MONTHLY MONITOR

January 2023

Századvég Konjunktúrakutató Zrt.

Századvég

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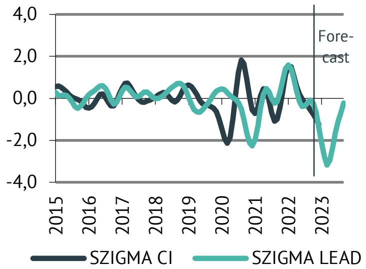
1. Summary

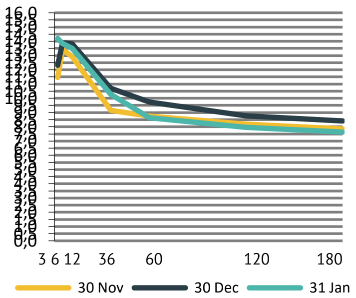
IN JANUARY, THE MNB DID NOT CHANGE THE BASE RATE AND THE EFFECTIVE INTEREST RATE ALSO REMAINED UNCHANGED

SIGMA indicators



Source: Századvég

Forint yield curve (%)



Source: Refinitiv

Forecast (21.12.2022)	2022
Change in the GDP (%)	5.3
Inflation (annual average, %)	14.4
EUR/HUF (annual average)	390

According to the December 2022 forecast of the SZIGMA LEAD indicator, the Hungarian economy's growth rate will still be below the historical trend until the end of the short-term (9-month) forecast horizon but is expected to turn around from April 2023.

Overall, an unfavourable economic environment (inflationary effects, high interest rates, high energy prices, etc.) is expected to persist in 2023, which could significantly dampen domestic demand as well as business growth and expansion.

In an environment of higher interest rates and higher inflation, the trend towards a preference for premium Hungarian government bonds with above-inflation yields over those with fixed yields (MÁP+) continued.

In November, the average gross monthly wage in the national economy was HUF 563,600, up 16.8% compared to the same period last year.

2. Overview of the economy

2.1 External environment

Hungarian PMI score was outstanding (63.1) in December 2022

The Purchasing Managers' Index (PMI) is relatively little discussed in public discourse, despite being an excellent short-term economic indicator. The index is calculated using the same methodology in several countries, so it is possible to compare the results objectively. The uniform methodology was developed by the US Institute for Supply Management and allows for comparisons of results between countries. The Purchasing Managers' Index (PMI) is a key focus of attention in the global economy, as it is generally an excellent short-term predictor of economic trends even before official GDP data are released. The index ranges from 0% to 100%, with a PMI below 50% indicating a recession and above 50% indicating an economic recovery.

The Hungarian score in December (63.1) is outstanding in international comparison, a particularly remarkable result in a deteriorating macroeconomic environment. In this context, it is worth examining the current situation in terms of manufacturing BMI of the surrounding V4 countries, as well as the strongest economies of the European Union, France and Germany, and the United States of America.

In Poland and the Czech Republic, the index reached a higher level in December than in November, but still remained below 50% in both countries. The former's score of 45.6% and the latter's 42.6% is nearly 20 percentage points lower than the Hungarian score, which is a considerable difference. Among the strongest economies in the European Union, Germany and France both had higher December scores compared with the previous month, but they were always below 50%. The German manufacturing PMI of 47.1% and the French one of 49.2% predict a slight economic downturn in economic performance in the coming months. The situation in the United States and China is similar, with 46.8% and 47.0%

respectively suggesting a slight decline in manufacturing output in the coming quarter.

The results suggest that, contrary to Hungarian expectations, all these countries are forecasting a slowdown in manufacturing in the coming period. This will have some impact in Hungary, as a small open economy, the evolution of the international environment is a determining factor for the country.

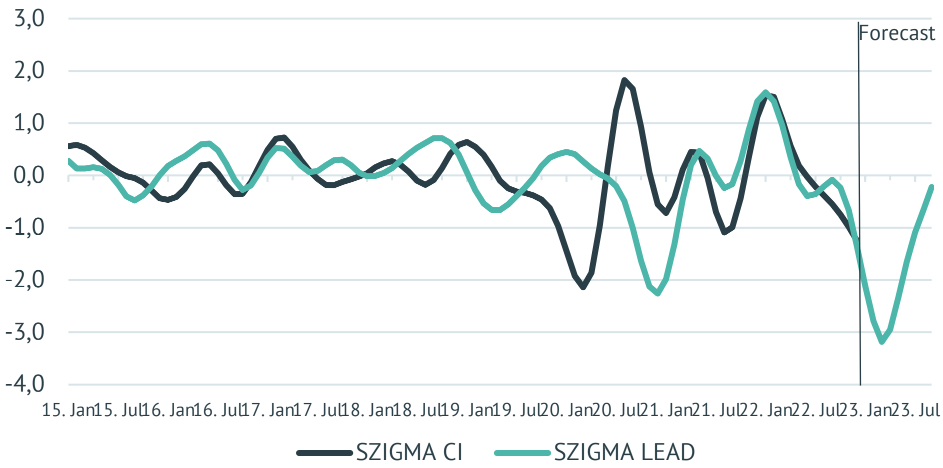
2.2 SZIGMA indicators

The Hungarian economy continues to grow below trend.

In December 2022, the SZIGMA CI indicator, which provides a snapshot of the current state of the Hungarian economy, remained in negative territory, showing a move away from trend. The extent of the divergence from trend increased compared with the previous month, meaning that the Hungarian economy's growth rate moved further away from trend. The Hungarian economy started to diverge from the trend in June 2022 and has gradually moved further away from the historical trend each month. This could be driven by a contraction in construction, industrial production and export sales. This is because, on a fixed basis, the month-end stock of construction contracts fell by 5.6% on a monthly basis and by 1.0% on an annual basis. On a fixed basis, industrial production, seasonally and working-day adjusted, fell by 0.7% month on month and increased by 1.0% year on year. On a seasonally and working-day adjusted and fixed basis, industrial export sales also decreased by 1.0% month on month, but they increased by 5.9% year on year. However, it is positive that by November 2022, fixed-base domestic industrial sales had increased both month on month (4.2%) and year on year (3.7%). A lower growth rate of the Hungarian economy is foreshadowed by the fact that, on a fixed basis, new domestic industrial sales orders expanded by 11.4% month on month, although this represented a 1.9% decline year on year. The number of new non-residential building projects increased by 17.9% year on year and by 7.1% month on month.

According to the December 2022 forecast of the SZIGMA LEAD indicator, which expresses expectations for the Hungarian economy's future performance in the short term, the Hungarian economy's growth rate will still be below the trend until the end of the short-term (9-month) forecast horizon but is expected to turn around from April 2023. Accordingly, the below-trend growth of the Hungarian economy will bottom out in March 2023, after which it will start to grow at a stronger above-trend rate until September 2023, moving closer to trend, but at the end of the forecast period the Hungarian economy will still be growing slightly below the historical trend. An unfavourable economic environment (inflationary effects, high interest rates, high energy prices, etc.) is expected to persist in 2023, which could significantly dampen domestic demand as well as business growth and expansion. To counter this, various targeted programmes are planned. In the construction sector, the postponement of investments that have not yet started will reduce capacity, which may be offset slightly by an expected increase in energy efficiency investments due to energy exposure. Thus, **we continue to expect a gradual moderation in construction output.** For industry, the positive trend is that in November 2022, on a fixed basis, *new industrial sales orders* increased both month on month and year on year. They increased by 6.7% month on month and by 5.8% year on year. This was driven by month-on-month increases in both domestic sales orders and exports. New domestic sales orders increased by 11.4% and exports by 5.6% compared to the previous month. On an annual basis, however, only exports grew (by 7.2%). New domestic sales orders fell by 1.9% compared to the previous year. Accordingly, **we expect new domestic industrial production and sales to decline slightly and exports to strengthen further.** The January 2023 Ifo Business Climate Index, which measures business sentiment in the German economy, showed an improving environment compared to the previous month, with firms in all sectors surveyed (manufacturing, services, trade, construction) less pessimistic about the future. Although the index strengthened by 1.6 index points compared with the previous month, it remained below the previous year's level (January 2022). The current index (90.2) is close to the March 2022 value (90.8), which was published after the outbreak of the Ukrainian-Russian war on 24 February 2022. The consumer confidence index, as measured by Eurostat, improved slightly (by 0.4 index points) in December 2022 to stand at -47.9 index points. Year on year, however, the weakening in the confidence index remains significant (32.1 index points). The negative index value could be improved by restoring consumer confidence.

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



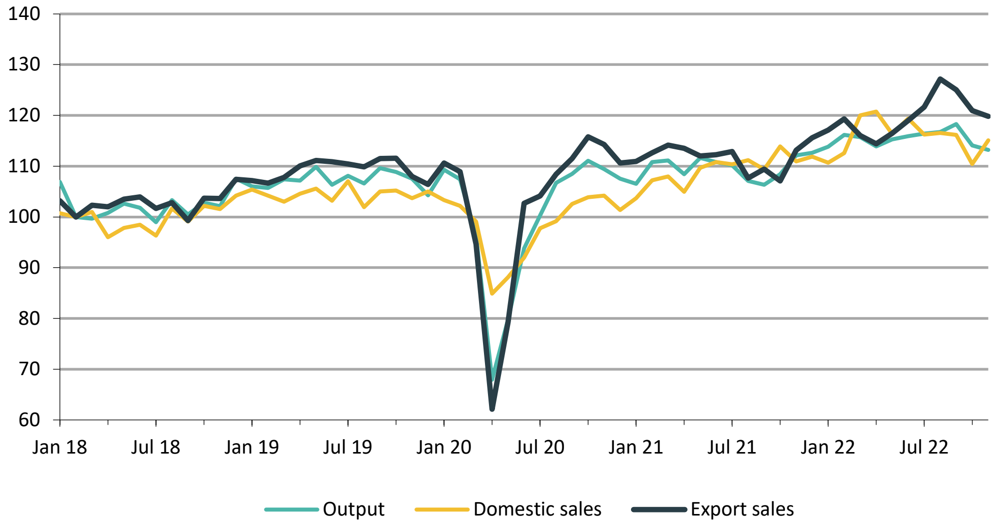
Source: Századvég

2.3 The real economy

Industrial output growth has slowed down.

Compared to the same period of the previous year, industrial output increased by 0.5% in raw data terms and by 0.8% in working-day adjusted data terms in November 2022. Month on month, however, industrial production adjusted for seasonal and working-day factors decreased by 0.7% compared to October 2022. Industrial sales grew by 4.2% year on year. This was driven by a 3.2/ increase in domestic sales and a 5.1% rise in export sales.

FIGURE 2: CHANGES IN INDUSTRIAL OUTPUT AND SALES (JANUARY 2018 = 100%)



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

Returning to industrial production, the contribution of individual sectors to industrial production varies. In November 2022, manufacturing continued to make the largest contribution to industrial production, with a weight of 94.9%. This was followed by the electricity, gas, steam and air conditioning sector with 4.6%. The remaining 0.5% was contributed by the mining and quarrying sector. Among these sectors of different weights, manufacturing output grew by 1.3% year on year, while the other two sectors contracted (electricity down by 19.6% and mining down by 1.2%). Within manufacturing, the largest contribution to output in November 2022 was still made by automotive manufacturing (26.3%). Year on year, the output of this sector grew by 23.3%. In terms of contribution to manufacturing, two sectors followed significantly behind automotive manufacturing, with a contribution to manufacturing output in November 2022 of more than 10%. With a 13.0% contribution to manufacturing, the output of the food, beverages and tobacco sector fell by 2.0% year on year due to the high base effect. The electrical equipment manufacturing sector, which contributes 10.9% to manufacturing output, showed a strong expansion for the second month in a row, despite the high base. Year on year, its output increased by 57.0% last month and by 54.5%

this month. Three sectors contributed a medium share (6-10%) to the November 2022 manufacturing output, the rubber industry at 7.7%, the metals industry at 7.3%, and computer, electronic and optical products at 9.9%. The November output of these three sectors was down compared to the same period last year, with the largest decline (16%) in the metals industry. Within manufacturing, the output of the coke and refined petroleum products sector fell the most (by 49.9%).

At the end of November 2022, the total stock of sales orders in the manufacturing industries monitored by the HCSO increased by 19.9% year on year. This was driven by a 21.8% increase in export sales orders and a 5.2% decline in domestic sales orders. For exports, sales orders continued to increase in the automotive, pharmaceuticals and computer, electronic and optical products manufacturing sectors. Of these, the latter, computer, electronic and optical products, stands out, with orders up 28.8% year on year, exceeding the previous year's record growth rate of 64.7% in November 2021. Despite the drop in domestic sales orders in November 2022, domestic sales orders expanded significantly in three sectors. In computer, electronic and optical products, sales orders increased not only for exports but also domestically (by 21.4%). The other two sectors where domestic sales orders increased were the electrical industry (20.3%) and machinery manufacturing (20.9%).

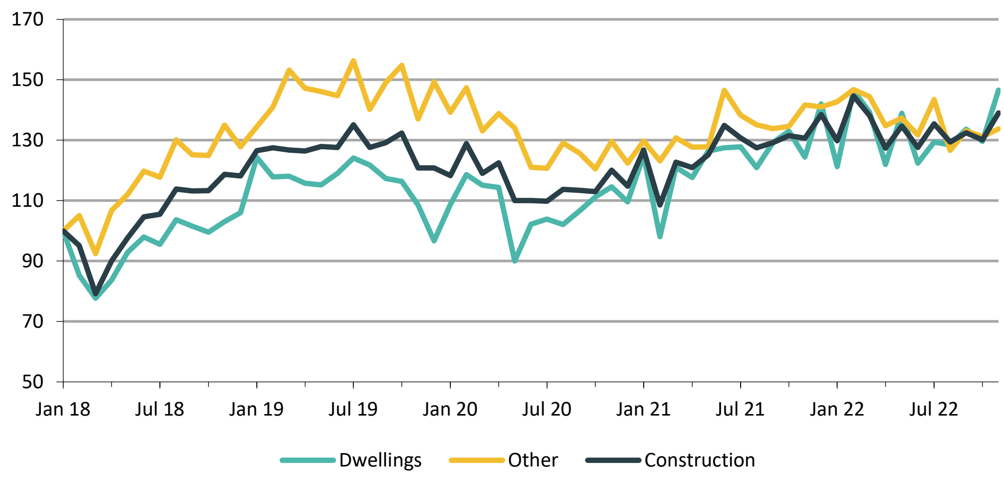
In November 2022, new sales orders grew by 5.8% year on year, driven by a 7.2% increase in new export sales orders and a 1.9% decline in new domestic sales orders. In terms of new sales orders, the largest year-on-year increase in new sales orders was recorded in the electrical industry (52.9%) for exports and in computer, electronic and optical products (22.2%) for the domestic sales, despite high base levels.

New construction sales orders grew in November.

In November 2022, construction output increased both month on month (6.9%) and year on year (7.0%). Annual performance varied across the main groups of the construction industry. While the construction of buildings increased by 18.6% compared to the same period last year, other civil engineering works fell by 6.9%. At the end of November 2022, construction sales orders decreased by 1.0% year on year, driven by a 5.0% decrease in the month-end stock of contracts for civil engineering works and a 5.0% increase in the month-end stock of contracts for buildings.

In November 2022, new sales orders in the construction sector grew by 3.8%, driven by a 9.6% increase in new sales orders for buildings. New contracts for civil engineering works fell by 4.2%.

FIGURE 3: CHANGES IN THE CONSTRUCTION INDUSTRY (JANUARY 2018 = 100%)



Remark: Seasonally and calendar adjusted indices.

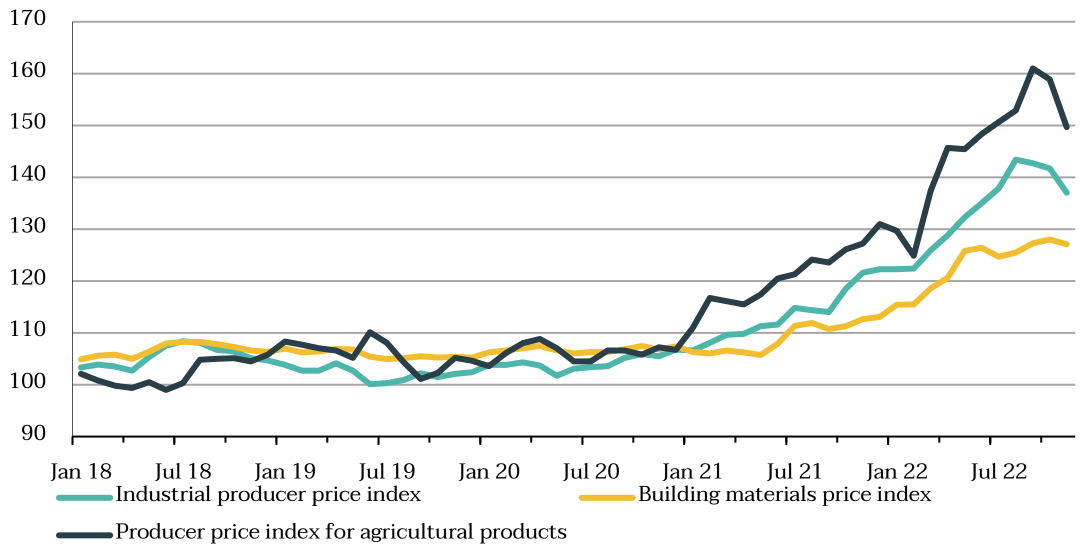
Source: Hungarian Central Statistical Office, Századvég

In November, the rate of producer price growth fell.

Changes in producer prices can have a significant impact on consumer prices and on new sales orders in industry and construction. In November 2022, the growth rate of industrial producer prices, construction input prices and agricultural producer prices fell back significantly.

Industrial producer price growth continued to slow, with prices rising by 37.0% year on year in November 2022. Price growth slowed down from September 2022. While the industrial producer price index rose by 43.4% year on year in August 2022, it was 42.7% in September 2022 and 41.7% in October 2022. **Construction** also saw a slowdown in price growth. The construction input price index rose by 27.1% year on year in November 2022, slightly below the 28.0% increase in October 2022. The increase in construction input prices started just a year ago, in October 2021, and accelerated in the March-May period of 2022, when the construction input price index rose by 2.0-5.2 percentage points per month. This strong growth rate has reversed. Agricultural producer prices, which rose by 49.7% in November 2022 compared to the same period of the previous year, are a factor driving food price increases. Although prices have been increasing at a high rate, it is positive that the rate of increase has slowed down significantly, as the rate of increase fell by 9.2 percentage points in November 2022 compared to the previous month, with an annual rate of increase of 58.9% in October 2022. Importantly, both months have a high base of roughly the same magnitude. Hence the rate of monthly decline is not attributable to the base effect.

FIGURE 4: INDUSTRIAL PRODUCER PRICE INDEX, CONSTRUCTION INPUT PRICE INDEX, AGRICULTURAL PRODUCER PRICE INDEX (SAME PERIOD OF PREVIOUS YEAR = 100%)



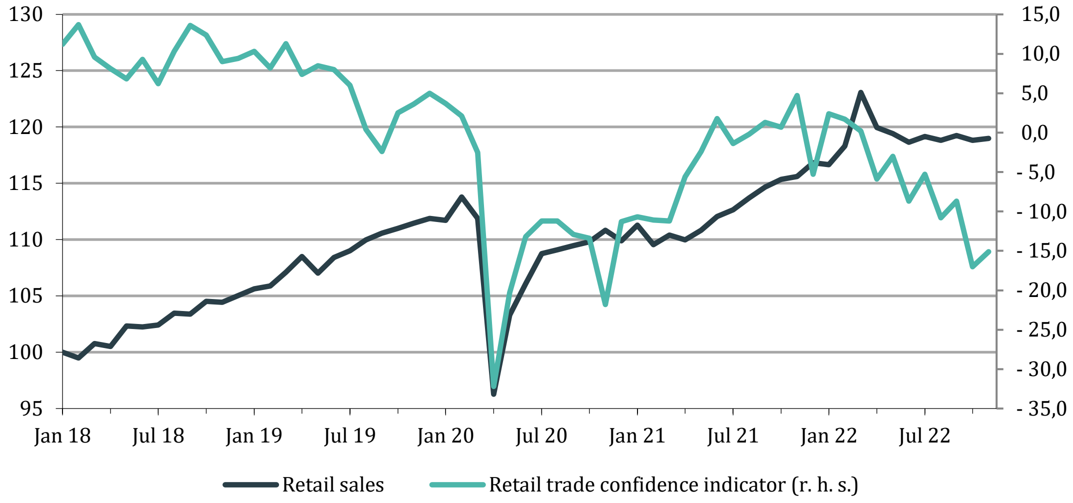
Source: Hungarian Central Statistical Office, Századvég

The volume of retail sales increased by 0.6%.

In November 2022, retail sales increased by 0.6% compared to the same period of the previous year, based on both raw data and calendar-adjusted data. Excluding motor vehicle fuel sales, retail sales fell slightly (4.6%) in November. The slowdown in sales is attributable to rising energy costs due to sanctions policies, the summer drought and the volatile exchange rate of the forint, generating increasing inflationary pressures in the economy, which, combined with product repricing, and a rising interest rate environment, are encouraging households to rationalise consumption. In November 2022, turnover in specialised and non-specialised food shops decreased by 6.7%, while turnover in non-food shops also decreased by 2.3%. In fuel retail, calendar-adjusted volume of sales increased by 27.7% compared to November 2021. The increase in fuel sales in November was caused by the then existing fuel price cap and panic buying, leading to a large increase in consumption. The discontinuation of regulatory pricing could lead to a significantly slower increase in fuel sales in December.

On a calendar-adjusted basis, food, beverages and tobacco declined by 0.8%, while foodstuffs fell by 8.6%. In non-food retail, the sales of books, newspapers and stationery fell by 1.7%, that of pharmaceuticals and perfumes by 5.1% and that of mail order and internet services by 9.8% compared to the same period last year. In contrast, the biggest sales increase (8.6%) was in second-hand goods. In addition, increases were recorded for textile products, clothing and footwear (13.1%) and computer and other manufactured goods (4.1%) compared to November last year.

FIGURE 5: 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 3.9% in December

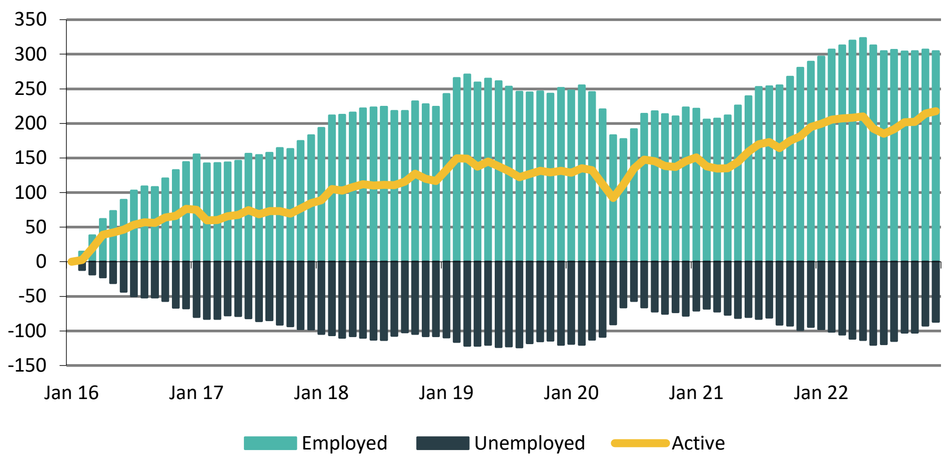
In Q4, the seasonally adjusted activity rate of the population aged 15-74 was 66.75% (4,885,000 persons), which means an increase of 23,000 in the labour market compared to the same period in 2021. This labour surplus is partly reflected in an increase in the number of employees. In Q4, the seasonally adjusted number of employees was around 4,692,000, an increase of 400 and 15,500 respectively compared to the previous three months and the same period of the previous year. On the other hand, unemployment has also risen slightly, with the number of the unemployed[1] reaching 193,000 in Q4 2022, an increase of 15,500 compared to Q3 and 7,500 compared to the previous year.

In November, the number of employees increased by nearly 1,200 on a seasonally adjusted basis, and by 36,000 compared to the same period of the previous year. The most significant increase in the number of employees was in the competitive sector, with 50,500 more working in enterprises having at least 5 employees compared to 2021, up by more than

[1] Also seasonally adjusted.

2,700 compared to October. The number of non-profit employees rose by a few hundred over the month, while the number of public sector employees fell by 1,300.

FIGURE 6: CHANGES IN THE LABOUR MARKET (JANUARY 2016 = 0, THOUSAND EMPLOYEES)



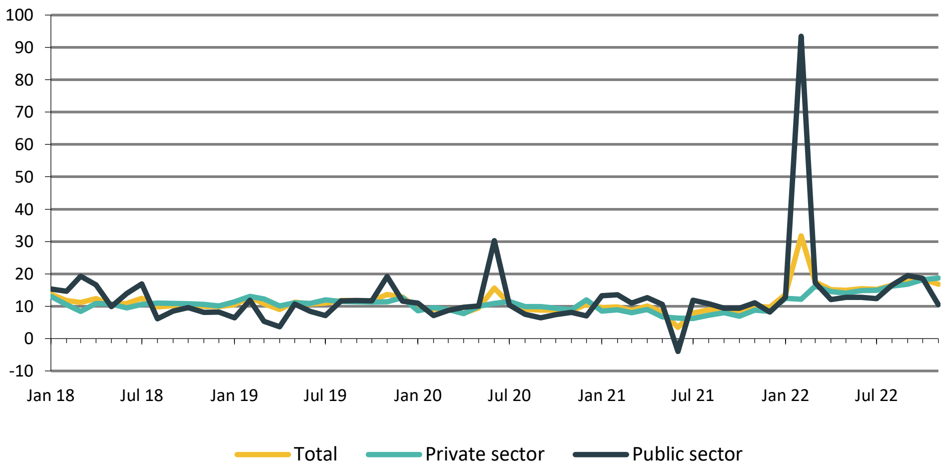
Remark: Seasonally and calendar adjusted indices

Source: Hungarian Central Statistical Office, Századvég

Real wages fell in November–August.

In November, the average gross monthly wage in the national economy was HUF 563,600, up 16.8% compared to the same period last year. The highest average gross monthly wage was recorded in the competitive sector, at HUF 576,880. The average net monthly wage including benefits was HUF 387,800, an annual increase of 17.6%. The average regular gross monthly wage, excluding bonuses, rewards and one-off allowances, increased by 20.2% in November compared to a year earlier, to an estimated HUF 495,200. Real wages fell by 4.7%, reflecting accelerating inflation, which was 22.5% in November. The median gross monthly wage was HUF 441,800.

FIGURE 7: CHANGES IN GROSS WAGES (ANNUAL CHANGE, %)



Source: Hungarian Central Statistical Office, Századvég

2.4 External balance

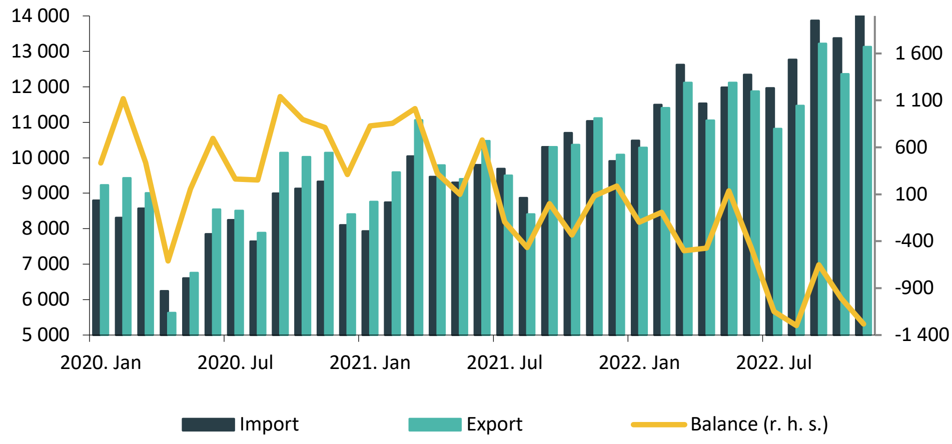
In October, exports of goods increased by 22.0% and imports by 26.0% year-on-year in euro terms. The trade balance deficit was, therefore, EUR 923 million, EUR 502 million less than in the previous year.

In October, the volume of food product imports increased by 12.0%, and food product exports decreased by 12.0% year on year. As for energy carriers, imports increased by 15.0% and exports decreased by 30.0%. As for processed products, imports increased by 2.2%, and exports increased by 0.6% year on year. As for machinery and transport equipment, imports increased by 17.0%, and exports by 26.0%.

The trade balance deteriorated significantly.

In November 2022, the EUR value of exports was 18.0% higher and the EUR value of imports was 29.0% higher than a year earlier. The trade balance deficit in goods amounted to EUR 1.3 billion, which is EUR 1.2 billion higher than a year earlier.

FIGURE 8: TRADE BALANCE (EUR MILLION)



Remark: The November 2022 figures are from the first estimate.

Source: Hungarian Central Statistical Office, Századvég

2.5 Fiscal outlook

In 2022, tax and contribution receipts were 18.4% higher than in the previous year.

in December 2022, the deficit of the central subsystem was HUF 1,287 billion. At the end of the year, the cumulative deficit of the central budgetary subsystem stood at HUF 4,753.4 billion. This was caused by a deficit of HUF 4,611.5 billion in the central budget and HUF 405.8 billion in social security funds, as well as a surplus of HUF 263.9 billion in extra-budgetary funds.

The government expects the underlying deficit to reach 4.9% of GDP, and the general government deficit including the special natural gas stock accumulation could reach 6.1% of GDP according to the EU methodology. According to the Ministry of Finance, the sovereign debt-to-GDP ratio improved to 73.5%, compared with 76.8% at the end of 2021, a sharper decline than expected. The Ministry of Finance said that balance indicators will continue to improve in 2023, with the budget deficit target at 3.9% and sovereign debt continuing to decline.

Central government revenues were 18.7% higher than in the same period of the previous year, with tax and contribution receipts 18.4% higher.

Receipts from business organisations accounted for 147.7% of the annual target in 2022, the highest completion rate and the highest increase (53%) of the three main tax revenue groups. Corporate tax revenues, the most significant item among payments by business entities, accounted for 126.8% of the target during the year, exceeding the balance of the last year by HUF 188.6 billion (33.8%). Due to the temporary introduction of special taxes during the year, payments by financial institutions and mining royalties increased significantly, by HUF 265.5 billion and HUF 181.1 billion, respectively, compared to the same period last year.

Revenues from consumption-related taxes were 23.6% higher than a year earlier. VAT receipts were HUF 1,664.3 billion (23.6%) higher than in the previous year. By the end of the year, 120.4% of the annual target had been met. The increase in VAT receipts was also driven by higher VAT receipts on domestic, import and tobacco products. Excise tax revenue was HUF 13.9 billion (1.1%) less than in 2021. This was driven by higher revenues from tobacco and spirits and other products, and lower revenues from fuels. The decrease in fuel-related revenues is linked to the lower tax rates temporarily introduced in March 2022.

Personal income tax revenues decreased by 3.8% (HUF 102.6 billion) compared to the previous year. The decline is driven by a one-off tax rebate for parents with children, while income tax revenues, which increase as wages rise, gradually mitigated the negative impact. Receipts from social contribution tax and social insurance contributions increased by 11.3% (HUF 590.8 billion) compared to 2021. The increase was driven by higher wages, while the reduction in the social contribution tax rate had the opposite effect.

The cumulative revenue of EU programmes reached HUF 1,393.3 billion by the end of 2022, which corresponds to 59% of the statutory target. In contrast, the cumulative expenditures of EU programmes closed at HUF 2,991.7 billion, 99.7% of the statutory target.

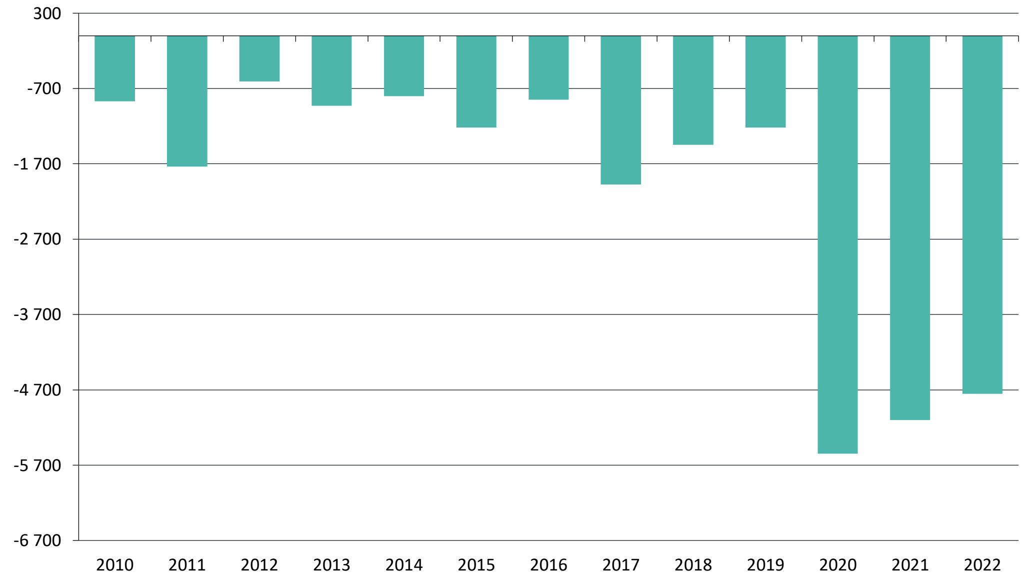
Among significant expenditure items, expenditure on individual and normative subsidies, housing allowances, chapter-administered professional appropriations, expenditures of EU programmes, expenditures on pensions and preventive medical care, and interest expenditure were higher than a year earlier.

Expenditure on individual and normative subsidies amounted to HUF 1,370.8 billion by the end of December, slightly more than two and a half times the previous year's figure. The significant difference is due, among other things, to the HUF 375.4 billion paid out in connection with household utility discounts, while no such payments were made in 2021.

Expenditure on housing subsidies was HUF 258.8 billion higher than in the same period of the previous year, reaching 166.4% of the annual target. In 2022, expenditure on chapter-administered professional appropriations was HUF 697 billion higher than in the same period of the previous year, and 152.5% of the annual appropriations.

In 2022, the cumulative expenditure on pension benefits amounted to HUF 4,791.5 billion, an increase of 16.4% compared to the previous year. During the same period, the Health Insurance Fund spent HUF 3,739.5 billion, an increase of 15.1% compared to the base period. Within this, expenditure on medical and preventive care, which accounts for more than half of the Health Insurance Fund's expenditure, increased by 17.2%.

FIGURE 9: CENTRAL SUBSYSTEM BALANCE, 2010–2022 JAN–DEC RESULTS, HUF BILLION)



Source: Ministry of Finance, Századvég

2.6 Monetary developments

In December, prices increased by 24.5%, on average.

In December 2022, consumer prices increased by 24.5% on average, compared to the same period of the previous year. Over the past year, the highest increases were for food (44.8%) and household energy (55.5%), the latter due to changes in household utility discounts. Consumer prices rose by 1.9% on average over a month. The seasonally adjusted core inflation rate showed a year-on-year increase of 24.8%.

The more significant contributors to the 44.8% average increase in food prices were the 82.7% increase in egg prices, the 81.1% increase in bread prices, the 83.2% increase in cheese prices and the 79.4% increase in butter and buttercream prices. The average inflation of 70.8% for dry pasta and 51.5% for poultry also outpaced average food inflation for the month. In contrast, pork prices rose at a below-average rate (29.9%), while sugar (10.3%) and flour (6.7%) inflation was also below average. The main drivers of the 13.4% average inflation in spirits and tobacco were the 25.9% increase in beer and the 18.5% increase in wine prices.

The 24.1% increase in new car prices played a particularly important role in the 13.6% average increase in the prices of consumer durables. Room furniture prices also increased at an above-average rate, by 18.7%, while kitchen and other furniture prices rose by 21.3% compared to the same period last year. Jewellery also saw a significant price increase of 21.7% in on a yearly basis in December. Consumer durables inflation is moderated by a 4.0% increase in the prices of computers, cameras and telephones, and a 0.8% increase in the prices of televisions. For consumer durables, volatile forint exchange rates in the autumn are among the factors that increase inflation risks, alongside parts shortages. However, the recent appreciation of the domestic currency could also have a positive impact on the price of consumer durables in the period ahead.

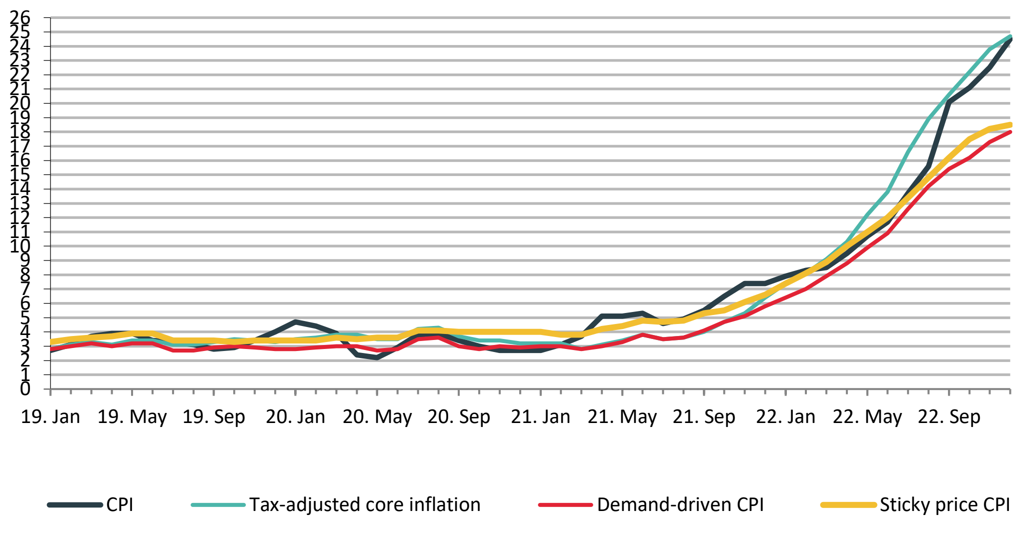
The average increase in household energy prices was 55.5% in December, compared to the same period of the previous year. Within household energy, the price of piped natural gas increased by 97.8%, electricity by 27.8% and cylinder natural gas by 48.7% over the past year. Despite the price boom on the world market, the discount household utility prices remained stable until July. From August, they remained the same up to average consumption. Above average consumption, however, consumers have to pay a higher price, which is calculated by the HCSO in the billing month. The rise in energy prices contributed roughly 2.5-3% to the increase in inflation in December. This trend is expected to continue until September 2023, when the base effect will cease, but the mild winter could have a positive impact on average household energy inflation.

In December, the price of services rose by an average of 9.5%, with home repair and maintenance up 24.3%, vehicle repair and maintenance up 22.6% and taxi up 30.8%. Furthermore, domestic holidays increased by 20.9%, while sports and museum admissions rose by 22.0%. The average price increase of services was moderated by, among other things, no change in the prices of sanitation, water and sewerage (100.0%), a 4.6% decrease in the price of TV subscriptions and a 0.2% decrease in the price of telephone and internet services.

Month on month, food prices rose by an average of 2.1%, but the prices of eggs (7.9%) and margarine (1.6%), which are covered by the official price cap, fell. The price of services increased by 0.8% month on month, while the price of household energy fell by 6.0% compared with November, thanks to the mild winter.

In 2022, consumer prices increased by an average of 14.5% year on year, with food prices rising by the highest rate of 26.0%. Household energy inflation was 21.7%, prices of consumer durables increased by 12.2%, other product prices increased by 12.0%, the prices of alcoholic beverages and tobacco increased by 9.9%, prices of services increased by 7.1% and clothing prices increased by 5.5%.

FIGURE 10: THE EVOLUTION OF INFLATION (ANNUAL CHANGE IN PERCENTAGE)



Source: MNB, Századvég

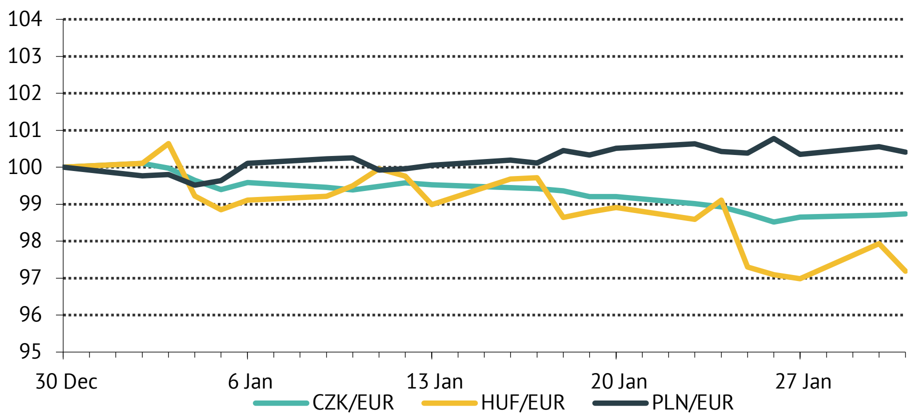
Among the core inflation indicators published by the MNB, in November, the seasonally adjusted core inflation rate was 24.0%, the core inflation rate net of indirect taxes was 23.8%, and the sticky price inflation rate was

18.2%. Core inflation excluding processed food was 17.3% in the eleventh month of the year.

The Czech koruna strengthened, while the

Exchange rates in the region showed a mixed picture in relation to the euro. In the past period, the Czech koruna strengthened by 1.26%, while the Polish zloty weakened by 0.41% against the euro. Government bond yields have fallen: the Czech 10-year government bond yield was 52 basis points lower at 4.6%, while the Polish 10-year yield closed 85 basis points lower at 6.04%.

FIGURE 11: CHANGES IN EXCHANGE RATES IN THE REGION (BASELINE VALUE = 100%)



Source: Refinitiv, Századvég

The Forint strengthened against

Indicators of the Hungarian financial and foreign currency markets have shown an overall more positive picture in the past period. The 10-year government bond yield closed at 8.62%, dropping 65 basis points. The HUF strengthened by 2.81% against the euro, by 4.75% against the Swiss franc and by 4.39% against the US dollar. This means that at the end of January 2023, one euro was worth 389 forints, one US dollar was worth 359 Forints and one Swiss franc was worth 388 forints. Sovereign debt held by foreigners has recently increased by HUF 1,501 billion to HUF 6,671 billion.

The central bank did not change its effective interest rate in January

At its January meeting, the Monetary Council of the central bank left its key interest rate unchanged at 13.00%. The Monetary Council left the overnight deposit interest rate at 12.5% and the lending rate at 25.0%. The central bank's effective interest rate, the interest rate on overnight deposits, remained at 18.0%. The MNB has increased the effective interest rate by 1,740 basis points since the start of the rate hike cycle. The asymmetric interest rate corridor defines the limits of the overnight interbank market interest rate and the central bank overnight deposit interest rate. In the long run, a high interest rate environment will change the choice between consumption or saving and could help to suppress inflation, but it could also cause the credit market to dry up. It also makes external speculation on the weakening of the forint more difficult by making it more expensive to hold short positions.

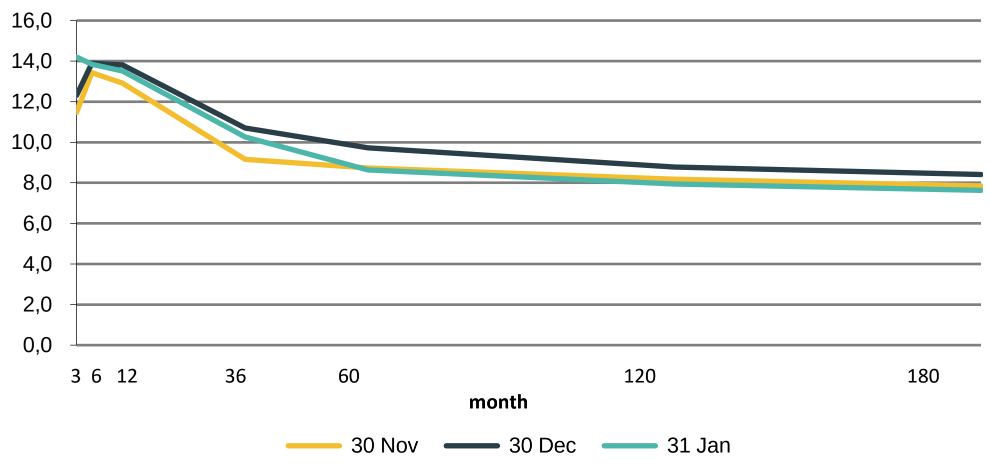
Over the past month in the government bond market, yields for shorter maturities varied between -31 basis points and 188 basis points on the secondary yield curve. This means that the 3-month yield was 14.2%, the 6-month yield was 13.85% and the 1-year yield was 13.51% on 31 January. The 3-year yield fell by 44 basis points to 10.27 percent. Yields are down 110 basis points over the 5-year horizon, 83 basis points over the 10-year horizon and 78 basis points over the 15-year horizon compared to the previous month. These three yields changed, therefore, to 8.63%, 7.95%, and 7.63%, respectively.

On 31 January 2023, the total value of "MÁP Plusz" government securities held by retail investors was HUF 2,055.7 billion after a HUF 378.8 billion decrease from the HUF 2,434.5 billion level at the end of December 2022. Given the high inflationary environment, the public prefers to hold government bonds with a fixed real interest rate, which are inflation-tracking, to the tune of HUF 4,692.7 billion (PMÁP as of 30 December: HUF 4,321.6 billion). The GDMA currently maintains the interest rate premium on the 5-year government bond at 1.5 percentage points, while the interest rate premium on the 3-year government bond at 0.75 percentage points. In the significantly higher interest rate environment, the total stock of government securities held by retail investors increased slightly from HUF 8,619.3 billion at the end of December 2022 to HUF 8,710.5 billion at the end of January 2023.

The share of foreign currency debt in the sovereign debt changed to 26.7% in January 2023 (corresponding to an increase of 1.5 percentage points), which is in the range (maximum 30%) specified in the financing plan for 2023 of the Government Debt Management Agency Ltd.

At the end of January, Hungary's sovereign debt rating remained at Baa2 with a stable outlook at Moody's, BBB with a negative outlook at S&P and BBB with a stable outlook at Fitch. Thus, all three major international credit rating agencies have a risk rating for Hungarian treasury securities that is one category above the lowest grade that is still recommended for investment.

FIGURE 12: CHANGES IN THE HUF YIELD CURVE (%)

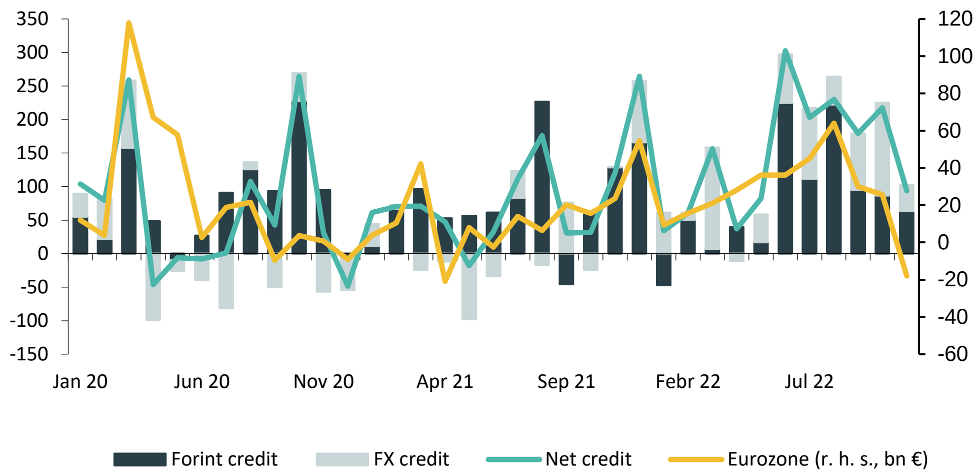


Source: GDMA, Századvég

Corporate holdings of foreign currency loans have

Seasonally adjusted data show that the net borrowing of HUF loans in the business sector was HUF 63.4 billion in November 2022. The net borrowing of foreign currency loans was HUF 39.5 billion in November; in other words, the aggregate value of foreign currency loans held by the business sector, i.e. exchange rate risk exposure, increased. This means that, based on seasonally adjusted data, total net borrowing was HUF 93.9 billion in November. Corporate borrowing in the euro area was EUR -17,99 billion in November 2022.

FIGURE 13: CORPORATE BORROWING (HUF BILLION)



Source: MNB, ECB, Századvég

3. Századvég's forecast[2]

TABLE 1:Q4 2022 FORECAST

	2021	2022	2023
Gross domestic product (volume index)	7.1	5.3	1.9
Household final consumption expenditure (volume index)	4.6	7.3	1.1
Gross fixed capital formation (volume index)	5.9	3.0	0.7
Export volume index (based on national accounts)	10.3	8.6	0.8
Import volume index (based on national accounts)	8.7	8.2	-0.9
Balance of international trade in goods (EUR billion)	1.9	-9.4	-6.8
Consumer price index (%)	5.1	14.4	19.3
Central bank base interest rate at the end of the period (%)	2.4	13	13
Unemployment rate (%)	4.1	3.6	4.2
Current account balance as a percentage of GDP	-3.1	-6.3	-4.1
Net lending as a percentage of the GDP	-0.5	-3.4	-1.9
ESA balance of public finances as a percentage of GDP	-6.8	-5.9	-5
Sovereign debt as a percentage of GDP	76.8	77.0	73.0

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

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

	2022			2023		
	10.2022	12.2022	change	10.2022	12.2022	change
Gross domestic product (volume index)	4.5	5.3	0.8	1.8	1.9	0.1
Household final consumption expenditure (volume index)	8.0	7.3	-0.7	-0.5	1.1	1.6
Gross fixed capital formation (volume index)	-1.1	3.0	4.1	3.0	0.7	-2.3
Export volume index (based on national accounts)	5.7	8.6	2.9	2.4	0.8	-1.6
Import volume index (based on national accounts)	5.1	8.2	3.2	0.1	-0.9	-1.0
Balance of international trade in goods (EUR billion)	-6.7	-9.4	-2.7	-3.7	-6.8	-3.1
Consumer price index (%)	13.1	14.4	1.3	13.4	19.3	5.9
Central bank base interest rate at the end of the period (%)	13.0	13.0	0.0	9.4	13.0	3.6
Unemployment rate (%)	3.7	3.6	-0.1	4.5	4.2	-0.3
Current account balance as a percentage of GDP	-5.5	-6.3	-0.8	-2.9	-4.1	-1.2
Net lending as a percentage of the GDP	-2.7	-3.4	-0.7	-0.7	-1.9	-1.2
Balance of public finances as a percentage of GDP	-4.5	-5.9	-1.4	-3.7	-5.0	-1.3
Sovereign debt as a percentage of GDP	73.0	77.0	4.0	67.6	73.0	5.4

Source: Századvég's calculation

[2] Date of preparation: 21 December 2022