MACROECONOMIC AND

FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES

OF THE MONETARY COUNCIL MEETING

OF 23 JUNE 2020

JUNE

2020

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The background material 'Macroeconomic and financial market developments' is based on information available until 18 June 2020.

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:
http://www.mnb.hu/en/monetary-policy/the-monetary-council/minutes

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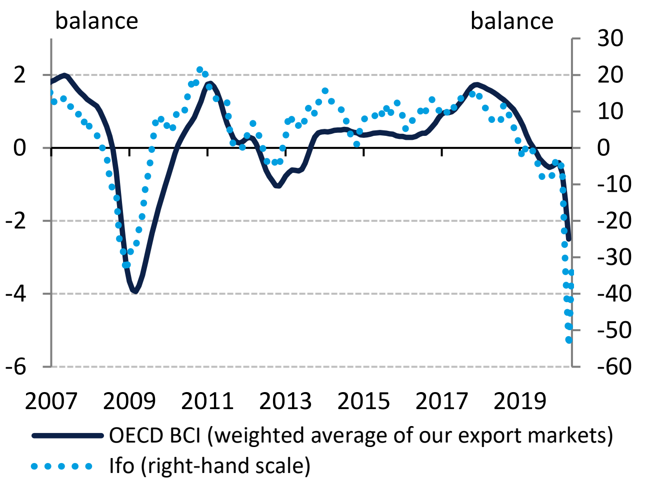
1. Macroeconomic developments

1.1. Global macroeconomic environment

In the past period, economic performance was primarily determined by the coronavirus pandemic and the measures taken to control it. In the first quarter of 2020, the performance of the large economies typically declined, which – based on the activity data of April and May – may be followed by an even more severe downturn in Europe. In parallel with the flattening of the epidemic curve, the restart of the European economies has commenced; however, the epidemic curve of the United States still has not improved materially.

Chart 1: Business climate indices in Hungary's export markets



Source: OECD, Ifo

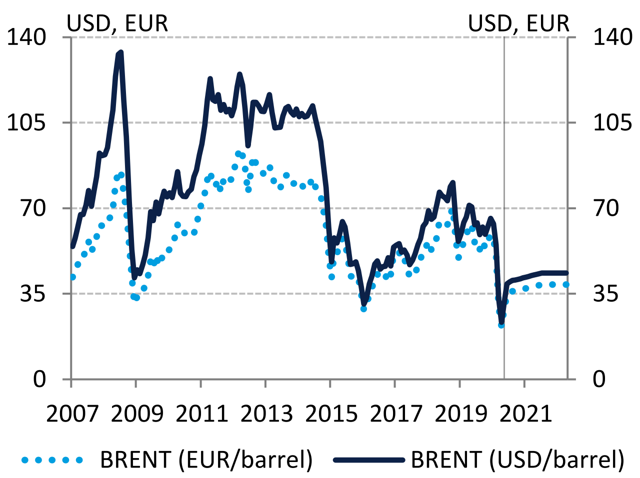
In the past period, economic performance was primarily determined by the coronavirus pandemic and measures taken to control it. The pandemic hit the global economy in a weakened state, and the negative economic impacts rapidly appeared in numerous countries (Chart 1). **Global tourism practically was brought to standstill in mid-March,** also evidenced by the plunge in the number of passenger flights. **The past weeks were characterised by gradual adjustment in air traffic**, which reflects the **ongoing restart of the economies.**

The economic impacts of the coronavirus first appeared in China, in parallel with the outbreak of the pandemic. **In the first quarter of 2020, China's GDP dropped by 6.8 percent year on year,** which was the largest decline seen in the past 50 years in China. **As a result of the restart of the Chinese economy,** in the past weeks **capacity utilisation increased** and **business sentiment improved in China. In April, both industrial production and exports grew by more than 3 percent in an annual comparison.** The volume of retail sales and the number of motor vehicle registrations already improved in April after the historic low registered in January and February, but still fell short of the year-on-year value.

In the first quarter of 2020, US GDP grew by merely 0.3 percent year-on-year. The absence of the measures, which were taken rather late, resulted in the fast spread of the virus throughout the country. **The US is still close to the peak of the epidemic curve.** In April, **US industrial output declined by 15 percent** in year-on-year terms. In April 2020, **retail and catering sales volume declined by 21.6** percent year-on-year, while car registrations fell by almost 50 percent. **By the end of May**, after a continuous decline, the **number of new applications for unemployment benefit fell below 1.9 million.** In line with this, in April the **unemployment rate** of those over 16 years **peaked at 14.7 percent**, and then **in May,** after a moderate decline, it **stood at 13.3 percent.**

By March, the continuous deterioration in the economic situation **reached Europe as well. In April, economic**

Chart 2: World market prices of Brent crude oil



Source: Bloomberg

performance of the United Kingdom fell by 24.5 percent, year-on-year. The volume of retail sales fell by almost 23 percent, while registration of new cars dropped close to zero in April. **In the first quarter of 2020, the economy of the euro area and of the 27 Member States of the EU contracted by 3.1 percent and 2.6 percent, respectively,** year on year. According to the **ECB's June projection, economic performance of the euro area may reach its low in the second quarter of 2020**, when euro area GDP may fall short of the year-on-year figure by 13 percent.

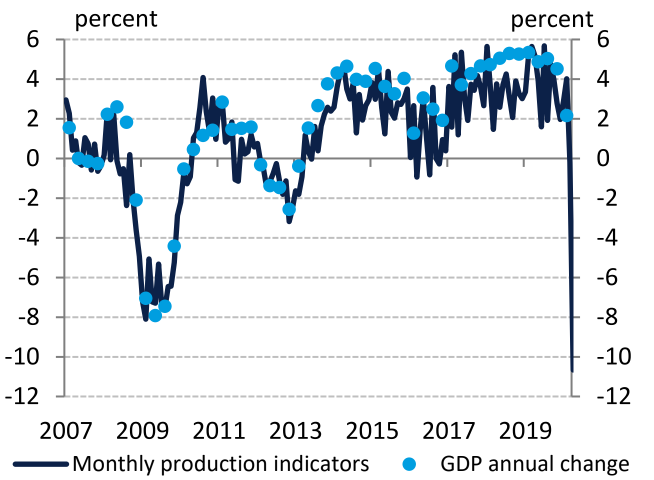
In parallel with the major decline (- 25.3 percent in April) in the industrial production of Germany – Hungary's main trading partner – exports of goods also fell considerably. **The coronavirus further exacerbated the challenges of the automotive industry, which may slow down the recovery of the sector.** German retail sales volume fell by 6.5 percent in April in year-on-year terms, accompanied by a decrease of almost 28 percent in car registrations. In the past period, German business sentiment deteriorated to an extraordinary degree and in April it broke a new negative record, followed by a correction in May. **The epidemic curves are already in the descending phase in most of the European countries.** In parallel with the flattening of the epidemic curves, **governments started to ease restrictions gradually, as a result of which economic prospects also started to improve.**

In May, euro area inflation – in line with analysts' expectations – declined further, also reflecting the fall in fuel prices. Inflation stood at 0.1 percent and core inflation at 0.9 percent. The **world market price of Brent crude oil increased substantially in the past period** (Chart 2). Demand for oil rose as a result of the gradual lifting of the restrictive measures implemented earlier due to the coronavirus pandemic, and the restart of certain economies. Moreover, the OPEC+ countries successfully agreed in the prolongation of former production cuts, according to which they extended the production cut of 9.7 million barrels per day, agreed earlier, until July 2020. This agreement provided further support for the rise in **oil prices, which was close to USD 39 per barrel in mid-June.** The price of industrial commodities increased, while the world market price of unprocessed food declined in May.

1.2. Domestic real economy developments

In the first quarter of 2020, Hungary's gross domestic product grew by 2.2 percent year-on-year. The negative impacts of the coronavirus pandemic also appeared in the production indicators of April. In April 2020, compared to the first quarter of 2020, on the whole total employment fell by 98,000 to 4,368,000 persons. 14,000 of the 98,000 persons were classified as unemployed, and thus the seasonally adjusted unemployment rate rose to 4 percent.

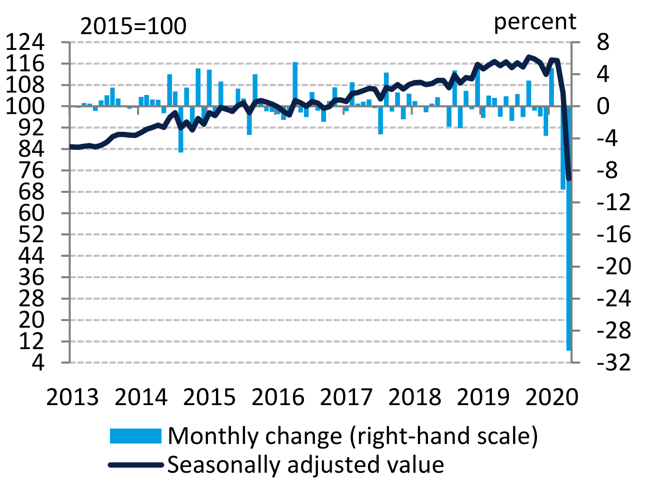
Chart 3: Monthly production indicators and GDP growth



Note: Weighted average of monthly production indicators (industrial output, construction output and retail sales). The weights are derived from regression explaining GDP growth.

Source: MNB calculation based on HCSO data

Chart 4: Development in industrial production



Source: MNB calculation based on HCSO data

1.2.1. Economic growth

According to the HCSO's detailed data release – in accordance with the preliminary data release – **gross domestic product grew by 2.2 percent year-on-year in the first quarter of 2020** (Chart 3). Based on the currently available data, this puts Hungary in the fourth place in the European Union's growth ranking. The carry-over effect resulting from last year's sound economic performance also contributed to the favourable – even in an international comparison – economic performance. However, **Hungary's GDP fell by 0.4 percent on a quarter-on-quarter basis.**

In **April 2020, industrial output was down by 36.8 percent** year on year (Chart 4). Output was down by 30.5 percent relative to the previous month, based on seasonally and working-day adjusted data. **Representing the largest share, the decline in the automotive industry** – in line with the factory stoppages announced from mid-March – was **particularly large.** Of the subsectors, output rose only in pharmaceutical manufacturing. Hungarian manufacturing **PMI rose from 33.7 points registered in April to 40.3 points in May.**

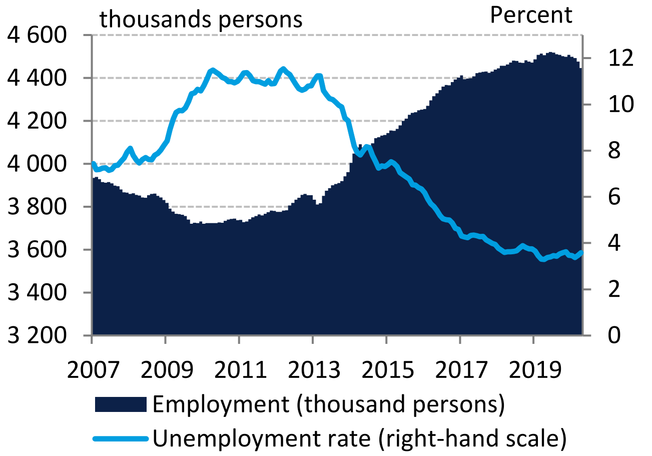
The spread of the pandemic caused interruptions in the supply chains, which resulted in a decline in international trade. Based on preliminary data, **exports and imports fell by 37 percent and 28 percent, respectively, in euro terms, year on year in May 2020.** As regards Hungary's external trade turnover, based on the seasonally adjusted data, the level of exports and imports fell short of the figures registered in March by 28.5 and 20.1 percent, respectively. Merchandise trade deficit – adjusted for VAT residents – amounted to EUR 881 million. **In annual terms, external trade balance fell by EUR 840 million compared to last April.**

In April 2020, construction output was down by 2.1 percent year on year and by 1.3 percent relative to the previous month, based on the seasonally and working-day adjusted data. Output of both main construction groups decreased: construction of buildings by 1.4 percent and other construction by 2.8 percent, in annual terms. However, the volume of new contracts increased by 3.9 percent year on year. The month-end volume of construction companies' contract portfolio fell short of the value registered at the end of April 2019 by 15.4 percent.

In April, the volume of retail sales (including sales of vehicles and components) **was down by 11.1 percent year on year, based on the seasonally and calendar adjusted data. The pandemic emergency situation and the restrictions impacted turnover of all shop types.** Turnover of mail order shops and web retail sales rose significantly (by 104 percent), sales of food and grocery products increased only moderately, while sales of all other product groups declined substantially. Demand for durable goods fell sharply; sales of furniture and appliances fell by 23.8 percent, while that of cultural and other articles dropped by 36.9 percent. Fuel consumption fell short of the level registered last year by 23.6 percent. In addition, seasonally adjusted sales of vehicles and components declined by 30.2 percent, while the number of new vehicle registrations dropped by 50.3 percent in April on an annual basis.

In line with the curfew measures and the closing of the frontiers, tourism fell drastically in April. **Compared to last year, nights spent at tourist accommodations in Hungary fell by 97 percent.**

Chart 5: Number of persons employed and the unemployment rate



Source: HCSO

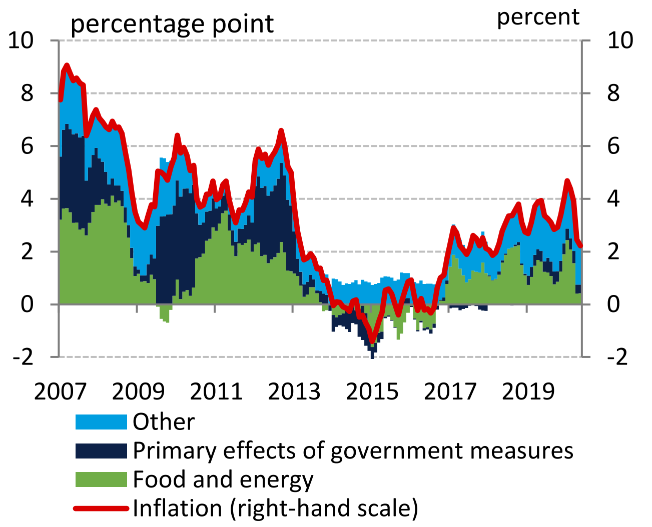
1.2.2. Employment

Based on the data of the Labour Force Survey (LFS), **total employment fell by 98,000 to 4,368,000 persons in April 2020 compared to the first quarter of 2020.** According to the LFS methodology, in April **only 14,000 of the 98,000 persons were classified as unemployed,** while 84,000 of them increased the number of the economically inactive compared to the first quarter of 2020. This is due to the fact that HCSO, based on the international standard methodology, regards those as unemployed who have no job and in the past 4 weeks actively sought employment and had they found a job they would be able to take up work within 2 weeks. Under the curfew measures taken in the period of the coronavirus pandemic, this methodological condition often cannot be satisfied, and thus 84,000 persons temporarily acquired the status of the economically inactive instead of the unemployed. **The seasonally adjusted unemployment rate rose to 4 percent** (Chart 5). Based on the data published by the National Employment Service (Nemzeti Foglalkoztatási Szolgálat - NFSZ), in April 2020, the number of registered jobseekers in Hungary was 330,700, exceeding the year-on-year figure by 69,200 persons.

1.3. Inflation and wages

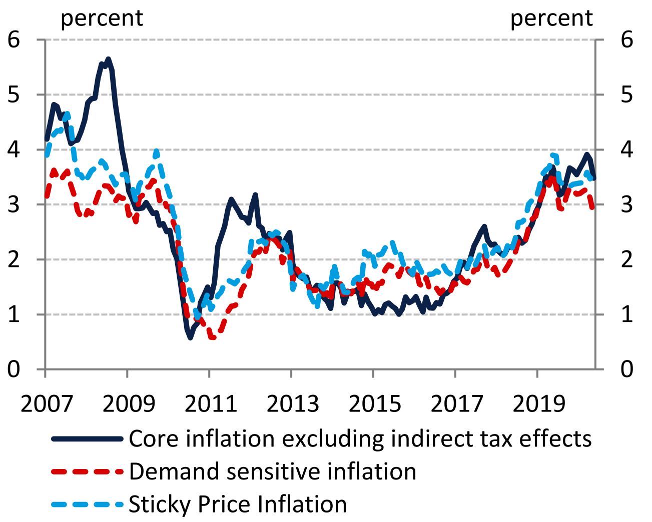
In May 2020, inflation calculated on a year-on-year basis was 2.2 percent, while core inflation and core inflation excluding indirect taxes stood at 4.0 and 3.5 percent, respectively Of the underlying inflation indicators capturing persistent trends, the price index of demand sensitive products declined, while that of sticky price products and services essentially remained unchanged compared to the previous month. In March 2020, gross average wages in the private sector rose by 9 percent compared to last March. The monthly increase in regular average wages substantially fell short of the typical rate registered in previous years, while bonus payments reached a historic high.

Chart 6: Decomposition of inflation



Source: MNB calculation based on HCSO data

Chart 7: Measures of underlying inflation indicators



Source: MNB calculation based on HCSO data

1.3.1. Wage setting

In March 2020, gross average wages in the private sector rose by 9 percent compared to last March. The monthly increase in regular average wages substantially fell short of the typical dynamics observed in previous years, while bonus payments reached a historic high. **Within the private sector, the growth rate of gross wages was below 10 percent both in the manufacturing and market services sectors.** The economic effects of the coronavirus pandemic impacted March only marginally. In the most affected sectors (accommodation and catering; information and communication; administrative and service support activity; other services) annual wage growth fell below 5 percent.

1.3.2. Inflation developments

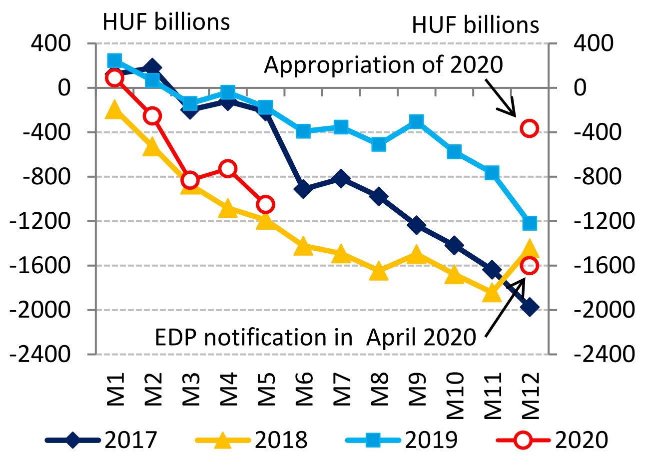
In May 2020, inflation calculated on a year-on-year basis was 2.2 percent, while core inflation and core inflation excluding indirect taxes stood at 4.0 and 3.5 percent, respectively (Chart 6). Compared to the previous month, inflation decreased by 0.2 percentage point and core inflation by 0.3 percentage point. The underlying reason for the decline in core inflation is the more moderate price dynamics of market services and industrial goods. Within core inflation excluding indirect taxes, inflation of market services fell to 4.8 percent and the price index for industrial goods also declined. Inflation of processed food declined moderately compared to the previous month.

Of the underlying inflation indicators capturing persistent trends, **the price index of demand sensitive products declined**, while **that of sticky price products and services remained broadly unchanged compared to the previous month** (Chart 7). In April 2020, agricultural producer prices increased by 12.8 percent in annual terms, while domestic sales prices in sectors of consumer goods increased by 6.9 percent.

1.4. Fiscal developments

The central sub-sector of the general government closed with a deficit of HUF 324 billion in May 2020, and thus the deficit accumulated since the start of the year rose to HUF 1,052 billion. The higher cash deficit, relative to the previous year, is primarily attributable to the loss of taxes, since the tax and contribution revenues of the central sub-sector dropped by 22 percent, i.e. HUF 290 billion, compared to last May.

Chart 8: Intra-year cumulative cash balance of the central government budget



Source: Budget Act of 2020, Hungarian State Treasury, National Reform Programme 2020

The **central sub-sector of general government** closed with a deficit of HUF 324 billion in March 2020, and thus the deficit accumulated since the start of the year rose to HUF 1,052 billion by the end of May 2020 (Chart 8).

In May 2020, budget revenues fell short of those registered a year ago by HUF 120 billion. Following the stagnation in the previous month, tax revenues in May declined by 22 percent year on year, which is partly attributable to the economy protection measures, and particularly to the decline in revenues resulting from the change in VAT refund, and partly to the deceleration of the economy caused by the virus. Gross VAT revenues, excise tax revenues and payments by enterprises fell by 16 percent, 17 percent and 14 percent, respectively, while personal income tax revenues stagnated compared to last May.

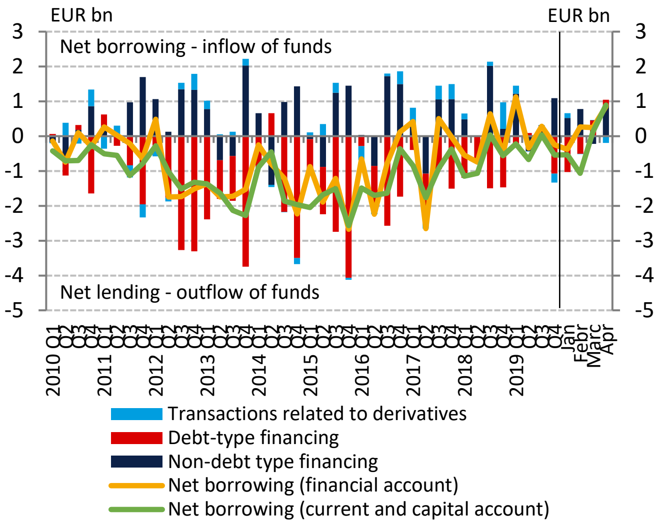
Expenditures of the central sub-sector were up by HUF 68 billion year on year, reflecting the higher net own expenditures of the budgetary organisations and chapters, and to the other expenditures of the central sub-sector.

The cost of the measures aimed at controlling the health and economic effects of the coronavirus pandemic amount to 5.3 percent of GDP. The Government may cover a large part of the measures by reallocation, absorption of the reserves, tax increases (retail special tax, contribution of financial organisations) and the reallocation of EU funds. Thus the net balance effect of the measures may be 1.1 percent of GDP in 2020.

1.5. External balance developments

In April, net borrowing was EUR 892 million, while current account deficit amounted to EUR 1.07 billion. The main underlying reason for the decline in the external balance indicators was the trade balance turning into a deficit. As regards the financing trends, capital inflows were mostly linked to the inflows of foreign direct investment, and the net external debt of the economy also rose moderately.

Chart 9: Structure of net lending (unadjusted transactions)



Note: Positive values indicate net borrowing (inflow of funds), while negative values indicate net lending (outflow of funds).
Source: MNB

In April, net borrowing of the economy was EUR 892 million, while the current account deficit amounted to EUR 1.07 billion. The major fall in the goods balance partly related to the decline in exports in excess to that in imports, and partly to expenditures of the prevention of the pandemic. Meanwhile, the services surplus was halved, partly due to the trends in tourism. The absorption of EU transfers also made a positive contribution to the country's net lending (Chart 9). Based on preliminary data, the income deficit fell slightly.

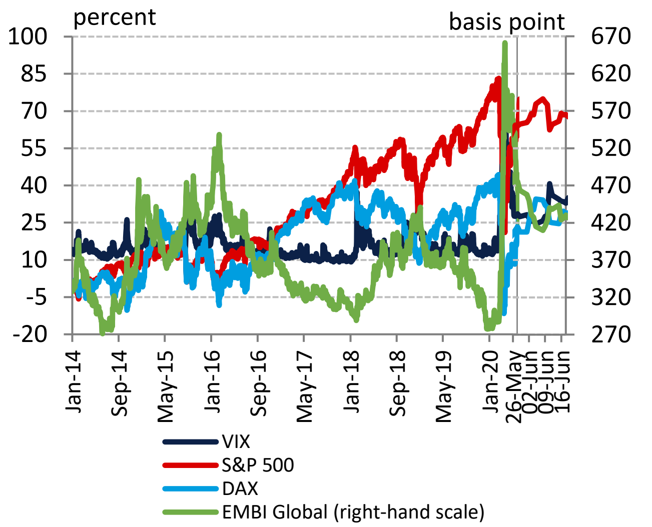
According to financial account data, foreign direct investments rose significantly in April, while debt liabilities of the economy increased slightly. The net borrowing based on financial account data was caused by a rise of EUR 181 million in net external debt to a lesser degree, and by the inflow of foreign direct investments in the amount of EUR 1.2 billion to a larger degree. The rise in net external debt was related to the public and corporate sector, while the banking sector's net debt declined.

2. Financial markets

2.1. International financial markets

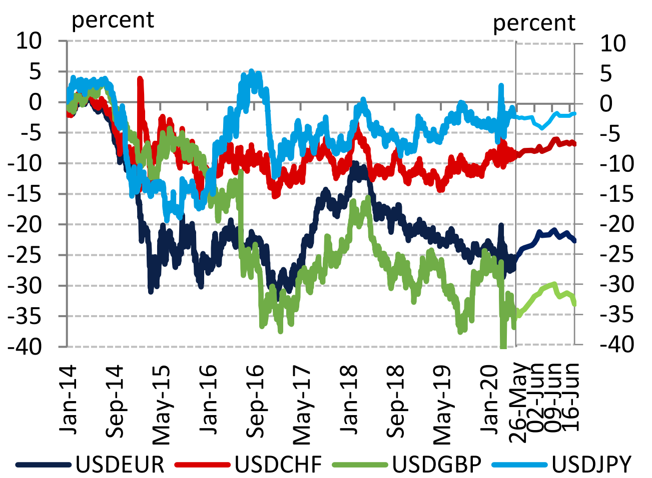
In the first half of the period since the last interest rate decision investor sentiment improved, followed by a decrease in risk appetite at the end of the period. Financial markets are still characterised by high volatility. The VIX index, the key measure of equity market volatility, increased by 5 percentage points to 33 percent, while the emerging bond market EMBI Global spread fell by 50 basis points to 426 basis points. Developed foreign exchange markets were characterised by the depreciation of the dollar. Oil prices increased by almost 10 percent.

Chart 10: Developed market equity indices, the VIX index (left-hand scale) and the EMBI Global Index (right-hand scale)



Source: Bloomberg

Chart 11: Developed market FX exchange rates



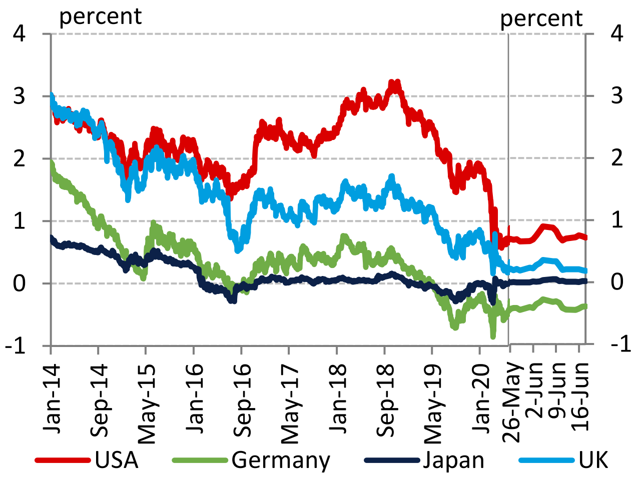
Note: Positive values indicate the strengthening of the variable (second) currency.

Source: Reuters

In the first half of the period since the last interest rate decision investor sentiment improved, followed by a decrease in risk appetite at the end of the period (Chart 10). **Volatility increased in the equity, bond and foreign exchange markets, and thus it is still at a high level.** The improving sentiment that characterised the first half of the period was attributable to positive developments in controlling the coronavirus, expectations related to the restart of the global economy as well as to fiscal and monetary policy measures. Some of the macroeconomic indicators published last month came as a positive surprise to the market. In the second half the period under review, investor sentiment deteriorated due to the unfavourable economic forecasts and fears of the second wave of the coronavirus. On the whole, both stock market indices and developed market government bond yields increased. Equity, bond and foreign exchange market volatility grew further during the month, and thus it stands at a high level. The volatility was also reflected by oil market trends. Namely, on 14 of the 17 working days that elapsed since the last interest rate decision, the change in WTI price exceeded 1 percent, while on 8 occasions the shift exceeded even 3 percent. On the whole, Brent rose by 12 percent over USD 40, while WTI by 10 percent close to USD 37.5.

The VIX index, the key measure of equity market volatility, increased by 5 percentage points to 33 percent, while the developed bond market MOVE index rose by 6 basis points to 58 basis points. However, the emerging bond market EMBI Global spread fell by 50 basis points to 426 basis points. According to the different dynamics of the indicators, risk appetite grew on the whole, but occasional unfavourable news caused increasing volatility (Chart 11). **The rise observed in the previous months in developed stock market indices continued, registering a growth of 4-8 percent, and the MSCI composite index, which measures emerging market performance, also increased at a similar rate (by 7 percent).** Developed foreign exchange markets were characterised by the increasing

Chart 12: Yields on developed market long-term bonds



Source: Bloomberg

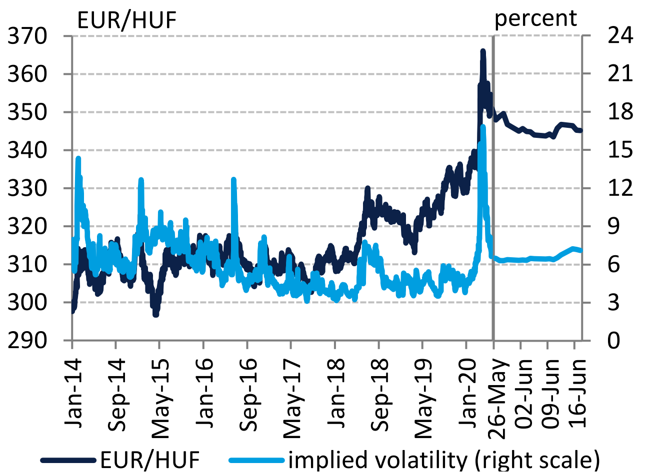
volatility and the depreciation of the dollar, which also reflects a rise in risk appetite. The dollar depreciated by roughly 3 percent against the euro, and by 2 percent against the pound sterling and the Swiss franc. Most of the emerging market currencies also strengthened against the dollar, while the Turkish lira and the Argentine peso depreciated by 2 percent. On the other hand, the price of gold rose by 1 percent amid continued strong uncertainty in the market, and thus currently it stands at USD 1,725.

Developed bond yields have risen since the last interest rate decision (Chart 12). Both the US and German 10-year yields rose by 6 basis points to 0.76 and -0.37 percent, respectively. The Japanese 10-year yield rose by 2 basis points to 0.02 percent. **Emerging countries' bond yields showed a mixed picture.** In the CEE region, the 10-year Hungarian and Czech yield rose at a similar rate, by roughly 20 basis points, the Polish one remained unchanged, while the Romanian one fell by 60 basis points.

2.2. Developments in domestic money market indicators

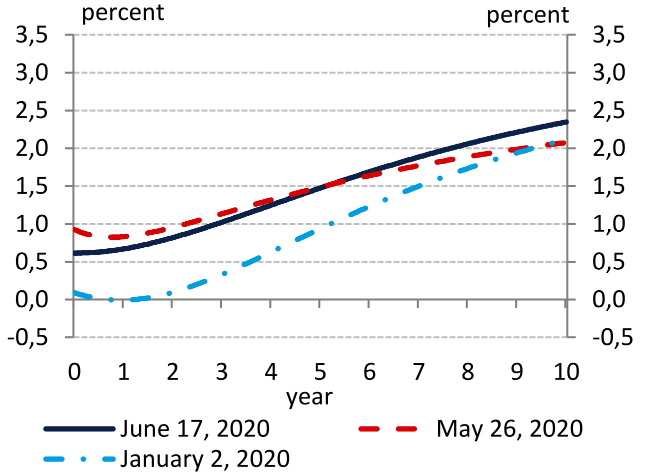
During the period under review, the forint strengthened against the euro. Of the currencies of the region, the Czech koruna appreciated to a larger, while the Romanian leu to a smaller degree than the forint, while the Polish zloty slightly weakened. Demand at the government securities auctions was strong; at the auctions of longer term securities the Government Debt Management Agency accepted higher volumes than previously announced. Average auction yields mostly declined, only the average yield on the 10-year government bond rose.

Chart 13: EUR/HUF exchange rate and the implied volatility of exchange rate expectations



Source: Bloomberg

Chart 14: Shifts in the spot government yield curve



Source: MNB, Reuters

Since the interest rate decision in May, the forint exchange rate has strengthened against the euro by 1 percent from 348 to 345 (Chart 13). Of the currencies of the region, the Czech koruna and the Romanian leu strengthened by 1.6 and 0.1 percent, respectively, while the Polish zloty weakened against the euro by 0.1 percent.

The government yield curve became steeper (Chart 14). The 1-3 year section of the yield curve registered a decrease of 10-20 basis points and 5-10 basis points on the middle section, while an increase of 10-25 basis points was observed at the longer end. As a result of the fall in short-term government securities yields and the rise in long-term yields, the steepness of the yield curve increased.

In the past month, the auctions of the discount Treasury bills and government bonds were characterised by strong demand. At the 3 and 12-month Treasury bill auctions, the Government Debt Management Agency did not accept higher volume than announced despite considerable demand. The average yield at the 3-month auctions declined from 0.79 percent to 0.67 percent, and the average auction yield at the 12-month Treasury bill auctions dropped from 0.84 percent to 0.76 percent. Demand was also strong at the auctions of long-term government securities. At the 5-year maturity the Government Debt Management Agency sold more securities than announced at all three auctions as well as at the auction of the 7-year floating rate bonds and of the 10-year government securities too. At the 3-year maturity, despite the mostly strong, 4 or 5-fold, demand, the announced amount was accepted, but at the first 3-year bond auction of the period the Government Debt Management Agency sold more bonds than announced. The 10-year average yield was 2.12 percent, representing a rise of 20 basis points from the last average auction yield of the previous period. The latest average auction yield on 5-year government securities fell by 14 basis points to 1.51 percent, while at 3-year securities it declined by 13 basis points to 1.13 percent. The Hungarian 5-year CDS spread rose by 1 basis points during the period under review, and currently stands at 75 basis points.

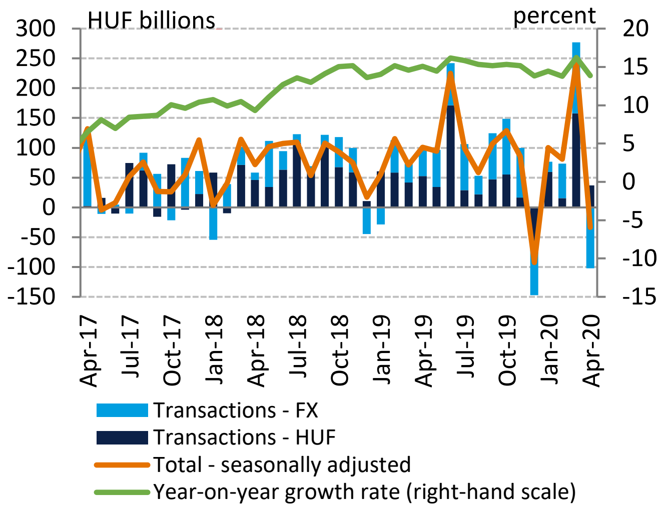
Non-residents' holdings of forint government securities

decreased. Non-residents' forint government securities holdings fell by HUF 30 billion to HUF 4,239 billion, and thus at the end of the period the market share of forint government securities held by non-residents decreased from 23.1 percent to 22.6 percent.

3. Trends in lending

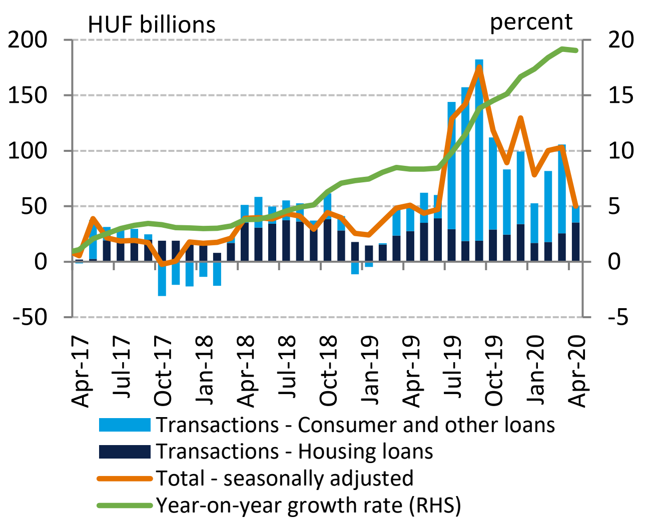
In April 2020, outstanding borrowing of non-financial enterprises – breaking the trend of the past months – declined by HUF 65 billion, as a combined result of the rise in outstanding borrowing in forint and a larger decline in outstanding foreign currency loans. Outstanding borrowing of households grew by 19 percent until the end of April in annual terms, partly due to the technical effect of the missed instalments resulting from the moratorium on payments.

Chart 15: Net borrowing by non-financial corporations



Source: MNB

Chart 16: Net borrowing by households

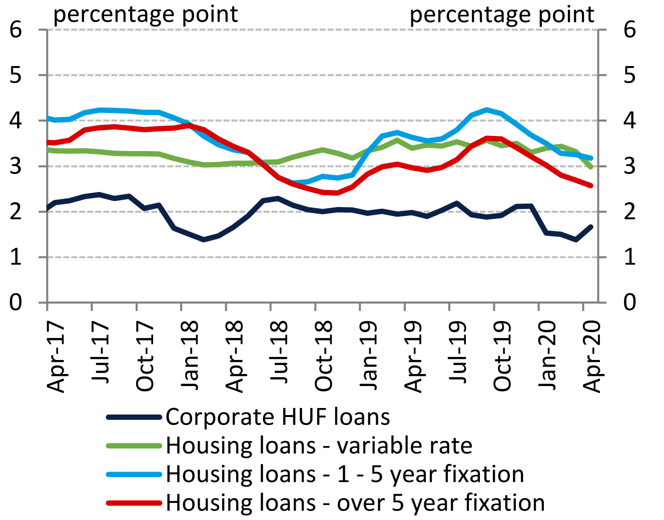


Source: MNB

In April 2020, outstanding borrowing of non-financial enterprises – breaking the trend of the past months – declined by HUF 65 billion, as a combined result of the rise in outstanding borrowing in forint and a larger decline in outstanding foreign currency loans. Accordingly, the annual growth rate declined to 14 percent (Chart 15). As a result of the coronavirus pandemic, lending activity may decline further in the coming months; according to our forecast, annual corporate loan dynamics may fall close to 10 percent by the end of the year. The decline in lending and the accompanying negative economic effects may be mitigated by the new central bank and government schemes to foster lending (FGS Go, MFB loan and guarantee programmes). Credit institutions' more prudent risk appetite is still reflected in new disbursements: the amount of the contracts concluded last month reached merely 60 percent of the monthly average of last year.

Outstanding borrowing of households grew by 19 percent until the end of April in annual terms, partly due to the technical effect of missed instalments resulting from the moratorium on payments (Chart 16). Disbursements of personal loans and overdrafts may have been curbed by the introduction of the new limit on APR. New disbursements in April already reflect the impacts of the coronavirus (tightening bank terms, declining household demand), since monthly disbursement of both new housing loans and personal loans decreased. On the other hand, despite the deteriorating economic environment, there is still strong demand for state-subsidised loan schemes, which may support lending to households. On the whole, a growth of 7 percent may be expected in the household segment in 2020.

Chart 17: Development of corporate and household credit spreads



Note: 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

The smoothed interest rate spread of forint corporate loans was 1.67 percentage points in April 2020, representing an increase of 0.29 percentage point compared to the previous month (Chart 17). The average smoothed interest rate spread on variable rate housing loans calculated on the basis of the annual percentage rate (APR) declined during the month and amounted to 2.98 percentage points. **The spread on products with interest rate fixation periods over one year, up to 5 years and more than 5 years also declined** compared to March. The average spread on housing loans with interest rate fixation periods over one year and up to 5 years reached 3.17 percentage points in April, while the spread on products with interest rate fixation periods of over 5 years was 2.57 percentage points.