MACROECONOMIC AND

FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES OF THE

MONETARY COUNCIL MEETING

OF 24 SEPTEMBER 2019

September

2019

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The background material 'Macroeconomic and financial market developments' is based on information available until 17 September 2019.

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

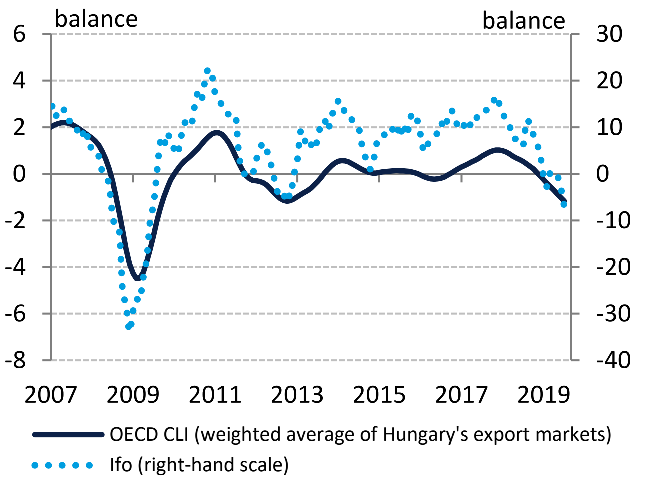
Table of contents

1. Macroeconomic developments

1.1. Global macroeconomic environment

In the second quarter of 2019, both GDP growth in the United States and economic growth in the euro area slowed down quarter on quarter. As a result of the decline in the business confidence indices and in the expectations with regard to the German economy, growth prospects of the euro area continued to worsen. Growth of the CEE region still substantially exceeds the growth rate of the euro area.

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



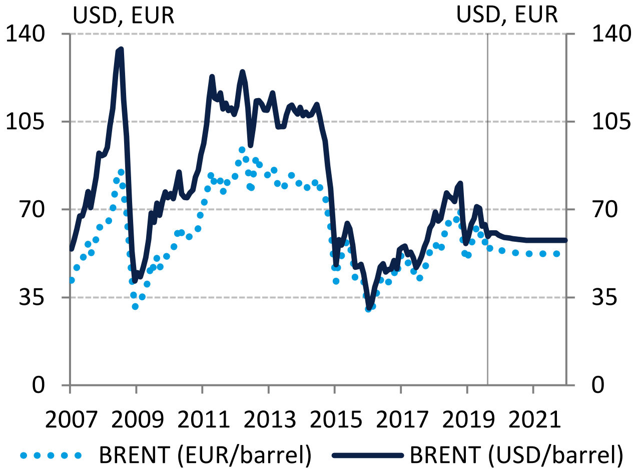
Source: OECD, Ifo

In the second quarter of 2019, the US economy rose – at a rate exceeding the expectations – **by 2.3 percent on an annual basis.** Growth was supported by the state government investments, in addition to household and federal government consumption. Net exports and inventories made negative contribution to economic performance, and building-type investments also curbed economic growth. Growth of the US economy may gradually decelerate in the coming period in parallel with the run-out of the growth supporting measures (tax cuts and infrastructural investment programme). **The concerns over the trade tensions between the USA and China** – due to their significant share within global imports – **play an increasingly prominent role in the fears related to the deceleration of the economy.** The higher customs burdens were already reflected in the macroeconomic figures, and the **price decline determining the commodity markets** – crude oil, industrial metals – **may also signal the contraction of global demand.**

In the second quarter of 2019, the economic performance of the **United Kingdom** – falling considerably short of expectations – **declined by 0.1 percent** quarter on quarter, mainly as a result of the contraction in corporate investments. **The exit of the United Kingdom from the EU, and the effect of the uncertainty resulting from the related events can be already observed also in the incoming macroeconomic figures.** As a result of the risk of trade disruptions, significant layoffs started in the British manufacturing industry, and in the first half of this year, the output of the British automotive industry declined by nearly 20 percent year on year.

In line with the weakening and increasingly uncertain external activity, in the second quarter of 2019 economic growth decelerated further across Europe. Economic growth of t**he euro area calculated on year-on-year and quarter-on-quarter basis rose by 1.2 and 0.2 percent, respectively. The data related to the second quarter signals deceleration compared to the previous quarter. The economic performance of Germany,** Hungary's key trading partner, **declined by 0.1 percent on a quarterly basis.** The decrease

Chart 2: World market prices of Brent crude oil



Source: Bloomberg

was caused – in line with the declining industrial performance – by the fall in exports, which was offset only partially by the domestic items. **Expectations with regard to the German economy's performance this year declined further.** In addition, forward-looking purchasing manager indices for the manufacturing industry also suggest continued unfavourable prospects, which is primarily explained by the **more moderate performance of the German vehicle industry**, in parallel with the emission control regulations introduced in the European Union in the second half of 2018, the drop in the sales of diesel cars and the narrowing of global demand. The Ifo index, capturing the outlooks of the German economy, declined further (Chart 1). New orders of the German industry also decreased in July year on year. **The short-term impact of the German industrial trends on Hungary's prospects is qualified by the fact that in the past months Hungarian vehicle manufacture has continued to outperform that of Germany.**

The **French** economy rose by 1.4 percent year on year. Growth was primarily supported by households' consumption, while decline in inventories curbed growth. The economic growth of **Austria** – based on a wide range of sectors – continued, and at 1.6 percent it outstripped the GDP growth of the euro area. The growth of the periphery countries was curbed primarily by the decline in **Italy's** economic performance (-0.1 percent). The rise in services was unable to offset the poor industrial and agricultural performance. In the years ahead, the concerns related to the high government debt, the budget and Italy's major government securities market exposure will weigh on Italian growth.

As in the previous quarters, the Central and Eastern European region proved to be the growth centre of the European Union also in the second quarter of 2019. According to the seasonally adjusted data, Poland, Romania, Slovakia and the Czech Republic recorded GDP growth rates of 4.2 percent, 4.6 percent, 2.6 percent and 2.7 percent, respectively. Examining the region as a whole, growth is mainly driven by domestic demand, while under weakening external activity net exports decelerate growth in several countries.

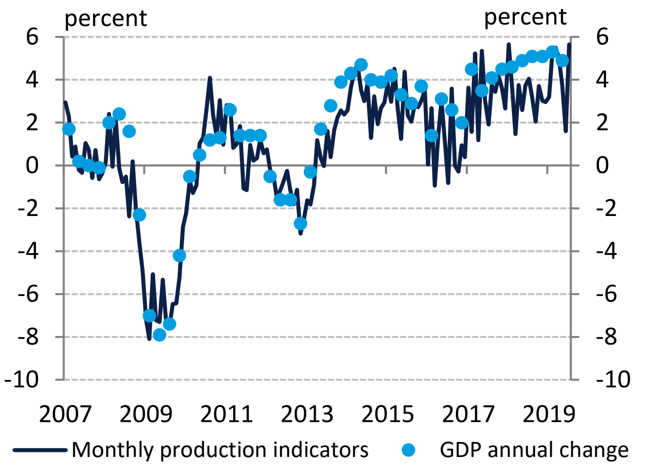
Growth prospects of the euro area continue to be dominated by downside risks. Economic growth may be curbed by the increase in trade tensions, the deteriorating industrial production observed in the past period, the challenges surrounding the automotive industry, the vulnerability of Italy stemming from the high government debt, the indirect effects of the deceleration of the Chinese economy and the uncertainty resulting from the fragile financial environment on the emerging markets. In addition, **the uncertainty surrounding the exit of the United Kingdom from the EU** continues to represent material risk and the "fallout" of the United Kingdom from the EU with no deal (hard Brexit) remains a realistic scenario.

Underlying inflation measured in the euro area – in line with the economists' expectations – **remained unchanged compared to July.** Accordingly, inflation stood at 1.0 percent and core inflation at 0.9 percent. The world market price of crude oil, under substantial volatility, was around USD 60 on average and in the past days it rose to USD 64 (Chart 2). The developments in prices were shaped by opposite effects: heightening geopolitical tensions in the Middle East pointed to an increase, while the trade tensions between China and the USA made major contribution to the decrease in prices. As a result of the drone attack that hit two Saudi oil terminals in mid-September, Saudi oil extraction temporarily was more than halved, which caused the price of the Brent oil to rise by 11 percent. In addition, as a result of the US customs duties imposed on additional Chinese goods, prospects related to global economic growth worsened, which curbs oil price developments in the medium term as well. World market prices of industrial commodities and of unprocessed food both declined in August.

1.2. Domestic real economy developments

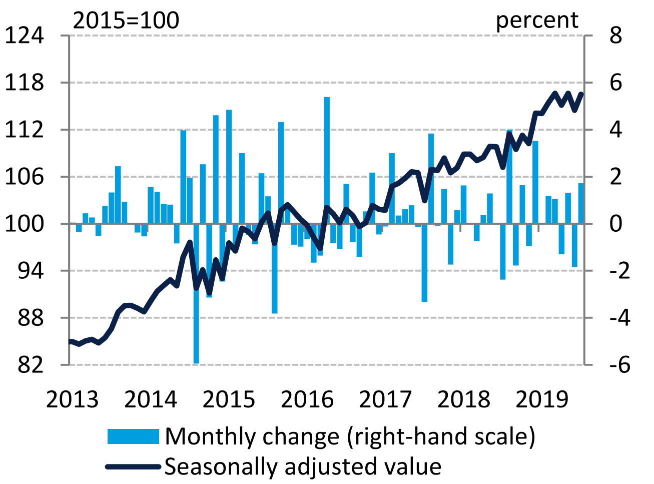
According to the HCSO's data, in the second quarter of 2019, Hungary's gross domestic product rose by 4.9 percent year on year. Growth was still supported by domestic demand. In the period of May to July 2019, seasonally adjusted unemployment rate remained 3.4 percent. In the second quarter of 2019, based on the number of vacancies, corporate labour demand continued to decline in a wide range of the sectors.

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

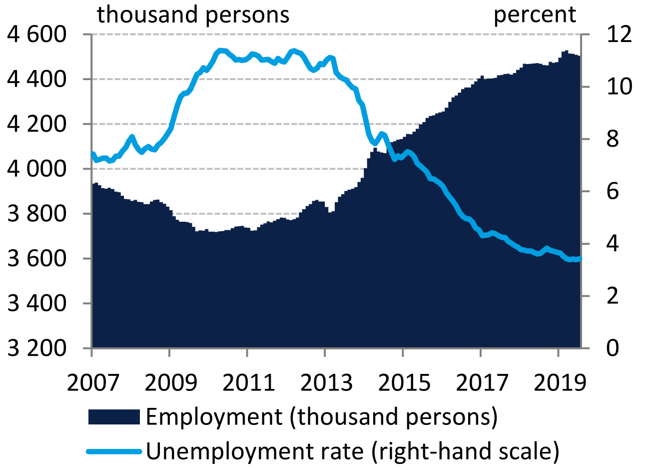
According to HCSO's data release, in the second quarter of 2019, Hungary's gross domestic product rose by 4.9 percent year on year. Based on the seasonally and working-day adjusted data, Hungary's GDP rose by **1.1 percent quarter on quarter**. Hungary is ranked second, behind Ireland, in the EU member states' growth ranking in year-on-year terms. From the output side, most of the national economy branches contributed to the growth, and market services, together with industry and construction, supported GDP growth to the largest degree (Chart 3). Despite the ailment of German industrial production, the Hungarian automotive industry substantially rose in the second quarter of the year, and thus industry made positive contribution to growth. From the expenditure side, domestic demand factors – consumption and investment – continued to increase to a large degree and materially supported economic growth, while net exports made negative contribution to GDP growth.

In July 2019, industrial output was up by 12 percent year on year, while production rose by 1.7 percent compared to the previous month (Chart 4). **The index adjusted for working days exceeded that of last year by 8.7 percent**; the difference is attributable to the one more working day compared to last year. The output of automotive industry, representing a large weight, rose by 34.6 percent year on year. In addition, the rise in the manufacture of electric equipment (13.5 percent) outstripped the average year on year.

Based on preliminary data, **expressed in euro terms, the value of exports and imports was up by 7.5 percent and 7.6 percent,** respectively, in an annual comparison in **July 2019**, and thus trade surplus rose by EUR 13 million. Despite the ailment of German industrial production, export sales of the Hungarian automotive industry rose by 31 percent in July. In June 2019, terms of trade improved in an annual comparison, which may be attributable to the relative change in the price of mineral fuels.

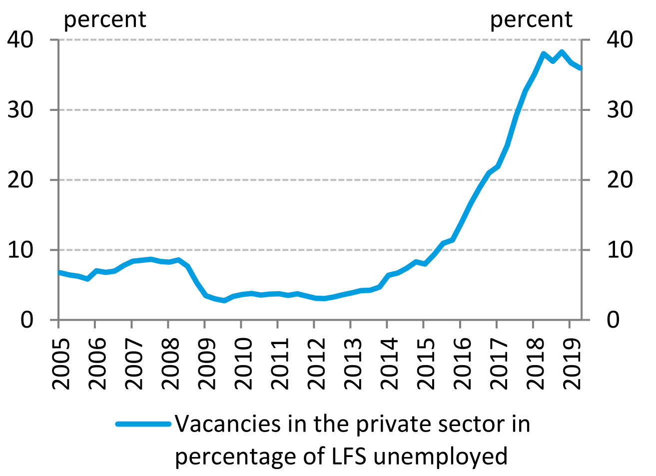
In July 2019, the volume of construction output was up by 32.9 percent year on year. Output increased both in the number of buildings and other structures. The growth in the construction of buildings was attributable to the construction of residential and industrial buildings. Due to

Chart 5: Number of persons employed and the unemployment rate



Source: HCSO

Chart 6: Development of labour market tightness indicator



Note: Quarterly data.
Source: National Employment Service, HCSO

the government investments, primarily to infrastructure developments (road, railway and public utility), construction of other structures increased further. **The volume of new contracts decreased by 25.5 percent year on year**; the number of contracts for buildings rose by 12.5 percent, while it fell by 40.5 percent for other structures. The month-end volume of the construction companies' contract portfolio fell short of the value registered a year ago by 10.2 percent.

In July, retail sales volume, based on the data adjusted for the calendar effect, was up by 6.6 percent year on year. According to the seasonally adjusted data, retail sales volume accelerated compared to the previous month. The rise in the total retail sales volume was primarily attributable to the continued growth in the turnover of non-food products (motor vehicles and vehicles parts, industrial goods, mail order shops), while the increase in fuel sales also substantially accelerated compared to the previous month. In addition, the turnover of food stores and groceries, representing a considerable weight, also continued to rise year on year.

1.2.2. Employment

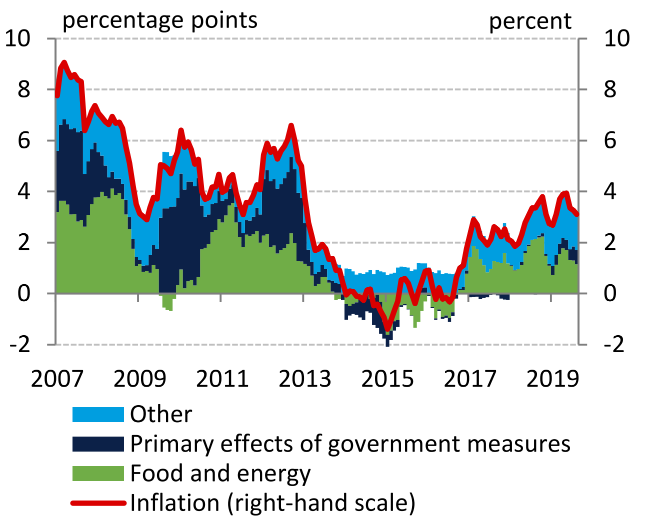
According to the (seasonally adjusted) data of the Labour Force Survey, in the period of May to July 2019, the labour force participation rate moderately decreased. Total employment rose by 0.8 percent year on year. The number of people in public employment and the number of people employed abroad was 110,000 and 118,000, respectively. **Seasonally adjusted unemployment rate remained at 3.4 percent** (Chart 5).

In the second quarter of 2019, based on the number of vacancies, **corporate labour demand continued to decline in a wide range of the sectors.** The labour market **tightness indicator** calculated from the ratio of job vacancies and unemployed persons, slackened – similarly to the previous quarter – but **still remained at a high level** (Chart 6).

1.3. Inflation and wages

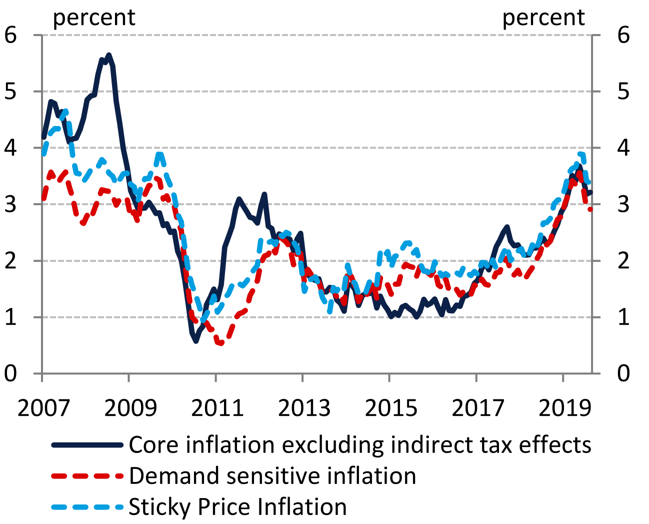
In August 2019, year-on-year inflation was 3.1 percent. Core inflation stood at 3.7 percent, while core inflation excluding indirect taxes was 3.2 percent. The underlying inflation indicators capturing the more permanent trends (inflation of demand sensitive and sticky price products and services) remained unchanged compared to the previous month.

Chart 7: Decomposition of inflation



Source: MNB calculation based on HCSO data

Chart 8: Measures of underlying inflation indicators



Source: MNB calculation based on HCSO data

1.3.1. Wage setting

In June 2019, gross average wage in the private sector rose by 10.9 percent year on year. The increase in the regular average wage on a monthly basis was higher than expected under the usual seasonality. Bonus payments in June were slightly lower than in the previous years. Within the private sector, wage dynamics in manufacturing substantially exceeded the wage growth of the market services sector. The wage dynamics, exceeding the 8 percent rise in the minimum wage and the guaranteed wage minimum, may still primarily be attributable to the tight labour market conditions determining the underlying wage setting trend.

1.3.2. Inflation developments

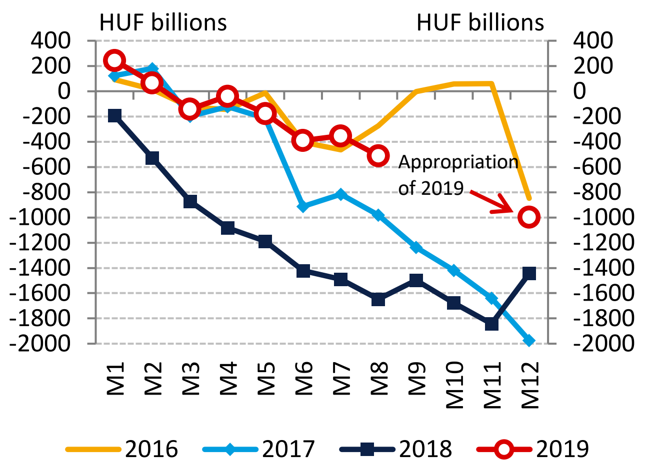
In August 2019, year-on-year inflation was 3.1 percent. Core inflation stood at 3.7 percent, while core inflation excluding indirect taxes was 3.2 percent (Charts 7 and 8)**. Inflation fell by 0.2 percentage point, while core inflation and core inflation excluding indirect taxes remained unchanged** compared to the previous month. The fall in inflation was primarily caused by the expected decline in the price index of unprocessed food.

The rest of the underlying inflation indicators capturing the more permanent trends (annual inflation of demand sensitive and sticky price products and services) **did not change compared to the previous month** (Chart 8). In July 2019, agricultural producer prices rose by 8.5 percent in annual terms, while the domestic sales prices in sectors of the consumer goods producers increased by 5.3 percent.

1.4. Fiscal developments

In August 2019, the central sub-sector of the general government closed with a deficit of HUF 158 billion, and thus the deficit accumulated in the first eight months rose to HUF 511 billion, which is substantially lower than the cash-based deficit registered in the first eight months of the previous two years.

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



Source: Budget Act of 2019, Hungarian State Treasury

In August 2019, **the central sub-sector of the general government** closed with a deficit of HUF 158 billion, and thus the deficit accumulated in the first eight months rose to HUF 511 billion, which is substantially lower than the cash-based deficit registered in the first eight months of the previous two years (Chart 9).

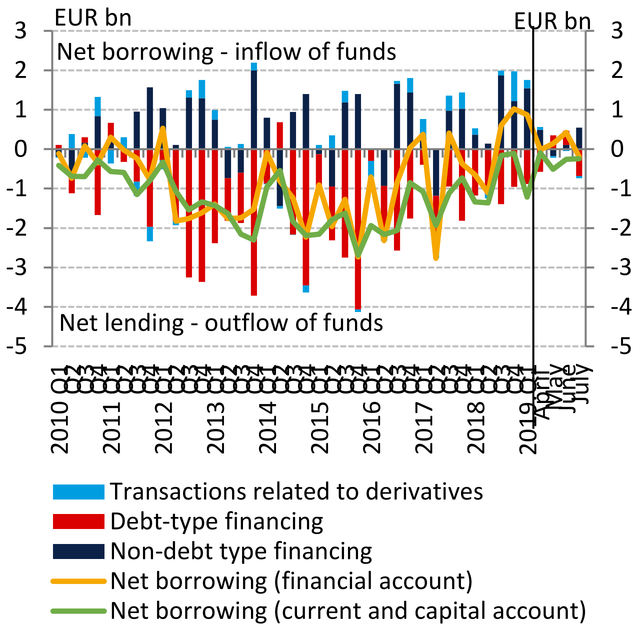
The revenues of the central sub-sector outstripped the value registered last August by HUF 104 billion. This is partly attributable to the higher level of VAT revenues, resulting from the high dynamics of gross payments. The dynamic growth in incomes related to wages and other earnings also contributes to the higher revenue.

In August 2019**, the expenditures of the central sub-sector** were up by HUF 107 billion year on year. The difference is attributable to the combined effect of the expenses of the central budgetary institutions, the higher subsidies disbursed to the transportation companies, the expenditures related to state assets and the lower rate of housing subsidies.

1.5. External balance developments

In July, net lending of the economy registered a surplus of EUR 242 billion, while the current account deficit amounted to EUR 70 billion. According to the financial account data, foreign direct investments continued to rise, while net external debt of the economy decreased.

Chart 10: 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 July, net lending of the economy registered a surplus of EUR 242 billion, while the current account deficit amounted to EUR 70 billion. Compared to June, net lending did not change substantially, while the current account deficit moderately decreased. Following the dividend payments in the previous month, the income balance deficit substantially decreased, which increased net lending; at the same time, the declining trade surplus pointed to the opposite direction. The inflow of transfers substantially improved the external balance position (Chart 10).

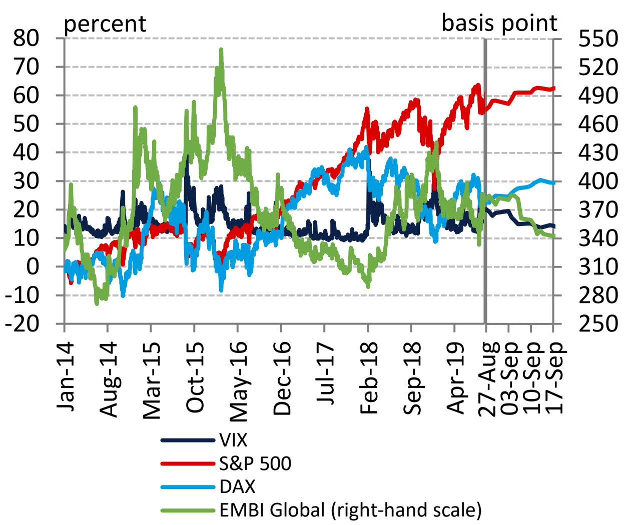
According to the financial account data, foreign direct investments continued to rise, while net external debt of the economy decreased. Net lending, calculated based on the financial account, amounted to roughly EUR 200 million, which was the combined result of the FDI inflow of EUR 500 million and the decrease of almost EUR 700 million in debt liabilities. The decrease in net external debt related to the private sector, while the rising public external liabilities were mainly attributable to the purchase of government securities by non-residents.

2. Financial markets

2.1. International financial markets

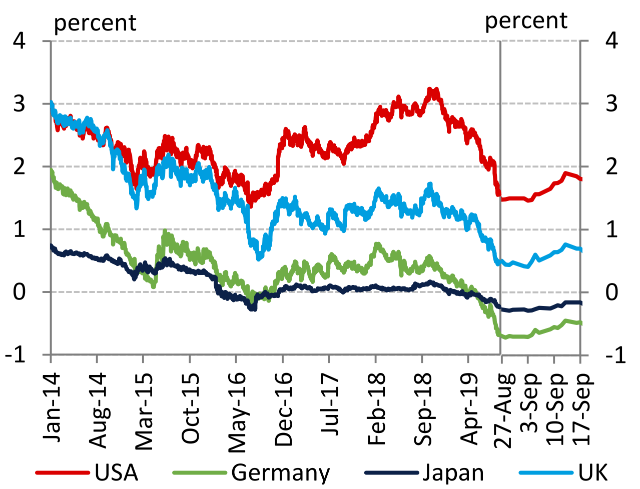
Since the last interest rate decision the risk appetite increased, which is mostly attributable to the positive developments related to the trade war, the continuation of the Brexit talks and the monetary policy decisions of the major central banks. The developed and emerging equity markets rose by 4-7 percent during last month, while developed bond markets were characterised by yield increase. Due to the Saudi drone attacks in mid-September, oil prices substantially increased last week, thus the price of the Brent closed the period at around USD 64.

Chart 11: Developed market equity indices, the VIX index (left-hand scale) and the EMBI Global Index (right-hand scale)



Source: Bloomberg

Chart 12: Yields on developed market long-term bonds



Source: Bloomberg

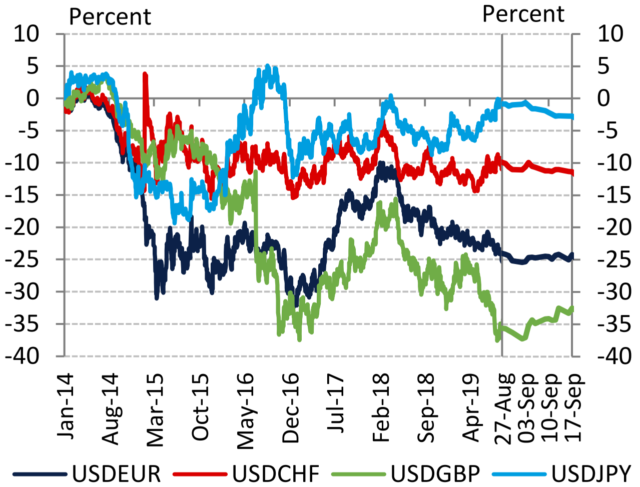
Generally, financial market sentiment improved in the past period. The positive developments related to the trade war, the easing of the monetary stance by the major central banks (Fed, ECB) and the continuation of the Brexit talks all contributed to the increasing willingness to take risks. At the same time, following the drone attacks against the oil facilities of Saudi Arabia, uncertainty increased temporarily.

The VIX index, the key measure of equity market risks, dropped by 6 percentage points to 14 percent by the end of the period, while the emerging bond market EMBI Global spread fell by almost 40 basis points to 340 basis points (Chart 11). **On the whole, the US stock exchange indices rose by 4-5 percent, the European and Japanese indices by 6-7 percent, while the composite MSCI, measuring the performance of the emerging market, was up by 6 percent.** Gold price dropped by 3 percent below USD 1,500 as a result of strengthening risk appetite, although the year-to-date increase was still around 15 percent.

The developed market bond yields – despite the central banks' easing measures – **significantly increased since the last interest rate decision**, , investors mostly turned to the equity markets (Chart 12). The US long-term yield rose by 33 basis points to 1.8 percent, while the German 10-year yield rose by almost 20 basis points to -0.5 percent from the mid-August historic trough of -0.71 percent. With this, although the German 30-year yield returned to the positive band, the US yield curve remained inverse: the 10-year yield is lower than the 1-year yield. Emerging market long-term yields varied: Brazilian and Russian ten-year yields decreased, while those in India, China and in the CEE region slightly rose during the period under review.

The exchange rate of the developed currencies did not change materially during the period under review (Chart 13). No major shift was observed in the EUR/USD exchange rate as a result of the interest rate decisions, and thus it stands roughly at same level as a month ago. The British pound appreciated by two percent at the news of the continuation of the Brexit talks. At the same time, the Swiss

Chart 13: Developed market FX exchange rates



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

Source: Reuters

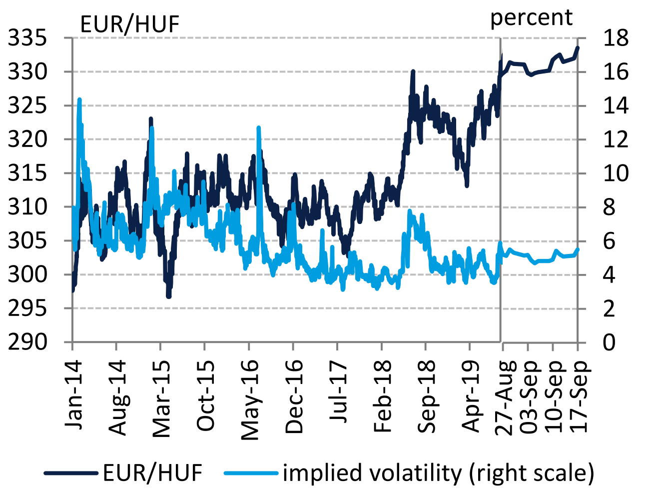
franc depreciated against the euro by 1 percent, while the Japanese yen depreciated against the dollar by 3 percent during the period under review.

Last month oil prices increased, and thus the price of Brent and WTI rose by 7 percent to USD 64 and by 6 percent to USD 58, respectively. The larger part of the monthly increase took place at the end of the period, following the drone attack on the oil terminals providing a major part of the Saudi Arabian production. Although after the event the Brent price soared to exceed even USD 70, as a result of the positive news related to the degree of the production shortfall, finally the price somewhat decreased.

2.2. Developments in domestic money market indicators

Since the previous interest rate decision, the forint depreciated against the euro to a larger degree than the currencies of the region. The 3-month BUBOR fell by 5 basis points to 0.21 percent. The short section of the government securities yield curve also shifted slightly downwards, while middle and long section rose in line with the trends observed on the developed markets, and thus the steepness of the yield curve increased. At the same time, the auction of long-term government securities attracted strong demand.

Chart 14: EUR/HUF exchange rate and the implied volatility of exchange rate expectations

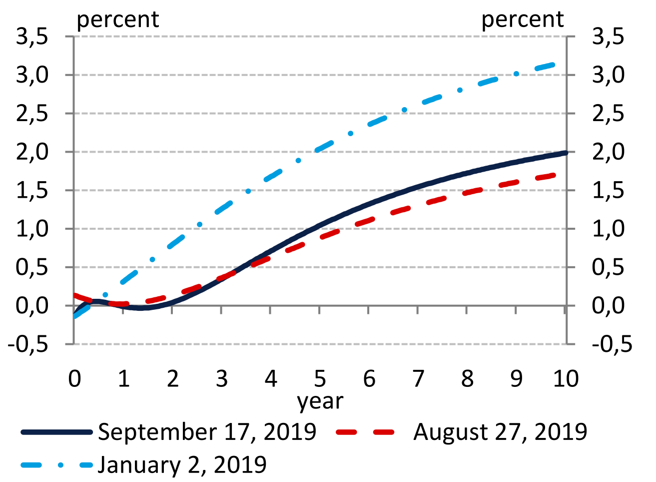


Source: Bloomberg

Since the interest rate decision in August, the forint exchange rate against the euro depreciated by 1.2 percent from 330 to 333.5 (Chart 14). With the exception of the Polish zloty, which on the whole appreciated by 1.3 percent, the currencies of the region slightly depreciated: the Czech koruna and the Romanian leu both depreciated against the euro by 0.2 percent.

The 3-month BUBOR, relevant for the monetary policy transmission, fell by 5 basis points, and thus it stood at 21 basis points at the end of the period. **The short section of the government yield curve slightly shifted downward, while its middle and longer sections increased.** The short section of the yield curve was characterised by a fall of less than 10 basis points, the middle section increased by 1-15 basis points, while the long section registered a rise of 15-25 basis points, and thus the government yield curve became steeper during the period under review (Chart 15).

Chart 15: Shifts in the spot government yield curve



Source: MNB, Reuters

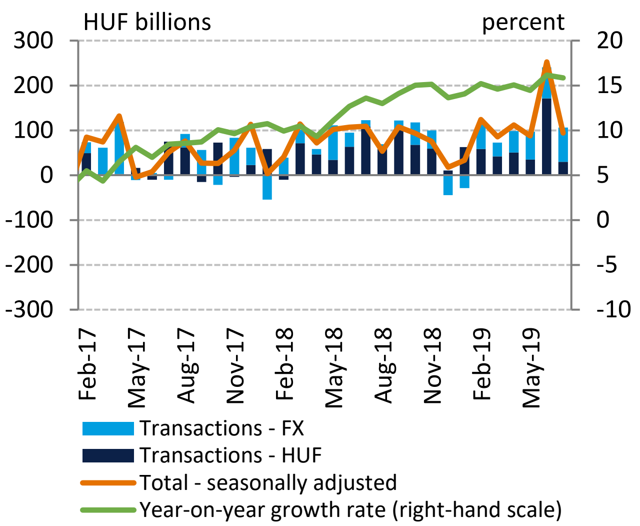
Short-term forint government bond auctions were characterised by medium and strong demand, while average yields remained record low. Demand for medium-term securities was smaller, while it was stronger for long-term papers; at the same time, long-term yields rose in line with the international trends. At the auctions of the 3- and 12-month Treasury bills, the Government Debt Management Agency issued the announced volume at each time. As in the previous period, the average yield of the 3-month auctions continued to fluctuate close to 0 percent. At the 12-month Treasury bill auctions, similarly to the previous period, the average auction yield was 0.05 percent. Demand at the longer term government securities auctions varied: at the auction of the 3-year securities the Government Debt Management Agency accepted lower, while at the auctions of the 5- and 10-year securities it accepted higher volumes than previously announced. The average yield of the 3-year securities was 0.38 percent, which fell short of that registered at the June auction by roughly 50 basis points. The average yield of the 5- and 10-year securities was 1.06 and 2.05 percent, respectively, which – in line with the international yield increase – exceeded the average auction yields registered in August by roughly 31 and 25 basis points. The Hungarian 5-year CDS spread fell by 2 basis point during the period under review, and at present it stands at 75 basis points.

Non-residents' forint government securities holdings declined by HUF 91 billion to HUF 4,264 billion. Their share within the total portfolio declined by 44 basis points, and thus at the end of the period it was close to 24.2 percent of the market holding.

3. Trends in lending

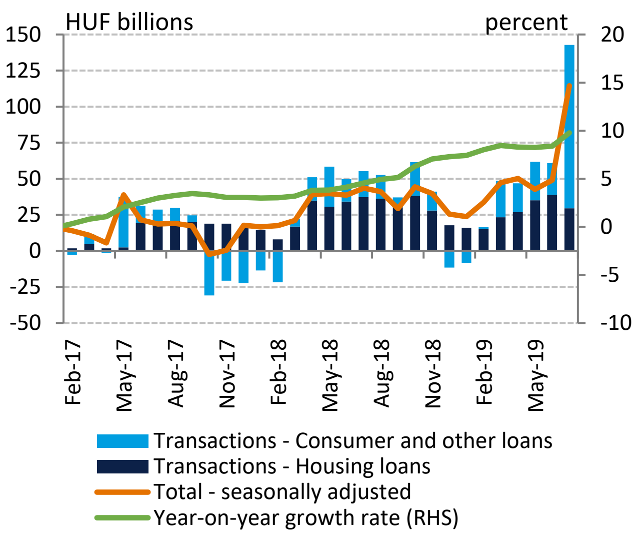
In July, the outstanding corporate loans of credit institutions rose by HUF 106 billion due to transactions. The outstanding loans of the credit institutions to households rose by HUF 143 billion due to transactions, and thus the annual growth in outstanding lending already amounts to 9.8 percent.

Chart 16: Net borrowing by non-financial corporations



Source: MNB

Chart 17: Net borrowing by households



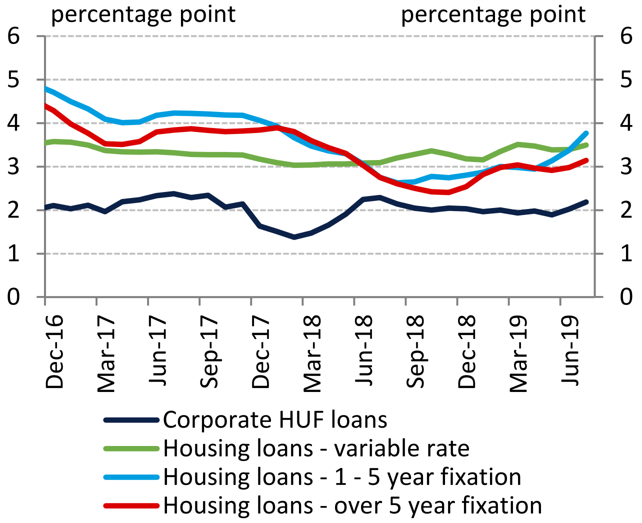
Source: MNB

In July, the outstanding corporate loans of credit institutions rose by HUF 106 billion due to transactions (Chart 16). By currency, forint loans and foreign currency loans increased by HUF 30 billion and HUF 76 billion, respectively. The growth registered in the past 12 months due to transactions continues to be well above HUF 1,000 billion. **Thus the annual growth rate of the outstanding corporate loans** remained **15.8 percent.** Excluding money market transactions, the volume of new loans amounted to roughly HUF 192 billion in July. **The growth rests upon a broad base in a breakdown of banks and industries as well.**

The outstanding loans of the credit institutions to households rose by HUF 143 billion due to transactions, and thus the annual growth in outstanding lending already amounts to 9.8 percent (Chart 17). The value of new contracts concluded during the month amounted to HUF 249 billion. **This exceptionally large volume is essentially attributable to the prenatal baby support within the category of consumer and other loans.** The value of new contracts in personal loan contracts, being the most popular product recently, reached HUF 53 billion in the month under review (a growth of 33 percent on an annual basis), while that of housing loans slightly fell short of the value registered in the previous months, at HUF 76 billion (annual growth of 15 percent).

The smoothed interest rate spread of forint corporate loans was 2.18 percentage points in July 2019, **representing**

Chart 18: 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

an increase of 15 percentage points compared to the previous month (Chart 18). **The average smoothed interest rate spread on variable rate housing loans calculated on the basis of the annual percentage rate (APR)** also rose during the month and amounted to 3.49 percentage points in July. **For loans with an interest rate fixation for up to 5 years, this value was 3.77 percentage points, while for loans fixed for more than 5 years, it stood at 3.14 percentage points in July.** Thus the interest rate spread on loans fixed for 5 years at the most is already higher than that on variable-rate loans.