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I The World Economy

The **world economic outlook** has significantly worsened since the summer. The global economic growth lost momentum by mid-year, due to the high inflation, the still existing shipping bottlenecks, and the escalation of the Russian-Ukrainian war. Another factor was the Chinese no-Covid policy that also put a brake on global economic flows. Real incomes are declining in several countries – putting a downward pressure on private consumption – financing conditions are getting oppressive amid the continuation of monetary tightening. The elevated commodity prices – even if a moderation began in the fall – are increasingly built in the consumer prices and push them upward. Wage pressure is on the rise, due to the demand to align wage growth to inflation. On the supply side, bottlenecks still occur, contributing to the overall price rise. According to the latest OECD forecast, the global economy will only expand at a rate of 3%, which will slow down to 2.25% the next year, with mounting downward risks. Inflation will not moderate spectacularly, thus high price indexes are to remain with us during the forecast period. The fear of supply disturbances will keep prices high and put both the households and the business sector in an increasingly difficult position. The fiscal policy constraints are tightening thus the governments have few tools to cushion the various shocks.

The **global trade flows** were only moderately affected by the Russian-Ukrainian war. What is happening is rather the temporary flattening of the steep volume rise that was observed from 2020 than a deep shock that fundamentally shakes the world economy. In addition to the drought that disrupted river transport, other specific shocks also hinder trade flows, for example, the blockade of the Taiwan Strait, the third busiest maritime route in the world, by China. At the same time, external trade prices keep rising without interruption, primarily fueled by the trade flows between emerging economies, while the price indexes of the developed countries are already decelerating due to the recessionary fears arising from the energy price hike. The volume of global trade turnover is expected to continue to grow in 2023, albeit at a slower pace, even in the case of a European recession.

At present, the prices of **crude oil** and **industrial metals** are comparable to their prewar levels. The Brent oil price dipped to around 95 USD/barrel, way below the 2021 average of 105 USD/barrel. The OPEC+ countries responded to the declining oil prices with a significant reduction of oil extraction – by 2 million barrels per day – and declared that they were not in favor of a decrease in prices. A further price decrease would be logical in light of the worsening global perspectives and lower demand but the sanctions against Russia and the stance of the OPEC+ countries will prevent such a decrease even in 2023. Since the Russian **gas deliveries** toward Europe are part of the ongoing political game, gas prices increased spectacularly but from September they started to move downward as well, and this trend has been continuing so far. The total loss of Russian gas deliveries would pose a virtually insurmountable problem to several European countries, forcing severe fiscal cuts and causing a deep recession, especially in the winter months. It is no wonder that the markets remain nervous and the prices are volatile.

The summer drought and the uncertainties regarding the Ukrainian grain exports pushed **non-energy commodity** prices upward at first but later a correction has taken place, with some moderation of prices. This, however, is not a cause for celebration since the prices of raw materials, especially industrial metals, are extremely demand-driven, which means that decreasing prices imply worsening growth perspectives. At the same

time, speculators gradually leave the raw material markets, which may decrease volatility. At the moment, a slower-than-before but still robust growth rate would be the optimal scenario for the world market, but such a scenario is unlikely to materialize until the end of the war.

Inflation kept accelerating in the summer months and reached new record highs in September. Under such conditions, it is not surprising that the pace of **monetary tightening** is faster than previously expected. The *FED* implements an aggressive rate hike cycle to break the inflation – that surpassed anything seen in the last 40 years – and does not see room for easing up to now. There is a danger that the US economy will fail to achieve a “soft landing”, that is, the suppression of inflation will result in a recession. The *ECB* raised its three key rates by 75 percentage points in September, a rate hike unprecedented in the history of the European Central Bank. But even after this raise, the reference rate is at a “friendly” level of 1.25 percent, quite low compared to the other countries. The *ECB* revised upward its inflation forecast to above 8% for 2022 and to 5-6% for the next year, which implies that further rate hikes can be expected in the future. The *British* central bank also continues the rate hike cycle, and a tightening began even in *Switzerland*. Japan remains the only country that goes against the current and keeps up its lax monetary stance. The non-eurozone members in Central Eastern Europe are raising their policy rates radically but were unable to put skyrocketing inflation under control so far.

The signs of an economic slowdown are becoming visible **outside the EU** as well. In the **US**, the pace of growth was much slower in the first half of this year than in the second half of 2021. The annual growth is likely to be very moderate, about 1.5%, this year, and the economy will probably stagnate in 2023. The approximately 2% growth of private consumption in 2022 will turn into stagnation next year while investments will decline in 2023. If external conditions deteriorate further, the US GDP may even contract in the next year. The inflation is still above 8%, although it has moderated somewhat from its summer peak levels, due to the monetary tightening. Energy prices and food prices drove the inflationary wave but the fact that core inflation also exceeds 6% indicates that inflationary expectations are increasingly built into the actual prices.

In **Japan**, the first months of this year were still heavily affected by the pandemics, and private consumption remains very subdued despite the easing of the epidemics. The no-COVID policy pursued in China primarily hits the Japanese manufacturing firms and generates supply-side bottlenecks for them. As a result, we expect Japanese growth remain moderate this year – around 1% – with a further slowdown in 2023. The slowdown is primarily due to stagnating private consumption and investments, but export growth is also weak, with a rate of about 2%. Inflation is picking up pace, too, but the 2% pace is still moderate compared to other countries. This explains why the Japanese central bank has not intervened so far and has not resorted to monetary tightening.

In the **United Kingdom**, the slowdown already began in the second quarter, at least compared to the previous quarter. Government consumption will contract this year and the growth of private consumption will also remain very subdued. Investments still expand at a relatively good pace but this will also change toward the end of this year and especially in the next year, due to the deteriorating external conditions. The GDP is expected to grow by about 3% in 2022 but it will contract in the next year, mostly due

to falling private consumption and investments. Inflation is rising rapidly in the UK: the year-on-year rate of 8.6% in August accelerated to above 10% in September. The worsening financing conditions, the declining sales outlook and the ever-present uncertainty regarding the Northern Ireland Protocol will together curtail the willingness of firms to invest. The fiscal policy stance will remain more or less neutral in both 2022 and 2023 as the previous support measures have been – or are being – phased out.

It is the first time since 1990 that **China** is the slowest-growing economy in the Asia-Pacific region. After the 8.1% growth in 2021, the OECD analysts expect a growth rate of 3.2% in 2022 and a slight acceleration to somewhat above 4% in 2023. The Chinese economy is struggling to get back on its feet after the strict lockdowns in the spring and the summer that led to the closure of large cities, production and logistical centers and transport hubs. In addition, the severe problems of the real estate market, the global economic slowdown and the high inflation rates in China's external markets have a combined downward effect on economic growth. The unprecedented heatwave in the East and South of China, the drought that beset nearly one-third of the country's area, and the heavy rains and floods in other areas – these natural disasters hit not just agriculture but cause severe problems in energy provision, industrial production and transport as well. At the same time, some industries, especially green energy generation and the production of so-called intelligent products, expanded at an unprecedented pace. As a result of the war in Ukraine, China will probably become a more prominent player in the world economy and an all-important economic partner for Russia in terms of both the trade of goods and services and FDI flows. In addition, China is becoming more active in the support of developing countries that find it difficult to secure their food and energy supply due to the war.

The threats to the whole of the world economy hit the **developing countries** particularly hard. Several countries, mostly in sub-Saharan Africa and Western Asia, face the threat of famine because of the grain crisis, and the rising energy prices cause severe energy shortages in countries that are outcompeted on the energy market by the richer countries that can afford to pay to meet their energy needs. The poor countries can only access loans with much worse conditions and the funds formerly available through the usual aid schemes are severely reduced. The longer the food and energy crisis continues, the larger the probability of unrest and riots worldwide. Since the funding countries in need get from the multilateral financial organizations falls way short of what is needed, the gap is more and more becoming filled by China through various credit schemes, by which the Chinese influence in the key sectors is also becoming more pronounced. The international institutes and organizations expect a growth rate of 3.6-3.7% in 2022 and 3.9% in 2023 in the whole of the developing world. The prospects of Latin America are the bleakest. In all likelihood, the Indian growth performance will remain outstanding, with a growth rate of 7.4% this year after the 8.7% posted in 2021.

The economic outlook in the **euro area** has significantly deteriorated in recent months. This is mostly because of three key risk factors: the escalation of the Russian-Ukrainian war, the sanctions against Russia that indirectly led to energy supply difficulties and, not unrelated to this, soaring inflation. The latest manufacturing data point toward the contraction of output. At present, we expect the eurozone GDP to grow by 2.8% this year, with a further deceleration in 2023: the optimistic scenario is a growth of 0.3% but downside risks abound, and an increasing number of forecasts indicate negative growth

in the euro area in 2023. On the expenditure side, we expect declining private consumption, stagnating government consumption and a very modest growth rate in fixed capital formation. Export may remain the most robust growth component – although it will be affected as well – but even here, too, the downside risks are significant. The eurozone *inflation* rate exceeded 10% in September, an unprecedented event since the introduction of the euro. The core inflation rate rose to 4.8% in September, indicating that the rise in energy prices is increasingly built into the overall prices and that expectations also start driving inflation. While we could hope in the summer that inflation will ease the next year, now we assume that high inflation remains with us throughout the forecast period. The extremely high inflation forced the ECB, too, to start the monetary tightening. The change in the monetary environment affects the market of government securities as well: the 10-year government yield expectations were rising from the beginning of this year and stabilized at a high level in the last couple of months. The fiscal policy will be less conducive to growth than in the previous years, even if the policymakers try to compensate the most vulnerable segment of the population for the rising energy costs in several countries.

As for the **EU27**, we predict annual growth rates of 2.8% and 0.5% for 2022 and 2023, respectively. For now, we assume that the situation will not worsen to a degree when economic contraction becomes unavoidable, and the energy supply problems remain at a manageable level. The high inflation will hinder growth – especially in certain Central Eastern European member states – and the recovery will be a protracted and painful process.

In **Germany**, the economic outlook has significantly deteriorated since the summer. According to the latest forecasts, German GDP will decrease in the autumn and winter months, and while the annual growth will be positive this year – at a meager rate of 1.6% – the GDP will slightly contract in 2023. It is worth noting that this pessimistic-sounding prediction is based on the optimistic assumption that the actual gas shortage will be avoided during the winter. In the case of a shortage and a subsequent strict restriction of gas consumption, the fall of GDP could be as severe as 4-5% and the recession would be likely to continue even in 2024. The acceleration of inflation poses a significant downward risk for the German economy. The inflation rate was 10.9 in September, and it is likely to increase further, leading to an annual average rate of about 9% in 2022. But for the government, the most worrisome possibility is the occurrence of an energy shortage that would have a dramatic effect not only on households but on several energy-intensive industrial branches, such as the chemical industry or the metal industry.

II. EU13 countries

The *new EU member states* posted an average economic growth of 4.7% in the second quarter, in the shadow of the energy crisis. The economies heavily relying on the tourism sector achieved the highest growth rates in April-June, and the same will be probably true in the third quarter as well, despite the fuel price surge. Thus, Malta (8.9%), Slovenia (8.3%), Croatia (7.8%) and Cyprus (6.2%) could achieve steep acceleration compared to the previous years. But the 6.5% growth in Hungary is especially noteworthy since this growth rate contributed to the regional growth rate by 0.6 percentage point, which was close to the contribution of Romania (0.8 percentage point, with a growth rate of 5.3%), even though the Romanian economy is about one and a half bigger. Poland posted a growth rate of 4.7%, thereby contributing 1.6 percentage points to the overall growth rate of the EU13 which was also 4.7% in the second quarter.

The other new member states had growth rates below the regional average. The GDP only grew by 0.3% in Estonia. This Baltic state has an exposure to Russia that highly exceeds the vulnerability of any other Central and Eastern European member states, and it strove to cut the links to Russia almost entirely the outbreak of the war. The Estonian government basically passed on the rising energy costs to the population, generating inflation rates surpassing 20%. Estonia keeps up its extremely strict fiscal discipline that was largely maintained even during the Covid crisis. All this elevates the trust on the part of the financial investors, which is crucial for such a small and open economy. As a result, Estonia does not need to worry much about the possibility of financing difficulties even if it undergoes a temporary recession. The present growth rate (and maybe a recession in the second half of the year) means a low statistical base level in 2023, making it easier to achieve positive growth the next year. The delinking from Russian energy sources and a shift toward the “green economy” may become a way out of the middle-income trap that seems to have been closed around Hungary, for example.

Despite the near-stagnation in Estonia, Slovakia generated the greatest disappointment with a growth rate of 1.7%. Its contribution to regional growth was only 0.1%, the same as Cyprus, an economy four times smaller in size. Slovakia depends on the Russian energy supply almost as much as the Baltic states. In addition, the heavily auto industry-oriented Slovakian industry still suffers from input shortages and logistical bottlenecks that have eased somewhat in recent months but still cause significant problems compared to the pre-Covid times.

Consumption still grew at a good pace in the second quarter, mostly due to the summer spending by households that was only moderately damaged by the high inflation rates. On the other hand, the external trade balances began worsening in several countries, due to the rising energy prices. Czechia, Romania, Poland, Slovakia and Hungary are especially hardly hit: these countries face a harsh deterioration of terms of trade, which severely undermines the growth prospects for the rest of the year.

Inflation is gaining momentum in the new member states. In January-August, only 3 countries posted inflation rates below 10% (Cyprus, Malta and Slovenia). The highest price hike – more than 20% – was registered in Estonia, mostly due to the skyrocketing (76%!) energy prices. The energy price hike was somewhat less steep but still dramatic in Lithuania (60%) and Latvia (48%), compared to which the 30% energy price inflation in the Visegrad countries is not that high (except for Hungary). The situation is compounded by the fact that the growth of food prices is already above 12% in the region.

The governments try to cushion the blow for the households with various support schemes but this results in a further deterioration of fiscal and current account balances. The core inflation rate is 8.4% in the region, but it may well exceed 10% before the end of this year. To fight inflation, the central banks continued the rate hikes everywhere. Since the beginning of the year, the policy rate was raised by 450 basis points (to 6.75%) in Poland, by 325 basis points (7%) in Chechia, by 1060 basis points (to 13%) in Hungary and by 450 basis points (6.25%) in Romania. These measures were necessary, but their success is limited as they are mostly useless against imported inflation. At the moment, the anti-inflation toolkit of the central banks seems to be exhausted but the rate hike cycle is probably not over in the Visegrad countries, save Hungary.

The rising energy prices and the high interest rates dramatically reduce the growth potential of the new member states, but the annual growth rates this year will not be drastically affected yet. On average, the new member states may grow at 4% in 2022, even if the GDP growth will be probably very subdued in the second half of the year and in the last quarter even a recession is in the cards. If the present market and policy conditions remain in 2023, the region may be able to avoid a recession even though the average growth rate is likely to remain below 2%. But the recession cannot be excluded, especially if the inflation keeps growing unchecked. Such a development would fundamentally alter the growth outlook, for the worse.

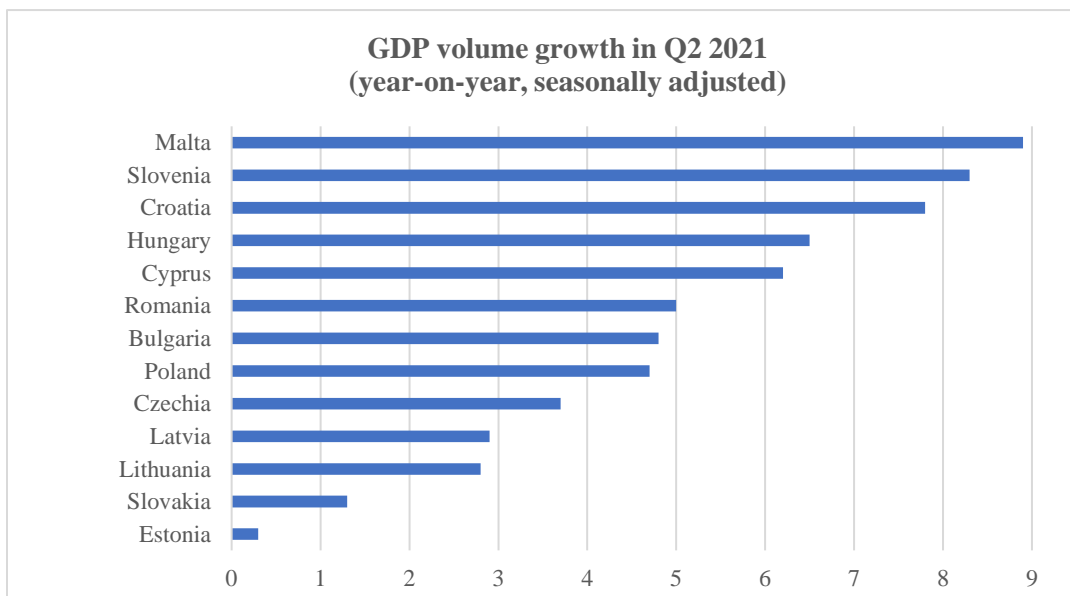


Table 2/1.

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	1.6	-0.2
France	17.3	1.1	2.3	1.9	1.8	-7.9	7.0	2.4	0.4
Italy	12.4	1.3	1.7	0.9	0.5	-9.0	6.6	2.9	-0.3
Netherlands	6.0	2.2	2.9	2.4	2.0	-3.8	5.0	3.2	1.0
Belgium	3.4	1.3	1.6	1.8	2.1	-5.7	6.3	2.3	0.4
Luxembourg	0.5	5.0	1.3	2.0	3.3	-1.8	6.9	1.6	0.8
Ireland	2.7	2.0	8.9	9.0	4.9	5.9	13.5	9.2	2.8
Greece	1.2	-0.5	1.1	1.7	1.8	-9.0	8.3	4.4	1.4
Spain	8.4	3.0	3.0	2.3	2.1	-10.8	5.0	4.0	0.9
Portugal	1.5	2.0	3.5	2.8	2.7	-8.4	4.9	6.2	0.6
Austria	2.8	2.0	2.3	2.5	1.5	-6.7	4.5	4.2	0.3
Finland	1.8	2.8	3.2	1.1	1.2	-2.3	3.5	2.0	0.6
Estonia	0.2	3.2	5.8	4.1	4.1	-3.0	8.3	1.3	1.2
Slovakia	0.7	1.9	3.0	3.8	2.6	-4.4	3.0	1.9	1.0
Slovenia	0.3	3.2	4.8	4.4	3.3	-4.2	8.1	5.3	2.2
Cyprus	0.2	6.5	5.9	5.7	5.3	-5.0	5.5	4.0	2.0
Malta	0.1	3.4	11.1	6.0	5.9	-8.3	9.4	4.6	3.7
Latvia	0.2	2.4	3.3	4.0	2.5	-3.8	4.7	2.5	1.0
Lithuania	0.4	2.5	4.3	4.0	4.6	-0.1	4.9	2.7	2.0
Euro Area	85.1	1.9	2.6	1.8	1.6	-6.3	5.4	2.8	0.3
Denmark	2.3	3.2	2.8	2.0	2.1	-2.1	4.1	2.6	0.6
Sweden	3.6	2.1	2.6	2.0	2.0	-2.9	4.8	2.2	0.8
Hungary	1.0	2.2	4.3	5.4	4.6	-4.7	7.1	4.5	-0.5
Czech Republic	1.6	2.5	5.2	3.2	3.0	-5.8	3.3	2.2	1.0
Poland	3.9	3.1	4.8	5.4	4.7	-2.5	5.7	4.9	2.1
Romania	1.6	4.7	7.3	4.5	4.2	-3.7	5.9	5.0	2.5
Bulgaria	0.5	3.0	2.8	2.7	4.0	-4.4	4.2	2.6	1.6
Croatia	0.4	3.5	3.4	2.9	3.5	-8.1	10.4	5.3	2.0
EU14	88.9	1.9	2.7	1.8	1.6	-6.1	5.3	2.8	0.3
New EU13	11.1	3.2	5.0	4.5	4.1	-3.8	5.5	4.0	1.7
EU27	100	2.0	2.8	2.1	1.8	-5.9	5.3	2.9	0.5
Memorandum items									
USA		2.9	1.6	3.0	2.3	-3.4	5.7	1.5	0.5
Japan		1.1	1.0	1.9	0.7	-4.7	1.7	1.3	1.1
United Kingdom		1.7	1.7	1.3	1.4	-9.4	7.3	2.9	-0.5
China		7.0	6.7	6.8	6.0	2.2	8.1	3.2	4.5
Russia		-2.8	-0.2	2.2	1.3	-3.0	4.7	-8.0	-5.5
South-Eastern Europe									
Serbia		3.3	2.1	4.5	4.3	-0.9	6.7	3.4	3.8
Turkey		3.2	7.4	3.0	0.9	1.8	9.0	2.0	3.0

* 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	9.0	9.6
France	17.4	0.3	1.2	2.1	1.3	0.5	2.1	6.1	7.2
Italy	14.1	-0.1	1.3	1.2	0.6	-0.1	1.9	7.9	8.0
Netherlands	4.9	0.1	1.3	1.6	2.7	1.1	2.8	10.2	7.0
Belgium	3.3	1.8	2.2	2.3	1.2	0.4	3.2	9.2	7.2
Luxembourg	0.2	0.0	2.1	2.0	1.6	0.0	3.5	8.0	5.5
Ireland	1.4	-0.2	0.3	0.7	0.9	-0.5	2.4	8.0	8.0
Greece	1.7	0.0	1.1	0.8	0.5	-1.3	0.6	10.2	9.0
Spain	9.1	-0.3	2.0	1.7	0.8	-0.3	3.0	9.2	7.1
Portugal	1.9	0.6	1.6	1.5	0.3	-0.1	0.9	7.5	8.0
Austria	2.7	1.0	2.2	2.1	1.5	1.4	2.8	7.2	7.1
Finland	1.7	0.4	0.8	1.2	1.1	0.4	2.1	7.0	6.5
Estonia	0.2	0.8	3.7	3.4	2.3	-0.6	4.5	20.0	9.5
Slovakia	0.8	-0.5	1.3	2.5	2.8	2.0	2.8	12.0	8.0
Slovenia	0.3	-0.2	1.6	1.9	1.7	-0.3	2.0	9.0	6.6
Cyprus	0.2	-1.2	1.0	0.8	0.5	-1.1	2.3	8.3	3.8
Malta	0.1	0.9	1.3	1.7	1.5	0.8	0.7	4.6	2.6
Latvia	0.2	0.1	2.9	2.6	2.7	0.1	3.2	17.0	8.5
Lithuania	0.4	0.7	3.8	2.5	2.2	1.1	4.6	19.0	7.0
Euro Area	85.3	0.2	1.5	1.8	1.2	0.3	2.6	8.0	7.9
Denmark	2.0	0.0	1.1	0.7	0.7	0.3	1.9	7.6	4.2
Sweden	3.0	1.1	1.9	2.0	1.7	0.7	2.7	8.2	5.1
Hungary	1.0	0.4	2.4	2.9	3.4	3.4	5.2	14.3	16.0
Czech Republic	1.5	0.7	2.3	2.0	2.6	3.3	3.2	15.5	9.0
Poland	4.3	-0.2	1.6	1.2	2.1	3.7	5.2	14.0	11.5
Romania	1.9	-1.1	1.0	4.1	3.9	2.3	4.1	13.0	9.0
Bulgaria	0.5	-1.3	1.0	2.6	2.5	1.2	2.8	14.0	7.9
Croatia	0.4	-0.6	1.3	1.6	0.8	0.0	2.7	10.8	5.0
EU14	88.1	0.4	1.7	1.9	1.4	0.5	2.6	7.9	7.7
New EU13	11.9	-0.2	1.7	2.2	2.6	2.6	4.2	13.8	9.9
EU27	100.0	0.2	1.7	1.9	1.5	0.7	2.9	8.6	8.0
Memorandum items ^a									
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	6.2
China		2.0	1.4	2.0	2.9	2.5	0.8	2.2	3.1
Russia ^b		15.5	7.0	2.9	4.5	2.6	5.9	17.5	13.0
South-Eastern Europe									
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	3.4
France	14.0	10.1	9.4	9.0	8.4	8.0	7.9	7.2	8.0
Italy	12.1	11.7	11.2	10.6	10.0	9.6	9.6	8.7	8.9
Netherlands	4.3	6.0	4.9	3.8	3.4	3.3	4.2	3.1	4
Belgium	2.4	7.8	7.1	6.0	5.4	6.4	6.3	5.4	6.0
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	4.8
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	13.5
Portugal	2.4	11.2	9.0	7.1	6.5	6.7	6.6	6.2	6.3
Austria	2.1	6.0	5.5	4.9	4.5	6.4	6.2	4.5	5.3
Finland	1.3	8.8	8.6	7.4	6.4	7.7	7.7	6.7	7.1
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
Euro Area	76.8	10.1	9.1	8.2	7.6	8.0	7.7	6.8	7.3
Denmark	1.4	6.0	5.8	5.1	5.0	5.3	5.1	5.0	6.2
Sweden	2.5	6.9	6.7	6.4	6.8	8.9	8.8	7.0	6.8
Hungary	2.2	5.0	4.0	3.6	3.3	4.1	4.1	3.7	4.0
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
EU-14	77.2	9.2	8.4	7.5	7.1	7.9	7.8	6.8	7.3
New EU13	22.8	6.6	5.5	4.5	4.1	4.4	4.6	4.7	4.5
EU27	100.0	9.3	8.3	7.4	6.8	7.2	7.1	6.3	6.7
<i>Memorandum items</i> ^a									
USA		5.3	4.9	3.9	3.7	8.1	5.4	3.6	4.3
Japan		3.4	3.1	2.8	2.4	2.8	2.8	2.6	2.5
United Kingdom		4.8	4.4	4.1	3.8	4.5	4.6	4.5	4.0
China ^b		4.1	4.0	4.0	3.8	3.6	4.0	4.2	4.2
Russia ^d		5.6	5.7	5.4	4.6	6.0	5.9	6.7	6.6
South-Eastern Europe									
Serbia ^e		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	Q3	2022 Aug.	2022 Nov.	2022 Nov.
GDP aggregates, real growth								
GDP total	-4.5	7.1	8.2	6.5		4.0	4.5	-0.5
Domestic Demand	-2.6	6.2	11.5	6.2		5.0	4.5	-2.1
Private Consumption	-1.9	4.2	11.5	9.4		5.7	5.4	-2.1
Public Consumption	3.9	3.1	6.4	0.3		2.3	1.2	-1.0
Gross Fixed Capital Formation	-7.1	5.2	13.2	6.1		4.7	4.2	-2.5
Gross Capital Formation	-6.8	11.7	17.6	2.4		4.7	4.4	-2.5
Export	-6.1	10.3	5.2	7.6		3.9	5.0	1.0
Import	-3.9	9.1	8.3	7.3		5.2	5.0	-1.0
Industrial production	-6.0	9.5	5.6	4.6	9.7	4.0	6.0	2.5
Consumer Price Index	3.3	5.1	8.2	10.6	16.5	13.0	14.3	16.0
Employment, earnings								
Number of Employed, growth ^a	-0.9	0.7	2.3	1.6	1.0	1.5	1.1	-0.7
Unemployment Rate ^a	4.1	4.1	3.7	3.2	3.6	3.4	3.7	4.1
Unit Labor Costs, in EUR ^b	3.0	-1.4	9.3	5.7		2.9	0.5	1.8
Gross Nominal Wages ^c	9.7	8.7	21.0	15.2	16.0	17.0	16.5	11.5
Net Real Wages	6.2	3.4	11.8	4.2	1.1	3.5	1.9	-3.9
Savings Rate, % of GDP ^d	6.5	6.5	5.7	5.2		6.2	5.2	4.5
Current and Capital Accounts								
Balance, % of GDP	1.0	-1.5	-3.5 ^g	-3.4 ^h		-3.0	-7.0	-3.5
General government								
Fiscal Balance, ESA-2010, % of GDP	-8.0	-6.8	-3.4	-2.3		-5.2	-6.5	-4.0
Gross Government Debt, % of GDP	79.6	76.6	77.3	77.0		75.0	76.0	75.0
Short-term Government Yields (3M), eop	0.28	2.16	5.7	6.3	11.6	9.0	12.0	9.0
Long-term Government Yields (10Y), eop	2.08	4.51	5.9	8.0	9.8	9.0	10.5	9.5
External assumptions								
Internat. Trade in Goods and Services ^d	-8.3	9.3				5.0	5.0	4.4
Brent Oil Price (\$/bbl, p. avg.)	41.8	70.8	100.9	113.8	100.9	116.0	104.0	100.0
GDP Real Growth, Eurozone	-6.4	5.4	5.6	4.2		3.0	2.8	0.3
GDP Real Growth, New EU Members	5.6	-3.8	7.1	4.7		3.1	4.0	1.7
EUR-HUF, period average	351	359	364	386	403	389	393	410
EUR-USD, period average	1.14	1.18	1.12	1.06	1.01	1.08	1.04	1.04

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

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

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

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

e July-August

f Seasonally adjusted data by the MNB

III. The Hungarian economy

The Hungarian economy achieved a remarkably good pace of growth in the past year and a half. While much of the last year was characterized by the post-Covid recovery, the seasonally adjusted GDP volume was already higher than the pre-pandemic peak in the third quarter of 2021. During the past six quarters, the cumulative growth was also higher in Hungary than in the other Visegrad countries and Romania. The same is true of the first half of 2022, even if not of both of the separate quarters.

The impact of the terms-of-trade deterioration

In the first half of 2022, the terms of trade deteriorated by 6% regarding the external trade of goods and services. In the light of the high degree of structural openness of Hungarian economy (the average of export and import amounted to more than 90% of GDP in the first half of 2022) a terms-of-trade loss of such proportions has not only a severe impact on the external trade balance but also syphons off a substantial amount of real income from the domestic economy. While the GDP – that is, the real value added domestically *produced* – grew by 7.3 percent in the first half of 2022, the GDP adjusted for the terms of trade – the gross domestic real income (RGDI) – only grew by 1.7%, which means that the terms-of-trade deterioration syphoned off nearly 80% of the GDP increment abroad. Under such conditions, the trajectory of final domestic use should be compared not to GDP but to the change in the RGDI to assess how the pressure on the external equilibrium evolves.

In the *first quarter* of this year, private consumption growth was elevated to stratospheric levels by a one-off shock, the enormous stimulus package of the government in February. This – along with the strong business investment growth – led to an unprecedented growth rate (11.5%) of final domestic use. Despite the significant negative growth contribution of *net export* – mostly due to the jump in the import of goods – the skyrocketing domestic use led to a GDP growth of 8.2% in the first quarter. After such an outlier, the subsequent slowdown is less remarkable than the fact that this slowdown was relatively moderate, despite the fact that several ominous signs were already hovering.

In the wake of the war the possibility of an energy crisis was arising. In addition, the summer of this year gave a taste of how an average summer – and an average annual agricultural crop yield – would look like one or two decades from now.

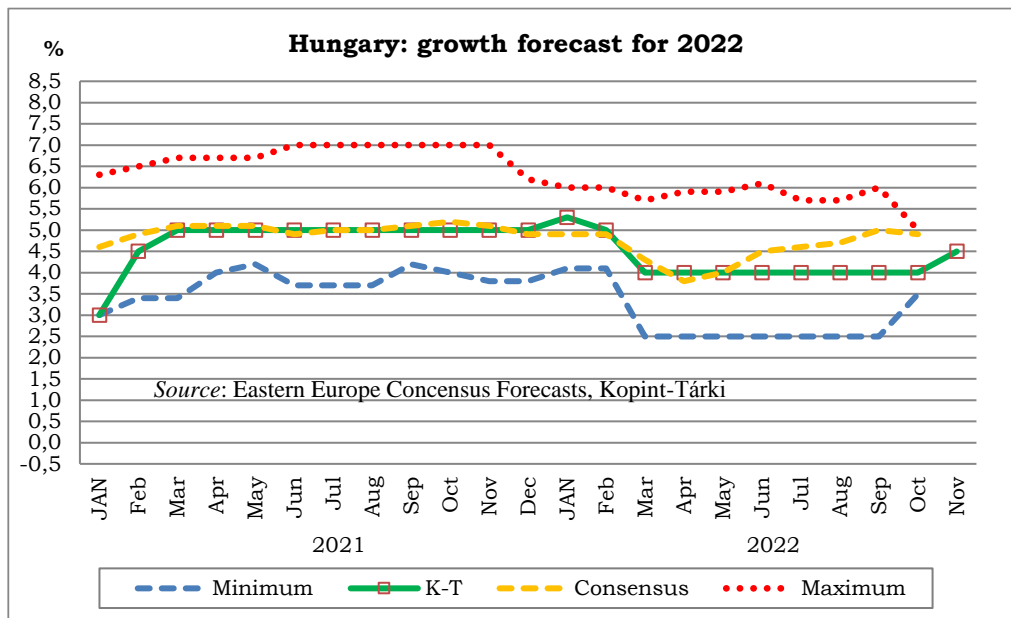
On the other hand, even the second quarter saw a reasonable growth of real wages, the February one-off windfall still had a dynamizing effect, and the partial lifting of the utility price cap system was not announced until July. As a result, household consumption expenditures kept expanding at a pace of about 10% in the second quarter, which helped keep the GDP growth above 6%. On the production side this was primarily reflected in the continuing skyrocketing growth (10.5%) in services, along with a modest growth in industry and wildly fluctuating growth in construction – and amid plummeting agricultural output.

But precisely the so far resilient household consumption will be hit hardest by the adverse developments from the third quarter. The inflation rate exceeded 15% in August and 20% in September, which leads to a halt, and eventually reversal, of the real wage growth seen until now. The jump of inflation in September was mostly due to the fact

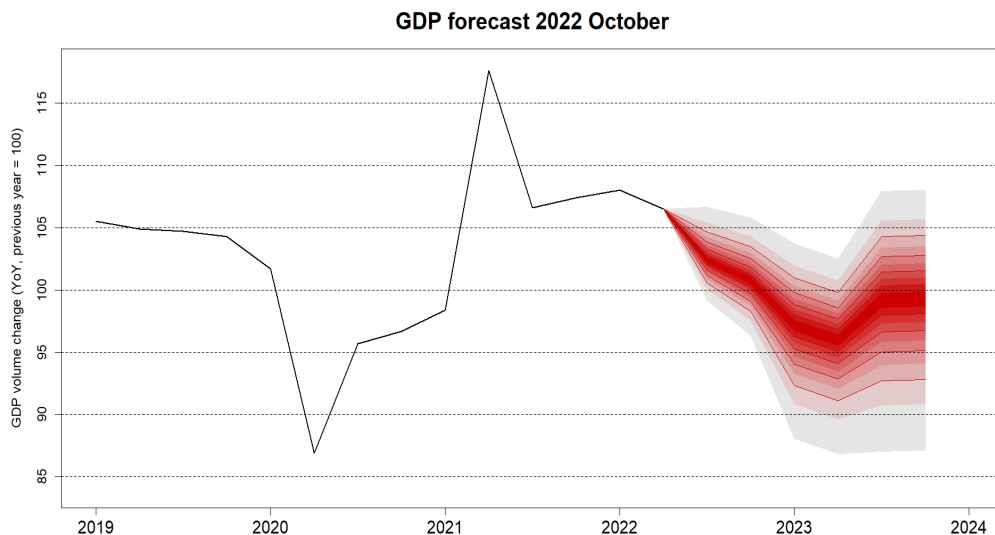
that the partial lift of the utility price cap was already reflected in the utility bills, which will severely reduce the households’ real disposable income and their consumption.

At the same time, on the production side, the dynamism of the growth in services will slow down drastically, in part due to the softening demand. But apart of the demand effect, the soaring energy costs are becoming more and more prohibitive for a growing number of firms.

The explosion of energy cost will have severe reverberations to industrial firms as well. Although the rising trend continued until July and still did not turn into decline in August, many firms belonging to several industrial branches raise the alarm about the energy cost-induced stress. Still, we assume for now that industrial growth will be more resilient in the second half of the year than the services sector. On the whole, despite the very dynamic first half and in the light of the coming negative turn, we revise our earlier growth forecast only slightly upward, to **4.5%**, for 2022. This prediction is, at present, more conservative than the consensus.



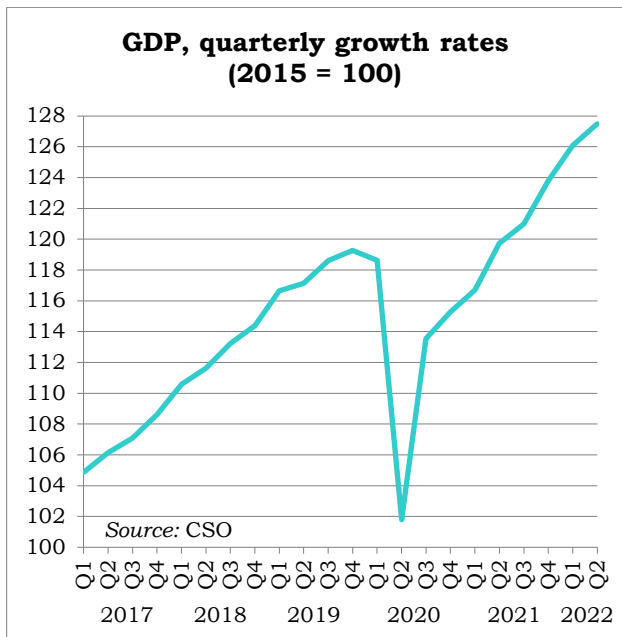
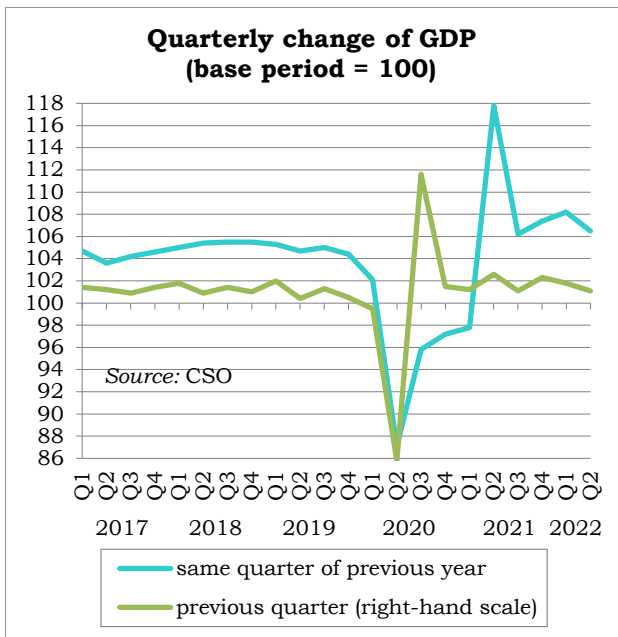
For 2023, however, a drastic worsening of the growth performance is to be expected – in fact, the annual GDP growth is likely to be negative. The fact that wage growth will fall



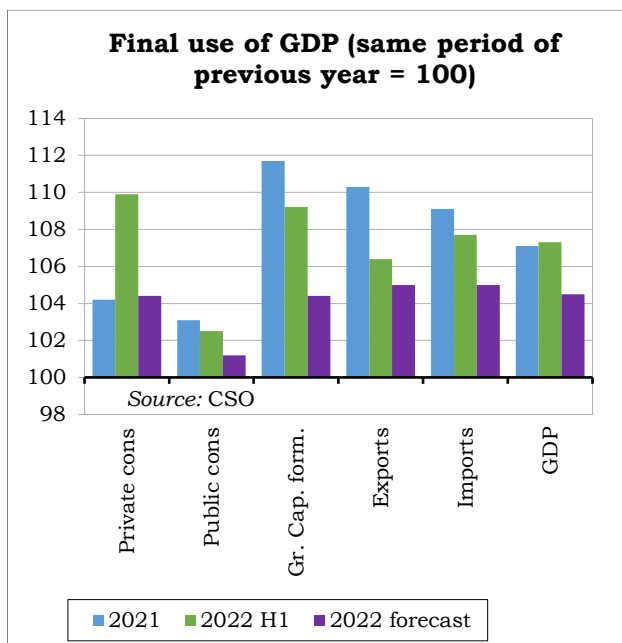
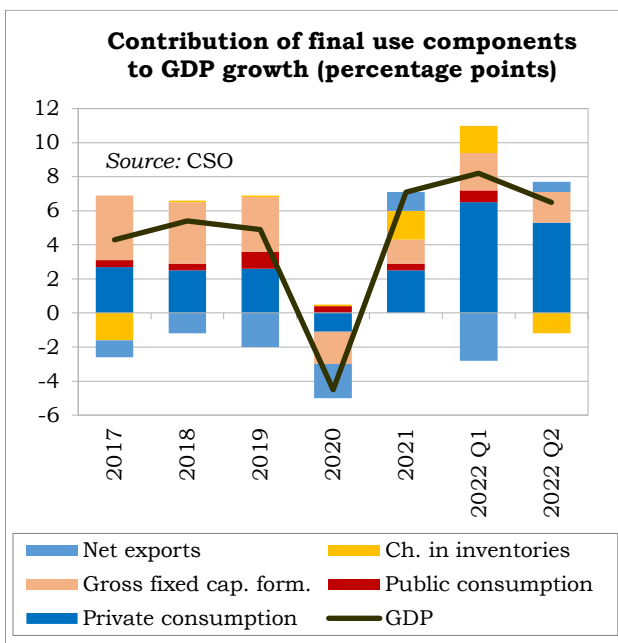
short of inflation in 2023, and the labor market situation will deteriorate – hopefully not very drastically – will cause a contraction of private consumption. Also, amid declining consumption demand and mounting supply and cost problems on the one hand, and a virtual hiatus of new state investments, due to fiscal constraints, investments will also decrease in the next year. On the other hand, the net export will contribute positively to economic growth, thanks to a drop in import and – probably – the continuation of export growth, at a very modest pace. On the whole, we expect a very slight decline of annual GDP – by 0.5% – in 2023.

The GDP and its components

The GDP grew at an outstanding pace in the first half of 2022. The 8.2% registered in the first quarter and the relatively moderate slowdown to 6.5% in the second quarter (despite the deteriorating external conditions, the Russian-Ukrainian war and the drastic surge in energy costs) surpassed even the relatively optimistic expectations. Compared to the previous quarter, the GDP was up 1.8% in the first quarter and 1.1% in the second. The cumulative year-on-year growth rate was 7.3% in the first half, which surpassed not just the EU average (4.8%), but also the respective rates of the regional competitors (the other Visegrad countries and Romania). The average volume of GDP was nearly 8% higher in the first half than in the pre-Covid peak year, 2019.

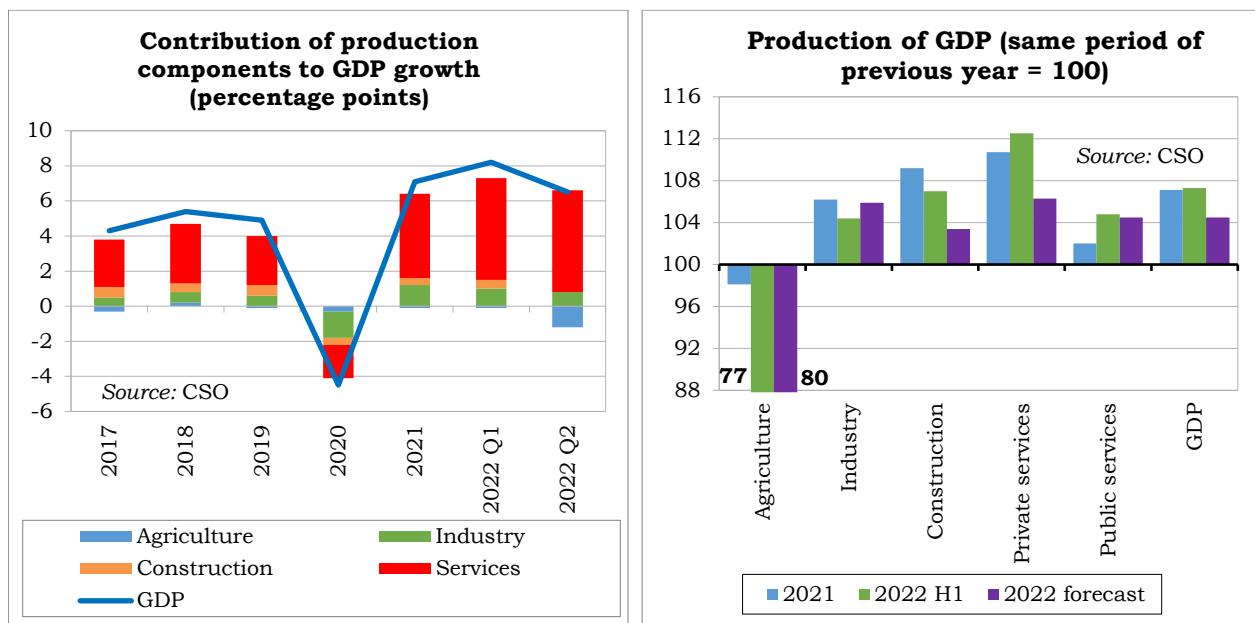


On the **expenditure side**, the structure of growth was extremely lopsided in the first quarter, with private consumption growth – primarily fueled by the enormous



government stimulus package timed for February – surpassing every previous records. Fixed capital formation growth also surpassed expectations, pushing the growth of *final domestic use* into unprecedented highs. This, on the other hand, resulted in the steep deterioration of the external trade position, primarily through a sharp boost to the import of goods. In the second quarter, some leveling took place, with a halving of the growth rate of final domestic use – even though consumption growth remained strong – and as a consequence, the net growth contribution of external trade turned from strongly negative in the first quarter to slightly positive in the second.

On the **production side**, on the other hand, the structure of growth became seriously lopsided only in the second quarter. On the one hand, the agricultural value added – after a moderate decline in the first quarter – plummeted by almost 36% in the second quarter, due to the heat waves and the almost unprecedented levels of drought. In addition, the formerly very dynamic construction output stagnated in the second quarter. At the same time, industrial growth continued at a modest pace, but the continuing double-digit growth of services was the most striking feature of the second quarter that temporarily made the services sector an absolute dominant driver of growth. Besides the still strong retail and transporting-and-storage growth, the expansion of services was supported by informatics services, real estate growth (due to the rising number of newly built dwellings) and the ongoing recovery of the arts-entertainment-recreation sector.



The **second half of the year**, however, will bring a rupture regarding the growth trends. On the one hand, the retail trade data show a distinct cooling of consumption growth (since June, the retail trade turnover excluding motor fuels has been basically stagnating). The inflation rate has almost caught up with nominal wage growth by August and must have surpassed it from September, even if there is no wage data about that month yet. With the previous real wage growth turning into decrease, the cooling of the labor market and the partial lifting of the utility price cap that caused another jump in inflation in September, the consumer sentiment among households has been rapidly worsening. The runaway energy costs hit hard the business sector as well – in some of the energy-intensive industries several instances of temporary closures or reduced

activity has already occurred, similarly to Western Europe, and cost are becoming unmanageable in various segments of the services sector as well. The energy shock affects the whole of the EU – including the German economy that is particularly important for Hungary – thus export growth will slow down along with import growth, even if that did not happen so far. The net growth contribution of external trade is expected to be somewhat positive in the third quarter and approximately neutral in the fourth quarter. But domestic demand will virtually stop growing in the last quarter, resulting in a near-stagnation of GDP growth at the end of the year.

On the whole, despite the impressive growth rate in the first half, we expect the annual GDP to grow only by about **4.5%** in 2022, which will probably be followed by an economic contraction in the next year.

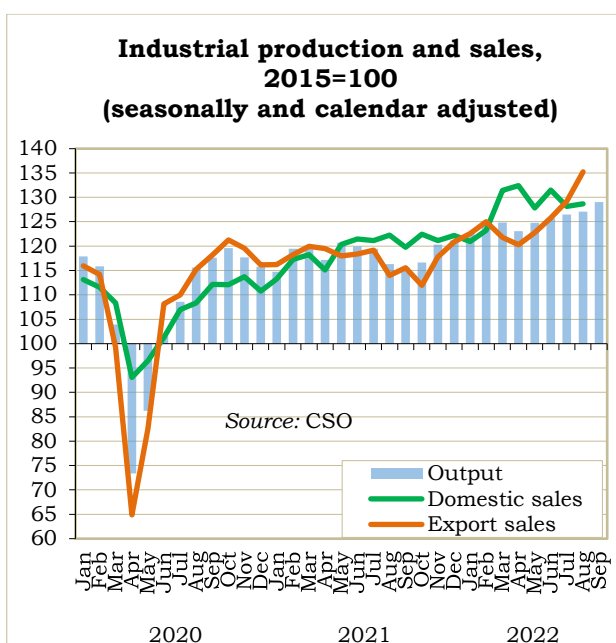
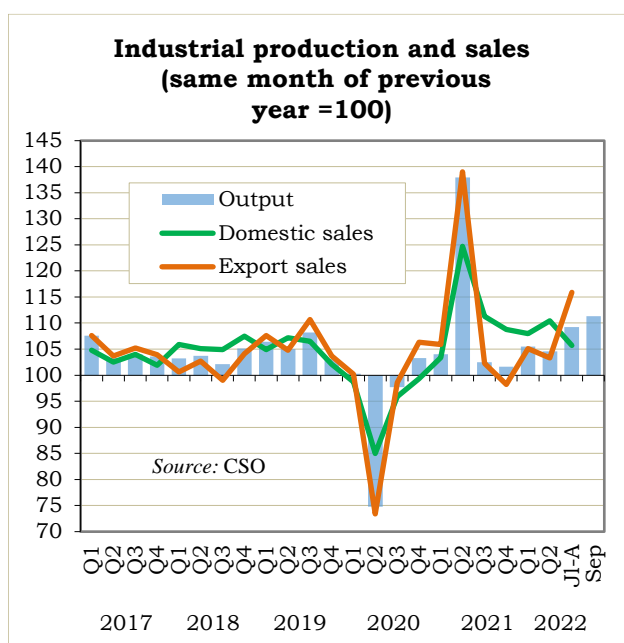
3.1. The production side of GDP

3.1.1. Industry

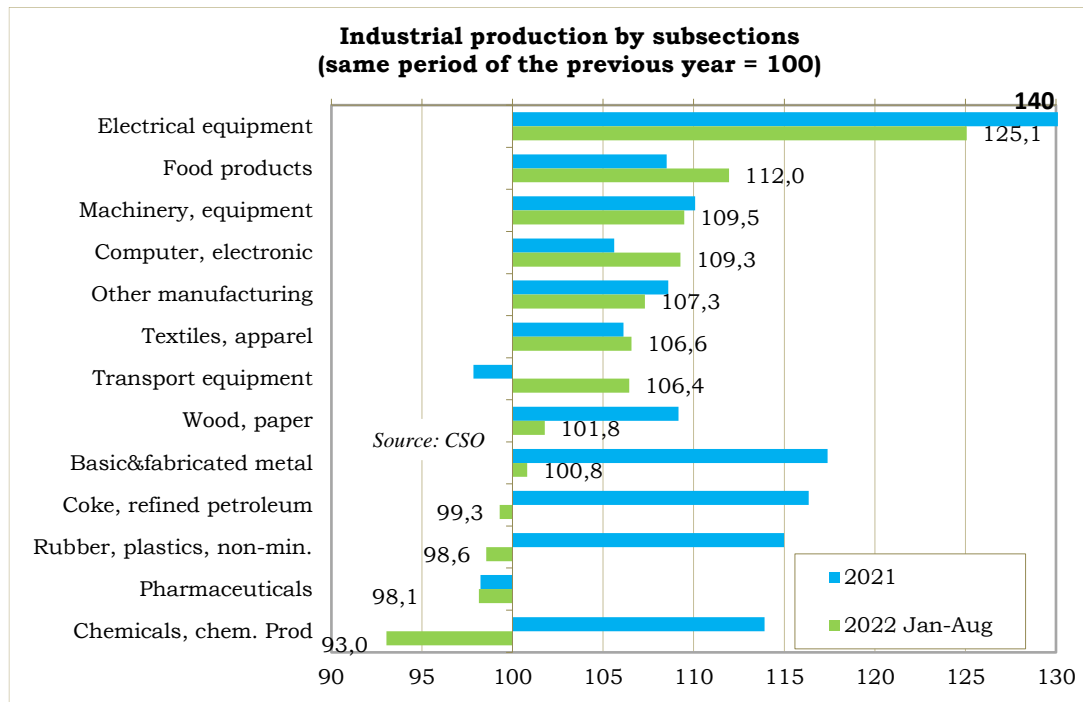
Industrial growth accelerated to 5.5% in the first quarter of 2022, which eased to 4.6% in the second. In addition, the second-quarter growth was uncharacteristically dominated by the 10.4% growth in domestic sales while export sales expanded merely by 3.3%. The seasonally adjusted data show that domestic sales remained high after the jump in March while export sales did not recover from a previous dip until June. (It should be noted that much of the dip in export sales during the spring was due to a drop in *electricity export* while the export sales in manufacturing decreased much less markedly and started rising again very soon.). In July and August, however, export sales rose considerably while domestic sales remained stable. As a result, the year-on-year growth rate was very dynamic again in July-August while domestic sales climbed only moderately. Probably the same is true of September even if for that month only preliminary numbers are available at present that show a continuing upturn of industrial output.

On the whole, industrial production was up 6,7% in January-September and managed to grow by an impressive 9,7% in the third quarter. This means that industry has remained much more resilient to the energy cost shock so far than what we expected, even if in some energy intensive branches (like chemical industry and metallurgy) the production started decreasing markedly during the second quarter.

In January-August, the electrical industry posted the highest average growth rate by far but – out of the engineering-related areas – the production of machinery and the electronic industry also achieved a cumulative growth rate of more than 9%. The automotive industry started growing in May and – due to changes in the statistical base – the growth turned into skyrocketing in August. As a result, the transport equipment industry could also grow at a reasonable pace of about 6% in the first eight months. On the whole, output contracted only in 4 of the 13 manufacturing sectors in January-August (coke–petroleum, rubber–plastic–non-metal minerals, pharmaceuticals, chemical industry) while in the large majority of the other manufacturing branches the



growth rate surpassed 5%. This is not a bad growth performance in a year marred by an energy crisis.



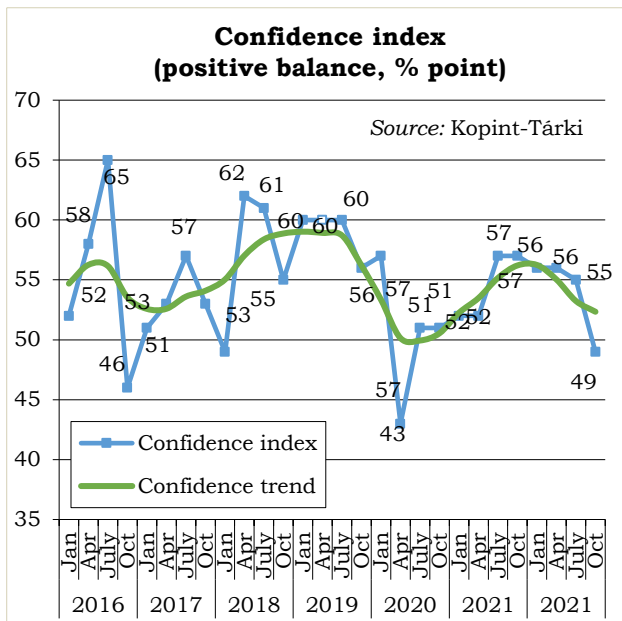
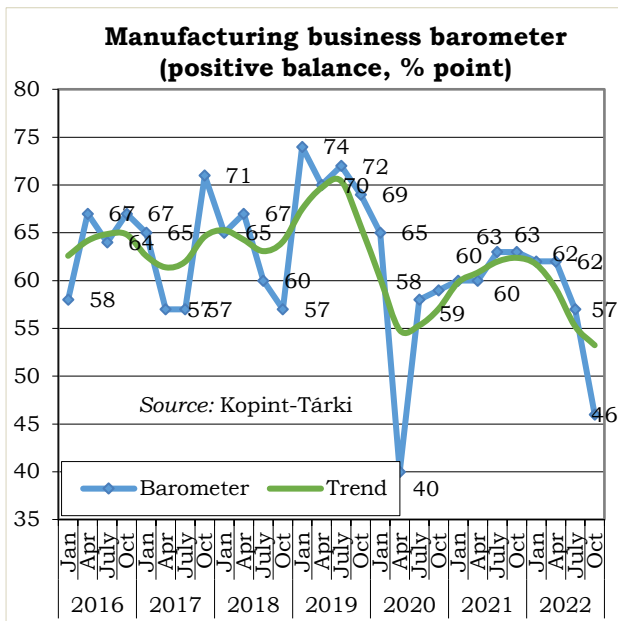
We expect a negative trend change in the last quarter, even if this negative turn may not be as drastic as previously expected. After a growth rate close to 10% in the third quarter, the last quarter will probably bring a marked deceleration. No dramatic worsening in demand conditions has been registered so far, or at least not regarding export sales. But the supply-side outlook – more specifically, the cost outlook – is threatening. The war in Ukraine is not about to end any soon and the prewar energy cost conditions probably never return. The government tries to cushion the blow by offering support for energy efficiency-enhancing investments and direct cost financing support for manufacturing SMEs. But this support will reach only a fraction of the affected enterprises. Still, for the time being, it seems that industrial sector may remain more resilient than several areas in the services sector. Industrial production may grow at an average rate of **6-6.5% in 2022**, with a sharp slowdown – but probably still some positive growth – in the next year.

Manufacturing sentiment indicators in the autumn of 2022

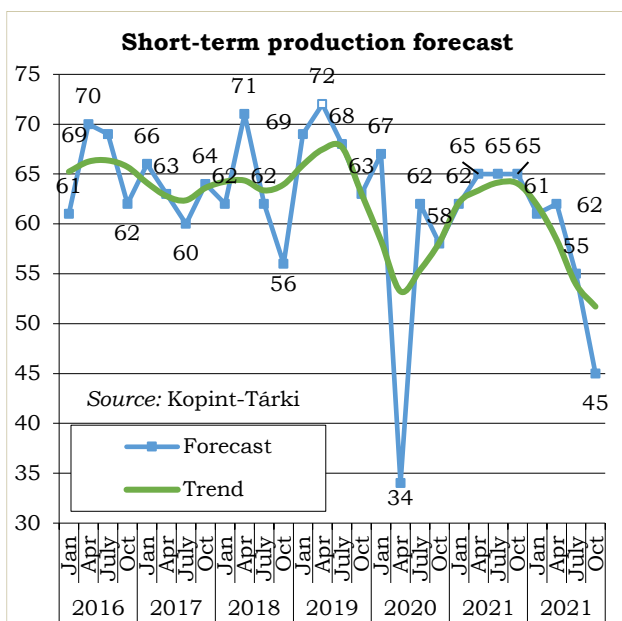
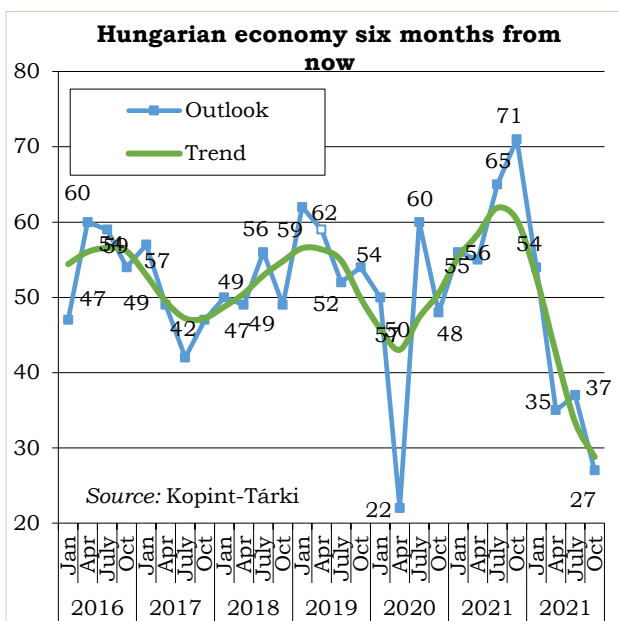
Almost every component of the manufacturing confidence index sharply fell in the autumn of 2022. The overall situation is unusually bad even though the present levels are still far from the levels seen in the spring of 2020. The difference is that during the pandemics the firms' outlook bounced back to precrisis levels merely a quarter later but now, such a fast recovery is very unlikely. The underlying problems (energy prices, raw material costs, softening European demand etc.) will persist for a considerable time and probably will enforce painful structural adjustment from manufacturing firms.

The subjective assessment of the firms' own situation stood at 53 points in the autumn, which in itself is not bad but also means a sharp fall from the 66 points registered in the spring. The six-month outlook, on the other hand, stood at 39, another significant fall from the 55 points in the previous quarter. The bad mood is universal among the firms, without significant differences by firm size. The picture is similar in the case of output

expectations that stand at 45 points, signaling a decrease of output. It should be noted that in April 2020 the same indicator stood at 34 points, which implies that this time no such drastic rupture of industrial activity is likely as two years ago.



The objective indicators also paint a picture of gradually worsening perspectives. The level of orders do not change drastically, although there is a clear downward trend. But there is no such a complete shutdown of domestic and international industrial activity as it occurred in 2020. The output inventory levels have started to rise but this does not unequivocally indicate a decrease in demand – the firms may have revved up production in anticipation of future disruptions in energy prices and energy supply. This seems to be corroborated by the fact that the capacity utilization level is at 73%, which is lower than the pre-pandemic level of 84% but still reasonably high. The employment outlook, on the other hand, clearly indicates a slowdown: for the first time in a long time, the firms do not plan to expand their workforce – they even anticipate a contraction of labour demand, which may even entail layoffs in some segments. In this respect, some



divergence can already be seen since the risk of redundancies is higher in the case of smaller enterprises.

On the whole, the (subjective) business barometer stood at 46 points in the autumn, primarily due to the uncertainties regarding the future outlook. At the same time, the confidence index which is based on objective indicators stood at 49 points, indicating stagnation or a mild downturn. The sentiment regarding the outlook of the Hungarian economy scored the worst, with merely 26 points. The latter is still better than the 22 points in the spring of 2020, but that time, the indicator jumped back to 60 points the next quarter, while such a quick rebound is unlikely this time, especially during the winter months.

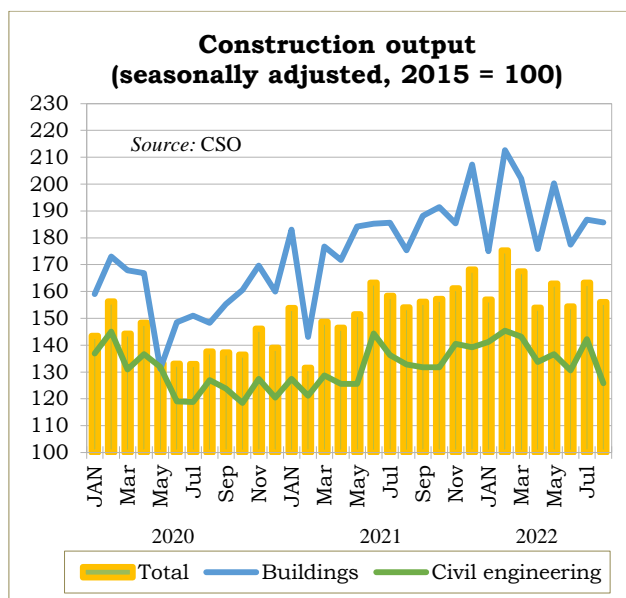
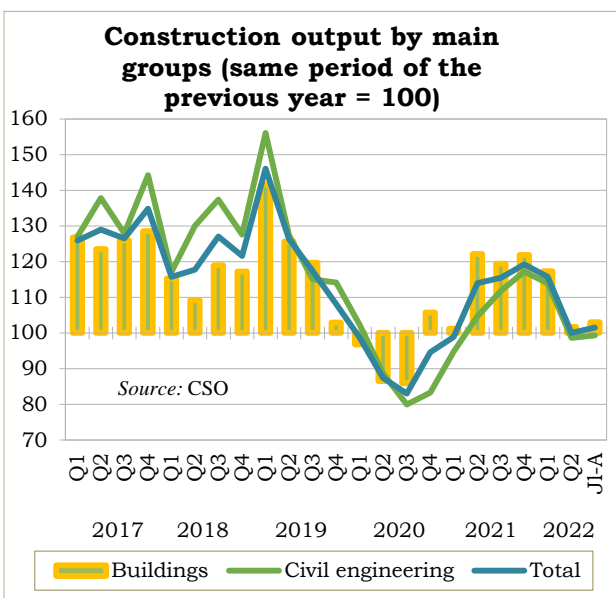
3.1.2. Construction

After the post-Covid growth cycle peak in the last quarter of 2021, construction output continued to grow by 17.5% in the first quarter this year but suddenly turned into stagnation (due to a year-on-year contraction in June) in the second quarter. The cumulative growth rate was 7% in the first half, with a higher rate (8.8% in the case of the construction of buildings). The year-on-year fall in June was different in the construction of buildings and civil engineering: for the latter, it was mostly because of the statistical base effect but for the former, it reflected the wild swings in the monthly output.

In July-August, the swings seemed to stabilize in the construction of buildings, resulting in a two-month growth rate of 3%. In civil engineering, on the other hand, the combine effect of a somewhat higher statistical base and a consistent downward trend in the monthly output – a result of the phasing-out of the previous large-scale infrastructural projects and the relative lack of new ones – led to a mild cumulative contraction in July-August which may continue during the rest of the year.

The *stock of orders* has been increasingly lower than one year earlier in the case of the construction of buildings while – after a period of growth – civil engineering orders stagnated in August. But the trends were much more consistently negative in the case of *new orders* for both main groups of construction. This is especially true of civil engineering where the volume of new orders plummeted in August. This may be a harbinger of further decline, due to the fiscal consolidation that resulted in the deferment of most large-scale government investment projects, previously scheduled for this year and the next. This cutting of public investment expenditures mostly affects civil engineering.

The volume of *newly started* civil engineering projects already significantly decreased in the second quarter, according to the *iBuild* database, and a milder decrease was registered in the construction of buildings as well. As for the latter, the industry stakeholders expect a decline in the case of hotel and office segments while growth may continue in the construction of industrial and logistical premises.



Of course, construction is hit not just by softening demand, but supply-side constraints cause problems for a considerable time. In recent months, soaring energy prices resulted in production cuts in various energy-intensive segments of building material production, notably in cement and brick production, which causes problems for construction firms.

We expect relatively sluggish construction activity for the rest of the year – some minimal growth in the third quarter may turn into a decrease in the fourth. We expect an annual growth rate of about **4% in 2022**, while construction output will probably contract in the next year.

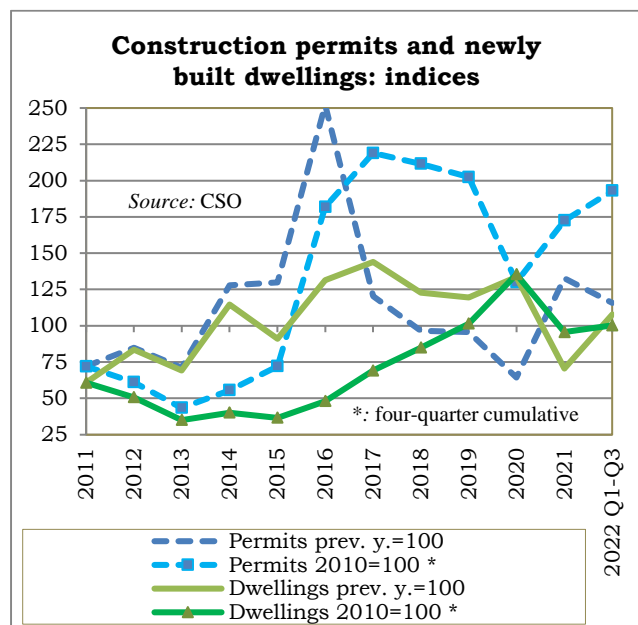
3.1.3. Housing construction

As opposed to the decreasing number of dwellings built in the last year, building completions picked up pace from the second quarter of this year and rose by as much as 57.5% in the third quarter. While in the second quarter much of the growth was due to the completions of projects by natural persons, in the third quarter, completions of housing projects by real estate developer firms also expanded at a dynamic pace. The cumulative growth in the first three quarters was still low, 7.7%, due to the fall in the first quarter.

The number of construction permits issued/construction notifications submitted continued to grow at a roughly steady pace (15.6% in Q3). According to the *iBuild database*, the *nominal value of newly started multi-dwelling projects* grew in the second quarter of this year – in real terms, they may have approximately stagnated, after a significant fall in the first quarter.

The continuing growth in the number of new permits/notifications suggests that demand is still going strong in the housing construction market. At the same time, supply-side problems remain severe, due to the steep rise in energy costs and in the price of materials. But a weakening of demand is already seen in the housing market and it is likely to become more severe with the worsening of the financing conditions and the negative turn from growth to decline regarding real household incomes.

The weakening demand may result in the deferment of construction starts in the case of projects that already have the construction permits. It is also a question how long the growth in the number of permits/notifications can continue amid deteriorating income trends. (In the third quarter, this growth was concentrated to Budapest alone, unlike in the previous quarters.) Since the Russian-Ukrainian war – and hence the supply-side and cost problems – will continue for a while and since demand is also likely to start to contract, the overall housing construction outlook is rather bleak. Still, the number of completed dwellings may continue to grow in the next couple of quarters.



3.2. The final use of GDP

3.2.1. Household income, consumption and saving

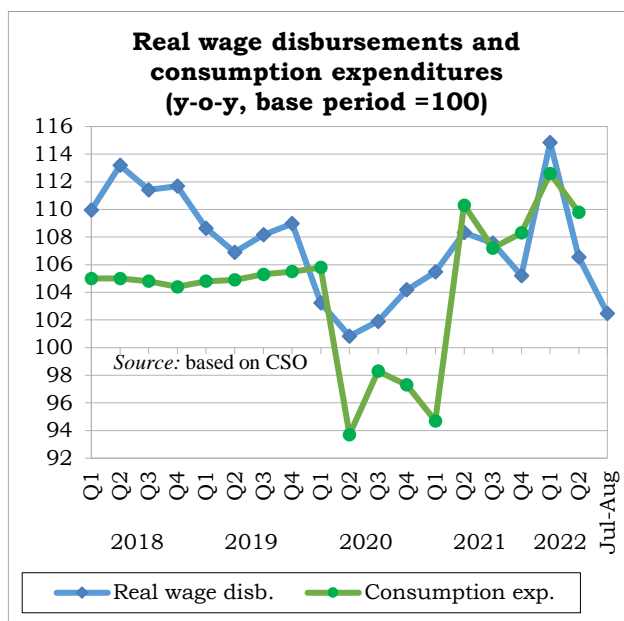
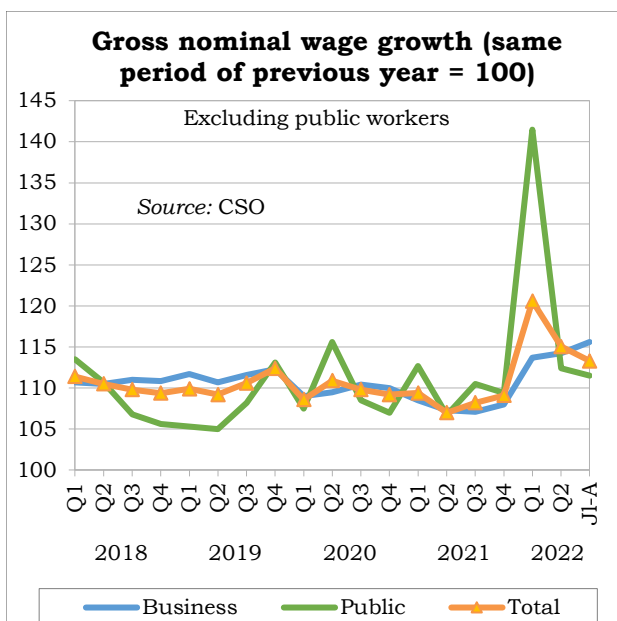
Nominal wage growth this year surpasses the pace seen in 2021: even if without the extreme growth in February (a result of the gigantic bonus paid to members of armed bodies), nominal wages steadily rose at double-digit rates in the first eight months of the year. The wage growth was supported by the 20% raise of minimum wages, the still pressing labor shortage and the dynamic pace of economic growth. With the additional shock of the above-mentioned “arms money” in February, the cumulative wage growth was 17,5% at the observed range of employers.

The accelerating inflation increasingly cut into real wage growth, but still, real wages grew by a cumulative 6.1% in January–August. On the other hand, median wages (whose growth was only marginally affected by the “arms money”, grew only by 3.6% during the same period. But – due to the inflationary wave – real wages were only up 0.9% in August and it is certain that their year-on-year rate turned into negative from September.

Since the number of employees still increase, even if at a slowing pace, the cumulative growth of **net real wage disbursements** was 8.5% in January–August, thereby surpassing real wage growth. In August, however, the growth rate was only 2.3%.

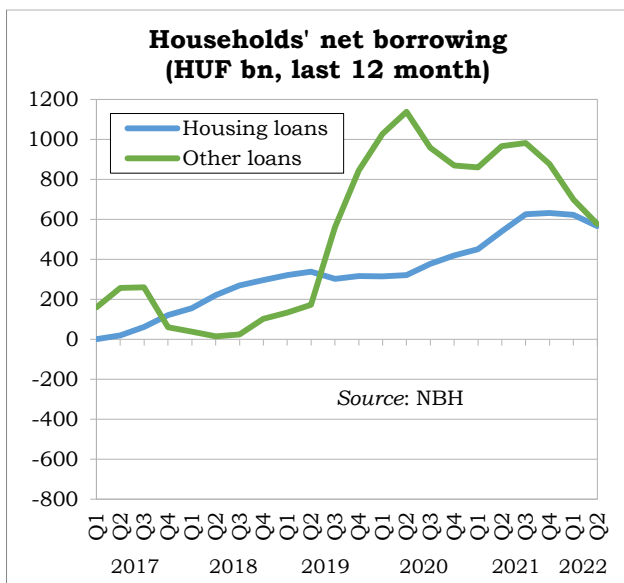
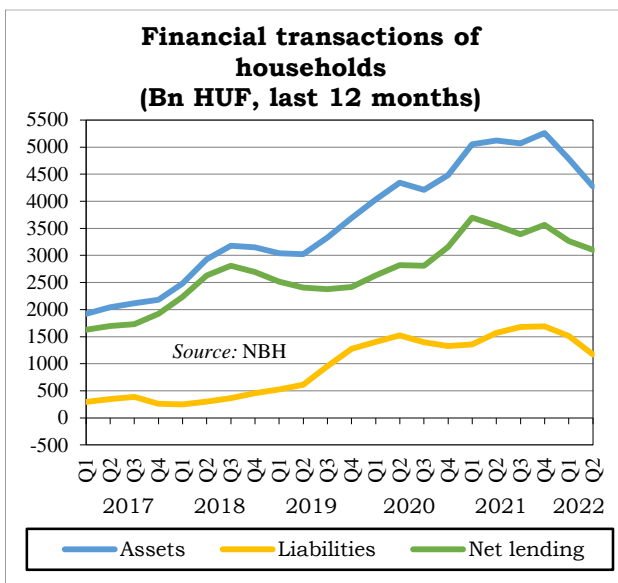
Beside the “arms money”, several other measures within the February stimulus package (full reintroduction of 13th month pension, full tax rebate for households with children, etc.) gave a boost to overall household incomes. As a result, **private consumption expenditures** skyrocketed in the first half of the year, with 12.6% and 9.8% growth in the first and second quarter, respectively. (Full private consumption – including transfers in kind from the government and non-profits – climbed 10.6% in the first quarter and 9.2% in the second.)

In the second half of the year, private consumption growth will drastically decelerate – toward the end of the year, even a year-on-year decrease is in the cards. Real wages are to decrease from September, amid the continuing inflationary surge. (The substantial supplementary pension payment in November only enough to more or less offset the erosion of real pensions caused by the inflation.) Based on the retail trade turnover data,



household consumption growth slowed down substantially in the third quarter – to about 3-3.5% – and without motor fuel purchases, real retail turnover slightly decreased in the third quarter. Besides the erosion of wages and pensions, rising interest rates limit the households’ appetite and ability to borrow, and the burden of already existing debts are also on the rise, even if – so far – not universally. As a result, the annual growth rate of consumption – even if it will probably **surpass 5.5%** - will not come to close to the growth registered in the first half.

The nominal value of household’s **net financing capacity** decreased in both the first and second quarters, amid the simultaneous decrease in both gross savings and net borrowing. This is because the households spent the significant – and in great part one-off income growth mostly on consumption, and a part of the surplus income went into the repayment of existing loans. It seems that the repayments affected both the housing and other loans: net housing borrowing continued to decrease in the second quarter amid a growth in new borrowing, while the sum of net other borrowing fell spectacularly amid a slight decrease in new borrowing. (The decreasing trend in the sum of new loans – especially in the case of housing loans – became substantial in the third quarter.) The four-quarter cumulative **net saving rate** (as a percentage of GDP) dipped to 5.2% in the second quarter, from 5.7% at the end of the last year.



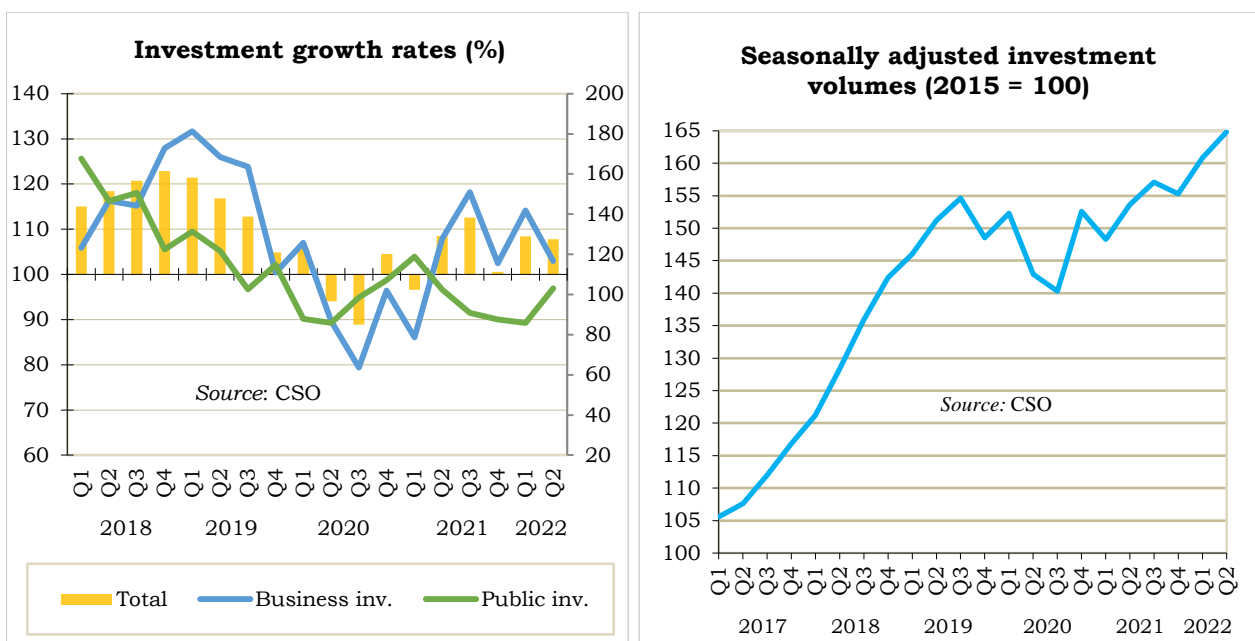
3.2.2. Investments

In the second quarter of 2022, investments grew by 7.8%, a mild deceleration from the 8.4% in the first quarter. The *seasonally adjusted* volume of investments rose significantly compared the previous quarter in both quarters, and the investment volume surpassed the pre-Covid peak level by 6.6% in the second quarter.

The structure of investment growth markedly differed in the first and the second quarter, according to the CSO data. In the first quarter business investment grew strongly, along with household investments, while in the second quarter the growth rate of business investments slowed down considerably while household investments continued to substantially contribute to overall investment growth. The latter is due to an upturn in housing investments, a reflection of the steep growth in the number of finished new dwellings. Besides, after three quarters of steady fall, government investments grew somewhat in the second quarter, due to a jump in education and healthcare investments.

The MNB, on the other hand, points out that the apparent flattening of business investments is mostly due to so-called quasi-fiscal industries – primarily, transport and storage – that heavily rely on government contracts, while investments of actual private firms, especially foreign-owned private firms, kept growing at a good pace. To wit, manufacturing investments continued to expand at a pace above 20%. There is a divergence, however, in manufacturing itself: automotive investments fell in both quarters while the investment boom in electrical industry (expansion of accumulator production capacity) continues.

The outlook for the second half of the year is gloomy. The growth of state investments is unlikely, despite the low statistical base, due to the deferment of many investment projects originally scheduled for 2022-2023, and the ever-growing financial stress the local governments face in the wake of the energy cost surge. Large segments of the business sector face debilitating cost increases and uncertain outlook – their appetite for investments – except for energy efficiency investments – will be severely curbed. Some segments of manufacturing may keep investing, however, at least for now. It should be



noted that the government strives to keep supporting the investments of the manufacturing sector. During October, it launched two schemes, one for the manufacturing SMEs and one for the large enterprises, that provide support for energy efficiency investments.

The rising cost of living, the growing uncertainty, the rising interest rates and the continuing rise in the prices of new homes will certainly affect the investment activity of households as well, at least in terms of new housing investments. At the same time, the number of *finished* housing construction projects may continue to rise for a while, and this may be reflected in the investment data as well.

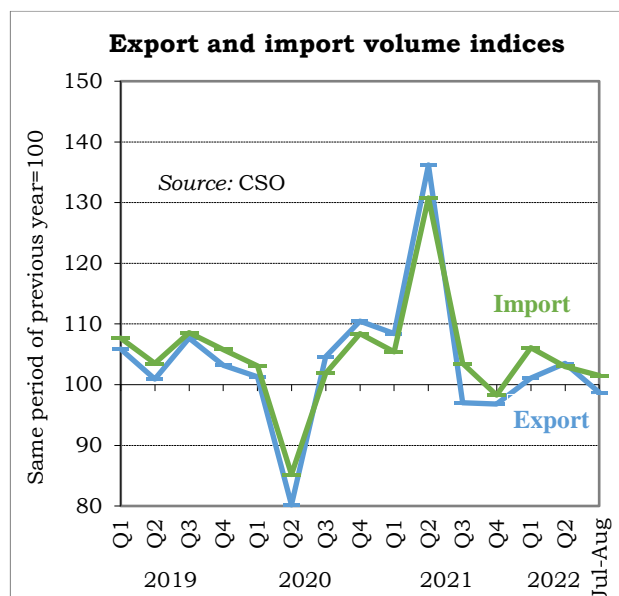
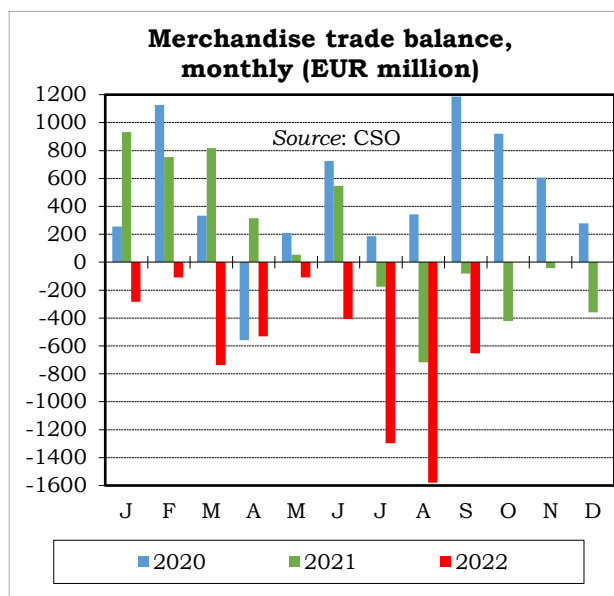
On the whole we expect only a very modest growth of investments in the second half of the year. As a result, the annual investment growth rate may remain **below 4.5% in 2022**.

3.2.3. External trade

In the first three quarters of 2022, the external trade trends were entirely unfavorable regarding the nominal external balance but partially favorable in terms of the changes of volumes. In January-August, the volume of merchandise export grew by 3.8%, while the import volume was up 5.5%. This is, however, the result of two combined events in the first quarter: the strong growth of import in the face of an unprecedented expansion of domestic demand and a very weak export growth mostly due to the supply-side bottlenecks. On the other hand, export grew at a faster pace than import in the second quarter – mostly due to an uptick in the export of machinery and transport vehicles – and most probably in the third quarter as well – for the same reason. (There is not yet volume data available for September, but August saw a dramatic jump in machinery and transport vehicle export.)

At the same time, the nominal balance remained extremely unfavorable throughout the first three quarters. The relatively benign developments in the volume of trade flows were overwritten by the drastic terms-of-trade deterioration. The latter was, on average, 6.9% in January-August, amid a very high export price growth and an even higher import price growth (in forint terms). As a result, the monthly external trade balances deteriorated sharply compared to the same month in the previous year even when the volumes moved in a favorable direction, for example in August. Thus, the trade balance was negative in every month of this year and the nine-month deficit amounted to EUR 5.7 billion, against the EUR 2.4 billion in the same period of 2021. This will be the first year since 2008 when the annual trade deficit is negative, and a negative record as well, to top it off.

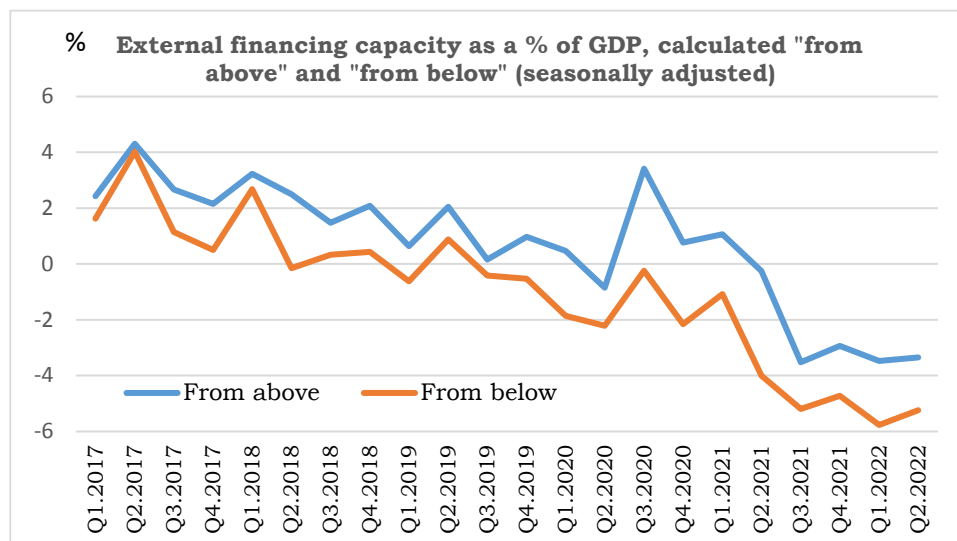
We expect that – amid a decelerating trend in trade flows in both direction, due to the domestic and global slowdown – export growth will remain slightly less depressed than import growth, in volume terms, in the last quarter and the next year. But the terms-of-trade deterioration will also remain strong during the rest of the year, which will result in a continuing deterioration of trade balances. The annual trade deficit is likely to reach **EUR 8-8.5 billion** in 2022, with a significant improvement in 2023.



3.3. Balance of payments

In the first half of 2022, the cumulative current account deficit amounted to EUR 4.3 billion, which – seasonally adjusted – makes up nearly 7% of GDP. Since the capital account posted a sizeable surplus (EUR 2.6 bn), due to the EU transfers, the so-called “net financial need calculated from above” – that is, net borrowing – was only EUR -2.7 billion.¹ But the financial balance calculated from financial flows shows a much higher financing need, amounting to EUR 4.5 billion in the first half.

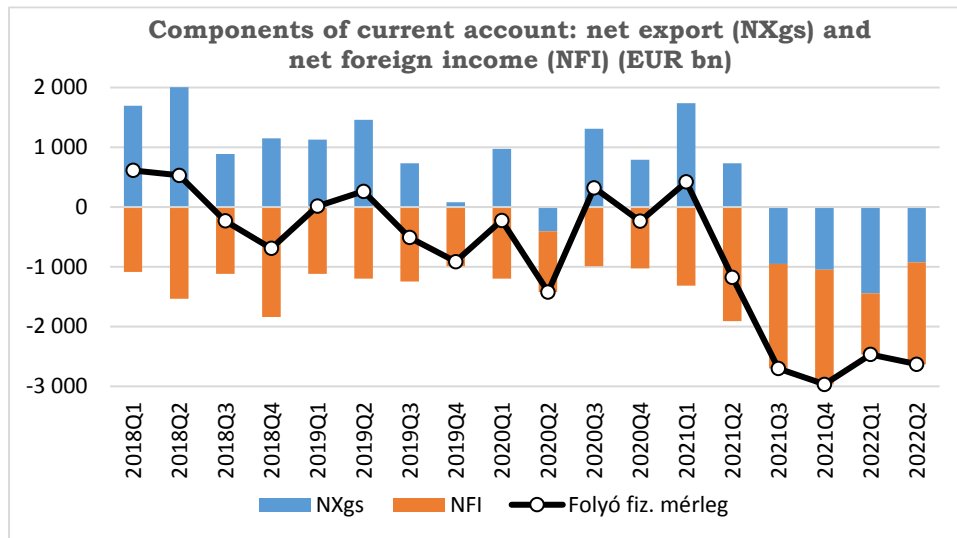
The chart below displays the evolution of external financing need calculated from above and from below between the first quarter of 2020 and the second quarter of 2022.



Source: MNB

Both external financing indicator showed a near-equilibrium position until the first quarter of 2021 but a significant worsening afterward, with a much more dramatic negative change in the case of the financial account balance.

¹ Net borrowing equals the inverse of the consolidated balance of current and capital balances.



Source: MNB

The opening of such a gap can be usually attributed to two factors: the overestimation of the trade balance (usually due to the underestimation of imports) and/or and unregistered outflow of capital. While we will focus on the current account hereinafter, both possibilities need to be kept in mind.

While the net incomes (NFI) has been steadily in negative territory, due to the interest paid after external debt and the FDI-related income repatriations, the deficit of incomes was offset, more or less, by the positive balance of the external trade of goods and services (NXgs), at least until mid-2021. After that, however, the external trade surplus turned to deficit as well, compounding the net effect of net incomes on the current account balance.

As we discussed in our previous report in more detail, the deterioration of net export from mid-2021 is primarily a consequence of the terms-of-trade deterioration, which in turn is a result of soaring energy prices. According to our calculation, about 80% of the roughly EUR 4.8 billion deterioration in the external trade balance was due to the terms-of-trade loss. While there was no significant change in the terms-of-trade trends from the first quarter to the second, the trade deficit moderated somewhat. This is because in the first quarter the negative price movements were compounded by a strong negative volume effect (due to the pre-election spending spree by the government and the resulting jump in domestic demand), the volume effect became slightly positive in the second quarter.

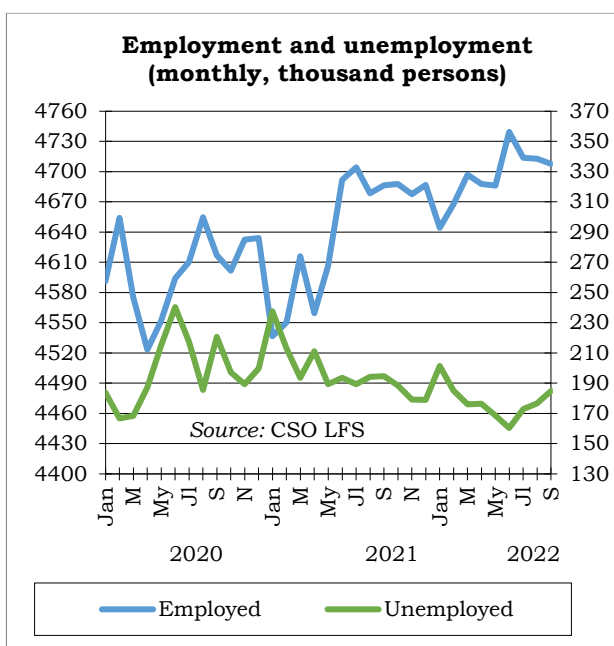
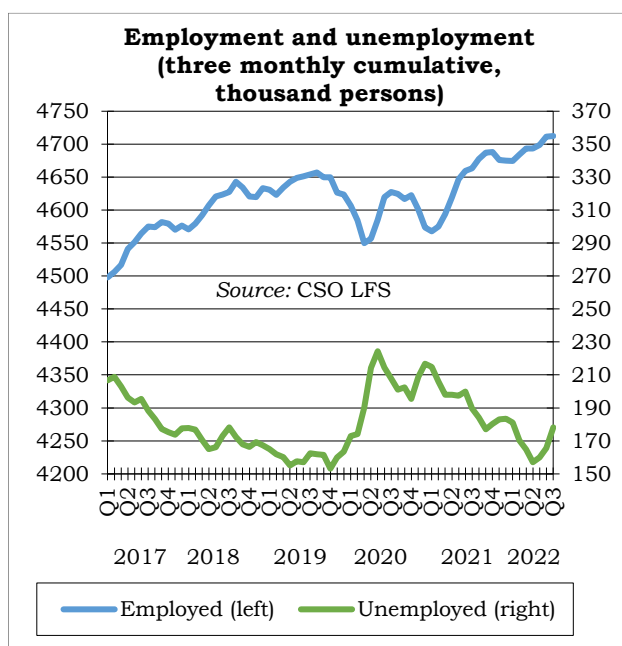
We expect the current account deficit to reach 8-9% of GDP in 2022, while the combined balance of current and capital accounts may amount to 6.5-7.5% of GDP.

3.4. Employment, unemployment

According to the LFS survey results, the employment situation continued to improve – although at a decelerating pace – at least in terms of the *number of employees* which rose by 1% in the third quarter, after the 1,6% registered in the second quarter. At the same time, the number of public workers continued to fall and the number of those working abroad continued to grow. But the net balance is that the number of employed in the domestic open labor market expanded by 1.2% in the third quarter, which is in line with the continuing (even if substantially decelerating) economic growth.

The trend change is approaching, however, and the merely 0.5% growth in September is a reflection of the coming negative turn. Another indicator is the slow increase in the *unemployment rate*: after dropping to 3.2%, a record low not seen since 2019 in the second quarter of this year, the unemployment rate rose to 3.6% in the third quarter. The monthly unemployment rate in September was 3.8%.

This suggests that the employers start adapting in the face of the fast deceleration of growth and soaring energy costs. For the rest of the year, we expect a near-stagnation in the number of employed that will turn into a decrease in the next year. The unemployment rate will keep growing in the fourth quarter and exceed 4% early in the next year, although it is still uncertain how dramatic will be the labor market deterioration in 2023.



3.5. Fiscal, monetary and financial developments

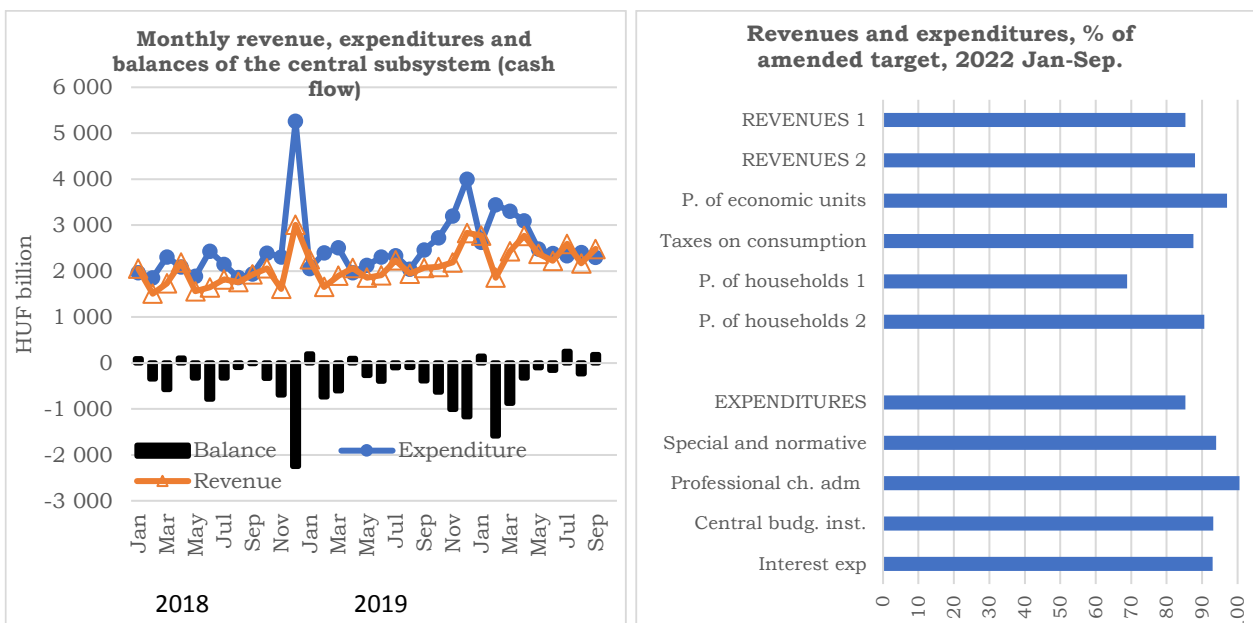
3.5.1. Fiscal developments

In the first nine months of 2022, 85.3% of the amended revenue target for the central budgetary subsystem (central budget, social security funds and extrabudgetary funds) materialized. This is much more than the pro rata 75%, even though a part of the actual revenue inflow from the payments of households – namely HUF 685 billion, the equivalent of the sum that was paid from the budget to households with children in February as a tax rebate – was subtracted from the official revenue number. If this sum is added to the revenue, the actual revenue-per-target ratio is even higher, 88%.

From the *taxes on consumption*, 87.6% of the annual target arrived in January-September. Since the budget plan lost its relevance long ago, it is more informative if we compare the revenue inflows to the inflows registered in the same period of the last year. In the case of consumption taxes, the year-on-year growth rate is 24.3%, which means that the revenue flow exceeded the respective sum one year earlier by almost one-fourth. Since this type of tax is the most sensitive to inflation, the actual revenue will probably spectacularly exceed the target this year. If, on the other hand, the volume of consumption contracts drastically in the last quarter, the degree of over-fulfilment may be reduced significantly.

Regarding the *payments from households*, the official record shows that only 68.9% of the annual target materialized in the first 9 months. But if we include the HUF 685 billion mentioned above, and count all cash inflows from households, the revenue-to-yearly target ratio is much higher, 90.6%.

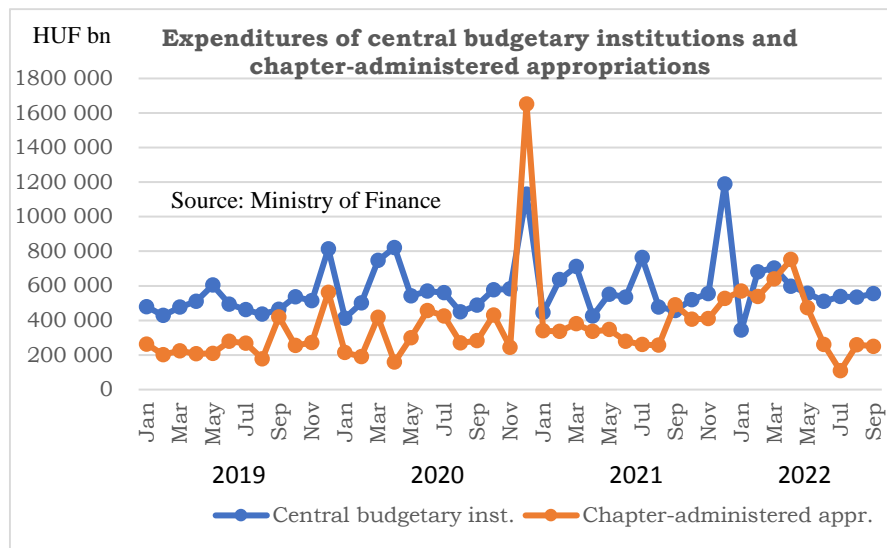
Explanation of the right-hand chart below: the bars named “REVENUES 1” and “Payments of households 1” account for the respective inflows according to official numbers that do not include HUF 685 billion, the equivalent of the tax rebate paid by the government to the eligible households to return the taxes that they had paid after their 2021 incomes. The bars “REVENUES 2” and “Payments of households 2”, on the other hand, include the said sum into the revenues due in 2022.



If the payments of household continue to flow at a pace similar to the summer months, the annual revenue may come close to the yearly target, even without the sum of the tax rebate.

The revenue-to-target ratio (97% in January-September), too, surpass the pro-rata 75% in the case of the *payments of economic units* also surpass the pro-rata by far. Almost all types of payments in this revenue category produced strong revenue flows. The payments of economic units were 37% higher in the first 9 months than in the same period of 2021.

As for *expenditures*, 85.3% of the yearly target materialized in the first 9 months. Some faint signs of fiscal prudence can be seen from June but the trend change is not really clear yet. The expenditures of central budgetary institutions only minimally decreased while the reduction is more pronounced in the case of professional chapter-administered appropriations, that is, state investments. In any case, expenditures under the latter heading already surpassed the yearly target as early as in July. Also,



in January-September, the the chapter-administered expenditures grew by 27% on an annual basis. The beginnings of the more restrictive approach can be seen from the fact that the year-on-year growth was much higher, 42%, in January-August.

It is ominous that the revenues from the EU programs amounted only 33% of the yearly target (HUF 790 billion) in the first 9 months. On the other hand, the government spent HUF 2,400 billion on pre-financing the EU development programs (79% of the annual target). Out of this sum, HUF 563 billion has been committed and HUF 407 billion has been actually spent so far to the projects under the RRF (Recovery and Resilience Facility), from own sources and at the government’s own risk since no agreement has been concluded yet about this facility with the European Union. While the EU is likely to transfer, sooner or later – unless they find irregularities – the funds pre-financed on projects under the Multiannual Financial Framework 2021-2027, hence they will not increase the accrual-based deficit. The fate of the funds spent on pre-financing RRF projects, on the other hand, is uncertain.

If Hungary eventually does not receive the RRF-financing from the EU – or receives only a part of it – than this will increase the Hungarian ESA deficit. In the 2022 budget plan

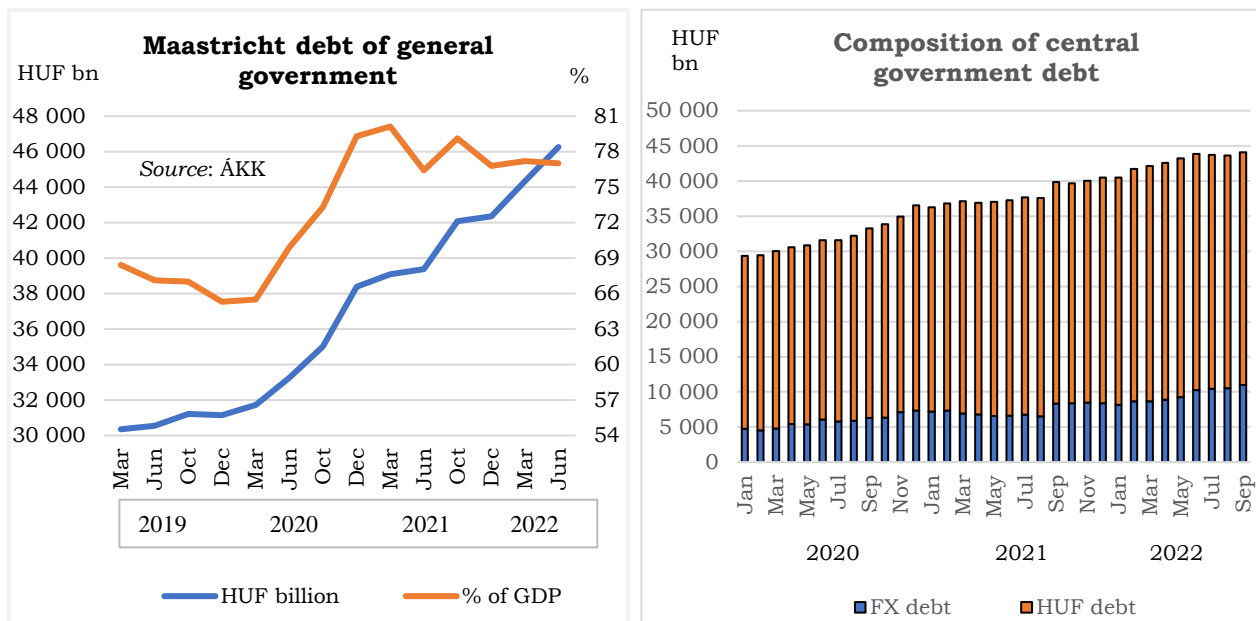
the yearly appropriation for RRF projects is HUF 1,450 billion but at that time it was not yet known to what extent this line of spending would become a budgetary risk.

To sum it up, it is fair to say that the spectacular over-execution in respect of the revenue targets and the sharp growth compared to 2021 was accompanied by an almost as massive over-execution of expenditures. Still, some improvement in the fiscal balance was seen in July-September, even though the available information about the fiscal consolidation measures suggests rather a degree of ad hocery, instead of a comprehensive master plan. The extra revenue from the windfall tax and the excise tax rate hike will probably arrive according to the plan – this is almost HUF 1000 billion. We do not know yet for sure how many households are affected by the partial lifting of the utility price cap and to what degree, and it is also uncertain how much government spending will be saved and how much additional VAT revenue will be achieved by this measure. As for the latter, the VAT content of the raised utility bills (27%) generates significant additional fiscal revenue. According to the estimate of the minister of finance, the state will spend an extra HUF 750 billion on energy import due to the price hike, which in turn raises the fiscal deficit from the originally planned 4.9% to 6.1% (as a percentage of GDP). The agreed-upon deferred payment after the gas deliveries will improve the cash-flow balance on the one hand but increase the ESA deficit on the other. The Kopint-Tárki expects a deficit-to-GDP ratio of 6.5% for 2022.

Public debt

From the end of December 2021 till the end of June 2022, the *Maastricht* debt of the general government (including the Eximbank) rose from HUF 42,354 billion to HUF 46,264 billion, that is, the growth amounts to as much as HUF 4 thousand billion. Never in the past couple of years such an enormous growth in state debt was seen in the space of such a short period: in 2021, it took the whole year for the state debt to climb HUF 4 thousand billion. By the end of the second quarter of 2022, the public debt reached 77.5% of GDP, from the 77.4% at the end of the previous quarter.

Without the Eximbank, the fiscal debt rose to HUF 44,757 billion by the end of September from HUF 40,697 billion at the end of last December. The increase of roughly HUF 4000 thousand billion is made of an increase in forint denominated debt by HUF



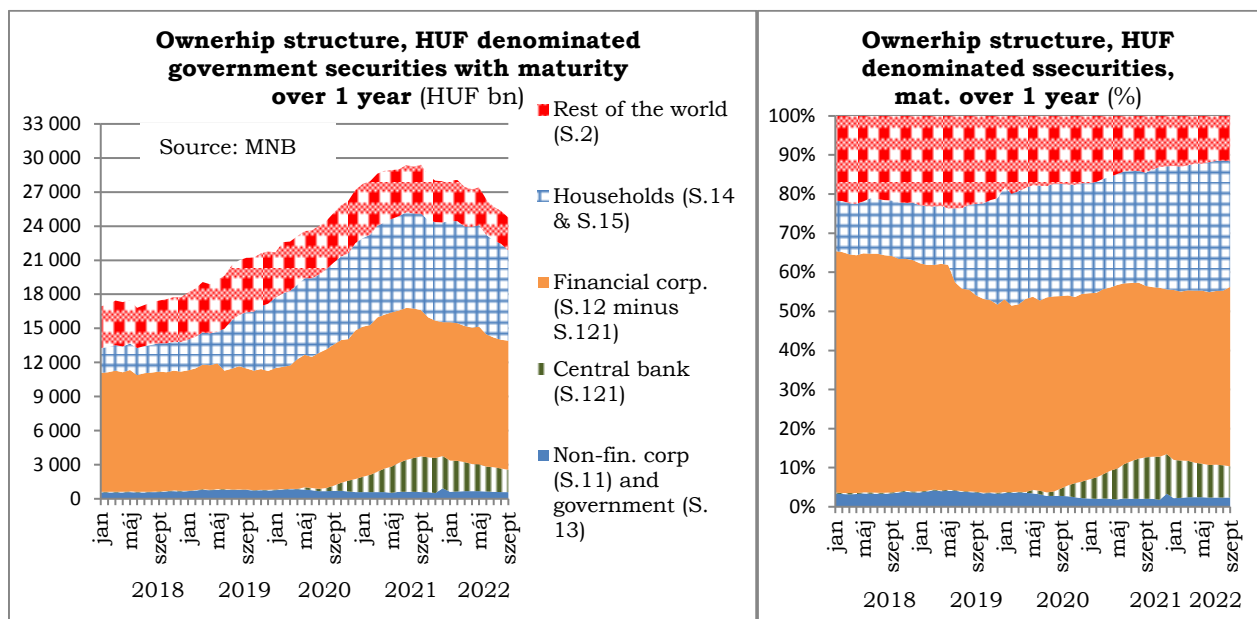
1,026 billion and an increase in FX denominated debt by 2,570 billion. The relative weight of forex debt is therefore on the rise again, from 20.7% at the end of 2021 to 24.9% at the end of September. This is roughly the same share than in 2017. In the subsequent years the government made a successful effort to reduce the FX share below 20% – in fact, the share was only 17.5% in the first quarter of 2020 – and that reduced share now bounced back to almost 25% now. This was mostly due to the reappreciation of FX-denominated government securities amid the sharp depreciation of the forint.

As for the ownership structure of government securities, it is noteworthy that the share of households is on the rise in the case of the forint denominated government bonds with maturity over one year (this category constitutes 71% of all government securities): from September 2021 to August 2022, the households’ share rose from 28.6% to 32.1% (the peak level was in August at 33.3%).

In May 2020, facing the coronavirus crisis, the central bank (MNB) launched its government asset purchase program. As a result, the stock of forint denominated government bonds with maturity over one year in the hands of the central bank peaked in September 2022 at HUF 3,123 billion, when the MNB owned 10.6% of this type of government securities. In August 2021, the MNB announced the “gradual phasing-out” of the asset purchase program, then in December 2021 it decided to entirely halt it. Accordingly, the value of MNB-owned stock decreased to HUF 1,974 billion, and the MNB’s share fell to 8%.

The importance of government securities with maturities under 1 year has steadily decreased in recent years: their share peaked in 2018 at 18-20% but has dropped to about 6% since then. The largest part – nearly half – of them is in the hands of households.

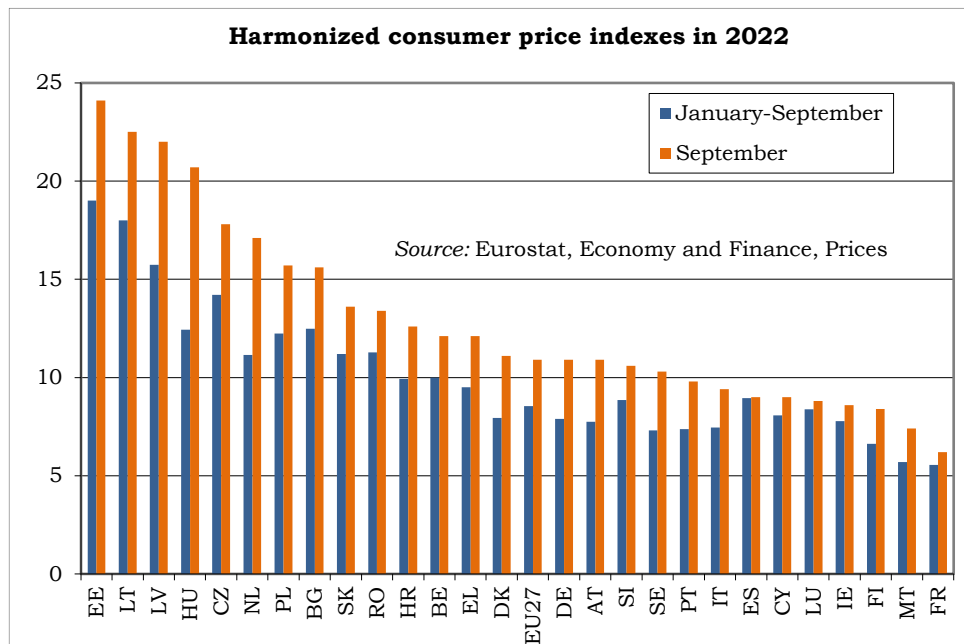
It is worth noting that the share of foreign owners in the ownership of FX-denominated government securities is steadily decreasing: from a share above 95%, it fell to about 85% by September 2022. On the other hand, households become more prominent owners of FX securities, with their share increasing to 5.6% by September. Domestic non-financial corporation also increase their FX government asset purchase, although their ownership share is still marginal.



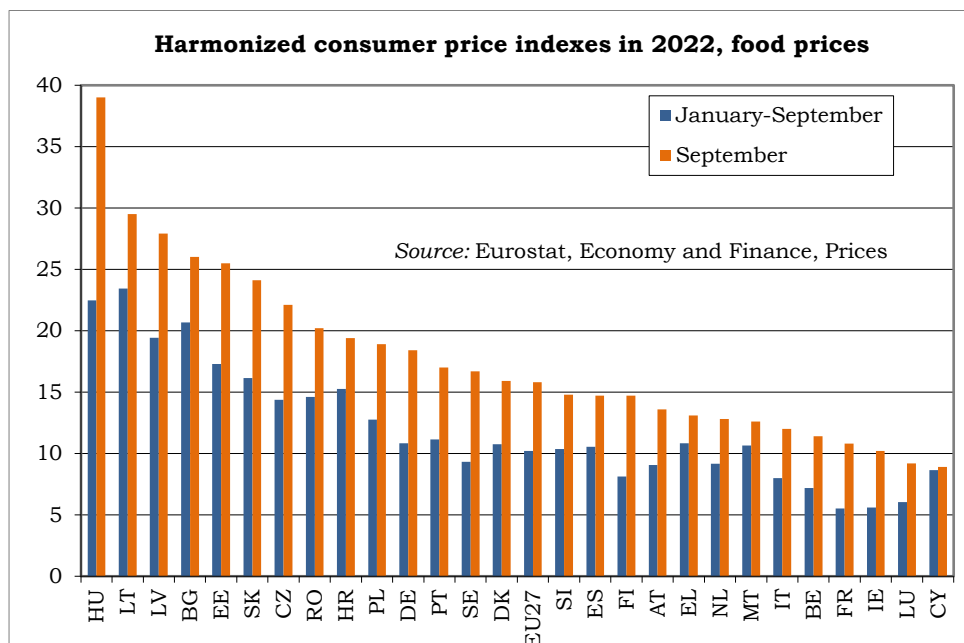
3.5.2. Inflation

In the first 10 months of 2022, consumer prices climbed 12.7%. By October, the monthly price index rose to 20.1% on an annual basis. The extreme impact of the partial lifting of the utility price cap (that is reflected in the price index from September) is shown by the fact in August the annual price index was still less extreme, 15.6%.

Based on the harmonized price index, Hungary had the fourth highest inflation rate in September among the EU member states, after the three Baltic states.



In the case of food price inflation, however, Hungary acquired the dubious glory of having the highest price index in August. In September, the harmonized food price index stood at 39% (and it surpassed 40% in October, without doubt).



The chart on the next page shows the (harmonized) September price index of the main groups of food products but the picture would not be much different, at least in terms of the relative position of countries, if it showed the average rates of the January-September period. Hungary is highlighted with red columns.

Bread and cereal prices soared by 55% in September in Hungary compared to the same months of 2021, the highest pace in the EU by far. The Hungarian price level steeply accelerated from month to month: in June, it was still around 30%.

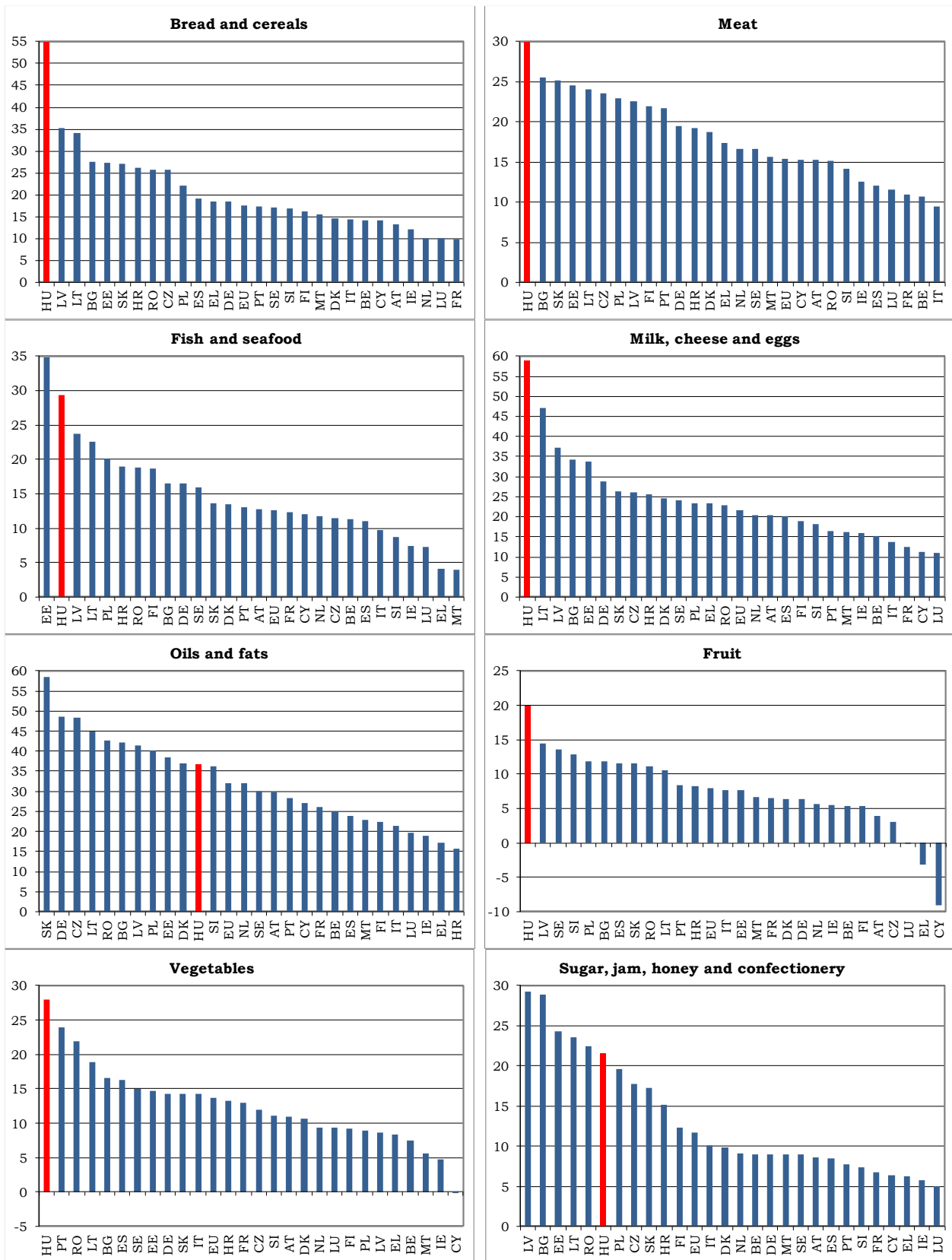
The picture is similar in the case of *meat* products (30% in September) even if this product groups was affected by the price cap (chicken breast and pork leg): the price index was clearly the highest in Hungary not just in September but also in January-September.

But Hungary is in top positions in the other food product groups as well:

- It was ranked first in September for milk-cheese-eggs, fruit, and vegetables. In the case of the former, the inflation rate was 59% in September.
- It was ranked second (!) for fish&seafood.
- Hungary occupied the sixth highest ranking in the case of the sugar-jam-honey-confectionary product group. This is notable because sugar is currently regulated by a price cap (and there is also a shortage of sugar). It is also true, though, that from July 2022, the rate of public health product tax (NETA) imposed on confectionaries was raised from 10.6% to 16.3%. This product group has a weight of 1.5% in the consumer basket, so a jump in its price index is felt somewhat in the overall inflation rate as well.
- Fats and oils is the only product group where Hungary is not in the top third of the EU in terms of the price index. In September, Hungary occupied the 11th place, with a price index of nearly 37%. Cooking oil prices are regulated by a price cap.

The September food price index was not just the higher among the EU members but also the difference between the September rate and the average January-September rate – that is, the acceleration of the price hike toward September – was by far the largest. A significant jump in food price inflation occurred in July when the extra tax was imposed on retail chains. On the one hand, this shows that the introduction of the extra tax was an enormous error because the retailers are forced to pass on the tax burden on the consumers, further fueling the already dangerously high inflation rate. On the other hand, the raised NETA-rate also generates additional price increases. And thirdly, the conclusion can be drawn that the price cap on the 7 food products unsurprisingly did not prevent the skyrocketing food price inflation but instead widened the scope of food price inflation. This may even have generated a secondary spill-over effect since the retailers, emboldened by the broad range of price hikes induced not by rising input prices but rising tax burden, may have raised the prices of other, unrelated products as well in one fell swoop.

Price indexes of various food product groups in September 2022 (%)



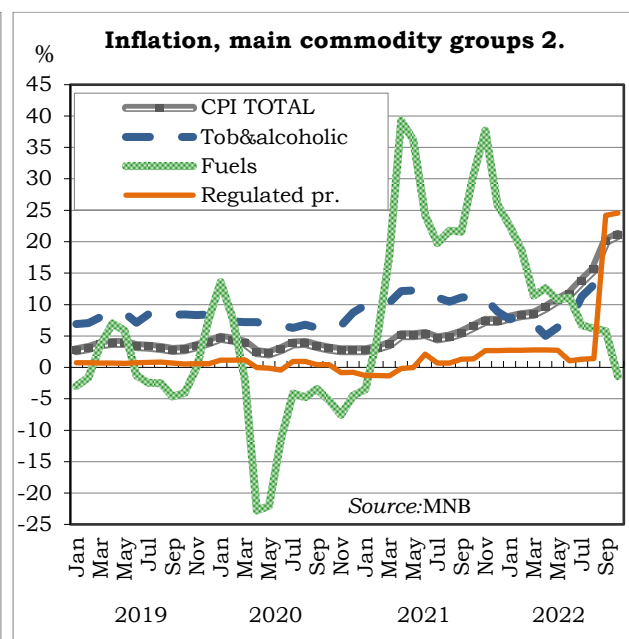
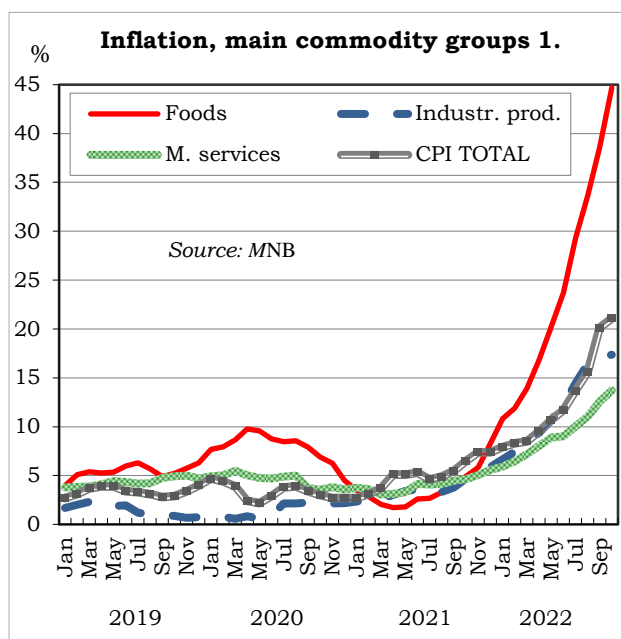
Source: Eurostat database, Economy and Finance, Prices: HICP - monthly data (annual rate of change) (prc_hicp_manr)

Characteristics of the Hungarian consumer price index in 2022

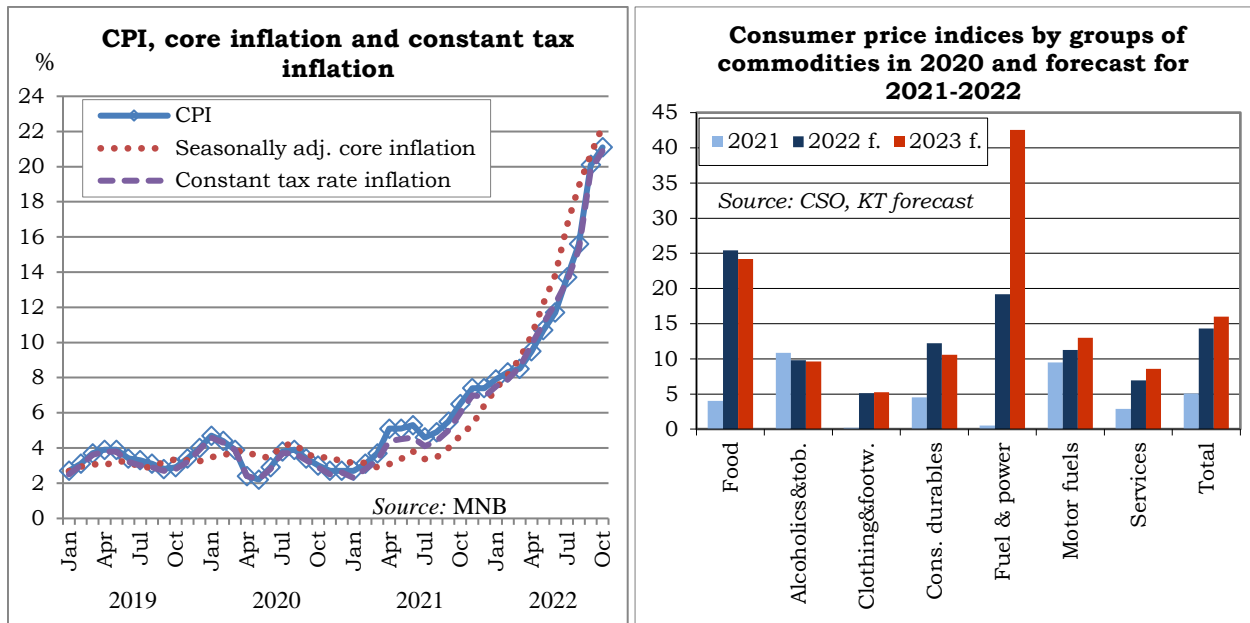
The evolution of core inflation and constant tax inflation provides an important input for the prediction of future trends. Notably, core inflation which trailed headline inflation by 1-2 percentage points in 2021 now exceeds it, to varying degrees. The gap was the biggest in August, with a headline inflation rate of 15.6% and a seasonally adjusted core inflation rate of 18.9%, but it was still 1.2 percentage points in October – by which the headline rate soared to 21.1%. The faster pace of core inflation suggests a further increase in headline inflation in the coming months, even without additional fuel and utility energy price hikes.

Many uncertainties – that were not present in the previous years – make it difficult to predict the 2022 and 2023 inflation.

1. It is unpredictable when the skyrocketing of food prices will stop and reverse. Since the days of prodigious handouts are over, the household incomes are being inflated away and the fiscal restriction also reduces the disposable income of households, the demand of households will decrease, which limits demand-driven price hikes. But it is hard to predict to what extent that drying up of demand will slow down the increase of prices. In any case, it will not stop the cost-driven inflationary pressure but it can put a limit on the price hikes that are not warranted by costs.
2. Although the government has declared that it will prolong the motor fuel price cap up to 31 December – on not especially rational grounds – the dramatic deterioration of the external financial position of Hungary (which is underlined by the deferment of payment for the Russian gas deliveries) would warrant making the domestic households face the increased costs and start conserving fuel.
3. The third source of uncertainty – the impact of the partial lifting of the utility price gap in August – has been already resolved: the rate of increase for regulated prices jumped by 23 percentage points in September, and that was the primary cause of the 4.5 percentage point increase in headline inflation in the same month compared to August.



At present, we expect an annual inflation rate of 14-14.5% for 2022, with upward risks. It is less risky to predict, however, that the inflation rate will accelerate further in 2023. The carry-over effect of the amendment of the utility price cap regime will raise inflation rates over the first two-third of the next year. The same can be expected regarding the motor fuel price cap since it will become utterly untenable to maintain it beyond the end of this year – and to keep encouraging consumers to continue to use motor fuels profligately. These upward effects cannot be offset even if the tumultuous rise of food prices comes to an end.

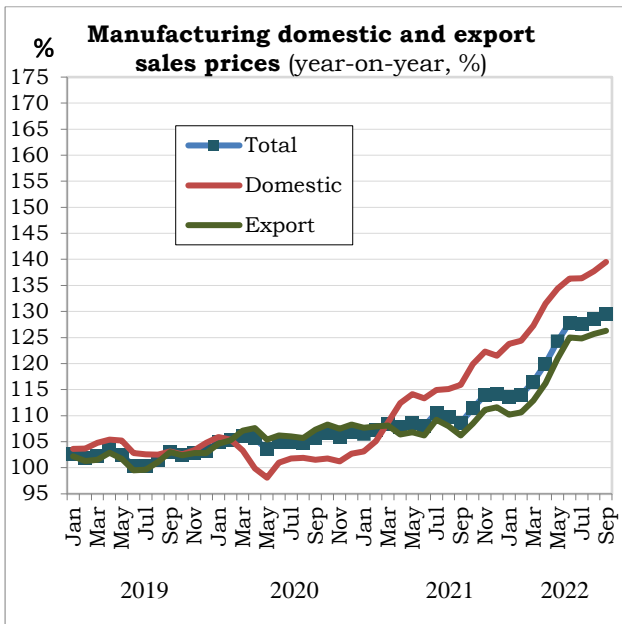


Producer prices

The high and rising levels of industrial, manufacturing, agricultural and construction price indices – that show hardly any sign of the slowing down up to September 2022 – suggest the continuing, even further accelerating, of the present high consumer price index.

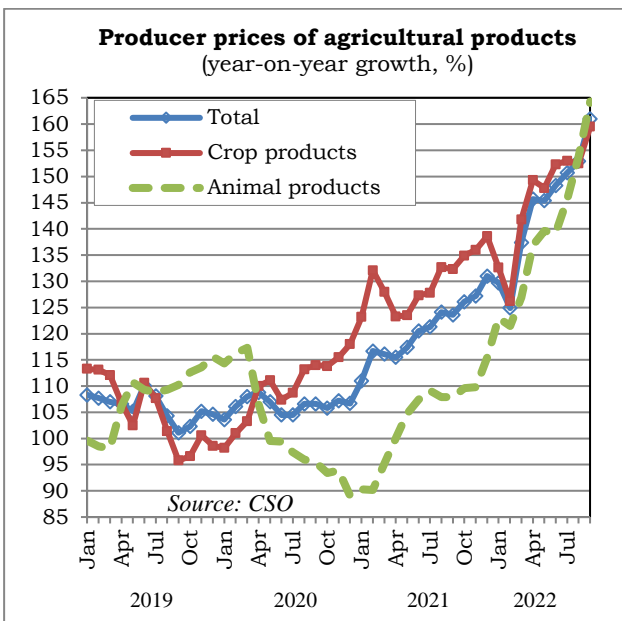
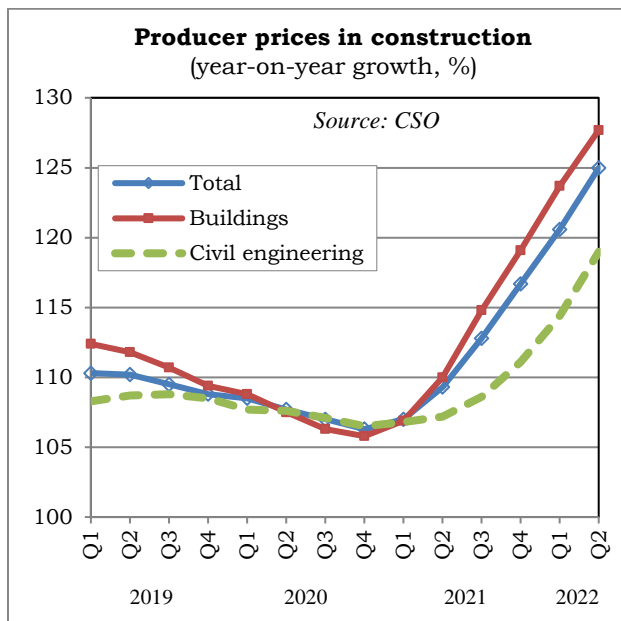
According to the CSO, industrial producer prices rose by an average 27.8% in the first half of the year, and by August the price index reached 43.4% (and minimally decreased in September). The growth is primarily driven by the price index of industrial *domestic sales* which peaked in August at 66.6%. At the same time, industrial export sales prices “only” rose by 31.6% in August. This is noteworthy because the forint weakened by 13% in August on a year-on-year basis and the growth rate of export sales prices was much higher than that.

The skyrocketing of industrial producer prices is in great part due to the nearly 100% rise in the prices of the production of coke and refined petroleum product and the prices of electricity, gas and steam supply. Hence it is worth looking at the manufacturing price index separately. The manufacturing price index is significantly lower (29.6% in September) than the overall industrial price index but the trajectories of the two are similar.



The *construction* producer price index has been soaring at a steep pace since 2021 and reached 25% in the second quarter of 2022. More specifically, producer prices in the construction of buildings were up 27.7% in the second quarter while at the same time the year-on-year rise of civil engineering prices was somewhat less dramatic, 19%. In the short run, prices may continue to soar due to rising wage and building material costs. In the medium term, however, the rise of prices may slow down, even halt, due to a decrease in demand on the part of the public sector, the business sector and the households alike.

In January-September, agricultural producer prices rose by an average rate of 39% and the third quarter saw a relentless acceleration: by September, the price index exceeded 64%. The price level of agricultural inputs also rose sharply: fertilizer prices tripled while the prices of energy and animal feed were up 35 and 39%, respectively. These numbers refer to the first half of the year but the price indices were rising as the year progressed. Due to the rising input prices, food prices will also increase further during the rest of the year.



3.5.3. Financial and capital markets

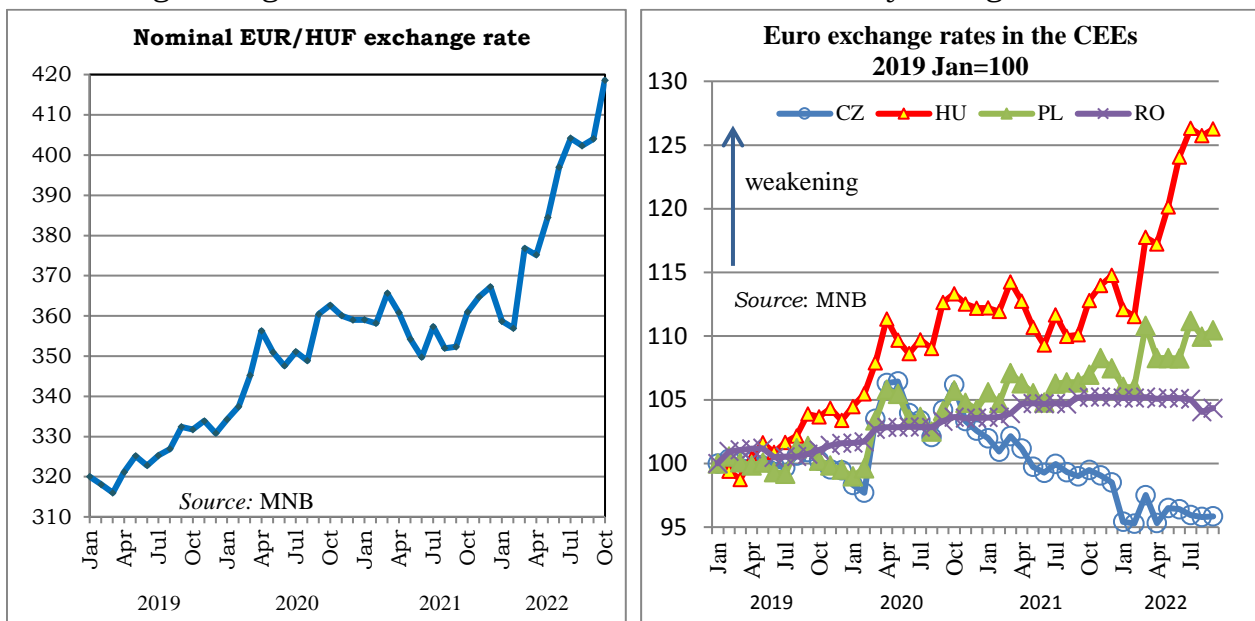
3.5.3.1. Policy interest rates and exchange rate

After a relatively stable period in 2021, a precipitous weakening of the forint started in February 2022. By mid-July, the EUR/HUF exchange rate exceeded 410 and near the middle of October it exceeded 430. Since then, the exchange rate recovered somewhat – in the first half of November it is within the 400-410 range.

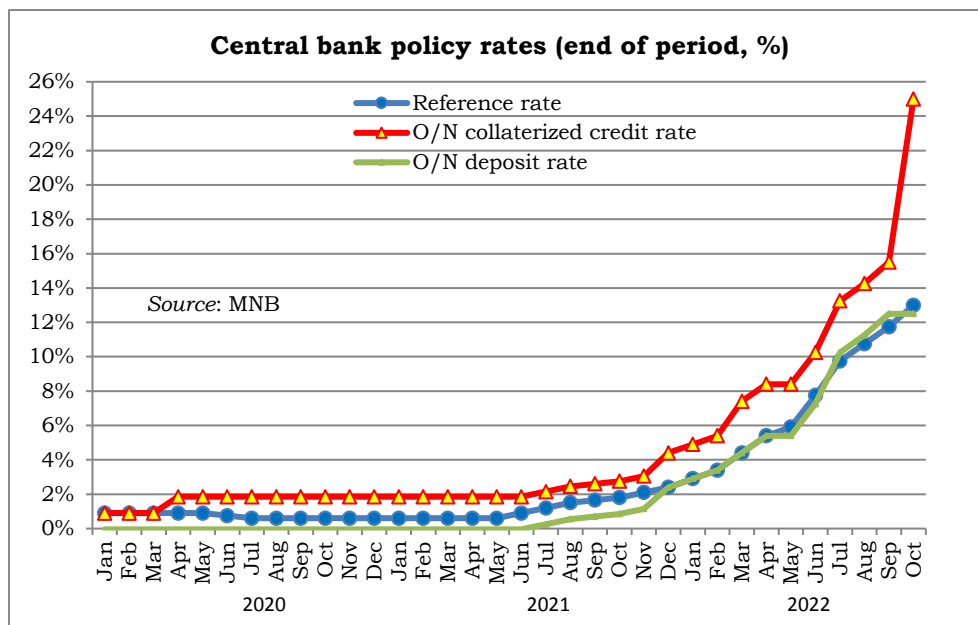
The forint weakening is clearly related to the impact of the Russian military attack on Ukraine but only indirectly, as shown by the fact that the currencies of other countries in the region did not weaken, or weakened only slightly, in the wake of the war. In another affected (neighboring) country, Romania, the leu remained stable because the central bank kept it stable through continuous intervention, which was made possible by the high level of foreign exchange reserves. The Czech koruna, after strengthening in 2021, has been roughly stable since the outbreak of the war, apart from some minor fluctuations. Even the Polish zloty weakened only moderately against the euro, by less than 3%, from the end of January to the end of October, even though Poland was one of the most vocal detractors of the Russian aggression, while the forint weakening was 15% during the same period.

Thus, the war in the vicinity, in itself, is not the cause of the forint weakening: it only laid bare the dangers of the deteriorating macroeconomic imbalances (high fiscal deficit, the uncertainties around the handling of that deficit, rising balance of payment deficit) and the erosion of confidence regarding Hungarian policies and due to the spectacular refusal of the Hungarian government to politically cooperate with the EU. At times of financial market tensions, the lack of confidence affects the vulnerable economies especially heavily. Hungary has one of the highest inflation rates in the EU and the outcome of the negotiations with the EU regarding the 7-year partnership agreement and the Recovery and Resilience Facility is highly uncertain. In addition to these factors, the Hungarian economy is particularly dependent on Russian energy shipments, which adds a further layer of risk amid the war.

The *central bank* responded to the soaring inflation and (in part) to the forint weakening with the tightening of interest rate conditions. The rate hike cycle began in June 2021



with raises of 30 basis points, then – in September-October – 15 basis points, and 30 basis points again in November-December. The tightening became steeper this year, but not without prevarication: the reference rate was raised by 50 basis points in January-February, 100 basis points in March-April, then only 50 basis points again in May, only to get serious once more with raises of 175 and 200 basis points, respectively, in June and July. The forint exchange rate reacted to all these raises only moderately, save a temporary strengthening right after the raises. The pace of raises decreased again to 100 basis points in August and September, and finally, in October, after a raise of 125 basis points to 13%, the central bank declared that the rate hike cycle is over. The declaration caused disturbances on the market since investors found it difficult to reconcile the decision with the fact that the central bank predicted a further substantial acceleration of inflation. Many experts opine that it would have been better to continue the rate hike cycle with small raises than halting it after one substantial raise.



The overnight deposit rate largely moved along with the policy rate. The interest rate corridor – the difference between the overnight deposit and the overnight credit rates – after a slowly widening trend and a stable period (300 basis points) between early March and the middle of October – opened wide after the overnight credit rate shot up to the 25% in the middle of October.

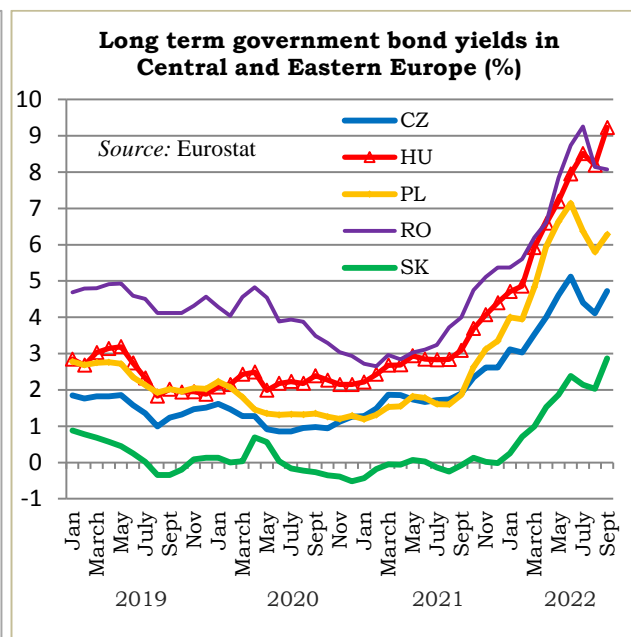
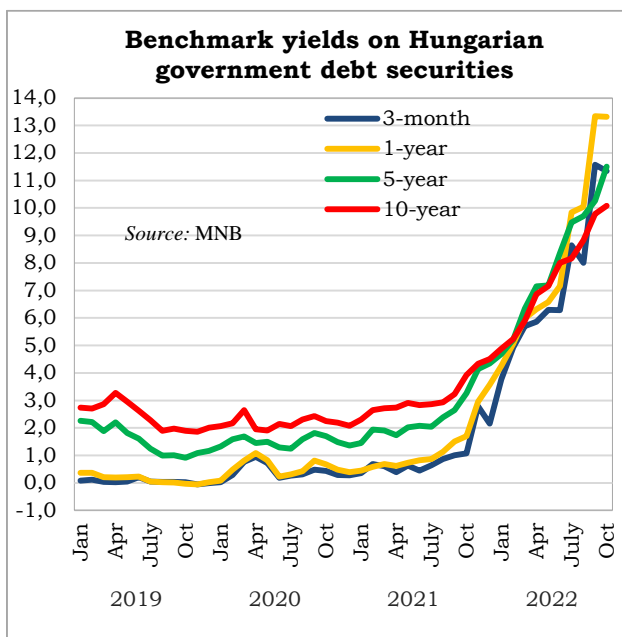
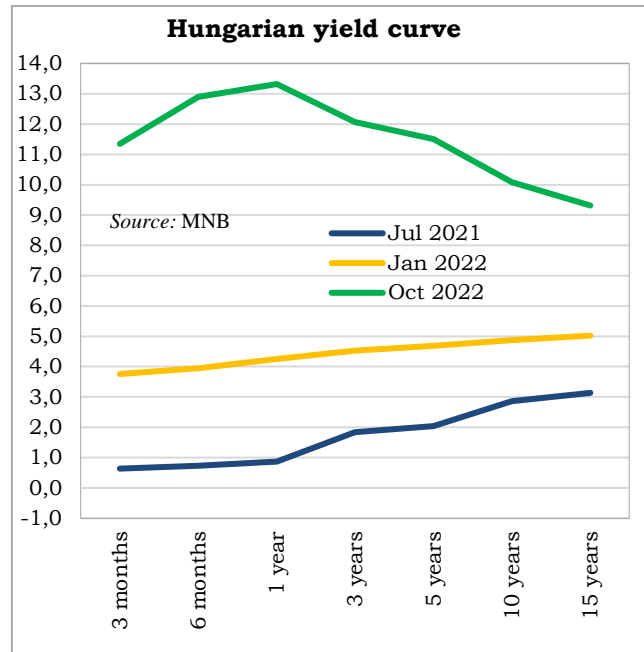
This means instead of the reference rate, the interest rate corridor and the liquidity tightening measures are becoming instrumental in monetary tightening. On the 1st of October, the minimum reserve ratio was raised from 1% to 5% and the interest rate payable if the reserve is under the minimum requirement was raised to 26% (twice as much as the reference rate). In addition, new assets have been introduced, with interest rates aligned to the reference rate. The central bank hopes absorb at least half of the liquidity pump into the banking sector during the crisis (HUF 9,500-9,700 billion) through these tools. Obviously, these tightening measures will raise lending rates and thus reduce the credit supply available to the business sector.

3.5.3.2. Government security yields

In the first 10 months of 2022, government yields sharp responded to the monetary tightening, the high fiscal deficit and debt and the rising costs of financing that debt with a sharp rise. Short-term yields rose at the steepest rate: the rise was more than threefold at 1-year yields and more than fivefold at 3-month yields. The 1-year yield surpassed 13% by the end of September while 3-year yields surpassed 12% by the end of October.

The yield of 10-year bonds (“Maastricht yield”) more than doubled, soared to 10.08% by the end October from the 4.51% seen at the end of the last year. As a result, the yield curve now has a unusual shape: the yields do not rise along with the duration, as they did even in January 2022 – instead, they took the shape of an asymmetric bell curve, with 1-year papers having the highest yields. This may suggest that the investors have a less bleak view regarding the longer-term perspectives than with regard to the short-term outlook.

The Hungarian 10-year yield, not far from 10%, stands out even within the region. The eurozone member Slovakia could sell 10-year bonds at yields below 3% even in September 2022, and the Czech yields stood at 4.7%, roughly half of the Hungarian level. The Polish yield is only slightly above 6%. Until July, the Maastricht yield was higher in Romania than in Hungary, but in August and especially in September, that was no longer the case.



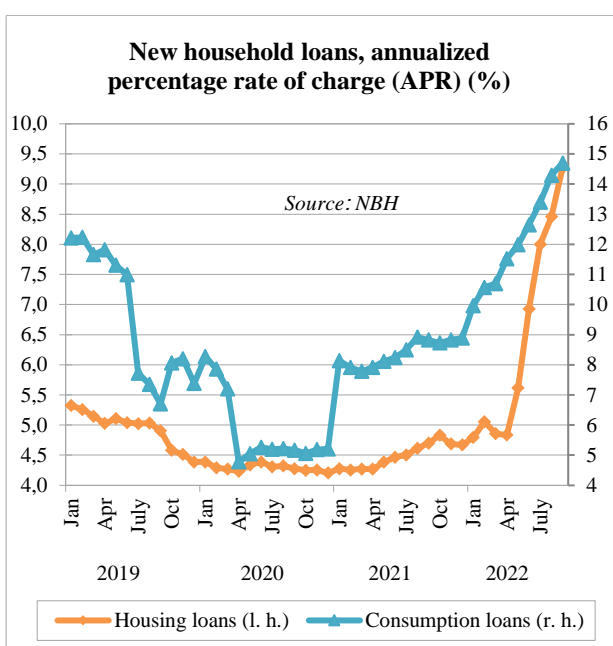
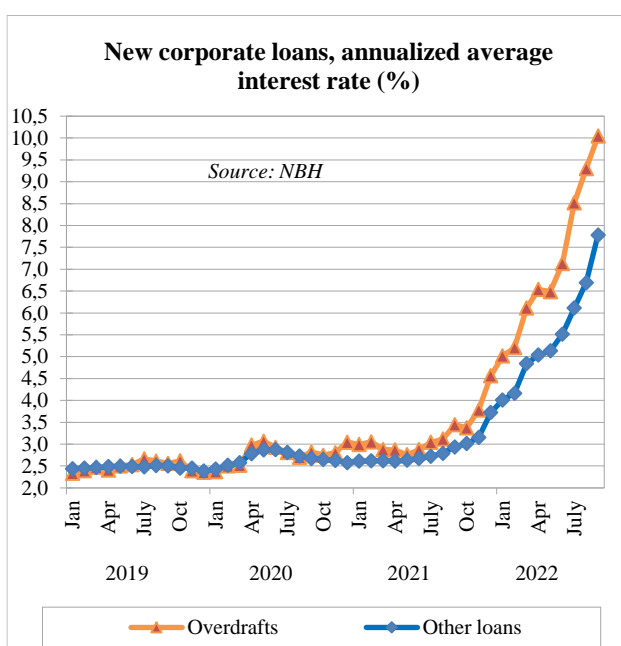
3.5.3.3. Corporate and household interest rates

The globally rising interest rates are reflected in the domestic business lending rates and are spilling over to the household lending rates as well.

The steep rise in the *overdraft rates* is particularly painful in terms of the working capital lending of non-financial firms: from the 5% in January the it climbed slightly above 10% by September. Since interest rates are still rising from month to month, the September rate may still be far from the eventual peak level. As for *other corporate loans*, much of which is used for investments, the interest rates increased less drastically – the average rate reached 7.8% in September, which is still a 165% rise on year-on-year terms. Annualized interest rates are rising at every maturity, which may significantly limit the borrowing capacity of non-financial firms in the future, even though – at least in the case of new overdraft loans – there is no sign of a slowdown of borrowing up to September 2022. The picture is more mixed in the case of other loans.

The annualized percentage rate of charges (APR) of *consumption loans* for households also significantly rose and reached 14.69% in September. It was the summer of 2016 when consumption loan rates reached such heights the last time. The APR of *housing loans* is still substantially lower, but still, it reached 9.3% in September, which is roughly twice as high as it was last December. This is an interest rate level which makes taking out a new loan a risky move.

The high level of interest rates is becoming a deterrent to borrowing: the new housing loan placements peaked in May at HUF 154 billion and decreased to HUF 79 billion by September. Fortunately, less than 1% of the new housing loans are floating rate loans (or loans with an initial rate fixation of less than 1 year) and almost 70% of them has a rate fixation of at least five years. The average length of the rate fixation of new housing loans was 134 months in August.



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

	2014	2015	2016	2017	2018	2019	2020	2021	2022*	2023*
GDP AGGREGATES, ANNUAL REAL GROWTH										
GDP total	4.2	3.7	2.2	4.3	5.4	4.9	-4.5	7.1	4.5	-0.5
Domestic Demand	5.3	2.0	1.8	5.7	7.1	7.1	-2.6	6.2	4.5	-2.1
Private Consumption	2.2	3.6	4.1	4.5	4.2	4.5	-1.9	4.2	5.4	-2.1
Public Consumption	8.9	1.3	0.5	3.8	4.2	9.4	3.9	3.1	1.2	-1.0
Gross Capital Formation	12.5	-1.6	-3.5	10.1	15.9	12.1	-6.8	11.7	4.4	-2.5
of which: Fixed Capital Formation	12.2	4.9	-10.6	19.7	16.3	12.8	-7.1	5.2	4.2	-2.5
Export	9.2	7.4	3.8	6.5	5.0	5.4	-6.1	10.3	5.0	1.0
Import	10.9	5.7	3.5	8.4	7.0	8.2	-3.9	9.1	5.0	-1.0
PRODUCTION INDICES										
Agricultural Production (gross)	11.4	-2.5	9.4	-4.1	2.6	-0.1	-2.4	-2.1	-22.0	0.0
Industrial Production	7.7	7.4	0.9	4.6	3.5	5.6	-6.0	9.5	6.0	2.5
Retail Trade Volume	5.2	5.8	4.8	5.6	6.7	6.3	-0.1	3.5	5.7	-2.0
EMPLOYMENT, EARNINGS										
Number of Employed	4.8	2.7	3.4	1.5	1.3	0.8	-0.9	0.7	1.1	-0.7
Unemployment Rate	7.5	6.6	5.0	4.0	3.6	3.3	4.1	4.1	3.4	4.1
Gross Nominal Wages	3.0	4.3	6.2	12.9	11.3	11.4	9.7	8.7	16.5	11.5
Net Real Wages	3.2	4.4	7.4	10.3	8.3	7.7	6.2	3.4	1.9	-3.9
PRICES, EXCHANGE RATES										
Consumer Price Index	-0.2	-0.1	0.4	2.4	2.8	3.4	3.3	5.1	14.3	16.0
EUR/HUF Exchange Rate (annual average)	309	310	311	309	319	325	351	359	393	410
EUR/USD Exchange Rate (annual average)	1.33	1.11	1.11	1.13	1.18	1.12	1.14	1.18	1.05	1.00
Short-term Interest Rates (3M), eop	1.43	0.80	0.06	-0.01	0.00	-0.01	0.28	2.16	12.0	9.0
Long-term Interest Rates (10Y), eop	3.60	3.33	3.16	2.02	3.01	2.01	2.08	4.51	10.5	9.5
BALANCE OF PAYMENTS										
Current and Capital Accounts, % of GDP	4.9	6.9	4.5	2.8	2.5	1.1	1.0	-1.5	-7.0	-3.5
GOVERNMENT BUDGET										
General Government Balance, ESA-95, % of GDP	-2.8	-2.0	-1.8	-2.5	-2.1	-2.1	-8.0	-6.8	-6.5	-4.0
Gross Government Debt, % of GDP ^a	76.5	75.7	74.8	72.1	69.1	65.5	79.6	76.6	76.0	75.0

^a Including the balance sheet of Eximbankkal

* Kopint-Tárki forecast

Source: KSH, MNB

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