

MACROECONOMIC AND

FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES

OF THE MONETARY COUNCIL MEETING

OF 21 NOVEMBER 2023

NOVEMBER

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The background material 'Macroeconomic and financial market developments' is based on information available until 15 November 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 Q3, GDP growth continued to slow in most EU economies and in China, while it accelerated in the US. Among the major economies, industrial production and retail sales volume rose in the United States and China, while they declined in the euro area. In October, the PMI sentiment indicator deteriorated in the euro area and China and it improved in the United States. In October, inflation decelerated to 3.2 percent in the United States following a level of 3.7 percent seen in September, while in China, after stagnating in September, consumer prices declined by 0.2 percent in annual terms. Euro area inflation was 2.9 percent, while core inflation was 4.2 percent in October year-on-year. The inflation figure was below, while core inflation was in line with analysts' expectations. In October, inflation rose in 5 EU countries.

year-on-year

(+2.2 percent),

(-4.7 percent),

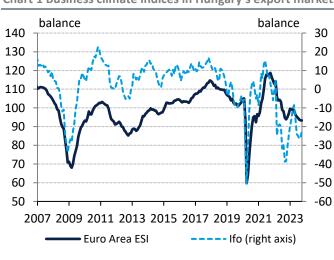


Chart 1 Business climate indices in Hungary's export markets

Source: European Commission, Ifo

(+0.5 percent), in Slovakia (+1.1 percent) and in Slovenia
(+1.6 percent) it grew year-on-year. The output of Germany, Hungary's main trading partner, declined
(-0.4 percent) on an annual basis.
Monthly production indicators fell in the euro area, while they rose in the US and China in annual terms. In October, industrial production in China grew by 4.6 percent on an annual basis. In September, it declined by 6.9 percent in the euro area, while it rose moderately, by 0.1 percent in the USA and by 7.6 percent in China in October, while in the euro area they fell by 2.9 percent in September year-on-year.

In 2023 Q3, GDP growth continued to slow in most EU economies and in China, while it accelerated in the US. Economic growth in the third quarter was 2.9 percent in the US and 4.9 percent in China in annual terms. On an annual basis, both the euro area and the EU-27 grew by 0.1 percent. Based on available data, the largest

(+1.9 percent) and Spain (+1.8 percent). In nine EU countries a decline was registered on an annual basis, with the output falling to the largest degree in Ireland

(-1.3 percent) and Austria (-1.2 percent). Among the other countries in the CEE region, economic activity in the Czech Republic declined (-0.6 percent), while in Poland

registered in

(+2.1 percent),

(-2.5 percent),

Cyprus

Portugal

Sweden

growth was

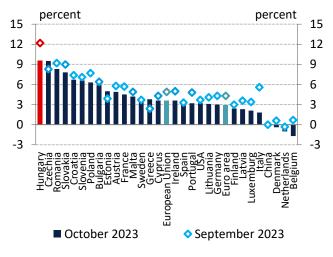
Romania

Estonia

In October, the Purchasing Managers Index deteriorated in China and the euro area, while it improved in the United States. The index remained below the threshold in the euro area, while it stood above it in the United States and in China. The Economic Sentiment Indicator (ESI) of the euro area remained broadly unchanged in October 2023 (Chart 1).

There is still no sign of significant slowdown in international labour market developments. In October,

Chart 2 Developments in the international inflation environment



Note: HICP (where available) and CPI rates. Source: Eurostat

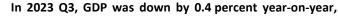
unemployment rate in the United States rose to 3.9 percent from 3.8 percent measured in the previous two months, being the highest figure since January 2022 albeit still remaining low in historical terms. However, the number of non-agricultural employees grew by a smaller degree than expected, i.e. by 150,000 persons last month, a slowdown from the increase by 297,000 persons registered in September. The smaller-than-expected growth is partly attributable to the strike of United Auto Workers. The unemployment rate in the euro area stood at 6.5 percent in September.

In October, inflation decelerated to 3.2 percent in the United States following 3.7 percent seen in September, while in China, after stagnating in September, consumer prices declined by 0.2 percent on an annual basis. Euro area inflation was 2.9 percent, while core inflation was 4.2 percent in October year-on-year. The inflation figure was below the analysts' median expectations of 3.1 percent, while core inflation was in line with analysts' expectations.

In October, inflation rose in 5 EU Member States. Among the EU countries, the highest inflation was recorded in the CEE region. Based on the harmonised price indices, prices rose by 9.6 percent in Hungary, 9.5 percent in the Czech Republic, 8.3 percent in Romania, 7.8 percent in Slovakia, 6.7 percent in Croatia, 6.6 percent in Slovenia and 6.3 percent in Poland, in an annual comparison (Chart 2).

1.2. Real economic developments in Hungary

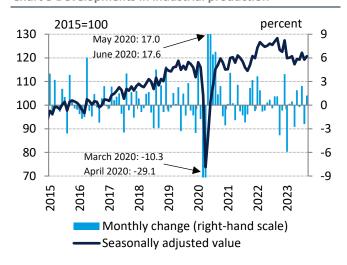
In 2023 Q3, GDP was down by 0.4 percent year-on-year, while economic performance rose by 0.9 percent quarter-on-quarter. In September 2023, the volume of industrial production and retail sales fell by 7.3 percent, and construction output by 6.0 percent year-on-year. In September 2023, the average number of employees in the 15–74 age group was 4,759,000. In the period between July and September in 2023, on average 25,000 more people worked in Hungary than in the same period last year. The unemployment rate stood at 3.9 percent in September.



1.2.1. Economic growth

while economic performance rose by 0.9 percent quarter-on-quarter. According to the HCSO, the largest contributors to the decline in economic output in 2023 Q3 were industrial production and market services. The decline was mitigated by the positive performance of agriculture. The decline in the value added of services was mostly attributable to trade, scientific, technical and administrative activities. The value added of the human health and social work economic sectors increased significantly, coming close to the level seen before the coronavirus pandemic.

Chart 3 Developments in industrial production



Source: MNB calculation based on HCSO data

In September 2023, the volume of industrial production fell by 7.3 percent, thereby registering a decline for the ninth month on an annual basis. Compared to the previous month, the level of production rose by 1.2 percent, while it still remained close to the figure seen at the beginning of the year (Chart 3). The HCSO measured a decline in most of the manufacturing subsectors, except for the automotive industry, representing the largest share, and electrical equipment production, both of them registering a growth. The output of the automotive industry, representing the largest share, grew by 1.2 percent compared to the level seen last September, while the production of electrical equipment rose by 2 percent. Production of the food, beverage and tobacco sector fell short of the level seen a year ago by 9.7 percent.

In September 2023, the volume of construction output declined by 6.0 percent. Construction of buildings declined by 9.5 percent, while other construction increased by 0.4 percent compared to the to the September base last year. Based on seasonally and calendar adjusted data, total construction output fell by 1.8 percent compared to August. The volume of new contracts decreased by 32.0 percent. Within this, the number of new contracts concluded for construction of buildings declined by 43.9 percent and for other construction works by 2.7 percent year-on-year. Construction companies' contract portfolio at the end of August fell by 30.6 percent on an annual basis. Within this, the volume of contracts for the construction of buildings was

13.4 percent lower, while that for the construction of other structures 42.6 percent lower than a year earlier.

In September 2023, the volume of retail turnover fell by 7.3 percent, thereby registering a decline for the tenth month on an annual basis. In the first eight months, turnover declined by 9.5 percent on average, with major contribution by the fall in fuel sales. Excluding fuel trade, turnover declined by 4.5 percent based on calendar adjusted data in September. On a monthly basis, the volume of retail sales remained broadly unchanged (+0.2 percent). Sales volumes thus remain below the level registered at the beginning of 2021, based on seasonally and calendar adjusted data. Retail turnover declined in all product groups, except shops selling pharmaceuticals, cosmetics, motor vehicle and vehicle parts and online shops year-on-year. Sales of industrial goods (-13.6 percent), furniture and appliance shops (-15.8 percent), textiles and clothing (-19.5 percent) and fuel (-19.9 percent) declined by more than 10 percent.

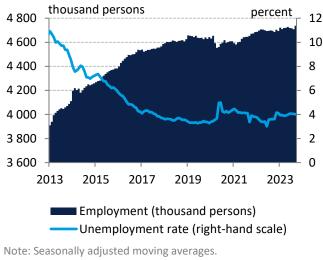
In September 2023, based on preliminary data, the trade balance showed a surplus of EUR 1.3 billion, which was exceeded only this June since the start of the publication of data in 1995. The balance improved by EUR 598 million compared to the previous month and by EUR 2.1 billion compared to the same period last year. In September, the export of goods fell by 5.2 percent in euro terms on an annual basis. The nominal value of imports in euro terms shrank by 19.4 percent in a year, due to the fall in fuel prices and the decline in domestic demand. In August 2023, the terms of trade improved by 11.0 percent, year-on-year. The contribution of mineral fuels significantly improved the terms of trade, with a contribution of 6.9 percentage points in August.

In October 2023, the real turnover of online cash register data continued to decline, while catering turnover rose. Based on online cash register data, nominal turnover rose by 4.9 percent, while real turnover adjusted for inflation fell by 5 percent in annual terms, according to data received to date. Freight traffic (-2.7 percent), passenger flights (-8.8 percent) and road passenger traffic (-9.4 percent) declined, respectively. Electricity load increased slightly by 0.6 percent. Cinema attendance rose by 7.3 percent and catering turnover by 13.2 percent. The number of housing market transactions expanded by 5.6 percent. Google searches for the term 'unemployment benefit' rose.

1.2.2. Employment

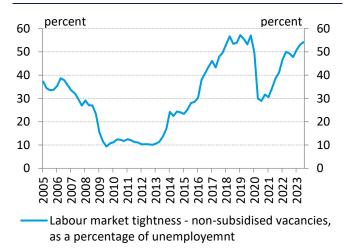
Based on the data of the Labour Force Survey in September 2023, the average number of employees in the 15–74 age

Chart 4 Number of persons employed and the unemployment rate



Note: Seasonally adjusted moving averages. Source: HCSO

Chart 5 Developments in labour market tightness indicator



Note: Quarterly data. Source: NES, HCSO group was 4,759,000. In the period of July to September 2023, the average number of employees was 4,737,000, exceeding the year-on-year figure by 25,000 (Chart 4). In July–September, on average, the number of employees in the primary labour market and of those working abroad rose by 13,000 and 18,000, respectively, while the number of fostered employees fell by 6,000, compared to the same period of the previous year.

In September, the number of the unemployed was 191,000, increasing the year-on-year figure by 11,000 persons, and as a result, the unemployment rate stood at 3.9 percent. Based on seasonally adjusted data, in September the number of unemployed fell slightly compared to August. Based on data published by the National Employment Service (NES) in September and October 2023, the number of registered jobseekers in Hungary was 228,000 (-10,000 on an annual basis) and 226,000 (-9,000 on an annual basis), respectively. Based on seasonally adjusted data, the number of the registered jobseekers in October 2023 remained unchanged compared to September, and it is still below the number measured in the months before the outbreak of the coronavirus pandemic.

The number of non-subsidised job vacancies grew further in the previous quarter, standing at a historic high (Chart 5). Based on data published by the National Employment Service (NES) in 2023 Q3 the number of job vacancies was 114,000, representing a year-on-year growth of 22.5 percent. Based on seasonally adjusted data, the number of vacancies has been rising steadily in the past five quarters.

1.3. Inflation and wages

In October 2023, domestic inflation continued to decline rapidly. Consumer prices rose by 9.9 percent in annual terms. As a result, the rate of price increases fell back into single-digit territory again, nine months after the peak in inflation at the beginning of the year. Both core inflation and core inflation excluding indirect tax effects fell to 10.9 percent. Incoming inflation data was below analysts' expectations. In August 2023, average wages in the national economy (excluding bonuses) rose by 14.1 percent, while private sector wages increased by 14.0 percent in annual terms.

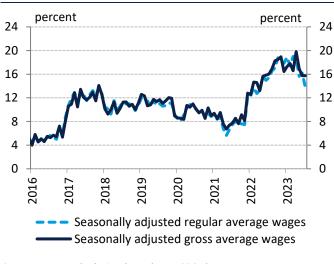
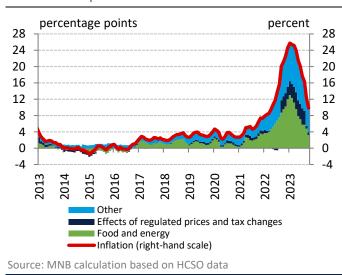


Chart 6 Dynamics of average earnings in the private sector

Source: MNB calculation based on HCSO data

Chart 7 Decomposition of inflation



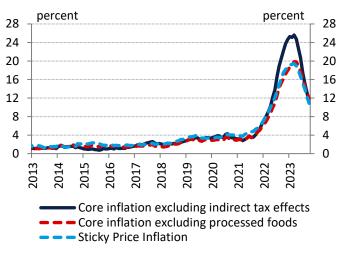
1.3.1. Wages

In August 2023, gross average wages in the private sector rose by 15.3 percent year-on-year. Bonus payments were above the historic average in August. Average regular earnings (excluding bonuses) rose by 14.1 percent in annual terms in the whole economy and by 14.0 percent in the private sector.

According to seasonally adjusted data, growth in gross average wage remained unchanged, while regular average wage slowed down in the private sector compared to the previous month (Chart 6). Within the private sector, wage dynamics of manufacturing exceeded those of market services. In August, based on raw data, manufacturing wages were higher by 15.4 percent year-on-year. In market services, HCSO registered a growth of 15.0 percent. Annual wage dynamics were over 14.0 percent in most economic sectors. Gross wages in construction and trade rose by 15.3 percent and 14.2 percent, respectively, in annual terms.

1.3.2. Inflation developments

In October 2023, inflation in Hungary continued to fall rapidly, and consumer prices rose by 9.9 percent, year-on-year (Chart 7). The rate of price increases fell back into single-digit territory again, nine months after the peak in inflation at the beginning of the year. Compared to the previous month, inflation declined by 2.3 percentage points, with food (-1.1 percentage points) and fuels (-0.4 percentage points) contributing most. Annual core inflation fell by 2.2 percentage points to 10.9 percent. The annual price index of market services declined to 14.3 percent, and thus the fall in the annual price dynamics, which started in June, continued. Processed food inflation was 7.5 percent, indicating a significant slowdown from 12.9 percent in the previous month. Annual inflation of products and services of regulated prices was -1.0 percent in October, while fuel inflation declined to 30.2 percent. The incoming figure was below analysts' expectations, with a median value of **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

10.3 percent and expectations ranging from 10.0 to 11.1 percent.

Underlying inflation indicators, capturing persistent trends on an annual basis, also moderated. Inflation for sticky-price goods fell by 1.3 percentage points, and annual core inflation excluding processed food decreased by 1.2 percentage points compared to the previous month (Chart 8).

1.4. Fiscal developments

The central sub-sector of the general government registered a deficit of HUF 223 billion in October, and thus the year-todate cumulative deficit rose to HUF 3,488 billion, representing 103 percent of the statutory cash-based deficit target and 78 percent of the raised deficit target of HUF 4,450 billion. In October, revenues of the central sub-sector were higher by HUF 117 billion, while expenditures rose by HUF 441 billion compared to the figure seen in October last year.

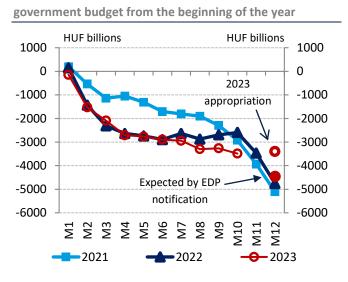


Chart 9 The cumulative cash balance of the central

Source: Budget Act of 2023, HCSO, Hungarian State Treasury, EDP notification

The central sub-sector of the general government closed with a deficit of HUF 223 billion in October, and thus the year-to-date cumulative deficit rose to HUF 3,488 billion, representing 103 percent of the statutory cash-based deficit target and 78 percent of the raised deficit target of HUF 4,450 billion (Chart 9).

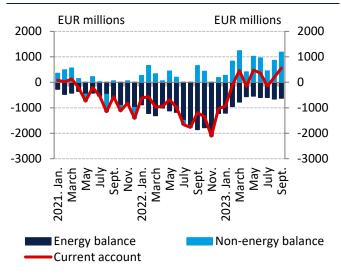
In October, **revenues of the central sub-sector** were HUF 117 billion higher than a year ago, of which tax and contribution revenues exceeded the year-on-year figure by HUF 128 billion (by 6 percent). Tax and contribution revenues from labour increased by HUF 128 billion (by 16 percent), while payments by enterprises dropped by HUF 16 billion (by 4 percent). Net and gross VAT revenues fell by 1 percent and 3 percent, respectively, year-on-year. Registered EU revenues amounted to HUF 35 billion, while the amount of EU funds received during the month was higher than that, around HUF 100 billion.

Expenditures were HUF 441 billion higher than in October 2022. The increase is primarily attributable to a rise of HUF 112 billion in the expenditures of central budgetary organisations and to an increase of HUF 82 billion in pension expenditures, as well as to a HUF 78 billion higher level of normative and special subsidies. Net interest expenditures rose by almost HUF 80 billion compared to the figure registered in October last year.

1.5. External balance developments

In September 2023, the current account surplus amounted to around EUR 560 million and net lending around EUR 760 million. The monthly increase in the current account balance is mostly attributable to the rise in goods surplus, resulting from the continued fall in imports. Based on financial accounts data, net direct investment increased by EUR 0.4 billion in September, mainly due to an increase in reinvested earnings in Hungary.





Note: The September value of the energy balance is estimated. Source: MNB, HCSO In September 2023, the current account surplus amounted to around EUR 560 million and net lending around EUR 760 million (Chart 10). The monthly increase in the current account balance is mostly attributable to the rise in goods surplus, resulting from the continued fall in imports under declining energy imports bill and decreasing domestic demand. In September, the services balance surplus remained at a similar, high level to the previous month. The income balance deficit decreased, while the transfer balance remained broadly at last month's level, with EU funds decreasing.

Based on financial accounts data, net direct investment increased by EUR 0.4 billion in September, mainly due to an increase in reinvested earnings in Hungary. The fall of EUR 1.1 billion in net external debt due to transactions was linked to corporations. The growth in the public sector's indicator has roughly offset the fall in the banking sector's debt.

2. Financial markets

2.1. International financial markets

Since the last interest rate decision, risk appetite has been volatile and improved overall. In recent weeks, investor sentiment has been shaped by expectations related to the monetary policy of the world's leading central banks, the publication of macroeconomic data and the events related to the situation in Gaza. Stock market indices in the developed markets rose, bond yields declined, while the dollar depreciated against the euro. Among the risk indicators, the VIX index, the key measure of equity market volatility, and the emerging market EMBI Global bond market premium declined, respectively.

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

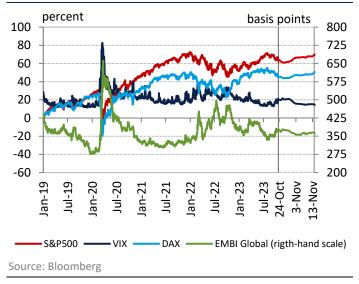
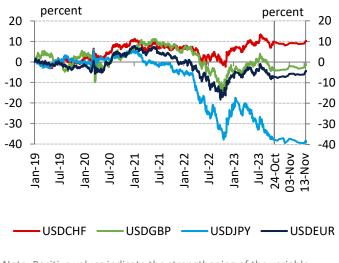


Chart 12 Evolution of developed market FX exchange rates from January 1, 2019



Note: Positive values indicate the strengthening of the variable (second) currency. Source: Bloomberg Since the previous interest rate decision, global investor sentiment was shaped by the expectations related to the monetary policy of the world's leading central banks, the publication of macroeconomic data (primarily the US inflation data) and the events related to the situation in Gaza. Risk appetite has been volatile and improved overall. Of the risk indicators, the VIX index, the key measure of equity market volatility, declined by 5 percentage points compared to its level registered on 24 October, while the emerging market EMBI Global bond market premium fell by 11 basis points to 365 basis points (Chart 11).

Developed market stock indices rose in the period. The US S&P 500 and the Dow Jones advanced by 8.7 and 6.2 percent, respectively, over the period. Among leading European stock market indices, the German DAX and the French CAC40 rose by 6.5 and 4.9 percent, respectively. Of the Asian indices, the Shanghai stock market index has increased by 2.8 percent, while the Japanese Nikkei by 9.5 percent since the previous interest rate decision. Overall, the developed and emerging market MSCI composite indices increased by 8.1 and 5.3 percent, respectively.

The dollar typically depreciated against the major currencies (Chart 12). The dollar depreciated by 2.7 percent (close to the 1.085 level) against the euro, by 2.8 percent against the British pound and by 1.1 percent against the Swiss franc, while its exchange rate against the Japanese yen remained unchanged.

Long-term yields in developed markets have typically fallen since the previous interest rate decision (Chart 13). Since the last interest rate decision, the US ten-year yield fell by 49 basis points to 4.46 percent, the German longterm yield declined by 30 basis points to 2.59 percent, while the Japanese yield was down by 6 basis points. Yields in the Mediterranean countries also declined: the Italian, Spanish, Portuguese and Greek yields were down Chart 13 Yields on developed market long-term bonds

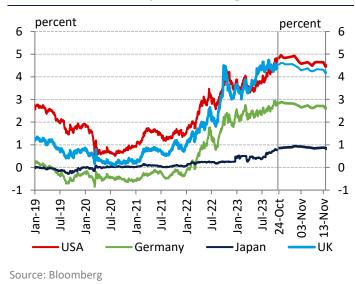
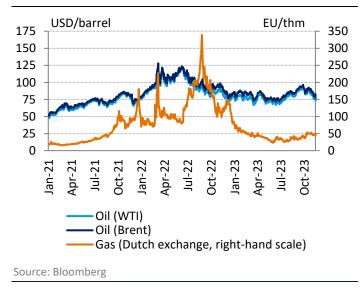


Chart 14 Developments in oil and gas prices since January 2021



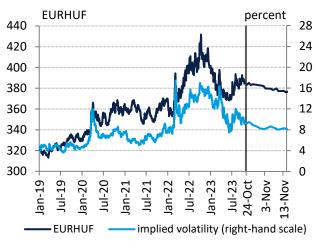
by 47, 34, 29 and 33 basis points, respectively. Among the yields on 10-year government bonds in the countries of the CEE region, Polish, Romanian and Czech yields decreased by 34, 10 and 28 basis points, respectively. Hungarian yield has fallen by 66 basis points since the interest rate decision in October.

A commodity prices moderated over the period considered. Following the major rise in early October, in the last weeks the price of Brent crude oil corrected and fell close to USD 82 per barrel (Chart 14). In parallel with this, TTF gas prices also declined since the last interest rate decision and stood at around EUR 48.5/MwH.

2.2. Developments in domestic money market indicators

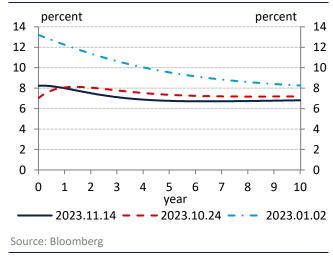
The forint has appreciated significantly against the euro since the October interest rate decision. The long end of the government securities yield curve moderated. The 3-month BUBOR fell by 73 basis points to 11.14 percent.

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



The forint has appreciated against the euro almost continuously since the previous interest rate decision (Chart 15). In the week after the October interest rate decision, the forint appreciated to a small degree; then, as a combined result of the declining developed market yields, the better-than-expected inflation and growth figures and the substantially depreciating dollar resulting from the decelerating US inflation, it appreciated by a total of 1.9 percent against the euro. Currencies in the CEE region also typically strengthened: the Polish zloty and Czech koruna appreciated against the euro by 1.6 percent and around 0.5 percent, respectively, while the Romanian leu depreciated by 0.2 percent.

The 3-month BUBOR, relevant for monetary policy transmission, has decreased by 73 basis points to 11.14 percent since the last interest rate decision.

Since the previous interest rate decision, the government securities market's yield curve has shifted downwards overall (Chart 16). Yields on the medium- and long-term maturities fell on average by 50-60 basis points, while the section within a year of the yield curve rose on average by 50 basis points.

Government securities auctions held by the Government Debt Management Agency since the last interest rate decision were characterised by strong demand. During the period under review, the volume of bids submitted was well above the announced volume both at the discount Treasury bill and bond auctions, and in most cases the Government Debt Management Agency accepted higher volume than announced.

Non-residents' holdings of forint government securities increased. Non-residents' holdings in forint government securities increased by HUF 106 billion to HUF 7,147 billion. The market share of forint government securities held by nonresidents declined to 20.8 percent.

3. Trends in lending

In September 2023, outstanding lending to non-financial corporations increased by HUF 20 billion, due to the rise of HUF 12 billion in forint loans and of HUF 8 billion in foreign currency loans. In September, households' outstanding borrowing increased by HUF 27 billion due to transactions, reducing the annual growth rate to 2.8 percent from 3.0 percent last month. Compared to the previous month, the smoothed interest rate spread on forint corporate loans increased significantly, by 0.42 percentage points to 2.82 percentage points in September 2023.

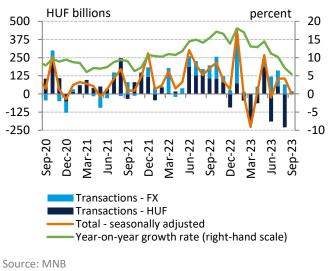


Chart 17 Net borrowing by non-financial corporations

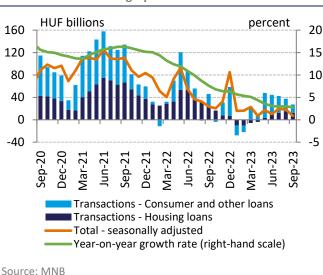
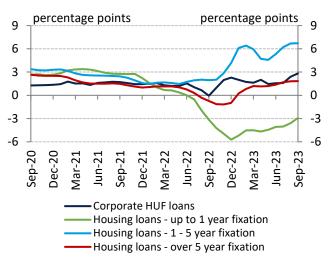


Chart 18 Net borrowing by households

In September 2023, outstanding lending to non-financial corporations increased by HUF 20 billion, due to the rise of HUF 12 billion in forint loans and of HUF 8 billion in foreign currency loans (Chart 17). As a result, the annual growth rate slowed to 5.4 percent from 7.1 percent registered in the previous month. Credit institutions issued new non-overdraft corporate loans in the amount of HUF 260 billion during the month, down by 40 percent from the same period last year, which was characterised by an above average volume of new corporate loan contracts.

In September, outstanding borrowing by households increased by HUF 27 billion due to transactions, reducing the annual growth rate to 2.8 percent from 3.0 percent last month (Chart 18). The volume of new household loan contracts, amounting to HUF 147 billion, was 14 percent lower than in the same period last year. The disbursement of housing loans declined to the largest degree in an annual comparison, while demand for personal loans was more buoyant.

Compared to the previous month, the smoothed interest rate spread on forint corporate loans increased significantly, by 0.42 percentage points to 2.82 percentage points in September 2023 (Chart 19). For housing loans, the spread on products with interest rate fixation for more than 5 years was stagnant compared to the previous month and stood at 1.84 percentage points at the end of the period under review. Chart 19 Developments in corporate and household credit spreads



Note: In the case of household loans, APR-based smoothed spreads calculated using the average reference rate for the month in which the loan was issued. In the case of forint corporate loans and 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 margin above the relevant IRS. Source: MNB