MACROECONOMIC AND

FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES OF THE

MONETARY COUNCIL MEETING

OF 26 MARCH 2019

March

2019

Time of publication: 2 p.m. on 10 April 2019

The background material 'Macroeconomic and financial market developments' is based on information available until 20 March 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

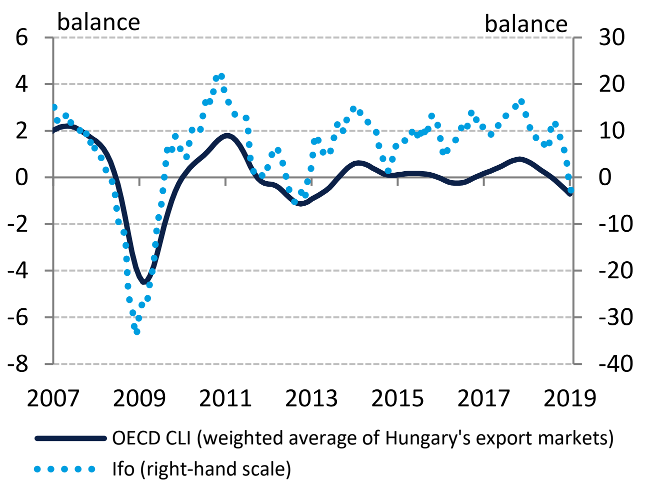
Table of contents

1. Macroeconomic developments

1.1. Global macroeconomic environment

In 2018, growth in GDP of United States was brisker, while economic growth in the euro area continued at a decelerating rate. Global growth prospects for 2019 substantially deteriorated. The data received from the United States, the euro area and from China, all point to decelerating economic activity. The outlook for economic activity is influenced by developments related to international trade policy and uncertainties surrounding the Brexit deal.

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

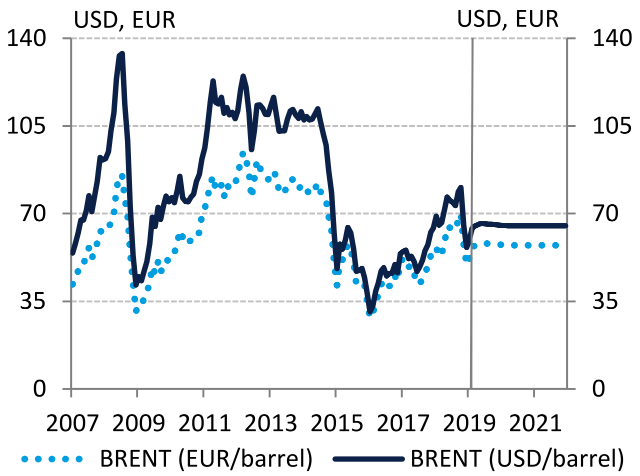


Source: OECD, Ifo

Growth in the global economy continued in the fourth quarter of 2018 at a slower rate. In the fourth quarter of 2018, the **US** economy increased – at the fastest rate since 2015 – by 3.1 percent in annual terms, and thus on the whole, the performance of the US economy rose by 2.9 percent in 2018. Household consumption was the key driver of growth, which may have been substantially supported by the tax reform adopted at the end of 2017, which reduced the personal income tax rate. In addition, corporate investments also provided material support for last year's growth. Net exports made negative contribution to economic performance, which was partially offset by the major inventory accumulation, which preceded the enforcement of customs measures. The prospects related to the growth of the US economy predict gradual deceleration in parallel with the run-out of the growth supporting measures (tax cuts and infrastructural investment programme). In addition, the potential deepening of the external trade tensions – due to the major weight of the United States within global imports – may also have tangible impact on global economic growth.

Economic growth in the **euro area** continued in the last quarter of 2018 at a slower rate than observed in the previous quarters. **The growth calculated on year-on-year and quarter-on-quarter basis was 1.1 and 0.2 percent, respectively.** The economic performance of Germany, Hungary's key trading partner, rose by 1.4 percent in 2018, which was the slowest rate of the past 5 years. The growth of 0.6 percent, registered in the fourth quarter, was primarily supported by investments, while households' consumption was more moderate. In line with the poor industrial performance, German exports also declined quarter-on-quarter. **Expectations with regard to the German economy's performance this year substantially declined in the past period.** The growth prospects of the German economy are deteriorated by declining industrial production and more moderate export performance. Germany's industrial production declined further in January, contributed to by a wide range of subsectors. In January, new orders of the German industry materially decreased year on year. In addition, the Ifo index, capturing

Chart 2: World market prices of Brent crude oil



Source: Bloomberg

the outlooks of the German economy, declined to its six-year low level in February (Chart 1).

In the fourth quarter, the **French economy** rose by 0.9 percent, contributed to by a wide range of the sectors. **Italy** fell into technical recession (the GDP contracted both in the third and fourth quarters of 2018 on a quarterly basis) which has been unprecedented since early 2013. The economic growth of **Austria** – based on a wide range of sectors – continued, and at 2.1 percent it outstripped the GDP growth of the euro area. The economic performance of the **United Kingdom** rose by 1.3 percent last year, at the slowest rate since 2009. The economic growth was mostly supported by household consumption. Corporate investment stagnated on the whole compared to the previous year, which was also attributable to the uncertainty surrounding the exit from the EU. This year, the outcome of the Brexit deal may substantially influence economic activity.

As in the previous quarters, the Central and Eastern European region proved to be the growth centre of the European Union in the fourth quarter of 2018 as well. According to the seasonally adjusted data, in the fourth quarter Poland recorded a GDP growth of 4.6 percent, Slovakia and Romania 4.0 percent, while the Czech Republic , 2.8 percent. As regards the region as a whole, domestic demand acted as the main driver of growth, while under weakening external activity net exports decelerated growth in several countries at the end of 2018.

Growth prospects of the euro area continue to be dominated by downside risks. Identifiable downside risks affecting European growth include the deteriorating industrial production observed in the past period, the vulnerability of Italy stemming from the high government debt, the deceleration of the Chinese economy and the uncertainty resulting from the fragile financial environment on the emerging markets. In addition to the foregoing, the exit of the United Kingdom from the EU continues to represent risk. A no-deal Brexit would substantially deteriorate – in addition to the direct trade channels – the growth prospects of the European economies through the major negative spillover effects (supplier networks, investment decisions). As regards the global economic activity, the increase in trade tensions remained the most significant money market and growth risk in the past months.

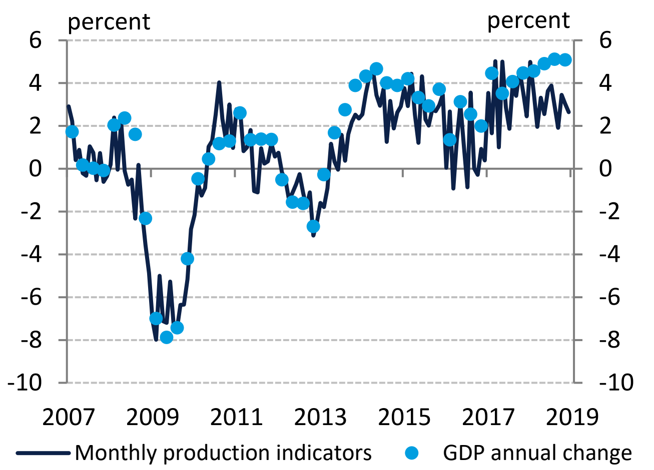
Underlying inflation measured in the euro area moderately declined in February, caused by the decelerating rise in service prices. As result of the change in oil prices, euro area inflation rose to 1.5 percent, while core inflation stood at 1.0 percent.

The world market price of Brent oil was around USD 67 on average in the last quarter of 2018 (Chart 2). **Since the last interest rate decision, the Brent price per barrel rose close to USD 67** by the end of the period under review. The rise in prices was attributable to the declining supply resulting from the agreement of oil production reducing reached in December last year by the OPEC member states. World market prices of industrial commodities increased, while those of unprocessed food remained unchanged in February.

1.2. Domestic real economy developments

According to the HCSO's data, in the fourth quarter of 2018, Hungary's gross domestic product rose by 5.1 percent year on year. Buoyant domestic demand continued to support growth. In the period from November 2018 to January 2019, in parallel with the material rise in labour force participation rate and employment, the seasonally adjusted unemployment rate was 3.7 percent. The labour market tightness indicator calculated from the ratio of job vacancies and unemployed persons remained at a high level.

Chart 3: Monthly production indicators and GDP growth



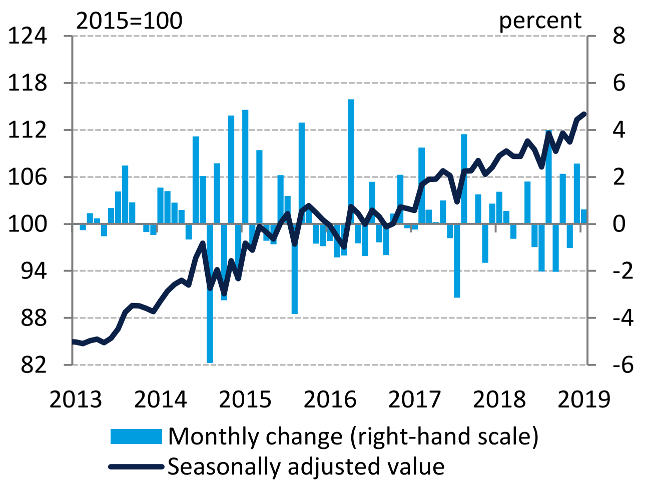
Note: Weighted average of monthly production indicators (industrial output, construction output and retail sales). The weights are derived from regression explaining GDP growth.
Source: MNB calculation based on HCSO data

1.2.1 Economic growth

According to HCSO's data release, in the fourth quarter of 2018, Hungary's gross domestic product rose by 5.1 per cent year on year (Chart 3). Based on the seasonally and working-day adjusted data, Hungary's GDP **rose by 1.0 percent quarter on quarter.** From the output side, most of the national economy branches contributed to the growth, and market services supported GDP growth to the largest degree. From the expenditure side, economic growth was supported to the greatest degree by the dynamic rise in internal demand factors, i.e. consumption and investment, while net exports decelerated GDP growth in the last quarter of the previous year.

In January 2019, **industrial output was up 4.4 percent** year on year, while production **rose by 0.6 percent compared to the previous month** (Chart 4). On the whole, the output of subsectors showed a positive picture; similarly to the previous month, **the output of vehicle manufacturing – representing a considerable weight – rose again**; in addition, the manufacture of electric equipments, as well as the food industry provided considerable support for the buoyant growth in industrial production. German industrial production showed a persistently decreasing trend in the past months; in addition, the new orders of the German industry continued to decrease in year-on-year terms.

Chart 4: Development in industrial production

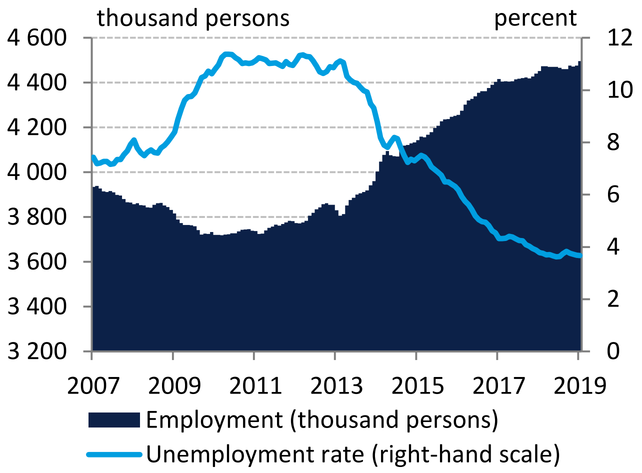


Source: MNB calculation based on HCSO data

Expressed in euro terms, the value of exports – in parallel with the industrial production – **was up by 6.4 percent, while that of imports rose by 9.7 percent** year on year in January 2019, and thus trade surplus decreased by EUR 225 million. In December 2018, the deterioration of the terms of trade slowed down, caused by the rise in the relative price of mineral fuels and processed goods.

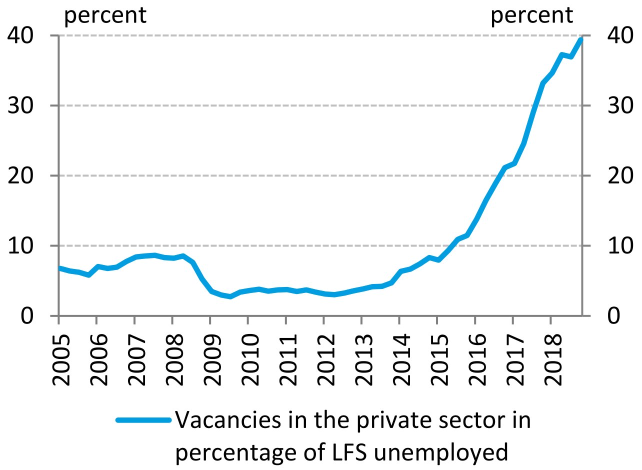
In January 2019 the volume of construction output was up 29.2 per cent year on year, while output increased by 9.8 per cent compared to the previous month. Output increased both in the case of buildings and other structures. The growth in production was attributable to industrial, office and residential buildings. Due to the government investments, primarily to infrastructure developments (road, railway, public utility), construction of other buildings rose. The **volume of new contracts substantially increased** year on year; within that, the

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

number of contracts for buildings increased again, while in the case of other structures a major year-on-year decrease was registered. The month-end volume of construction companies' contract portfolio substantially rose for buildings, while it decreased for other structures.

In January, **retail sales volume was up by 5.4 per cent year on year, based on both the seasonally unadjusted data and the data adjusted for the calendar effect**. Retail sales volume rose by 0.5 percent compared to the previous month. As regards the structure of retail sales, turnover continued to rise in a wide range of products. The substantial rise in the turnover of non-food consumer durables continued to support growth considerably; in addition, the turnover in food products also increased more significantly compared to the previous months.

1.2.2. Employment

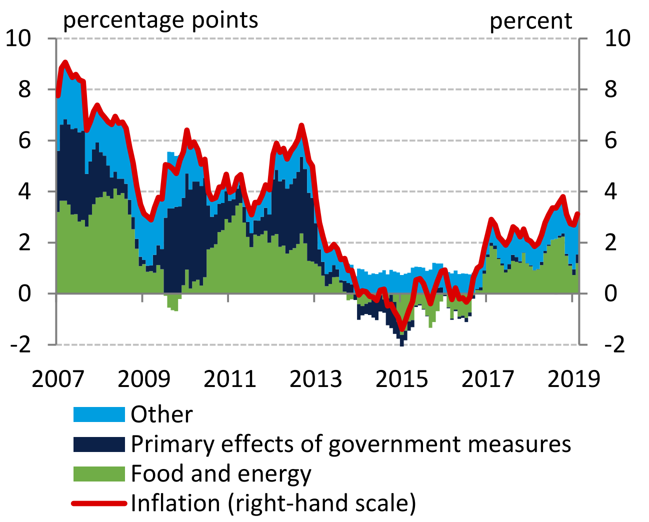
According to the seasonally adjusted data of the Labour Force Survey, between November 2018 and January 2019, both the labour force participation rate and the number of people in employment rose. Within total employment, public employment slightly decreased, while the number of people employed abroad did not change, and thus the rise was realised on the primary labour market. **In parallel with the rise in labour force participation rate and employment, the seasonally adjusted unemployment rate stood at 3.7 percent** (Chart 5).

In the fourth quarter of 2018, based on the number of job vacancies, corporate labour demand remained high in manufacturing, while it moderately rose in the market services sector. The **tightness indicator** calculated from the ratio of job vacancies and unemployed persons **remained at a high level** (Chart 6).

1.3. Inflation and wages

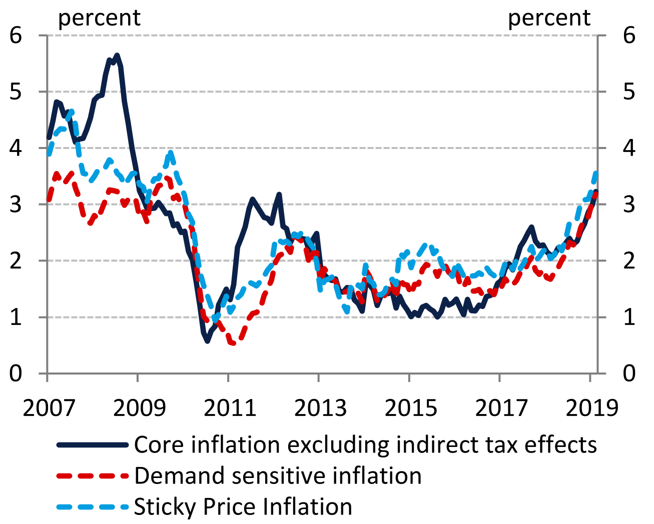
In February 2019, inflation stood at 3.1 percent, core inflation at 3.5 percent and core inflation excluding indirect taxes at 3.2 percent. Underlying inflation indicators rose compared to the previous month. In December 2018, gross average wage in the private sector rose by 10.1 percent year on year. The continued strong wage dynamics was supported, in addition to the historically tight labour market environment determining the underlying wage setting trend, by the raising of the minimum wage and guaranteed wage minimum by 8 and 12 percent, respectively, and the 2.5 percentage point reduction in the social contribution tax also supported corporate wage developments.

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 December 2018, gross average wage in the private sector rose by 10.1 percent year on year. The continued strong wage dynamics was supported, in addition to the **historically tight labour market environment** determining the underlying wage setting trend, by the **raising of the minimum wage and guaranteed wage minimum by 8 and 12 percent, respectively, and the 2.5 percentage point reduction in the social contribution tax also supported corporate wage developments**. Unlike the seasonality usually observed in December, the regular average wage did not change on monthly basis, while the degree of bonus payments was higher than in the previous years.

1.3.2. Inflation developments

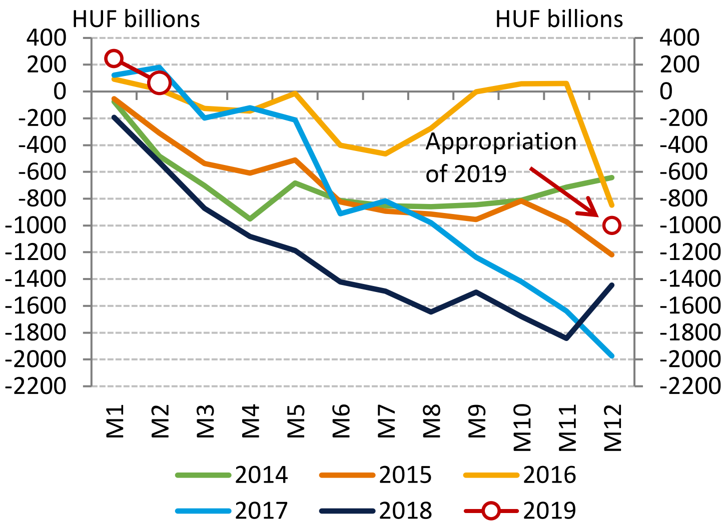
In February 2019, year-on-year inflation was 3.1 percent, while core inflation and core inflation excluding indirect taxes stood at 3.5 and 3.2 percent, respectively (Chart 7). Inflation rose by 0.4 percentage point compared to the previous month, contributed to – in addition to the rise in core inflation – by the increase in unprocessed food and fuel prices.

Core inflation excluding indirect taxes rose to 3.2 percent in February, mostly caused by the increase in the price of processed food and industrial goods. The **other underlying inflation indicators capturing the more permanent trends** (annual inflation of demand sensitive and sticky price products and services) **also rose** compared to the previous month (Chart 8). In January 2019, agricultural producer prices rose by 8.3 percent in annual terms, while the domestic sales prices of the consumer goods industry increased by 2.8 percent.

1.4. Fiscal developments

The central sub-sector of the general government closed with a deficit of HUF 177 billion in February 2019 and thus the surplus accumulated in the first two months decreased to HUF 67 billion.

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



Source: Budget Act of 2019, Hungarian State Treasury

In February 2019, the central sub-sector of the general government closed with a deficit of HUF 177 billion, and thus the surplus generated in the current year decreased to HUF 67 billion (Chart 9). The cumulated cash balance recorded at the end of February, which substantially exceeds that of last year, was primarily caused by the rise in EU funds and in tax revenues related to consumption, as well as by the year-on-year decrease in the disbursement of EU transfers.

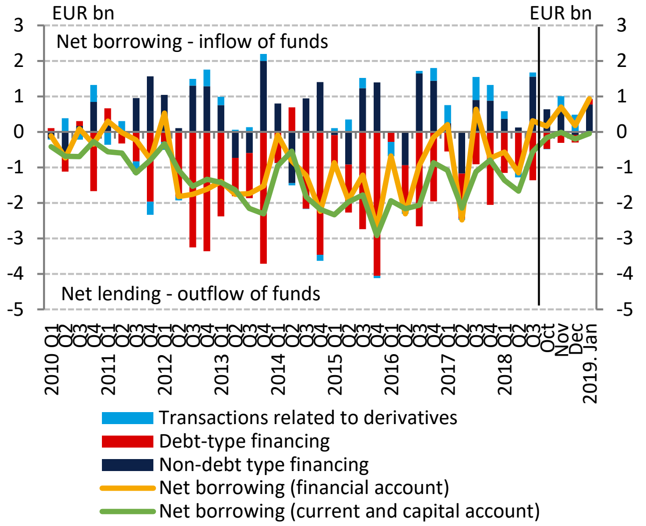
In February 2019, the **revenues of the central sub-sector** were up by HUF 208 billion year on year. This is mostly attributable to the higher volume of VAT revenues, resulting from the dynamic rise in gross revenues in addition to the rearrangement of reimbursements between months. The higher value of revenues related to EU transfers compared to last February also contributed to higher revenues of the central sub-sector.

In February 2019, the **expenditures of the central sub-sector** rose by HUF 48 billion year on year. The growth in normative and individual subsidies compared to last February was offset by the decline in the expenditures related to EU transfers, and by the fact that – contrary to the previous years – certain family allowances due in February were paid on 31 January.

1.5. External balance developments

In December, net lending of the economy amounted to EUR 51 billion, which was achieved under a current account deficit of EUR 154 billion and a capital account surplus of EUR 205 billion. According to the financial account data, in January the rise in net FDI inflow continued, while net external debt also rose.

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 December, net lending of the economy amounted to EUR 51 billion, which was achieved under a current account deficit of EUR 154 billion and a capital account surplus of EUR 205 billion. The moderate rise in the current account deficit was linked to a fall in the trade balance, which was attributable to rising imports related to domestic use, as well as to the temporary strike actions. The capital account surplus declined under the lower absorption of EU transfers, while the income balance deficit has not changed substantially during the month.

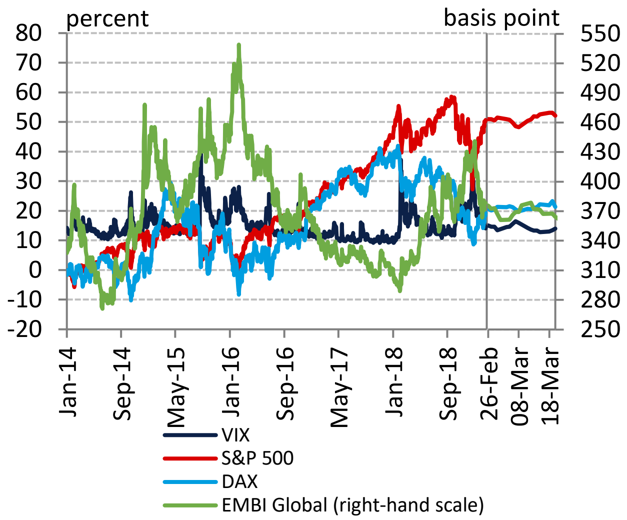
According to the financial account data, in January the rise in net FDI inflow continued, while net external debt also rose. The growth of almost EUR 800 million in net foreign direct investments was primarily attributable to the reinvested earnings of non-resident enterprises. The moderate increase in net external debt is attributable to the purchase of forint government securities by non-residents. However, the impact of this was mitigated by the decline in the private sector's net external debt (Chart 10).

2. Financial markets

2.1. International financial markets

Since the previous interest rate decision, global financial market sentiment improved on the whole. This was primarily attributable to the more cautious communication of the world's leading central banks. However, anxieties about the global deceleration and developments related to the Brexit continue to cause uncertainty.

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



Source: Bloomberg

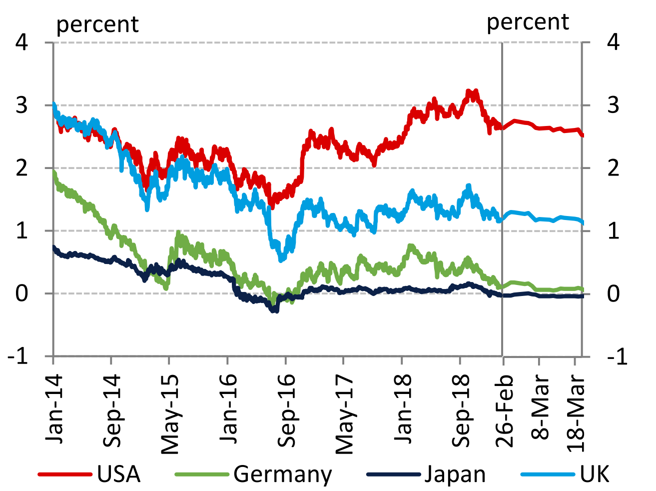
Since the previous interest rate decision, the indices reflecting global investor sentiment fluctuated in a narrow band. The VIX index was around the level observed before the interest rate decision in February, i.e. below 15 percent (Chart 11). The bond market processes also reflected a decline in risk aversion, and the market participants anticipated a shift in the key central banks' monetary policy toward a more prudent direction: the emerging market EMBI Global spread declined further, and it continuously fluctuates below 400 basis points since mid-January. The MOVE index, measuring the volatility of the US bond market, declined further in parallel with the improvement in global investor sentiment, and thus it fell below 44 basis points. The developments in the market sentiment were primarily determined by the more cautious communication of the world's leading central banks, the press news on the unfavourable USA and Korea negotiation, and favourable developments in the trade policy negotiations between the USA and China. At the same time, anxieties about the slowdown of global growth and the developments related to Brexit continue to cause uncertainty.

The communication of Fed in March and later on the communication by the governor suggested a shift to a more accommodating monetary policy, which was in line with the market pricing for this year. By contrast, the economists expected one interest rate hike this year, and thus the interest rate path forecast of the Fed policymakers brought some surprise. The market prices no interest rate hike for 2019 since December, which is already consistent with the latest forecasts of the FOMC members. At the same time, the expectations of the market and Fed with regard to 2020 still differ: while the first expects an interest rate decrease, FOMC members project an increase.

In line with slowdown of euro area growth and the downside risks **the pricing related to the date of the first interest rate increase by ECB was continuously postponed.** In parallel with the announcement of TLTRO-III and the postponement of the date of the interest rate increase, the EONIA forward yield curve flattened further after the decision.

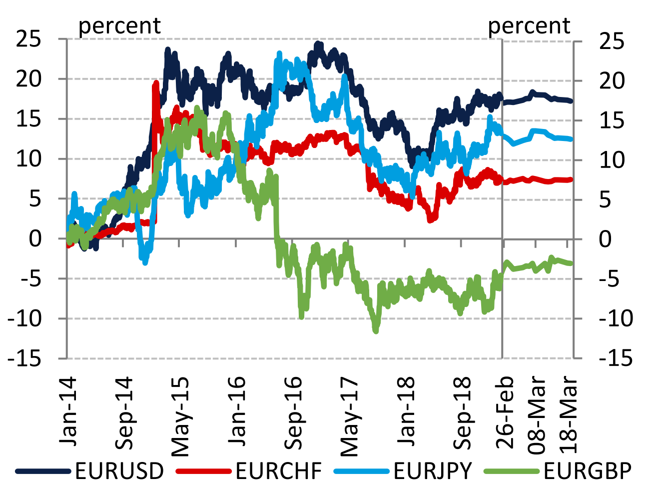
Amid the favourable market sentiment, both the

Chart 12: Yields on developed market long-term bonds



Source: Bloomberg

Chart 13: Developed market FX exchange rates



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

Source: Reuters

developed stock exchange indices and the emerging market indices recorded a moderate growth during the period under review. Of the key stock exchange indices, the US, the European and Japanese indices all rose moderately since the previous interest rate decision. The MSCI index, representing the developed markets, rose by 1 percent in total. At the same time, the composite MSCI index measuring the performance of the emerging market, showed a somewhat smaller, i.e. 0.3 percent, increase.

Both the developed and the emerging market long-term government securities yields declined. On the developed markets, the US long-term yield fell by 5 basis points below 2.6 percent, while the German yield decreased by 3 basis points below 0.1 percent and the Japanese long-term yield also declined by 1 basis points (Chart 12). Of the euro area periphery yields the Italian yield declined by roughly 24 basis points, while Greek yields slightly increased. The EMBI Global, representing the emerging bond markets, declined by 11 basis points in total during the period under review, which reflects an improvement in the perception of the emerging region.

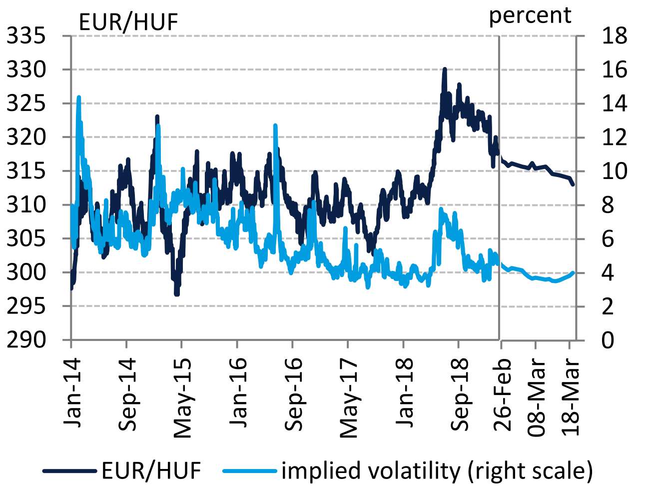
As a result of the Fed decision, the dollar depreciated against the euro. The dollar exchange rate depreciated against the euro and the Swiss franc by 0.2 and 0.7 percent in total, respectively, while its exchange rate against the British pound and the Japanese yen appreciated by 0.4 and 0.1 percent, respectively (Chart 13).

Oil prices, mostly as a result of the supply side developments, rose during the period under review. The price of WTI and Brent rose by 8 and 4 percent, respectively, since the previous interest rate decision, while the year-to-date price growth exceeds 20 percent. The oil price rise was supported by the fall in the oil extraction of OPEC member states to a four-year low. The announcement by Saudi Arabia – according to which it will maintain the substantial cut in production until the end of April – also pointed to this direction. In addition, there were major power cuts in Venezuela, which decelerated oil extraction.

2.2. Developments in domestic money market indicators

The forint depreciated by one percent since the previous interest rate decision. The 3-month BUBOR fell by 1 basis point, and at present it stands at 14 basis points. The short and long term government bond yields decreased, while the medium-term yields increased slightly.

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

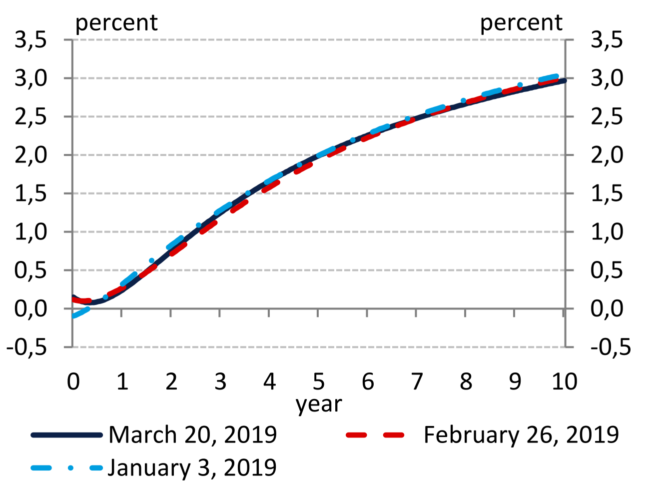


Source: Bloomberg

During the period under review, the forint exchange rate against the euro appreciated to the level of 313, and thus it appreciated by one percent in total since the February interest rate decision. The appreciation was more or less steady, and it typically moved together with the processes observed in the region; however, last week the forint appreciated to a slightly larger degree than the currencies of the region. In March, the Polish zloty appreciated at a similar rate, while the exchange rate of the Czech koruna and the Romanian leu depreciated last week, and thus they remained essentially unchanged throughout the last month (Chart 14).

The 3-month BUBOR, relevant for the monetary policy transmission, fell by 1 basis point, and at present it stands at 14 basis points. **The up to 2 years and the close to 10 years sections of the government yield curve declined by 2-4 basis points.** At the same time, the middle section of the curve recorded a rise of 5-8 basis points. Due to the moderate shifts, the steepness of the government securities market yield curve essentially remained unchanged during the period under review (Chart 15).

Chart 15: Shifts in the spot government yield curve



Source: MNB, Reuters

The forint government bond auctions were characterised by strong demand, while at the auction of the securities with shorter maturity the Government Debt Management Agency issued the pre-announced volume or less than that. The 3-month Treasury bill auctions were typically characterised by lower demand, but the Government Debt Management Agency accepted a lower volume than announced only on one occasion. The average yield of the 3-month auctions was 0 percent during most of the period. At the 12-month Treasury bill auctions, the average auction yield decreased by 1 basis points to 0.37 percent under stronger demand. The auctions of the longer term government securities generally attracted strong demand, and thus in most of the cases the Government Debt Management Agency augmented the announced volume. At the same time, average yields typically increased slightly compared to the previous period, and thus, e.g. in the case of the 5-year securities the average yield was 2.27 percent compared to the 2.23 percent recorded at the last auction of the previous period.

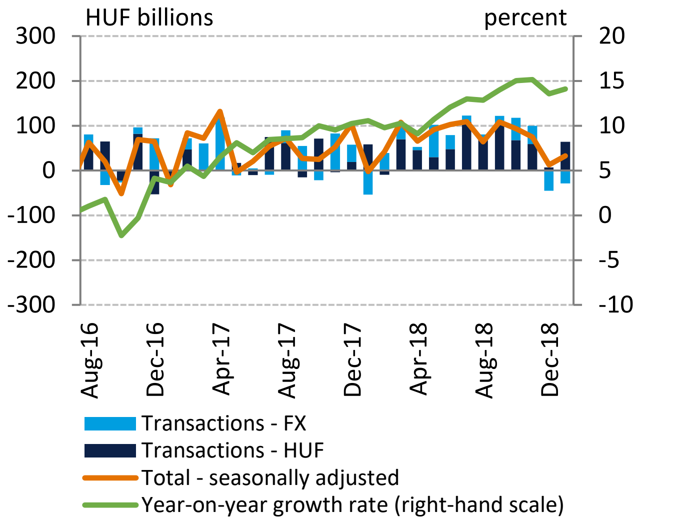
The 5-year Hungarian CDS spread rose to 91 basis points at the end of the period, which was in line with the change in the spreads recorded in the region.

Non-residents increased their forint government securities holding slightly, by HUF 16 billion. Accordingly, the portfolio held by non-residents rose to around HUF 4,230 billion, while their share remained close to 23 percent of the market holding.

3. Trends in lending

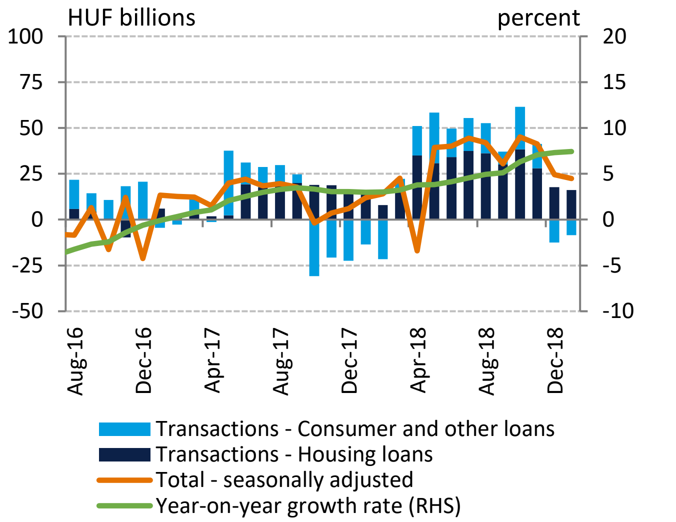
In January, the outstanding corporate loans of credit institutions rose by HUF 36 billion as a result transactions. The outstanding loans of the credit institutions to households rose by HUF 8 billion, and thus in January 2019 the annual growth in outstanding lending accelerated to 7.4 percent.

Chart 16: Net borrowing by non-financial corporations



Source: MNB

Chart 17: Net borrowing by households



Source: MNB

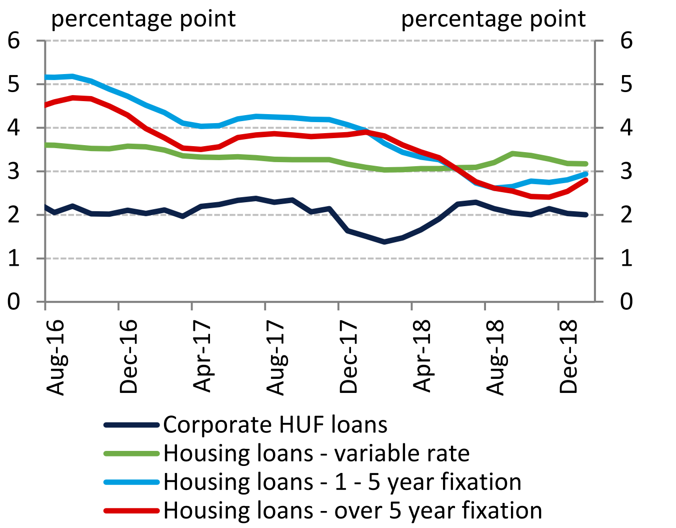
In January, the outstanding corporate loans of credit institutions rose by HUF 36 billion as a result transactions (Chart 16). In a breakdown by currency, forint loans increased by HUF 64 billion, while foreign currency loans decreased by HUF 29 billion. In January 2019, the annual growth in corporate lending – after the moderate fall recorded at the end of the year – accelerated to 14.1 percent. Excluding money market transactions, the volume of new loans amounted to HUF 172 billion during the month.

The outstanding loans of credit institutions to households rose by HUF 8 billion as a result of transactions, and thus in January 2019 the annual growth in outstanding lending accelerated to 7.4 percent (Chart 17). The value of new contracts concluded during the month amounted to HUF 121 billion. The 12-month cumulated value of new loans rose by 29 and 45 percent in the case of housing loans and consumer loans, respectively. Since September 2017, the Certified Consumer-Friendly Housing Loan products already contributed by HUF 363 billion to the growth in lending for housing purposes in a sounder structure, and accounted for 57 percent of the housing loans concluded in the month under review with interest rate fixed for at least 5 years.

During 2019, the ratio of (variable rate) loans with interest fixed for 1 year at the most declined further, and amounted to only 4.4 percent in January. Within the fixed-interest loans, from the second quarter of 2018, loans with interest period longer than 5 years increasingly gained ground, accounting for 68 percent of the total new housing loans in January. From 1 October 2018, the MNB introduced a new payment-to-income regime, differentiated by interest period, which is expected to divert demand toward loans with longer interest rate fixation, thereby reducing the interest risk of households.

The smoothed interest rate spread of forint corporate loans was 2 percentage points in January 2019 (Chart 18). However, the spread on small-amount market loans – typically taken by SMEs – exceeded the average of the other Visegrád countries by 80 basis points. The average smoothed interest rate spread on variable rate housing loans calculated on the basis of the annual percentage rate

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

(APR) dropped by 10 basis points compared to September 2017, to 3.2 percentage points. In the case of loans the interest rate of which is fixed for 5 years at the most, this value dropped by 130 basis points to 2.95 percentage points, while in the case of loans fixed for more than 5 years, it fell by 105 basis points to 2.8 percentage points, and thus at present the average spread on fixed-rate loans was already lower than that on the variable-rate loans.