MACROECONOMIC AND

FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES OF THE

MONETARY COUNCIL MEETING

OF 18 DECEMBER 2018

December

2018

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The background material 'Macroeconomic and financial market developments' is based on information available until 15 December 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 pre-announced schedule. At the second scheduled meeting each month, members consider issues relevant to decisions on interest rates. Abridged minutes of the Council's rate-setting meetings are released regularly, before the next policy meeting takes place. As a summary of the analyses prepared by staff for the Monetary Council, the background material presents economic and financial market developments, as well as new information which has become available since the previous meeting.

The abridged minutes and the background materials to the minutes are available on the MNB's website at:
http://www.mnb.hu/en/monetary-policy/the-monetary-council/minutes

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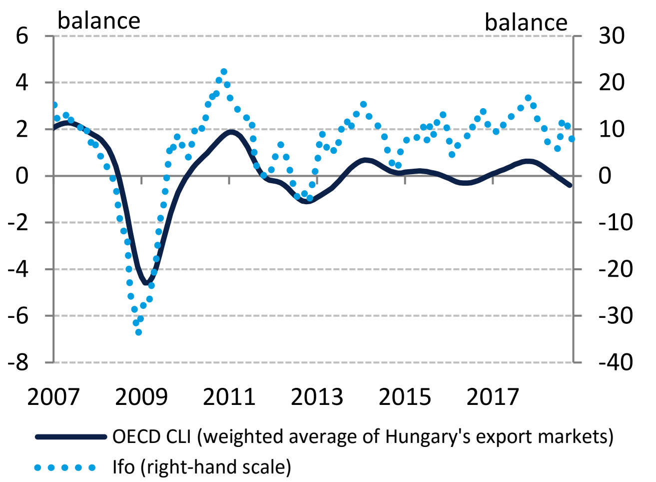
1. Macroeconomic developments

1.1. Global macroeconomic environment

In the third quarter of 2018, the GDP growth of the United States continued at a brisker, while the economic growth in the euro area at a decelerating rate. According to the international forecasts, on the whole, the growth prospects of the euro area deteriorated in the past months.

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



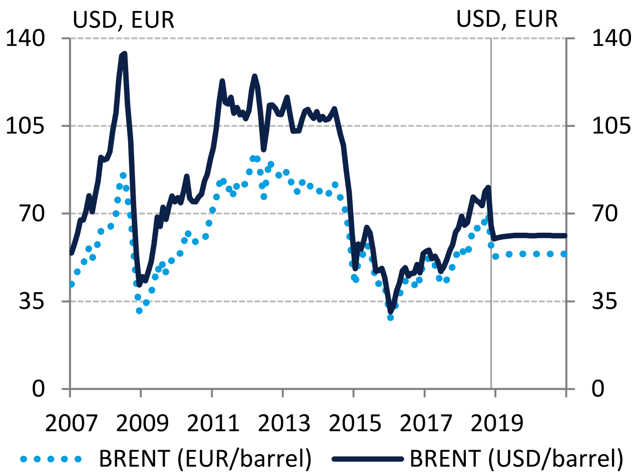
Source: OECD, Ifo

Growth in the global economy, and particularly in the USA and in the euro area, continued in the third quarter of 2018. The **US** economy rose at the fastest rate observed since 2015, by 3.0 percent in annual terms. Household consumption was the key driver of growth, with major contribution by the tax reform adopted at the end of last year, which also reduced the personal income tax rate. The economic expansion was also supported by corporate investments and public sector spending. Net exports substantially curbed growth, which was offset by significant inventory investments. Growth prospects of the US economy are favourable on the whole, contributed to by the tax cuts and the economic stimulus effects of the infrastructural investment programme. However, the wear off of the growth supporting measures carries downside risk on economic performance from 2020. 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 third quarter at a slower rate than observed in the previous quarters. **The growth calculated on year-on-year and quarter-on-quarter basis was 1.6 and 0.2 percent, respectively.** The economic performance of Germany, Hungary’s key trading partner, materially decelerated in the third quarter. The 1.2 percent year-on-year growth was supported primarily by investments, while household 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 and next year lessened** in the past period, which is primarily attributable – in addition to the poor industrial production – to the more moderate than expected export performance. The Ifo index, capturing the outlooks of the German economy, declined further in November (Chart 1).

Economic growth of the **United Kingdom** continued in the third quarter, but it still falls short of the growth rate recorded last year. The expansion of the economy was mainly driven by household consumption, and exports also contributed positively to the performance of the UK

Chart 2: World market prices of Brent crude oil



Source: Bloomberg

economy. Corporate investments reduced economic growth, which may have been also attributable to the investments postponed due the exit from the EU. In the third quarter, the **French economy** rose at a lower rate than expected, by 1.4 percent, contributed to by a wide range of the sectors. The performance of the **Italian economy** – in parallel with the poor industrial performance – decelerated further, and in annual terms GDP rose by 0.7 percent in 2018 Q3. The economic growth of **Austria** – based on a wide range of sectors – continued, and at 2.4 percent it outstripped the GDP growth of the euro area.

As in the previous quarters, the Central and Eastern European region proved to be the growth centre of the European Union in the third quarter of 2018 as well. According to the seasonally adjusted data, in the third quarter Poland, Slovakia and the Czech Republic recorded a GDP growth of 5.7 percent, 4.5 percent and 2.4 percent, respectively. Following the outstanding growth registered in 2017, Romania's economic performance decelerated further in the third quarter, and the Romanian GDP rose by 4.1 percent year on year. Growth in the countries of the region was still supported by the dynamically increasing domestic demand.

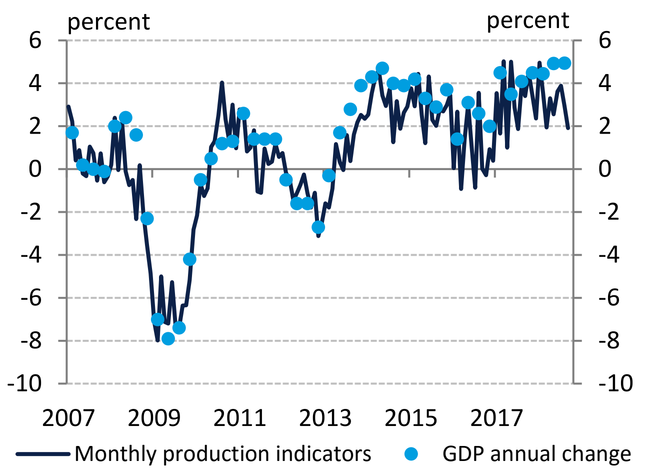
As regards the growth prospects of the euro area, downside risks strengthened. As regards the global economic activity, in the past months the increase in trade tensions remained the most significant money market and growth risk. In addition, downside risks affecting European growth are the deteriorating industrial production observed in the past period, the uncertainty resulting from the fragile financial environment in the emerging markets, the exit of the United Kingdom from the EU – and the uncertainty arising from the exit negotiations – , as well as the slowdown of the Chinese economy. In addition to the foregoing, the high government debt of Italy and the financial and real economy risks arising from the anticipated fiscal policy also deserve special attention.

Underlying inflation in the euro area moderately declined in November. According to the preliminary data, inflation and core inflation stood at 2 percent and 1 percent, respectively. Inflation declined in line with the expectations, primarily caused by the fall in energy prices. The world market price of crude oil declined close to USD 60 by the end of November, being the fourth largest monthly decline since 1990 (Chart 2). The fall in oil prices was attributable, in addition to the growth in global oil extraction, to the fact that the USA temporarily exempted eight countries from its sanctions against Iran, and thus these countries can continue to import Iranian oil. World market prices of industrial commodities and unprocessed food rose moderately in November.

1.2. Domestic real economy developments

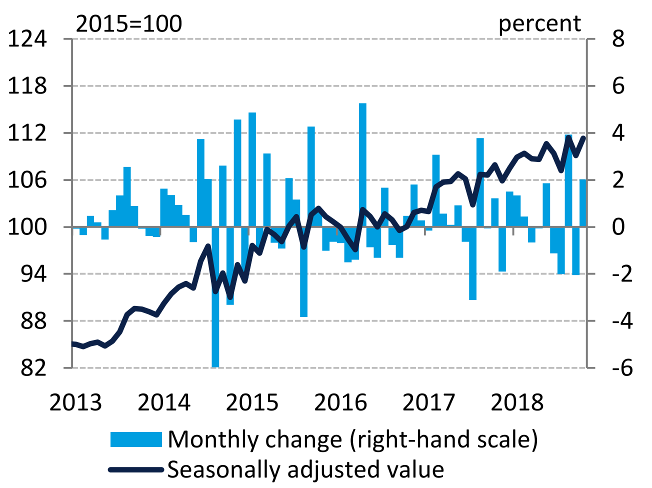
According to the HCSO's data, in the third quarter of 2018, Hungary's gross domestic product rose by 4.9 percent year on year. Most of the national economy branches supported the growth, market services contributed to the largest degree to the increase in GDP. In parallel with employment growth, from August to October 2018 unemployment rate fell to 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

Chart 4: Development in industrial production



Source: MNB calculation based on HCSO data

1.2.1 Economic growth

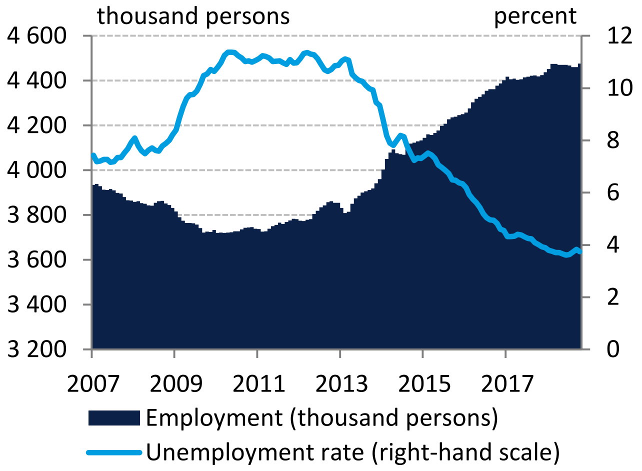
According to HCSO's data release, in the third quarter of 2018, Hungary's gross domestic product rose by 4.9 per cent year on year. Based on the seasonally and working-day adjusted data, **Hungary's GDP rose by 1.3 percent quarter on quarter**. From the output side, most of the national economy branches contributed to the growth, and market services supported GDP growth to the largest degree (Chart 3). Moderate growth in industrial production was accompanied by dynamic rise in construction. Retail sales continued to rise further in October.

In October 2018, **industrial output was up by 5.9 percent** year on year, while production **rose by 2.0 percent compared to the previous month** (Chart 4). The working-day adjusted index stood at 3.3 percent, where the difference was caused by the one more working day compared to the previous year. On the whole, the output of subsectors showed a positive picture; **there was a material correction in the output of vehicle manufacturing – representing a considerable weight** – and thus it made a positive contribution to industrial production again; in addition, the manufacture of electronic products and chemical industry output also substantially rose. German industrial production was moderate in the past months, but it adjusted in October; however, the new orders of the German industry – already for five months in a row – declined again in year-on-year terms.

Expressed in euro terms, the value of exports – in parallel with the industrial production – **was up by 6.5 percent, while that of imports rose by 9.7 percent**, year on year in October 2018, and thus trade surplus decreased by EUR 232 million. Export and import prices materially rose in September even in a historical comparison. In September 2018, the terms of trade have deteriorated by 2.3 percent year on year, caused by the rise in the relative price of mineral fuels and processed goods.

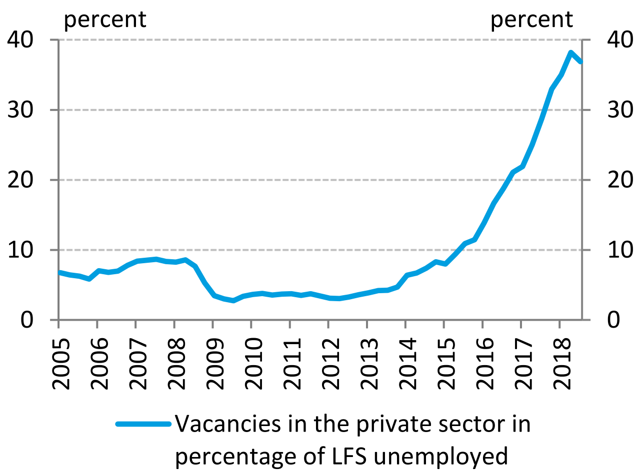
In September 2018, the volume of construction output was up 25.8 percent year on year, while output decreased by 0.2 percent compared to the previous month. Output increased both in the case of buildings and other structures. In the case of the construction of buildings, the growth in production was attributable to educational, industrial, commercial and

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

residential buildings. Due to the government investments, primarily to infrastructure developments (road, railway, public utility), construction of other buildings continued to rise. The **volume of new contracts decreased** year on year; within that the volume of contracts for buildings slightly declined, while those for other structures considerably fell compared the value registered in the previous year. The month-end volume of the construction companies' contract portfolio still substantially exceeds the level of last year, which primarily reflects the housing market contracts committed until 2019 and the already committed EU funds.

In October, according to the preliminary data, **retail sales volume was up by 6.6 percent year on year, based on the unadjusted data**. According to the data adjusted for the calendar effect, the volume of sales grew by 5.7 percent year on year. Retail sales volume rose by 0.9 percent compared to the previous month. As regards the structure of retail sales, turnover continued to rise in a wide range of products in October. The substantial rise in the turnover of non-food consumer durables continued to support growth significantly.

1.2.2. Employment

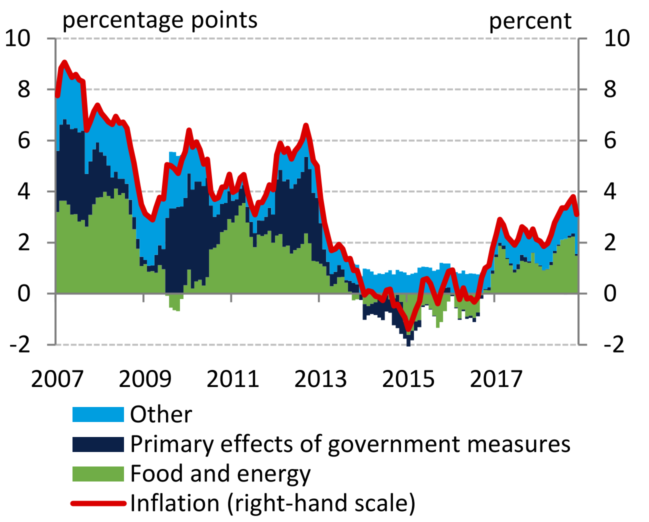
According to the (seasonally adjusted) data of the Labour Force Survey, in the period of August-October 2018, both the labour force participation rate and the number of people in employment rose. Within total employment, the fall in public employment was accompanied by a moderate rise in the number of people employed abroad; on the whole, the rise in employment in the primary labour market continued. **In parallel with the rise in employment, the unemployment rate fell to 3.7 percent** (Chart 5).

In the third quarter of 2018, based on the number of job vacancies, corporate labour demand remained high in manufacturing and continued to rise moderately 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

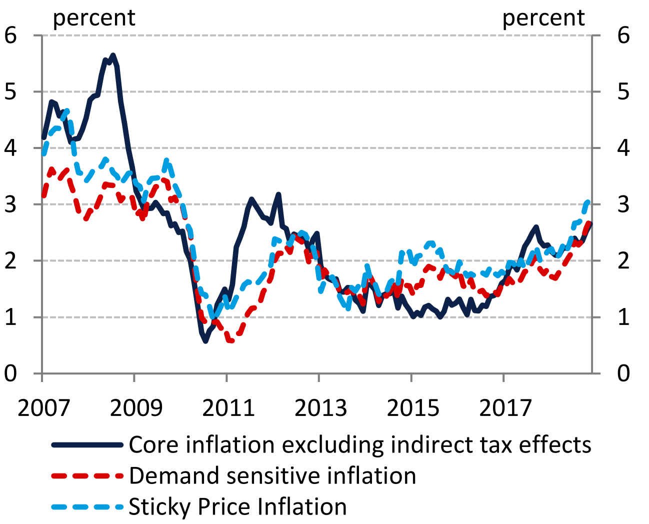
In November 2018, inflation stood at 3.1 percent, core inflation at 2.6 percent and core inflation excluding indirect taxes at 2.7 percent. Underlying inflation indicators moderately rose compared to the previous month. In September 2018, gross average wage in the private sector rose by 10.8 percent 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 this year's 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 September 2018, gross average wage in the private sector rose by 10.8 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 this year's **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**. Due to its midyear seasonality, regular average wage moderately declined on a monthly basis. Wage dynamics in sectors with below-average wage was still higher than in sectors with above-average wage.

1.3.2. Inflation developments

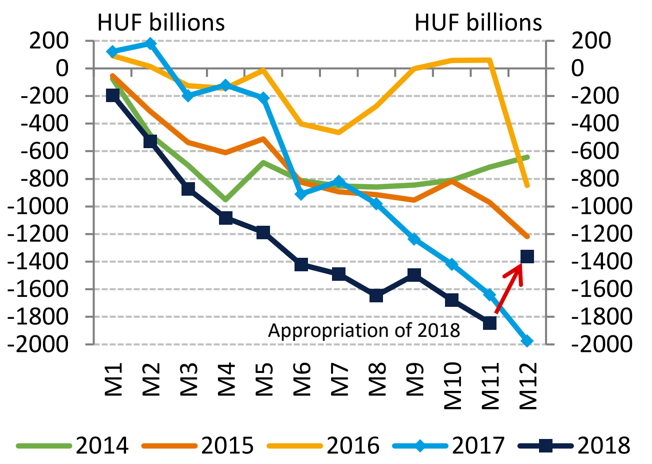
In November 2018, year-on-year inflation was 3.1 per cent, while core inflation and core inflation excluding indirect taxes stood at 2.6 and 2.7 per cent, respectively (Chart 7). Inflation fell by 0.7 percentage point, while core inflation remained unchanged compared to the previous month. The decline in inflation is attributable to the substantial fall in fuel prices.

Underlying inflation indicators moderately rose compared to the previous month (Chart 8). In October 2018, agricultural producer prices rose by 5.1 percent in annual terms, while the domestic sales prices of the consumer goods industry increased by 1.6 percent.

1.4. Fiscal developments

In November 2018, the central sub-sector of general government closed with a deficit of HUF 164 billion, and thus the current year's cumulated deficit amounted to HUF 1,842 billion at the end of the reporting month. The cumulated deficit continues to exceed the annual deficit target in the 2018 Budget Act.

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



Source: Budget Act of 2018, Hungarian State Treasury

In November 2018, the **central sub-sector of general government** closed with a deficit of HUF 164 billion, and thus the current year's cumulated deficit amounted to HUF 1,842 billion at the end of the reporting month. The cumulated deficit continues to exceed the annual deficit target in the 2018 Budget Act (Chart 9). The high value of the cumulated government deficit is attributable to the pre-financing of EU transfers and the lower amount of the related revenues, the higher expenditures of the budgetary organisations and the absence of last year's one-off revenue items (tax credit for growth, land sales).

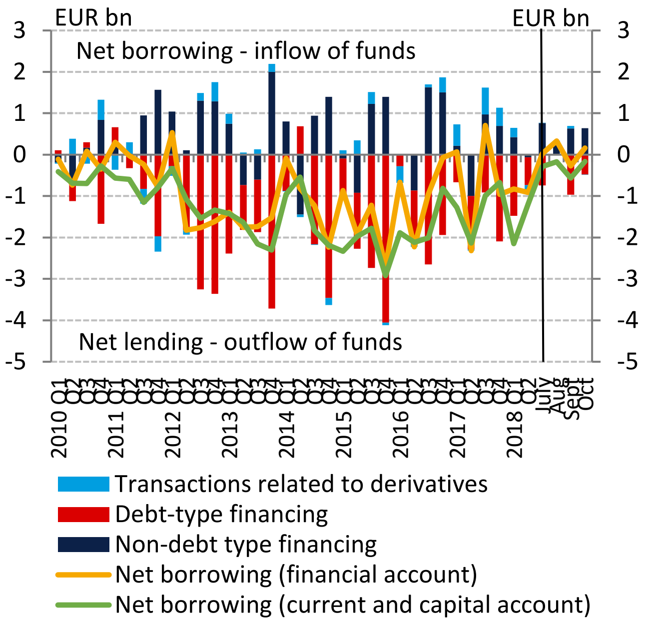
The **revenues of the central sub-sector** were by HUF 88 billion lower in November 2018 compared to the value of the previous year. The difference was primarily the result of revenues from value added tax due to the change in the reimbursement rules, since from January the reimbursement deadline decreased from 45 days to 30 days in case of reliable debtors. At the same time, wage-related revenues showed dynamic increase year on year.

The **expenditures of the central sub-sector** fell short of the November 2017 value by HUF 145 billion. On the one hand, expenditures related to EU transfers declined year on year, and on the other hand, it resulted in lower level of expenditures in November that the wage payments of the central budgetary organisations and the curative and preventive care sector, the family support expenditures due at the beginning of November were paid at the end of October.

1.5. External balance developments

The current account and net lending of the economy showed a surplus in October as well. According to the financial account data, net external debt of the economy declined further, while foreign direct investments 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 October, current account surplus amounted to EUR 35 million, while net lending of the economy was EUR 164 million. According to the October data, the current account still shows a surplus, albeit the degree thereof – due to the decline in trade surplus – decreased compared to September. The output of sectors with major weight in exports – vehicle manufacturing and manufacture of electronic products – materially rose in October. The rise in energy imports from outside Europe, mostly denominated in dollar, also contributed to the developments in the goods balance. The transfer balance surplus declined in parallel with the decreasing absorption of EU transfers. No significant change was observed in the income balance deficit during the month.

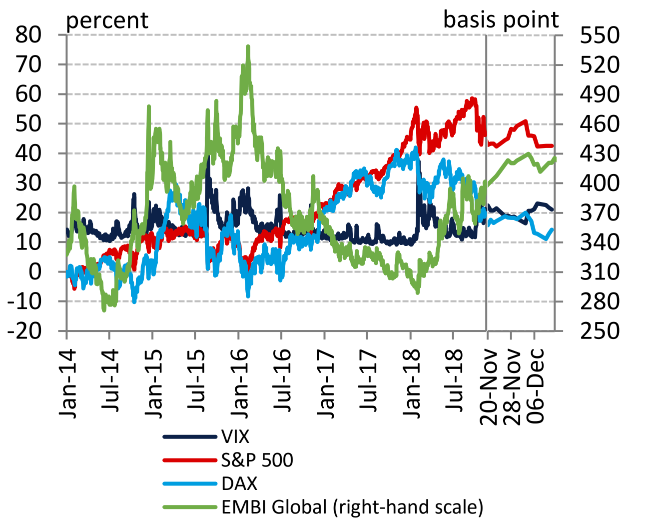
According to the financial account data, in October, the rise in net FDI and the decline in net external debt continued. The rise in net foreign direct investments was still mostly linked to the reinvested earnings of non-resident enterprises. The net external debt of the economy declined substantially, by roughly EUR 0.5 billion, based on transactions, which is attributable to the growth in **banks'** external assets. The net external debt of the consolidated **general government,** under the non-resident sector's rising government securities holding, increased, while the **corporate sector'**s debt was linked to foreign borrowing (Chart 10).

2. Financial markets

2.1. International financial markets

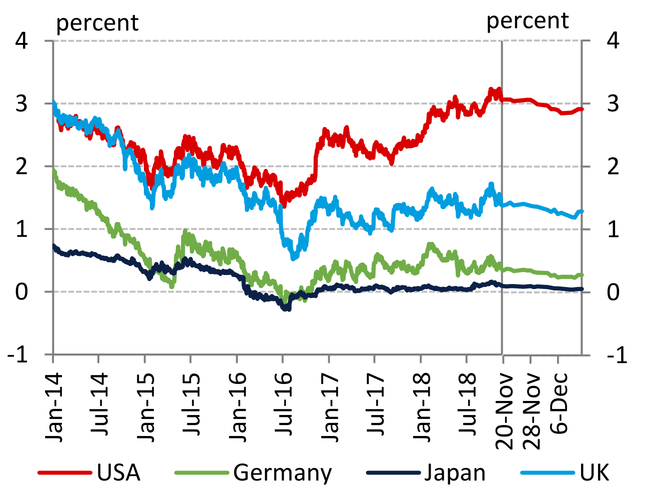
Global market sentiment varied since the previous interest rate decision. Investors focused on the developments related to the Brexit deal and the Italian budget, as well as on the continuation of the trade policy negotiations between the USA and China. The VIX index, measuring stock exchange volatility, declined to 21 percent during the period under review. Although developed stock markets tended to decline, emerging market stock exchanges showed an increase. Developed government securities yields fell, while the emerging bond markets were characterised by mixed movements. No substantial change was observed in the exchange rate of developed currencies, while emerging currencies temporarily depreciated. During last month, oil prices moderately declined further, and thus the Brent and WTI price dropped to USD 60 and USD 51, respectively.

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



Source: Bloomberg

Chart 12: Yields on developed market long-term bonds



Global investor sentiment varied since the previous interest rate decision. The VIX index declined since mid-November from 23 percent, to 21 percent, while the rise registered relative to the level of 16 percent recorded at the beginning of December shows that sentiment somewhat deteriorated by the end of the period (Chart 11). The bond market also developed similarly during the period under review: the MOVE index, measuring the volatility of the US bond market, dropped from the initial 59 basis points to 50 basis points, and then – in parallel with the deterioration in sentiment – rose to 58 basis points. Market participants' judgement was substantially determined by the developments related to the Brexit deal, the news on Italy's budget and the negotiations between the USA and China related to customs tariffs.

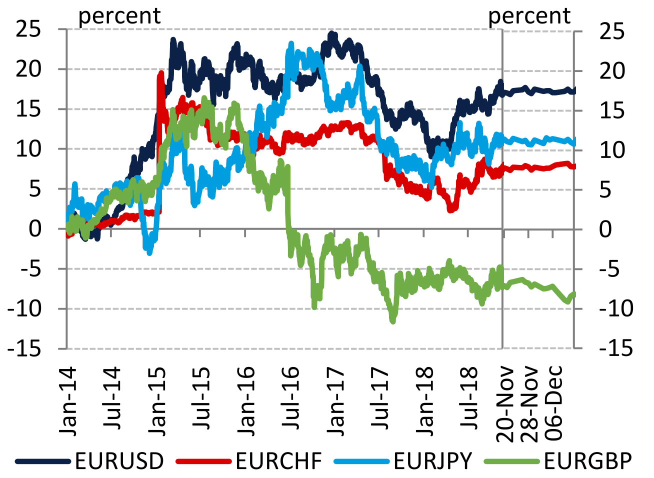
On the whole, developed market stock exchange indices slightly declined, while the emerging ones moderately rose during the period under review. The key US and European equity indices fell by roughly 1 percent, while the emerging market MSCI index rose by 1 percent compared to the start of the period. At the same time, the Beijing stock exchange was down by 2 percent.

Developed market long-term government securities yields declined to a larger degree, while emerging markets registered shifts of mixed direction during the period under review. On the developed markets, the US long-term yield fell by 17 basis points to 2.89 percent, while the German yield decreased by 10 basis points to 0.25 percent (Chart 12). The EMBI Global, reflecting the emerging bond markets, declined by 9 basis points in total during the period under review, which however was primarily attributable to the improving perception of a few countries (Turkey, South-Africa).

During the period under review, Fed had no rate-setting meeting; at the same time, economists anticipate an interest rate hike at the meeting of 19 December. The

Source: Bloomberg

Chart 13: Developed market FX exchange rates



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

Source: Reuters

probability of an interest rate increase in December rose during the period under review; 95 percent of the respondent economists anticipate a 25 basis point hike at the December meeting. On the other hand, looking ahead, market expectations related to an interest rate increase lessened and they price maximum one tightening for next year. In line with its former communication, the ECB terminated its asset purchase programme in December, and thus – in accordance with the expectations – net purchases will stop at the end of December. In the case of ECB, based on the market pricings, the first increase of the overnight deposit interest is expected in the first quarter of 2020.

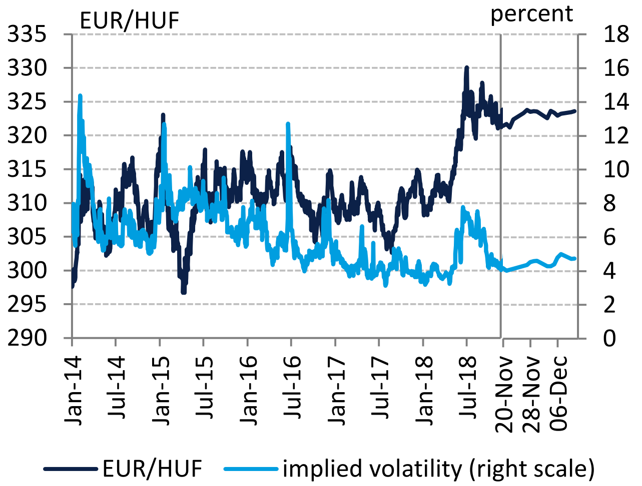
Developed currency exchange rates did not change materially during the period under review, while certain emerging currencies temporarily depreciated. The EUR/USD and the EUR/CHF exchange rate is still around 1.13, while the British pound depreciated by one percent against the euro due to the uncertainty around Brexit. Of the emerging currency, the Argentine peso, the Brazil real, the Columbian peso and the Russian rouble substantially depreciated at the beginning of December, typically due to country-specific reasons (Chart 13).

Oil prices continued to decline during last month. The Brent price fell to around USD 60, while the WTI price decreased to a similar degree, to USD 51.

2.2. Developments in domestic money market indicators

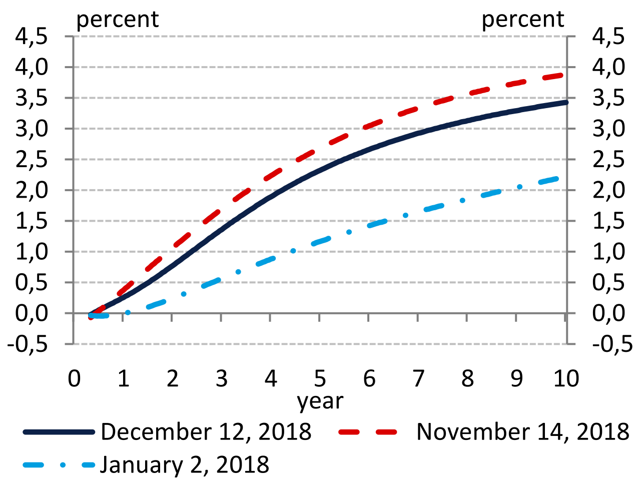
In the period since the last interest rate decision, the 3-month BUBOR did not change significantly. The government securities yield curve shifted downward and thus the curve became flatter, which may have been partly attributable to the further rise in the non-residents' forint government securities holding, with their share standing at 23 percent. During the period under review, the forint fluctuated in a narrow band, and on the whole it depreciated by less than half percent.

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



Source: Bloomberg

Chart 15: Shifts in the spot government yield curve



Source: MNB, Reuters

At the beginning of the period, the forint exchange rate against the euro was around 322, then – despite the deterioration in international sentiment in December – it fluctuated in a narrow band and on the whole it depreciated by less than half percent. Of the currencies of the region, the Polish zloty and the Czech koruna appreciated during the period under review, while the Romanian leu showed minimal movement. The forint exchange rate showed low volatility in most of the period under review, which did not change even upon the publication of the domestic macroeconomic data (Chart 14).

By the end of the period, the 3-month BUBOR fell by 2 basis points to 13 basis points. **The entire section of the government yield curve declined substantially, by roughly 20-45 basis points.** The decline was larger toward the longer section of the yield curve, and thus the yield curve became flatter (Chart 15).

Most of the forint government securities auctions were characterised by strong demand, and thus the Government Debt Management Agency accepted higher than the announced volume in several cases. The average yield of the 3-month auctions declined to -0.15 percent in the second half of the period, from where it rose back to start-of-period level of -0.06 percent at the last auction. At the 3-month discount Treasury bill auctions the Government Debt Management Agency announced HUF 50 billion on all four occasions, and in the last two cases it reduced the accepted volume despite the fact that demand exceeded the announced volume. Demand was adequate at the 12-month discount Treasury bill auctions as well; the average yield slightly decreased. Demand for the 3-year government securities was stronger at the beginning of the period, and more moderate in the second half thereof, while the 5-year fixed- and variable-rate bonds were characterised by stable high demand, and thus the announced volume was augmented on both maturities. The average yield in the case of the 3-year securities fell to 1.27 percent, while at the 5-year securities to 2.66 percent, representing at both securities a fall of 40 basis points. Demand for the 10-year government securities was also strong, and thus the Government Debt Management Agency increased the issued volume by HUF 7.5 billion compared to the initially announced HUF 15 billion. The average yield declined by almost 50 basis points to 3.15 percent compared to the auctions held at the beginning of November.

The 5-year Hungarian CDS spread rose moderately, by 3 basis points and finally closed the period at 91 basis points. The minimal shift was in line with the deterioration in international sentiment and the developments in the spreads in the region.

Non-residents continued to show high interest in the Hungarian government securities, and thus their forint government securities holding rose by HUF 60 billion in total during the past month, and at the beginning of December there was a period when their holding exceeded HUF 4,200 billion. Accordingly, the portfolio held by non-residents rose to around HUF 4,120 billion, while their share remained above 23 percent.

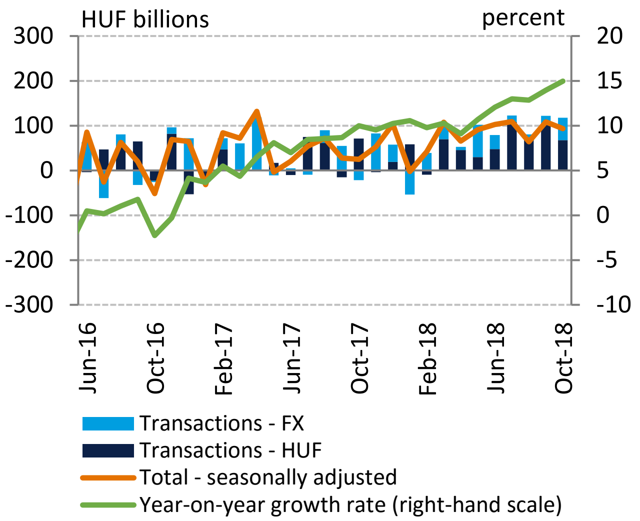
3. Trends in lending

In October, the outstanding corporate loans of credit institutions rose by HUF 118 billion due to transactions, which is equivalent to an increase of HUF 93 billion on a seasonally adjusted basis. The outstanding loans of credit institutions to households rose by HUF 62 billion as a result of transactions, which represents a decrease of HUF 27 billion on a seasonally adjusted basis. Thus, the annual growth in outstanding lending amounted to 5.9 percent in October 2018.

In October, the outstanding corporate loans of credit institutions rose by HUF 118 billion due to transactions, which is equivalent to an increase of HUF 93 billion on a seasonally adjusted basis (Chart 16). In a breakdown by currency, forint loans and foreign currency loans increased by HUF 67 billion and HUF 51 billion, respectively. In October 2018, corporate lending rose by 15 percent in annual terms. Excluding money market transactions, the volume of new loans amounted to HUF 277 billion during the month.

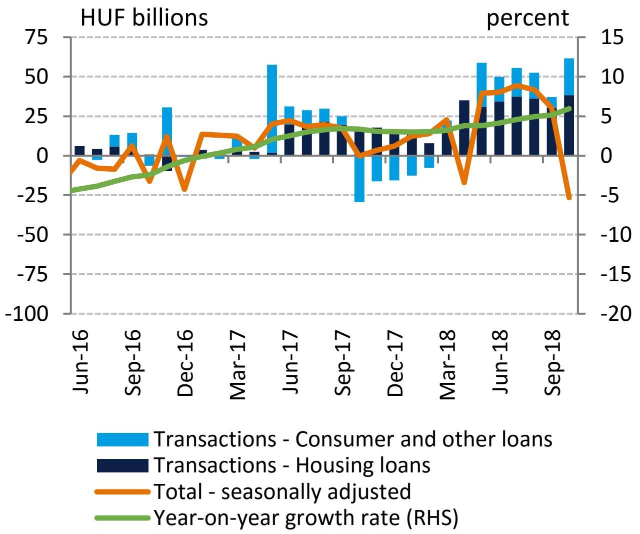
The outstanding loans of credit institutions to households rose by HUF 62 billion as a result of transactions, which represents a decrease of HUF 27 billion on a seasonally adjusted basis. Thus, the annual growth in outstanding lending amounted to 5.9 percent in October 2018 (Chart 17). The value of new contracts concluded during the month was HUF 147 billion, and thus in annual terms it registered a growth of 34 percent. As regards the individual sub-segments, the volume of new housing loans and personal loans rose by 37 and 46 percent, respectively. Since September 2017, the Certified Consumer-friendly Housing Loan products already contributed by HUF 276 billion to the growth in lending for housing purposes in a sounder structure, and 60 percent of the fixed-rate loans concluded during the month were already certified loans.

Chart 16: Net borrowing by non-financial corporations



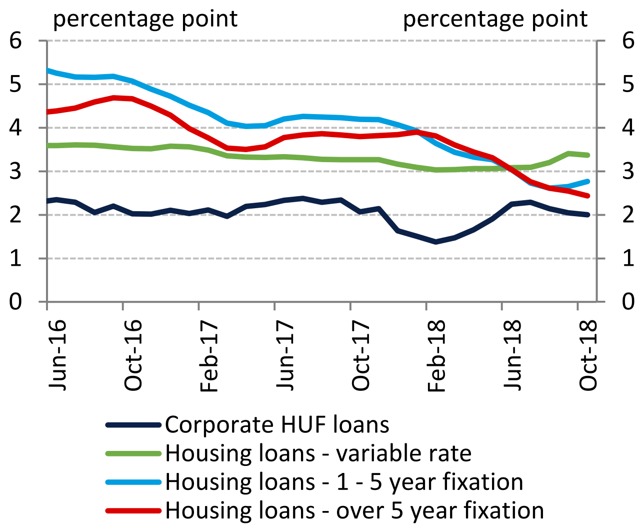
Source: MNB

Chart 17: Net borrowing by households



Source: MNB

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

In the first half of 2018 the ratio of loans with interest fixed for 1 year at the most declined, and amounted to 8 percent in October. Within the fixed-interest loans, from the second quarter, loans with interest period longer than 5 years increasingly gained ground, accounting for 57 percent of the total new housing loans in October. 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 dropped by 5 basis points to 2 percentage points in October (Chart 18). However, the spread on small-amount market loans – typically taken by SMEs – exceeds the average of the other Visegrád countries by 75 basis points. The average smoothed interest rate spread on variable rate housing loans calculated on the basis of the annual percentage rate (APR) rose by 10 basis points compared to September 2017, to 3.4 percentage points. In the case of loans the interest rate of which is fixed for 5 years at the most, this value dropped by 145 basis points to 2.8 percentage points, while in the case of loans fixed for more than 5 years, it fell by 140 basis points to 2.45 percentage points, and thus at present the average spread on fixed-rate loans is already below that on the variable-rate loans.