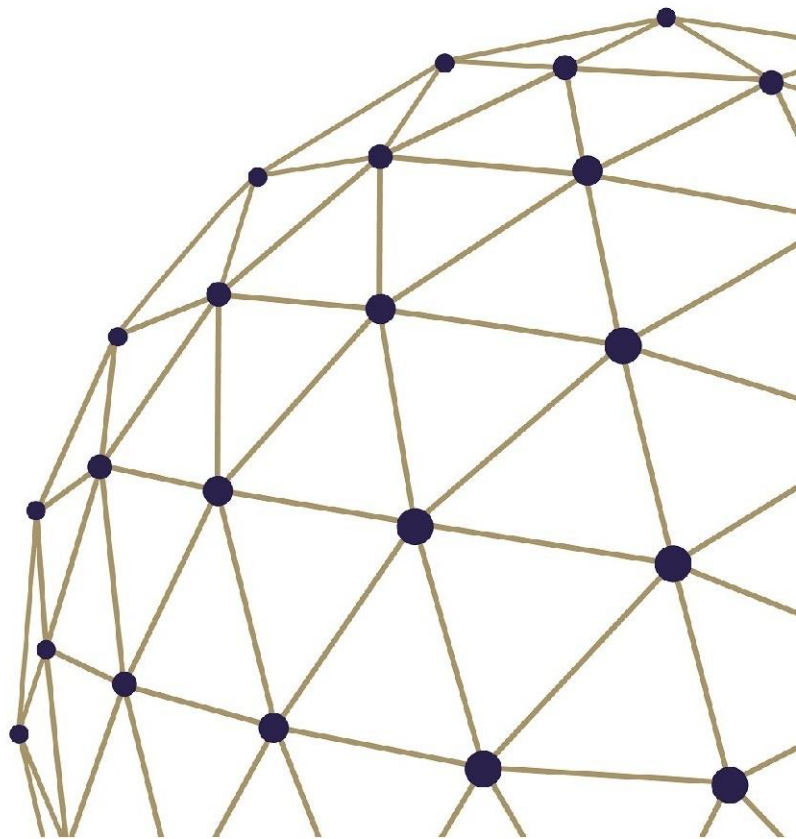




Macroeconomic and financial market developments

January 2017

Background material
to the abridged minutes of the
Monetary Council meeting
of 24 January 2017



Time of publication: 2 p.m. on 8 February 2017

The background material ‘Macroeconomic and financial market developments’ is based on information available until 20 January 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 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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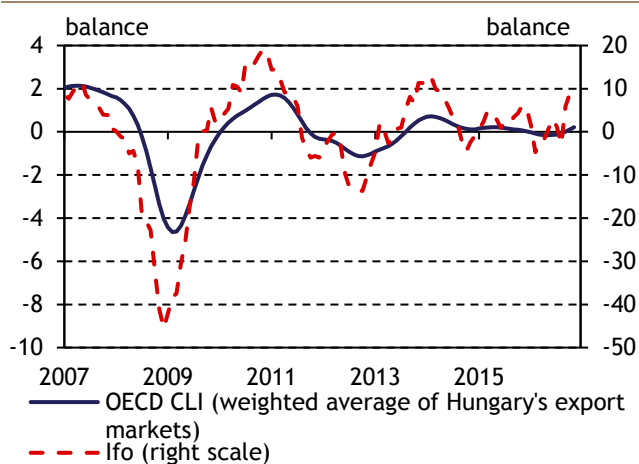
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1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

GDP figures for the third quarter showed a positive picture overall. The German economy – Hungary's most important trading partner – expanded, and growth in the USA also continued. Due to the deceleration of growth in China and the risks surrounding the economy, global growth may still be deemed fragile. In line with the moderate world demand, inflationary pressure from the world market has remained weak in recent months.

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



Source: OECD, Ifo

GDP figures for the third quarter showed a positive picture overall. The German economy – Hungary's most important trading partner – expanded, and growth in the USA also continued. However, the deceleration of growth in China and the risks surrounding the economy raise questions about the stability of global economic activity. Based on the foregoing, looking ahead, global growth may still be deemed fragile. Looking ahead, commodity prices – which started to pick up from low levels as a result of the agreement reached by the OPEC member states – will restrain the commodity exporters' activity growth to a lessening degree, while persisting geopolitical tensions continue to slacken growth in developed countries through weaker demand and economic sanctions. Over the short term, the effects of the UK referendum may be concentrated on the United Kingdom for the time being, but depending on the outcome of exit negotiations, they may also have a negative impact on the performance of the Hungarian economy over the medium and long term.

Chart 2: Brent crude oil world market prices



Source: Bloomberg

The euro area economy registered a quarter-on-quarter growth rate of 0.3 per cent in the third quarter of 2016. In December, the Purchasing Manager Index applicable to the euro area showed its highest value in recent years, which evidences positive trends in output, employment and new orders. According to market expectations, the growth rate of the euro area may be higher than previously expected, i.e. around 1.4 per cent, throughout 2017. The exit of the United Kingdom from the EU carries significant medium and long-term risks. Supported primarily by persisting increase in consumption, the growth of the German economy, Hungary's most important export partner, continued in the third quarter. On the whole, according to the recent months' average, German industrial production and new orders also rose in November year on year. Expectations concerning the German economy (Ifo) continued to develop positively after the less favourable outlook registered in previous months (Chart 1).

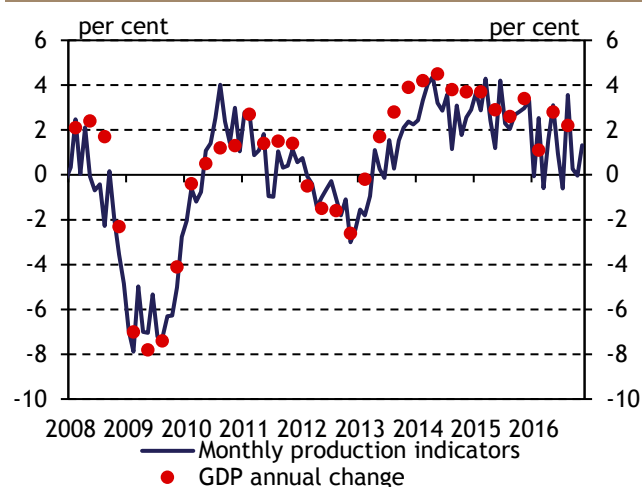
Inflationary pressure from the world market may gradually increase. For the time being, moderate world demand offsets the rise in commodity prices. As a result, inflation rates remained below targets in the world's major economies. In the past month, oil prices fluctuated in the

range of USD 51-57, which is a substantial increase compared to the level of around USD 30, recorded in the beginning of 2016 (Chart 2). World market prices of industrial commodities and unprocessed food remained moderate.

1.2. Domestic real economy developments

In the third quarter of 2016, Hungary's GDP expanded at a rate of 2.2 per cent year on year. Retail sales volume continued to increase in November, while industrial production registered a minor year-on-year growth. Total outstanding lending to enterprises increases in an annual comparison. From August to October, whole economy employment rose by 3.2 per cent year on year. The unemployment rate stood at 4.5 per cent.

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 calculations based on HCSO data

1.2.1. Economic growth

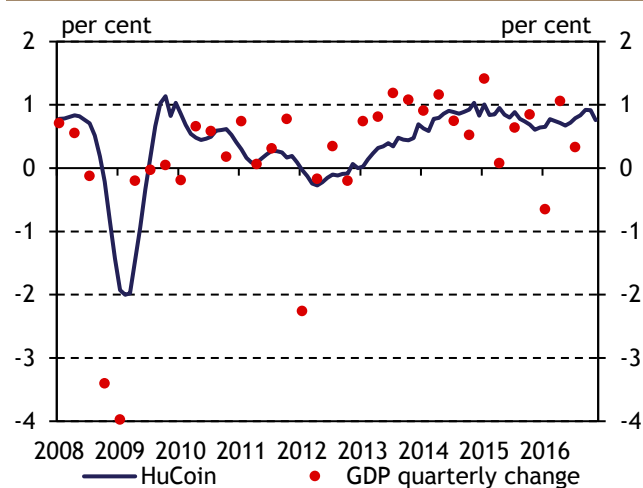
Based on the detailed figures released by the HCSO, in the third quarter of 2016 Hungary's GDP grew at a rate of 2.2 per cent year on year and by 0.3 per cent compared to the previous quarter.

In the third quarter of 2016, the strongest driver of growth on the production side was the services sector, linked to the pick-up in domestic demand. Additionally, due to crop yields exceeding those of the previous year, agriculture also made a significant contribution to economic growth. In line with the subdued industrial production in the third quarter, growth was moderately supported by the sector, while the construction industry – in parallel with this year's decelerating inflow of EU funds – continued to restrain it (Chart 3).

On the expenditure side, household consumption continued to make a significant contribution to GDP growth, which is also corroborated by retail sales data. Overall, investments continued to decline in the third quarter, primarily due to the major fall in government investments financed from EU funds. The contribution of net exports to growth was slightly negative, which is attributable to several factors. In parallel with a subdued industrial production, export performance decelerated substantially in the third quarter, while the slowdown of annual import dynamics is primarily explained by the continued decline in investments. In line with the favourable performance of agriculture and the accumulation of the inventories stockpiled in trade, changes in the inventories of the national economy made a major contribution to growth in the third quarter.

Based on the HuCoin indicator, which reflects the medium-term prospects of the domestic economy, the underlying trends of economic activity were stable when examining the average of the past months (Chart 4).

Chart 4: Evolution of the HuCoin indicator



Note: The historic values of the HuCoin indicator may have been changed by revisions to GDP data.

Source: MNB calculations based on HCSO data

In November 2016, the volume of industrial output, both according to the raw data and the data adjusted for the working-day effect rose by 0.6 per cent year on year, while on a seasonally adjusted basis it was up 0.9 per cent compared to the previous month. With a high share in output, vehicle manufacturing rose substantially, the performance of electronics and optics increased moderately, while the output of food industry essentially stagnated compared to the previous month. On the whole, forward-looking indicators reflect a mixed picture for the short-term outlook of the domestic industry.

Based on preliminary data, in November 2016 the value of goods exports and imports increased by 5.8 per cent and 4.6 per cent, respectively, year on year in euro terms, thus the trade surplus was up EUR 130 million from last November. The year-on-year terms of trade continued to improve in October, also contributed to, in addition to the low fuel prices, by the relative price change in machinery and transport equipment, as well as processed goods.

In November 2016 the volume of construction output was down 14.4 per cent year on year, while output rose by 1.7 per cent compared to the previous month. The volume of new contracts decreased by 28.2 per cent year on year. The month-end volume of construction companies' contract portfolio increased by 24 per cent year on year, in which the most prominent contribution was a significant increase in the volume of contracts for other construction.

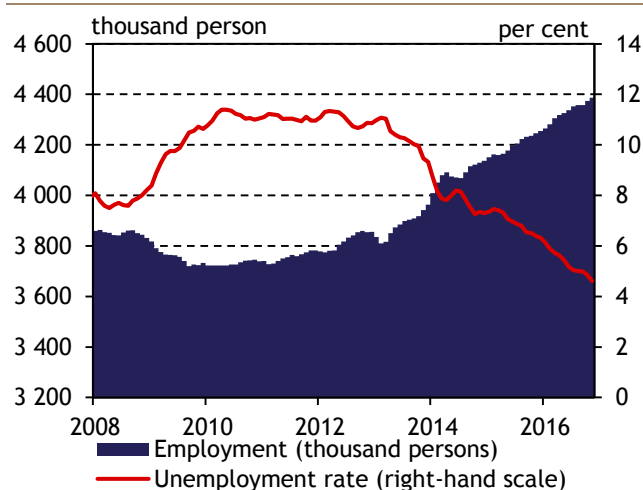
In November, based on preliminary data, the volume of retail sales, both according to the raw data and the data adjusted for the calendar day effect, was up 4.7 per cent year on year, while turnover increased by 0.9 per cent compared to the previous month. As regards the structure of sales, sales volume increases were registered across a wide range of products.

1.2.2. Employment

According to Labour Force Survey data, from September to November whole economy employment increased by 3.3 per cent year on year. Labour force participation rate slightly increased in the period under review, while unemployment rate fell to 4.5 per cent (4.6 per cent when adjusted for seasonal effects) (Chart 5). Total employment continued to rise both with and without public employment; there was no material change in the number of public workers.

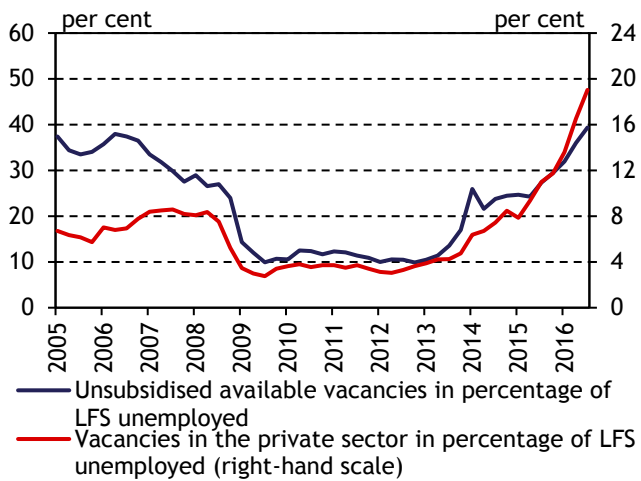
According to the data released by the National Employment Service (NES), as in recent years, in October 2016 the number of newly announced non-subsidised jobs

Chart 5: Number of persons employed and the unemployment rate



Source: HCSO

Chart 6: Indicators of labour market tightness



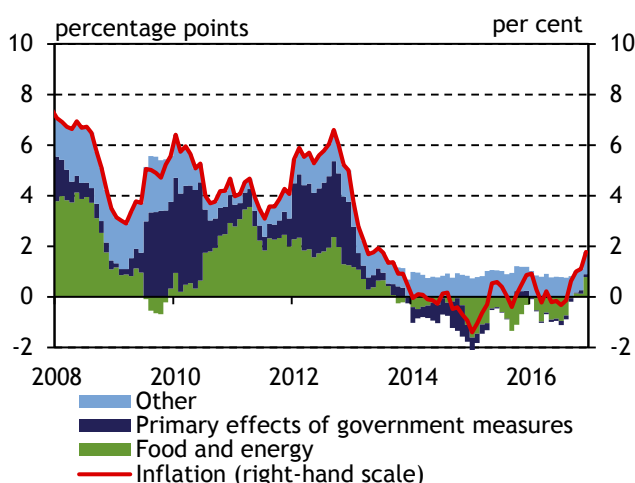
Source: National Employment Service, HCSO

remained at around 15,000, while the end-of-month number of vacant non-subsidised jobs reached a historic high in the post-crisis period. In the third quarter, the number of vacant jobs in the private sector published by the HCSO rose to another historic high. In a historic comparison the tightness of the labour market is still high based on the indicators calculated from various statistics (Chart 6).

1.3. Inflation and wages

In December 2016 year-on-year inflation was 1.8 per cent, while core inflation and core inflation excluding indirect taxes stood at 1.7 and 1.6 per cent, respectively. Underlying inflation indicators essentially remained unchanged. In November 2016 the annual wage growth in the private sector accelerated compared to the previous month, thus wage dynamics is still stronger than in the previous year.

Chart 7: Decomposition of inflation



Source: MNB calculations based on HCSO data

1.3.1. Wage setting

In November the annual growth of gross average wages accelerated in the private sector compared to the previous month. Acceleration was stronger in the manufacturing sector than in the case of market services. In the private sector, average gross wages were up 7.1 per cent year on year. According to seasonally adjusted data, the annual dynamics of both the gross average wages and the regular wages accelerated in the private sector.

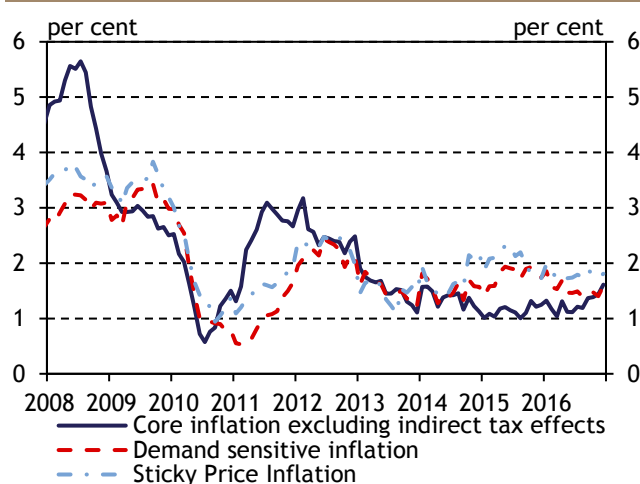
1.3.2. Inflation developments

In December 2016, inflation was 1.8 per cent, while core inflation was 1.7 per cent and core inflation excluding indirect taxes stood at 1.6 per cent (Chart 7). Inflation and core inflation rose by 0.7 and 0.1 percentage point, respectively, relative to the previous month. The upward drift in inflation is primarily caused by the price index of fuels.

Underlying inflation indicators continue to point to a moderate inflation environment, reflecting low imported inflation and inflation expectations, as well as moderate commodity prices (Chart 8). In November 2016 agricultural producer prices fell by 5.5 per cent in annual terms, while there was a minor increase in domestic sales prices of consumer goods sectors.

As regards the incoming December inflation data, core inflation corresponded to, while the total inflation rate slightly exceeded the projection in the December Inflation Report. According to our current forecast, inflation will remain below the 3 per cent medium-term target and will reach it in the first half of 2018. Looking ahead – as a result of base effects and recovering domestic demand – inflation may increase gradually.

Chart 8: Measures of underlying inflation

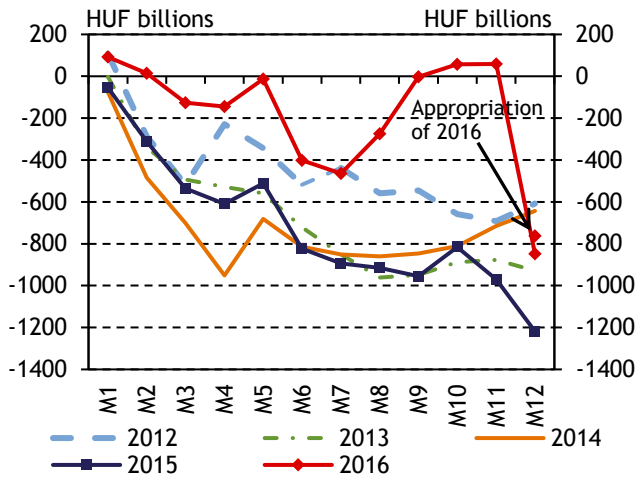


Source: MNB calculations based on HCSO data

1.4. Fiscal developments

In December 2016, the general government's central sub-system closed with a deficit of HUF 908 billion, thus the annual cash-based deficit became HUF 848 billion.

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



Source: MNB calculations based on HCSO data

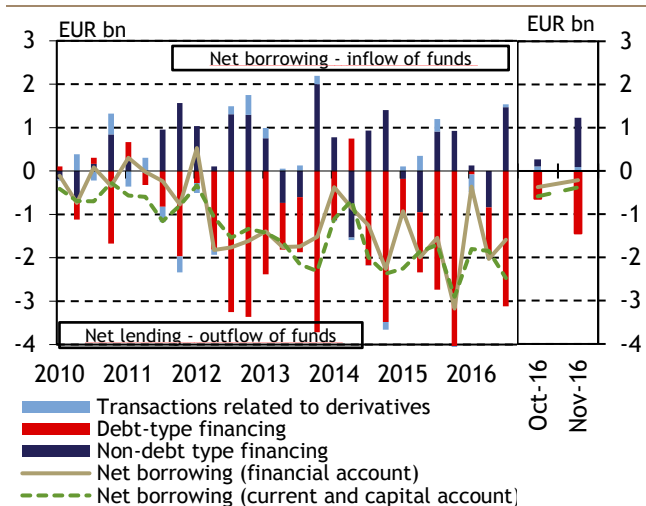
In December 2016, the general government's central sub-system closed with a deficit of HUF 908 billion, thus the annual cash-based deficit became HUF 848 billion. Thus the deficit of December is well above the deficit registered in the last month of previous years, nevertheless, as a result of cumulative cash surplus that persisted until the end of November, the annual cash-based balance was around the level of previous years (Chart 9). **In the last weeks of the year, several decisions were made that substantially raised the general government expenditures.**

In December 2016, the **revenues of the central sub-system** fell short of those registered in December 2015 by HUF 72 billion, while the **expenditures of the central sub-system** exceeded those of December 2015 by HUF 588 billion. During December, EU transfers reached almost HUF 700 billion, which is the highest monthly value in the domestic EU transfer payments until now. Thus the year to date transfers amounted to roughly HUF 2,000 billion; however, a major part of this may have been advance payments.

1.5. External balance developments

According to the November data release, seasonally unadjusted net lending dropped to EUR 380 million. The larger part of net lending related to the current account, and a minor part thereof to the capital account surplus. The decrease in net lending was attributable to a great degree to the decelerating absorption of EU transfers. In line with the expansion of industrial production, there is still a substantial trade surplus, reflecting a continued increase in annual comparison as well.

Chart 10: Structure of external financing (unadjusted transactions)



Source: MNB

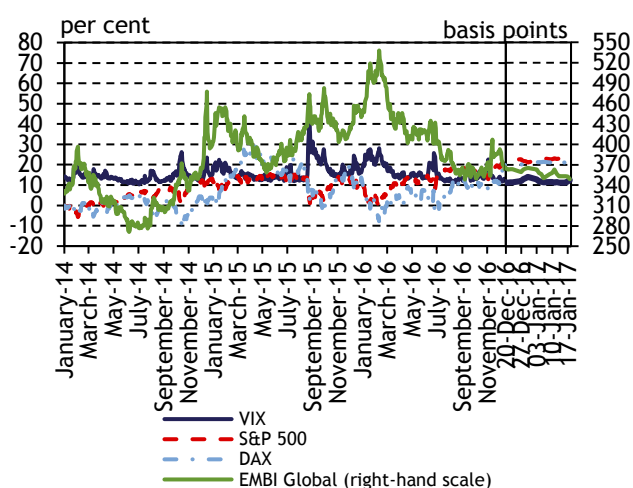
Financing side developments also reflect a decrease in the net lending of the economy, which amounted to EUR 212 million in November. The outflow of funds was generated in the context of an outstandingly high, i.e. EUR 1.4 billion, decrease in net external debt, and FDI inflows of about EUR 0.9 billion. Growth in foreign direct investments was linked primarily to the reinvested earnings in Hungary. The decline of over EUR 1.4 billion in net external debt was contributed to by all sectors of the economy. The decrease in the government's external debt is primarily attributable to the fall in the non-residents' government securities holding in the amount of EUR 400 million. The net external debt of banks' decreased in line with a larger decrease in foreign liabilities. The fall in the corporate sector's net external debt took place under a rise in external assets, primarily an increase in foreign commercial loan receivables.

2. FINANCIAL MARKETS

2.1. International financial markets

Since the previous policy decision asset prices showed relatively small shifts, and volatility decreased in the market compared to November. Investors mostly focused on the speech of the British prime minister, the publication of the Fed minutes and the inauguration of the new US president. Investors' demand for risky assets increased, while the exchange rate of Japanese yen, a currency of safe haven, somewhat rose. Oil prices essentially stagnated during the period.

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



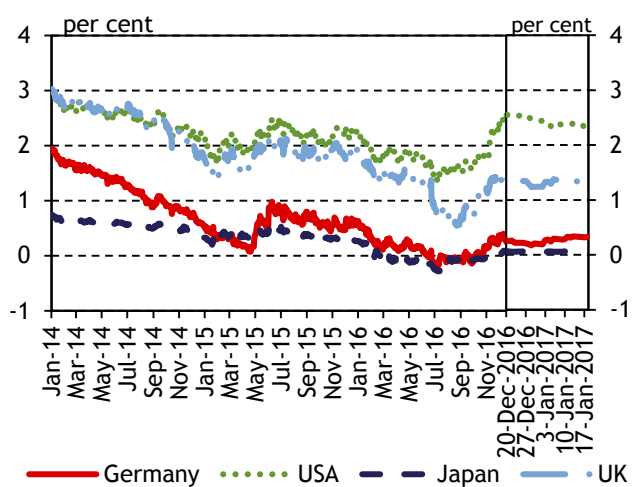
Source: Bloomberg

Market sentiment since the previous policy decision was calm. Investor sentiments were primarily influenced by the fluctuation in the dollar exchange rate and the depreciation of the emerging currencies (particularly the Turkish lira) against it, the publication of the minutes of Fed's December meeting, and the once again heightening fears about Brexit. On the whole, risk indices slightly decreased, accompanied by a moderate rise of developed, primarily European, stock exchanges, while bond market volatility also fell.

Of the developed stock market indices it was primarily the European equity markets that performed well in the period. The European stock exchanges were up 0.5-3 per cent, US indices mostly stagnated, while the Japanese stock exchange slightly fell due to the appreciating yen exchange rate. The VIX index, measuring stock exchange volatility, still fluctuated at a historic low level of 11-12 per cent. The MSCI composite stock price index of emerging markets rose by roughly 5-5.5 per cent, reflecting a pick-up in investors' demands for risky assets.

After the turbulences seen in November, the bond market risk indices also evidenced calmer investor sentiment in the past period. The emerging bond market EMBI Global spread fell by 15 basis points (Chart 11), and the MOVE index, measuring the volatility of the developed bond market, also showed a minor decrease.

Chart 12: Yields on developed market long-term bonds



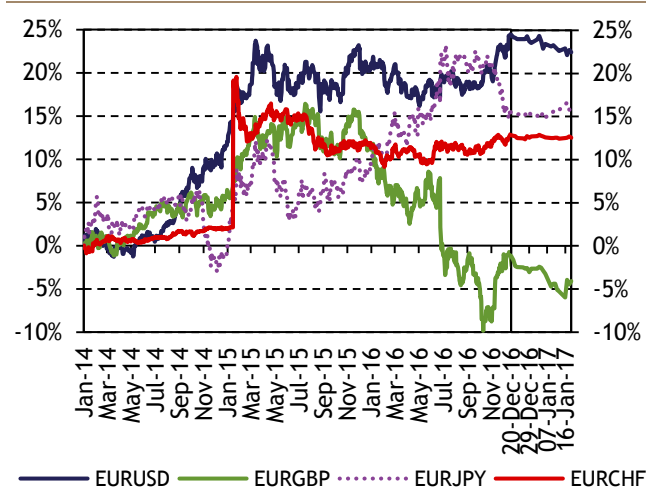
Source: Bloomberg

Developed, long-term bond yields rose, while the yield of the more risky emerging market bonds were somewhat down from their previous high value, in line with the tranquil global sentiments. There was no change in Japanese yields, while US yields fell by 13 basis points and the European yields rose by 10-15 basis points. The rise in German yield is partly attributable to the surprising German inflation outcome of December, while the fall in US yields was caused by the milder than expected by the market tone of Fed's December minutes and the hints related to only gradually increasing path of interest rates. This was somewhat offset by the yield increasing effect of Janet Yellen's speech delivered on 18 January in a mildly tightening tone, but on the whole there was no change in the key trends. In line with the rising German yields, the

less risky, emerging European bond yields (such as the Polish and the Hungarian once) increased.

The Brent and WTI oil prices once again started to decline after the rise seen late December and early January, thus overall they essentially stagnated during the period. For the time being the market takes a wait-and-see attitude with regard to the actual result of the OPEC agreement on curbing production, entering into force from January. Meanwhile, the Saudi Arabian energy minister was of the opinion that it would not be necessary to extend the six-month OPEC agreement, as the demand and supply balance of the oil market will be reinstated by the end of the first half year.

Chart 13: Developed market FX exchange rates



Source: Reuters

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

Of the major currencies, the **dollar strengthened against the euro** to 1.04, but later on, after the publication of the Fed minutes and Donald Trump's press conference, saying not too much on the specifics of his anticipated economic policy, it started to weaken again. It somewhat strengthened after Yellen's speech (0.3-0.4 per cent), but this was only temporary, thus **on the whole, it closed the period with a depreciation of 2.5 per cent**. As a result of the once again rising fears about Brexit, the British pound depreciated against the dollar roughly by 3-4 per cent, but after the speech of Theresa May it strengthened 2.5 per cent, thus it showed a depreciation of roughly 1 per cent in the period. The Japanese yen appreciated primarily against the weakening dollar (2-3 per cent). As regards the emerging market currencies, the market focused on the depreciation of the Chinese yuan, seen early in the year, and the continuing fall of the Turkish lira. The latter one depreciated by further 7 per cent this January, after a weakening of over 20 per cent last year, thus it was regarded as the poorest performing emerging currency.

Markets focused on the speech of the Governor of Fed and on the ECB's rate setting meeting. Based on Janet Yellen's statement, the strength of the economy justifies further tightening, and until the end of 2019 several interest rate hikes per year are needed to achieve the 3 per cent long-run equilibrium level of interest rates. According to the first reactions of the economists, this may as well mean that Fed may perform further tightening as early as March. According to Yellen, the US economy is close to reaching full employment, inflation is approaching the target and the Beige Book partially corroborates the favourable view on the economy. **The Governing Council of the ECB changed neither the key interest rates, nor its unconventional instruments.** At the press conference that followed the meeting, Mario Draghi confirmed that **the asset purchase programme would be further expanded as**

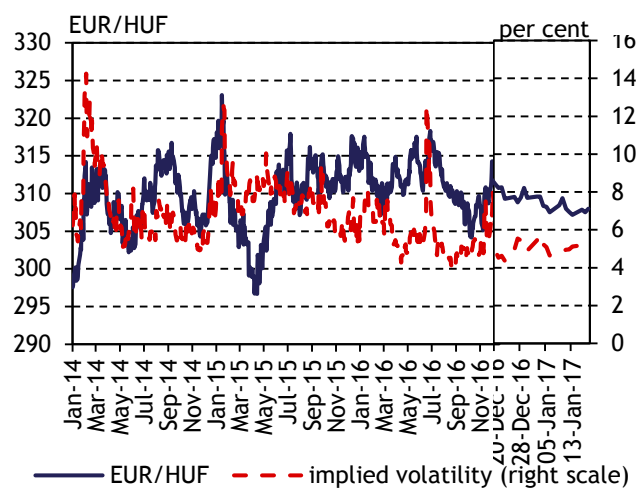
necessary, since no persisting rise was perceived in the underlying inflation processes.

The market also followed Theresa May's speech of 17 January **with great interest**, as it was the first time that the prime minister spoke about the strategy with regard to the post-Brexit commercial relations with the EU and she summarised in 12 points the key priorities of Great Britain related to the Brexit process. **The British pound depreciated almost 1 per cent already one day before the speech. However, after the speech the pound appreciated by 2.5 per cent.** According to most of the investment analyses, the strengthening is attributable to the fact that both Houses of the Parliament can vote on Brexit, and it was the first time when investors saw a specific Brexit strategy that reduces uncertainty. In her speech she emphasised the global role of Great Britain and the importance of the new commercial agreements to be concluded.

2.2. Developments in domestic money market indicators

Similarly to the currencies of the region, the forint also slightly appreciated during the month. Domestic yields were on the rise, thus the government yield curve's longer end shifted upward, accompanied by a drop in the non-residents' forint government securities holding. On the other hand, under the mildly positive risk-taking sentiments, the domestic CDS spread dropped by almost 15 basis points.

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



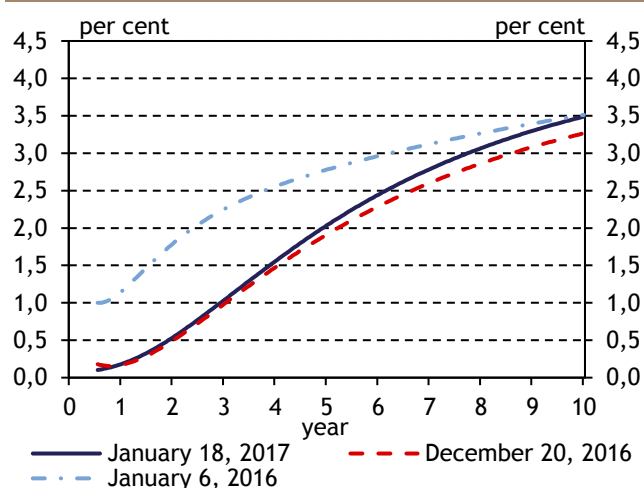
Source: Bloomberg

The forint strengthened roughly 1 per cent in the past month, in line with the other currencies of the region (Chart 14). The strengthening was in part the adjustment of the weakening seen in December, and in part it was due to the improvement in the international risk appetite. Compared to the 1 per cent appreciation of the forint, the Polish zloty and Romanian leu appreciated by 1.3 and 0.5 per cent, respectively, while the exchange rate of the Czech koruna essentially remained unchanged.

Short-term foreign exchange swap interest rates were volatile in the past period, while the longer term ones materially decreased: the decrease for the one-week, one-month and 3-month maturities was 110, 81 and 27 basis points, respectively. Interbank interest rates also decreased substantially, i.e. the one-day BUBOR fell close to 0, while the 3-month BUBOR was down to 0.3 per cent. In addition, the BUBOR turnover in January was high, reaching HUF 20 billion by the middle of the month.

The long end of the government yield curve shifted upwards: while at the 10-year maturity there was a rise of 17 basis points, the upward drift on the 3 to 5-year maturities was smaller, i.e. 5-8 basis points (Chart 15).

Chart 15: Shifts in the spot government bond yield curve



Source: MNB, Reuters

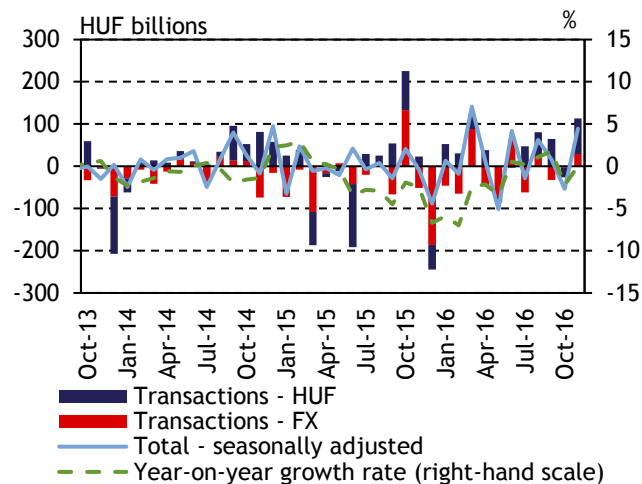
Demands at the bond auctions of the period strengthened. Demand at the year-end auctions was sufficient, while in the January auctions there was overbidding on several occasions, particularly for the 3-year bonds. On the whole, auction yields were in line with the secondary market yields, although the auction yield of the 3-month discount Treasury bills exceeded those of the secondary market due to the change of benchmark.

On the other hand, non-residents' holdings of government securities have decreased by almost HUF 100 billion during the period. Thus their portfolio fell close to HUF 3,460 billion, while their share in HUF government securities dropped to around 24 per cent. In most of the period, the Hungarian 5-year CDS spread remained around the level of 125 basis points recorded on the date of the interest rate decision, followed by a fall of 14 basis points at the end of the period to 113 basis points.

3. TRENDS IN LENDING

As an adjustment of the base effect observed in the previous month the annual dynamics improved, as a result of which the credit institutions' total corporate lending in annual comparison has not changed. The annual growth of outstanding borrowing by the SME segment is in the 5-10 per cent band, deemed desirable by the MNB. In November the outstanding borrowing of households rose by HUF 9 billion.

Chart 16: Net borrowing by non-financial corporations



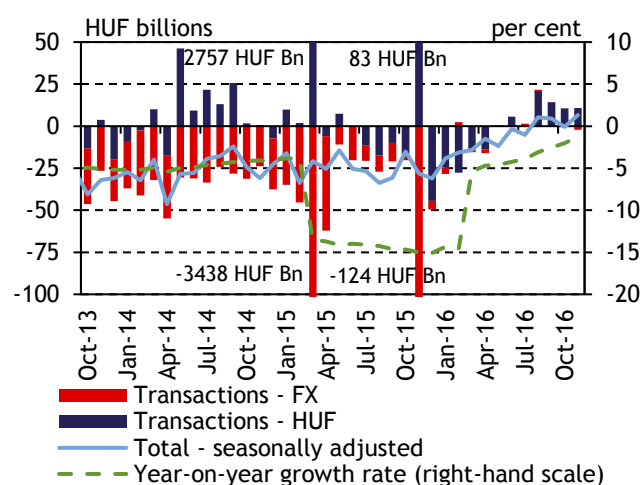
Source: MNB

As a result of transactions, the outstanding loans of credit institutions to the corporate sector increased by HUF 113 billion in November, equivalent to an increase of HUF 89 billion on a seasonally adjusted basis (Chart 16). In a breakdown by currency, forint loans and foreign currency loans rose by HUF 84 billion and by HUF 29 billion, respectively, during the month.

As an adjustment of the base effect observed in the previous month the annual dynamics improved, as a result of which the credit institutions' total corporate lending in annual comparison has not changed. On the other hand, outstanding borrowing by the SME segment grew at an annual growth rate of 7 per cent by the end of the third quarter of 2016, being in the band of 5-10 per cent, deemed desirable by the MNB. Loan agreements concluded in the third phase of the Funding for Growth Scheme boosted the outstanding forint and foreign currency loan portfolio by HUF 49 billion and HUF 8 billion, respectively.

In November, interest rates on **new corporate loans** decreased, thus remained historically low. The average annualised interest rate on small-value forint loans decreased by 0.05 percentage point to 3.95 per cent from the previous month, while the average interest rate on higher-value forint loans, net of money market transactions, decreased by 0.28 percentage point to 2.12 per cent.

Chart 17: Net borrowing by households



Source: MNB

In November, **outstanding loans to households** increased by HUF 9 billion as a combined result of transactions, primarily due to an increase in the portfolio of forint loans (Chart 17). During the month, the contraction in outstanding loans amounted to 1.2 per cent in annual terms. In the period under review, households concluded new loan contracts in a total value of HUF 85 billion, thus the average annual growth in new business volume was 46 per cent. Within that the volume of new housing loans rose by 44 per cent.

In November, interest rates on **new household loans** were below the pre-crisis interest rate level. Compared to the previous month, the annual percentage rate of charge on forint housing loans decreased slightly, by 0.02 percentage point to 5.52 per cent.