MONTHLY **MONITOR**

March 2022 Századvég Economic Research Institute













SzázadvéG



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1. Summary

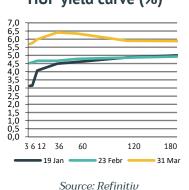
ECONOMIC GROWTH COULD REACH 3.9% THIS YEAR

In the wake of the Russo-Ukrainian War, we have lowered our growth expectations for this year to 3.9%. Economic output could increase by 4.7% in 2023. Inflation could be 9.3% in 2022 and 6.4% in 2023.





HUF yield curve (%)



Forecast (26 March 2022)	2022
GDP volume change (%)	3,9
Inflation (annual average, %)	9,3
Gross wages	13,8
Exchange rate (annual average)	369

Average wages could increase by 13.8% in 2022 and 11.2% in 2023, so real wages could increase by 4.1% in 2022 and 4.5% in 2023, on average. Consumption is expected to grow by 3.9% in 2022 and 3.8% in 2023, while investments are expected to expand by 6.0% and 5.7%, respectively. Net exports will be a drag on economic growth in 2022 but will support it in 2023.

In 2021, the Hungarian economy expanded by 7.1%, meaning that the recovery from the coronavirus pandemic was swift. As for individual sectors, agricultural output fell by 2.2%, while industrial output was up 9.8%, construction 15.8% and services 6.2% on a year earlier. This means that agriculture contributed -0.1 percentage points to growth, while the industrial sector contributed 1.9 percentage points, construction 0.7 percentage points and services 3.6 percentage points.

On the consumption side, the volume of household final consumption expenditure grew by 4.3%, collective consumption by 4.8% and investments by 6.0%. Exports were up 10.1% and imports 8.2% on a year earlier. Thus, the contribution of consumption to growth was 2.0 percentage points, that of collective consumption 0.5 percentage points, that of investment 1.6 percentage points and that of net exports 1.7 percentage points.



2. Economic overview

2.1. External environment

Consumer prices in the US rose by 7.9% in February, which was the fastest pace since January 1982. Within this, food prices rose by 7.9%, energy

Euro area inflation at an all-time high.

prices by 25.6%, the prices of other goods by 6.4% and the prices of services by 4.4%. Euro area inflation also rose to an all-time high of 5.9% in February. Apart from data from recent months, the only other month before that when inflation in the zone was

above 4% was July 2008. Prices of food, alcohol and tobacco rose by 3.2%, energy prices by 32.0%, the prices of other manufactured goods by 3.1% and the prices of services by 2.5%. Among Member States, the highest price increase was recorded in Lithuania at 14.0%, but Estonia also recorded an inflation rate of 11.6% and Belgium 9.5%. In contrast, France and Malta recorded price increases of only 4.2%, while Finland and Portugal recorded increases of 4.4%.

As expected, the European Central Bank did not change its interest rate conditions. At the same time, the schedule for the Asset Purchase Programme (APP) was changed. Following the closure of the Pandemic Emergency Purchase Programme (PEPP) at the end of March, the central bank plans to purchase bonds worth EUR 40 billion in April, EUR 30 billion in May and EUR 20 billion in June. After that, if the data show an improvement in the medium-term inflation outlook, the ECB may stop its purchases altogether in Q3. According to the ECB's latest March forecast, the euro area economy could grow by 3.7% this year, which is 0.5 percentage points below the December forecast. The area's economy is expected to expand by 2.8% next year, broadly in line with the growth rate forecasted 3 months earlier. Inflation, on the other hand, could be 5.1% this year, compared with 3.2% previously expected, and could fall to 2.1% next year, close to the central bank's 2% target.



REPowerEU: The European Commission's response to Russian exposure

On 8 March, the European Commission published its REPowerEU proposal, which sets out measures to boost green energy production, diversify energy supply and reduce demand, and to end dependence on Russian energy as soon as possible. According to Commission data, Russia accounts for 27% of oil imports, 46% of coal imports and 45% of natural gas imports.

The Commission will give Member States the possibility to regulate prices and operate transfer mechanisms to protect consumers and the economy, thereby mitigating the impact of energy price volatility on businesses and farmers. To finance the measures, Member States may temporarily introduce tax measures on extra profits.

At the same time, the Commission has announced its intention to set up a new stand-alone temporary crisis facility to provide liquidity support to the most affected businesses. The crisis facility was adopted on 23 March. Within this context, Member States can set up programmes to provide aid of up to EUR 35,000 for agriculture and fisheries companies most affected by the crisis, and up to EUR 400,000 for other sectors. The decision also allows Member States to provide liquidity support in the form of state guarantees and subsidised loans. For both types of aid, limits apply to the maximum loan amount based on the operational needs of the company.

The Commission has also announced a proposal to require underground storage infrastructures in the EU to be filled to 90% of their capacity by 1 October of the year in question. The proposal issued on 23 March, however, only provides for a level of 80% this year, rising to 90% next year.

To diversify gas supplies, the Commission intends to increase LNG and pipeline imports from non-Russian suppliers and increase the use of biomethane and hydrogen. It also aims to increase energy efficiency in homes, buildings, the industry and the energy system, and to increase the share of renewable energy sources. However, the Commission has not presented detailed plans for how the area will purchase 50 billion cubic-



metres of LNG to replace Russian gas on the current world market, which currently has overdemand, or when the capacity to receive it will be available. The report also ignores the fact that energy efficiency investments may also face capacity constraints (e.g., 30 million heat pumps to be installed by 2030) but includes proposals such as turning down thermostats that control the heating of buildings by 1 °C, which would save 10 billion cubic-metres of gas.

To achieve the announced targets, the Commission is encouraging the speeding up of planning and authorisation procedures, on which it will publish a recommendation in May. The REPowerEU plan, however, is expected to be finalised in cooperation with Member States by the summer. The plan aims to support the diversification of energy supply, accelerate the transition to renewable energy and improve energy efficiency. All these factors are seen by the Commission as necessary to gradually end dependence on Russian gas imports and fossil fuels and provide the EU with a hedge against price shocks.

2.2. SZIGMA indicators

In February 2022, the SZIGMA CI indicator, which provides a snapshot of the current state of the Hungarian economy, remained positive, meaning

The SZIGMA indicator remains positive.

that the economy expanded above trend. In the first month of 2022, industry's domestic and export sales increased on both a monthly and annual basis: by 2.2% and 1.4%, respectively, compared with December 2021, and by 11.9% and 4.9%,

respectively, compared with January 2021. The industry's new domestic sales orders increased by 4.5% on a monthly basis and by 19.1% on an annual basis, while new export sales orders fell by 41.0% on a monthly basis and by 0.9% on an annual basis. In light of the above, the contribution of industry to growth can be positive, but the renewed disruption of supply chains in the wake of the Russo-Ukrainian conflict, shortages of raw materials, chip shortages and rising energy prices pose risks. The end-of-month volume of construction contracts increased substantially, by 49.3% compared to the previous month and by 6.2% compared to January 2021.



The SIGMA LEAD indicator, which expresses our expectations for the short-term performance of the Hungarian economy, shows above-trend growth in March, followed by below-trend growth until July, which then turns back into above-trend growth by the end of the forecast horizon. The Ifo Business Climate index, which measures business sentiment in the German economy, improved by 2.9 index points in February 2022 compared with January 2022 and by 5.9 index points compared with February 2021. The external environment is therefore improving despite the Russo-Ukrainian conflict. Retail sales continued to grow in January 2022. This year, retail sales should make a significant contribution to economic growth, thanks to substantial government transfers and rising consumption as wages rise. Eurostat's consumer confidence index improved by 3.8 index points on a monthly basis and by 12.7 index points on an annual basis in the first month of this year, but it still remained negative (-10.2 index points). In other words, by improving confidence, the segment's sales could be further increased. In 2022, we expect the Hungarian economy to expand by close to 5%, but there are serious risks to growth.

2,0
1,0
0,0
-1,0
-2,0
-3,0
15. Jan 15. Jul 16. Jan 16. Jul 17. Jan 17. Jul 18. Jan 18. Jul 19. Jan 19. Jul 20. Jan 20. Jul 21. Jan 21. Jul 22. Jan 22. Jul
SZIGMA CI
SZIGMA LEAD

FIGURE 1: SZIGMA SIMULTANEOUS (CI) AND LEADING (LEAD) INDICATORS

Source: Századvég



2.3. Real economy

The Hungarian Central Statistical Office's second estimate for Q4 2021

Services pulled GDP growth.

quarter.

showed a 7.1% increase in gross domestic product compared with a year earlier. On a seasonally and calendar-adjusted basis, GDP volume was 7.0% higher than in the same period of the previous year, while it increased by 2.0% compared with the previous

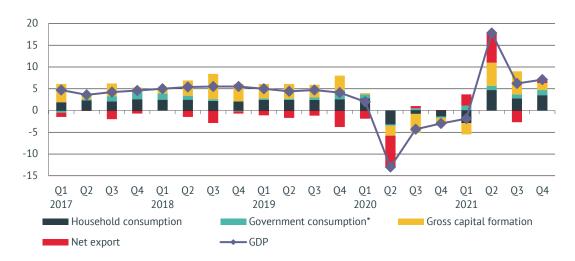
On the production side, the added value generated by agriculture was 6.1% lower than one year before. The added value generated by the industry increased by 2.1% in the period under review, while that of manufacturing within the industry increased by 1.8% compared to Q4 2020. The added value generated by the construction industry in the quarter in question was 21.4% higher, that of services was 8.1% higher than one year before. Agriculture moderated GDP growth by 0.2 percentage points, while construction contributed 1.2 percentage points, services 4.6 percentage points and industry 0.4 percentage points.

On the consumption side, household final consumption expenditure increased by 7.7% and the volume of collective consumption by 5.8% compared to Q4 2020. Gross fixed capital formation increased by 3.3% compared to the same period of the previous year.

In Q4 2021, the volume of exports was 3.2% higher than in the same period of the previous year, while the volume of imports was 2.3% higher. Hence, the foreign trade balance increased GDP growth by 0.8 percentage points. Within exports, exports of services increased by 28.3%, while exports of goods decreased by 1.5% on an annual basis. Imports of services increased by 19.1% and imports of goods decreased by 0.4% compared to the same period last year.



FIGURE 2: CONTRIBUTION TO Y-O-Y GDP-GROWTH (EXPENDITURE APPROACH; %)



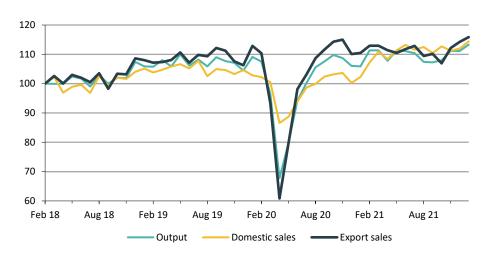
Source: HCSO. *: with any kind of social transfers

In January, industrial production was up sharply by 8.9% year-on-year on raw data basis and by 7.1% on working-day adjusted data basis. In comparison with December, the output of this sector grew by 1.9%, according to seasonally and working day-adjusted data. Industrial sales were up 9.0% year-on-year in the first month of the year, with domestic sales up 13.1% and export sales up

Industrial production increased by 8.9%.

6.5%.

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



Remark: Seasonally and working-day adjusted data

Source: HCSO, Századvég



Breaking down the output of the entire industry as a sector, one can see that the output of the mining industry, which is of minor importance, increased by 14.9%, that of manufacturing increased by 7.4% and that of the energy industry increased by 15.3%. Within manufacturing, the most significant growth (19.4%) was achieved by other manufacturing, but the increase in the production of coke and refined petroleum products (19.3%) was not far behind. These were followed by a 13.7% increase in food production. The output of the important automobile industry was 6.8% higher than one year before. The biggest decline, 14.4%, was in pharmaceuticals. At the end of January, order volumes of the observed sectors were significantly higher than a year earlier, by 24.8%. Within this, the volume of domestic sales orders was 8.6% smaller than a year earlier, while the volume of export sales orders was 27.1% larger. The volume of new orders was 1.6% higher than a year earlier. Within this, the volume of new domestic sales orders increased by 19.1%, while that of new export sales orders decreased by 1.0%.

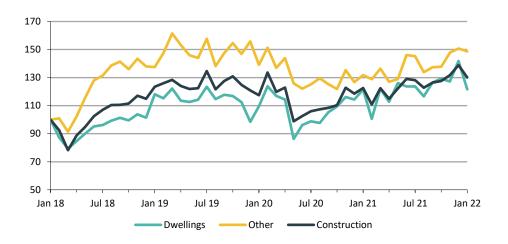
Construction output fell compared to the previous month.

After the strong expansion of the previous months, construction output turned down in January. Although the sector's output grew by 3.3% on an annual basis, it decreased by 6.3% on a monthly basis. Compared to the same period of the previous year, construction of buildings shrank by 0.4%,

while that of civil engineering works increased by 12.9%. The volume of contracts in the sector remains high, with total contracts 6.3% higher than a year earlier, but within this, while the volume of orders for civil engineering works increased by 15.3%, the volume of orders for buildings shrank by 5.1%. The volume of new contracts for these two main groups moved, however, in the opposite direction: the volume of contracts for the construction of buildings increased by 49.7%, while that for civil engineering works fell by 39.8%, so that the overall volume of new contracts was 11.7% higher than a year earlier.



FIGURE 4: CONSTRUCTION SECTOR (JANUARY 2018 = 100%)



Remark: Seasonally and working-day adjusted data

Source: HCSO, Századvég

In January 2022, retail sales increased by 4.5% in terms of raw data and by

The volume of retail sales increased by 4.1%.

4.1% in terms of calendar-adjusted data compared to the same period of the previous year. Adjusted data show a 0.1% decrease compared to the previous month. In January 2022, the calendar-adjusted volume of sales increased by 0.1% in specialised and non-specialised food shops, by 6.4% in non-

food shops and by 10.7% in fuel retail, relative to January 2021.

Several years of dynamic growth in sales in parcel companies and online specialty stores continued in November, up 8.2% year-on-year on a calendar-adjusted basis. There was also a significant increase in the sales of second-hand goods (32.9%), pharmaceuticals (25.1%) and textile products, clothing and footwear (15.5%). In addition, an above-average increase in sales was also recorded for books, newspapers and stationery (6.0%) and perfumes (6.6%). The sales of shops selling computers and other manufacturing goods (2.2%) also increased, although less than the sales of retail shops. However, there was a decrease in the sales volumes of shops selling a mixed range of manufactured goods (3.6%) and shops selling furniture and electric goods (6.3%) compared to January 2021. Calendar-adjusted data show that, in January 2022, sales decreased by 0.8% in non-specialised food shops, and it increased by 2.3% in shops selling food



products, beverages, and tobacco products, relative to the same period of the previous year.

FIGURE 5: RETAIL SALES VOLUME (JANUARY 2018 = 100%) AND
RETAIL TRADE CONFIDENCE INDICATO



Remark: Seasonally and working-day adjusted data

Source: HCSO, Eurostat, Századvég

In January 2022, the number of employees exceeded 4,680,000 on the basis of seasonally adjusted data. This represents an increase of 7,000 month-

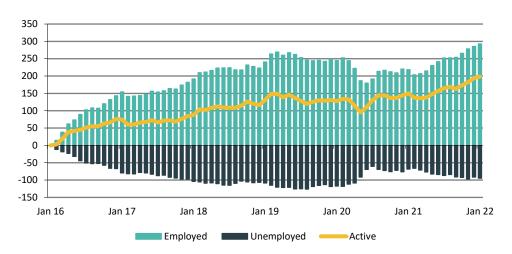
Almost 50,000 more people were working than before the coronavirus pandemic broke out.

on-month and nearly 75,000 year-on-year. In the same period in 2020, when the coronavirus pandemic had not yet emerged in Hungary, the number of people in employment was 48,000 lower. Compared to the previous month, the number of the active population increased by 4,000, while the number of the unemployed decreased by 3,000 to 186,000. This represents an unemployment rate of 3.8% for the 15-74 age group. In the last month of 2021, the number

of employees increased by 5,000 to close to 2,865,000 on a seasonally adjusted basis, while the annualised increase was close to 96,000. In the same month, the number of employees increased by 3,000 in enterprises having at least 5 employees, and by 1,000 in both the public sector and at non-profit organisations. The number of people employed in public employment schemes fell only slightly by a thousand to 81,000 last December.



FIGURE 6: LABOUR MARKET TRENDS (JANUARY 2016 = 0, THOUSANDS OF PERSONS)



Remark: Seasonally and working-day adjusted data

Source: HCSO, Századvég

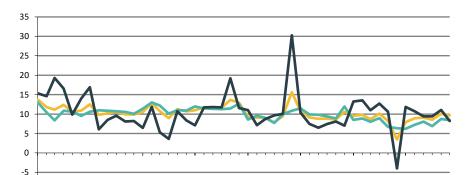
In December 2021, the average gross monthly wage in the national economy was HUF 492,800, 9.7% more than in the same period of the

In 2021, the average net monthly wage exceeded HUF 300,000 thanks to the tax allowances.

previous year. Average monthly wages in the competitive sector rose by 8.4% to HUF 512,100 forints, while by 8.2% in the public sector to HUF 420,800 in December. In the last month of the year, the average net monthly wage was HUF 327,700, while it was HUF 337,200 with benefits. This also represents an increase of 9.7%, or 2.1% in real inflation-adjusted terms. In 2021 as a whole, the average net monthly

wage in the national economy increased by 8.7% to HUF 291,800, and by HUF 300,500 if tax allowances are taken into account. Taking the 5.1% annual inflation rate into account, this corresponds to a real increase of 3.4%.





Jan 20

Private sector

FIGURE 7: GROSS WAGES (ANNUAL CHANGE, %)

Remark: Seasonally and working-day adjusted data

Jan 19

Jul 19

Source: HCSO, Századvég

-10 [⊥] Jan 18

2.4. External balance

Jul 18

The foreign trade balance deteriorated.

In December, the EUR value of product exports increased by 18.0%, and the EUR value of product imports increased by 27.0% year on year. The foreign trade deficit was, therefore, EUR 378 million, EUR 658 million less than in

Jul 20

Jan 21

Public sector

Jul 21

the previous year.

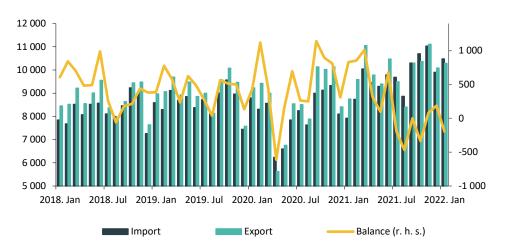
In December 2021, the volume of food product imports increased by 16.0%, and food product exports increased by 1.1% year-on-year. As for energy carriers, imports increased by 0.2%, and exports decreased by 14.0%. As for processed products, imports increased by 0.2%, and exports increased by 6.1% on a year-on-year basis. As for machinery and transport equipment, imports increased by 9.8%, and exports by 5.7%.

In January 2022, the EUR value of exports was 15.0% higher and the EUR value of imports was 31.0% higher than a year earlier. The trade deficit in goods amounted to EUR 196 million, which is EUR 1,142 million less than a year earlier.

The current account balance stood at EUR -763.0 million in January 2022, down from EUR -81.3 million in January 2021.



FIGURE 8: BALANCE OF TRADE (IN MILLION EUR)



Remark: The data relating to January 2022 derive from the first estimates.

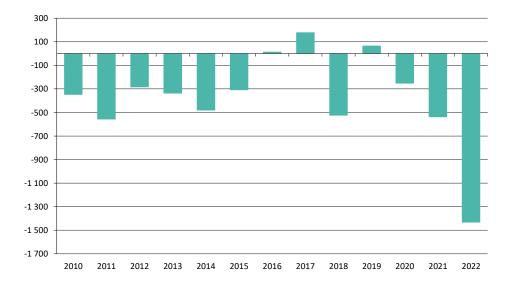
Source: HCSO

2.5. Fiscal outlook

The deficit in the first two months of this year is HUF 1,433.7 billion.

In February 2022, the central budgetary subsystem closed with a deficit of HUF 1,433.7 billion. This deficit consisted of the HUF 1,440.1 billion deficit of the central budget, the HUF 42.6 billion deficit of the social security funds subsector and the HUF 49.0 billion surplus of the extra-budgetary funds.

FIGURE 9: BUDGET DEFICIT IN JANUARY-FEBRUARY (BN HUF)



Source: PM



By the end of the second month of this year, 27.7% (HUF 209.3 billion) more value-added tax had been collected than in the same period last year. Value-added tax on domestic and imported products made a positive contribution to the increase in VAT receipts, while the revenue from tobacco products reduced it. On the other hand, due to the 2021 personal income tax rebate and the increase in wages, the resulting item closed at HUF -55.3 billion, which is HUF 538.2 billion less than the January–February 2021 balance. Excise duty revenue was 0.8% (HUF 1.4 billion) lower in January–February 2022 than a year earlier, mainly due to lower sales of tobacco products. Revenues from social contribution tax and social insurance contributions exceeded the same period of the previous year by 9.9% (HUF 90.5 billion). This is explained by the increase in the average wage, the reduction in the social contribution tax rate and the abolition of the vocational training contribution.

In the first two months, EU programmes generated HUF 193.5 billion in revenue for the treasury, compared with HUF 692.8 billion in expenditure. Besides the transfers paid out in February (personal income tax rebate, "13th month's" pension, six-months' arms allowance), tax cuts (personal income tax exemption for under-25s, reduction of the social contribution rate), expenditure due to the Russo-Ukrainian war, higher-than-planned increases in pensions and pension-like benefits, and the substantial minimum wage and guaranteed wage minimum will determine this year's budgetary developments.

2.6. Monetary developments

In February 2022, consumer prices increased by 8.3% on average relative to the same period of the previous year. The most significant price

In February, prices increased by 8.3%, on average.

increases over the past year have been in vehicle fuels and food. On average, food prices increased by 11.3% and fuel prices by 18.7% compared to the same period last year.

More significant contributors to the 11.3% average increase in food prices were the 19.2% increase in poultry prices, the 27.7% increase in potato prices, the 17.8% increase in bakery product prices, the 25.0%



increase in bread prices and the 22.1% increase in dry pasta prices. Average food inflation was, however, held back by a 2.5% increase in salami, dry sausage and ham prices, a 1.3% increase in pork prices, a 5.5% increase in non-alcoholic soft drink prices and a 6.9% increase in fresh domestic and tropical fruit prices.

The prices of other products and fuels increased by 10.8% in February, year-on-year. Within this, vehicle fuel prices increased by 18.7%, explained by the base effect and long-standing supply-demand imbalances. Higher price increases were held back by the government's fuel price cap.

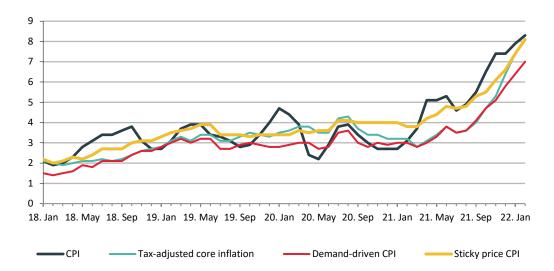
The average increase in household energy prices was 1.3% in February, compared to the same period of the previous year. Within household energy, fuelwood prices increased by 9.2%, coal prices increased by 13.3%, and bottled gas prices increased by 6.7% in a single year. The price of electricity, pipeline gas and district heating remained unchanged.

In February, prices of services increased by an average of 5.5%, mostly driven by a 41.2% increase in motorway tolls, vehicle rental and parking, a 6.9% increase in the prices of health services, a 17.4% increase in home repair and maintenance prices, an 12.2% increase in vehicle repair and maintenance prices, and an 9.2% increase in the prices of personal care services. The average increase in the price of services was moderated by the stagnation in the price of gambling, a 3.5% increase in condominium common charges, a 3.9% decrease in the price of local public transport and a 2.4% decrease in the price of telephone and internet.

Clothing prices increased by 3.9% and the prices of durable consumer goods increased by 8.3% on average in a single year. Taking a closer look at the latter, one can see that jewellery prices increased by 9.9%, home furniture prices increased by 15.0%, new car prices increased by 7.3% and used car prices increased by 10.0%. Prices of spirits and tobacco increased by an average of 8.2%, including tobacco by 9.9%, compared to the same period in 2021.



FIGURE 10: INFLATION (Y-O-Y, %)



Source: MNB

Among the core inflation indicators published by the MNB, each of the seasonally adjusted core inflation rate, the core inflation rate excluding the effects of indirect taxes and the sticky price inflation rate stood at 8.1% in February. Core inflation excluding processed food was 7.0% in the first month of the year.

Both the ECB Board of Governors and the Federal Open Market Committee met in the recent period. Euro area interest rate conditions did not change, i.e. the reference interest rate is still 0.00%, the active and deposit rates of central bank availability are 0.25% and -0.50%, respectively. However, the Fed's Federal Open Market Committee (FOMC), which decides on interest rates, raised its benchmark rate by 25 basis points to a target range of 0.25-0.5%.

The Czech koruna and the Polish zloty strengthened slightly.

Exchange rates in the region showed a mixed picture in relation to the euro. Exchange rates in the region fell sharply against the euro after the outbreak of the Russo-Ukrainian war, before correcting sharply towards the end of the period under review. In the past period, the Czech koruna strengthened by 0.1%, while a zloty weakened by 2.6% against the euro. Government bond

the Polish zloty weakened by 2.6% against the euro. Government bond yields rose sharply because of higher risks and central bank rate hikes, with



the Czech 10-year government bond yield 70 basis points higher at 3.72% and the Polish 10-year yield up 125 basis points to 5.22%.

112 111 110 109 108 107 106 105 104 103 102 101 100 99 98 23 Feb 2 Mar 9 Mar 16 Mar 23 Mar 30 Mar CZK/EUR — HUF/EUR — PLN/EUR

FIGURE 11: REGIONAL EXCHANGE RATES (START DATE = 100%)

Source: Refinitiv

The HUF weakened.

overall, Hungarian money and foreign currency market indicators have shown a more negative picture in the past period. The yield of 5-year treasury securities closed at 6.34%, rising 155 basis points. The HUF weakened by 3.0% against the euro, by 4.2% against the Swiss franc and by 4.8% against the US dollar. This means that on 31 March 2022, one Euro was worth HUF 367, one US Dollar was worth HUF 329, and one Swiss Franc was worth HUF 356. Sovereign debt held by

At its interest rate meeting in March, the Monetary Council of MNB raised its base interest rate by 100 basis points; the base interest rate is, therefore,

foreigners has recently increased by HUF 225 billion to HUF 4,563 billion.

The base rate rose by 100 basis points.

4.4%. The Monetary Council of the central bank increased the interest rate corridor asymmetrically, raising the overnight deposit interest rate to 4.4% and the lending rate to 7.4%. The

central bank decides on the interest rate for the one-week deposit facility on a weekly basis, which is currently set at 6.15%, 175 basis points above the base rate. The MNB has increased the effective interest rate by 540 basis points since the start of the rate hike cycle. The asymmetric interest rate corridor defines the overnight interbank market interest rate and the central bank's one-week deposit rate.



MNB will continue to focus on keeping short interest rates in line with what it considers to be the optimal short interest rate. Therefore, the MNB has been actively using its foreign exchange liquidity swap facility again since the beginning of March.

In a statement issued about its March meeting, the Monetary Council declared the objective that all monetary policy instruments of MNB should support the achievement of price stability as quickly as possible. This is why MNB stopped buying government bonds in December. Maintaining the stability of the government securities market continues, however, to remain important to the Monetary Council, which is, therefore, ready to intervene with temporary purchases of government bonds if necessary, which does not imply a change in its fundamental monetary policy stance.

Over the past month in the government bond market, yields for shorter maturities increased by between 117 basis points and 132 basis points on the secondary yield curve. This means that the 3-month yield was 5.7%, the 6-month yield was 5.76% and the 1-year yield was 5.99% on 31 March. The 3-year yield increased by 174 basis points to 6.41%. Yields are up 155 basis points over the 5-year horizon, 103 basis points over the 10-year horizon and 95 basis points over the 15-year horizon compared to the previous month. These three yields changed, therefore, to 6.34%, 5.9%, and 5.88%, respectively.

Since 3 June 2019, retail investors can buy super government bonds (MÁP+) with a relatively high interest rate that gradually increases during its term, ensuring a total annual yield of 4.95%. On 16 March 2022, the total value of treasury securities held by retail investors was HUF 5,780.55 billion after a HUF 139.08 billion decrease from the HUF 5,919.63 billion level at the end of February 2021. In this high-inflation environment, more and more investors (16 March: HUF 2597.51 billion in PMÁP) are opting for inflation-tracking government bonds that offer a fixed real interest rate. 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.



The share of foreign currency debt in the sovereign debt changed to 20.7% in February (i.e. increased by 0.6 percentage point), which is in the range (10–25%) specified in the financing plan for 2022 of GDMA.

Among the big international credit rating agencies, Moody's (25 March 2022) has recently had an announced date for revising or confirming the risk rating of the Hungarian sovereign debt. Moody's has, however, not issued a statement. The rating of Hungary's sovereign debt is currently unchanged at Baa2 with stable outlook with Moody's, BBB with S&P and BBB with 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.

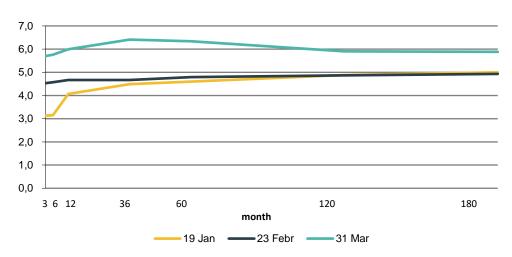


FIGURE 12: THE HUF YIELD CURVE (%)

Source: ÁKK, Századvég

Seasonally adjusted data show that the net repayment of HUF loans in the business sector was HUF 46.1 billion in January 2022. The net borrowing

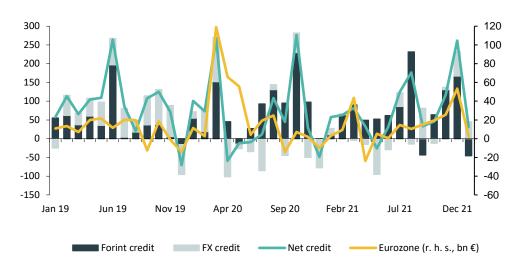
Companies have reduced HUF loans.

of foreign currency loans was HUF 45.6 billion in January 2021; 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 30.8 billion in January. Corporate borrowing in the euro area was EUR 2.435 billion in January 2022.







Source: MNB, ECB

In January, the value of gross loan placement in Hungarian forints over and above bank overdrafts was HUF 64.8 billion, which is HUF 102.94 billion less than the amount of the previous month. The sum of newly granted euro-loans was HUF 148.0 billion, which is HUF 88.7 billion more than the figure for December.



3. Macroeconomic forecast of Századvég Economic Research

Economic growth could be around 4% this year.

Our current forecast already takes into account the effects of the current Russo-Ukrainian war. It is important to underline the uncertainty about the war: we cannot see the end of the war, nor the damage caused by the war and sanctions. We estimate that Hungary's economic output

could grow by 3.9% in 2022 and 4.7% in 2023. Since our previous forecast in December 2021, we have revised down our overall growth expectations due to the war. Following the much better-than-expected GDP expansion of 7.1% in Q4, we would have revised our growth forecast upwards to close to 6%, but we have revised our expectations downwards due to the outbreak of the Russo-Ukrainian war and its expected prolonged economic consequences this year.

In the context of the Russo-Ukrainian war, it is important to emphasise the uncertainty, as the time when the fighting will end and the extent of the damage are not yet clear. All that is certain at the moment is that supply chains will be disrupted as a result of these events, and energy and food prices will also rise, with inflationary effects. At the same time, we do not expect the conflict to completely stop economic growth, given the strong fundamentals of the economy, with high employment and investment rates.

We have revised our inflation forecast upwards from 5.1% last year to 9.3% this year and 6.4% next year, due to the impact of the war. As a result, real wage growth may also be slower than previously expected. However, given that average wages are expected to rise by an average of 13.8% this year and 11.2% next year, real wage growth could still be positive at 4.1% and 4.5%, respectively. Rising real wages and government transfers, although smaller than previously expected, could still lead to a substantial increase in consumption: 3.9% in 2022 and 3.8% in 2023. Household consumption will therefore be the main driver of economic growth this year.



Investment is also expected to grow by 6.0% this year and 5.7% next year, slightly less than previously expected, but still noticeably, due to the uncertain economic situation.

External trade is expected to slow economic growth in 2022 and accelerate it in 2023. The dampening effect in 2022 is amplified by the effects of war. Exports could grow by 4.6% in 2022 and imports by 5.1%, while the two could increase by 5.9% and 4.7%, respectively, in 2023. At the same time, the increase in the price of energy, which Hungary imports in significant quantities, leads to a deterioration in the foreign trade balance.

The labour market situation should remain positive, at least for employees. Employment could remain high and the unemployment rate could remain below 4%, meaning that the economy could continue to face labour shortages. High employment can be supported by high levels of investment. The Russo-Ukraine war is affecting employment in two ways: adverse macroeconomic effects are holding back employment growth, while the placement of refugees remaining in the country may alleviate some of the labour shortage.

Monetary policy has been tightened recently to tackle rising inflation, with the base interest rate and the one-week deposit rate also rising. We expect that the one-week deposit rate will continue to be the instrument with which the central bank will react flexibly to rapidly changing market conditions, while the base interest rate will change less frequently, at most monthly. Currently, the base rate is below the one-week deposit interest rate, so further tightening is expected, with a peak above 7% and a decline in line with the decline in inflation. We expect the central bank's inflation target to be reached after 2023.

An important challenge for fiscal policy is to further reduce the increased deficit caused by the coronavirus pandemic. This process must continue in the current war situation, notably by postponing government spending that does not support long-term growth or improve competitiveness. Taking all this into account, the budget deficit to GDP ratio could be 4.2% in 2022 and 3.2% in 2023. This should continue the gradual decline in the debt-to-GDP ratio, from 78.2% at the end of 2021 to 67.7% at the end of 2023.



4. Századvég forecast ¹

TABLE 1: Q1 2022 PROJECTION

	2021	2022			2022	2023				2023	
	annual	Q1	Q2	Q3	Q4	annual	Q1	Q2	Q3	Q4	annual
Gross domestic product (volume index, %)	7,1	5,2	3,1	3,7	3,7	3,9	4,9	5,2	4,8	3,9	4,7
Household consumption expenditure (volume index, %)	4,3	6,4	2,5	3,7	2,8	3,9	5,1	2,8	4,2	3,0	3,8
Gross fixed capital formation (volume index, %)	6,0	14,4	-1,0	1,1	9,5	6,0	5,7	10,9	3,9	2,3	5,7
Export volume index (based on national accounts, %)	10,1	2,8	4,9	5,9	4,6	4,6	4,9	5,7	6,5	6,4	5,9
Import volume index (based on national accounts, %)	8,2	5,2	4,8	4,9	5,6	5,1	4,0	4,8	5,0	5,1	4,7
Foreign trade balance (bn EUR)	1,9	0,7	-0,4	-0,6	-1,2	-1,5	1,0	-0,2	-0,2	-0,9	-0,3
Consumer price index (%)	5,1	8,7	9,4	9,9	9,2	9,3	7,6	6,5	6,0	5,5	6,4
Central bank's base rate at the end of the period (%)	2,4	4,4	6,4	7,2	6,8	6,8	6,4	5,80	5,20	5,00	5,00
Unemployment rate (%)	4,1	3,8	4,0	3,8	3,6	3,8	3,8	3,7	3,7	3,6	3,7
Gross average earnings (year-on-year change, %)	8,9	12,5	14,4	14,4	13,8	13,8	11,5	10,6	11,1	11,5	11,2
Current account balance as a percentage of GDP	-3,1					-4,8					-3,2
External financing capacity as a percentage of GDP	-0,5					-2,5					-1,0
General government ESA-balance as a percentage of GDP	-6,8					-4,2					-3,2
Government debt (% of GDP)	76,8					72,5					67,7
GDP based external demand (volume index, %)	5,3	3,9	3,4	3,0	2,7	3,3	2,5	2,4	2,4	2,3	2,4

Source: MNB, HCSO, Századvég-Calculation

TABLE 2: CHANGES COMPARED TO OUR PREVIOUS FORECAST

	2022			2023			
	Dec 2021	Mar 2022.	Difference	Dec 2021	Mar 2022.	Difference	
Gross domestic product (volume index, %)	5,3	3,9	-1,4	4,8	4,7	-0,1	
Household consumption expenditure (volume index, %)	7,4	3,9	-3,6	3,7	3,8	0,1	
Gross fixed capital formation (volume index, %)	6,4	6,0	-0,4	7,5	5,7	-1,8	
Export volume index (based on national accounts, %)	6,0	4,6	-1,5	4,6	5,9	1,3	
Import volume index (based on national accounts, %)	6,6	5,1	-1,5	3,6	4,7	1,2	
Foreign trade balance (bn EUR)	3,6	-1,5	-5,1	4,9	-0,3	-5,2	
Consumer price index (%)	5,3	9,3	4,0	3,7	6,4	2,8	
Central bank's base rate at the end of the period (%)	3,20	6,80	3,6	3,20	5,00	1,8	
Unemployment rate (%)	3,6	3,8	0,3	3,2	3,7	0,5	
Gross average earnings (year-on-year change, %)	11,3	13,8	2,5	10,6	11,2	0,6	
Current account balance as a percentage of GDP	-1,9	-4,8	-2,9	-1,1	-3,2	-2,1	
External financing capacity as a percentage of GDP	0,0	-2,5	-2,5	1,2	-1,0	-2,2	
General government ESA-balance as a percentage of GDP	-5,2	-4,2	1,0	-3,5	-3,2	0,3	
Government debt as a percentage of GDP	78	72,5	-5,5	75,0	67,7	-7,3	
GDP based external demand (volume index, %)	,5	3,3	-1,3	2,5	2,4	-0,1	

¹ The forecast is valid as of 26 March 2022

