MACROECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES OF THE

MONETARY COUNCIL MEETING

OF 30 JANUARY 2018

2018

JANUARY

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The background material 'Macroeconomic and financial market developments' is based on information available until 26 January 2018.

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 preannounced 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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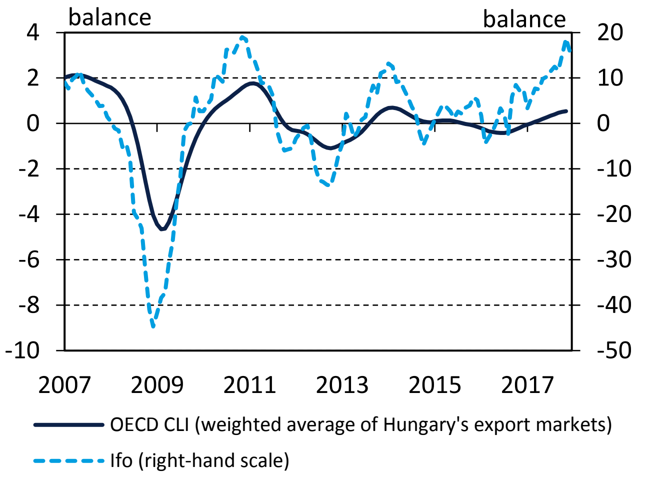
1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

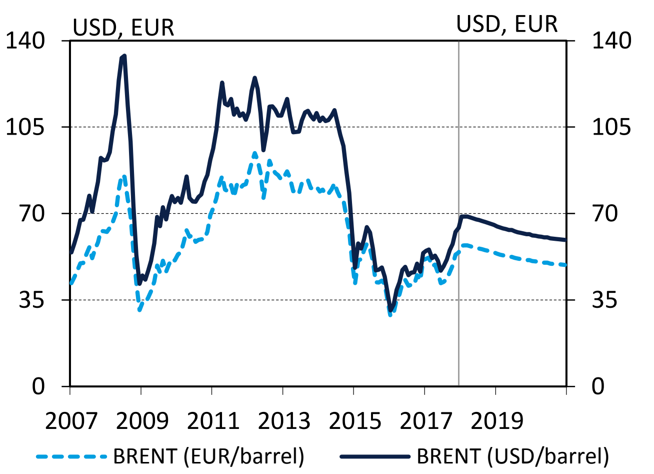
In the third quarter of 2017 international economic activity developed positively. In addition to the euro area, the US economy also expanded in the third quarter; however, growth prospects are still surrounded by uncertainty. The third quarter growth rate of the economy of Germany, Hungary's most important trading partner, exceeded the expectations, with the German industrial production reaching a historic high in November. The dynamic expansion of the Central and Eastern European region, appearing to be the growth centre of the European Union, was primarily supported by domestic demand in the past period.

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



Source: OECD, Ifo

Chart 2: Brent crude oil world market prices



Source: Bloomberg

In the third quarter of 2017 international economic activity developed positively. In addition to the continued growth in the euro area, the US economy expanded in the third quarter at a rate outstripping the economists' and market expectations. Industrial production data from the past months and the improving business confidence **project favourable European economic activity** in the coming period, also supported by the persistent rise in the forward-looking business survey indicators. Despite the improving financial conditions and the strong business confidence, the potential scenarios related to the protectionist tendency of the economic policy and the stimulative impact of the announced tax reform on the economy in the United States – in the absence of knowing the details – are still surrounded by uncertainty. The **exit of the United Kingdom from the EU** and the uncertainty related to the German coalition talks still carry negative risk in respect of the European growth rate.

The economy of Germany, Hungary's most important trading partner, grew materially in the third quarter. Steadily rising household consumption as a result of the favourable labour market processes, growing investments of the corporate sector and the improving export performance also contributed to the growth of the German economy. In the past period, the growth of German industrial production continued, with the growth rate reaching a historic high in November. The positive performance of the industry was contributed to by a wider range of subsectors. In addition to the continued rise in new industrial orders in Germany, the Ifo index, capturing the outlooks of the German industry, also developed favourably the past months (Chart 1).

Buoyant growth in the countries of the region is primarily shaped by the dynamically increasing domestic demand. All countries of the region registered a material rise in consumption, supported by the improving labour market conditions, the increasing real income resulting from the low inflation environment and favourable household confidence. In addition, investments have an increasingly determinant role in growth.

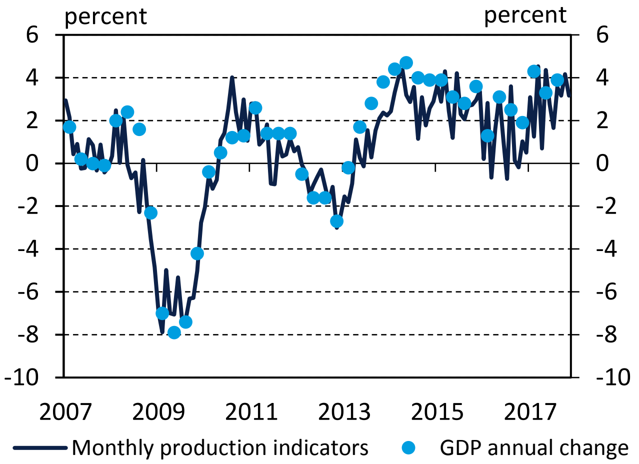
No substantial change took place in the global inflationary environment; underlying inflation in the euro area continue to develop moderately. In December there was a slight decrease in inflation, primarily reflecting the fall in the fuel price index attributable to base effects.
Oil world market prices mostly fluctuated around USD 65-70 since the last rate-setting meeting (Chart 2).

Oil price developments were influenced, in addition to the disturbances in Iran's internal affairs, by the news on declining US oil reserves and the reduction of the operating drilling rigs. World market prices of industrial commodities moderately increased, while those of unprocessed food remained essentially unchanged in December.

1.2. Domestic real economy developments

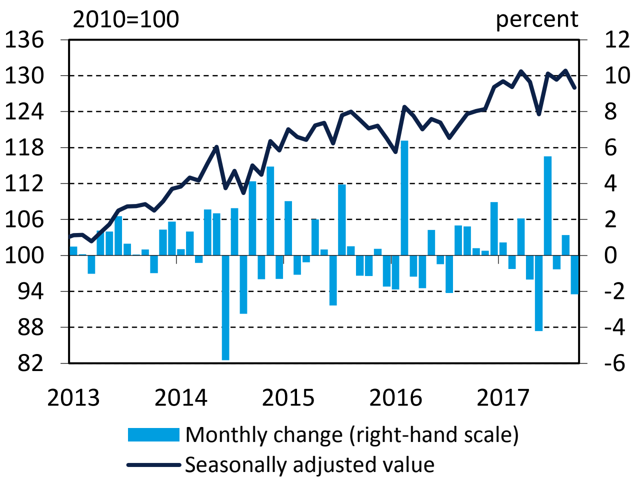
According to the HCSO's data release, in 2017 Q3 Hungary's GDP grew by 3.9 percent year on year. Based on the received monthly activity data, the growth of the Hungarian economy may have continued in the fourth quarter as well. The unemployment rate dropped to 3.8 percent in November. Within employment, the number of employees in the primary labour market continued to rise, while there was no material change in the number of public workers.

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

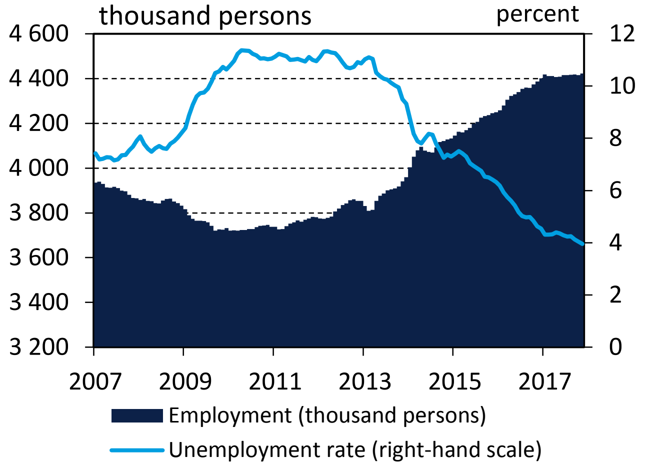
Based on the data release by the HCSO, **in the third quarter of 2017 Hungary's GDP grew at a rate of 3.9 percent** year on year. Based on the seasonally adjusted data, **Hungary's GDP rose by 0.9 percent quarter on quarter.** On the expenditure side, **household consumption** was the primary contributor to **economic growth,** in addition to investments, while on the output side growth was supported by construction and the performance of the industry, in addition to services.

The rise in GDP may have continued in the fourth quarter as well, also supported by the available monthly production indicators (Chart 3). **The growth in retail sales continued at a stable rate**, accompanied by persisting dynamic rise in construction output. The upward drift of industrial production continued in the past months as well.

In November 2017, industrial output was up 3.4 percent year on year, while production was down 2.2 percent compared to the previous month (Chart 4). The index, excluding the working-day effect, corresponded to the raw annual growth. **Overall, the performance of the manufacturing subsectors improved** year on year, in line with the positive economic performance of Hungary's external markets. The output of vehicle manufacturing, representing a considerable weight, declined, which may be attributable to the changeovers affecting the vehicle industry. The output of the metal industry, chemical industry, as well as other engineering subsectors materially increased year on year. **On the whole, forward-looking indicators reflect a positive picture with regard to the outlooks of the Hungarian industry.** Under the positive international business conditions, both Hungary and Germany's new industrial orders rose in the past period.

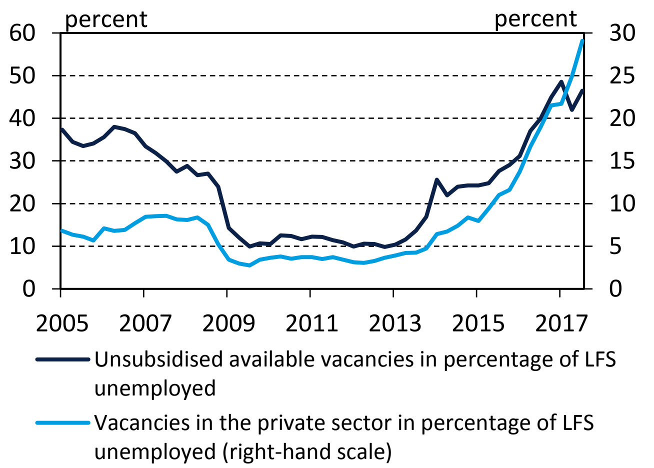
Expressed in euro terms, the value of exports and imports increased by 6.1 percent and 7.8 percent, respectively, year on year, in November 2017, in line with the industrial production trends. Last November trade surplus fell by EUR 79

Chart 5: Number of persons employed and the unemployment rate



Source: HCSO

Chart 6: Indicators of labour market tightness



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

million compared to November 2016. In October 2017 the terms of trade slightly improved year on year.

In November 2017, the volume of construction output was up 30.7 percent year on year, while output decreased by 1.4 percent compared to the previous month. The dynamic growth of the sector was also **supported by the manufacturing capacity expansions and the construction of residential buildings, in addition to the projects implemented from EU funds. Forward-looking indicators project positive construction industry performance.** The volume of concluded new contracts increased by 11.7 percent, while the month-end volume of construction companies' contract portfolio was up 110.3 percent year on year.

In November, **retail sales volume was up 6.7 percent year on year adjusted for the working-day effect.** In the past months turnover increased in a wide range of products. The considerable rise in the turnover of non-food consumer durables continued to be the primary contributor to the sales growth. This was accompanied by a year-on-year growth in food and fuel sales.

1.2.2. Employment

According to the Labour Force Survey data in **September-November 2017** both labour force participation and employment rose in the national economy. In parallel with this, the level of unemployment decreased further, with the **unemployment rate falling to 3.8 percent** on the whole (Chart 5).

Within employment, the increasing number of employees in the primary labour market contributed to the further rise in employment, while there was no material change in the number of public workers.

The labour market is still historically tight according to the tightness indicators calculated from the various statistics (Chart 6). According to the data released by the National Employment Service, in the last quarter of 2017 the number of non-subsidised vacancies, indicating corporate labour demand, slightly increased compared to the previous quarter. At the end of last year, the number of non-subsidised vacancies was slightly higher compared to the third quarter, which may imply the deteriorating match of labour demand and supply.

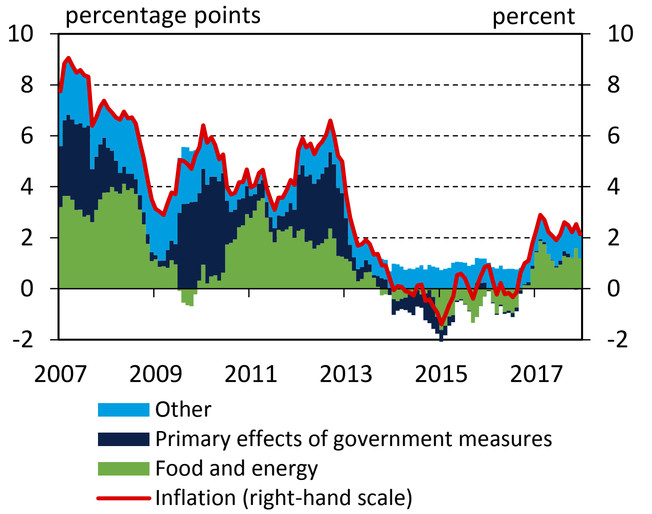
1.3. Inflation and wages

In December 2017, inflation stood at 2.1 percent, core inflation at 2.6 percent and core inflation excluding indirect taxes at 2.2 percent. Underlying inflation indicators essentially remained unchanged, at around 2 percent, below the core inflation. Taking 2017 as a whole, inflation and core inflation stood at 2.4 percent and 2.3 percent, respectively. Private sector gross average wage rose by 11.2 percent in November year on year; the vigorous wage dynamics was also supported by the wage agreement in the tight labour market environment. Similarly to the larger part of the year, bonus payments in November fell short of the rate observed last year.

1.3.1. Wage setting

In November 2017, gross average wages in the private sector rose by 11.2 percent, while regular average wages **were up 12.4 percent year on year**. The growth in both gross wages and regular wages decelerated compared to October. In line with the usual seasonality, regular wages moderately rose compared to the previous month. Similarly to the larger part of the year, current bonus payments fell short in November as well of the degree observed last year. **In addition to the historically tight labour market environment, the two-digit wage growth in 2017 was also contributed** to by the wage adjustments affecting the government public service companies, **and the direct and significant spill-over effect of the measures included in the wage agreement at the beginning of the year.**

Chart 7: Decomposition of inflation



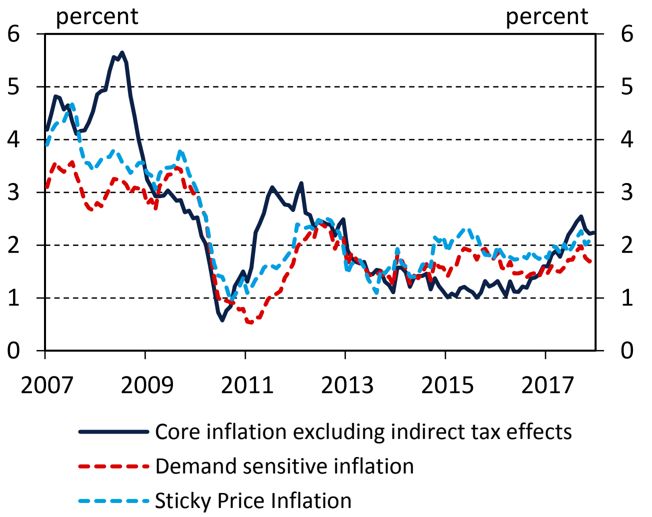
Source: MNB calculation based on HCSO data

1.3.2. Inflation developments

In December 2017, year-on-year inflation was 2.1 percent, while core inflation and core inflation excluding indirect taxes stood at 2.6 and 2.2 percent, respectively (Chart 7). Inflation fell by 0.4 percentage point while core inflation remained unchanged relative to the previous month. The decrease in inflation was caused by the fall in the fuel price index attributable to the base effects.
Taking 2017 as a whole, inflation and core inflation stood at 2.4 percent and 2.3 percent, respectively.

Underlying inflation indicators essentially remained unchanged, being around 2 percent, below the core inflation (Chart 8). In November 2017, agricultural producer prices rose by 7.7 percent in annual terms, while the domestic sales prices of the consumer goods sectors increased by 3.9 percent.

Chart 8: Measures of underlying inflation indicators



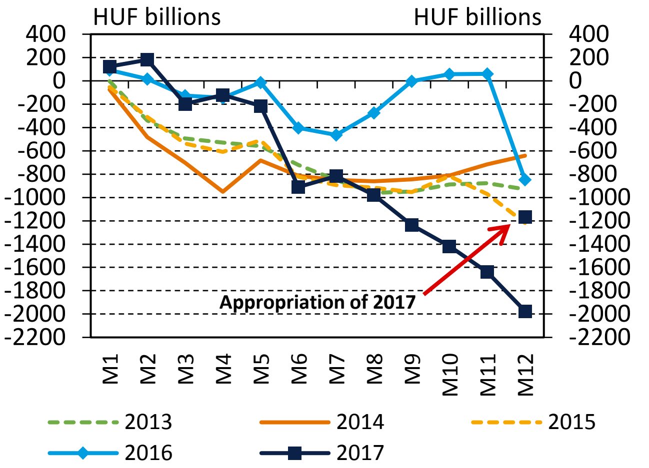
Source: MNB calculation based on HCSO data

The December inflation and core inflation data corresponded to the projection in the December Inflation Report. According to our current projection, inflation in the first months of this year will remain at the present level, close to the lower bound of the tolerance band. Inflation will reach the 3 percent target sustainably from mid-2019.

1.4. Fiscal developments

The central sub-sector of the general government closed with a deficit of HUF 335 billion in December 2017, thus the cash-based deficit in 2017 amounted to HUF 1,974 billion.

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



Source: MNB calculation based on HCSO data

The central sub-sector of the general government closed with a deficit of HUF 335 billion in December 2017, thus the cash-based deficit in 2017 amounted to HUF 1,974 billion (Chart 9). **This is the highest value of recent years**, and exceeds even the amended statutory appropriation by HUF 800 billion. The main reason for the difference is the **payment of the advances related to EU transfers.**

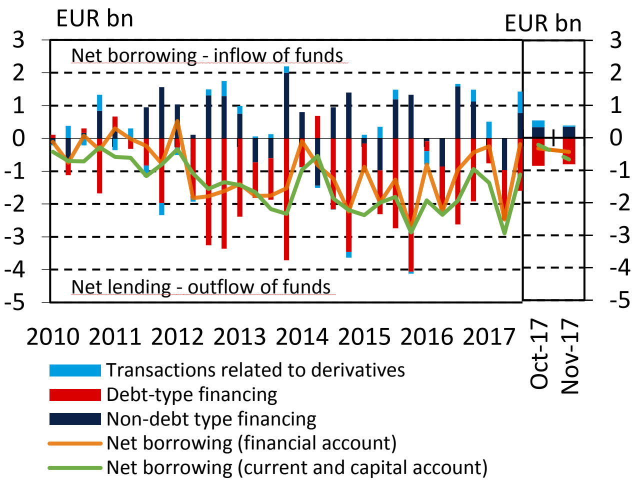
The **revenues of the central sub-sector** in December 2017 were down by HUF 44 billion year on year. **Tax and contribution revenues fell short of the year-on-year values by HUF 35 billion,** primarily as a result of the lower amounts paid by the enterprises and the **more moderate value added tax revenues**. Wage-related receipts, similarly to the trends observed throughout the year, rose dynamically in December as well. Other revenues of the central sub-sector were realised in a high amount primarily due to the year-end payments by the social security funds, which, however, also appear on the expenditure side of the budget. The volume of EU revenues considerably exceeded both the monthly levels typical of previous periods and that of last December.

The expenditures of the central sub-sector, similarly to 2016, **significantly rose in December compared to the previous months. Various one-off measures were taken at the end of 2017 as well**, which affected the expenditures of the extra-budgetary funds, as well as other expenditures related to state assets, mostly at the expense of such other budgetary items where the budget realised savings during the year. Similarly to 2016, the amount of EU transfer-related payments also rose in December.

1.5. External balance developments

In November net lending of the economy amounted to EUR 670 million, which substantially exceeds the level recorded in the previous months. According to the unadjusted figures, trade balance substantially increased, while the income balance and the transfer balance were stable during the month.

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 November net lending of the economy amounted to EUR 670 million, which substantially exceeds the level recorded in the previous months. According to the unadjusted figures, trade balance substantially increased, while the income balance and the transfer balance were stable during the month (Chart 10). The rise in the balance of goods was primarily attributable to the moderate goods import, contributed to by the lower demand for imports resulting from the decline in vehicle industry output.

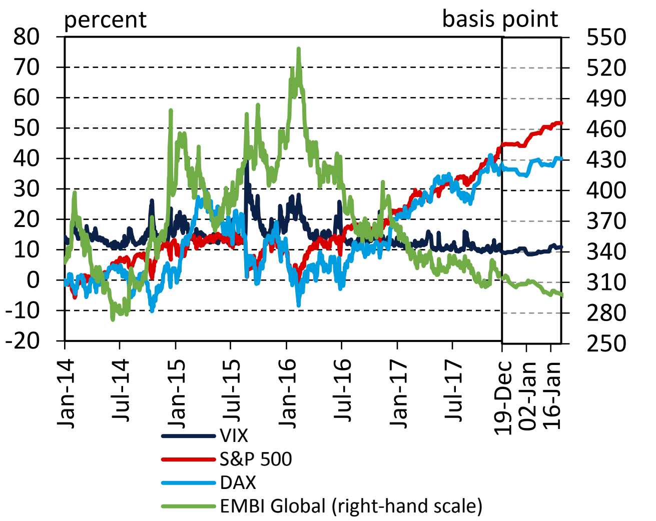
According to the financial account data, the outflow of funds amounted to EUR 0.4 billion in November, which was related to an inflow of FDI liabilities and a larger outflow of debt-type liabilities. The increase in foreign direct investments in excess of EUR 0.4 billion was fully attributable to the rise in reinvested earnings, accompanied by a continued decline in intercompany loans. As a result of transactions, net external debt of the economy fell by more than EUR 0.8 billion, contributed to by the general government and the banking sector to a similar degree, while the corporate sector's external debt rose. The decline of EUR 0.6 billion in the net external debt of the government is attributable to the rise in receivables from the EU and the decline in non-residents' government securities holdings, which was partly offset by the fall in foreign exchange reserves. The decline in the net external debt of the banking sector was attributable to the decrease in short-term external liabilities.

2. FINANCIAL MARKETS

2.1. International financial markets

Investor sentiment improved in the period following the previous interest rate decision. Developed market stock exchanges rose by around 5 percent and 2-3 percent in the United States and in Europe, respectively. In parallel with this the US and German 10-year government bond yields rose by roughly 20-25 basis points. Emerging market stock indices rose considerably, by 10 percent on average, in the last one month. Emerging market yield level also increased; however, the EMBI global, reflecting the average yield differential compared to the developed market benchmarks, dropped below 300 basis point, which is a 4-year minimum. Highlights in the currency market and in the commodity market include the 5 percent rise in the EUR/USD exchange rate and the 10 percent increase in oil prices, respectively.

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

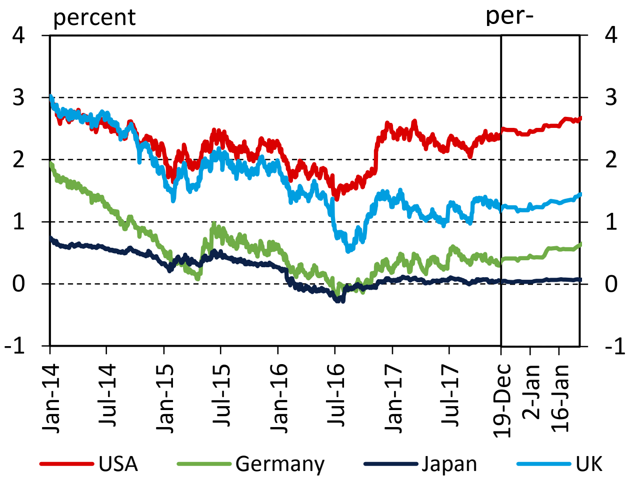


Source: Bloomberg

Global investor sentiment continued to improve during the last one month. Positive sentiment was supported by the better than expected macroeconomic data releases both in the United States and in Europe: labour market data, retail sales volume, as well as confidence indicators show a steadily favourable picture.

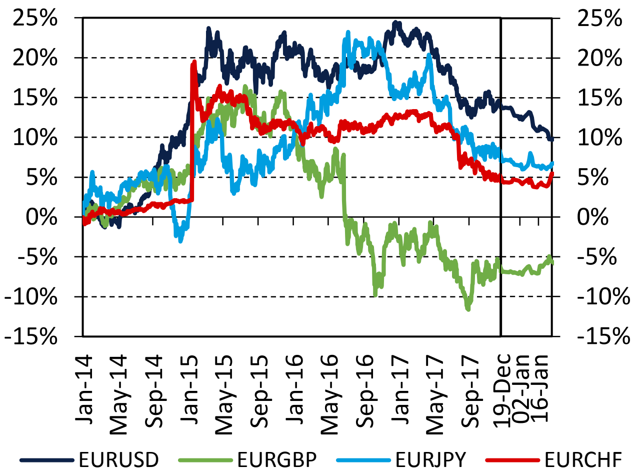
After the publication of the minutes of the ECB's December meeting market expectations related to the first interest rate hike of the ECB and to the ending of the asset purchases strengthened. Based on the minutes, the current forward guidance may change in early 2018. This was interpreted by several market participants as a sign that in spring the ECB would communicate the ending of the programme in September 2018 and that the forward guidance related to the timing of interest rate increases may also change. As a result of this, the market's interest rate expectations related to the date of the first interest rate hike were brought forward and the market implied interest rate path shifted upward. Based on the market pricing, the present overnight deposit rate of -0.4 percent may increase in 2019 three times, by 10 basis points each occasion. In January the Governing Council of the **ECB did not change the key interest rate.** The Governing Council still expects that the policy rates will remain at the current levels for an extended period of time and well beyond the horizon of the net asset purchases. As for unconventional monetary policy measures, **from January 2018 the Governing Council will continue the asset purchase programme at the pace of EUR 30 billion per month until end-September 2018**, or longer if necessary, and in any case until such time as the Governing

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

Council experiences a sustained adjustment in the path of inflation towards the inflation target.

After the interest rate hike by the Fed in December, market pricing implies that the next step may take place in March, and thereafter the pricing shows a possible additional interest rate increase in June with a probability of over 50 percent.

Both the developed and emerging market stock exchange indices rose materially in the past one month (Chart 11). Indices in the United States and in Europe rose by about 5 percent and 2-3 percent, respectively. In addition to the positive macroeconomic data releases, the favourable trend was also supported by the prospects of rising energy company profits resulting from the increasing oil prices. In the positive sentiment, emerging market stock indices rose considerably, by 10 percent on average in one month.

Long-term yields rose both in the developed and emerging markets (Chart 12). In the United State, the rise was recorded primarily at the long end of the yield curve, by around 20 basis points. This was partly contributed to by the fact that the supply of long-term government securities may increase due to the approved tax package, and partly to the increasing inflation expectations due to the rising oil prices. In the euro area the entire yield curve shifted upward. In the case of short-term yields this was supported by the ECB's communication, while in the case of long-term yields, it was a consequence of the favourable macro figures and rising oil prices.

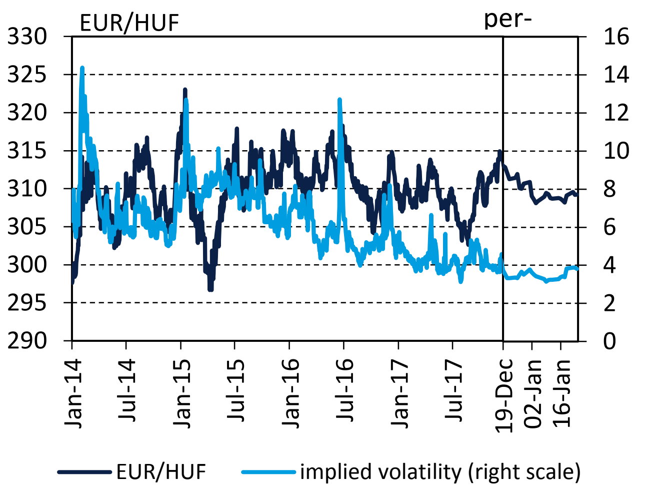
In the foreign exchange market, the euro continued to appreciate against the dollar (Chart 13). Although as a result of improving global sentiment the dollar depreciated against other key currencies as well, this was the most striking against the euro. This is primarily attributable **to strengthening expectations related to the ECB's communication.**

The world market price of crude oil rose materially, by 10 percent, which also supported a general increase in commodity market prices. The depreciation of the dollar and the developments in the Middle East (Iran and Syria) also contributed to the rising oil price. In addition, it should be emphasised that after a steady decline, the oil reserves of the United States fell to a 3-year minimum in the past period, and the number of new rigs also failed to rise to the degree expected.

2.2. Developments in domestic money market indicators

Following the December interest rate decision, until the year-end the forint essentially appreciated steadily, in line with the currencies of the region, and then – after a wave of moderate depreciation – the exchange rate basically remained unchanged at a monthly level. The government yield curve became steeper, while yields on whole rose more moderately than observed in the region. The 3-month BUBOR dropped to 0.02 percent. Non-residents' forint government securities holding declined by HUF 105 billion, thus their share dropped to 21 percent. Hungarian CDS spread stabilised around 80 basis points after a fall of 12 basis points.

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

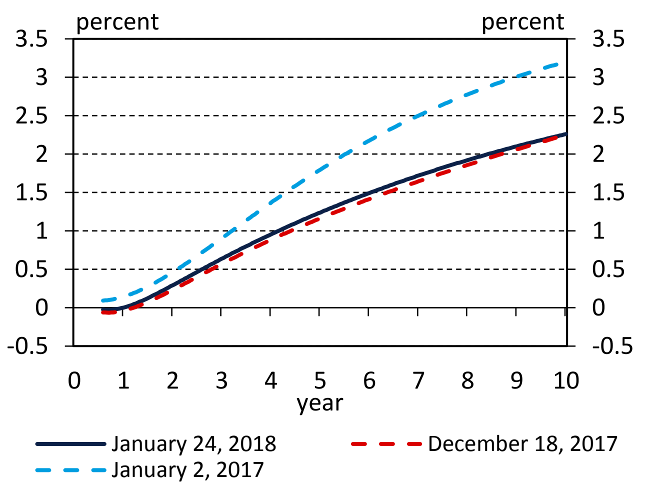


Source: Bloomberg

The forint appreciated against the euro by almost one percent in the period, moving between 308 and 313. Following the December interest rate decision, until the year-end the forint appreciated steadily, in line with the currencies of the region, and then – after a wave of moderate depreciation – the exchange rate basically remained unchanged in a monthly comparison. During the period, the forint moved together with the Polish zloty and partially also with the Czech koruna. The Czech koruna appreciated, similarly to the forint, by roughly 1 percent, while the Polish zloty recorded a smaller appreciation, i.e. 0.75 percent. The Romanian leu moved oppositely and it depreciated by one percent during the period (Chart 14). The currencies of the region appreciated against the dollar, the forint, zloty and the Czech koruna by roughly 4-5 percent, while the leu by 2.5 percent.

The government yield curve became slightly steeper: the short end of the yield curve up to three years shifted by 4-8 basis points up, while the longer – 7-9 year – end of the curve rose by 10-13 basis points (Chart 15). The secondary market long-term, ten-year yields rose only to a smaller degree, by 7-8 basis points.

Chart 15: Shifts in the spot government bond yield curve



Source: MNB, Reuters

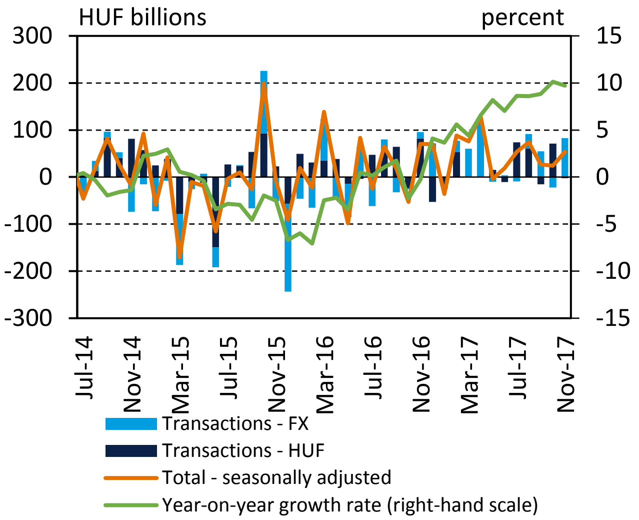
At the bond auctions of the period strong demand was registered primarily for longer maturities. At the 3-month Treasury bill auctions bid-to-cover was smaller in some of the cases, nevertheless the Government Debt Management Agency issued the announced quantity in all cases. Average yields continued to remain around 0 percent. As regards the 12-month Treasury bill, demand was also moderate; on one occasion a smaller quantity than offered was accepted, nevertheless the average yield was still around 0 percent. At the auctions of the long-term government securities, the largest demand was shown for the 3- and 10-year bonds; the average yield of for the 3-year and 10-year bonds dropped by almost 12 and roughly 10 basis points, respectively. The bid-to-cover ratio of the 5-year bonds was more moderate; the average yield was around 0.99 percent, falling short of the December level by 8 basis points.

The stock of Hungarian forint-denominated government securities held by non-residents dropped by HUF 105 billion in the period, thus their holdings amounted to HUF 3,414 billion at the end of the period. Their share in forint government securities was down from 22 to 21 percent. The 5-year Hungarian CDS spread decreased significantly, by 12 basis points, to 80 basis points, which was in line with the regional and global trends, and represents the lowest value in the post-crisis period.

3. TRENDS IN LENDING

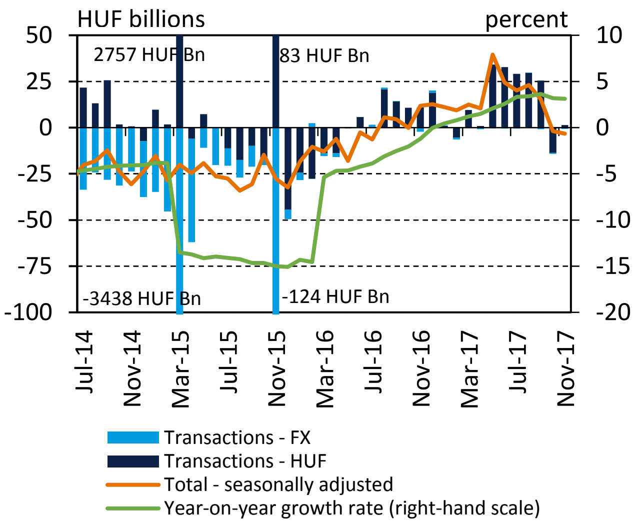
In November, the outstanding corporate loans of credit institutions rose by HUF 80 billion due to transactions, which is equivalent to an increase of HUF 54 billion on a seasonally adjusted basis. No substantial change was registered in the outstanding loans of the credit institutions to households: it rose by HUF 1 billion as a result of transactions, thus the annual growth in outstanding lending amounted to 3.1 percent at the end of November. The smoothed interest rate spread of forint corporate loans was 2.1 percentage points in November. The spread on new housing loans follows a decreasing trend compared to the end of 2016.

Chart 16: Net borrowing by non-financial corporations



Source: MNB

Chart 17: Net borrowing by households

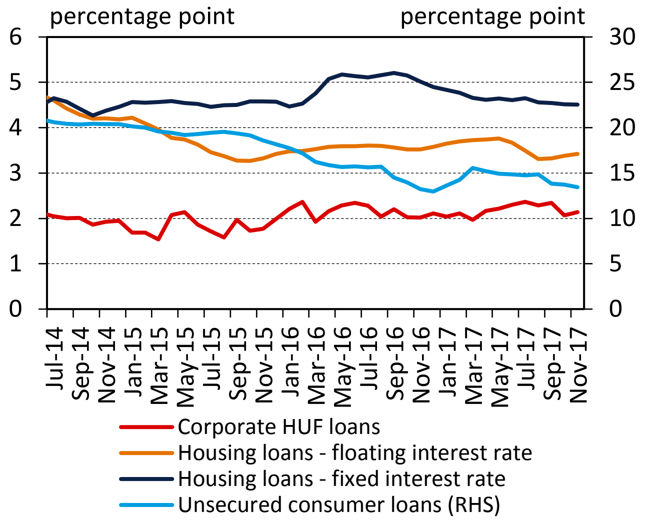


Source: MNB

In November, the outstanding corporate loans of credit institutions rose by HUF 80 billion due to transactions, which is equivalent to an increase of HUF 54 billion on a seasonally adjusted basis (Chart 16). In a breakdown by currency, forint loans increased by HUF 82 billion, while foreign currency loans decreased by HUF 2 billion. In November 2017, corporate lending rose by 9.7 percent in annual terms. Excluding money market transactions, the volume of new loans amounted to HUF 198 billion during the month; the value of the money market transactions was HUF 64 billion. Accordingly, the gross amount of new loans in November was up 24 percent in annual terms.

No substantial change was registered in the outstanding loans of the credit institutions to households: it rose by HUF 1 billion as a result of transactions, thus the annual growth in outstanding lending amounted to 3.1 percent at the end of November (Chart 17). The value of new contracts concluded during the month was HUF 110 billion, thus in annual terms it registered a growth of 44 percent. As regards the individual sub-segments, the volume of new housing loans and personal loans rose by 37 and 47 percent, respectively. To date, the disbursement of Certified Consumer-friendly Housing Loan products amounted to HUF 14 billion, with the contribution of November to this being HUF 8 billion. This accounted for 13 percent of new lending in the month.

Chart 18: Development of corporate and household credit spreads



Note: Three-month smoothed spreads on the APR. In the case of corporate forint loans, the 3-month BUBOR. In the case of housing loans with variable interest or interest fixed for at least 1 year the 3-months BUBOR, while in case of housing loans fixed for over one year the relevant margin above IRS.
Source: MNB

The smoothed interest rate spread of forint corporate loans was 2.1 percentage points in November (Chart 18). However, the spread on small-amount market loans – typically taken by SMEs – still exceeds the average of the other Visegrád countries by 1 percentage point. The average interest rate spread on housing loans to households calculated using the annual percentage rate (APR) has not changes and still stands at 4.3 percentage points, which can be considered high in international comparison. The spread on unsecured consumer loans to households stood at 13.4 percentage points in November. The problem of high spreads affects primarily the market of long-term fixed-rate transactions.

The spread on new housing loans follows a decreasing trend compared to the end of 2016. In November, the 1-5 year fixed-rate housing loans, the 5-10 year fixed-rate housing loans and loans with a fixed rate for over 10 years fell by 0.41 percentage point (4.7), 0.44 percentage point (4.6) and 0.6 percentage point (3.6), respectively, compared to the data registered at the end of last year.