



MACROECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL
TO THE ABRIDGED MINUTES OF THE
MONETARY COUNCIL MEETING
OF 19 DECEMBER 2017

2017
DECEMBER

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The background material 'Macroeconomic and financial market developments' is based on information available until 15 December 2017.

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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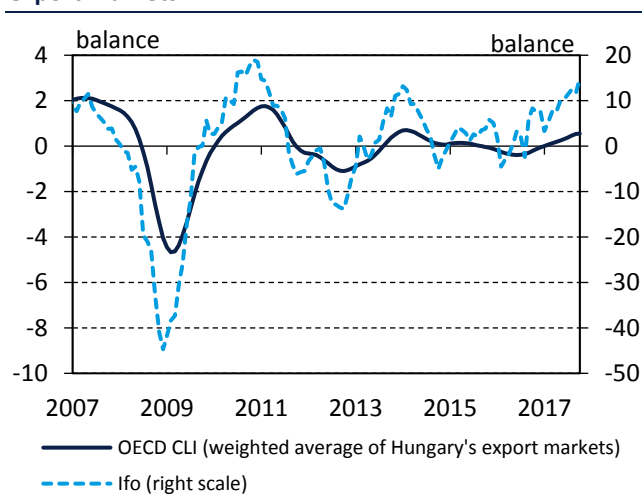
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1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

GDP figures for the third quarter of 2017 showed a positive picture overall. The growth in the euro area continued at a stable rate; economic growth both in Germany - Hungary's most important trading partner - and in the USA outstripped the expectations. Market expectations with respect to the economic growth of the euro area improved in the past period, which was also supported by favourable incoming data and the improving sentiment concerning growth. However, cyclical factors may also play a role in the economic growth of the euro area, indicating the uncertainty of economic outlook over the long term.

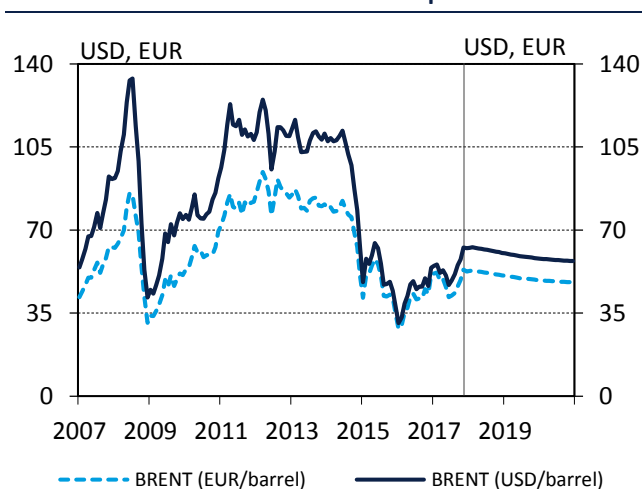
Chart 1: Business climate indices in Hungary's export markets



Source: OECD, Ifo

Growth in the euro area continued in the third quarter. Despite the natural disasters that struck the country the economy grew materially in the United States in the third quarter of 2017, exceeding the economists' and market expectations. Industrial production data from the past months and the improving business confidence may project a more buoyant European economic activity in the coming period. The Purchasing Manager Index related to the euro area reached its highest level of recent years, which also supports this. In accordance with the incoming data, international institutions typically revised their short- and medium-term growth expectations upwardly with regards to the economic growth in the euro area. However, cyclical factors may also play a role in the economic growth of the euro area, indicating the uncertainty of economic outlook over the long term. The exit of the United Kingdom from the EU and the uncertainties concerning the elections in Germany still carry negative risks.

Chart 2: Brent crude oil world market prices



Source: Bloomberg

The output of Germany, Hungary's most important trading partner, grew materially in the third quarter. Growing investments of the corporate sector, the improving export performance and the stable household consumption also contributed to the growth of the Germany economy. The growth in consumption was also supported by the favourable labour market developments and the increasing real wages. In recent months, industrial production in Germany grew materially in annual terms. The Ifo index, capturing the outlooks of the German industry continued to rise reaching historically high levels. In addition, new industrial orders in Germany also increased in October (Chart 1).

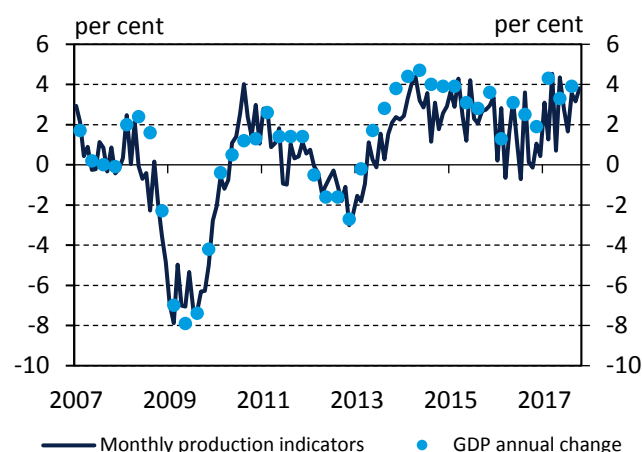
The global inflation environment remained basically unchanged, underlying inflation in the euro area continue to develop moderately. In the euro area, inflation rose slightly in November primarily reflecting a rise in fuel prices. Oil world market prices rose into the USD 60-65 range in November (Chart 2). The tensions in the Middle East, the dynamic growth in demand in Asia, as well as the extension

of the OPEC agreement all pointed toward an increase in oil prices. World market prices of industrial commodities moderately decreased, while those of unprocessed food remained essentially unchanged in November.

1.2. Domestic real economy developments

According to the HCSO's data release, in 2017 Q3 Hungary's GDP grew by 3.9 per cent year on year. On the expenditure side consumption contributed largely to the growth in addition to the investment; on the production side construction and the performance of the industry were the key contributors to growth besides services. The unemployment rate dropped to 4 per cent in October. Within employment, the number of public workers continued to decline, while the number of those employed on the primary labour market remained broadly unchanged.

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

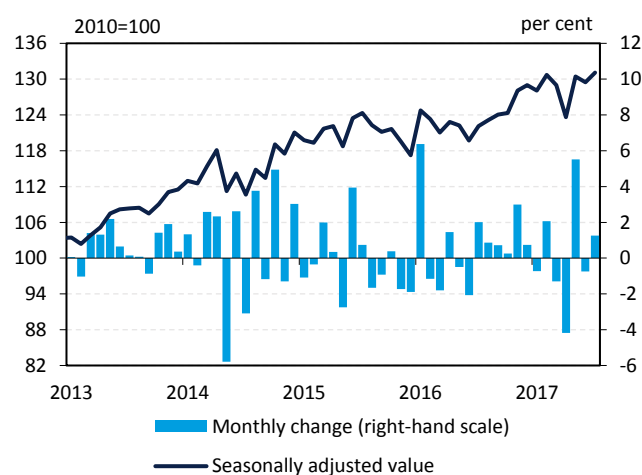
Based on the data release by the HCSO, in the third quarter of 2017 Hungary's GDP grew at a rate of 3.9 per cent year on year. Based on the seasonally adjusted data, Hungary's GDP rose by 0.9 per cent quarter on quarter. On the expenditure side consumption contributed largely to the economic growth in addition to the investment; on the production side construction and the performance of the industry were the key contributors to growth besides services.

According to the HCSO's data release in 2017 Q3 market services contributed to the growth to the largest degree on the output side; in addition, construction and industry also had a positive impact. In Q3, industrial production increased at a faster rate than in the previous quarter. As regards the structure of production, the decline in the output of vehicle manufacturing, representing a considerable share, was offset by the growth of other engineering sectors. The significant increase in construction output continued, which was supported by the construction of buildings and other structures. The expansion in retail sales continued at a faster rate than in the previous quarters (Chart 3).

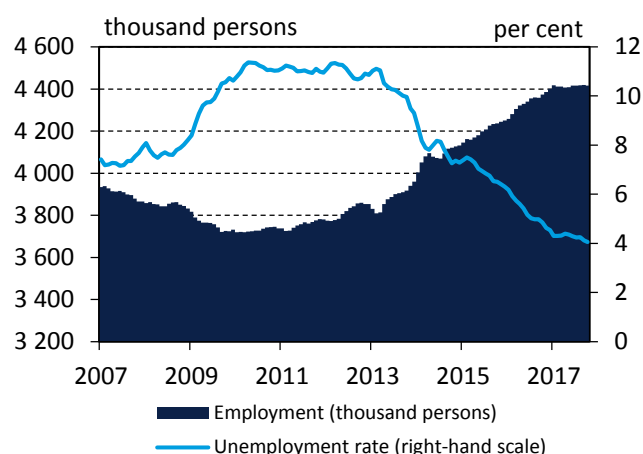
On the expenditure side, the considerable expansion in investment and the continued expansion of consumption were the source of economic growth. Net exports made a negative contribution to the economic growth in Hungary due to the decelerating export growth and the vigorous import growth.

In October 2017, based on preliminary data the volume of industrial output was up 7.6 per cent year on year, while it increased by 1.3 per cent 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. The performance of the metal industry improved significantly, and the output of vehicle manufacturing, representing a considerable share, chemical industry, as well as other engineering subsectors increased year on year. **Forward-looking indicators reflect a positive**

Chart 4: Development in industrial production



Source: MNB calculation based on HCSO data

Chart 5: Number of persons employed and the unemployment rate

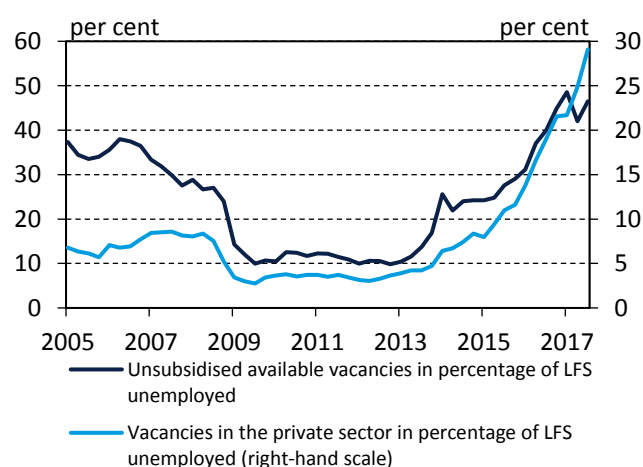
Source: HCSO

picture with regard to the outlooks of the domestic industry.

Based on preliminary data, expressed in euro terms, the value of exports and imports increased by 11.8 per cent and 17.0 per cent, respectively, year on year, in October 2017, in line with the industrial production trends. The trade surplus was down by EUR 275 million from last October. In September 2017 the terms of trade improved slightly year on year.

In October 2017, the volume of construction output was up by 38.1 per cent year on year, while output increased by 6.0 per cent compared to the previous month. Output increased significantly in the case of buildings and other structures. The substantial increase in the construction of buildings is primarily attributable to the construction of residential buildings, offices and educational buildings in addition to industrial buildings. In the case of construction of other structures, the growth is explained by the construction of motorways, railway renewals besides the low basis. The volume of concluded new contracts increased by 15.7 per cent, while the month-end volume of construction companies' contract portfolio was up 113.3 per cent year on year.

In October, according to the preliminary data, retail sales volume was up 6.3 per cent year on year based on the raw data and data adjusted for the calendar effect. As regards the structure of retail sales, sales increases were registered across a wide range of products. The significant expansion in the turnover of non-food consumer durables primarily continued to contribute to the expansion of sales. This was accompanied by a year-on-year growth in food and fuel sales.

Chart 6: Indicators of labour market tightness

Note: quarterly data.

Source: National Employment Service, HCSO

1.2.2. Employment

According to the Labour Force Survey data, in **August-October 2017** whole-economy employment declined slightly. In parallel with this the level of labour force participation and unemployment decreased slightly; overall, **unemployment rate was at 4 per cent** (Chart 5). Within employment, the headcount change was attributable to the gradually decreasing public employment, the number of those employed on the primary labour market remained broadly unchanged.

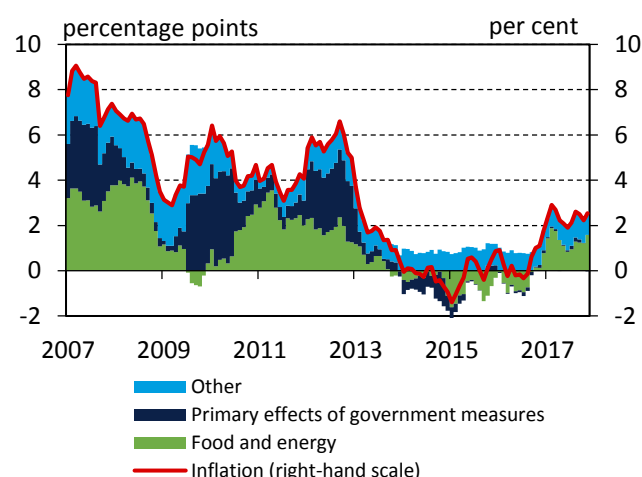
The labour market is still historically tight according to the **tightness indicators calculated from the various statistics** (Chart 6). According to the data released by the National Employment Service (NES), in October 2017 the number of non-subsidised vacancies, indicating corporate labour

demand, has increased slightly compared to the previous month. The month-end number of vacant non-subsidised jobs, showing the matching of the structure of labour demand and supply, decreased slightly in October; however, it was still high.

1.3. Inflation and wages

In November 2017, inflation stood at 2.5 per cent, core inflation at 2.7 per cent and core inflation excluding indirect taxes at 2.2 per cent. On the whole underlying inflation indicators remained unchanged: they remain around 2 per cent, lower than the core inflation. Private sector gross average wage rose by 11.7 per cent in September year on year; the vigorous wage dynamics was also supported by the wage agreement in a tight labour market environment. Bonus payments in September fell short of the degree observed last year.

Chart 7: Decomposition of inflation



Source: MNB calculation based on HCSO data

1.3.1. Wage setting

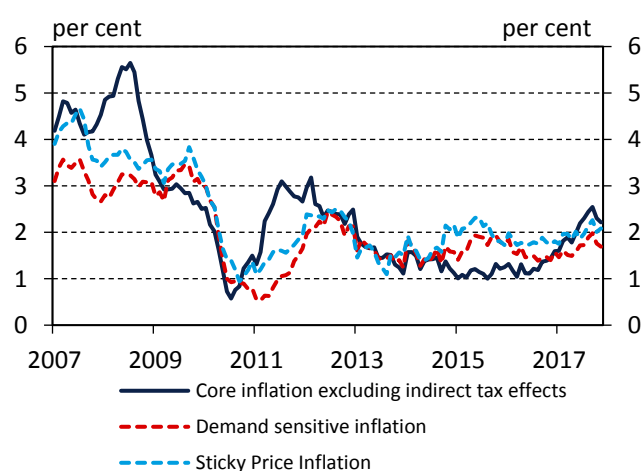
In September 2017 gross average wages in the private sector rose by 11.7 per cent, while regular average wages were up 12.1 per cent year on year. There was no substantial change in the annual dynamics of gross wages, while the growth of regular wages was slightly higher than in August. In line with the intra-year seasonality, regular wages remained unchanged on a monthly basis, while bonus payments in September fell short of the degree observed last year. In addition to the historically tight labour market environment, this year's two-digit wage growth is explained by the wage adjustments affecting the government public service companies, and the direct and significant spillover effect of the measures included in the wage agreement at the beginning of the year.

1.3.2. Inflation developments

In November 2017, year-on-year inflation was 2.5 per cent, while core inflation and core inflation excluding indirect taxes stood at 2.7 and 2.2 per cent, respectively. Inflation rose by 0.3 percentage point while core inflation remained unchanged relative to the previous month. The increase in inflation was caused by the increase in fuel prices (Chart 7). On the whole, underlying inflation indicators remained unchanged: they remain around 2 per cent, lower than the core inflation (Chart 8). The price dynamics of market services declined, which was mainly attributable to the decrease in subscription fees for cable television, mobile phone plans and internet. In October 2017, agricultural producer prices rose by 7.3 per cent in annual terms, while the domestic sales prices of the consumer goods sectors increased by 4.7 per cent.

The November inflation data basically corresponded to the projection in the September Inflation Report. Core inflation fell slightly short of our expectation, with the lower-than-expected price dynamics of market services. According to our current projection inflation will again move close to the lower bound of the tolerance band at the end of the year. Inflation will reach the 3 per cent target sustainably by mid-2019.

Chart 8: Measures of underlying inflation indicators

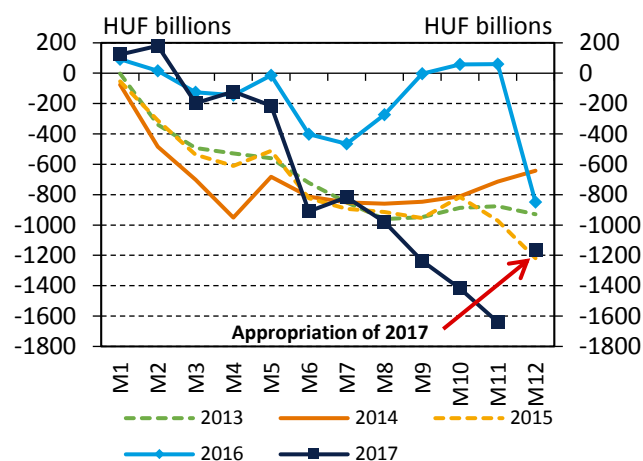


Source: MNB calculation based on HCSO data

1.4. Fiscal developments

The central sub-sector of the general government closed with a deficit of HUF 221 billion in November 2017, while the cumulative balance of the current year amounted to HUF -1,639 billion at the end of the eleventh month.

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 221 billion in November 2017, while the cumulative balance of the current year amounted to HUF -1,639 billion at the end of the eleventh month. The monthly balance is the lowest value of recent years, while the cumulated cash deficit exceeds the annual estimate of the 2017 Budget Act (Chart 9).

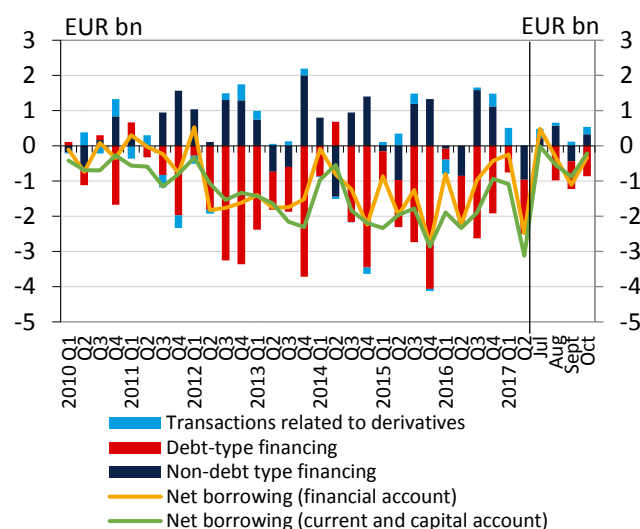
The revenues of the central sub-sector in November 2017 were up by HUF 96 billion year on year. The difference was primarily caused by a sharp increase in VAT revenues as compared to its low level last year and the dynamic growth of personal income tax and contribution revenues.

The expenditures of the central sub-sector in November 2017 were up by HUF 319 billion year on year. The significant growth was primarily attributable to the increase in the central budgetary institutions' own and EU transfer-related net expenditures, as well as pension expenditure and a steep rise in payments related to state assets. This was somewhat offset by the amount of subsidies to local governments, which fell short of the level last year.

1.5. External balance developments

In October, net lending of the economy amounted to EUR 210 million, which was below this year's average monthly values. The decrease in foreign trade balance played a major role in the decline of the external trade balance, which was the result of the import growth exceeding export growth.

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 October, net lending of the economy amounted to EUR 210 million, which was below this year's average monthly values. According to unadjusted data foreign trade balance declined sharply, while with the stable inflow of the EU transfers the transfer balance did not change notably. The decrease in foreign trade balance played a major role in the decline of the external trade balance, which was the result of the import growth exceeding export growth. Intense domestic absorption played a key role in the sharp increase of goods imports during the month.

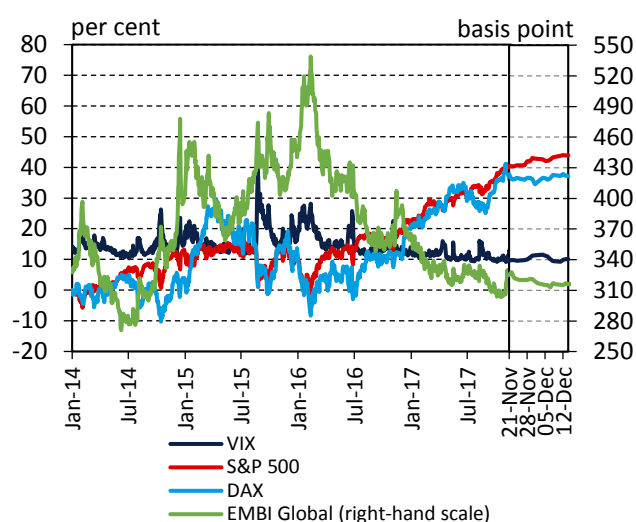
According to financing side processes, net lending of the economy was down to EUR 0.3 billion, resulting from a fall in external debt and the inflow of non-debt liabilities (Chart 10). An increase in foreign direct investments was primarily related to reinvested earnings. In October, the net external debt of the economy decreased by EUR 0.9 billion, in parallel with the general government's external debt declining and that of the banking sector's increasing. The decrease of the net external debt of the government, exceeding EUR 1 billion, was related to a decline in the government securities holding of non-residents, the absorption of EU transfers and an increase in foreign exchange reserves. The net external debt of the banking sector rose slightly by EUR 0.3 billion in parallel with the growth of external liabilities.

2. FINANCIAL MARKETS

2.1. International financial markets

In the first half of the period since the last interest rate decision investor sentiment was calm, although there was a minor deterioration in sentiment in the global financial markets in the middle of the period, thus the rise observed in the developed and emerging market stock market indices at the beginning of the period, was mostly adjusted. Developed bond markets diverged in the past month: while American yields decreased at the beginning of the period, which was followed by an increase as a result of Fed's interest rate decision, German yields moved in the opposite direction: the increase at the beginning of the period was followed by a decrease. The indices representing emerging bond markets, and oil prices remained broadly unchanged.

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

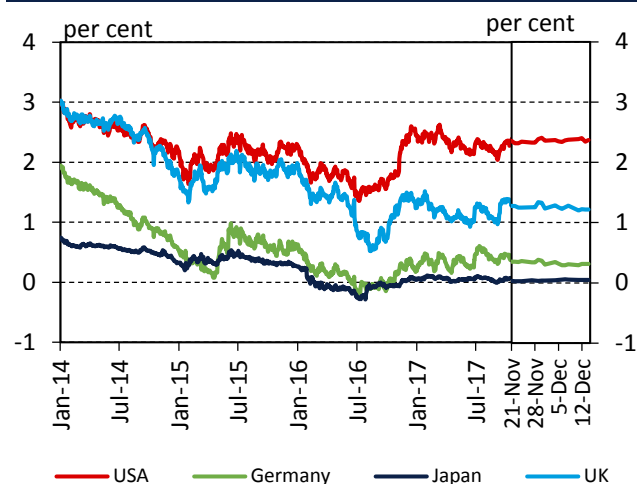


Source: Bloomberg

During most of the period since the last interest rate decision, investor sentiment was favourable, primarily determined by the expectations related to an interest rate increase by the Fed, the Brexit negotiations and the OPEC agreement. Demand for risky assets was strong throughout the month; however, it was followed by a minor adjustment in the middle of the month. Overall, the developed and emerging stock exchanges mostly continued their rise, reaching new historic highs. However, during the adjustment at the beginning of December, indices declined. Volatility in the developed bond markets decreased at the end of the period, but yields were different mostly as a result of the expectations related to the American interest rate decision. The emerging bond market risk indicator slightly rose at the beginning of December compared to its level recorded at the beginning of the period, in accordance with the increased global aversion to risk; however, it fell moderately by the middle of the month.

Developed market stock exchange indices declined in the middle of the period, followed by an increase (Chart 11). Stock exchanges rose slightly at the end of November with the exception of the American indices, but they adjusted at the beginning of December. Investor sentiment improved again at the end of the period, thus American stock markets rose significantly by 2-4 per cent, the English and French stock markets by nearly 1 per cent, while the German fell by around 0.5 per cent. Of the emerging indices the Brazilian and the Chinese fell by 2 and 3.5 per cent, respectively. In parallel with the stock exchange movements the VIX index rose by 2 percentage points at the beginning of December; however, it returned to its former historic low of around 10 per cent at the end of the period.

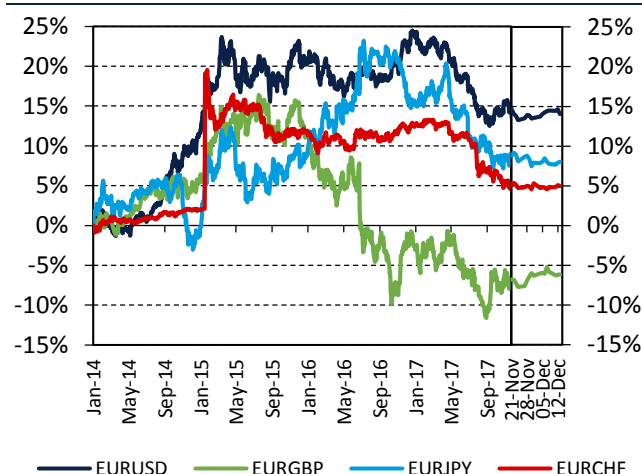
At its December meeting, Fed raised its interest rate target by 25 basis points in accordance of the expectations. At the press conference following the announcement there was no communication with regards the pace of the balance sheet

Chart 12: Yields on developed market long-term bonds

Source: Bloomberg

reduction, and interest rate path; however, their growth expectations were raised. As a result of the decision, market responses were moderate, interest rate expectations moved towards a little earlier date: in 2018 two increases are still priced in, but after the one in March the next interest hike is expected in September and not in December.

Developed countries' bond yields diverged (Chart 12). Due to the expectations related to Fed's interest rate increase and after the announcement of the decision American short-term yields rose slightly; however, the 10-year yield only increased by 1 basis point overall. American bond yields decreased at the beginning of the period, while they increased in the second part of the period, as the date of the interest rate decision was approaching. German yields displayed an opposite trend: they rose by a few basis points at the beginning of the month yields fell by the end of the period, thus the ten-year yield is at 0.31 per cent.

Chart 13: Developed market FX exchange rates

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

Source: Reuters

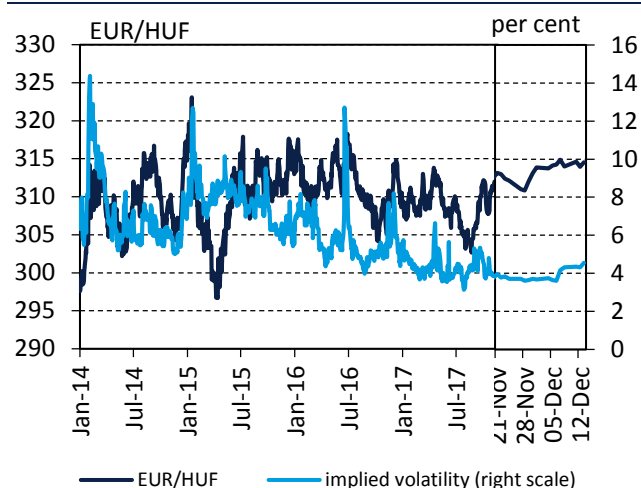
In the narrower region, a fall in the yields was typically observed, especially on long maturities. The Czech, Romanian and Polish ten-year yield rose to a larger degree, the Hungarian ten-year yield decreased modestly by 5 basis points, following a more substantial fall in the previous month. The emerging bond market EMBI Global spread fell slightly, by 7 basis points; a large part of this took place in the second part of the period.

The exchange rate of the developed currencies was stable in the last months of the year: the dollar and the yen depreciated against the euro by 1 per cent, while the British pound appreciated mildly in the period (Chart 13).

2.2. Developments in domestic money market indicators

Following the depreciation resulting from the November interest rate decision, the forint, together with the currencies of the region, temporarily appreciated, then from the end of November it started depreciating again, and it closed around 314.5. Thus, it depreciated more than the regional currencies against the euro, by 0.6 per cent. The steepness of the government yield curve continued to slightly decline. Non-residents' forint government securities holdings declined by HUF 150 billion, thus their share was around 21 per cent. Hungarian CDS spread stabilised in the 91-95 basis-point band.

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



Source: Bloomberg

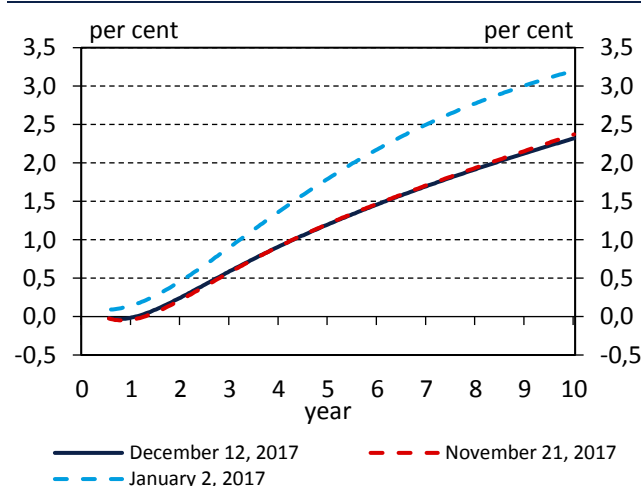
The forint depreciated against the euro by 0.6 per cent in the period moving between 311 and 315. Following the depreciation resulting from the November interest rate decision, the forint, together with the currencies of the region, temporarily appreciated, then from the end of November it started depreciating again, and it closed around 314.5 (Chart 14). To a similar degree as the Hungarian forint, the Czech koruna depreciated by nearly 0.5 per cent, the Polish zloty and the Romanian leu appreciated against the euro by 0.3 per cent. The forint and the koruna depreciated slightly against the dollar, while the zloty and the leu slightly appreciated.

The steepness of the government yield curve continued to slightly decline: the yield curve's section of up to 3 years shifted by 2-4 basis points up; however, the longer end of the curve dropped by 1-5 basis points (Chart 15). Following the significant decline in the secondary market long-term, ten-year yield in the past months, it only slightly dropped in December.

At the bond auctions of the period there was a strong demand mainly for long maturities. However, in the case of 3-month Treasury bill auctions the bid-to-cover was low at the last two auctions, therefore the issuer sold less securities than the announced quantity. Average yields continued to remain around 0 per cent. As regards the 12-month Treasury bill, demand was also subdued and the average yield dropped by 2 basis points to 0.01 per cent. At the auctions of the long-term government securities, outstanding demand was shown primarily for 3- and 10-year bonds; the average yield remained unchanged for the 3-year bonds, but it dropped by 20 basis points for the 10-year bonds. The bid-to-cover ratio of the 5- and 15-year bonds was more moderate, the average yield dropped significantly by nearly 50 basis points in the case of the 15-year bond compared to the previous auction held in October.

The stock of Hungarian forint-denominated government securities held by non-residents dropped by HUF 150 billion in the period, thus their holdings amounted to HUF 3,430 billion at the end of the period. Their share in forint government securities dropped from 22.7 to 21 per cent.

Chart 15: Shifts in the spot government bond yield curve



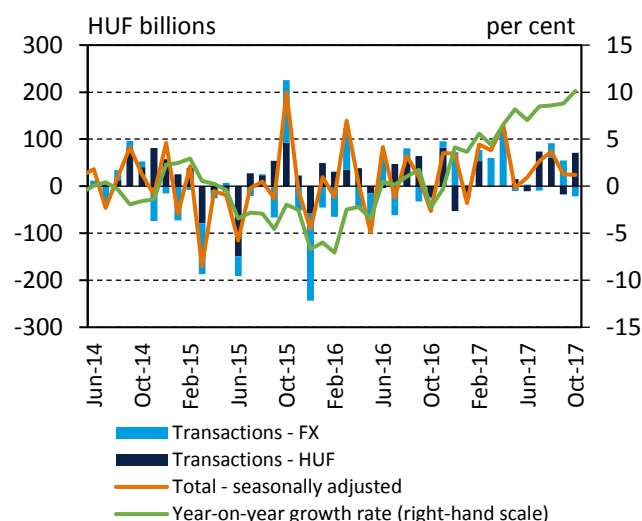
Source: MNB, Reuters

The 5-year Hungarian CDS spread decreased slightly by 4 basis points to 91 basis points, which was in line with the regional trends.

3. TRENDS IN LENDING

In October, the outstanding corporate loans of credit institutions rose by HUF 49 billion due to transactions, which is equivalent to an increase of HUF 24 billion on a seasonally adjusted basis. As a result of a single loan repayment the outstanding loans of the credit institutions to households fell by HUF 14 billion in total as the combined balance of disbursements and repayments. The smoothed interest rate spread of forint corporate loans dropped to 2.1 percentage points in October.

Chart 16: Net borrowing by non-financial corporations

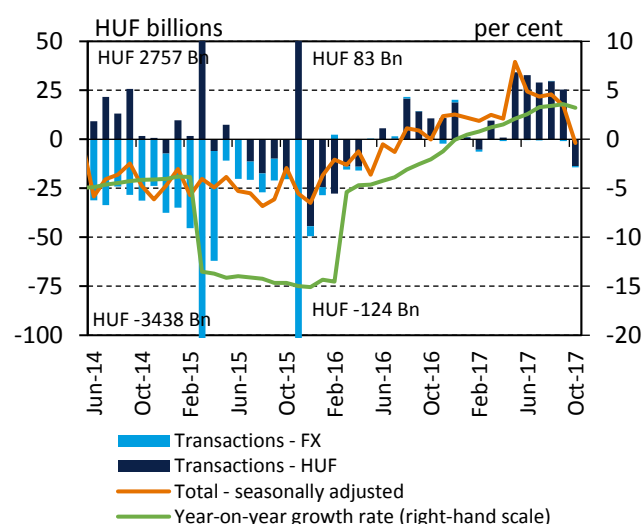


Source: MNB

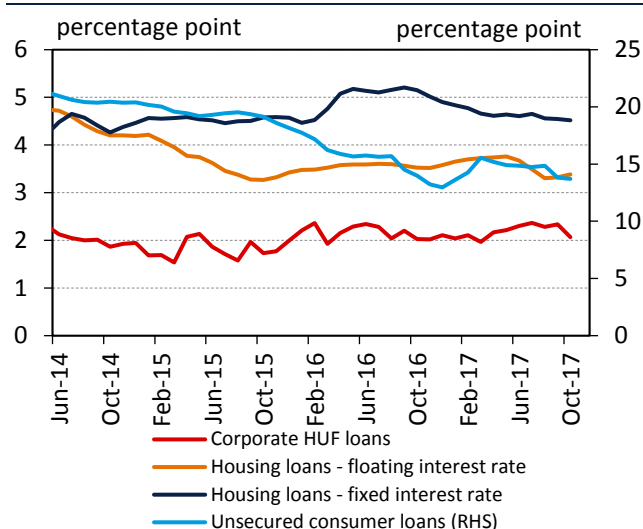
In October, the outstanding corporate loans of credit institutions rose by HUF 49 billion due to transactions, which is equivalent to an increase of HUF 24 billion on a seasonally adjusted basis (Chart 16). In a breakdown by currency, forint loans increased by HUF 71 billion, while foreign currency loans decreased by HUF 22 billion. In October 2017, corporate lending rose by 10.1 per cent in annual terms. Excluding money market transactions, the volume of new loans amounted to HUF 273 billion during the month; the value of the money market transactions was HUF 80 billion. The gross amount of new loans in October was up 31 per cent in annual terms.

As a result of a single loan repayment the outstanding loans of the credit institutions to households fell by HUF 14 billion in total as the combined balance of disbursements and repayments, thus at the end of October the annual growth in outstanding lending was 3.2 per cent (Chart 17). The value of new contracts concluded during the month was HUF 108 billion, thus in annual terms it registered a growth of 45 per cent. As regards the individual sub-segments, the volume of new housing loans and personal loans rose by 33 and 47 per cent, respectively.

Chart 17: Net borrowing by households



Source: MNB

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 dropped to 2.1 percentage points in October (Chart 18). However, the spread on small-amount market loans - typically taken by SMEs - still exceeds the average of the other Visegrad countries by 1 percentage point. The average interest rate spread on housing loans to households, calculated using the annual percentage rate (APR), is still at 4.6 percentage points, which can be considered high in international comparison. The spread on unsecured consumer loans to households stood at 14.3 percentage points in October. The problem of high spreads affects primarily the market of long-term fixed-rate transactions.

The spread on new housing loans has been following a downward trend in the last three quarters as compared to the end of 2016. In October, 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 0.36 percentage point (4.7), 0.37 percentage point (4.6) and 0.2 percentage point (3.4), respectively, as compared to data recorded at the end of last year.