

MAKRO MONITOR

October 2023

Századvég

Konjunktúrakutató Zrt.

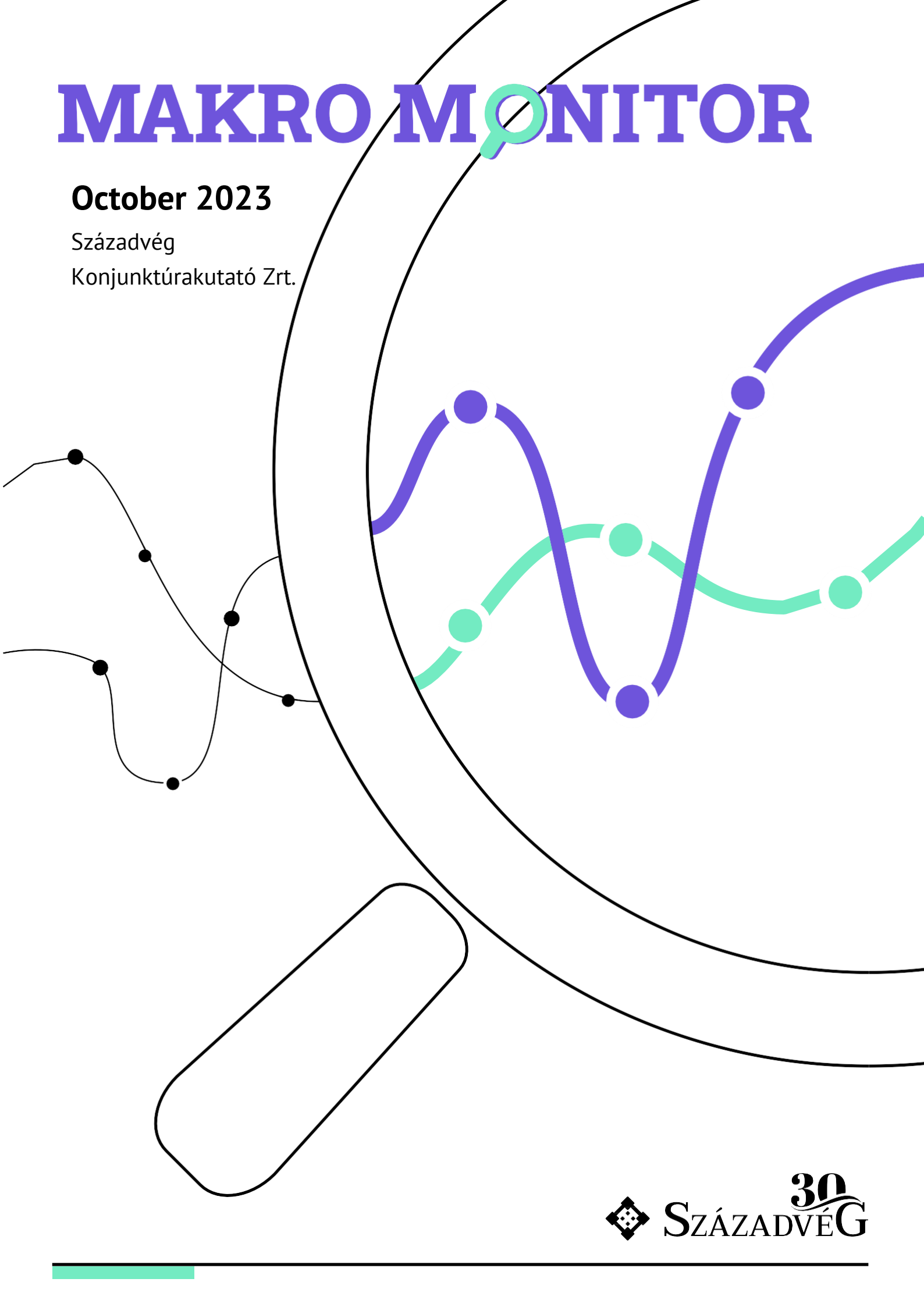


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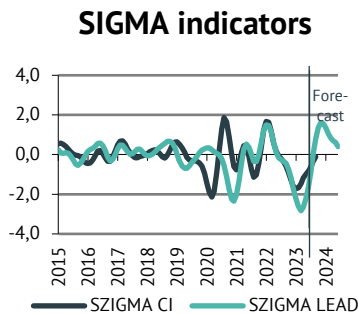
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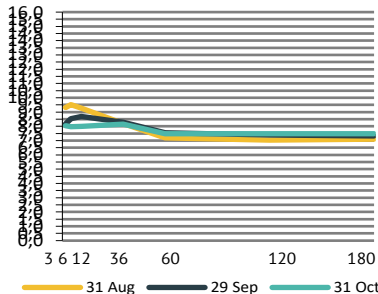
1. Summary

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.



Source: Századvég

Forint yield curve (%)



Source: Refinitiv

Following a 100 basis point cut in the policy rate in previous months, the central bank’s Monetary Council also started to cut the base rate at its October meeting. As a result, the Hungarian base rate (and the policy rate) currently stands at 12.25%, down 75 basis points.

Raw data show that retail sales decreased by 7.0%, while calendar-adjusted data show that it decreased by 7.1% in August 2023, compared to the same period of the previous year. Within this, sales decreased by 4.0% in specialised and non-specialised food shops and by 5.2% in non-food shops. The turnover volume of petrol stations fell by 18.1%, significantly more than the other main groups.

In October 2023, the value of the SZIGMA CI indicator, which provides feedback on the current state of the Hungarian economy, was -0.1 up to September 2023. This compares with -0.01 in the previous month, meaning that the growth rate of the Hungarian economy has moved away, although only slightly, from its **historical trend rate**.

The other indicator, SZIGMA LEAD, is a short-term indicator for the future of the Hungarian economy. The indicator continues to show a double turnaround. First, it still points to a positive upturn in economic growth, and then to a stalling and a 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-

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

September 2023 data from Eurostat, the official statistical office of the European Union, show that the annual inflation rate in the euro area slowed to 4.3%, a significant decrease of 0.9 percentage points from 5.2% in August. It is important

to note that this rate is a significant improvement compared to 9.9% a year earlier as well. For the European Union as a whole, annual inflation was 4.9% in September, also down from 5.9% in August and a significant change from 10.9% a year earlier.

September's CPI data show significant differences across Europe, but there is convergence across regions. While Hungary has high inflation at 12.2%, in the West, Belgium and Denmark have 0.7% and 0.6%, respectively. In central Europe, the Czech Republic had 8.3% inflation and Slovakia 9.0%, showing that higher inflationary pressures are a problem not only in Hungary in the region. Interestingly, we are already seeing deflation in the Netherlands, -0.3%. Meanwhile, southern regions, such as Italy and Greece, reported 5.6% and 2.4% for inflation respectively, showing the internal diversity of the European economic space in terms of inflation trends.

Detailed September data show inflation trends in the euro area, with food, alcohol and tobacco prices rising by 8.8%, a moderating trend from 9.7% in August. Energy prices show an important turnaround from a significant increase in prices to a 3.3% decrease in August and a 4.6% decrease in September, indicating that energy prices have continued to moderate. For the other main groups, prices of non-energy goods rose by 4.1% and those of services by 4.7% in September, 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 Our SZIGMA indicators

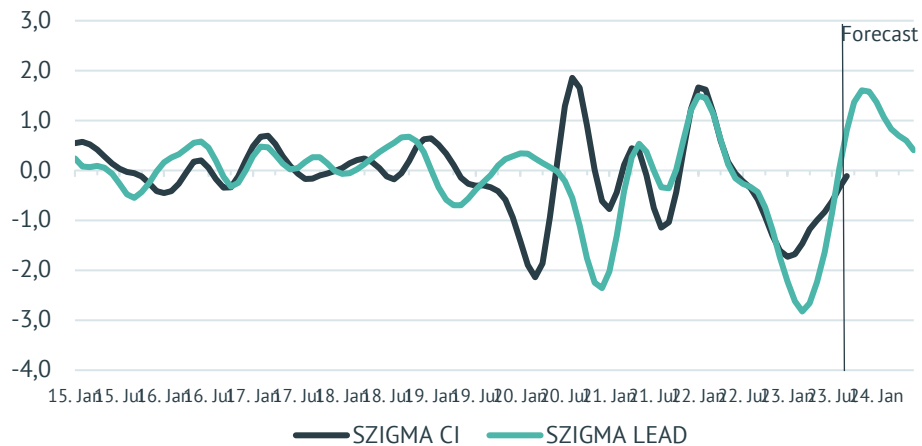
The growth rate of the Hungarian economy has therefore almost reached its historical trend rate.

In October 2023, the value of the SZIGMA CI indicator, which reflects the current state of the Hungarian economy, was -0.1 up to September 2023. This compares with -0.01 in the previous month, meaning that the growth rate of the Hungarian economy has moved away, although only slightly, from its **historical trend rate**. The below-trend growth started in June 2022, only worsened until January 2023, and then started to slowly recover and has now almost reached its historical trend. Global economic impacts affect the growth of Hungary's open economy. Gradually falling inflation and a moderating but still high interest rate environment are still not conducive to investment. Households continue to cut back consumption, 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 August 2023 seasonally and working-day adjusted fixed-base **construction output** volume fell by 4.9% from the previous month, but was essentially flat on an annual basis, as the rate of decline was 0.13%. The fall was attributable to the decline in the construction of buildings, which fell by 11.3% month on month and 7.1% year on year. At the same time, the construction of civil engineering works (roads, railways, bridges, overpasses, pipelines, telecommunications and electricity networks, etc.) increased on both month on month and year on year. It grew by 3.3% month on month and by 12.4% year on year. At the same time, the number of new non-residential construction projects increased by 16.4% month on month and decreased by 2.8% year on year. In addition, unfortunately, the volume index of the month-end stock of construction contracts, calculated on a fixed basis, does not show a positive picture, as it has been steadily declining: by 5.1% month on month and by 23.9% year on year. The year-on-year decline was mainly attributable to a 40.6% drop in the stock of

contracts for civil engineering works. **In industry**, the latest figures, for August 2023, show that the seasonally and working-day adjusted *volume of industrial production*, calculated on a fixed basis, decreased by 2.4% month on month and by 6.1% year on year. The volume of industrial sales (domestic and exports combined), seasonally and working-day adjusted and calculated on a fixed basis, also fell, both month on month (2.6%) and year on year (12.4%). This is because domestic and export industrial sales fell both month on month and year on year. Domestic industrial sales fell by 5.4% month on month and by 18.0% year on year. Industrial export sales fell by 0.9% month on month and by 7.8% year on year.

In October 2023, our short-term leading indicator, SZIGMA LEAD, still indicates dual dynamics in the growth rate of the Hungarian economy. So, the growth rate of the Hungarian economy is reaching and then surpassing the historical trend rate, and then this strengthening growth rate will stall and revert to the historical trend rate. **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 7.6% year on year and by 8.5% month on month. The volume index for new industrial export sales orders fell sharply month on month (by 4.1%) and less sharply year on year (by 3.3%). As for the German and EU indices affecting the Hungarian economy, the Ifo Business Climate Index for September 2023, **which measures change in business sentiment in the German economy**, remained unchanged compared to the previous month, at 85.8 index points. Eurostat's consumer confidence index decreased in September 2023. The index deteriorated by 2.5 index points month on month, while it improved by 13.1 index points year on year. This month it stood at -34.6 index points.

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



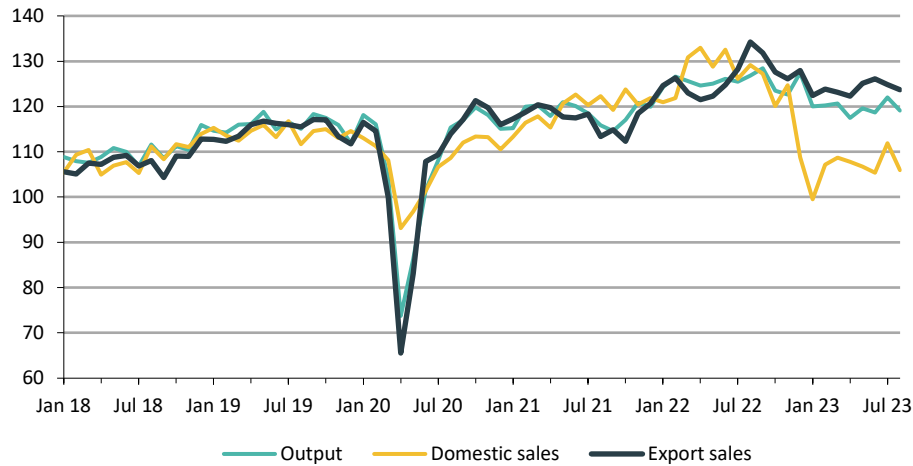
Source: Századvég

2.3 The real economy

Hungarian industry continues to slow down.

In August 2023, the volume of industrial production fell both month on month and year on year. Compared to the same period of the previous year, it decreased by 5.3% in raw data terms and by 6.1% in working-day adjusted data terms. Seasonally and working day adjusted industrial production volume fell by 2.4% month on month. Overall industrial sales fell by 12.2% in August 2023 compared with the same period a year earlier. Although both industrial export sales and industrial domestic sales fell, domestic sales more than doubled. Industrial domestic sales shrank by 17.6% and industrial export sales by 8.1%. Despite the decline in industrial production and sales volumes, it is important to underline that the current level is still higher than what was seen before the outbreak of the coronavirus pandemic, except for domestic sales volumes. Given that exports cannot compensate for the decline in domestic sales and the consumption structure of the Hungarian budget, it is crucial to restore domestic demand without generating inflationary effects.

FIGURE 2: 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 decline in industrial production volumes in August 2023 was caused by a contraction in the performance of all three sub-sectors that determine industrial production (mining, manufacturing and energy). Industrial production is mainly determined by the manufacturing sector. In August 2023, manufacturing accounted for 94.8% of total industrial production. This was followed by energy with 4.7%, and then mining with 0.4%. The output volume of all three sub-sectors that determine industrial production declined on an annual basis in August 2023: manufacturing output fell by 4.7%, energy by 16.5% and mining by 5.5%. In manufacturing, the performance of all but three sectors (automotive manufacturing, electrical equipment manufacturing and other manufacturing) declined. The largest contributor to the manufacturing sector's August 2023 output (23.4%) continued to be the automotive sector, where output grew by 4.6% year on year. Far behind automotive manufacturing, the second and third largest sectors are food (14.3%) and electrical equipment manufacturing (12.3%). In August 2023, the annual output of the food industry, which weights 14.3%, declined by 10.1%. Output in electrical equipment manufacturing, which accounts for 12.3%, grew by 15.8% year on year. Other manufacturing, a low-weight sector, was

among the three sectors whose output increased. The output of the other manufacturing sector grew by 6.2% year on year in August 2023. Annual output in the other sectors shrank in August 2023. The largest declines of more than 16% were recorded in the wood, rubber and pharmaceutical sectors. Electrical equipment manufacturing output contracted by 15.8%. Output fell by over 10% in food production, coke production, the manufacturing of computer, electronic and optical products, and machinery and equipment manufacturing.

In August 2023, total new sales orders of the manufacturing industries monitored by the HCSO increased by 3.5% year on year at comparable prices, driven by both domestic and export sales orders. Export sales orders grew by 3.2% and domestic sales orders by 9.2%. In terms of *export* sales orders, all but 3 of the 8 sectors observed (automotive manufacturing, electrical equipment manufacturing and metals) saw an increase in sales orders. However, only 3 sectors (pharmaceuticals, metals and electrical equipment) saw an increase in *domestic* sales orders. Pharmaceuticals, which is one of the minor manufacturing sectors, stood out from other sectors in terms of the annual increase in both exports and domestic industrial sales orders. Their domestic industrial sales orders nearly quadrupled, with no base effect. Their export industrial sales orders almost quintupled, with the slightly lower base playing only a minimal role.

In August 2023, *new sales orders* in key manufacturing industries fell by 3.9% year on year at comparable prices, driven by both a 3.3% decline in new export sales orders and a 7.6% decline in new domestic sales orders. For *new industrial export sales orders*, only 3 of the 8 key manufacturing sectors monitored have seen new export sales orders increase at comparable prices. One of these was electrical equipment manufacturing, which rose by a further 20.1%, despite the strong base. However, new export sales orders in automotive manufacturing, the largest sector, declined by 6.6% year on year, also due to the high base effect. In terms of *new industrial domestic sales orders*, three sectors also recorded volume growth, one of which was electrical equipment manufacturing (15.7%). Domestic demand is therefore mostly associated with electrical equipment

manufacturing, which includes the manufacturing of electric motors, generators, power distributors, batteries, dry cells, lighting equipment, household electrical appliances and other electrical equipment. However, automotive manufacturing, the one with the largest share, saw its new domestic sales orders shrink by 7.6% year on year. **Overall**, exports are also showing signs of a slowdown, most notably in automotive manufacturing, which is one of the most important sectors of manufacturing output.

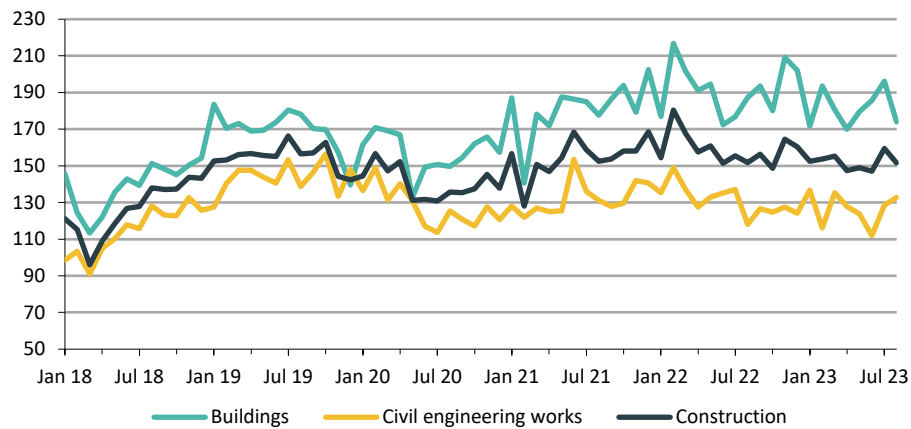
Construction shows an increasingly negative performance.

In August 2023, the annual volume of construction output fell by 0.5% in terms of raw data. Construction performed differently in the different main construction groups.

While the construction of buildings shrank by 7.6% year on year, the construction of civil engineering works (roads, bridges, railways, complex industrial installations, pipelines, etc.) expanded by 13.6% year on year.

Compared with the previous month, seasonally and working-day adjusted construction output shrank by 5.0%. Compared to the same period of the previous year, the stock of contracts at the end of the month under review shrank by 23.9%, while the stock of new contracts in the month under review grew by 31.9% in August 2023. The 23.9% decline in the stock of construction contracts measured at the end of August 2023 was due to a sharp fall (40.6%) in contracts for the construction of civil engineering works. This decline in the stock of contracts could not be offset by a 4.9% increase in the stock of contracts for the construction of buildings.

FIGURE 3: CHANGES IN THE CONSTRUCTION INDUSTRY (MONTHLY AVERAGE FOR THE YEAR 2015 = 100%)



Remark: Seasonally and calendar adjusted indices.

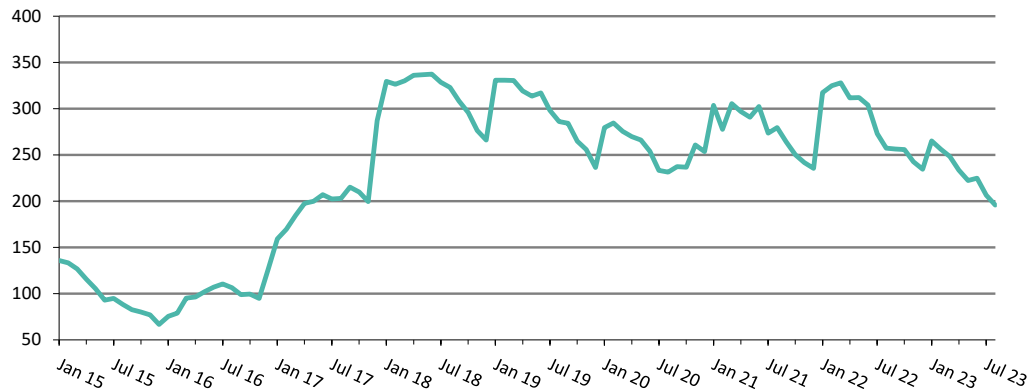
Source: Hungarian Central Statistical Office, Századvég

Future prospects are mixed, with the stock of new construction contracts signed in the month under review fluctuating and the stock of contracts at the end of the month under review steadily declining. The **stock of new contracts** increased by 31.9%, with new contracts for high-value industrial buildings causing the stock of new contracts for buildings to rise by 22.3% and for civil engineering works by 46.6%.

This increase in the stock of new contracts is a positive sign, but the volume of new construction contracts in the first eight months of 2023 is 21.6% lower than in the same period of the previous year.

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, despite occasional spikes in new orders, the month-end stock has been falling steadily since February 2023, except for a small increase in July. In August 2023, it was already at 196.0%, much lower than one of the weakest periods (233.3%) of the “COVID-19 year”, 2020.

FIGURE 4: CHANGES IN MONTH-END CONSTRUCTION CONTRACTS (MONTHLY AVERAGE FOR 2015 = 100%)



Source: Hungarian Central Statistical Office, Századvég

Industrial producer prices fell sharply.

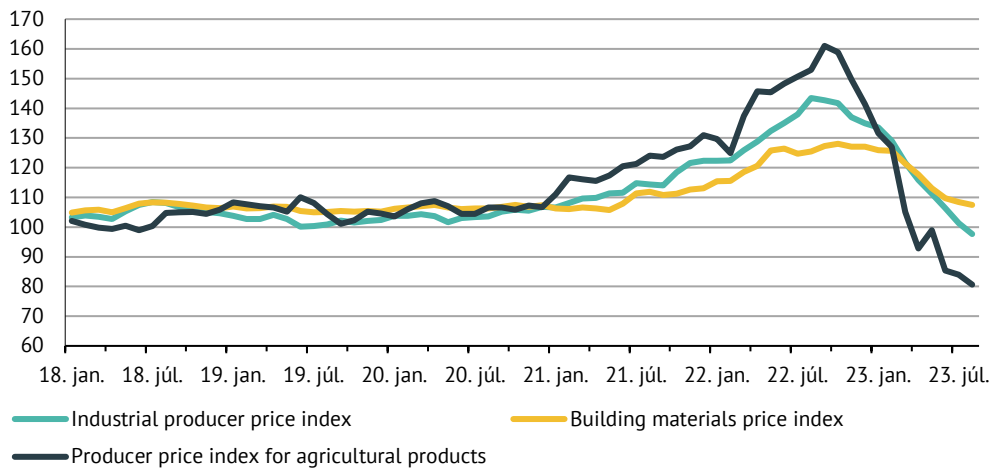
In August 2023, the industrial producer price index and the agricultural producer price index were already lower than in the same period of the previous year. The building materials price index has not yet started to decline in real terms, but price increases have slowed down, i.e. the rate of price increases has fallen. Compared with the same period of the previous year, the **agricultural producer price index** fell by 19.4% in August 2023, in which the exceptionally high base continued to play a decisive role. This base effect will continue to be felt until around March this year, as the agricultural producer price peaked at 161.0% in September 2022, before falling sharply to 105.1% in March 2023. In the year-on-year decline of 19.4% in the agricultural producer price index, prices of individual products vary significantly. While producer prices fell significantly for cereals (42.8%), industrial crops (36.6%), agricultural and horticultural products (29.1%) and animal products (10.7%), producer prices for the main foodstuffs (vegetables, fruit and livestock) rose. Producer prices increased by 4.6% for vegetables, 41.0% for potatoes, 24.3% for fruit and 9.4% for livestock. However, it is important to note that price increases for vegetables, potatoes and livestock have slowed down significantly.

In August 2023, **industrial** producer prices fell by 2.3% year on year, while they rose by 0.7% month on month. Industrial domestic sales prices and industrial export sales prices developed differently. While domestic sales prices rose by 8.6% year on year, export sales prices fell by 7.6% year on year. However, compared with the previous month, domestic sales prices rose by 0.3% and export sales prices by 0.9%. The large difference between domestic sales prices and export sales prices is due to the relative weight of the manufacturing and energy industries. Manufacturing has a smaller share in domestic sales and energy has a larger share in it than in export sales. For export sales, prices fell by 0.9% in manufacturing, which accounts for 90% of total sales, and by 61.0% in energy, which accounts for 9.8% of total sales.

Meanwhile, the 8.6% increase in domestic sales prices was driven by a 2.2% increase in manufacturing, which accounts for 65% of the total, and an 18.4% increase in energy, which accounts for 30%. Domestic sales prices in the food industry have been slowly declining. In August 2023, domestic sales prices in the food industry increased by 9.3% compared to the same period of the previous year.

In construction, the increase rate of building material prices is falling slowly. In August 2023, they were up 7.5% year on year, down 1.8 percentage points from the previous month. A high base and falling demand may play a role in the slow decline in building materials prices. Building materials price growth peaked in October 2022 and started a slow decline thereafter.

FIGURE 5: INDUSTRIAL PRODUCER PRICE INDEX, CONSTRUCTION INPUT PRICE INDEX, AGRICULTURAL PRODUCER PRICE INDEX (SAME PERIOD OF PREVIOUS YEAR = 100%)



Source: Hungarian Central Statistical Office, Századvég

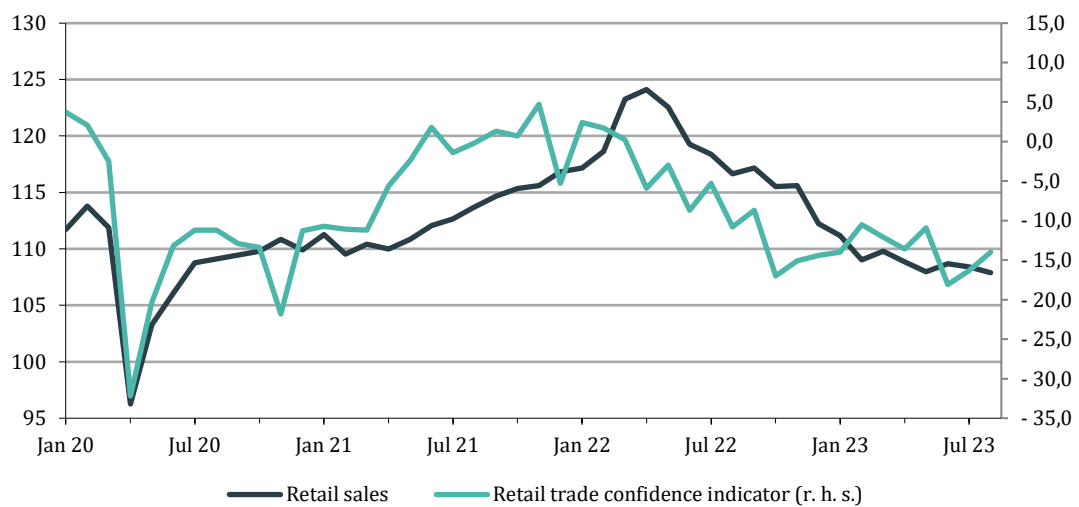
Retail sales contracted by 7.6% in August.

Raw data show that retail sales decreased by 7.0%, while calendar-adjusted data show that it decreased by 7.1% in August 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 10%, 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. A further decline in inflation could positively affect the long-lasting negative trend in retail sales, leading to an increase in purchasing power. As a result, an improving trend in retail sales is likely in the coming period.

In August 2023, turnover in specialised and non-specialised food shops decreased by 4.0%, while turnover in non-food shops also decreased by 5.2%. In fuel retailing, sales fell significantly, by 18.1% year on year, in August. If we look at the volume of retail sales excluding fuel sales, we see a year-on-year decline of only 4.5%.

In food retailing, sales in non-specialised foodstuffs shrank by 4.2% while sales in food products, beverages and tobacco shrank by 3.4%. In nonfood sales, the volume of furniture and electric goods decreased by 15.1%, books, newspapers and stationery by 7.7% and computer and other industrial goods by 5.8% year on year. There was also a significant decrease in textile products, clothing and footwear (7.8%). In contrast, the biggest sales increase (12.1%) was in fragrances. For non-food products, only this one case showed an increase.

FIGURE 6: RETAIL SALES AND RETAIL CONFIDENCE INDEX (JANUARY 2018 = 100%)



Remark: Seasonally and calendar adjusted indices.

Source: Hungarian Central Statistical Office, Eurostat, Századvég

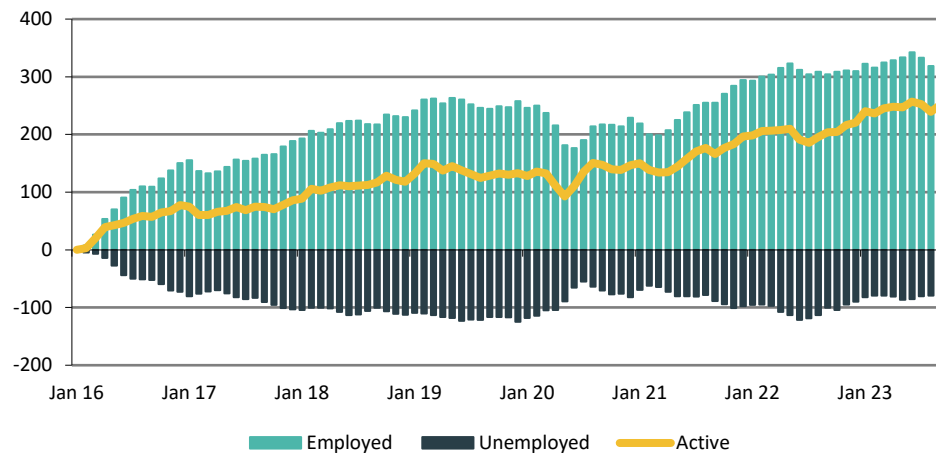
The unemployment rate is 4.1% in September 2023.

In September 2023¹, the seasonally adjusted activity rate of the population aged 15-74 was 67.3% (4,918,000 persons), which means a labour market growth of 47,000 compared to the same period of the last year. In the period under review, the seasonally adjusted number of employees was around 4,718,000, a year-on-year increase of 25,000. The number of the unemployed continued to rise, to 199,800, a year-on-year increase of 22,000.

¹ Three-month moving average

In September, the number of employees increased by nearly 4,400 on a seasonally adjusted basis compared to the same period of the previous year. The most significant increase in the number of employees was in the competitive sector, with 15,400 more working in enterprises having at least 5 employees compared to August 2022. However, the number of employees in the public sector has fallen by 13,900 in the last year, a significant reduction. The number of people employed in the non-profit sector increased by 2,900 in one year.

FIGURE 7: CHANGES IN THE LABOUR MARKET (JANUARY 2016 = 0, THOUSAND EMPLOYEES)



Remark: Seasonally and calendar-adjusted indices

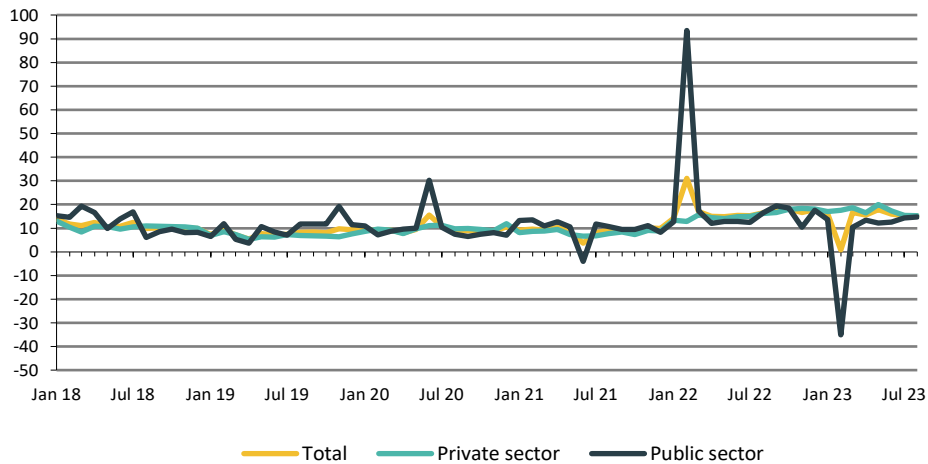
Source: Hungarian Central Statistical Office, Századvég

Real earnings fell further in August.

In August, the average gross monthly wage in the national economy was HUF 555,900, up 15.2% compared to the same period last year. The highest average gross monthly wage was recorded in the competitive sector, at HUF 562,700. The average net monthly wage including benefits was HUF 383,500, an annual increase of 15.1%. The average regular gross monthly wage, excluding bonuses, rewards and one-off benefits, increased by 14.1% in August 2023 compared to a year earlier, to an estimated HUF 528,500. Inflation, which

is still high at 16.4% in August, caused real earnings to fall by 1.0%. The median gross monthly wage was HUF 450,000.

FIGURE 8: CHANGES IN GROSS WAGES (ANNUAL CHANGE, %)



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

2.4 External balance

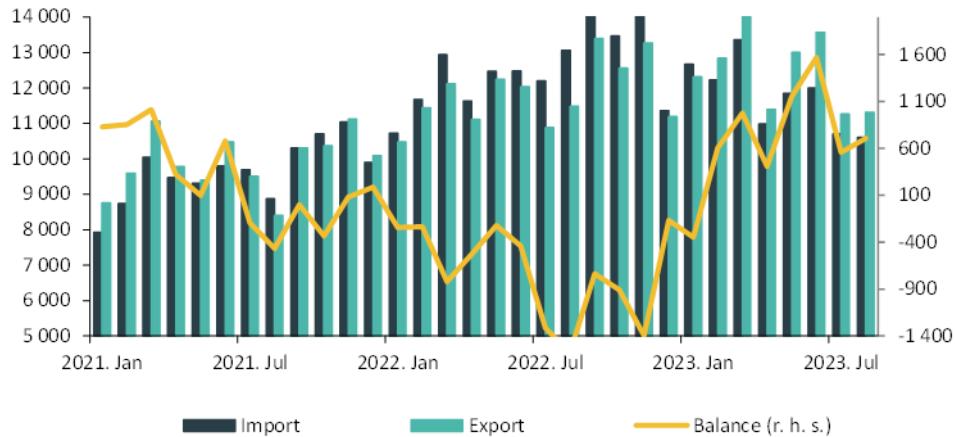
In July, the volume of exports of goods decreased by 3.2% and imports by 5.4% year on year. This brought the trade balance to a surplus of EUR 559 million, an improvement of EUR 1.9 billion compared to the previous year.

In July, the import volume of food products, beverages and tobacco decreased by 11.0%, and their export volume decreased by 2.9% year on year. As for energy carriers, imports decreased by 11.0%, while exports increased by 46.0%. As for processed products, imports decreased by 5.0%, and exports by 1.7% year on year. As for machinery and transport equipment, imports decreased by 8.7%, and exports increased by 4.8%.

The trade balance improved significantly.

In August 2023, the first estimate put the value of exports in euro at 1.5% higher and imports in euro at 19.0% lower than a year earlier. This brought the foreign trade surplus in goods to EUR 708 million, which is EUR 2.3 billion better than a year earlier.

FIGURE 9: BALANCE OF TRADE IN GOODS (EUR MILLION)



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

Source: Hungarian Central Statistical Office, Századvég

2.5 Fiscal outlook

By the end of September 2023, 83.7% of the increased annual deficit target had been met.

The Ministry of Finance announced on 3 October that it had raised the annual deficit target from 3.9% to 5.2%.

The September surplus of the central budgetary subsystem amounted to HUF 33.7 billion, reducing the accumulated deficit to HUF 3,298.7 billion by the end of September 2023, which corresponds to 83.7% of the revised annual deficit target (96% of the previous deficit target). This deficit consisted of the HUF 3,266.0 billion deficit of the core budget, the HUF 135.7 billion deficit of social security funds and the HUF 136.7 billion surplus of extra-budgetary funds.

Central government revenue in the first nine months of the year was 19.2% higher than in the same period of the previous year.

Payments from business organisations were 38.7% higher than in the same period of 2022. Within payments by business entities, the largest revenue earner, corporate tax, was 37.1% (HUF 218 billion) higher than in the first nine 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 224.4 billion and HUF 111.5 billion respectively. The increase in these two items is largely attributable to the special taxes introduced in 2022.

Revenues from consumption-related taxes were 4.3% (HUF 270.6 billion) higher than a year earlier. VAT receipts were only HUF 19.3 billion, or 0.4%, higher than at the end of September last year. However, on the positive side, VAT receipts in September were higher than in the same month in 2022, unlike in July and August. Excise tax revenue was HUF 84.8 billion (9.2%) more than in the first nine months of 2022. The highest increases were recorded for excise tax receipts on fuel and tobacco (HUF 39.71 billion and HUF 36.1 billion respectively).

Personal income tax receipts increased by HUF 1,041 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 664.8 billion) compared to the same period of the previous year, also caused by wage increases.

Revenue from EU programmes reached HUF 1,159.9 billion in September, HUF 369.6 billion (46.8%) more than in 2022. In contrast, expenditure on EU programmes amounted to HUF 1,992 billion, HUF 374.9 billion (15.8%) less than the previous year.

Central government expenditure in the first nine 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 1,504.1 billion higher than at the end of September last year. The most significant item of the increase was HUF 1,105.6 billion in expenditure to maintain discount household utility prices.

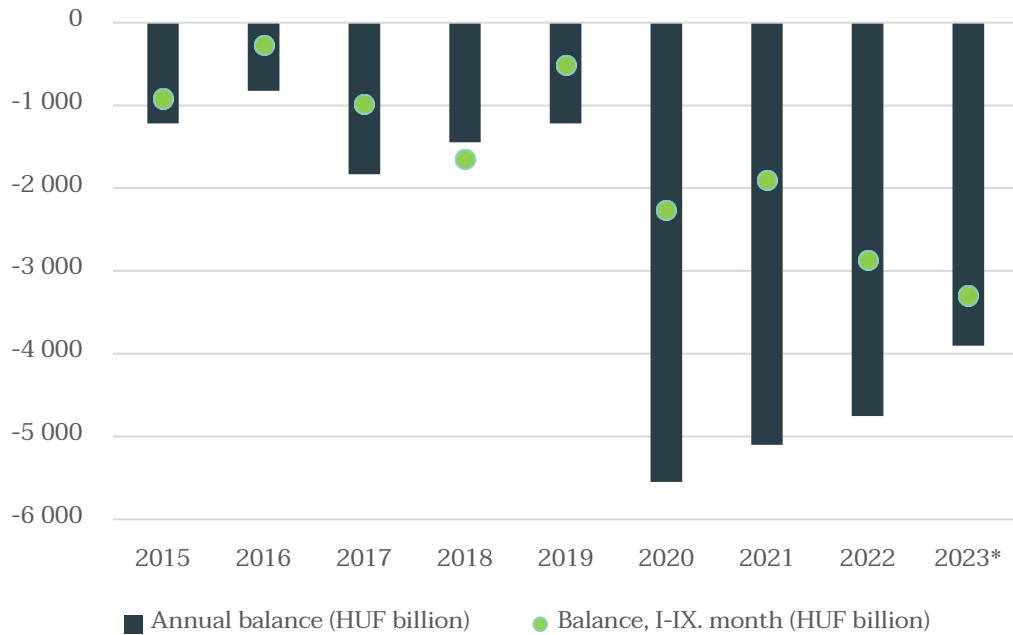
Expenditure on state property increased by HUF 569.5 billion, while expenditure on housing subsidies was HUF 49.2 billion lower than in the same period of the previous year.

Expenditure on budgetary bodies and chapter-administered appropriations increased by HUF 73 billion, or 0.8%, compared with the first nine months of the previous year, but this is in the opposite direction to the government's spending cut plans of 11.7%.

In the first nine months of 2023, pension expenditure amounted to HUF 4,291.3 billion, up by 22.4%, or HUF 784.2 billion, compared to the same period in 2022. During the same period, expenditure on the Health Insurance Fund amounted to HUF 2,965.7 billion, an increase of 7.9% (HUF 217.5 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 5.9%.

The balance of interest expenditure and interest income was HUF 412.2 billion (36.7%) more negative at the end of September than in the first nine months of 2022.

FIGURE 10: CENTRAL SUBSYSTEM BALANCE, 2015–2023 (JANUARY TO SEPTEMBER, HUF BILLION)



Source: Ministry of Finance, Hungarian State Treasury; *compared to the actual deficit in 2013-2022 and the planned (revised) deficit in 2023

2.6 Monetary developments

In September, prices increased by 12.2%, on average.

In September 2023, consumer prices increased by 12.2% on average — compared to the same period of the previous year. In the past year, the highest price increases have been in food (15.2%) and services (13.6%). Household energy prices fell by 14.6% compared to a year earlier, due to the inclusion of the base effect. Consumer prices rose by an average of 0.4% over a month, with a 3.3% increase in vehicle fuel prices leading the rise. The seasonally adjusted core inflation rate was 13.1% higher than in the same period of the previous year.

A more significant contribution to the 15.2% average increase in food prices came from the 61.3% rise in sugar prices, the 26.0% increase in buffet prices and the 26.1% rise in chocolate and cocoa prices. The 24.0% inflation in non-alcoholic beverages and 18.4% in pastries also outpaced

average food inflation for the month. In contrast, prices increased at a below-average rate for poultry (8.5%), butter and butter cream (1.1%) and cheese (0.6%). For flour, prices have already fallen by 13.9%. The main drivers of the 12.3% average inflation in spirits and tobacco were primarily the 23.4% increase in beer prices.

The average price increase of 1.5% 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 (9.8%), vacuum cleaners and air conditioners (9.7%) and heating and cooking equipment (7.7%). Inflation in consumer durables is moderated by a 3.6% fall in the price of televisions. It is also important to highlight the improving trend for second-hand cars: in September, second-hand cars were already 8.5% 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%.

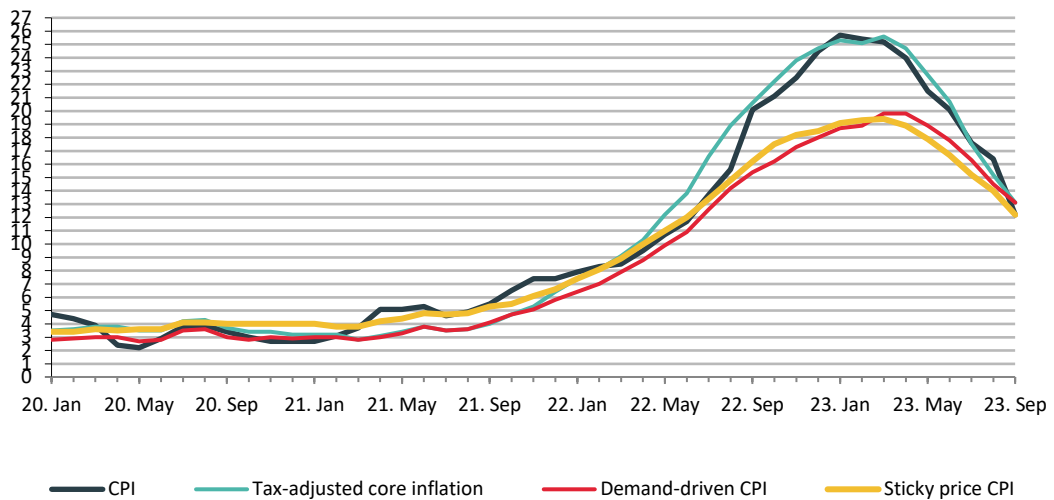
The average decrease in household energy prices was 14.6% in September, compared to the same period of the previous year. Within household energy, the price of piped gas fell by 33.5% and electricity by 3.2% over the past year. From August 2022, discount household utility prices remain unchanged until 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 around 2.5-3% over the past year, which dropped out of the inflation base in September, accounting for much of the significant decline.

In September, prices for services rose by an average of 13.6%, with the main contributors being a 30.1% increase for travel to other destinations, a 21.7% increase for postal services, a 16.7% increase for household appliance repairs and a 20.1% increase for TV subscriptions. Domestic holiday prices also increased significantly, by 22.8%. 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 continued to rise in September on an annual basis.

Compared with the previous month, food prices fell by 0.2% on average, with non-alcoholic beverages up 2.4% and fruit and vegetable juice up 0.9%, but price increases were offset by a 3.4% fall in flour, a 3.0% fall in seasonal food and a 2.6% fall in sugar and dry pasta. Clothing prices rose by 1.8% on a monthly basis, while the price of household energy was 1.0% higher than in the previous month. Vehicle fuel prices increased by 3.3% compared to July.

FIGURE 11: THE EVOLUTION OF INFLATION (ANNUAL CHANGE IN PERCENTAGE)



Source: MNB, Századvég

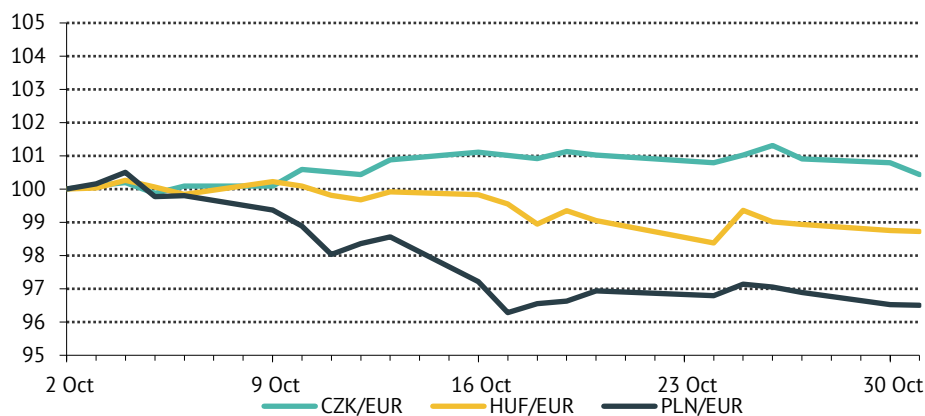
Among the core inflation indicators published by the MNB, in September, the seasonally adjusted core inflation rate and the core inflation rate net of indirect taxes were 13.1%, and the sticky price inflation rate was 12.2%. Core inflation excluding processed food was 13.1% in September.

In September, developments in the region were mixed vis-à-vis the euro.

The currencies of competitors in the region showed a mixed performance against the euro.

The Czech koruna has weakened by 0.4%, while the Polish zloty has strengthened by 3.5% against the euro over the past period, mainly due to the correction following the interest rate cut in September. Government bond yields also fell over the period, with the Czech 10-year government bond yield 17 basis points lower at 4.54% and the Polish 10-year yield 24 basis points lower at 5.59%.

**FIGURE 12: 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.

Domestic money and foreign exchange market indicators improved last month. The HUF strengthened by 1.3% against the Euro, by 1.2% against the Swiss Franc, and

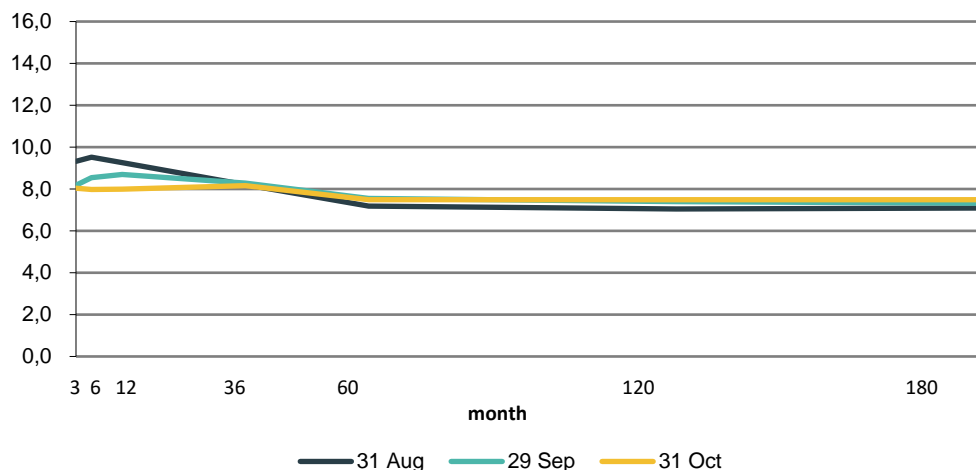
by 2.3% against the US Dollar. This means that at the end of October 2023, one euro was worth 382 forints, one US dollar was worth 358 Forints and one Swiss franc was worth 397 forints. Sovereign debt held by foreigners increased by HUF 852 billion to HUF 7,025 billion in the past month.

In October, the central bank started to cut the base rate.

Following a 100 basis point cut in the policy rate in previous months, the central bank’s Monetary Council also started to cut the base rate at its October meeting. As a result, the base rate in Hungary is currently at 12.25%, down 75 basis points. Accordingly, the upper limit of the interest rate corridor was changed to 13.25% and the lower limit to 11.25%. The extent of monetary easing exceeded analysts’ expectations, as the consensus was for a 50 basis point cut.

In the government bond market, yields for shorter maturities varied between -13 basis points and -70 basis points on the secondary yield curve in October. This means that the 3-month yield was 8.04%, the 6-month yield was 7.98% and the 1-year yield was 7.99% on 31 October. The 3-year yield fell by 13 basis points to 8.15%. Month on month, 5-year yields decreased by 6 basis points, 10-year yields increased by 8 basis points, and 15-year yields increased by 17 basis points. These three yields changed, therefore, to 7.48%, 7.48%, and 7.49%, respectively.

FIGURE 13: CHANGES IN THE HUF YIELD CURVE (%)



Source: GDMA, Századvég

On 30 September 2023, the total value of “MÁP Plusz” government securities held by retail investors was HUF 1,012.4 billion after a

HUF 1,422.0 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 and interest rate environment, households prefer to buy discount treasury bonds that exceed the interest rate of MÁP Plusz and the inflation-tracking Premium Hungarian Government Bond (PMÁP), whose cumulative value has risen to HUF 6,437.2 billion, an increase of HUF 2,115.6 billion compared to the end of 2022. The total stock of government securities held by households stood at HUF 9,492.7 billion at the end of September 2023, up from HUF 8,619.3 billion at the end of 2022, i.e. HUF 873.4 billion more than in the last month of the previous year.

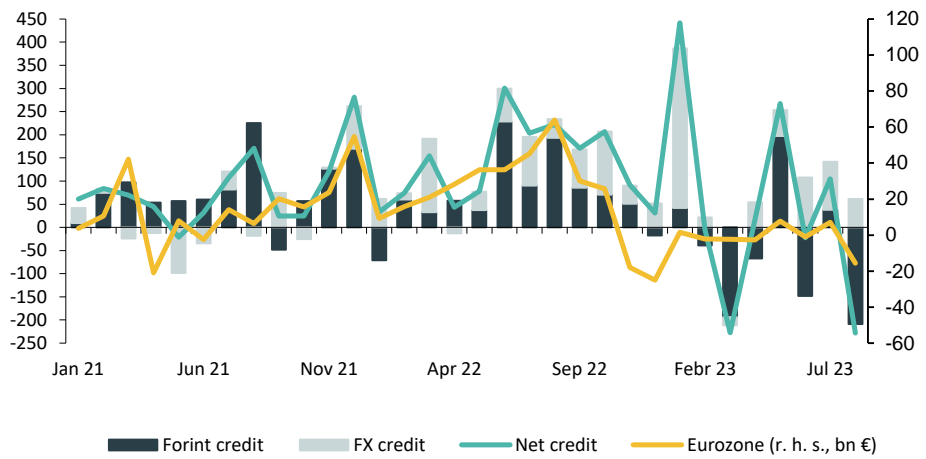
The share of foreign currency debt in the sovereign debt changed to 27.1% in September (i.e. increased significantly, by 1.58 percentage point from the previous month), which is in the range (maximum 30%) specified in the financing plan for 2023 of GDMA. In the first nine months of the year, average foreign currency debt averaged 25.77%, a share of foreign currency debt higher than in September.

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 showed a mixed picture in Hungary.

Seasonally adjusted data show that the net repayment of HUF loans in the business sector was HUF 209.1 billion in August 2023. In contrast, net foreign currency borrowing increased, with HUF 61.6 billion in August 2023. Seasonally adjusted total net loan repayments amounted to HUF 228.3 billion in the period under review. Corporate loan repayment in the euro area was EUR 15.6 billion in August 2023.

FIGURE 14: CORPORATE BORROWING (HUF BILLION)



Source: MNB, ECB, Századvég

3. Századvég's forecast²

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