

MONTHLY MONITOR

February 2023

Századvég Konjunktúrakutató Zrt.



SZÁZADVÉG

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1. Summary

THE MNB DID NOT CHANGE THE BASE RATE OR THE EFFECTIVE INTEREST RATE IN FEBRUARY

IN Q4, ECONOMIC OUTPUT WAS 0.4% HIGHER THAN A YEAR EARLIER ON A RAW DATA BASIS; HOWEVER, ON A QUARTERLY BASIS, THE ECONOMY HAD ALREADY CONTRACTED BY 0.4%.

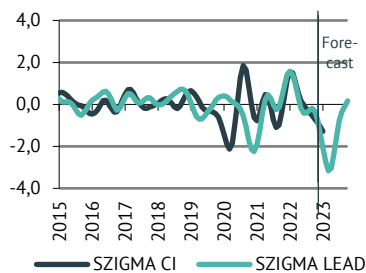
In January, average inflation in the European Union fell by 0.4 percentage points on an annual basis to 10.0%, while the average inflation rate in the euro area was 8.6%, down by 0.6 percentage points. Slowing inflation is attributable to a combination of factors, including monetary tightening by central banks, moderating energy and commodity prices and the base effect.

The January 2023 forecast of the SZIGMA LEAD indicator, which expresses expectations for the Hungarian economy's future performance in the short term, projects that at the end of the short-term (9-month) forecast horizon (October 2023), the Hungarian economy will grow slightly above its historical trend.

The high inflation environment is forcing central banks to raise interest rates. Hungary has the highest effective interest rate (overnight (O/N) deposit rate: 18.0%) in the region, following the October move by the Hungarian central bank.

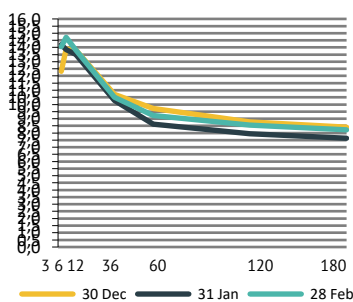
In an environment of higher interest rates and higher inflation, the trend towards a preference for premium Hungarian government bonds with above-inflation yields over those with fixed yields continued.

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

2. Overview of the economy

2.1 External environment

Inflation is expected to slow down in Europe

In 2022, people across Europe could experience very high inflation, but January data show that inflation peaked in December and is expected to slow in the coming period. In January, average inflation in the European Union fell by 0.4 percentage points on an annual basis to 10.0%, while the average inflation rate in the euro area was 8.6%, down by 0.6 percentage points. Slowing inflation is attributable to a combination of factors, but the monetary tightening by central banks, moderating energy and commodity prices, and the base effect are all important factors.

The highest price increase continues to be in the energy sector, with prices up 18.9% compared to January last year. Processed food inflation, at 15.0% on average, is also significant, and is still on an upward trend compared to previous months. In contrast, non-energy-intensive manufacturing goods show a 6.7% inflation, while services show 4.4%.

At Member State level, the countries with the highest inflation rates are the countries of Central and Eastern Europe and the Baltic States. Compared with January last year, inflation was 21.4% in Latvia, 18.5% in Lithuania, 19.1% in the Czech Republic and 15.9% in Poland. In contrast, inflation is slowing in most Western European, Southern European and Nordic countries. In Germany, the average price of products in the consumer basket increased by 9.2%, in Portugal by 8.6% and in Finland by 7.9%. Outside the EU, inflation was 6.4% in the United States, 10.1% in the United Kingdom and 2.1% in China on an annual basis. Thanks to improving data, more and more central banks may start monetary easing in the second half of the year.

2.2 SZIGMA indicators

By the end of the forecast horizon, the Hungarian economy may grow slightly above its historical trend.

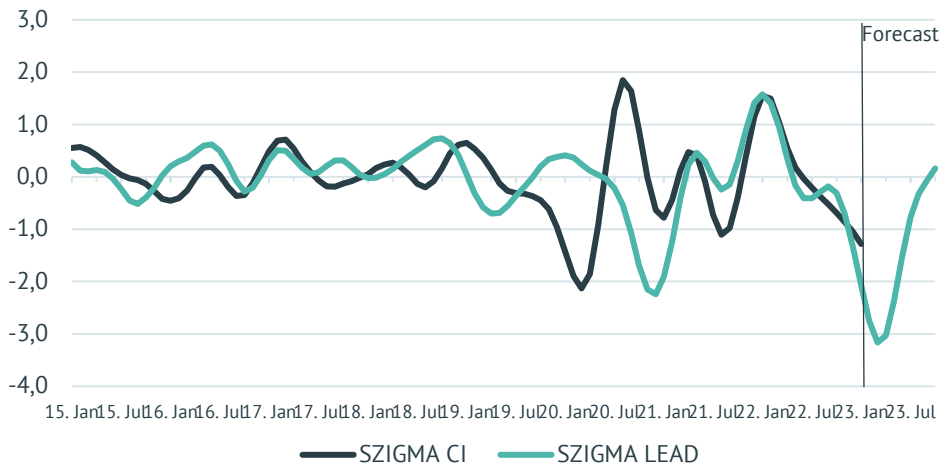
In February 2023, the SZIGMA CI indicator, which provides a picture of the current state of the Hungarian economy, remained in negative territory. This means that the Hungarian economy had been growing below its historical

trend. Current data suggest that the growth rate of the Hungarian economy is moving further away from the historical trend. This started from June 2022 and gradually moved further away from the historical trend each month. This could be explained by a contraction in construction and domestic industrial sales. In fact, according to December 2022 data, the month-end stock of **construction** contracts on a fixed basis decreased by 3.4% month on month and by 1.2% year on year. This trend is likely to continue, as the number of new non-residential building projects is down 32.4% on the previous month and 44.1% on the same period last year. In **industry**, domestic demand contracted, while exports expanded. On a fixed base, seasonally and working-day adjusted domestic industrial sales also fell by 14.1% month on month and by 11.5% year on year, due to the decline in domestic demand. Domestic industrial sales are expected to continue to contract, with new domestic industrial orders declining, on a fixed basis, by 17.4% month on month and by 12.2% year on year in December 2022. In addition, exports continued to expand. On a fixed basis, Industrial export sales, seasonally and working-day adjusted, increased by 2.2% month on month and by 6.9% year on year. Exports are expected to continue to expand, as indicated by the fact that industrial export sales increased by 68.3% month on month and by 7.9% year on year on a seasonally and working-day adjusted and fixed basis.

The January 2023 forecast of the SZIGMA LEAD indicator, which expresses expectations for the Hungarian economy's future performance in the short term, projects that at the end of the short-term (9-month) forecast horizon (October 2023), the Hungarian economy will grow slightly above its historical trend. The Hungarian economy is projected to reach the trough

of below-trend growth in April 2023. Then, by May 2023, the divergence from trend reverses, and by October 2023, it strongly approaches, and even slightly exceeds, the historical trend. So, in the short term, a stronger economic growth is expected. In 2023, adverse economic developments such as high interest rates, high inflation, shrinking domestic demand and uncertain energy prices are expected to persist. In construction, the most likely developments are a continuation of investments already underway and an increase in energy efficiency investments. Thus, **we continue to expect a gradual moderation in construction output.** For industry, the positive trend is that in December 2022, on a fixed basis, *new industrial sales orders* increased both month on month and year on year. As explained above, this was only due to an increase in exports. Domestic new orders continued to contract both month on month and year on 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 the change in business sentiment in the German economy, continued to show improving economic sentiment. The Index improved by 1.1 index points month on month, to stand at 90.1 index points. However, it is still far from the 98.6 index points recorded before the war (February 2022) and the 90.7 index points recorded in the month of the war (March 2022). Eurostat's consumer trust index showed a strong improvement in January 2023, rising by 2.1 index points month on month to stand at 45.8 index points. However, the year-on-year weakening remains significant (31.8 index points), which could be improved as consumer confidence recovers.

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



Source: Századvég

2.3 The real economy

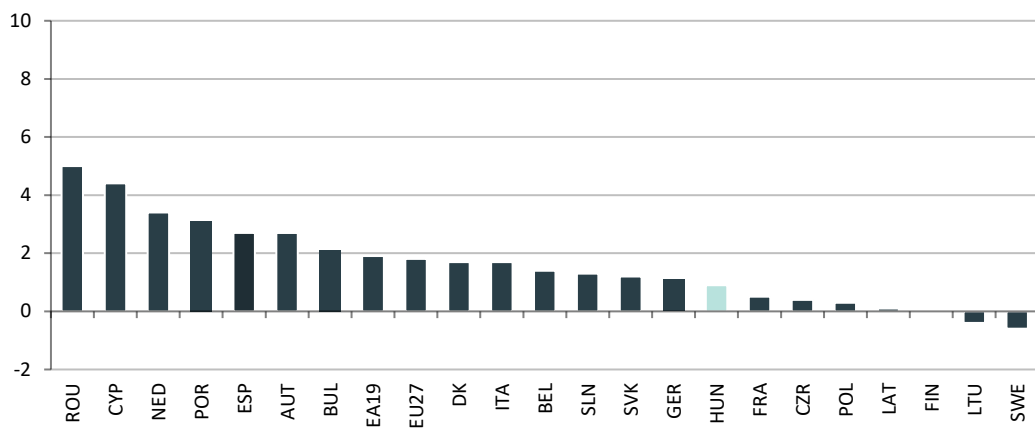
Hungarian GDP grew by 0.4%.

According to the first estimate of the Hungarian Central Statistical Office (KSH), the annual gross domestic product of the Hungarian economy grew by 0.4% in Q4 2022, based on raw data, and by 0.9% based on seasonally and calendar-adjusted data. According to the first estimate, the Hungarian GDP grew by 4.6% from 2021 to 2022. The Hungarian economy expanded above the EU average for the year as a whole.

On a seasonally adjusted basis, GDP grew in the euro area (by 0.1%), while for the European Union as a whole, GDP was unchanged compared to the same period a year earlier. Within the European Union, Ireland (15.7%), Romania (5.0%) and the Netherlands (3.4%) were among the countries with higher growth rates than Hungary, while Lithuania (-0.4%), Finland (0.0%) and France (0.5%) lagged behind the growth rate experienced in Hungary. On a quarterly basis, Ireland (3.5%) and Denmark and Romania (1.1%) recorded the highest growth rates, while several EU countries saw a decline: In Poland and Lithuania, economic output declined by 2.4% and 1.7%, respectively.

Several industries contributed to growth, most notably industry and market services. Within industry, significant increases compared with a year earlier were recorded for the automotive industry and electrical equipment manufacturing, and, among market services, for real estate, transport and storage. Growth has been held back mainly by a significant decline in agriculture due to drought.

FIGURE 2: GDP GROWTH IN Q4 2022 IN THE EU (Y/Y, %)



Remark: Seasonally and calendar adjusted indices. Preliminary estimate.

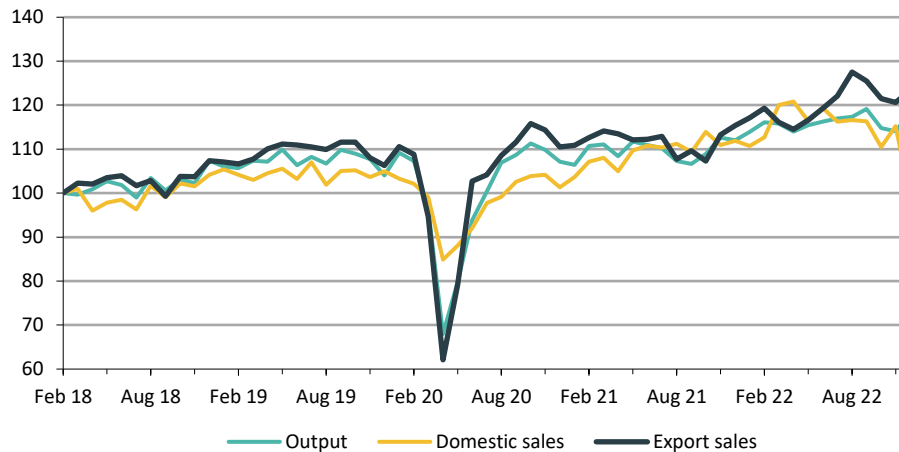
Source: Eurostat

In 2022, industrial output increased by 5.7%.

In 2022, industrial output expanded by 5.8% year on year. Compared to the same period of the previous year, industrial output increased by 2.0% in raw data terms and by 5.7% in working-day adjusted data terms in December 2022. The significant difference between raw data and data adjusted for working days is explained by the number of days, as there were 2 fewer working days in December 2022 than in the same period of the previous year. On a monthly basis, compared to November 2022, seasonally and working day-adjusted industrial output rose by 3.8%. Industrial sales for 2022 as a whole expanded by 6.1%, despite the high base in the previous year, driven by a 3.6% increase in domestic sales and an 8.0% increase in export sales. However, industrial

sales contracted by 5.2% in December 2022, as a significant contraction in domestic sales (13.8%) was not offset by a 3.9% increase in export sales.

**FIGURE 3: CHANGES IN INDUSTRIAL OUTPUT AND SALES
(JANUARY 2018 = 100%)**



Remark: Seasonally and calendar adjusted indices.

Source: KSH, Századvég

Back to industrial production. In 2022 as a whole, manufacturing continued to account for the largest share (95.0%) of the three sectors. Of the remaining share, the electricity, gas, steam and air conditioning supply sector represented 4.5% and the mining and quarrying sector 0.5% of manufacturing output. These three sectors grew at a lower annual rate in 2022 compared to previous years. Despite the high base, mining and quarrying expanded by 9.0%, electricity, gas, steam and air conditioning by 1.2% and manufacturing by 5.8% in 2022 compared to 2021. In December 2022, the different contribution of each sector to industrial output was as follows: Manufacturing continued to account for the largest share of industrial output (95.0%). This was followed by the electricity, gas, steam and air conditioning sector with a weight of 4.4%. Mining and quarrying contributed the remaining 0.6% to industrial output. Of these sectors, which are of different weights, manufacturing output grew by 2.4% on an annual basis; mining and quarrying, the one with the smallest weight, expanded by 16.3%, while output in electricity, gas, steam and air conditioning decreased by 7.8%. The largest contributor to manufacturing

output in December 2022, automotive manufacturing, remained unchanged with a 24.8% share and its output increased by 34.5% year on year. In terms of contribution to manufacturing output, the next two after (significantly behind) automotive manufacturing, were food production with a share of 13.4% and electrical equipment manufacturing with a share of 11.0%. Of these, the output of the food industry contracted by 4.8% year on year in December 2022. At the same time, electrical equipment manufacturing, with its 11.0% share, grew by 61.6% year on year in December 2022, producing the highest volume growth rate of all manufacturing sectors despite the high base effect. The second highest volume growth rate (40.6%) was achieved by machinery manufacturing, which has a medium weight (8.0%), with a high base. The third highest volume growth rate (34.5%) was the aforementioned automotive manufacturing, where the low base also played a role in the high growth rate.

At the end of December 2022, the stock of orders and the stock of new orders, which determine the current and future development of industrial production and sales, increased by 7.8% compared to the same period last year for the total stock of orders in the manufacturing industries followed up by the Hungarian Central Statistical Office. This was driven by an 8.1% increase in export sales orders and a 2.1% increase in domestic sales orders. For exports, the stock of sales orders in the pharmaceutical industry increased significantly compared to the same period last year, more than doubling (211.6%), but with a very low base. However, given the significant increase in new sales orders, a further rise in sales orders is expected. Computer, electronic and optical products manufacturing saw both domestic sales orders (9.5%) and export sales orders (20.1%) increase. New sales orders are expected to decrease. Despite the high base, the stock of sales orders in automotive manufacturing grew by 12.4%. This was driven by the increase in both exports and domestic sales orders. Looking ahead, new sales orders in automotive manufacturing are up by more than 11% for both domestic and export sales, so further growth in sales orders is expected.

New sales orders in priority manufacturing industries increased by 6.0% in December 2022. This was due to a 7.9% rise in new export sales orders and a 12.2% fall in new domestic sales orders. Both export and domestic new sales orders increased significantly in three sectors: electrical equipment manufacturing, machinery manufacturing and automotive manufacturing. In addition, two industries (paper and pharmaceuticals) had new sales orders changing in the opposite direction. While new domestic sales orders in paper production increased by 9.2%, its export sales orders fell by 17.9%, resulting in an overall decrease of 9.4% in new sales orders for this industry. The trend is more positive for the pharmaceutical industry. While new domestic sales orders in the pharmaceutical industry fell by 17.7%, new export sales orders increased by 72.3%, resulting in an overall increase of 51.9%. This expansion of new sales orders has been ongoing since August 2022 and in December it far exceeded the growth rate of the previous months. The increase in new sales orders from August 2022 was partly due to the low base.

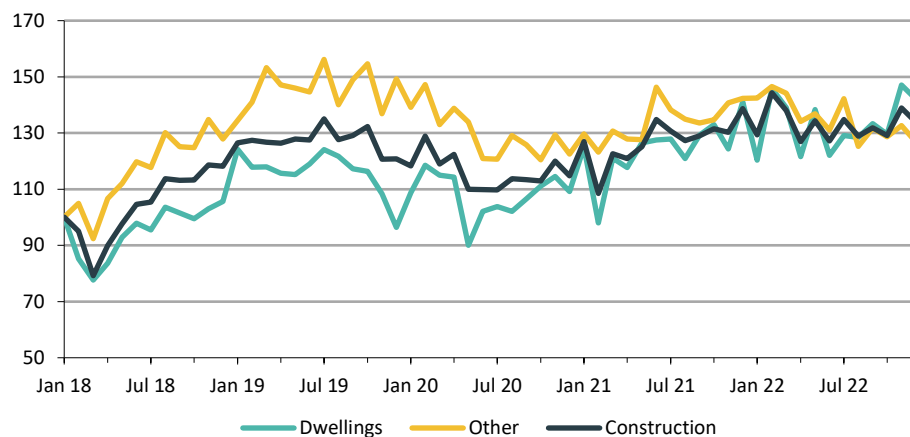
In 2022, the stock of new construction orders fell by 3.1% compared to 2021.

Construction output increased by 3.0% in 2022, driven by a 6.3% increase in buildings and a 1.4% decrease in civil engineering works. Looking ahead, the stock of new construction contracts in 2022 was 3.1% below the 2021 level. This was due to a 17.3% drop in contracts for civil engineering works. At the same time, new contracts for buildings was 10.3% higher than in the previous year.

Construction output fell by 3.9% year on year in December 2022 compared with December 2021. By building group, the construction of buildings increased by almost 1.1% year on year in December 2022, while the construction of civil engineering works fell by 12.7%. Construction contracts at the end of December 2022 were down by 1.2%. This was in line with industrial output for the two main building groups (buildings and civil engineering works). While the month-end stock of contracts for buildings

rose by 13.9%, that for civil engineering works fell by 10.6%. At the same time, new construction sales orders show a slow downward trend. New construction sales orders fell by 35.9% in December 2022, partly due to the high base. New sales orders decreased for both main building groups. New contracts for buildings fell by 4.5%, while new contracts for civil engineering works fell by 59.3%, also due to the high base.

FIGURE 4: CHANGES IN THE CONSTRUCTION INDUSTRY (JANUARY 2018 = 100%)



Remark: Seasonally and calendar adjusted indices.

Source: KSH, Századvég

Industrial and agricultural producer price growth rates moderated.

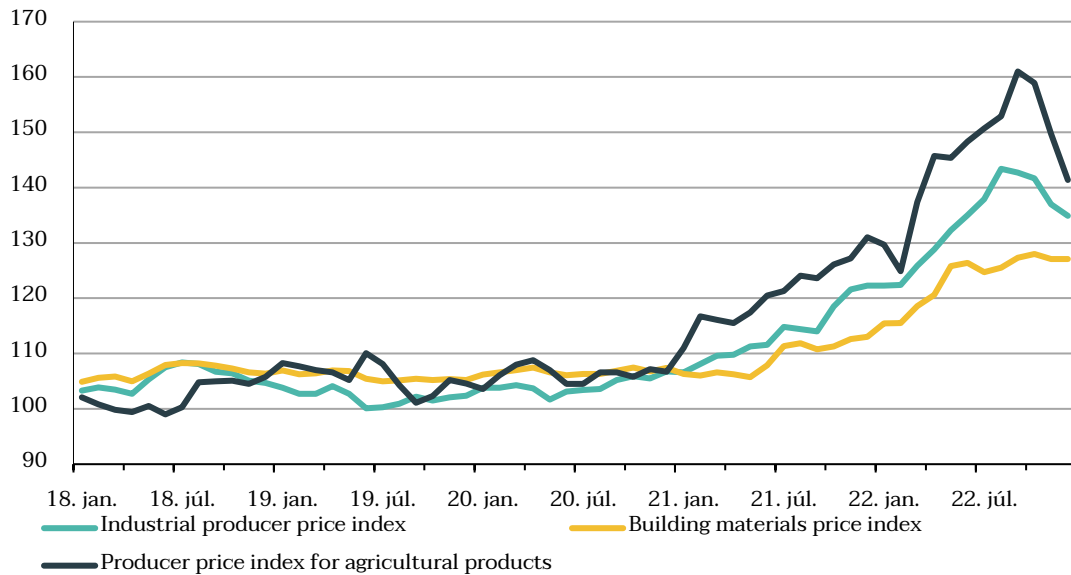
In December 2022, the rate of increase in producer prices for industrial and agricultural goods continued to fall, positively affecting consumer price

developments and new industrial sales orders.

The rate of increase in **industrial** producer prices fell even further. In December 2022, producer prices rose by 34.9% year on year. This annual increase, taking into account the previous months and their base effect, shows a downward trend. As can be seen from the fixed-base industrial producer price indices, the decline in the rate of industrial producer price growth started in October 2022 and continued in December 2022. In December 2022, the 34.9% annual increase in industrial producer prices was driven differently by domestic and export sales. The price increase for

domestic sales was more than three times higher than the price increase for export sales. While domestic sales prices rose by 62.9%, export sales prices increased by 20.7%. This included a sharp rise in energy prices, higher raw material costs and the upward impact of the weakening forint. In **construction**, prices grew at a stagnating rate, with the construction materials price index rising by 27.1% on an annual basis in December 2022, similar to the previous month, compared with an almost identical annual base. However, construction producer price growth accelerated slightly. Although on a quarterly basis, construction producer prices increased by 26.2% in both Q3 and Q4 2022 compared to the same period of the previous year, the base effect was different for the two periods. The latter, Q4 2022, already had a higher base. In Q4 2022, construction producer prices were 4.6% higher than in the previous month. **Agricultural** producer price growth **fell sharply** in December 2022. This could have a further positive impact on food price increases. Agricultural producer prices rose by 41.4% in December 2022 compared with the same period a year earlier. Although the price increase is high, it compares favourably to the 58.9% year-on-year increase in October 2022 and 49.7% in November 2022. It is important to note that, compared to October-November 2022, when the high base was of the same order of magnitude, the base in December 2022 was slightly higher (by 3.8 percentage points), but despite the higher base, agricultural producer prices continued to fall faster. So, the rate of the monthly decline was not just due to the base effect. Falling fertiliser prices may have contributed to the reduction. This is because within agricultural expenses, the fertiliser price index increased by 156.1% in Q1-Q4 2022 compared to an increase of 204.8% in Q1-Q3 2022.

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



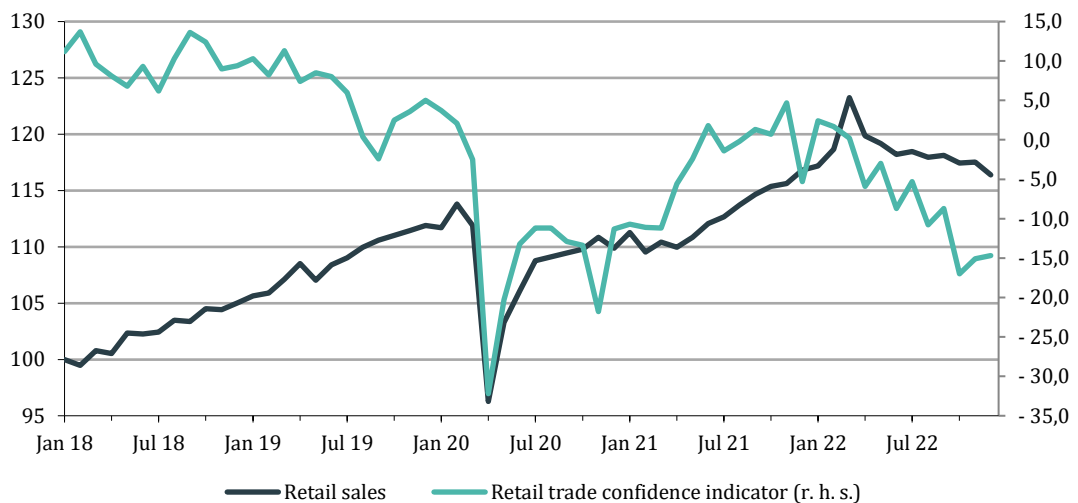
Source: KSH, Századvég.

Retail sales fell by 3.9%.

In December 2022, retail sales decreased by 4.8% on a raw basis and by 3.9% on a calendar-adjusted basis compared with the same period of the previous year. The slowdown in sales is caused by high energy costs, productivity problems in agriculture and the volatile forint exchange rate, which are generating increasing inflationary pressures in the economy, which, combined with a rising interest rate environment, are encouraging households to rationalise consumption. In December 2022, turnover in specialised and non-specialised food shops decreased by 8.3%, while turnover in non-food shops also decreased by 0.4%. In fuel retail, calendar-adjusted volume of sales increased by 1.3% compared to December 2021. The significant downturn in the growth in petrol station sales is due to the abolition of official prices for households. Market prices, which are significantly higher than regulated prices, have encouraged households to cut back on fuel consumption, which has led to a significant decline in the annualised growth rate of over 20% seen in previous months, but it is still in positive territory.

Calendar-adjusted data show an increase of 0.2% in food, beverages and tobacco, while foodstuffs showed a very large decrease of 10.5%. In non-food retail, the sales of books, newspapers and stationery fell by 8.1%, that of furniture and electric goods by 5.3% and that of parcel and internet services by 9.8% compared to the same period last year. In contrast, by far the largest increase in sales (35.3%) was in second-hand goods. In addition, increases were recorded for textile products, clothing and footwear (8.7%) and computer and other manufactured goods (4.4%) compared to December last year.

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



Remark: Seasonally and calendar adjusted indices.

Source: KSH, Eurostat, Századvég

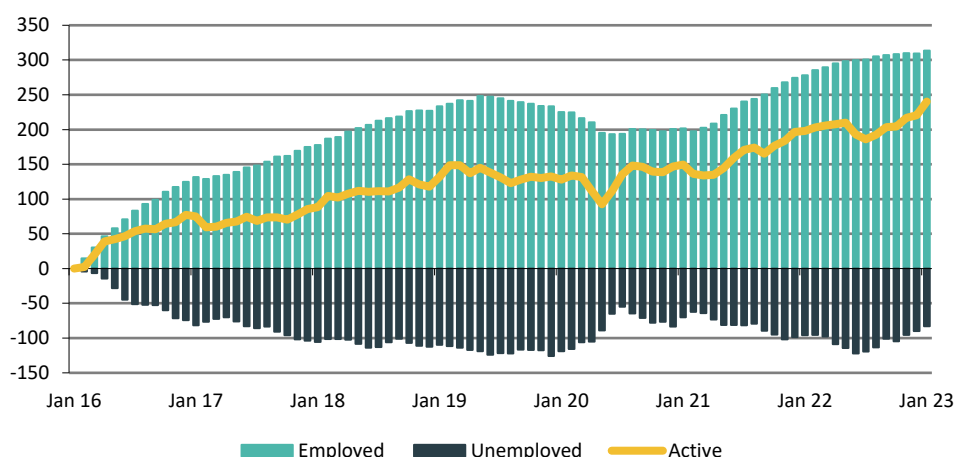
The unemployment rate was 3.9% in

Between November 2022 and January this year, the seasonally adjusted activity rate of the population aged 15-74 was 67.1% (4,907,000 persons), which means an increase of 42,000 in the labour market compared to the same period of the previous year. In the period under review, the seasonally adjusted number of employees was around 4,712,000, an increase of 12,300 and 13,600 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 reaching 196,000, an increase of 22,300 compared to the previous quarter and 13,000 compared to the previous year.

In January, the seasonally adjusted number of employees stagnated compared to December, while it increased by 28,900 compared to the same period of the previous year. The most significant increase in the number of employees was in the competitive sector, with 44,800 more working in enterprises having at least 5 employees compared to 2022, up by more than 5,600 compared to December. The number of non-profit employees rose by a few hundred over the month, while the number of public sector employees fell by 1,100.

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



Remark: Seasonally and calendar-adjusted indices

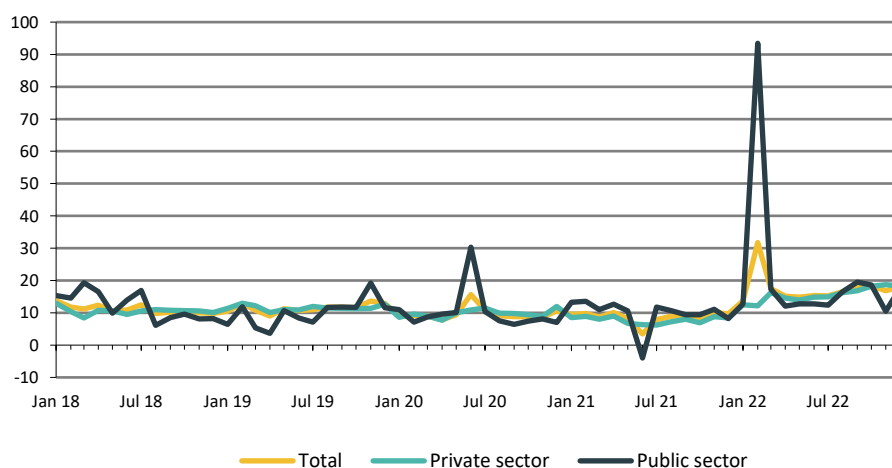
Source: KSH, Századvég

Real wages fell in December.

In December, the average gross monthly wage in the national economy was HUF 581,900, up 18.1% compared to the same period last year. The highest average gross monthly wage was recorded in the competitive sector, at HUF 605,700. The average net monthly wage including benefits was HUF 344,800, an annual increase of 18.7%. The

average regular gross monthly wage, excluding bonuses, rewards and one-off allowances, increased by 18.1% in January 2023 compared to a year earlier, to an estimated HUF 495,700. Real wages fell by 5.1%, reflecting accelerating inflation, which was 24.5% in December. The median gross monthly wage was HUF 447,800.

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



Source: KSH, Századvég

2.4 External balance

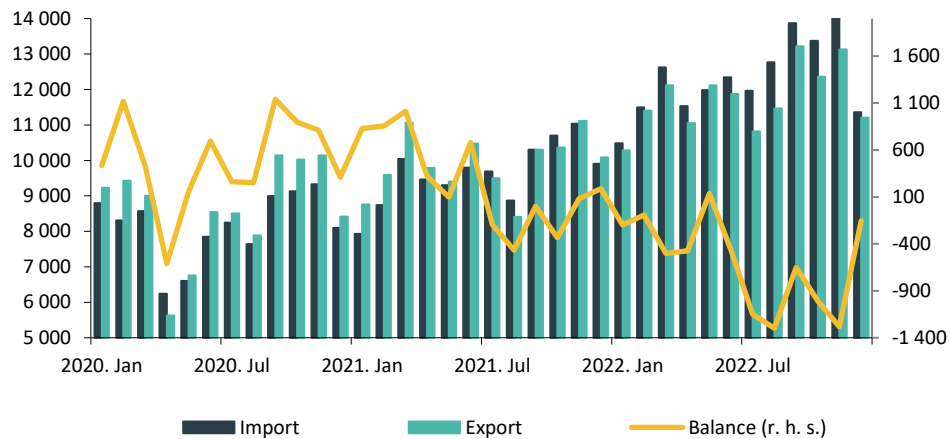
In November, exports of goods increased by 19.0% and imports by 31.0% year on year in euro terms. The trade balance deficit was, therefore, EUR 1,415 million, EUR 1,372 million less than in the previous year.

In November, the volume of food product imports increased by 9.8%, and food product exports decreased by 3.3% year on year. As for energy carriers, imports increased by 1.7% and exports decreased by 17.0%. As for processed products, imports increased by 8.5%, and exports increased by 2.2% year on year. As for machinery and transport equipment, imports increased by 23.0%, and exports by 18.0%.

The trade balance deteriorated.

In December 2022, the EUR value of exports was 12.0% higher and the EUR value of imports was 9.9% higher than a year earlier. Therefore, the trade deficit in goods amounted to EUR 154 million, which is EUR 204 million better than a year earlier.

FIGURE 9: TRADE BALANCE (EUR MILLION)



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

Source: KSH, Századvég

2.5 Fiscal outlook

The general government deficit was HUF 143.6 billion in January.

At the end of January 2023, the deficit of the general government subsector stood at HUF 163.6 billion. Against a deficit of HUF 190.8 billion in the central budget, social security funds showed a surplus of

HUF 3.6 billion and extra-budgetary funds a surplus of HUF 43.6 billion.

When publishing its January budget figures, the Ministry of Finance confirmed that it would reduce the budget deficit to 3.9% this year and the sovereign debt-to-GDP ratio to below 70%.

Central government revenues at the end of January were 2.4% higher than in the same period of the previous year, with tax and contribution receipts 22.6% higher.

Payments from business organisations were 36.6% higher than in January 2022. Within payments from business organisations, corporate tax receipts, the most significant item, were 24.1% (HUF 12.6 billion) higher in January than in the same month of the previous year. Mining royalties and energy sector payments increased significantly by HUF 18.9 billion and HUF 23.5 billion respectively compared to the same period last year, largely due to the temporary introduction of extra taxes in 2022.

Revenues from consumption-related taxes were 19% (HUF 169.7 billion) higher than a year earlier. VAT receipts were HUF 114.7 billion (15.3%) higher than in January of the previous year. The increase in VAT receipts was also driven by higher VAT receipts on domestic, import and tobacco products. Excise tax receipts was HUF 44 billion (44%) more than in January 2022. The most significant increase (HUF 39.4 billion) was observed for tobacco products, where the January 2023 tax rate increase caused a significant increase in stockpiling turnover.

Personal income tax receipts increased by 9.2% (HUF 102.1 billion) compared to January of the previous year. The rise was partly due to wage increases and partly to a low base due to last year's family tax rebate. Receipts from social contribution tax and social insurance contributions increased by 12.4% (HUF 61.8 billion) compared to the same period of the previous year, also caused by wage increases.

The revenue of EU programmes reached HUF 34.6 billion in January, which corresponds to 1.5% of the statutory target. In contrast, expenditures of EU programmes closed at HUF 151.1 billion, 4% of the statutory target.

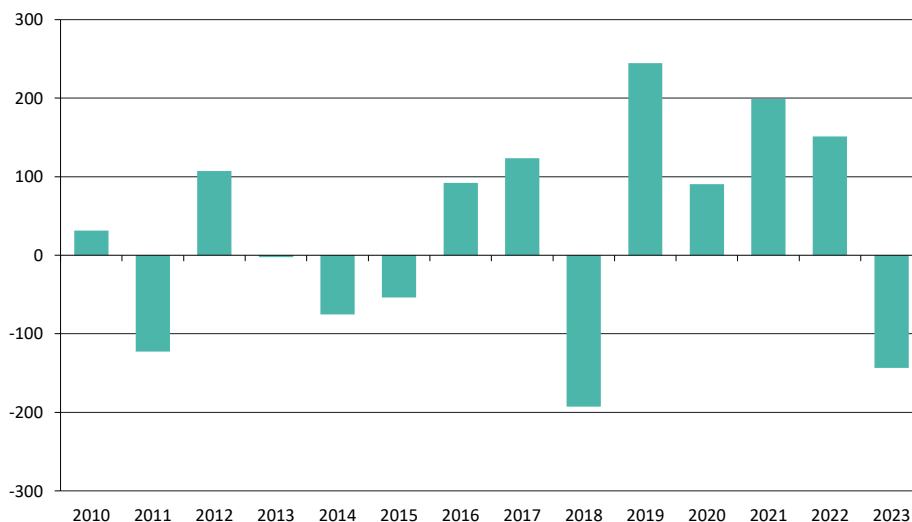
Among significant expenditure items, expenditure on specific and normative subsidies, housing subsidies, expenditure on public property and interest expenditure were higher than a year earlier. In contrast, expenditure by budgetary bodies fell.

The amount spent on specific and normative subsidies was HUF 231.9 billion higher than in January last year. The most significant item of the increase was HUF 173.0 billion in expenditure to maintain discount household utility prices. Expenditure on public property increased to HUF 376.2 billion. The most significant group of expenditure, amounting to HUF 350 billion, is expected to cover the purchase of the state's stake in Vodafone in January 2023. Expenditure on housing subsidies was HUF 13.7 billion higher than in the same period of the previous year.

Expenditure by budgetary bodies was HUF 175.8 billion lower than in the first month of the previous year.

In January 2023, pension expenditure amounted to HUF 427.7 billion, up 27.1% year on year. During the same period, the Health Insurance Fund spent HUF 308.2 billion, an increase of 5.5% 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 7.1%.

FIGURE 10: CENTRAL SUBSYSTEM BALANCE, 2010–2023 JANUARY RESULT, HUF BILLION)



Source: Ministry of Finance, Századvég

2.6 Monetary developments

In January, prices rose by 25.7% on average.

In January 2023, consumer prices increased by an average of 25.7% year-on-year. Over the past year, the highest increases were for food (44.0%) and household energy (52.4%), the latter due to changes in household utility discounts. Consumer prices rose by 2.3% on average over a month. The seasonally adjusted core inflation rate showed a year-on-year increase of 25.3%.

The more significant contributors to the 44.0% average increase in food prices were the 80.6% increase in bread prices, the 76.1% increase in cheese prices and the 76.6% increase in butter and buttercream prices. The average inflation of 73.8% for pastries, 66.4% for dry pasta and 48.3% for poultry also outpaced average food inflation for the month. In contrast, pork prices rose at a below-average rate (29.5%), while sugar (8.3%) inflation was also below average. The main drivers of the 15.5% average inflation in spirits and tobacco were the 34.2% increase in beer and the 18.9% increase in wine prices.

The 24.2% increase in new car prices played a particularly important role in the 13.5% average increase in the prices of consumer durables. Room furniture prices also increased at an above-average rate, by 19.9%, while kitchen and other furniture prices rose by 20.6% compared to the same period last year. Jewellery also saw a significant price increase of 21.9% in on a yearly basis in January. Consumer durables inflation is moderated by a 5.4% increase in the prices of computers, cameras and telephones, and a 2.5% increase in the prices of audio and video devices. For consumer durables, volatile forint exchange rates in the autumn are among the factors that increase inflation risks. However, the recent appreciation of the domestic currency could also have a positive impact on the price of consumer durables in the period ahead.

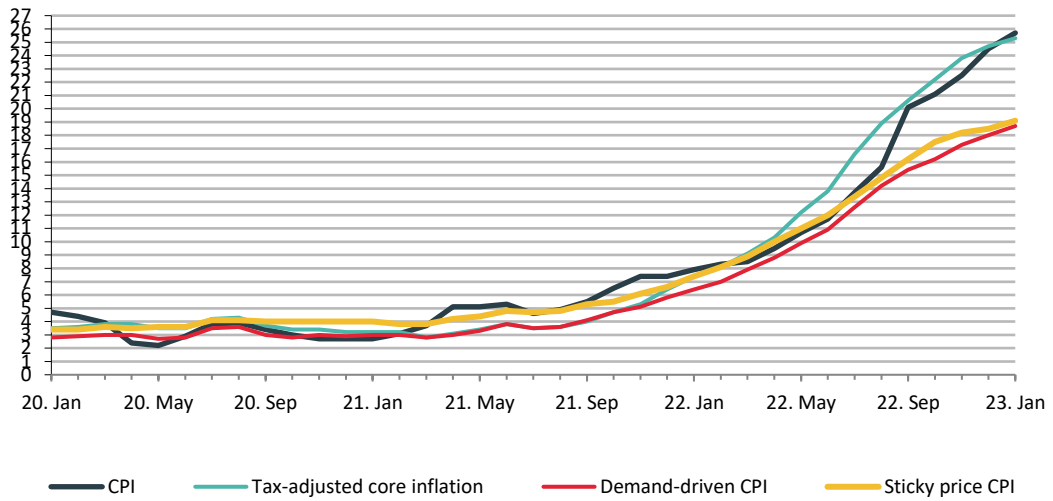
The average increase in household energy prices was 52.4% in January, compared to the same period of the previous year. Within household energy, the price of piped gas increased by 88.6%, electricity by 27.7% and

cylinder gas by 50.6% 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 KSH in the billing month. The rise in energy prices contributed roughly 2.5-3% to the increase in inflation each month. This trend is expected to continue until the end of the base effect in September 2023, but the mild winter and energy saving led to a smaller-than-expected inflation surplus in January.

In December, the price of services rose by an average of 11.3%, with home repair and maintenance up 24.3%, vehicle repair and maintenance up 23.1% and taxi up 32.6%. Tolls, vehicle rental and parking fees also increased by 27.1% due to the repricing in January. 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 3.1% increase in the price of TV subscriptions and a 4.7% increase in the price of local public transport.

Compared with the previous month, food prices rose by an average of 2.4%, with the most significant increase being for seasonal foodstuffs (5.6%). The price of services rose by 2.4% on a monthly basis, while the price of household energy fell by 2.0% compared with December, thanks to the mild winter.

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



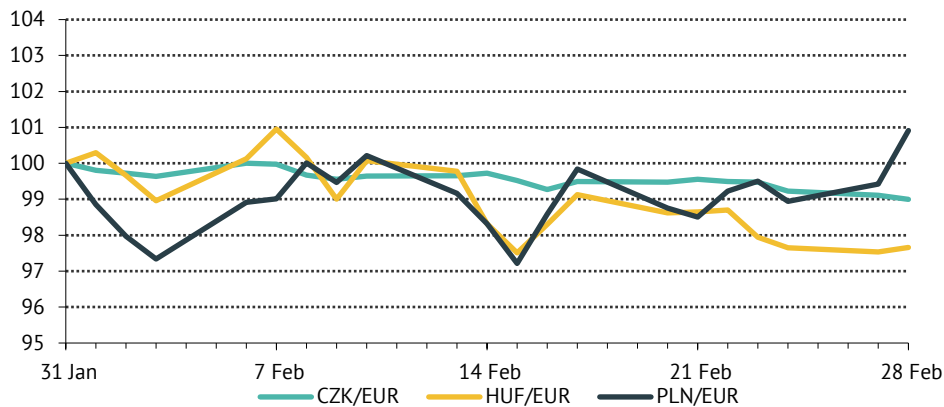
Source: MNB, Századvég

Among the core inflation indicators published by the MNB, in January, the seasonally adjusted core inflation rate was 25.3%, the core inflation rate net of indirect taxes was 25.3%, and the sticky price inflation rate was 19.1%. Core inflation excluding processed food was 18.7% in the first month of the year.

The Czech koruna strengthened, while the Polish zloty weakened.

Exchange rates in the region showed a mixed picture in relation to the euro. In the past period, the Czech koruna strengthened by 1.0%, while the Polish zloty weakened by 0.91% against the euro. However, government bond yields fell: the Czech 10-year government bond yield was 17 basis points lower at 4.95%, while the Polish 10-year yield closed 30 basis points lower at 6.59%.

**FIGURE 12: CHANGES IN EXCHANGE RATES IN THE REGION
(BASELINE VALUE = 100%)**



Source: Refinitiv, Századvég

The Forint strengthened against

Hungarian money and foreign exchange market indicators have recently shown a very positive picture. The 10-year government bond yield closed at 8.68%, dropping 59 basis points. The HUF strengthened by 2.34% against the euro, by 1.46% against the Swiss franc and by 0.28% against the US dollar. This means that at the end of February 2023, one euro was worth 380 forints, one US dollar was worth 358 Forints and one Swiss franc was worth 382 forints. Sovereign debt held by foreigners has recently increased by HUF 1,408 billion to HUF 6,578 billion.

In February, the central bank did not change its effective interest rate.

At its February 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.

Over the past month in the government bond market, yields for shorter maturities varied between -14 basis points and 86 basis points on the

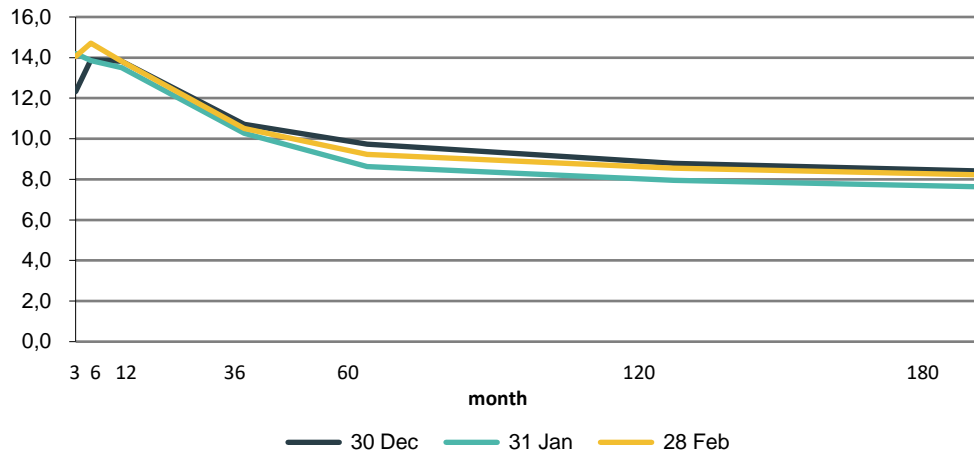
secondary yield curve. This means that the 3-month yield was 14.06%, the 6-month yield was 14.71% and the 1-year yield was 13.82% on 28 February. The 3-year yield increased by 23 basis points to 10.5%. Yields are down 60 basis points over the 5-year horizon, 60 basis points over the 10-year horizon and 59 basis points over the 15-year horizon compared to the previous month. These three yields changed, therefore, to 9.23%, 8.55%, and 8.22%, respectively.

On 28 February 2023, the total value of “MÁP Plusz” government securities held by retail investors was HUF 1,777.6 billion after a HUF 656.9 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 5,045.1 billion (PMÁP as of 31 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 an environment of significantly higher interest rates, the total stock of government securities held by retail investors was HUF 8,819.4 billion, or HUF 200.1 billion higher at the end of February 2023, compared with HUF 8619.4 billion at the end of 2022.

The share of foreign currency debt in the sovereign debt changed to 25.5% in February (i.e. decreased by 1.2 percentage point), which is in the range (maximum 30%) specified in the financing plan for 2023 of GDMA.

At the end of February, 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 13: CHANGES IN THE HUF YIELD CURVE (%)



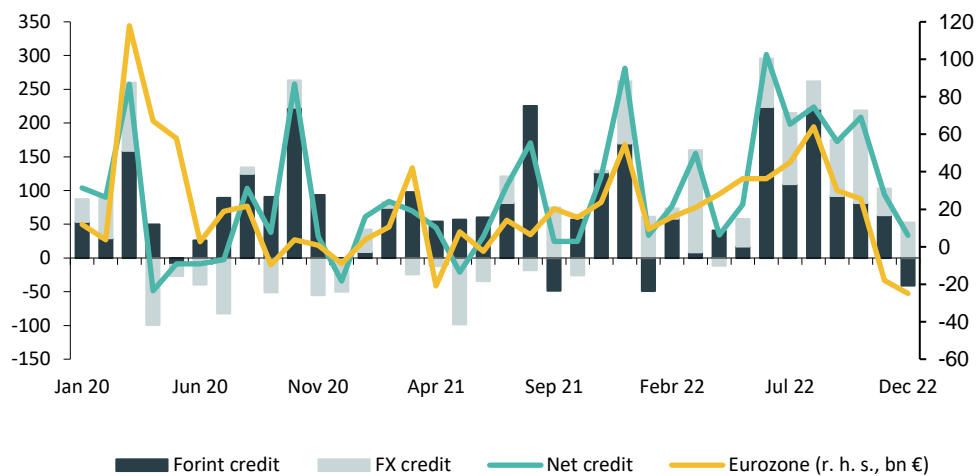
Source: GDMA, Századvég

Corporate credits in foreign currencies have increased significantly.

Seasonally adjusted data show that the net repayment of HUF loans in the business sector was HUF 40.8 billion in February 2023. The net borrowing of foreign currency loans was HUF 52.7 billion in December; 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 33.4 billion in December. Corporate loan repayment in the euro area was EUR 25.0 billion in December 2022.

FIGURE 14: CORPORATE BORROWING (HUF BILLION)



Source: MNB, ECB, Századvég

3. Századvég's forecast¹

TABLE 1:2022 Q4 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, KSH, 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

¹ Date of preparation: 21 December 2022