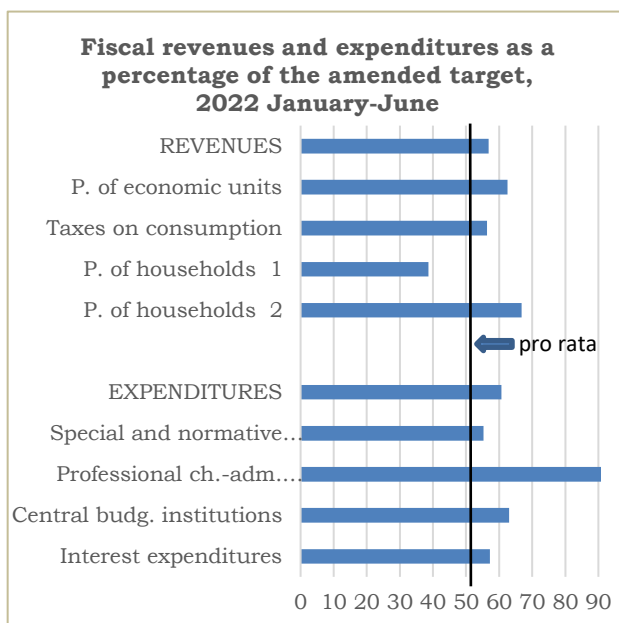
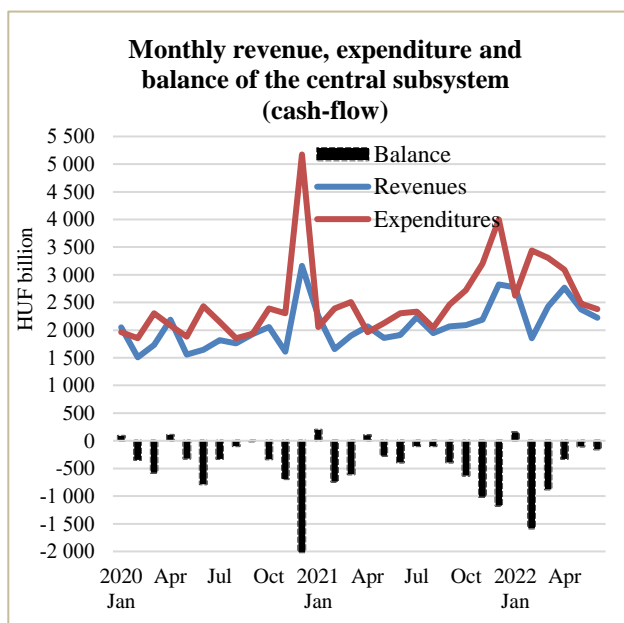
The government introduced the fiscal bill for 2022 in May 2021 and adopted in July 2021, at a time when even the economic outcome of 2021 was unknown. This, amid the current turbulent environment, led to a situation where basically there is no line in the budget act that even proximately in line with the actual fiscal developments.

The budget act set the total amount of revenues at HUF 25,352 billion and the total amount of expenditures at HUF 28,505 billion. This would have meant a deficit of HUF 3,152 billion, a decrease from the previous year and 5.9% of GDP, with the assumption of a GDP growth rate of 5.2% and a GDP deflator of 3.8%.

The Fiscal Council noted in its assessment of the budgetary bill that the state of the economy could make it possible a faster reduction of deficit – to a deficit-to-GDP ratio closer 3% - because there was no real need for further stimulus spending.

By the end of June 2022, the cash flow deficit of the central subsystem of general government reached HUF 2,892 billion, 91.7% of the annual deficit target. But the February deficit alone was HUF 1,585 billion, a result of the giant stimulus spending implemented in that month, including the tax rebate for families with children, the reintroduction of 13<sup>th</sup> month pension and the bonus paid to members of the armed bodies, amounting to 6-month earning (“arms money”).

At the same time, other types of government spending also continued at an intense pace, like the tourism subsidies (that were unjustifiable even before the February spending spree), the church and sport subsidies, the subsidies paid under the Modern Cities program, and other programs – all this amounted to several billion forints. This contradicted with the government announcement in December 2021 which envisaged the deferment of government investments projects amounting to HUF 755 billion and also the reduction of the 2022 deficit target of 5.9% of GDP to 4.9%. This reduction was



justified by citing the growth data of 2021 that suggested that the economic restart had already taken place and fiscal spending could be reined in while maintaining the growth target of about 5% for 2022.

Since then, the conditions have changed profoundly. Primarily, the Russian invasion disrupted the world economy. The military conflict drastically exacerbated the already rising trend of food and commodity prices. The war in the vicinity lowered global economic growth and fueled global inflation.

Due to the inflationary pressures – and the resulting high GDP deflator – it was clear even before the war that the official nominal GDP target was not realistic. The nominal GDP exceeded the target in 2021 as well, and the highest-than-expected base level is now compounded by the even much higher inflation in 2022, even though real GDP is likely to grow at a somewhat slower pace than what is envisaged in the budget. As a result, we expect the nominal GDP to exceed the target by roughly 10% this year, amid real GDP expanding by about 4% and a GDP deflator of 9-11%. As we have already indicated in our previous report, this provides the government some wiggling room regarding the deficit-to-GDP ratio, but it does not save the government from the growing burden of financing the growing fiscal debt.

The higher inflation rate reduces the deficit-to-GDP ratio in two ways. First, higher prices pump up consumption tax revenues, second, it increases the nominal GDP – that is, the denominator of the deficit-to-GDP ratio – thereby the value of the fraction. It is true that there are items on the expenditure side, too, that grow along with inflation (e.g. pensions) and the growing debt also increases interest expenditures but still, there are numerous expenditure items where the government has discretionary powers to decide whether to rise them along with inflation or keep them at their original nominal level, thereby reducing the deficit.

Let us see now how all this affects the 2022 deficit in light of the data about the first half of the year. In the January-June, revenues amounted to 56.8% of the yearly target, as opposed to the pro rata 50%, despite the HUF 685 billion personal income tax rebate.

Revenues from taxes on consumption reached 56.3% of the yearly target, after an annual growth of as much as 25%. Since these are the type of taxes that are the most sensitive to inflation, a significant overachievement is likely this year. While real consumption growth will decelerate significantly in the second half of the year, this will be largely offset by rising inflation, hence we expect a revenue overperformance of about 8% in 2022.

The revenue inflow from the payment of households only made up 38.6% of the target, and the respective ratio was just 35.9% in the case of personal income tax. This is due to the fact that the 2022 budget did not anticipate the PIT rebate of HUF 685 billion (that was decided upon two months after the adoption of the budget). If we add this sum to the actual inflow, then 60.3% of the yearly target was achieved in the first half. Some of the 685 billion may trickle back to the budget by the end of the year, improving the outcome/target ratio.

The inflow from the payments of economic units also significantly surpassed the prorated ratio by achieving 62.5% of the yearly target by the end of June. Almost all items within that revenue category performed well. A yearly overperformance of HUF 100-200 billion could be expected for this year even without the introduction of the

“windfall taxes” that amount to HUF 800 billion. In sum, revenues are likely to substantially surpass the target, mostly due to the very high inflation rate.

But the gap between the targets and the prorated outcome was higher in the case of expenditures: 60.7% of the spending target already materialized during the first half of the year. By far the largest overspending is recorded in the case of professional chapter-administered appropriation, that is, the state investments, development and maintenance projects. On this line, the plan was to *reduce* the expenditures – instead, a 60% growth took place in the first six months and the sum of 6-month spending got very close to the annual target itself.

The table below shows data on the major items within the category of professional and chapter-administered appropriation.

#### **Selected items within chapter-administered appropriations**

	2021.H1 bn HUF	2022.H1 bn HUF	2022 June bn HUF
Normative financing (public education, religious and moral education, social and child protection, child welfare, equal opportunities for people with disabilities, non-state higher education institutions)	274.1	585.0	169.3
Road development	172.9	201.3	0.0
Tourism development appropriation	51.0	114.4	11.7
Transport-related programs	112.3	93.0	7.9
Investment promotion appropriation	34.5	55.0	6.1
Highway availability fee	68.8	70.4	0.0
<b>Sum of items above</b>	<b>913.6</b>	<b>1119.1</b>	<b>195.0</b>

Source: Finance Ministry: Information note on the financial developments of the central subsystem of the general government (June 2021, May and June 2022)

The item called “tourism development appropriation” was especially notable as the spending in the first half of this year exceeded by 31% the total spending in the whole past year.

From the data of the first six months, it is still hard to surmise the supposed intention of reducing expenditures, even though toward the end of the first half, the monthly sums of most items within chapter-administered appropriations dipped below the monthly average of the first half, with a notable exception of normative financing the support to non-state universities – as can be seen from the last column of the table above.

The government spent a substantial sum on projects that are supposedly under the Recovery and Resilience Fund (RRF), but from own sources and the government’s own risk because there is still no agreement with the European Union. Up until the end of June, HUF 1847 billion was spent under the heading “expenditures of European Union programmes”, which constitutes a 87% growth on an annual basis and a significant overspending compared to the prorated sum based on the annual target. Much of these expenditures, however, are connected to programs that are parts of the previous budget period of 2014-2020. They will be probably refunded by the EU, therefore do not increase the ESA deficit this year. We estimate that under the RRF the government may

have spent a couple of hundred billion forints in the first half of 2022. The annual target for RRF spending is HUF 1,450 billion, but at the time of the setting of this target it was still unknown that the conclusion of the RRF agreement would run up against such difficulties.

The CSO says the ESA (accrual-based) fiscal deficit amounted only 4.8% of GDP in the first quarter and only 32% of the cash-flow deficit in the same time period. This means that the ESA bridge was enormous, a great part of which was made up of the HUF 685 billion spent on the PIT rebate for families with children that, according to accrual-based accounting, was a part of the 2021 deficit. Another major component of the ESA bridge was the prefinancing of EU projects (current prefinancing minus inflow of EU funds on previous, completed projects).

During the rest of the year, two important factor needs to be considered. The first is the additional revenue coming from “windfall tax” imposed and the excise tax raised by the government, the second is the cost of maintaining the utility price cap that, under the present extreme global energy prices, will very high even after its amendment from August.

In light of the windfall tax, the government would not really need the announced public investment cut to reach the deficit target, provided that it manages its current expenditures more frugally. It is not true, therefore, that the bulk of the stabilization package consists of expenditure reduction – actually, much of the stabilization is achieved via the extra taxes.

The cash-flow deficit will be very high in 2022, it may come close to HUF 5,000 billion, but the accrual-based deficit will be much lower, HUF 3,000-3,500 billion, which – due to the higher-than-expected nominal GDP – may amount to 5-5.5% of GDP. If no deal is concluded with the EU on the RRP by the end of the year, then the accrual-based deficit-to-GDP ratio may be about 1 percentage point higher.

#### **3.4.1.2. Fiscal debt**

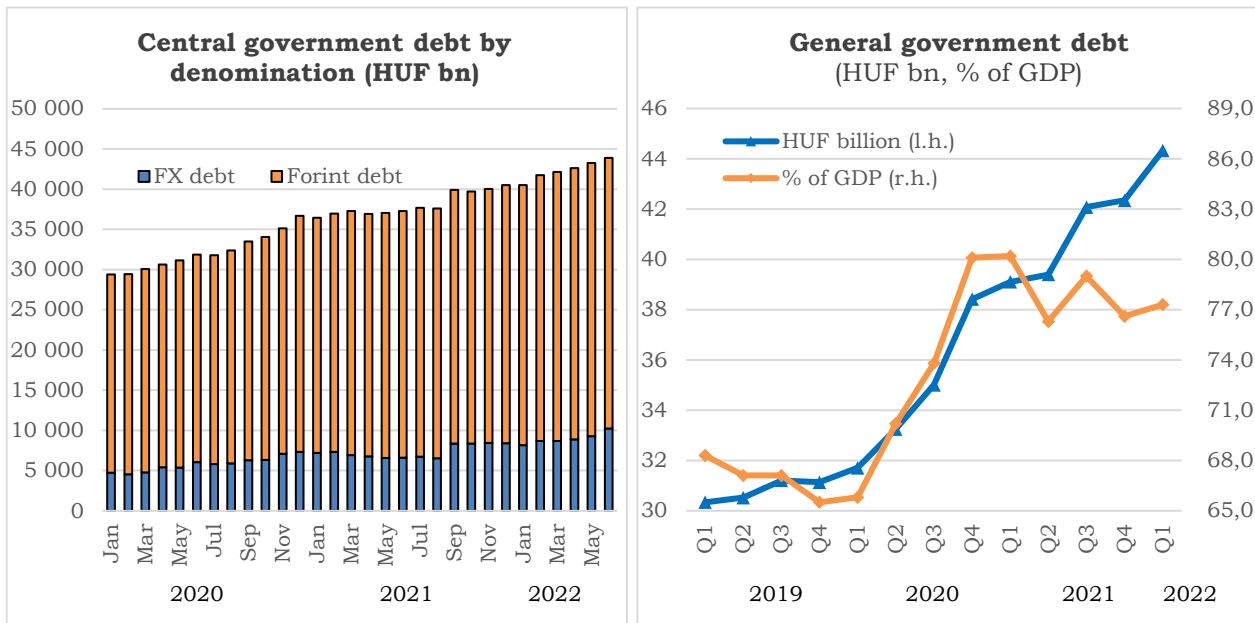
According to the data by the Government Debt Management Agency, the central government debt rose from HUF 40,697 billion in December 2021 to HUF 44,280 billion by the end of June. Until May, much of the debt growth was due to the rise in forint debt (predominantly the net issuance of government bonds and to a much lesser degree the net issuance of discount treasury bills and retail securities) but in June the stock of FX debt jumped after a major issuance of FX bonds. (In June, the stock of forint-denominated debt even slightly decreased.)

From April, debt revaluation has also contributed to the the expansion of the stock of FX debt. In the first quarter, amid largely stable exchange rate, the FX debt even lost some of its value. But from April on, the forint has steeply weakened (to a monthly average of 397 in June and even further afterwards), leading to a positive revaluation of the FX debt stock.

In any case, the share of FX debt rose from 20.6% in last December to 23.1% in June. (The respective share was only 18.7% in September 2020.)

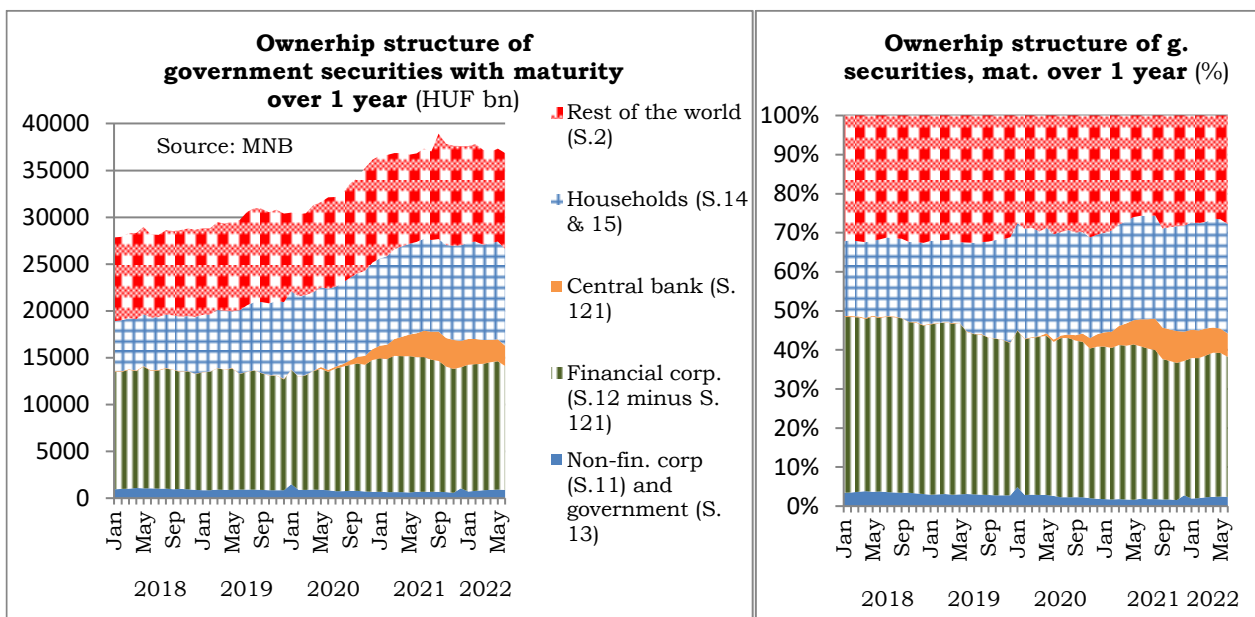


In the first quarter of 2022, the so-called Maastricht debt rose to 75.1% of GDP (77.3% with the debt of Eximbank) from the 74.4% (76.6% with Eximbank) recorded at the end of 2021.



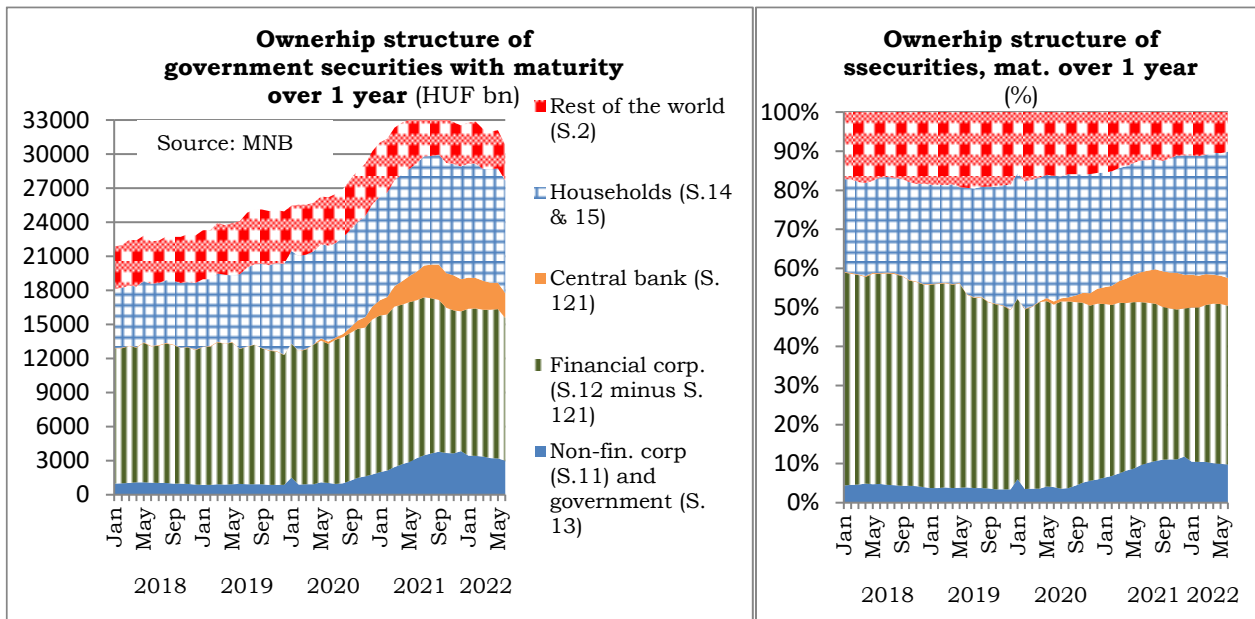
There was no significant change in the ownership structure of government securities in the first half of the year. The share of foreigners somewhat decreased while there was a slight increase in the share of households and a more marked increase in the share of financial and non-financial enterprises. Financing by the central bank decreased by more than 1 percentage point (the central bank only purchased bonds with maturities over a year).

The central bank started its government security purchasing program in May 2020, and from then on, the stock of central bank-owned assets (predominantly forint-denominated government bonds) grew steadily, peaking in September 2021 with a combined value above HUF 3,123 billion. Its share in the outstanding forint-denominated government bonds reached its maximum level in last November at 11%.





In August 2021, the central bank decided upon “starting a gradual phase-out” of government asset purchases and in December it announced the ending of the program. Accordingly, by June 2022 both the value and the share of assets in the hands of the



central bank decreased (to HUF 2,190 billion 8.3%, respectively).

The share of forint-denominated securities with maturities under one year has steadily decreased in the recent years, from the peak level of 17-20% in 2018 to roughly 5%. About half of the remaining assets are in the hands of households.

Notably, the share of foreign owners in the ownership of FX-denominated government securities has been lower for a couple of years than it was before. While in 2010 their share was above 95%, it decreased to 85-87% in about five years and has remained there ever since. Since the beginning of this year, households and – very lately – domestic non-financial enterprises have been increasing their purchase of FX securities, to cushion the effects of the forint weakening.

### 3.4.2. Inflation

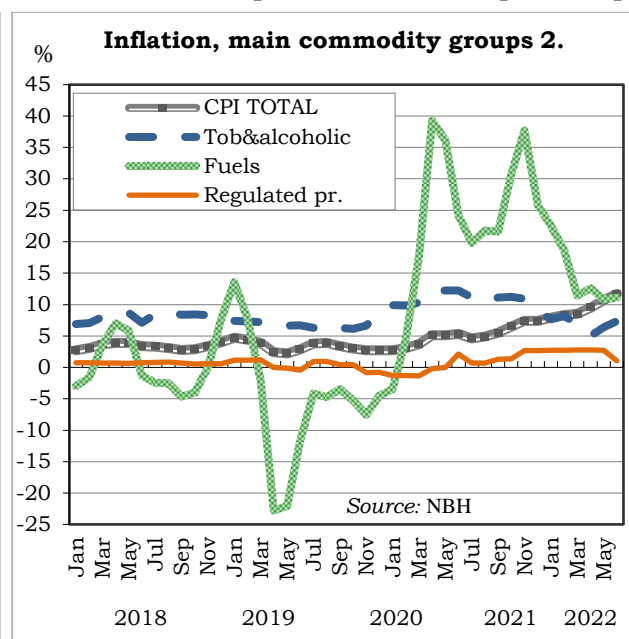
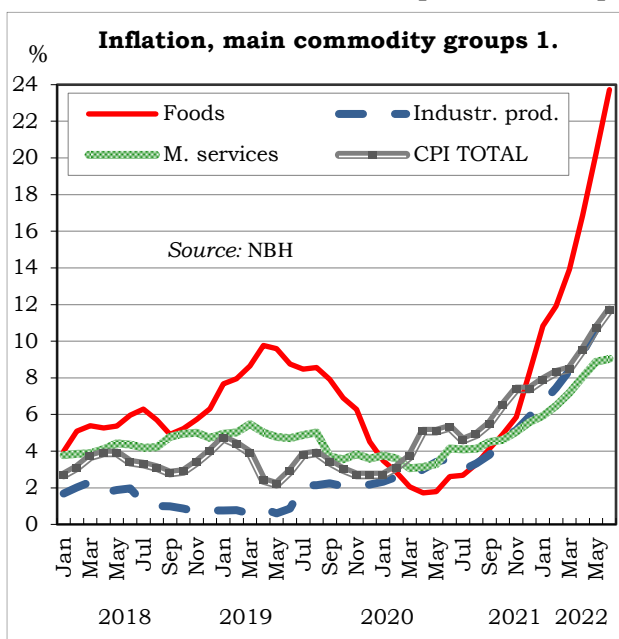
In the first half of 2022, the average inflation rate was 9.4% but in June prices rose by 11.7%, with further acceleration in the offing. On a month-on-month basis, prices have been steadily rising in almost every group of goods and services, as in 2021.

The upward trend was connected to international tendencies. The recovery from the first COVID-shock brought about relatively fast growth and an expansion of demand while supply failed to recover as fast. The disturbances in the access to parts and components, the logistical problems, the production bottlenecks in the case of some inputs led to widespread shortages that generated a fast rise of prices. The oil market situation became the most severe but there have been shortages in the case of many other raw materials as well. High oil prices spilled over to other goods and, through the jump in shipping costs, were reflected in the price of basically every good. A serious situation arose in the agrarian sector that is especially vulnerable to the prices of products based on natural gas and oil, e.g. the price of fertilizers.

The Russian military aggression against Ukraine further aggravated the situation, especially in the global market of cereals since Russia and Ukraine together make up about one-third of the global cereal export. Since the outcome of the war is uncertain and it is warranted to prepare for a protracted conflict, the food price indications are immeasurable.

In Hungary, inflation was the second highest among the EU member states even before the outbreak of the war (behind Romania in 2018-19 and behind Poland in 2020). The high domestic inflation is far from being just a consequence of the war – the war only aggravated the already existing inflationary tendencies.

In the first half of 2022, inflation was primarily driven by food and fuel prices but the prices of virtually all product groups rose significantly in this period. According to the classification by the central bank, food prices were 23.7% higher in June than one year earlier; according to the CSO classification, the year-on-year growth rate was only minimally lower, 22.1%. In any case, this group of products that represents 27.1% of the consumer basket had a profound impact on the overall price index. The price cap



imposed on six specific food items did not affect food prices in any serious way, due to their marginal weight (2.5-2.8%) in the consumer basket, and the retailers could easily offset the losses they took from the price cap by raising prices of other products. The price of fish, meat and preparations rose by 22.9% in June, the the price of milk, dairy products and eggs rose by 34.5%, and also the prices of both oils and fats and cereals and sweets rose by more than 20% on an annual basis. The average price of non-alcoholic and alcoholic beverages and tobacco products was less than 10% higher in June than one year earlier, but the excise tax hike from July will certainly change that and push the price index into double-digit territory.

The steady weakening of the forint (against the euro) and the pre-election “mood booster” spending measures together led to a marked rise in the prices of *industrial products* – by 12.3% in June on an annual basis. The industrial goods predominantly come from import, thus the changes in the exchange rate are directly reflected in their forint prices, especially when the demand constraint – that could pare down the price hike intentions of retailers – is weak. The government’s income-booster measures before the elections weakened down the demand constraint.

According to the CSO, the average price index of services was only 5.6% in June, with wide differences between the various categories of services. The motorway tolls and parking prices rose by more than 40% between January and May, with a probably temporary respite in June. On the other hand, the prices of communication services (telephone, internet, postal services) are on a decline.

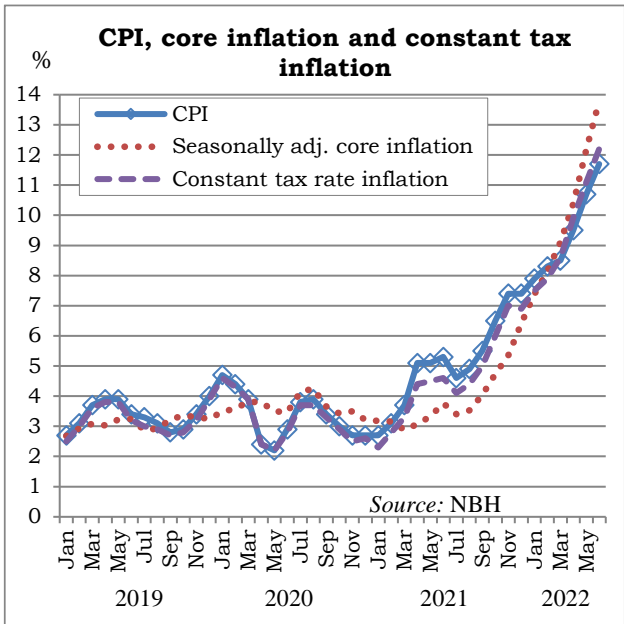
By now, inflation is fueled not just by the actual rise of input prices but also inflationary expectations. This is a phase of inflationary perceptions that is very hard to stop because it is becoming a self-perpetuating cycle if the producers and retailers basically rise their prices in advance, to pre-emptively offset the input cost rise expected in the future.

Inflationary expectations are further exacerbated by the “windfall tax” introduced in mid-year by the government. The government expects a revenue of HUF 815 billion from this tax and another HUF 100 billion from the excite tax hike. The inflationary impact of the tax is different in the case of various affected areas. The energy windfall tax – that basically targets the Hungarian energy conglomerate MOL – is not inflationary because both the fuel and utility prices are capped (even if the caps have been made more selective by now). Still, the question remains how MOL will financially deal with the combined effect of the windfall tax and the loss from the fuel sales at artificially low prices.

**Expected revenues from the windfall tax by economic industries in 2022**

	HUF bn
Banking sector windfall tax	300
Transaction levy raise	50
Insurance sector	50
Energy firms (MOL)	300
Retail chains	60
Telecom firms	40
Airlines	30
Pharma distributors, except pharmacies	20

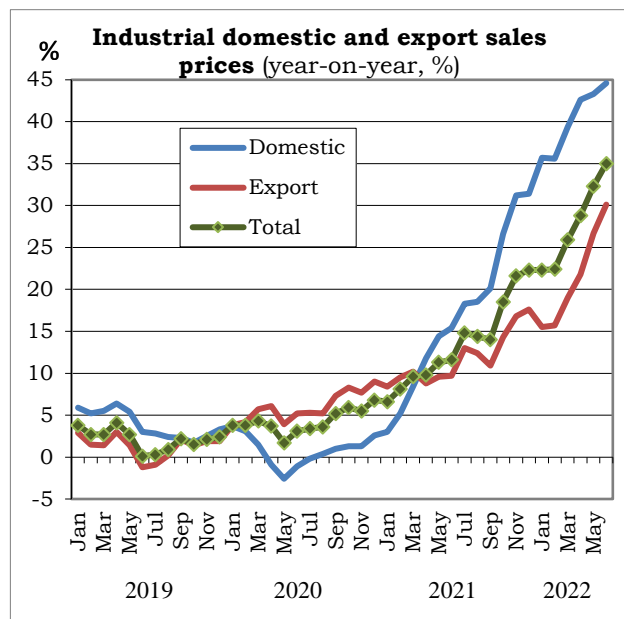
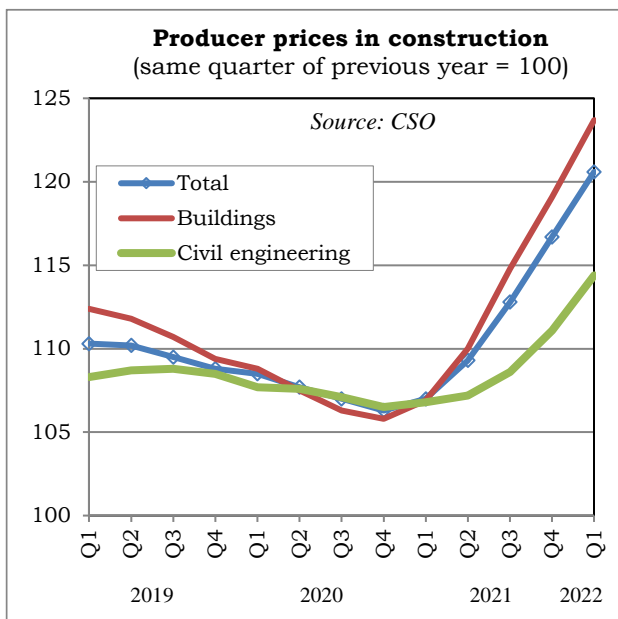
The new tax imposed on the banking sector and the raise of transaction levy, on the other hand, will certainly be reflected in the banks' pricing policy. In the present inflationary environment, both banks and insurers can justify their charge hikes. The same is true for telecom firms, airlines and especially retail chains. The government wants to collect HUF 60 billion from the retail chains while it forbids the passing on of the tax burden to consumers by raising prices – but amid the already high-inflation environment, the ability to detect such price raises will be very limited. (The situation is similar in the case of airlines unless they, like Ryanair, openly and provocatively announce their price hike as a response to the new tax.)



It is worth noting that core inflation that remained below headline inflation (by 1-2 percentage points) in 2021, has steadily exceeded headline inflation since March 2022, which points to the further acceleration of inflation in the near future.

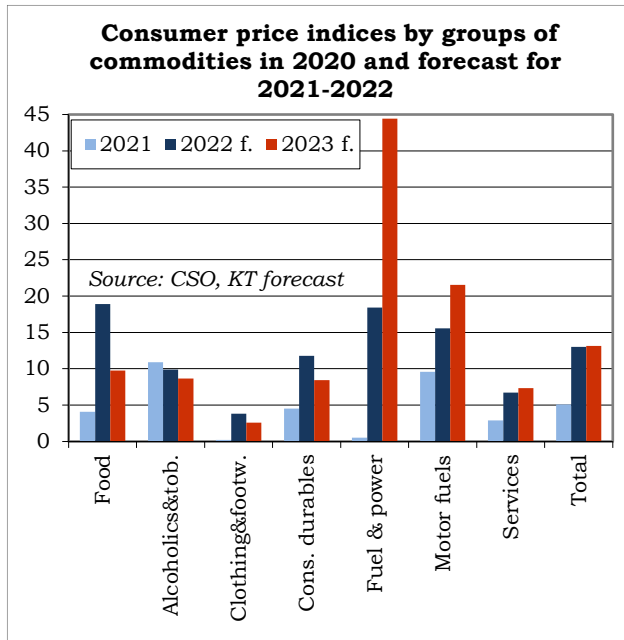
*Producer prices* also indicate a further acceleration of inflation. The construction price indexes steadily keep rising. The upward pressure may ease during the rest of the year if the announced deferment of public investments actually materializes because up to the first quarter of this year, public investments were instrumental in driving construction prices upward, through draining the inputs from business and household investments.

In industry, the fact that domestic sales prices rose at an even higher rate (by 44.6% in June on an annual basis) than export sales prices (“only” 30.1% in June) even if the weakening of the forint is translated into higher export prices is worrisome.



Agricultural producer prices were up 45.4% between June 2021 and June 2022. But crop prices rose by as much as 47.8%. In the first quarter of 2022, the agricultural input price index was 36.5% but that average hides extremely diverging price developments: fertilizer prices were up 194.8% while the price of animal feed rose by 34.4%.

In the recent month, the government implemented a change in the utility price cap system. From August on, the households' gas and electricity consumption above the national average consumption is priced higher than the consumption up to the average (but still remains below the market price). On the other hand, in its latest (June) inflation report, the national bank (MNB) says that it expects the government to start gradually phasing out the price caps on the six specific food products and on fuels. We consider this opinion as a semi-official statement on the part of the MNB. Now, the price cap on the food products will not cause significant change, just as it could not really hold back food inflation since its introduction in October 2021. The gradual elimination of the fuel price gap, on the other hand, will have significant effect. While the speed of the phase-out is not yet known, at present we expect that the annual inflation will reach **13% in 2022**.



For 2023, we predict the annual inflation rate to remain 13%, with a significantly reduced upward pressure from food prices but a dramatic rise in energy prices, mostly due to the carry-over effect of the raising of the energy price cap for a significant segment of households.





in the process of economic growth. In end-June, the strategy and communication made a turnaround and the MNB announced that it was 110% committed to fight inflation.

At the same time, the MNB declared that it would close the gap between the reference rate and the one-week deposit rate, thereby creating a more transparent money-market conditions. In late July, the one-week deposit rate was indeed identical with the reference rate. In the future, the reference rate decisions will be aligned with the yields set at the one-week tenders. This way the central bank ended the less-than-transparent situation where the respective roles of the reference rate and the one-week deposit rate were unclear. The O/N collateralized lending rate was raised to 13.25% and the O/N deposit rate was raised to 10.25% in late July.

In the future, the MNB intends to respond to the economic and financial market developments by flexibly changing the one-week deposit rate. Since the MNB wants to keep the one-week rate and the reference rate at the same level, the changes in the one-week deposit rate will determine the changes in the reference rate at the rate-setting meetings.

The central bank cites the rising inflationary expectations as the reason to maintain the policy of monetary tightening in the medium term and says the rate hikes would continue until it was unanimously clear that the inflation reached its peak. The MNB expects this to happen during the autumn although this is still far from certain.

While the drastic rise at the end of June provoked only a very short-term response from the money market – in a couple of days, the euro exchange rate was again well above 400. But around mid-July a shaky downward trend started on the face of the repeated steep rate hikes and by early August the EUR/HUF exchange rate dipped to about 395.

In comparison with the other two non-euro Visegrad countries (Czechia and Poland) and Romania, the forint has been clearly an underachiever in 2022 since the outbreak of the Russian-Ukrainian war. The Romanian leu remained profoundly unaffected by the war, even it Romania has a much longer common border with Ukraine, not to mention the Russian-controlled Transnistria. It is true, however, that the Romanian central bank manages the leu exchange rate through continuous interventions. The zloty, even though Poland is much more intensely affected by the Russian invasion, has weakened only moderately to the war so far and the Czech koruna hardly budged as well.

Hence the steep forint weakening cannot be simply attributed to the war in the vicinity: it has much more to do with the deteriorating macroeconomic equilibrium indicators (high fiscal deficit, the dubious effectiveness of the chosen fiscal countermeasures and the rising current account deficit), the loss of confidence in Hungarian policies and the spectacular lack of willingness to cooperate with the EU, even regarding minor matters. Investors are also discouraged by the interminable conflict around the Recovery and Resilience Facility (RRF) – the possible date of a deal is delayed further and further and the very chance of a deal seems to be decreasing.

### 3.4.3.2. Government yields

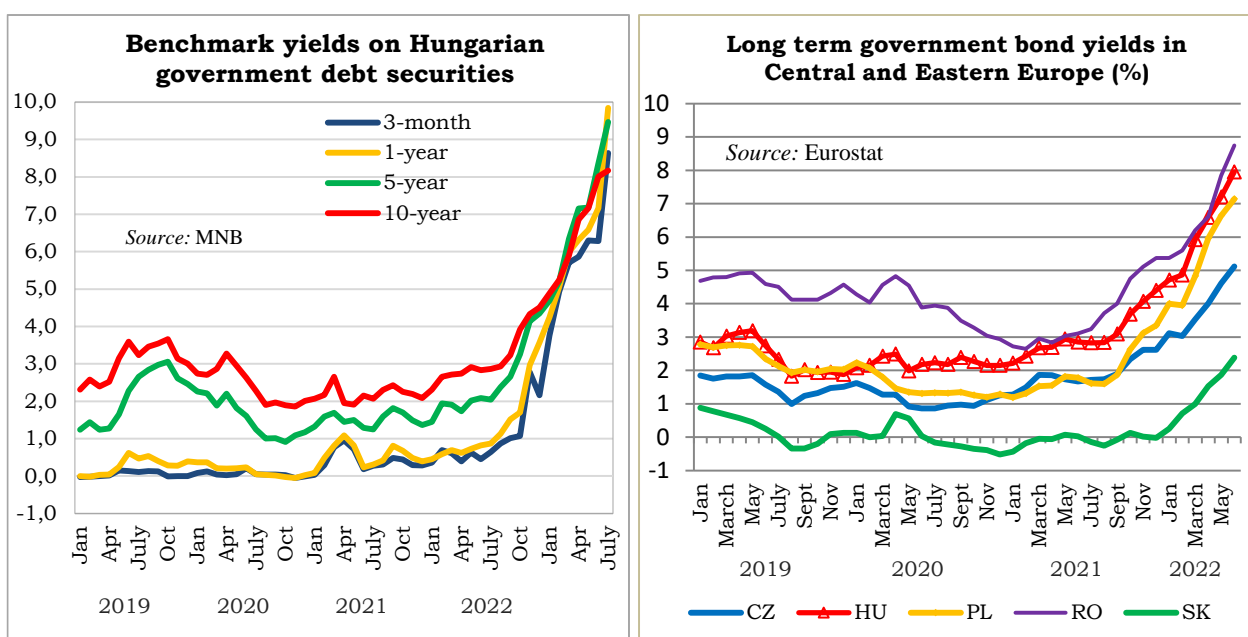
In December 2021, the central bank (MNB) decided to abolish the government asset purchase program, introduced back in March 2020. Accordingly, the stock of government securities in the hands of the MNB began to gradually decrease as shown in subsection 3.3.1.2, on the chart on the ownership structure of government securities.

The gradual phasing-out of government asset purchases led to some uptick in government yields even before the Russian invasion. The yield rise was buttressed by the enormous fiscal deficit and the magnitude of the government's financing need. This was further aggravated by the Russian invasion that – in addition to increasing the uncertainties on the financial markets – substantially lowered the level of risk tolerance among investors, especially regarding the relatively high-risk emerging economies.

In the first seven months of 2022, yields of all kinds of maturity rose steeply. Short-term yields increased the most, so much so that the usual order of magnitude between the different maturities collapsed by the end of July: the 3-month yield (8.64%) was higher than either of the 10-year (8.17%), 15-year (7.9%) or 20-year (7.69%) yields. The yields of various maturities were scattered between 7.69% (20-year maturity) and 10.34% (3-year maturity).

In the coming months, some further yield increase is likely, which constitutes a grave risk for the financing of public debt.

The 3.24 percentage point growth of the 10-year yield in Hungary between January and July was higher than in the other Visegrad countries – even if it was still lower than the Romanian yield increase. The eurozone country Slovakia could sell 10-year bonds at a yield of 2.38% at the end of July – although this represents a significant increase compared to the start of the year as well. The Czech and Polish 10-year yield was lower by 2.8 and 0.8 percentage point in July, respectively, than in Hungary. The Romanian yield remained the highest within the region.

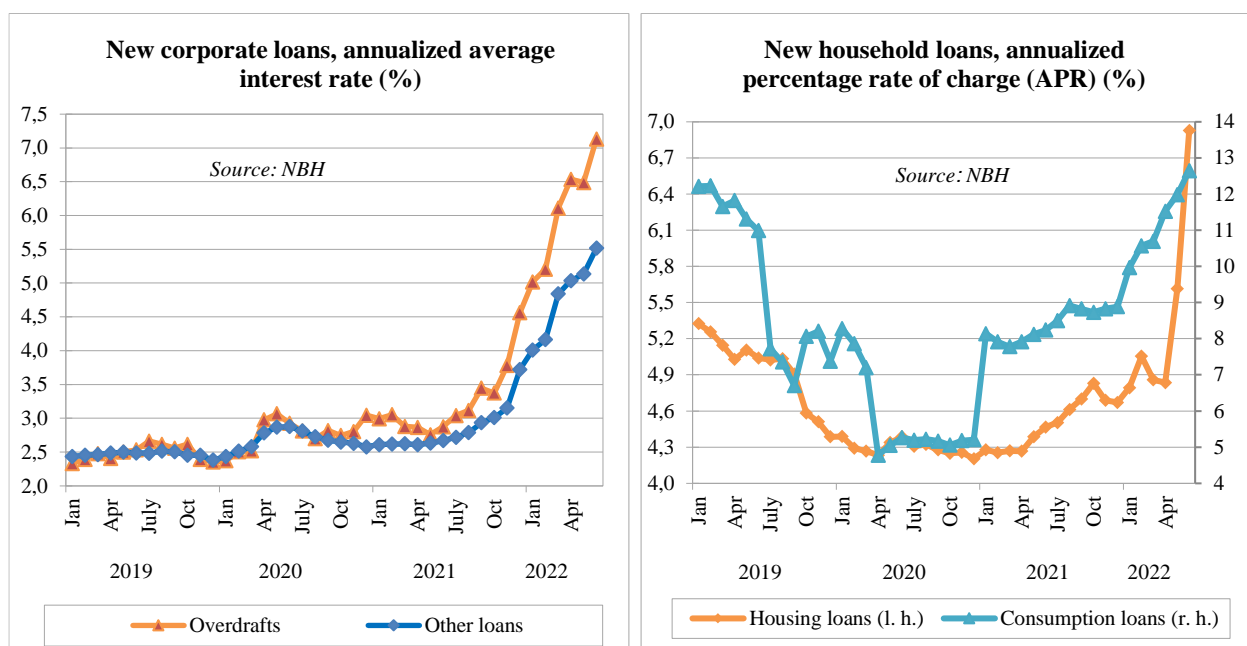




### 3.4.4. Interest rates of corporate and household loans

The ongoing monetary tightening is now spectacularly reflected in the upward trend of corporate interest rates and – with some delay – also in household interest rates.

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 reached 7.13% by June 2022. As for *other corporate loans*, much of which is used for investments, the interest rates rose somewhat less drastically, from 2.61% in January 2021 to 5.52% in June 2022. But in the case of other loans with initial rate fixations over 5 years, the average interest rate climbed above 8% while for the loans with rate fixation between 1-5 years, the interest rate of loans exceeded 7% in June.



Corporate *deposit* rates also increased substantially. The average rate of deposits with agreed maturity up to one year was 6.5%, as against the 0.57% one year earlier, while the rate of deposits with maturity over one year rose to 4.39% from the 0.81% in June 2021. The drastic rate hike in late June and afterwards will certainly bring about further increases in the deposit and lending rates.

The annual percentage rate (APR) of *consumption loans* extended to households increased as well, it exceeded 12% in June 2022. The rise in APR of housing loans was less drastic but it also almost reached 7% in June from the 4.5% one year earlier. The monthly amount of new housing loans has been rising in the first half of the year – the six-month average amount was 30% higher than one year earlier. Also, in the first half of this year, the share of subsidized loans was 43%, as opposed to the 18% in the first half of 2021. The average difference between the APR of the subsidized and market-based housing loans fluctuates: it was 2.3 percentage points in April but only 0.27 percentage point in June.

The average duration of initial rate fixation has also been on the rise: the average duration of fixation increased to 189 month in April from 154 months in January (weighted by the amount of outstanding loans).

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

	2014	2015	2016	2017	2018	2019	2020	2021	2022*	2023*
<b>GDP AGGREGATES, ANNUAL REAL GROWTH</b>										
GDP total	4.2	3.7	2.2	4.3	5.4	4.6	-4.5	7.1	4.0	3.0
Domestic Demand	5.3	2.0	1.8	5.7	7.1	6.8	-2.7	5.8	5.0	1.5
Private Consumption	2.2	3.6	4.1	4.5	4.2	4.5	-1.9	4.4	5.7	1.0
Public Consumption	8.9	1.3	0.5	3.8	4.2	6.4	3.4	3.9	2.3	0.0
Gross Capital Formation	12.5	-1.6	-3.5	10.1	15.9	12.1	-6.6	9.6	4.7	3.0
of which: Fixed Capital Formation	12.2	4.9	-10.6	19.7	16.3	12.8	-7.0	5.9	4.7	3.0
Export	9.2	7.4	3.8	6.5	5.0	5.4	-6.1	10.3	3.9	3.8
Import	10.9	5.7	3.5	8.4	7.0	8.2	-4.0	8.7	5.2	2.0
<b>PRODUCTION INDICES</b>										
Agricultural Production (gross)	11.4	-2.5	9.4	-4.1	2.6	-0.1	-2.4	-2.1	-4.0	0.0
Industrial Production	7.7	7.4	0.9	4.6	3.5	5.6	-6.0	9.6	4.0	3.7
Retail Trade Volume	5.2	5.8	4.8	5.6	6.7	6.3	-0.1	3.5	5.0	1.0
<b>EMPLOYMENT, EARNINGS</b>										
Number of Employed	4.8	2.7	3.4	1.5	1.3	0.8	-0.9	0.7	1.5	0.3
Unemployment Rate	7.5	6.6	5.0	4.0	3.6	3.3	4.1	4.1	3.4	3.3
Gross Nominal Wages	3.0	4.3	6.2	12.9	11.3	11.4	9.7	8.7	17.0	9.5
Net Real Wages	3.2	4.4	7.4	10.3	8.3	7.7	6.2	3.4	3.5	-0.5
<b>PRICES, EXCHANGE RATES</b>										
Consumer Price Index	-0.2	-0.1	0.4	2.4	2.8	3.4	3.3	5.1	13.0	10.0
EUR/HUF Exchange Rate (annual average)	309	310	311	309	319	325	351	359	389	400
EUR/USD Exchange Rate (annual average)	1.33	1.11	1.11	1.13	1.18	1.12	1.14	1.18	1.08	1.08
Short-term Interest Rates (3M), eop	1.43	0.80	0.06	-0.01	0.00	-0.01	0.28	2.16	9.0	9.0
Long-term Interest Rates (10Y), eop	3.60	3.33	3.16	2.02	3.01	2.01	2.08	4.51	9.0	9.0
<b>BALANCE OF PAYMENTS</b>										
Current and Capital Accounts, % of GDP	4.9	6.9	4.5	2.8	2.4	1.2	0.9	-0.4	-3.0	-2.5
<b>GOVERNMENT BUDGET</b>										
General Government Balance, ESA-95, % of GDP	-2.8	-2.0	-1.8	-2.5	-2.1	-2.1	-8.0	-6.8	-5.2	-4.0
Gross Government Debt, % of GDP <sup>a</sup>	76.5	75.7	74.8	72.1	69.1	65.5	79.6	76.6	75.0	74.0

<sup>a</sup> Including the balance sheet of Eximbank

\* Kopint-Tárki forecast

Source: CSO, MNB

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