MAKRO MONITOR

September 2023

Századvég
Konjunktúrakutató Zrt.

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1. Summary

In Q2 2023, Hungarian economic output contracted by 2.3% year on year and by 0.3% quarter on quarter, according to seasonally adjusted data.

At its meeting in September, the Monetary Council of the central bank did not change the base rate (13%) but continued to cut the policy rate. The central bank cut its effective rate, the overnight deposit facility rate, by 100 basis points to 13.0%.

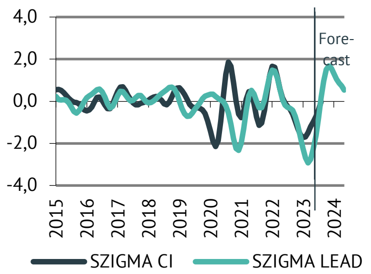
Raw data show that retail sales decreased by 7.7%, while calendar-adjusted data show that it decreased by 7.6% in July 2023, compared to the same period of the previous year. Within this, sales increased by 4.1% in specialised and non-specialised food shops and by 5.5% in non-food shops. The turnover volume of petrol stations fell by 20.5%, significantly more than the other main groups.

In September 2023, the SZIGMA CI indicator, which reflects the current state of the Hungarian economy, was -0.01 until August 2023, indicating that the growth rate of the Hungarian economy has reached a turning point. This means that the growth rate of the Hungarian economy grew below the historical trend rate but has now reached it and is expected to exceed it from now on.

The other indicator, SZIGMA LEAD, is a short-term indicator for the future of the Hungarian economy. This indicator is still showing a double turnaround, first a positive stronger economic growth, and then a stalling and decline in the growth rate.

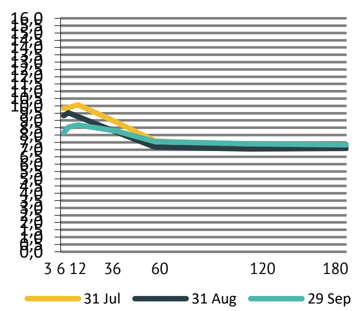
In an environment of higher interest rates and higher inflation, the trend towards a preference for premium Hungarian government bonds with above-

SIGMA indicators



Source: Századvég

Forint yield curve (%)



Source: Refinitiv

Our forecast (26.09.2023)	2023
Change in the GDP (%)	-0.3
Inflation (annual average, %)	17.8
EUR/HUF (annual average)	382.3

inflation yields over those with fixed yields continued.

2. Overview of the economy

2.1 External environment

In August, the disinflationary trends that have been underway since the beginning of the year continued in the EU and the euro area.

August 2023 data from Eurostat, the official statistical office of the European Union, show that the annual inflation rate in the euro area slowed to 5.2%, a slight decrease of 0.1 percentage points from 5.3% in July. It is important to note that this rate is a significant improvement compared to 9.1% a year earlier. For the European Union as a whole, annual inflation was 5.9% in August, also down from 6.1% in July and a significant change from 10.1% a year earlier.

August's CPI data show significant differences across Europe, but there is convergence across regions. While Hungary has high inflation at 14.2%, in the West, Belgium and Spain have 2.4%. In central Europe, Austria had 7.5% inflation, the Czech Republic 10.1% and Slovakia 9.6%, showing that higher inflationary pressures are a problem not only in Hungary in the region. Interestingly, Nordic countries such as Norway and Sweden are already experiencing deflation, with rates of -1.0% and -0.2% respectively. Meanwhile, southern regions, such as Italy and Greece, reported 5.5% and 3.5% for inflation respectively, showing the internal diversity of the European economic space in terms of inflation trends.

Detailed August data show inflation trends in the euro area, with food, alcohol and tobacco prices rising by 9.7%, reflecting a moderating trend compared to previous months. Looking at energy prices, there has been an important turning point: after significant price increases in the past, the sector had 3.3% deflation in August, indicating that energy prices continued to fall. For the other main groups, prices of non-energy goods rose by 4.7% and those of services by 5.5% in August, showing that inflationary pressures in these areas continue to be more significant.

Overall, decreasing energy prices offset increases in food and services prices, shaping the aggregate inflation rate.

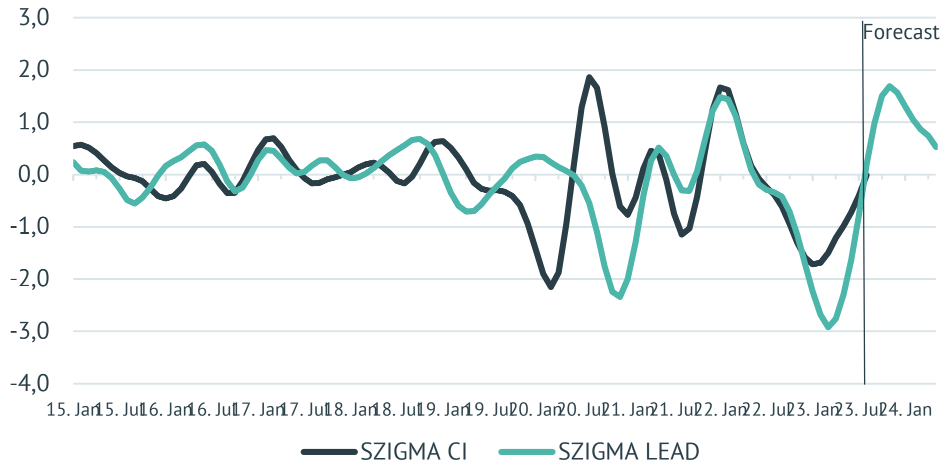
2.2 SZIGMA indicators

The growth rate of the Hungarian economy has reached a turning point.

In September 2023, the value of the SZIGMA CI indicator reflecting the current state of the Hungarian economy was -0.01 up to August 2023. **The growth rate of the Hungarian economy has therefore almost reached its historical trend rate.** The Hungarian economy is expected to grow above its historical trend rate next month. This marks the end of a very long period, as the growth rate of the Hungarian economy was declining between June 2022 and January 2023, after which it started to slowly improve and reached its historical trend rate in August 2023. Global economic impacts affect the growth of Hungary's open economy. The indicators do not yet reflect the impact of the war in Israel. Gradually falling inflation and a moderating but still high interest rate environment are still not conducive to investment. With real wages having been falling for several months and food prices high, the population continues to hold back domestic demand. It is therefore not surprising that domestic retail sales have been falling steadily since November 2022. Subdued domestic demand continues to hold back industrial and construction output. In construction, the latest seasonally and working-day adjusted fixed base **construction** output volume for July 2023 rose both month on month (8.4%) and year on year (2.6%). Month on month, the increase was due to higher output in both buildings (5.8%) and other civil engineering works (13.9%). On an annual basis, however, output increased only in buildings (11.2%). The construction of other civil engineering works (roads, railways, bridges, overpasses, pipelines, telecommunications and electricity networks, etc.) fell by 6.8%. This is also reflected in the number of new non-residential construction projects, which fell by 20.6% month on month and 33.1% year on year. The volume index of the month-end stock of construction contracts calculated on a fixed basis is still not favourable, falling by 8.1% month on month and by 24.4% year on year. **In industry**, latest seasonally and working-day adjusted industrial production data for July 2023, calculated on a fixed basis, already increased by 2.9% month on month, while it decreased by 2.6% year on year. Seasonally and working-day adjusted industrial sales volumes (domestic and exports combined) calculated on a fixed basis already rose slightly month on month, but continued to fall year on year. This is due to a decline in export sales both month on month and year on year, and a decline in domestic sales on an annual basis. Export sales fell by 0.8% month on month and by 2.2% year on year. Domestic industrial sales grew by 6.3% month on month and fell by 11.1% year on year.

In September 2023, our short-term leading indicator, SZIGMA LEAD, continues to indicate dual dynamics in the growth rate of the Hungarian economy. For one thing, in August 2023, the growth rate of the Hungarian economy reached its historical trend rate and is expected to strengthen steadily above trend. For another thing, this strengthening growth rate could still stall, reverse and start to decline by the end of this year (November 2023), but at the end of the forecast horizon (May 2024) the growth rate of the Hungarian economy will still remain above trend. **In summary,** our forecast continues to show a strengthening of economic growth, with the growth rate expected to come to a halt and slow down at the end of this year. Based on seasonally and working-day adjusted fixed-base new orders in industry, the basis for our forecast, imply a *continued moderation of* ***industrial production and sales***. This is because the volume index for new industrial domestic sales orders fell by 1.5% year on year and by 4.5% month on month. The volume index for new industrial export sales orders fell sharply month on month (by 12.2%) and less sharply year on year (by 5.0%). So, at present, new industrial domestic sales orders have fallen less than export sales orders. As for the German and EU indices affecting the Hungarian economy, the Ifo Business Climate Index for August 2023, **which measures change in business sentiment in the German economy**, weakened by 1.6 index points from the previous month to stand at 85.8 index points. Therefore, the optimistic trend between January and May 2023 has reversed, as economic players considered that the German economy had not yet seen a positive turnaround and were therefore increasingly pessimistic. Eurostat's consumer confidence index increased in August 2023. The index rose by 14.0 index points year on year and by 2.6 index points month on month, to stand at -32.1 index points from the previous month.

FIGURE 1: CURRENT (CI) AND FORECASTING (LEAD) SZIGMA INDICATORS



Source: Századvég

2.3 The real economy

Hungarian GDP fell by 0.3% quarter on quarter.

In its detailed second estimate, the Hungarian Central Statistical Office (KSH) did not change the first estimate of Hungary's gross domestic product (GDP) for Q2 2023. It shows that in Q2 2023, Hungarian GDP declined by 2.4% in raw data terms and by 2.3% in terms of seasonally and calendar-adjusted data compared with the same period of the previous year. There was also a monthly decline. GDP contracted by 0.3% quarter on quarter.

On the **production** side: Raw data show that industry, services and construction contributed to the 2.4% year-on-year decline in Q2 2023.

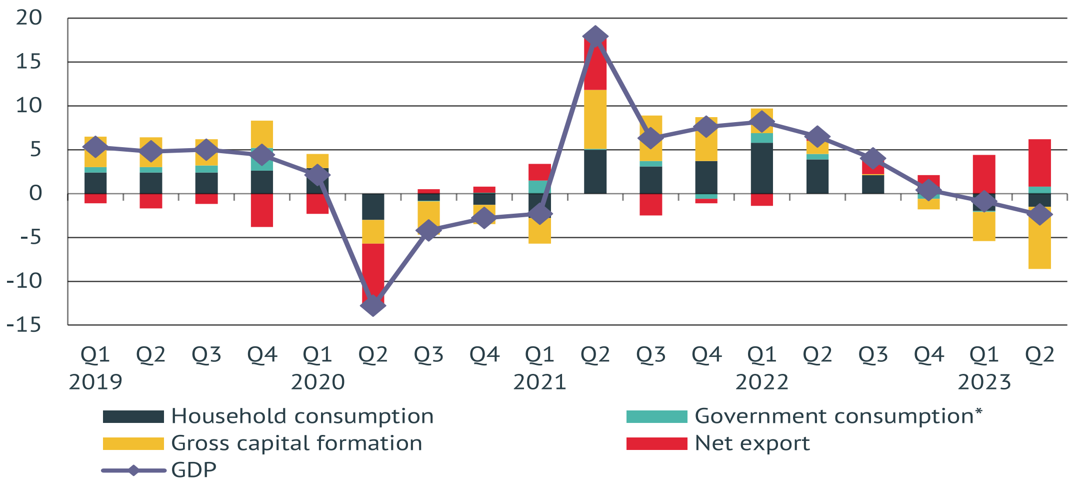
Only agricultural output moderated the decline in GDP. Compared to the same period last year, agriculture grew by 67.9%, with the exceptional drought last year as a base effect. However, other sectors contracted, industry by 5.7%, construction by 6.0% and services by 2.4%. Accordingly, agriculture contributed 1.7 percentage points, services -1.5 percentage points, industry -1.0 percentage point, construction -0.3 percentage point and the balance of taxes and subsidies on products -1.2 percentage points to GDP in Q2 2023.

On the **consumption** side, the year-on-year contraction in consumption and accumulation contributed to the GDP in Q2 2023. At the same time, trade balance (net balance) strengthened Q2 2023 GDP. Consequently, final consumption (household and collective) accounts for -0.7 percentage points, gross accumulation for -7.1 percentage points and foreign trade balance for 5.4 percentage points in Q2 2023 GDP.

Household final consumption expenditure fell by 3.2%, while benefits in kind received from the government increased by 6.2% and benefits in kind received from non-profit organisations for households increased by 1.8%. Thus, total household consumption fell by 1.6%. Collective consumption also increased (by 2.3%). Consequently, **final consumption**, which includes both total household consumption and collective consumption, fell by 1.0%. **Gross accumulation** fell by 21.3% **overall**, due to a decrease in investment (gross fixed-capital formation) (15.6%). Among investments, construction investment contracted, while investment in machinery and equipment rose. At the level of the national economy, investments increased only in manufacturing among the most important sectors. Therefore, overall **domestic consumption**, which includes both final consumption and gross accumulation, fell by 7.6%.

Overall, foreign trade boosted Q2 2023 GDP volume. Trade in goods accounted for 83% of foreign trade, of which exports rose by 1.8% and imports fell by 5.1% year on year. In services, both exports and imports fell, by 6.2% and 8.9% respectively.

FIGURE 2: CONTRIBUTION TO ANNUAL GDP GROWTH (CONSUMPTION SIDE, %)



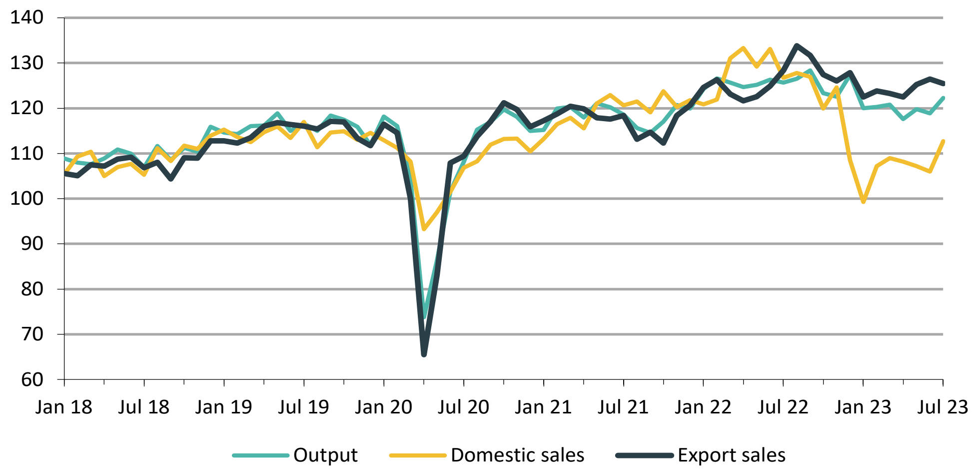
**Including social benefits in kind.*

Source: Hungarian Central Statistical Office

The decline in industrial production continued.

Compared with the same period of the previous year, industrial production fell by 2.6% year on year according to raw data and by 2.5% according to working-day adjusted data in July 2023. On a monthly basis, the volume of seasonally and working-day adjusted industrial production increased by 2.8%. In July 2023, total industrial sales contracted by 5.9% year on year, of which domestic sales fell by 11.0% and export sales by 2.2%. At the same time, the figure below clearly shows that, in the case of a fixed base, the volume of domestic sales is improving strongly and the volume of export sales is starting to improve, albeit to a lesser extent. However, this positive trend is overshadowed by the fact that industrial production volumes, on a fixed basis, started to weaken after a weak improvement.

FIGURE 3: CHANGES IN INDUSTRIAL OUTPUT AND SALES (2015 MONTHLY AVERAGE = 100%)



Remark: Seasonally and calendar adjusted indices. Source: Hungarian Central Statistical Office, Századvég

Returning to industrial production, the largest share (weight) of industrial production in July 2023 belonged to the manufacturing sector, which accounted for 95.0% of industrial production in that month. Of the other two sectors, the energy sector (electricity, gas and steam supply and air conditioning) contributed 4.6% and mining and quarrying 0.4%. The volume of industrial production continued to fall year on year in all three of the sectors dominating industrial production: Manufacturing, which accounts for 95.0% of the total, fell by 2.3%, while energy, which accounts for 4.6%, declined by 21.3% and mining and quarrying, which account for 0.4%, fell by 35.2%. Within manufacturing, output fell in all but four sectors (automotive manufacturing, electrical equipment manufacturing, pharmaceutical production and other manufacturing). The largest contributor to the manufacturing sector's July 2023 output (28.1%) continued to be the automotive sector, where output grew by 14.4% year on year. Significantly behind automotive, the difference between the two second and third most important sectors (food and electrical equipment) is small. Food represents 13.2% of manufacturing output this month. At the same time, annual output in the food industry fell by 9.3% year on year. The third most important sector (with a weight of 11.4%) was electrical equipment manufacturing, where output grew by 9.8% year on year. This strengthened the performance of the manufacturing sector. The other two sectors (pharmaceuticals and other manufacturing), whose output increased this month, are among the less important sectors. Pharmaceutical manufacturing, with a weight of 2.6%, grew by 20.7% year on year, while other manufacturing, with a weight of 3.2%, grew by 11.1%. Of the four medium-weight sectors, computer, electronic and optical products manufacturing, the heaviest one (9.0%), saw its performance fall by 5.0% year on year. This was followed by the rubber sector with a weight of 7.4% and a year-on-year decline of 20.1%. The third medium-weight sector (7.3%) was the metals industry, where output fell by 12.2% year on year. The fourth and last medium-weighted sector (5.3%) was machinery and equipment manufacturing, which saw its output fall by 5.1% year on year this month.

In July 2023, total new sales orders of the manufacturing industries monitored by the HCSO increased by 6.8% year on year at comparable prices, driven by both domestic and export sales orders. Export sales orders grew by 6.7% and domestic sales orders by 7.7%. As regards export sales orders, of the 8 sectors observed, all but automotive manufacturing and basic metals and fabricated metal products expanded. As regards domestic sales orders, all but three sectors (pharmaceuticals, metals and electrical equipment) saw their domestic sales orders fall year on year. In pharmaceuticals, domestic sales orders stood out from the other subsectors in year-on-year terms. Their domestic sales orders increased by more than three and a half times, with no base effect playing a role. The second largest increase (58.1%) was in electrical equipment manufacturing, despite the high base. The third highest increase (14.8%) was in basic metals and fabricated metal products, due to a low base. The largest decline (31.2%) was in computers, electronic and optical equipment and the second largest (16.2%) in chemicals.

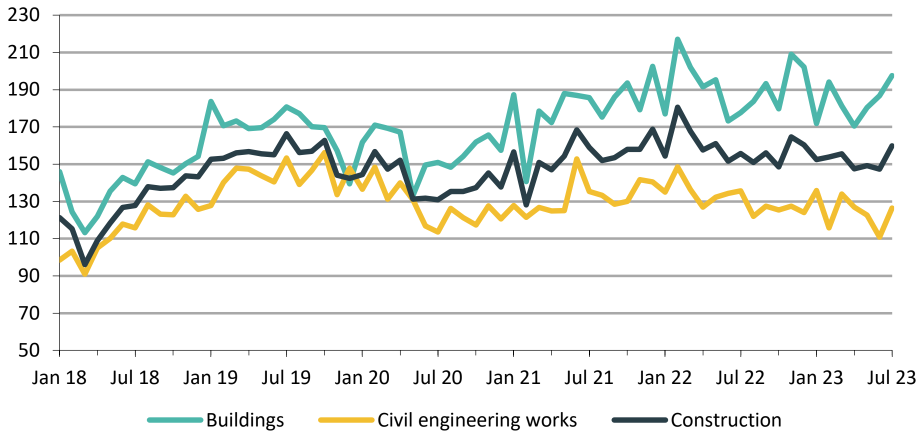
In July 2023, *new sales orders* in key manufacturing industries fell by 4.5% year on year at comparable prices, driven by both a 5.0% decline in new export sales orders and a 1.4% decline in new domestic sales orders. New export sales orders increased in four of the eight sectors observed (paper, pharmaceuticals, electrical equipment and machinery and equipment). New domestic sales orders increased in four sectors (pharmaceuticals, metals, electrical equipment and automotive manufacturing). The largest increase (27.6%) was in automotive manufacturing, due to a low base. This was followed by a 21.0% increase in electrical equipment manufacturing. The third largest increase (15.2%) was in pharmaceuticals, slightly supported by a low base.

Construction output stepped out of a seven-month downward trend.

In July 2023, the annual volume of construction output increased by 3.4% in terms of raw data. This growth was driven by the fact that the stock of new contracts increased by 16.7% year on year in the previous month, including a 40.1% increase in new contracts for buildings. Construction output volumes varied across the main construction groups. While the construction of buildings increased by 11.6% year on year, the construction of civil engineering works (roads, bridges, railways, complex industrial installations, pipelines, etc.) contracted by 5.0% year on year. The decline in output in the latter group was mainly due to a reduction in orders from the state and local government.

Compared with the previous month, seasonally and working-day adjusted construction output increased by 8.5%. In Q2 2023, construction prices rose by 1.6% quarter on quarter. Compared to the same period of the previous year, the stock of contracts at the end of the month under review decreased by 24.4%, and the stock of new contracts in the month under review decreased by 7.0% in July 2023. The 24.4% decline in the stock of construction contracts at the end of July 2023 was mainly due to a sharp fall (39.9%) in contracts for the construction of civil engineering works. The decline in the stock of contracts for the construction of civil engineering works could not be offset by a 1.2% increase in the stock of contracts for the construction of buildings.

FIGURE 4: CHANGES IN THE CONSTRUCTION INDUSTRY (MONTHLY AVERAGE FOR THE YEAR 2015 = 100%)



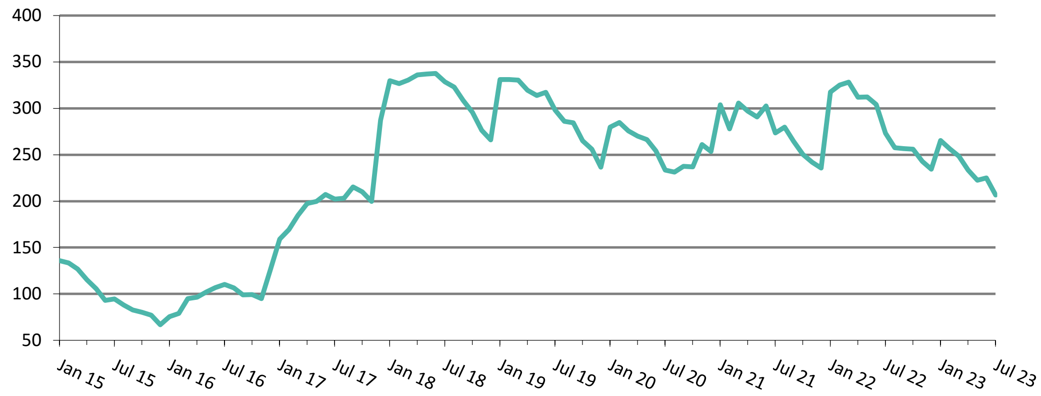
Remark: Seasonally and calendar adjusted indices.

Source: Hungarian Central Statistical Office, Századvég

Future prospects worsened again after an improvement and strengthening in the previous month, as the stock of new construction contracts signed in the month under review contracted by 7.0% year on year. This decline was mainly due to a fall in the volume of new contracts for civil engineering works. The stock of new contracts for civil engineering works decreased by 24.5%, while the stock of new contracts for buildings increased by 11.7%.

The figure below illustrates the evolution of new contracts in construction (buildings and civil engineering works combined) at the end of the month on a fixed basis and in the month under review. The figure clearly shows that, over a longer time horizon and on a fixed basis, the stock of contracts of construction firms at the end of the month under review continued to decline, currently standing at 206.6% and increasingly close to the 199.6% fixed volume index in November 2017, which preceded the construction boom in 2018.

FIGURE 5: CHANGES IN MONTH-END CONSTRUCTION CONTRACTS (MONTHLY AVERAGE FOR 2015 = 100%)



Source: Hungarian Central Statistical Office, Századvég

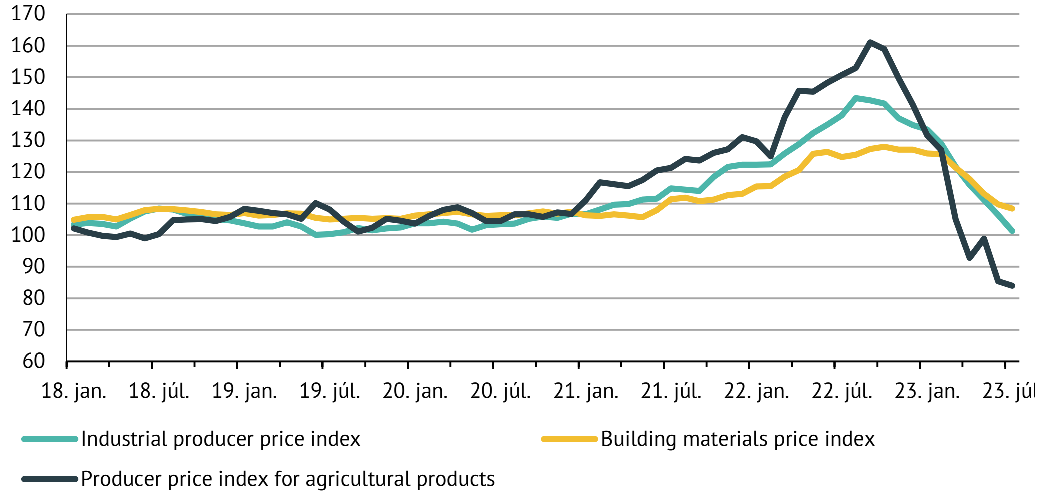
The agricultural producer price index continued to fall.

In July 2023, the rate of increase of the industrial producer price index and the building materials price index continued to fall. Meanwhile, the agricultural producer price index continued to fall. Compared with the same period of the previous year, the **agricultural producer price index** fell by 16.0% in July 2023, in which the exceptionally high base played a key role. This effect will continue to be felt for a long time, until around spring this year, as the high base effect peaked at 161.0% in September 2022 and then started to decline sharply. The year-on-year decline of 16.0% in the agricultural producer price index is favourable, but there is considerable variation between products. While producer prices have fallen significantly for some products, they have risen for the main foodstuffs (fruit, vegetables, livestock). Producer prices of cereals fell by 41.9%, producer prices of industrial crops (including oilseeds) by 40.5%, animal products by 4.1% and agricultural and horticultural products by 26.8%. However, on an annual basis, producer prices increased by 23.8% for vegetables, 70.4% for potatoes, 23.1% for fruit and 15.6% for livestock.

In July 2023, **industrial** producer prices increased both year on year (1.3%) and month on month (0.9%). However, the monthly price change indicates a slowing rate of price increases. Domestic and export sales prices developed differently. While domestic sales prices rose by 19.5% year on year and by 0.4% month on month, export sales prices only increased in relation to the monthly base (by 1.1%). Export sales prices fell by 7.5% year on year. The large difference between domestic and export sales prices is due to the fact that the energy industry has a larger weight in domestic sales than in export sales. Although energy prices increased at similar rates for domestic sales (52.0%) and export sales (51.0%), the energy sector still weighs 30% of domestic sales compared to 9.8% of export sales. The difference in weight is also reflected in manufacturing prices. While manufacturing prices, which account for 65% of domestic sales, rose by 3.2%, manufacturing accounted for 90% of export sales and manufacturing prices fell by 2.1%.

In construction, the increase rate of building material prices continues to fall slowly. The gradual slowdown in construction output also plays a role. Building material prices were up 8.4% in July 2023 year on year.

FIGURE 6: INDUSTRIAL PRODUCER PRICE INDEX, CONSTRUCTION INPUT PRICE INDEX, AGRICULTURAL PRODUCER PRICE INDEX (SAME PERIOD OF PREVIOUS YEAR = 100%)



Source: Hungarian Central Statistical Office, Századvég

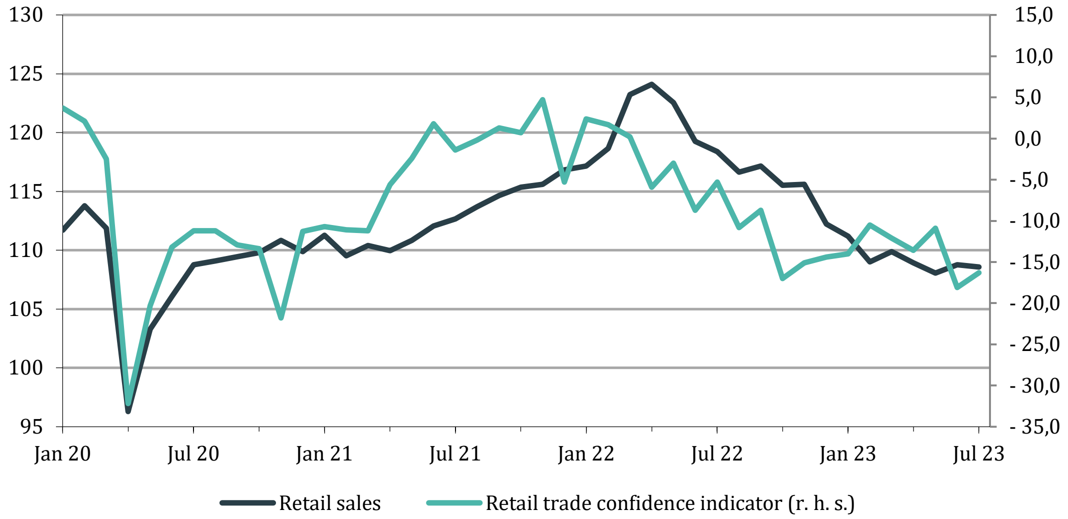
Retail sales contracted by 7.6% in July.

Raw data show that retail sales decreased by 7.7%, while calendar-adjusted data show that it decreased by 7.6% in July 2023, compared to the same period of the previous year. The decline in the volume of retail sales is still due to an inflation above 15%, despite the strengthening of disinflationary trends: as wages lose purchasing power, the population is forced to rationalise consumption. The discontinuation of the fuel price cap in December will have a similar negative impact on retail sales until the base effect takes effect, and the steady increase in fuel prices since mid-summer may also lead to a further fall in consumption. In the prolonged negative trend in retail sales, the 0.7% month-on-month increase in sales in June was a positive sign, while July volumes were almost the same as in June. A further decline in inflation will lead to an increase in purchasing power, which is likely to continue the upward trend in retail sales.

In July 2023, turnover in specialised and non-specialised food shops decreased by 4.1%, while turnover in non-food shops also decreased by 5.5%. In fuel retailing, sales fell significantly, by 20.5% year on year, in July. If we look at the volume of retail sales excluding fuel sales, we see a year-on-year decline of only 4.7%.

In food retailing, sales in non-specialised foodstuffs shrank by 4.1% while sales in food products, beverages and tobacco shrank by 3.8%. In nonfood sales, the volume of furniture and electric goods decreased by 16.2%, books, newspapers and stationery by 8.2% and computer and other industrial goods by 5.7% year on year. There was also a significant decrease in textile products, clothing and footwear (6.2%). In contrast, the biggest sales increase (4.7%) was in fragrances. Inaddition, the sales volume of parcel and internet services also increased slightly (1.4%) year on year.

FIGURE 7: RETAIL SALES AND RETAIL CONFIDENCE INDEX (JANUARY 2018 = 100%)



Remark: Seasonally and calendar adjusted indices.

Source: Hungarian Central Statistical Office, Eurostat, Századvég

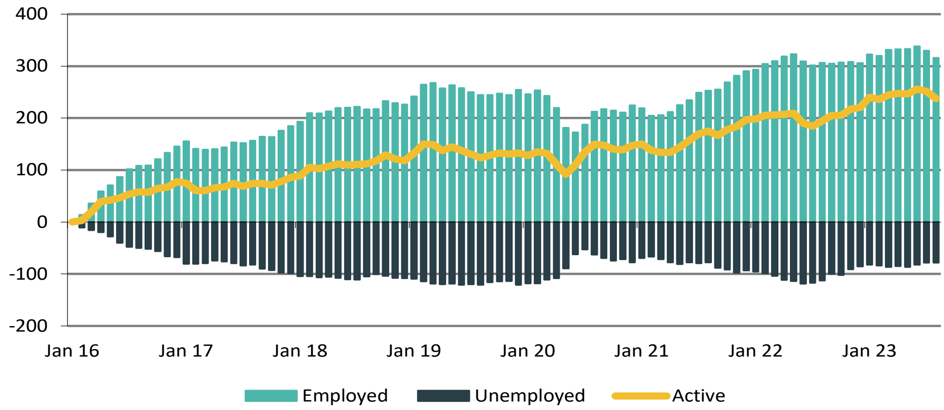
Unemployment rate at 4.0% in August.

In August 2023[1], the seasonally adjusted activity rate of the population aged 15-74 was 67.1% (4,904,000 persons), which means a labour market growth of 44,000 compared to the same period of the last year. In the period under review, the seasonally adjusted number of employees was around 4,704,000, a year-on-year increase of 9,000. The number of the unemployed continued to rise slightly, to 200,000, a year-on-year increase of 34,000.

In July, the seasonally adjusted number of employees increased by 1,300 in one month, while it increased by 11,400 compared to the same period of the previous year. The most significant increase in the number of employees was in the private sector, with 28,400 more working in enterprises having at least 5 employees compared to July 2022, up by 4,600 compared to June 2023. The number of public sector employees fell by 2,000 in the last month, but in the last year there have been nearly 14,000 fewer employees in the sector, a significant decrease. The number of people working in the non-profit sector rose by 1,300 in a month, and by 2,800 in a year.

[1] Three-month moving average

FIGURE 8: CHANGES IN THE LABOUR MARKET (JANUARY 2016 = 0, THOUSAND EMPLOYEES)



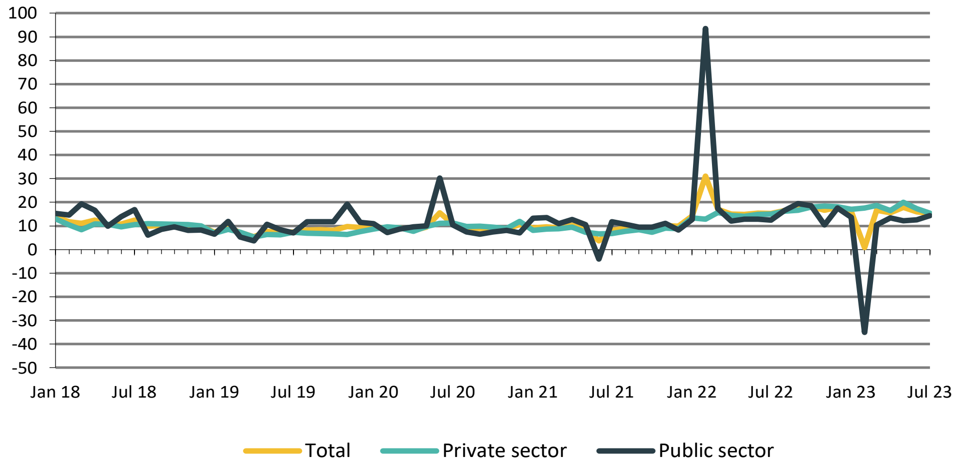
Remark: Seasonally and calendar-adjusted indices

Source: Hungarian Central Statistical Office, Századvég

Real earnings fell further in July.

In July, the average gross monthly wage in the national economy was HUF 559,100, up 15.2% compared to the same period last year. The highest average gross monthly wage was recorded in the private sector, at HUF 566,600. The average net monthly wage including benefits was HUF 385,600, an annual increase of 15.1%. The average regular gross monthly wage, excluding bonuses, rewards and one-off benefits, increased by 15.6% in July 2023 compared to a year earlier, to an estimated HUF 526,800. Inflation, which is still high at 17.6% in July, caused real earnings to fall by 2.0%. The median gross monthly wage was HUF 450,000.

FIGURE 9: CHANGES IN GROSS WAGES (ANNUAL CHANGE, %)



Remark: Seasonally and calendar-adjusted indices
Source: Hungarian Central Statistical Office, Századvég

2.4 External balance

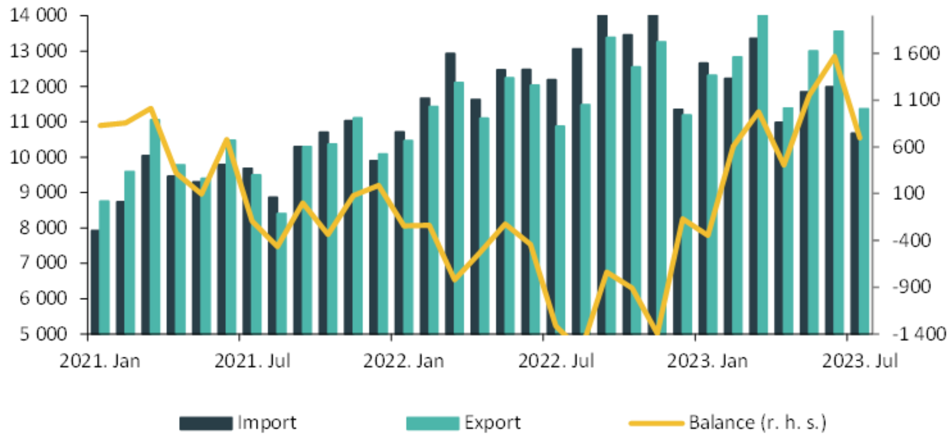
In June, the volume of exports of goods decreased by 10.0% and imports by 1.1% year on year. This brought the trade balance to a surplus of EUR 1.6 billion, an improvement of EUR 2.0 billion compared to the previous year.

In June, the import volume of food products, beverages and tobacco decreased by 1.8%, and their export volume decreased by 3.3% year on year. As for energy carriers, imports decreased by 23.0%, while exports increased by 53.0%. As for processed products, imports decreased by 3.8%, exports increased by 0.6% on a year-on-year basis. As for machinery and transport equipment, imports decreased by 3.3%, and exports increased by 16.0%.

The trade balance improved significantly.

In July 2023, the first estimate put the value of exports in euro at 4.3% higher and imports in euro at 13.0% lower than a year earlier. This brought the foreign trade surplus in goods to EUR 697 million, which is EUR 2.0 billion better than a year earlier.

FIGURE 10: BALANCE OF TRADE IN GOODS (EUR MILLION)



Remark: The July 2023 figures are from the first estimate.

Source: Hungarian Central Statistical Office, Századvég

2.5 Fiscal outlook

By the end of August 2023, the accumulated deficit reached 97% of the annual deficit target, and the government revised this year's deficit target to 5.2% in view of the unfavourable fiscal developments.

The August deficit of the central budgetary subsystem amounted to HUF 358.3 billion, bringing the accumulated deficit to HUF 3,297.4 billion by the end of August 2023, which corresponds to 97.0% of the annual deficit target. This deficit consisted of the HUF 3,330.8 billion deficit of the core budget, the HUF 93.0 billion deficit of social security funds and the HUF 125.1 billion surplus of extra-budgetary funds.

Central government revenue in the first eight months of the year was 20.1% higher than in the same period of the previous year.

Payments from business organisations were 47.6% higher than in the same period of 2022. Within payments by business organisations, corporate tax, the largest revenue generator, was 38.3% (HUF 207.3 billion) higher than in the first eight months of the previous year. Compared to the same period of the previous year, payments from the energy sector and financial institutions increased significantly by HUF 244.0 billion and HUF 111.4 billion respectively. The increase in these two items is largely attributable to the special taxes introduced in 2022.

Revenues from consumption-related taxes were 4.2% (HUF 232.3 billion) higher than a year earlier. VAT receipts were only HUF 6.1 billion, or 0.1%, higher than at the end of August last year. In August this year, as in May and July, VAT receipts were again lower than in the same month of 2022. Excise tax revenue was HUF 70.2 billion (8.6%) more than in the first eight months of 2022. The highest increases were recorded for excise tax receipts on tobacco and fuel (HUF 32.4 billion and HUF 27.8 billion respectively).

Personal income tax receipts increased by HUF 1,009.8 billion compared to the same period in 2022. The rise is largely driven by the low base due to last year's tax rebate for families, but wage growth is also an increasingly important contributor. Receipts from social contribution tax and social insurance contributions increased by 14.6% (HUF 592.7 billion) compared to the same period of the previous year, also caused by wage increases.

Revenue from EU programmes reached HUF 1,040.9 billion in August, HUF 302.2 billion (40.9%) more than in 2022. In contrast, expenditure on EU programmes amounted to HUF 1,813.8 billion, HUF 432.0 billion (19.2%) less than the previous year.

Central government expenditure in the first eight months of the year was 19.4% higher than in the same period of the previous year.

Among significant expenditure items, expenditure on specific and normative subsidies, expenditure on public property, pensions and interest expenditure were significantly higher than a year earlier.

The amount spent on specific and normative subsidies was HUF 1,449.9 billion higher than at the end of August last year. The most significant item of the increase was HUF 1,085.1 billion in expenditure to maintain discount household utility prices.

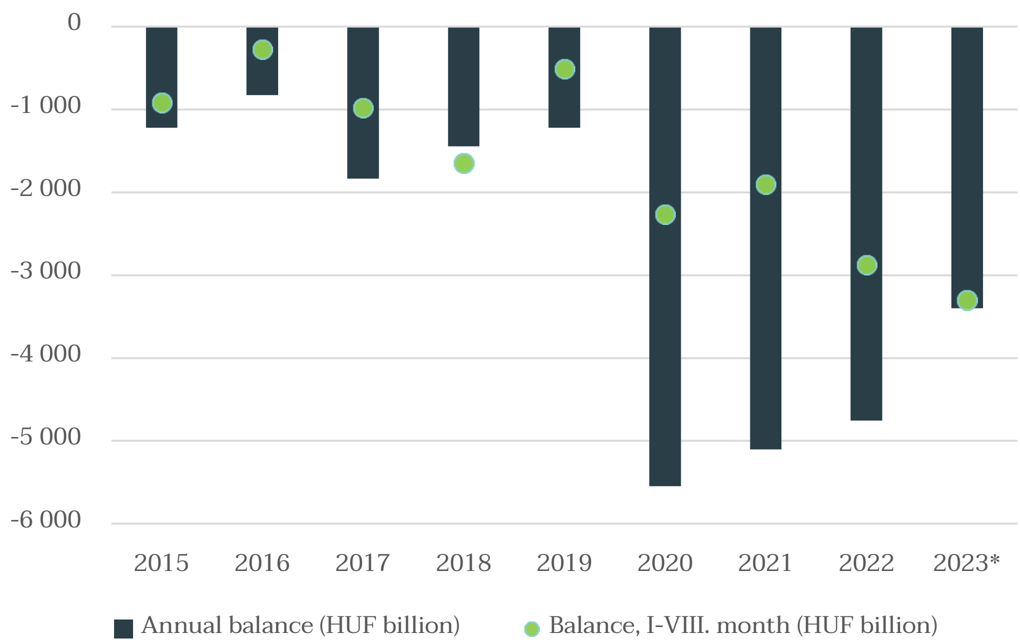
Expenditure on state property increased by HUF 450.3 billion compared to the same period last year. Cumulative expenditure on housing subsidies was, for the first time, lower than in the same period of the previous year, with a shortfall of HUF 5.4 billion.

Expenditure on budgetary bodies and chapter-administered appropriations decreased by HUF 31.1 billion, or 0.4%, compared to the first eight months of the previous year, but this is a significant shortfall compared to government plans to cut spending by 11.7%.

In the first eight months of 2023, pension expenditure amounted to HUF 3,859.0 billion, up by 22.4% to HUF 706.1 billion compared to the same period in 2022. During the same period, expenditure on the Health Insurance Fund amounted to HUF 2,621.8 billion, an increase of 7.5% (HUF 182.3 billion) compared to the base period. Within this, expenditure on medical and preventive care, which accounts for more than half of the Fund’s expenditure, increased by 5.3%.

The balance of interest expenditure and interest income was HUF 452.4 billion (46.1%) more negative at the end of August than in the first eight months of 2022.

FIGURE 11: CENTRAL SUBSYSTEM BALANCE, 2013–2023 (JANUARY TO AUGUST, HUF BILLION)



*Source: Ministry of Finance, Hungarian State Treasury; *compared to the actual deficit in 2015-2022 and the planned deficit in 2023.*

The Ministry of Finance issued a statement on 3 October saying that the government revised its deficit target for this year to 5.2% of GDP, in view of the significant increase in spending.

2.6 Monetary developments

In August, prices increased by 16.4%, on average.

In August 2023, consumer prices increased by 16.4% on average relative to the same period of the previous year. Over the past year, household energy prices (34.7%) and food prices (19.5%) have increased the most. Consumer prices rose by an average of 0.7% over a month, with an 8.2% increase in vehicle fuel prices leading the rise. The seasonally adjusted core inflation rate showed a year-on-year increase of 15.2%.

A more significant contribution to the 19.5% average increase in food prices came from the 67.9% rise in sugar prices, the 29.6% increase in buffet prices and the 25.8% rise in chocolate and cocoa prices. The 24.5% inflation rate for fruit and vegetable juices and the 20.1% inflation rate for pastries also exceeded the average food inflation rate for the month. In contrast, poultry prices (11.2%), edible oil prices (2.8%) and margarine prices (1.9%) rose at a below-average rate. For flour, prices have already fallen by 10.4%. The main drivers of the 12.7% average inflation in spirits and tobacco were primarily the 24.0% increase in beer prices.

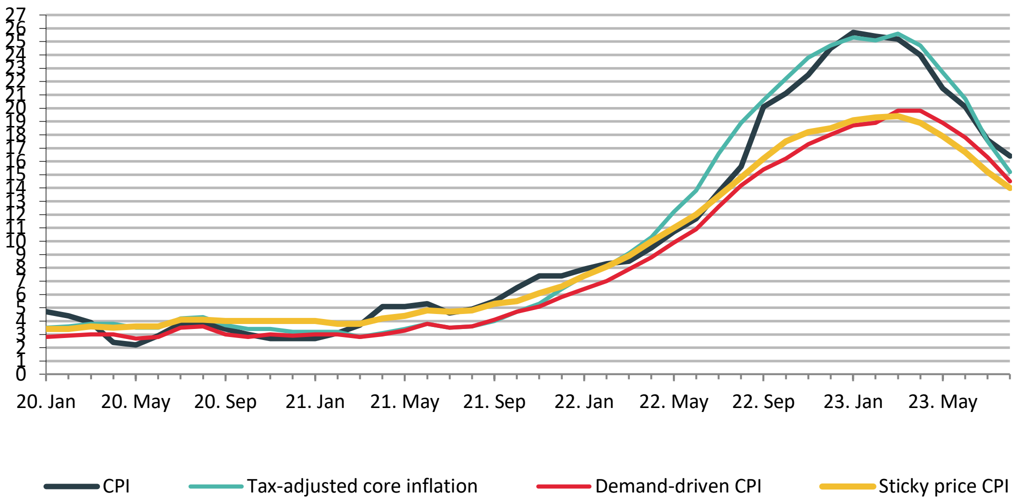
The average price increase of 2.3% for consumer durables represents a significant improvement compared to the previous period, driven by factors such as sustained lower input material prices, increasingly efficient supply chains and a significantly stronger forint exchange rate compared to the same period last year. The current level is already well within the central bank's inflation target range. Looking at the main group, above-average increases were also recorded for kitchen and other furniture (11.2%), vacuum cleaners and air conditioners (11.3%) and heating and cooking equipment (9.5%). Consumer durables inflation is moderated by a 2.5% rise in audio and video equipment and a 3.4% price decline for televisions. It is also important to highlight the improving trend for second-hand cars: in August, second-hand cars were already 8.0% less expensive than a year earlier, which has a significant impact on the overall result for the main group, due to the high weight of just over 2%.

The average increase in household energy prices was 34.7% in August as compared to the same period of the previous year. Within household energy, the price of piped gas increased by 47.1%, electricity by 25.3% and cylinder gas by 25.2% over the past year. From August 2022, discount household utility prices remain unchanged until the average consumption; however, above that, consumers have to pay a higher price, which is recorded by the HCSO in the billing month. The rise in energy prices has resulted in an inflation surplus of roughly 2.5-3% over the past year, which will be unwound from the base over the next month. This factor will contribute significantly to the reduction in inflation on an annual basis.

In August, the price of services rose by an average of 13.2%, driven mainly by a 19.4% increase in vehicle repair and maintenance, a 20.4% increase in tickets for sports events and museums, a 19.4% increase in household equipment repair and a 27.9% increase in other long-distance travel. Domestic holiday prices also increased significantly, by 23.0%. The average increase in the price of services was moderated by, among other things, the prices of garbage collection, water and sewerage services remaining unchanged (100.0%) and the introduction of county and country passes, which reduced the price of travel to work and school by 21.7%. In contrast to the other main groups, services inflation has only just started to fall on an annual basis, but it is certainly positive to see a decline of 1.4 percentage points compared with the previous month's annual base.

Month on month, food prices rose by 0.3% on average after the phasing out of official prices: sugar was 54.6% higher and pork 7.3% higher, but the 11.5% fall in flour, 9.5% in eggs and 5.0% in seasonal food largely offset the price increases. Prices of services rose by 0.1% on a monthly basis, while the price of household energy decreased by 0.3% compared with the previous month. Fuel prices rose by 8.2% from July, which had a significant impact on inflation and ended up higher than analysts' expectations.

FIGURE 12: THE EVOLUTION OF INFLATION (ANNUAL CHANGE IN PERCENTAGE)



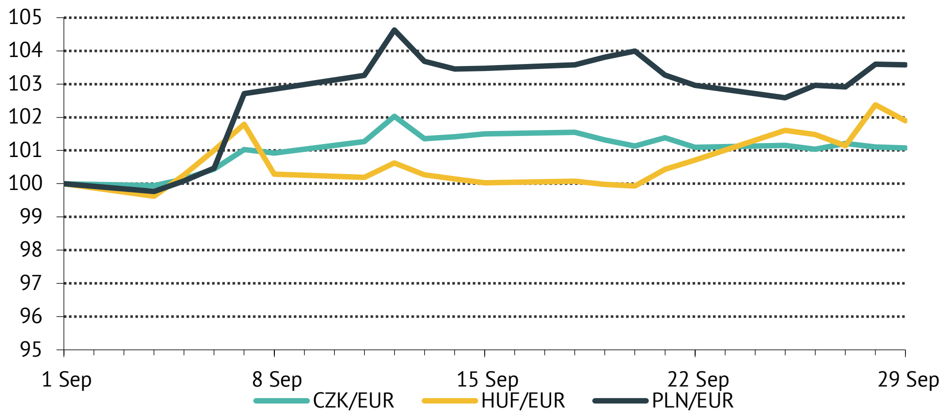
Source: MNB, Századvég

Among the core inflation indicators published by the MNB, in August, the seasonally adjusted core inflation rate and the core inflation rate net of indirect taxes were 15.2%, and the sticky price inflation rate was 14.0%. Core inflation excluding processed food was 14.5% in August.

Currencies of regional competitors weakened against the euro.

Developments in the region were negative relative to the euro in September, mainly due to a larger-than-expected interest rate cut by the Polish central bank. In the past period, the Czech koruna weakened by 1.1%, the Polish zloty weakened by 3.6% against the Euro. Government bond yields also rose over the period under review, with the Czech 10-year government bond yield 38 basis points higher at 4.75% and the Polish 10-year yield 30 basis points higher at 5.92%.

FIGURE 13: CHANGES IN EXCHANGE RATES IN THE REGION (BASELINE VALUE = 100%)



Source: Refinitiv, Századvég

The Hungarian currency weakened against the euro, the Swiss franc and the dollar.

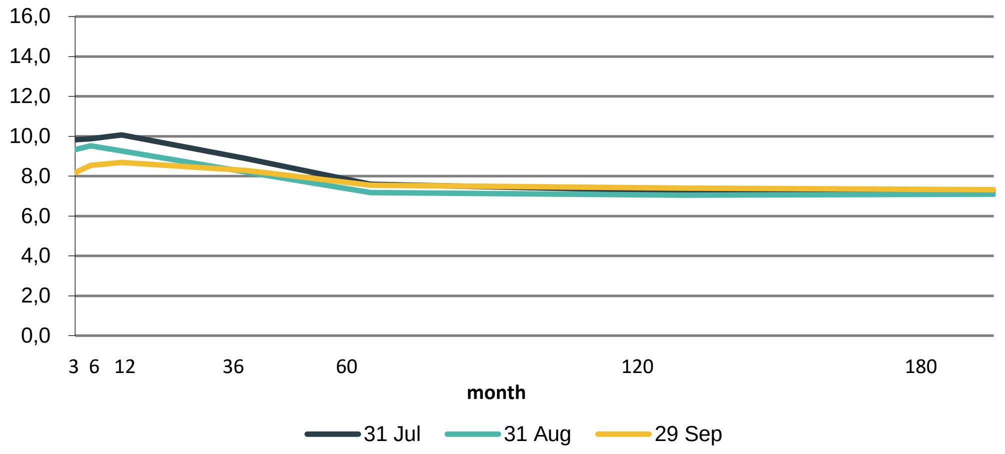
Hungarian money and foreign exchange market indicators have shown strong volatility in the recent period, but in September they tended to weaken. The HUF weakened by 1.1% against the euro, by 1.9% against the Swiss franc and by 4.2% against the US dollar. This means that at the end of September 2023, one euro was worth 391 forints, one US dollar was worth 368 Forints and one Swiss franc was worth 405 forints. Sovereign debt held by foreigners decreased by HUF 864 billion to HUF 6,173 billion in the past month.

The central bank continued its monetary easing in September.

At its September meeting, the Monetary Council of the central bank left the base rate unchanged at 13.0%, but continued to cut the policy rate, bringing it back in line with the key interest rate after almost a year. The Monetary Council cut the lower end of the interest rate corridor, the overnight deposit interest rate, by 50 basis points to 12.0%, and the upper end of the interest rate corridor, the overnight lending rate, by 250 basis points to 14.0%. Overall, the central bank continued to ease monetary policy, but markets have already priced in the convergence of the policy rate and the base rate in September. The question is mainly what steps the central bank will then take to continue the period of interest rate cuts.

In the government bond market, yields for shorter maturities varied between -57 basis points and -115 basis points on the secondary yield curve in September. This means that the 3-month yield was 8.17%, the 6-month yield was 8.54% and the 1-year yield was 8.69% on 29 September. The 3-year yield increased by 8 basis points to 8.28%. Yields are up 36 basis points over the 5-year horizon, 36 basis points over the 10-year horizon and 23 basis points over the 15-year horizon compared to the previous month. These three yields changed, therefore, to 7.54%, 7.4%, and 7.32%, respectively.

FIGURE 14: CHANGES IN THE HUF YIELD CURVE (%)



Source: GDMA, Századvég

On 31 August 2023, the total value of "MÁP Plusz" government securities held by retail investors was HUF 1,061.1 billion after a HUF 1,373.4 billion decrease from the HUF 2,434.5 billion level at the end of December 2022. The main reason for this is that, in a high inflation environment, households prefer to buy discount bonds that exceed the interest rate of MÁP Plusz and the inflation-tracking Premium Hungarian Government Bond (PMÁP), the cumulative value of which has risen to HUF 6,398.0 billion, an increase of HUF 2,076.4 billion compared to the end of 2022. In the significantly higher interest rate environment, the total stock of government securities held by households stood at HUF 9,460.7 billion at the end of August 2023, up from HUF 8,619.3 billion at the end of 2022, i.e. HUF 841.4 billion more than in the last month of the previous year.

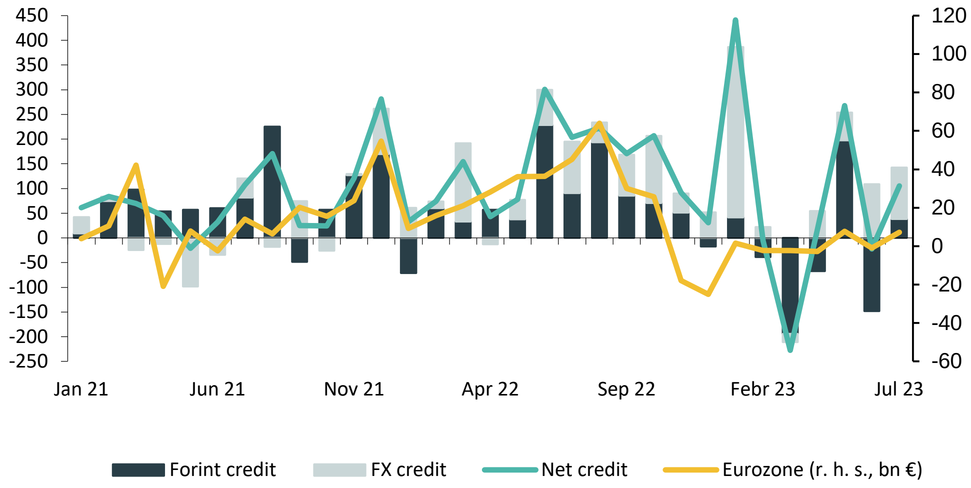
The share of foreign currency debt in the sovereign debt changed to 25.5% in August (i.e. decreased by 0.48 percentage point from the previous month), which is in the range (maximum 30%) specified in the financing plan for 2023 of GDMA. In the first eight months of the year, average foreign currency debt averaged 25.6%, with the August share of foreign currency debt converging to this value.

Hungary's sovereign debt rating remained at Baa2 with a stable outlook at Moody's, BBB with a stable outlook at S&P and BBB with a negative outlook at Fitch. The risk rating of Hungarian government bonds is therefore in the recommended for investment category of all three major international rating agencies.

Corporate credits increased in Hungary.

Seasonally adjusted data show that the net borrowing of HUF loans in the business sector was HUF 38.1 billion in July 2023. At the same time, net lending in foreign currency increased, with net borrowing amounting to HUF 104.5 billion in the seventh month of the year. Seasonally adjusted total net borrowing amounted to HUF 105.1 billion in the period under review. Corporate borrowing in the euro area was EUR 7.1 billion in July 2023.

FIGURE 15: CORPORATE BORROWING (HUF BILLION)



Source: MNB, ECB, Századvég

3. Macroeconomic forecast

In 2022, the Hungarian economy grew by 4.6%. Data from the first two quarters of this year suggest no economic growth: Századvég Konjunktúrakutató forecasts that the Hungarian economy may shrink by 0.3% in 2023. 2024 and 2025 are expected to produce modest growth rates, 2.5% and 2.8% respectively.

Several factors may affect Hungarian economic performance in the coming period. Looking abroad, we expect economic expansion in the euro area and for our main trading partners, which should support sustained high growth rates in Hungarian exports. We expect continued disinflation in the euro area, which could bring down external inflationary pressures on the Hungarian economy. Continued falling of both transport costs and energy prices are among the other factors that could support the moderation of inflation in Hungary. In addition to the positive effects of these factors, the uncertainty caused by the Russia-Ukraine war should be mentioned as a negative factor.

Looking at Hungarian inflation trends, consumer prices increased by 14.6% last year. Inflation peaked at the beginning of this year, so the recent months have seen a steady decline in the year-on-year inflation rate. It is also important to note that the month-on-month indices have sometimes still been higher than the inflation rate regarded as tolerable by the central bank. Taking Hungarian disinflation into account, we estimate inflation to be 17.8% in 2023, 5.5% in 2024 and 3.7% in 2025.

With inflation starting to moderate, the Magyar Nemzeti Bank has committed to lowering the policy rate, so that the policy rate may converge to the central bank base rate in September 2023. Looking ahead, we expect monetary policy to gradually ease and the base rate to return to the central bank's target range of 3±1% in 2025.

The 0.3% contraction in economic output expected this year is mainly attributable to a contraction in domestic demand. However, net exports continue to support economic growth. Household final consumption expenditure fell in the first half of the year, reflecting a decline in real earnings. Among available data, confidence indicators showed an upturn in consumer confidence, although year-on-year retail sales did not yet show an increase. We expect consumption to pick up towards the end of the year; year on year, however, it could still be 1.5% lower than in 2022. Consumption could rise by 1.8% in 2024 and 2.5% in 2025.

The high Hungarian interest rate environment, earlier profit losses due to higher production costs and the lack of EU funding may have also contributed to the decline in investments in the first half of the year. This year's policy rate cuts may help corporate borrowing, but interest rates remain high. We estimate that investments might have fallen further in Q2 2023, implying an annual decline of 10.1%. **We expect investments to rise next year as EU funding arrives, interest rate conditions ease and production costs fall.** Additionally, a strong base effect could also appear in the annual investment rate, which we estimate at 8.1% in 2024 and 3.1% in 2025. We expect government spending to follow a trend, increasing by 1.9% in 2023, 2.2% in 2024 and 2% in 2025 on an annual basis.

After examining the revenue and expenditure projections in the 2023 budget and their expected annual outturns, our forecast projects an ESA deficit of 5.2%, 1.3 percentage points higher than the 3.9% of GDP deficit projected. We expect the cash deficit to be more favourable at 4.9%. If the government takes corrective fiscal measures in the coming months, the general government deficit could be lower than our current forecast. The government forecasts the gross public debt-to-GDP ratio to fall to 69.7% by the end of the year, while we currently expect the government debt-to-GDP ratio to be higher at 70.8% by the end of the year.

In the first half of 2023, Hungary's exports showed strong fluctuations, but we expect exports to grow strongly for the rest of the year. As a result, exports could grow by 3.7% in 2023, followed by 2.6% and 6.4% in the subsequent years, thanks to the expansion of our export partners and the closing output gap in the euro area. Imports are mainly shaped by domestic demand, so we expect imports to fall by 0.2%, in line with falling consumption. In the coming years, imports are expected to grow more dynamically, by 4.1% in 2024 and 6.2% in 2025, as consumption and exports pick up. Over the forecast horizon, we expect an overall positive contribution to net export output.

4. Századvég's forecast[2]

TABLE 1:2023 Q3 FORECAST

	2022	2023	2024
Gross domestic product (volume index)	4.6	-0.3	2.5
Household final consumption expenditure (volume index)	6.3	-1.5	1.8
Gross fixed capital formation (volume index)	2.2	-10.1	8.1
Export volume index (based on national accounts)	11.8	3.7	2.6
Import volume index (based on national accounts)	11.1	-0.2	4.1
Balance of international trade in goods (EUR billion)	-14.9	-11.0	-13.4
Consumer price index (%)	14.6	17.8	5.5
Central bank base interest rate at the end of the period (%)	13.0	11.0	7.3
Unemployment rate (%)	3.6	3.8	3.5
Current account balance as a percentage of GDP	-8.1	-5.2	-6.6
Net lending as a percentage of the GDP	-6.0	-3.1	-4.5
ESA balance of public finances as a percentage of GDP	-6.2	-5.2	-3.7
Sovereign debt as a percentage of GDP	73.3	70.8	70.4

Source: MNB, Hungarian Central Statistical Office, Századvég's calculation

TABLE 2:QUARTER-ON-QUARTER CHANGE OF OUR FORECAST

	2023			2024		
	06.2023	09.2023	change	06.2023	09.2023	change
Gross domestic product (volume index)	1.1	**-0.3**	*-1.4*	4.3	**2.5**	*-1.8*
Internal market demand (volume index)	-2.2	**n.a.**	*n.a.*	4.6	**n.a.**	*n.a.*
Household final consumption expenditure (volume index)	n.a.	**-1.5**	*n.a.*	n.a.	**1.8**	*n.a.*
Gross fixed capital formation (volume index)	n.a.	**-10.1**	*n.a.*	n.a.	**8.1**	*n.a.*
Export volume index (based on national accounts)	2.5	**3.7**	*1.2*	6.9	**2.6**	*-4.3*
Import volume index (based on national accounts)	-0.5	**-0.2**	*0.3*	6.8	**4.1**	*-2.7*
Balance of international trade in goods (EUR billion)	-3.7	**-11.0**	*-7.3*	-3.7	**-13.4**	*-9.7*
Consumer price index (%)	18.6	**17.8**	*-0.8*	5.1	**5.5**	*0.4*
Central bank base interest rate at the end of the period (%)	11.7	**11.0**	*-0.7*	6.6	**7.3**	*0.7*
Unemployment rate (%)	4.3	**3.8**	*-0.5*	4.6	**3.5**	*-1.1*
Current account balance as a percentage of GDP	-4.1	**-5.2**	*-1.1*	-3.3	**-6.6**	*-3.3*
Net lending as a percentage of the GDP	-2.1	**-3.1**	*-1.0*	-1.3	**-4.5**	*-3.2*
Balance of public finances as a percentage of GDP	-3.9	**-5.2**	*-1.3*	-3.3	**-3.7**	*-0.4*
Sovereign debt as a percentage of GDP	68.2	**70.8**	*2.6*	67.1	**70.4**	*3.3*

Source: Századvég's calculation

[2] Date of preparation: 28 September 2023