MACROECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES

OF THE MONETARY COUNCIL MEETING

OF 23 MAY 2023

MAY

2023

Time of publication: 2 p.m. on 7 June 2023

The background material 'Macroeconomic and financial market developments' is based on information available until 17 May 2023.

Article 3 (1) of the MNB Act (Act CXXXIX of 2013 on the Magyar Nemzeti Bank) defines achieving and maintaining price stability as the primary objective of the Magyar Nemzeti Bank. The MNB's supreme decision-making body is the Monetary Council. The Council convenes as required by circumstances, but at least twice a month, according to a pre-announced schedule. At the second scheduled meeting each month, members consider issues relevant to decisions on interest rates. Abridged minutes of the Council's rate-setting meetings are released regularly, before the next policy meeting takes place. As a summary of the analyses prepared by staff for the Monetary Council, the background material presents economic and financial market developments, as well as new information which has become available since the previous meeting.

The abridged minutes and the background materials to the minutes are available on the MNB's website at:
https://www.mnb.hu/en/monetary-policy/the-monetary-council/minutes

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1. Macroeconomic developments

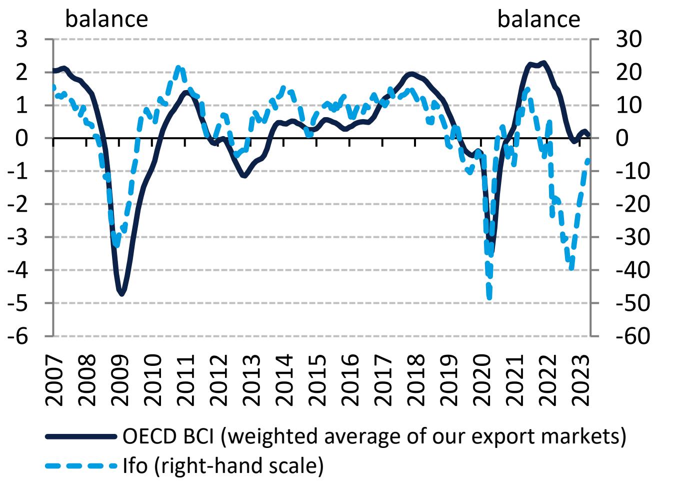
1.1. Global macroeconomic environment

In 2023 Q1, global economic growth slowed down. The euro area, the European Union, the United States and China saw an economic growth of 1.3 percent, 1.2 percent, 1.6 percent and 4.5 percent, respectively, in year on year terms. In April, forward-looking confidence indices improved slightly in the euro area and the United States, while they deteriorated in China. Annual inflation in the United States and in China decreased to 4.9 percent and 0.1 percent, respectively, in April. Based on preliminary data, inflation in the euro area stood at 7.0 percent in April, up from 6.9 percent in the previous month, year on year. In April, inflation fell in all but five countries in the European Union.

In 2023 Q1, GDP growth in the major economies slowed down further. In an international comparison, the euro area, the European Union, the United States and China registered an economic growth of 1.3, 1.2, 1.6 and 4.5 percent, respectively, on an annual basis, according to preliminary data. Among the 22 EU countries publishing preliminary data, annual GDP growth was the highest in Spain (+3.8 percent) and Cyprus (+3.4 percent) in 2023 Q1. Hungary's main trading partner, Germany's economy shrank by 0.1 percent. Economic performance increased in 16 Member States, stagnated in Germany, while it declined in Hungary, Austria, the Netherlands, Ireland and Lithuania, quarter-on-quarter.

Monthly production indicators and retail sales typically rose in April. In April, industrial production in the US grew by just 0.2 percent, the lowest since March 2021. Industrial production expanded by 5.6 percent in China and by 1.4 percent in the euro area in April, year on year. In April, the volume of retail sales rose by 1.6 percent in the United States, while in China – owing to the lifting of the strict epidemiological restrictions – it grew significantly, by 18.4 percent, year on year. In March, a 3.8 percent fall was registered in the euro area.

Chart 1 Business climate indices in Hungary's export markets

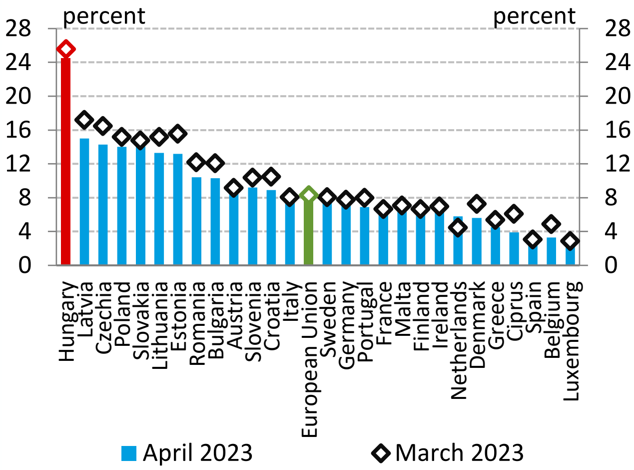


Source: OECD, Ifo

In April, forward-looking confidence indices improved slightly in the euro area and the United States, while they deteriorated in China (Chart 1). In April, business sentiment in the euro area slightly improved based on the Economic Sentiment Indicator (ESI) and the Purchasing Managers Index (PMI) on a monthly basis. The PMI improved in the United States, while deteriorated in China compared to the previous month, however, it was above the threshold (50 points) in both countries in April.

International labour market developments remained unchanged. In April, the unemployment rate in the United States was 3.4 percent (reaching a 50-year low level again after January), while in the euro area it stood at 6.5 percent in March.

Chart 2 Developments of inflation in European Union



Note: HICP and CPI rates.

Source: Eurostat

In April, inflation in the United States decreased to 4.9 percent, while in China, it fell from 0.7 percent in March to 0.1 percent in April, year on year.

Based on preliminary data, inflation in the euro area was 7.0 percent in April, up from 6.9 percent in the previous month, in year on year terms. Core inflation was 5.6 percent in April, following 5.7 percent in March. The actual inflation figure was slightly above analysts' expectations of 6.9 percent, while the core inflation figure was in line with analysts' consensus.

Inflation declined in all but five EU countries in April. Hungary had the highest inflation rate among the EU countries. In addition, the Baltic countries and the Visegrad countries also had higher annual price index. In the region, prices rose by 14.3 percent in the Czech Republic, while in Poland and Slovakia by 14 percent, year on year (Chart 2).

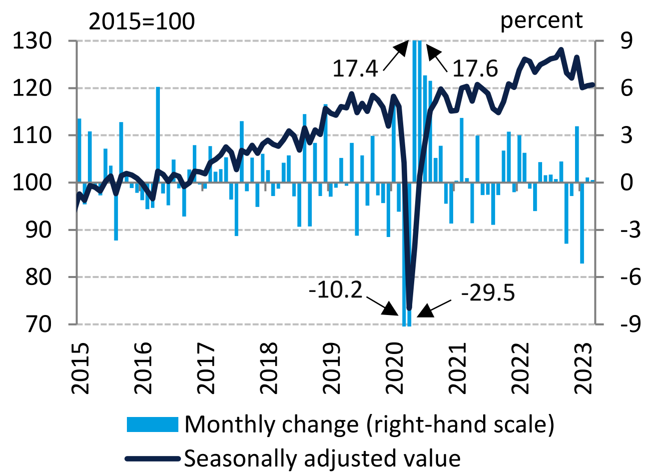
1.2. Real economic developments in Hungary

In 2023 Q1, Hungary's gross domestic product fell by 0.9 percent year on year. Incoming macroeconomic data mostly indicate a gradual decline in economic activity in the first months of the year. In March 2023, industrial production, construction output and the volume of retail sales fell by 4.1 percent, 9.8 percent and 13.1 percent, respectively, year on year. The average number of employees in the 15-74 age group was 4,707,000 in March 2023. In 2023 Q1, 21,000 more people worked in Hungary than in the same period last year. The unemployment rate stood at 4.0 percent in March.

1.2.1. Economic growth

In 2023 Q1, Hungary's economic performance was down by 0.9 percent, year on year, while GDP declined by 0.2 percent, on a quarter-on-quarter basis. According to the HCSO's data release, in Q1 industry was the largest contributor to the fall in economic performance. The decline was mitigated by the performance of agriculture and services. The healthcare sector was the largest contributor to growth in services, coming close to the level seen before the coronavirus pandemic.

Chart 3 Developments in industrial production



Source: MNB calculation based on HCSO data

In March 2023, the volume of industrial production fell by 4.1 percent, as a result of which industrial output registered a steady decline since January in an annual comparison. Seasonally and calendar adjusted series show a 3.9 percent decline compared to March last year. Compared to the previous month, the level of production rose by 0.2 percent (Chart 3). Production fell in most of the manufacturing subsectors but rose in the automotive industry, battery manufacturing and other machinery manufacturing, year on year. The output of the automotive industry, representing the largest share, grew by 23.5 percent, year on year, while production of electrical equipment, including battery production and the manufacture of electric motor, rose by 23.1 percent. The rest of the subsectors representing a larger weight registered a decline in production. The output of petroleum refining (-29.6 percent), chemical substances production (-27.0 percent), energy production (-25.1 percent), mining (-22.6 percent), rubber, plastic and non-metal production (-17.1 percent), manufacture of computers and electronic products (-13.8 percent), food production (-13.3 percent) and metal industry production (-12.9 percent) declined significantly compared to last March.

The volume of construction output declined by 9.8 percent in March 2023, representing a steady fall since January on an annual basis. The decline is largely attributable to the high output in the base period. Construction of buildings and other construction decreased by 13.2 percent and 1.6 percent, respectively, year on year. Based on seasonally and calendar adjusted data, total construction output fell by 1.3 percent compared to February. The number of new contracts decreased by 31.8 percent compared to March 2022. The number of contracts for buildings increased by 3.6

percent, while it fell by 54.1 percent for other structures. The end-March volume of construction companies' contract portfolio fell short of the value registered a year ago by 27.9 percent. Contracts for the construction of buildings and of other structures declined by 9.0 percent and by 39.4 percent, respectively, year on year.

In March 2023, the volume of retail sales fell by 13.1 percent, representing four months of declining sales on an annual basis. The base effect resulting from the government disbursements early last year was a significant contributor to the decline in March. Excluding fuel trade, turnover declined by 9.5 percent based on data adjusted for the calendar effect. The volume of retail sales, excluding fuel trade, has been falling since last July on an annual basis. Compared to the previous month, the volume of retail sales rose by 0.8 in March, and thus the monthly fall lasting since October halted. The level of retail sales is still close to the level registered at the beginning of 2021 based on seasonally and calendar adjusted data. Retail turnover declined in all product groups, except motor vehicle and vehicle parts and shops selling medicine and perfumes.

Based on preliminary data, the trade balance showed a surplus of EUR 899 million in March 2023, which improved the balance further, following the surplus of EUR 581 million registered in February. The last time when the trade balance of goods showed a larger surplus was in January 2021. The balance improved by EUR 1.7 billion, compared to the same period of the previous year. The balance adjusted for VAT residents improved by EUR 1.6 billion on an annual basis, and it showed a surplus of EUR 299 million. In March, despite the decline in industrial production, the value of goods exports in euro terms rose by 16.5 percent, while that of imports, in line with the slowdown in domestic demand items, registered a moderate year-on-year increase of 2.1 percent. In February 2023, the terms of trade improved by 1.4 percent in an annual comparison. The contribution of mineral fuels deteriorates the terms of trade to a decreasing degree; in February, the effect of this was 0.9 percent.

In April 2023, high frequency data mostly reflect decelerating economic activity. Based on online cash register data, nominal turnover in April rose by 9.2 percent, while turnover adjusted for inflation fell by 14.8 percent in annual terms. Air passenger traffic, goods traffic and road passenger traffic declined (-8.4 percent, -9.9 percent, -9.7 percent, respectively) according to data received to date. Electricity load data fell by 4.8 percent. The number of housing market transactions declined by 38.7 percent, according to data available to date. Cinema attendance rose by 22.8 percent. Catering turnover rose by almost 19.5

percent in April. Google searches for the term "unemployment benefit" was low.

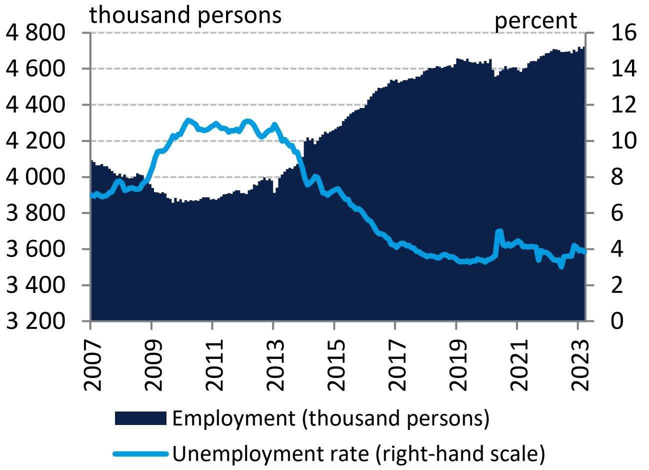
1.2.2. Employment

Based on Labour Force Survey (LFS) data, the average number of employees in the 15-74 age group was 4,707,000 in March 2023. In 2023 Q1, the average number of employees was 4,696,000, exceeding the year-on-year figure by 21,000 (Chart 4). In the first three months of the year, on average, the number of employees in the primary labour market and of those working abroad rose by 18,000 and 14,000, respectively, while the number of fostered employees fell by 10,000, compared to the same period of the previous year.

In March, the number of the unemployed was 195,000, exceeding the year-on-year figure by 19,000 persons, thus on the whole, the unemployment rate stood at 4.0 percent. Based on seasonally adjusted data, the number of unemployed in March was unchanged compared to February. Based on data published by the National Employment Service in March and April 2023, the number of registered jobseekers in Hungary was 244,000 (-7,000 on an annual basis) and 235,000 (-6,000 on an annual basis), respectively. Based on seasonally adjusted data, the number of the registered job seekers in April 2023 remained unchanged compared to March, and it is still below the number measured in the months before the outbreak of the coronavirus pandemic.

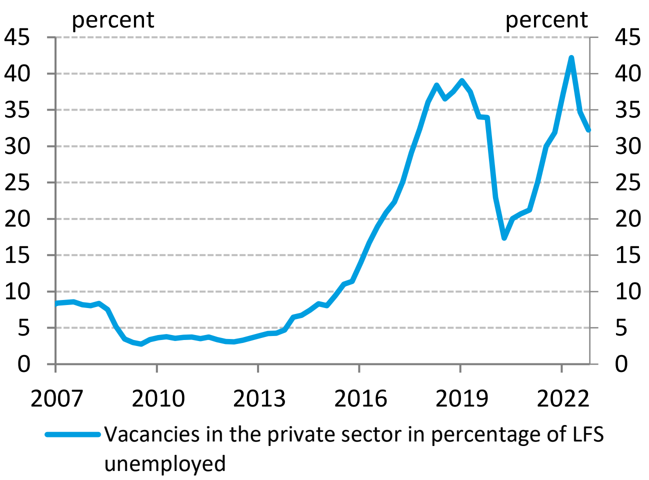
The labour market remains historically tight (Chart 5). In 2022 Q4, unsubsidised available vacancies amounted to 59,000 in the private sector, representing an increase of 4 percent in annual terms and remaining broadly unchanged compared to the previous quarter. Labour demand remained unchanged in market services, while it declined moderately in manufacturing, quarter-on-quarter. Within the public sector, job vacancies in public administration declined significantly and moderately in education, while they slightly rose in the healthcare sector compared to the third quarter.

Chart 4 Number of persons employed and the unemployment rate



Note: Seasonally adjusted data.
Source: HCSO

Chart 5 Developments in labour market tightness indicator



Note: Seasonally adjusted, quarterly data.
Source: HCSO

1.3. Inflation and wages

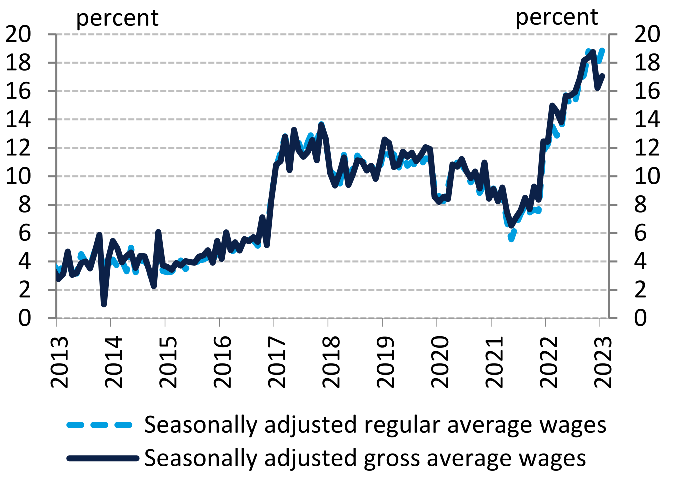
In April 2023, domestic inflation declined faster than in the previous months. Consumer prices rose by 24.0 percent year on year. For the first time since August 2021, core inflation also declined and it stood at 24.8 percent, while core inflation excluding indirect taxes was 24.7 percent. Incoming inflation data were matched analysts' expectations. In February 2023, average regular earnings (excluding bonuses) rose by 17.3 percent in annual terms in the overall economy, and by 19.0 percent in the private sector.

1.3.1. Wages

In February 2023, gross average earnings in the private sector rose by 17.6 percent year on year. The amount of bonus payments was close to the historical average in February. Average regular earnings (excluding bonuses) rose by 17.3 percent in annual terms in the whole economy and by 19.0 percent in the private sector, respectively.

According to seasonally adjusted data, growth in both gross average wages and regular average wages accelerated in the private sector compared to the previous month (Chart 6). In the private sector, wage dynamics in manufacturing outstripped that in market services. Annual wage dynamics were over 15.0 percent in most sectors. In February, based on raw data, manufacturing wages were higher by 19.4 percent, year on year. In market services, HCSO registered a growth of 16.7 percent. Gross wages in construction and trade rose by 16.4 percent and 15.3 percent, respectively, in annual terms.

Chart 6 Dynamics of average earnings in the private sector

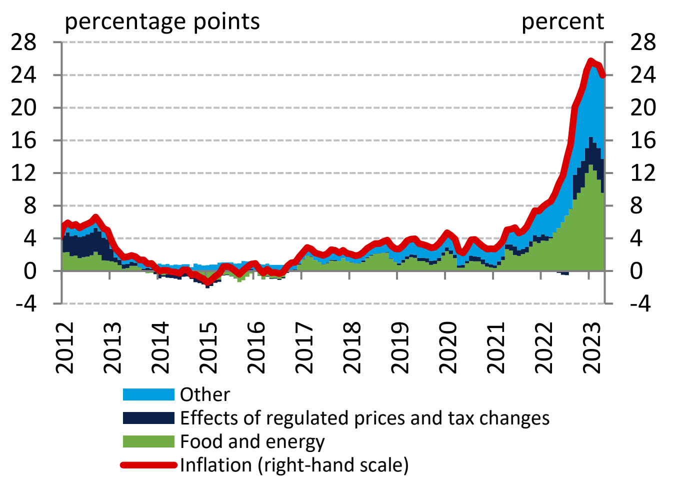


Source: MNB calculation based on HCSO data

1.3.2. Inflation developments

In April 2023, inflation in Hungary continued to fall at a faster pace than in previous months. Consumer prices rose by 24.0 percent, year on year (Chart 7). Compared to the previous month, inflation declined by 1.2 percentage point. The slowdown was entirely driven by foods (-1.3 percentage points). In April, for the first time since August 2021, core inflation fell and stood at 24.8 percent, while core inflation excluding indirect taxes was 24.7 percent. Compared to the previous month, annual core inflation eased by 0.9 percentage point. The fall in core inflation was essentially fully attributable to the decline in the inflation of processed food. The incoming data were in line with analysts' expectations. The median was 24.1 percent, while expectations varied between 23.5 and 24.6 percent.

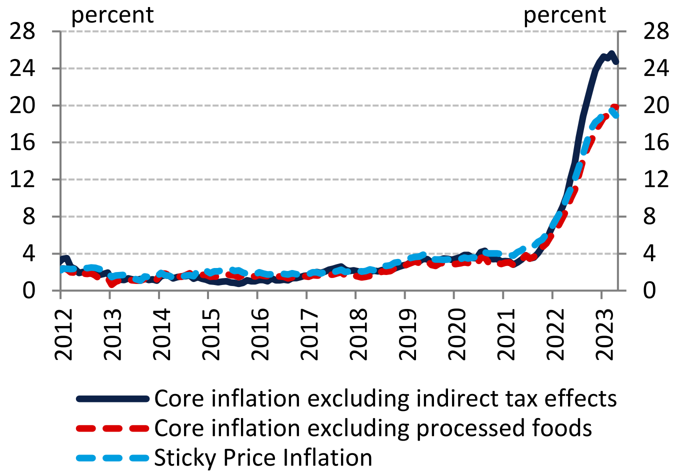
Chart 7 Decomposition of inflation



Source: MNB calculation based on HCSO data

The monthly change in core inflation excluding processed food prices, which better reflects market developments, was 1.6 percent. Underlying inflation indicators, capturing persistent trends on an annual basis, moderated or stagnated (Chart 8).

Chart 8 Measures of underlying inflation indicators



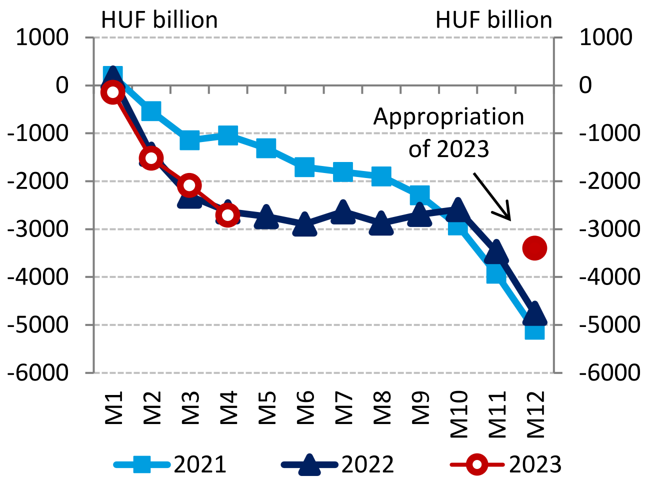
Note: Core inflation excluding processed food corresponds, with unchanged content, to the former demand sensitive inflation measure.

Source: MNB calculation based on HCSO data

1.4. Fiscal developments

In April 2023, the balance of the central sub-sector of the general government showed a deficit of HUF 620 billion. The year-to-date cumulative deficit in 2023 rose to HUF 2,710 billion by the end of April, accounting for 80 percent of the annual appropriation of HUF 3,400 billion. In April, revenues of the central sub-sector were HUF 152 billion higher than a year before, with tax and contribution revenues rising by HUF 224 billion year on year. Expenditures were nearly HUF 446 billion above the level seen in April 2022.

Chart 9 Intra-year cumulative cash balance of the central government budget



Source: Budget Act of 2023, Hungarian State Treasury

The balance of the **central sub-sector of the general government** in April 2023 was a deficit of HUF 620 billion. The cumulative deficit for 2023 increased to HUF 2,710 billion by the end of April, which is 80 percent of the HUF 3,400 billion annual appropriation (Chart 9).

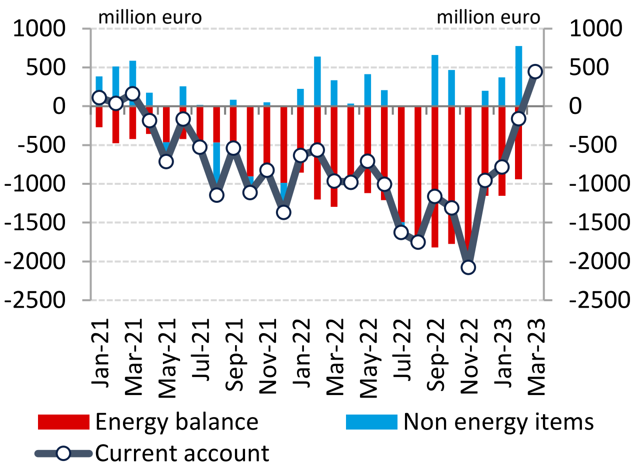
In April, **revenues of the central sub-sector** were HUF 152 billion higher than a year before. Tax and contribution revenues rose by HUF 224 billion at an annual level. Payments by enterprises, VAT revenues and social contribution tax revenues rose by HUF 63 billion, HUF 40 billion and HUF 92 billion respectively, compared to April 2022. Gross VAT revenues rose by a decelerating rate of 10 percent, which is attributable to the decline in the volume of retail sales. EU grants were recognised in the amount of HUF 69 billion during the month; however, the larger part of this had been received earlier.

Expenditures were approximately HUF 446 billion higher than in April 2022. The growth is primarily attributable to the rise of HUF 393 billion in normative and special subsidies. Besides, the increase of almost HUF 90 billion in interest expenditures and the rise of HUF 90 billion in pension expenses was offset by the decrease of HUF 100-100 billion in the net expenditure of budgetary organisations and chapters, and in the expenditures related to EU projects.

1.5. External balance developments

According to data received, the trend improvement in external balance developments continued. In March 2023, the current account showed a surplus of almost EUR 450 million, while net lending amounted EUR 561 million. The substantial improvement in the current account balance was mostly attributable to the favourable developments in trade in goods, resulting from the improvement in the energy balance and the strong growth in net exports. According to financial accounts data, net external debt expanded again in parallel with the net outflow of foreign direct investments.

Chart 10 Developments of current account and energy balance



Source: MNB, HCSO

In March 2023, the current account balance became positive, showing a surplus of almost EUR 450 million (Chart 10). Net lending amounted to EUR 561 million. The substantial improvement in the current account balance was mostly attributable to the favourable developments in goods trade. The goods surplus in March was the combined result of the improved energy balance and the dynamic growth in net exports, while imports – in line with the declining consumption – remained moderate, accompanied by the stabilisation of the services balance surplus at a high level. Income balance deficit increased slightly and the transfer balance surplus rose.

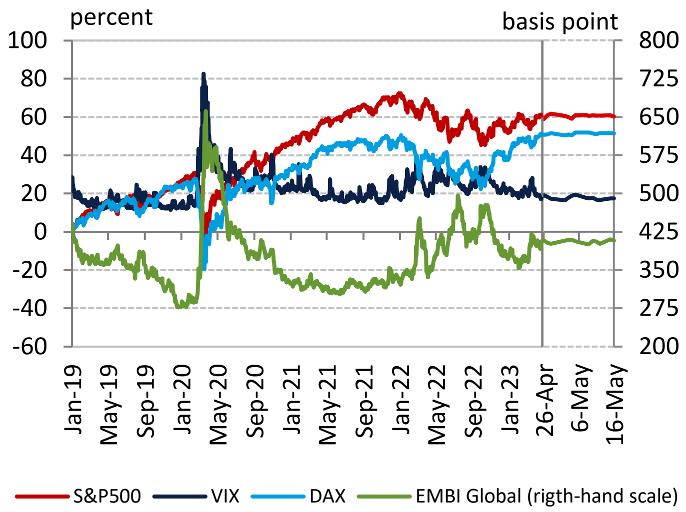
According to financial accounts data, net external debt expanded again in parallel with the net outflow of foreign direct investments. The fall in net foreign direct investments was partly attributable to dividend payments. Net external debt rose by about EUR 0.7 billion due to transactions, which was attributable to the substantial rise in the government's indicator, while net external debt of banks and companies declined.

2. Financial markets

2.1. International financial markets

In the period since the last interest rate decision investor sentiment improved. Concerns about certain actors of the global banking system grew again as a result of another bank failure in the US. However, market turbulences proved to be temporary. In addition to the circumstances of the bank failure, market participants' attention was focused on the expectations for the world's leading central banks' interest rate policy and macroeconomic data releases. Long-term yields generally declined in developed markets and in the CEE region. Leading stock indices showed a mixed picture.

Chart 11 Developed market equity indices, the VIX index and the EMBI Global Index

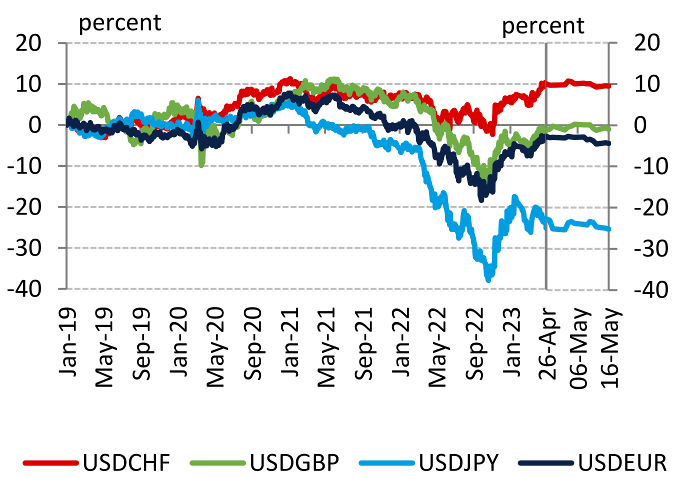


Source: Bloomberg

Among the **risk indicators**, the VIX index, the key measure of equity market volatility, decreased overall by 0.8 percentage points to 18.0 percent compared to the level registered at the previous interest rate decision, while in emerging markets the EMBI Global bond market premium decreased by 3 basis points. The MOVE index (a measure of developed bond market volatility) declined by 7 basis points to 130 basis points (Chart 11).

Leading stock indices showed a mixed picture. The US S&P 500 increased by 0.9, while the Dow Jones was down 1.5 percent over the period. Among leading European stock market indices, the German DAX rose by 0.2 percent, while and the French CAC40 fell by 1.7 percent. Among the Asian indices, the Japanese Nikkei and the Shanghai stock market index was up by 4.3 percent, and 0.8 percent, respectively, compared to the level seen at the previous interest rate decision. Overall, the developed and emerging market MSCI composite indices increased by 0.5 and 1.4 percent, respectively.

Chart 12 Evolution of developed market FX exchange rates from January 1, 2019

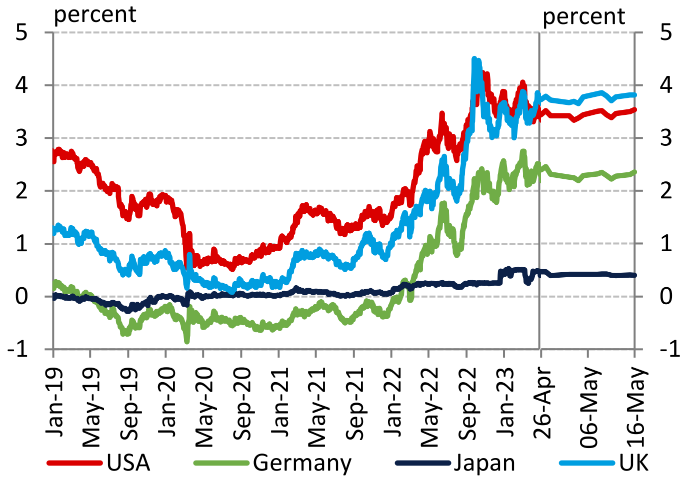


Note: Positive values indicate the strengthening of the variable (second) currency.
Source: Bloomberg

The US dollar mostly appreciated against the major currencies (Chart 12). The US dollar appreciated by 2.0 percent against the Japanese yen, 0.6 percent against the Chinese renminbi, 0.5 percent against the Swiss franc and 1.0 percent against the euro, bringing the euro-dollar exchange rate to around 1.086 by the end of the period. The US dollar depreciated by 0.6 percent against the British pound and by 1.1 percent against the Canadian dollar.

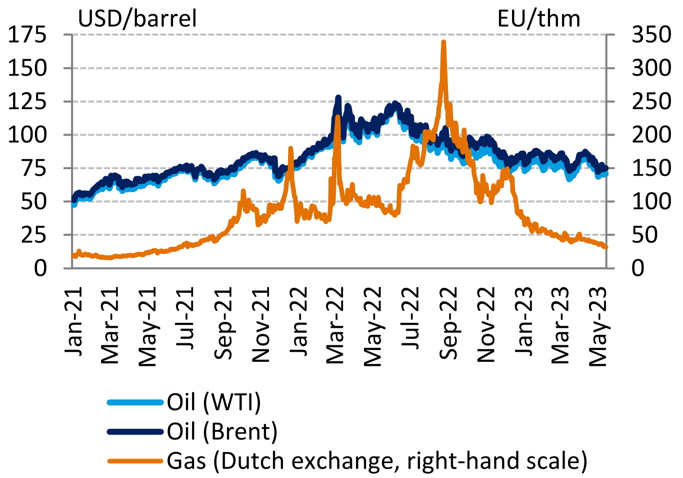
Long-term yields generally moderated in developed markets, excluding the US, and in the CEE region (Chart 13). Ten-year US yields rose by 13 basis points, while the German yields fell by 3 basis points, and thus the US yield closed the period at 3.53 percent, while the German yield at 2.35 percent. Yields in the Mediterranean countries moderated: the Spanish, Portuguese, Italian and Greek fell by 1, 6, 5 and 17 basis points, respectively. Among the yields on 10-year government bonds in the countries of the CEE region, Polish yields increased by 4 basis points, while Czech and Romanian yields decreased by 28 and 32

Chart 13 Yields on developed market long-term bonds



Source: Bloomberg

Chart 14 Developments in oil and gas prices since January 2021



Source: Bloomberg

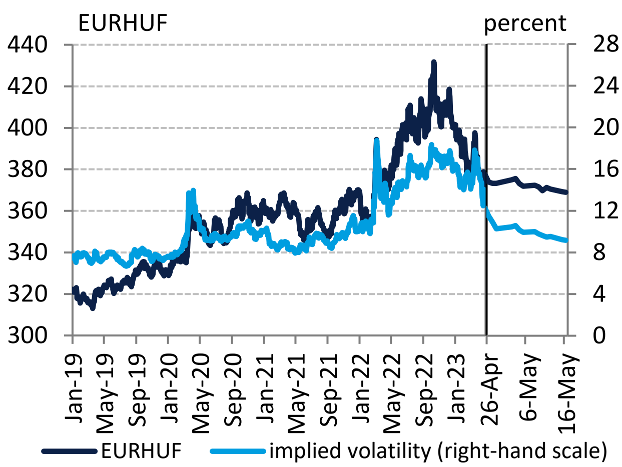
basis points respectively. Hungarian yields have fallen by 36 basis points since the April rate decision.

Oil prices have fallen since the previous interest rate decision: the price of Brent crude oil was down by 7.3 percent to USD 74.9 per barrel, while the US benchmark WTI oil price fell by 8.1 percent to USD 70.9 per barrel (Chart 14). **Gas prices declined by 20 percent**, and thus as a result, of the declining trend, which started at the end of August 2022, gas prices fell to levels last seen in June 2021. Currently, gas storage facilities in Europe are filled up to 63 percent on average and their utilisation was around the average capacity typical for this period of the year, which was also due to milder winter weather in the region and stronger imports of liquefied natural gas. The price of **industrial metals** declined, with the price of copper falling by 5 percent, zinc and aluminium both falling by 4 percent. **The Bloomberg commodity price index, covering the entire commodity market, declined by 3.3 percent over the period.**

2.2. Developments in domestic money market indicators

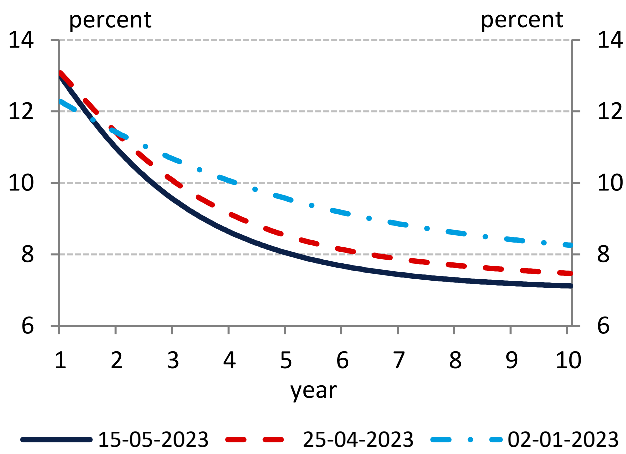
Since the interest rate decision in April, the forint appreciated against the euro. The government yield curve flattened out. The 3-month BUBOR fell by 8 basis points to 16.16 percent.

Chart 15 EUR/HUF exchange rate and the implied volatility of exchange rate expectations



Source: Bloomberg

Chart 16 Shifts in the spot government yield curve



Source: Bloomberg

Since the interest rate decision in April, the forint has strengthened against the euro along with the Polish zloty (Chart 15). Among the currencies of the CEE region, the Czech koruna and the Romanian leu were broadly unchanged against the euro over the past month.

The 3-month BUBOR, relevant for monetary policy transmission, decreased by 8 basis points to 16.16 percent since the last interest rate decision.

The government yield curve flattened out (Chart 16). At the 1-year section of the curve yields was down by 10-15 basis points, while yields declined at medium and longer maturities by an average of 40-50 basis points.

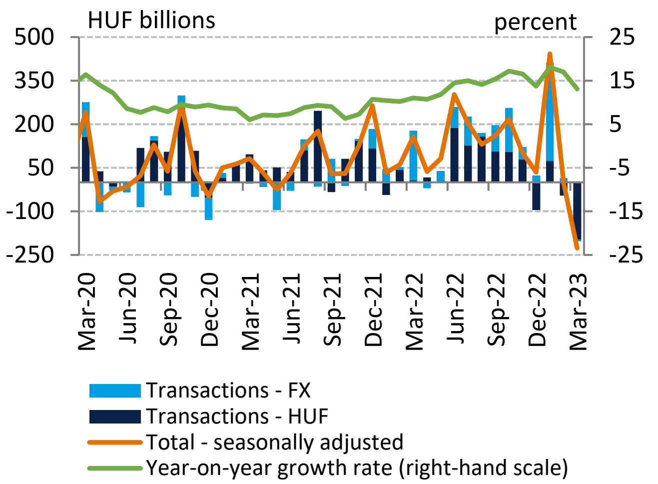
Government bond auctions held by the Government Debt Management Agency since the last interest rate decision were characterised by a strong demand. During the period under review, at certain government bond auctions the Government Debt Management Agency typically accepted higher volume than announced, particularly in the case of short-term securities. Average yields typically declined. The discount Treasury bill auctions were mostly characterised by rising average yield and strong demand.

Non-residents' holdings in forint government securities increased by HUF 84 billion to HUF 7,165 billion. The market share of forint government securities held by foreign actors increased to close to 22 percent.

3. Trends in lending

In March 2023, outstanding loans to non-financial corporations fell by HUF 203 billion, while outstanding borrowing by households rose by HUF 17 billion due to transactions. In March 2023, the smoothed interest rate spread on forint corporate loans stood at 1.62 percent, down 0.1 percentage point compared to previous month.

Chart 17 Net borrowing by non-financial corporations

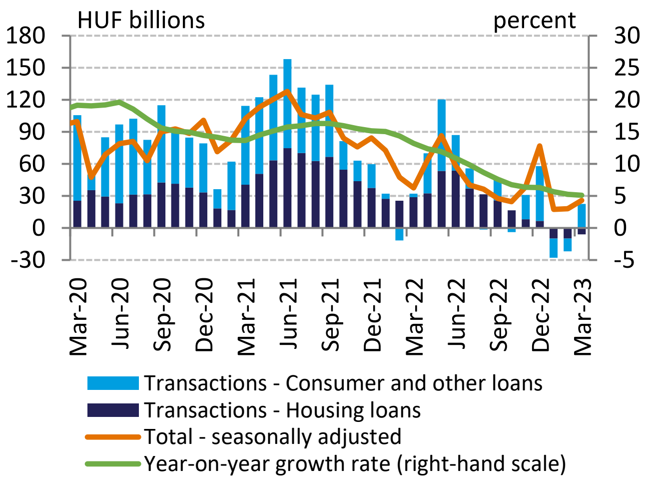


Source: MNB

Reflecting a fall in forint loans by HUF 197 billion as a result of a large transaction and a decline in foreign currency loans by HUF 6 billion, outstanding loans to non-financial corporations fell by HUF 203 billion in March 2023 (Chart 17). As a result, the annual growth rate slowed to 13.1 percent from 17 percent registered in previous month. Credit institutions disbursed new loans in the amount of HUF 212 billion, 51 percent less than a year earlier.

In March, outstanding borrowing by households increased by HUF 17 billion due to transactions, reducing the annual growth rate to 5.1 percent from 5.3 percent last month (Chart 18). The volume of new household loan contracts, amounting to HUF 124 billion, was 51 percent lower than in the same period last year. The decline affected all of the main credit products, with the disbursement of housing loans registering the largest decline.

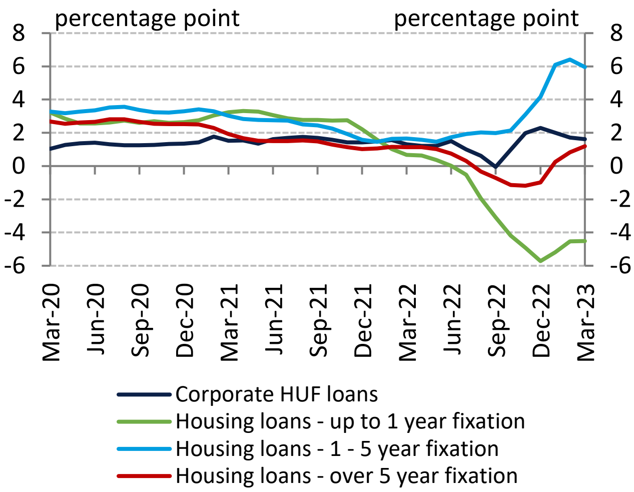
Chart 18 Net borrowing by households



Source: MNB

In March 2023, the smoothed interest rate spread on forint corporate loans stood at 1.62 percent, following a decrease of 0.1 percentage point compared to previous month. (Chart 19). The average spread on housing loans with interest rate fixation periods longer than 1 year and up to 5 years fell by 0.46 percentage point and stood at 5.95 percentage points in March, while the spread on products with interest rate fixation periods of more than 5 years rose by 0.37 percentage point and stood at 1.2 percentage points at the end of the period under review. The spread is always calculated based on the average reference rate prevailing in the month when the loan was disbursed, and thus due to the delayed nature of the repricing negative spreads may develop temporarily in certain sub-markets. In the case of subsidised loans, the interest rate also includes the state interest subsidy; accordingly, the calculated average spreads are higher than those actually seen by customers. This effect appears particularly in the case of housing loans with interest rate fixation for 1-5 years.

Chart 19 Developments in corporate and household credit spreads



Note: Above APR, 3-month smoothed spreads. In the case of corporate forint loans, the spread over the 3-month BUBOR. In the case of housing loans with variable interest or interest fixed for 1 year at the most, the 3-month BUBOR, while in the case of housing loans fixed for over one year, the APR-based margin above the relevant IRS.

Source: MNB