Macroeconomic and financial market developments

February 2017

Background material
to the abridged minutes of the
Monetary Council meeting
of 28 February 2017

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The background material 'Macroeconomic and financial market developments' is based on information available until 22 February 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 usually 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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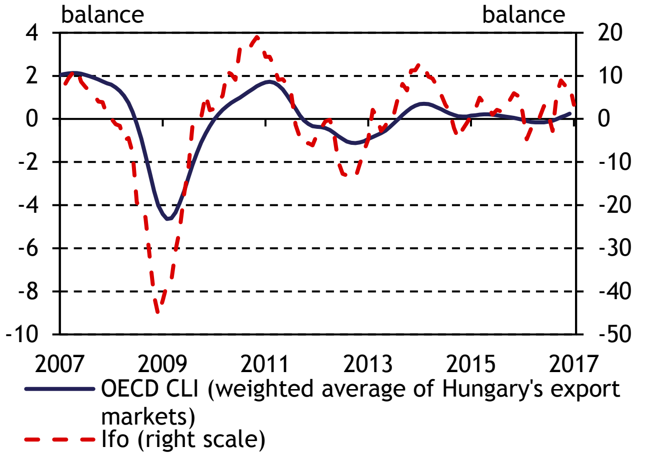
1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

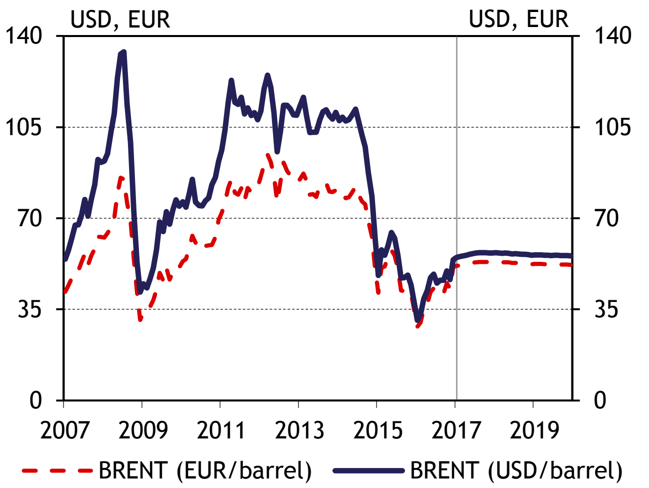
GDP figures for the fourth quarter showed a positive picture overall. The German economy – Hungary's most important trading partner – expanded, and growth in the US also continued. Due to the deceleration of growth in China and the risks surrounding the economy, global growth may still be deemed fragile. The medium-term view on European economic activity has improved in recent months. For the time being, the effects of the UK referendum may be concentrated on the United Kingdom, but they may also have a negative impact on the performance of the Hungarian economy over the medium and long term. Global inflation has risen in recent months, due primarily to increasing commodity prices.

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



Source: OECD, Ifo

Chart 2: Brent crude oil world market prices



Source: Bloomberg

GDP figures for the fourth quarter showed a positive picture overall. The German economy – Hungary's most important trading partner – expanded, and growth in the US also continued. As a result of the fiscal stimulus package implemented in the second half of 2016 in China, several institutions raised their medium-term forecasts for China's economy. On the other hand, due to the deceleration of growth in China observed in the past years and the risks surrounding the economy, global growth may still be deemed fragile. **The medium-term view on US and European activity has improved in recent months.**

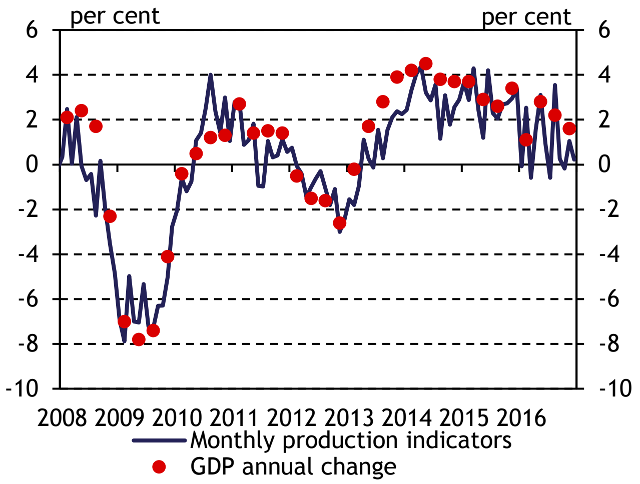
The euro area economy registered a quarter-on-quarter growth rate of 0.4 per cent in the last quarter of 2016. In January, the Purchasing Manager Index applicable to the euro area continued to rise, and it showed its highest value in recent years, a proof of positive trends in output, employment and new orders. According to market expectations, the growth rate of the euro area may be slightly higher than previously expected, i.e. around 1.6 per cent, throughout 2017. The exit of the United Kingdom from the EU carries significant medium and long-term risks. The growth of the German economy, Hungary's most important export partner, continued in the fourth quarter. Growth was supported by buoyant domestic demand through the material expansion in general government consumption and a sustained increase in household consumption, as well as by the rise in gross fixed investment. German industrial production declined, and new orders rose in December. In line with weaker industrial production, expectations concerning the German economy (Ifo) lessened after the more positive outlook of previous months (Chart 1).

Global inflation has risen in recent months, due mainly to increasing commodity prices. Inflation rates in the world's major economies rose, also reflecting base effects, while underlying inflation continued to develop moderately. Oil prices fluctuated in the range of USD 55-57 in recent months (Chart 2). World market prices of industrial commodities and unprocessed food rose slightly.

1.2. Domestic real economy developments

According to the preliminary release by the HCSO, gross domestic product grew by 1.6 per cent in the last quarter of 2016 year on year. As a result, Hungary's GDP rose by 2.0 per cent in 2016. In the fourth quarter of 2016, whole economy employment rose by 3.6 per cent year on year. The unemployment rate stood at 4.4 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

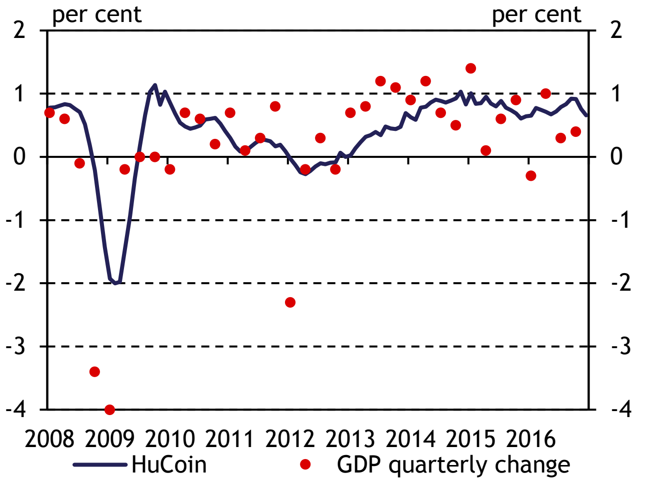
1.2.1. Economic growth

Based on the preliminary release by the HCSO, in the fourth quarter of 2016 Hungary's GDP grew at a rate of 1.6 per cent year on year and by 0.4 per cent compared to the previous quarter. On the production side, market services and agriculture were the strongest drivers of growth, while on the expenditure side expansion may have been supported by household consumption. According to the preliminary release by the HCSO, Hungary's GDP rose by 2.0 per cent in 2016.

In the fourth quarter of 2016, **on the production side** market services and, as a result of its favourable performance outstripping that of previous year, agriculture may have been the strongest drivers of growth. Industrial performance stagnated, while the contribution of construction to growth continued to be negative. The detailed production and expenditure side structure of the GDP is not yet public, thus we can make assumptions with regard to the processes underlying the incoming data only on the basis of the monthly production data available to us (Chart 3). According to these indicators, industrial production fell slightly short of the high level registered last year. The material decline in construction output continued, due to the lower volume of infrastructural projects financed from EU funds compared to the level registered in 2015. In accordance with our expectations, the volume of retail sales continued to increase. **Based on the historic characteristics and the cyclical position, the MNB expects that upon publishing the final GDP figures growth in 2016 may change upwards as a result of the revisions**.

On the expenditure side, household consumption may have increased significantly in the fourth quarter as well, which is also corroborated by the incoming retail sales data. Overall, investment may have been weak, in line with the shortfall in infrastructural and construction projects financed from EU funds relative to 2015. In parallel with subdued industrial production at the end of the year, growth in vehicle export sales also lost momentum; however, the positive performance of several sectors has offset the weakening underlying processes. The buoyant growth in imports at the end of the year may have been attributable, in addition to the low base, to energy imports

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

rising due to the year-end heating season and to increasing demand of domestic consumption for imports.

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).

In December 2016, the volume of industrial output was down 0.5 per cent year on year, while on a seasonally adjusted basis it rose by 0.5 per cent compared to the previous month. With a high share in output, engineering registered a decline primarily due to the vehicle manufacturing subsector, while light industry and chemical industry output rose compared to the previous month. **On the whole, forward-looking indicators reflect a mixed picture for the short-term outlook of domestic industry.**

Based on preliminary data, in December 2016 **the value of goods exports and imports increased by 7.7 per cent and 9.9 per cent, respectively, year on year in euro terms**, thus the trade surplus was down EUR 82 million from last December. In line with gradually rising commodity prices, Hungary's terms of trade deteriorated in November year on year, thus the improvement in the terms of trade that lasted for almost eighteen months did not continue.

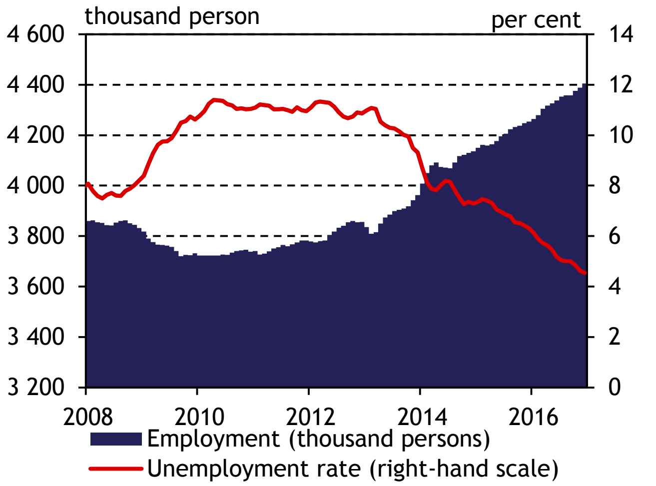
In December 2016, **the volume of construction output was down 14.9 per cent year on year**, while output rose by 1.4 per cent compared to the previous month. The volume of new contracts increased by 114.1 per cent year on year. The month-end volume of construction companies' contract portfolio increased by 89 per cent year on year. The major expansion both in new contracts and in the contract portfolio was primarily attributable to the significant increase in the other constructions main group.

According to the raw data the volume of retail sales was up 2.8 per cent, in December. Based on the data adjusted for the calendar day effect, it rose by 3.3 per cent **year on year**, while turnover increased by 0.2 per cent compared to the previous month. As regards the structure of sales, turnover may have increased across a wide range of products, while there was a minor deceleration in sales volume, mainly attributable to the more moderate expansion in the turnover of non-food, durable products.

1.2.2. Employment

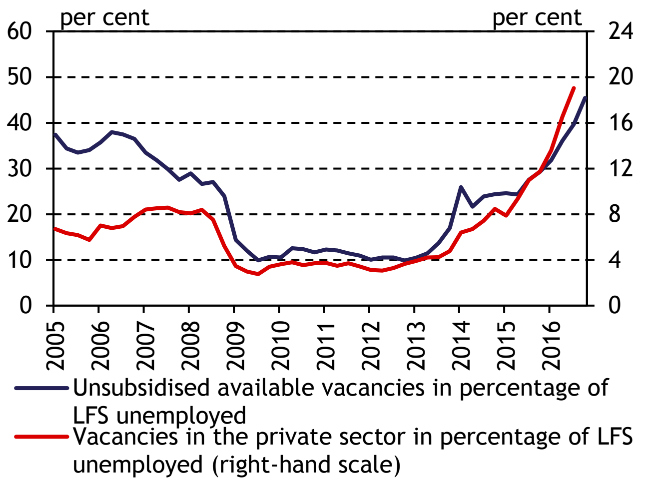
According to Labour Force Survey data, **in the fourth quarter of 2016 whole economy employment rose by 3.6 per cent year on year.** Labour force participation rate slightly increased in the period under review, while the unemployment rate fell to 4.4 per cent (4.5 per cent when

Chart 5: Number of persons employed and the unemployment rate



Source: HCSO

Chart 6: Indicators of labour market tightness



Source: National Employment Service, HCSO

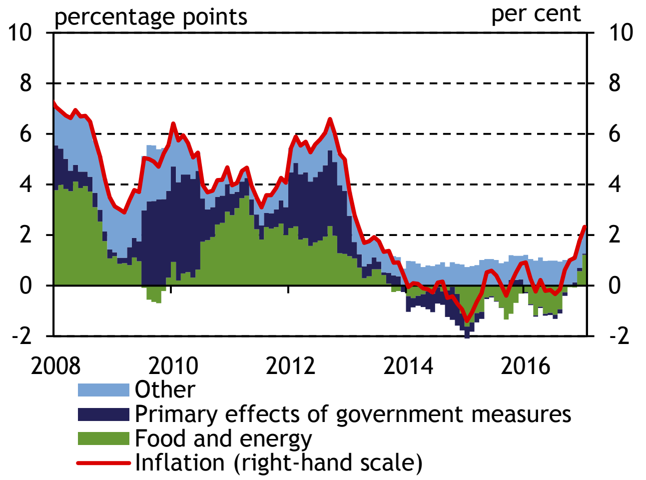
adjusted for seasonal effects) (Chart 5). Whole economy employment continued to rise both with and without public employment; there was no material change in the number of public workers.

According to the data released by the National Employment Service (NES), **as in recent years**, in December 2016 the **number of newly announced non-subsidised vacancies remained at around 15,000**. The end-of-month number of non-subsidised vacancies reached a historic high in the post-crisis period. In the third quarter, the number of job vacancies in the private sector published by the HCSO rose to another historic high. In a historical 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 January 2017 year-on-year inflation was 2.3 per cent, while both core inflation and core inflation excluding indirect taxes stood at 1.6 per cent. Underlying inflation indicators essentially remained unchanged. In December 2016, annual wage growth in the private sector decelerated relative to the previous month. Wage dynamics related to the whole of 2016 was 5.4 per cent in the private sector.

Chart 7: Decomposition of inflation



Source: MNB calculations based on HCSO data

1.3.1. Wage setting

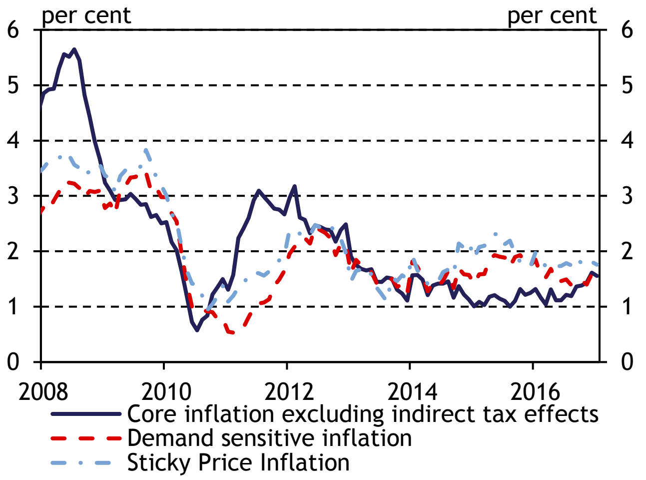
In December, the annual growth of gross average wages decelerated in the private sector compared to the previous month. Gross average wage rose by 4.4 per cent year on year (by 5.2 per cent on seasonally adjusted basis). Regular wages rose at a lower rate on a monthly basis compared to the seasonality usually observed in December, mainly contributed to by the manufacturing sector. The lower wage growth seen in the private sector in December may have been attributable to the fact that **after the November wage agreement, enterprises held back their wage setting in December. As regards the entirety of 2016, average gross wages in the private sector were up 5.4 per cent.**

1.3.2. Inflation developments

In January 2017 year-on-year inflation was 2.3 per cent, while core inflation and core inflation excluding indirect taxes both stood at 1.6 per cent (Chart 7). Inflation rose by 0.5 percentage points, while core inflation dropped by 0.1 percentage point relative to the previous month. The upward drift in inflation is primarily caused by the increase in the price index of fuels, partly attributable to base effects. Inflation developments were also affected by the VAT cuts, such as milk, eggs, poultry, internet and restaurant services, which entered into force in January 2017.

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 December 2016 agricultural producer prices fell by 4.7 per cent in annual terms, while there was a minor increase in the domestic sales prices of consumer goods sectors.

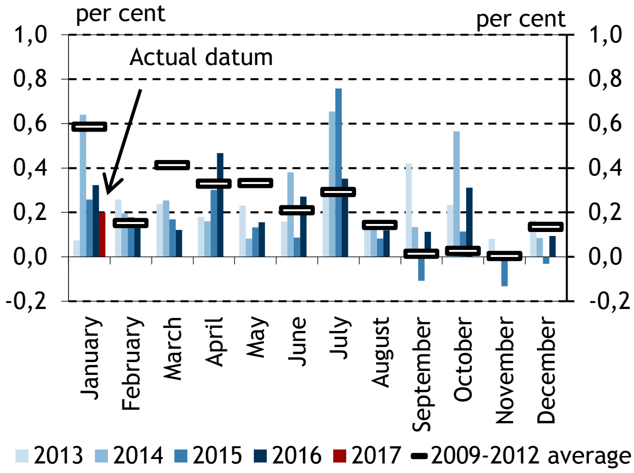
Chart 8: Measures of underlying inflation indicators



Source: MNB calculations based on HCSO data

In January there was no change in market services prices compared to the previous month, which was also attributable to the VAT cut of restaurant services and the internet. Excluding the effect of the VAT cut, **in January, a determinant month in terms of repricing, the price change was more moderate compared to the price dynamics typical in the beginning of the year** (Chart 9). Should this dynamics persist, inflation may be lower from the second

Chart 9: Inflation of market services



Note: not seasonally adjusted monthly changes (without tax effects)
Source: MNB calculations based on HCSO data

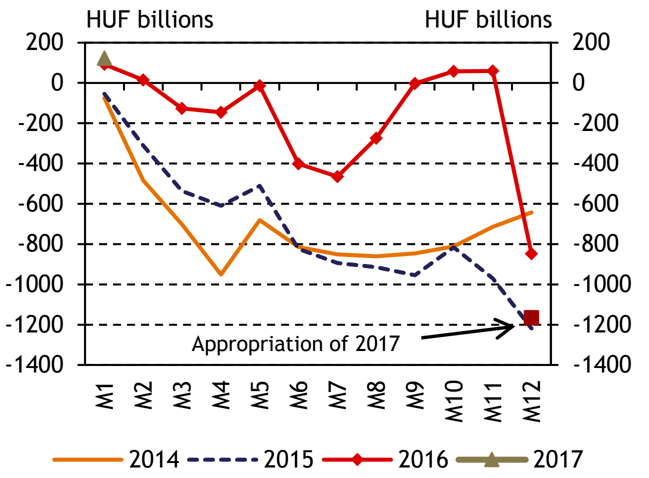
quarter looking ahead.

As regards the incoming January data, core inflation was in line with the projection in the December Inflation Report. Inflation exceeded the projection, which is attributable to the higher-than-expected price index of fuel prices, characterised by volatile pricing, in January. **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 inflation may increase gradually as a result of base effects and recovering domestic demand.

1.4. Fiscal developments

In January 2017, the central sub-system of general government closed with a surplus of HUF 123 billion. Both revenues and expenditures of the budget exceeded those of January last year. Almost all tax types contributed to the rising revenues, while revenues related to state-owned assets also substantially increased. The increase in expenditures was primarily caused by the rise in net expenditures related to the EU transfers.

Chart 10: Intra-year cumulative cash balance of the government budget



Source: MNB calculations based on Hungarian State Treasury data

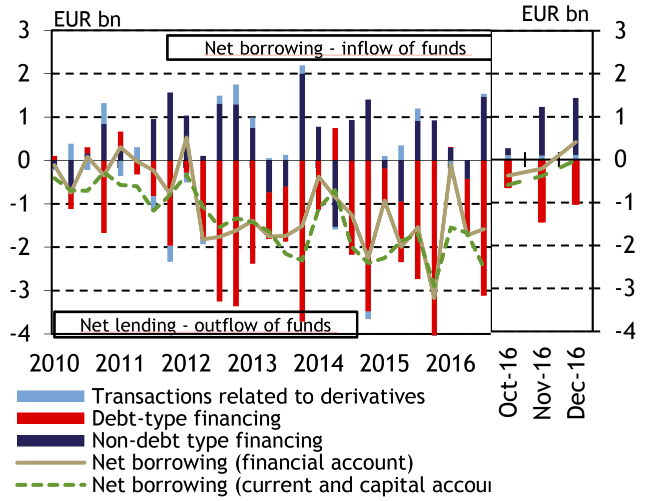
The surplus of the central sub-system of general government stood at HUF 123 billion in January 2017, representing a more positive balance relative to the same period of previous years (Chart 10). Almost all tax types contributed to the rise in budget receipts compared to the previous year, and revenues related to the state assets also substantially increased. Within expenditures, the monthly values that were higher than those last year were primarily caused by the rise in net expenditures related to EU transfers.

In January 2017, **revenues of the central sub-system** exceeded receipts of a year earlier substantially, by more than HUF 140 billion. Tax and contribution revenues contributed to growth by HUF 80 billion, and other revenues of the central sub-system were also significantly higher than last year. As regards tax revenues, it should be noted that the impact of this year's tax cuts (social contribution tax, corporate income tax and targeted VAT cuts) are not yet reflected in the monthly cash data; the impact of these on tax revenues, in the case of the social contribution tax and VAT, will be available from February. In January 2017, **expenditures of the central sub-system**, similarly to the revenues, were higher than a year earlier by more than HUF 100 billion. The increase in expenditures mainly reflected the rise in net expenditures related to EU programmes, while an increase in expenses was seen in at several smaller items.

1.5. External balance developments

In December net lending fell close to zero. From the real economy's side the fall is mostly caused by the low absorption of EU transfers. Financing side developments reflect inflow of funds; however, this mostly related to the inflow of non-debt funds, while the major decline in net external debt continued.

Chart 11: Structure of external financing (unadjusted transactions)



Source: MNB

In December net lending fell close to zero (Chart 11). The decline mainly reflected the low absorption of EU transfers, while the surplus of trade and services balance was still high following a minor fall, and the income balance deficit decreased further. The high energy import demand of the year-end heating season, as well as the deterioration in the terms of trade – also attributable to the change in energy prices – may have been determinant factors in the decrease of the trade balance. Despite the decline, the trade balance can be still regarded as a factor providing the greatest support for the economy's net lending.

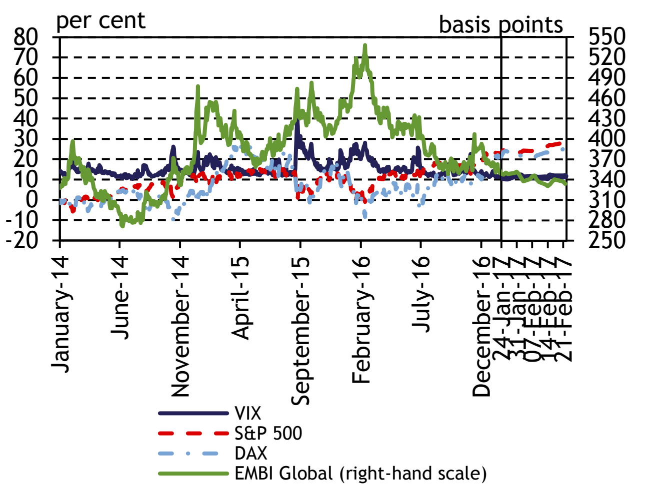
Based on financing side developments an inflow of funds was registered following the outflow of funds that mostly characterised the past months. On the other hand, it should be noted that the inflow of funds essentially related to the inflow of non-debt funds, while the major decline in net external debt continued. The expansion of the non-debt funds was determined by the inflow of foreign direct investments, mostly attributable to the rise in the reinvested earnings of companies owned by non-residents. The fall in net external debt in the amount of almost EUR 1 billion was contributed to by all domestic sectors, with the banking sector taking the lead. The decrease in the government's external debt consolidated with the MNB is attributable to the fall in the non-residents' government securities holding, the impact of which was partially offset by the decline in foreign exchange reserves. The decrease in the banks' external liabilities was mainly the result of the fall in short-term liabilities, while long-term liabilities slightly increased. The fall in the corporate sector's net debt was mainly due to the decrease in long-term foreign loans.

2. FINANCIAL MARKETS

2.1. International financial markets

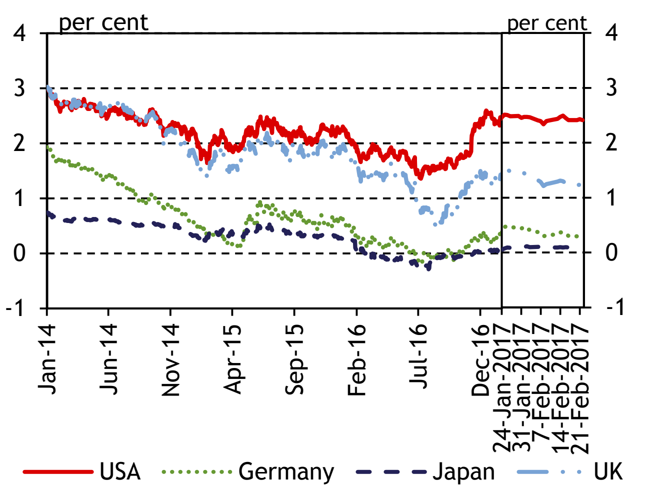
Since the previous policy decision, markets were characterised by varying sentiment, but on the whole, risk indices slightly fell, stock market indices rose, while bond market volatility decreased in the period. Investors mostly focused on Trump's first measures, the communication by the Fed, the voting related to the Brexit act, as well as on the developments in the European, primarily the French, elections. Investors' demand for risky assets increased, while the price of gold and the exchange rate of the Japanese yen, serving as safe haven assets, strengthened, implying cautious investor sentiment. Developed long-term bond yields, with the exception of Japanese yields, slightly fell. Oil prices increased somewhat, due to the fulfilment of the production cutback undertaken by the largest oil exporting countries.

Chart 12: Developed market equity indices, the VIX index (left-hand scale) and the EMBI Global Index (right-hand scale)



Source: Bloomberg

Chart 13: Yields on developed market long-term bonds



Source: Bloomberg

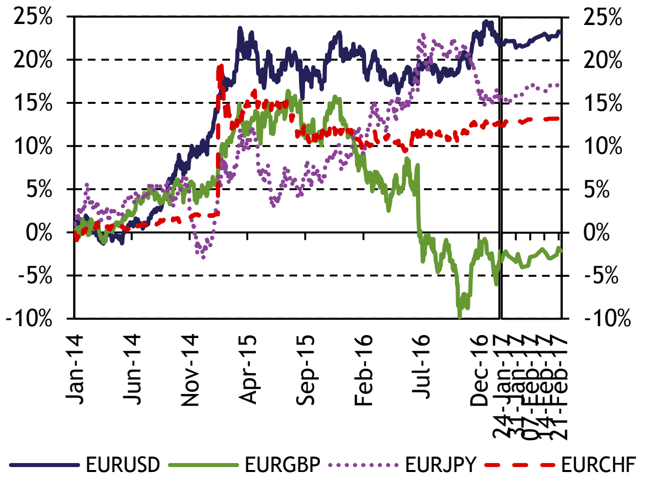
Market sentiment has been mixed since the previous policy decision, but has been mildly positive on the whole. Sentiment in the foreign exchange market was determined by Trump's immigration order, the statements by Navarro and Trump related to foreign currency manipulations, the once again strengthening expectations of a March interest rate hike by the Fed following Janet Yellen's speech, and the uncertainty surrounding the European politics. On the whole, risk indices decreased slightly, accompanied by a rise in developed, primarily US, stock price indices, while bond market volatility also fell. The developed and, the more risky, emerging market bond yields generally fell. On the other hand, it may imply cautious investor sentiment that of the safe-haven assets, the price of gold rose by 2.5 per cent, while Japanese yen strengthened by 0.5 per cent against the dollar.

Developed stock market indices performed well in the period. US stock price indices rose by 4-5 per cent, while the European and Japanese stock exchanges were up 2-3.5 per cent. The VIX index bottomed out at 10.58 per cent during the period, while by the end of the period it rose to 11.8 per cent, thereby still being at a historic low level. The increase in the MSCI composite stock price index of emerging markets, rising roughly by 5 per cent during the period, implies continued pick-up in demand for risky assets.

The fall in the bond market risk index reflected calm investor sentiment in the period. The emerging bond market EMBI Global spread fell by almost 16 basis points (Chart 12), and the MOVE index, measuring the volatility of the developed bond market, also showed a decrease of 6 basis points.

Developed, long-term bond yields, with the exception of Japan, decreased moderately, while the bond yields of more risky emerging markets showed a larger fall (Chart 13). The US, German and British yields fell by 5, 13 and 20 basis points, respectively, while Japanese yield rose by 3 basis points. Yellen's declaration made at the hearing

Chart 14: Developed market FX exchange rates



Source: Reuters

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

before the Senate, which, due to the references made to the gradually increasing interest rate path, may have moderated long-term upward risks to price stability, made a major contribution to the fall in US long-term yields. On the other hand, the long-term bond yields of less risky emerging markets (Polish, Hungarian) increased slightly, which is attributable to rising inflation expectations.

Brent and WTI oil prices fell in the beginning of the period, but still achieved an increase of 1-2 per cent compared to the end of the previous period. In the beginning of the period, the investors' caution attributable to Trump's immigration order was not favourable for the oil price either; in addition, both the number of the US drilling rigs and oil extraction rose. On the other hand, oil prices were supported by the increasing volume of information becoming available about the actual reduction in production by the key oil exporting countries. OPEC member states reduced their extraction by 90 per cent of the undertaken volume, while Saudi Arabia did so in excess of its undertaking. On the whole, oil prices rose during the period, but the rise was restrained by the increase in US production.

At the beginning of the period, the dollar weakened against the euro to 1.08, as a result of Trump's immigration order and a statement by his top trade adviser Navarro, related to foreign currency manipulation (Chart 14). In the second half of the period, due to uncertainty surrounding the European political situation, and to the statements by Fed Governor Janet Yellen at the Senate hearing, as well as better-than-expected US inflation and retail sales data, **the dollar closed the period with an appreciation of 1.6 per cent**. The **Japanese yen appreciated by 0.5 per cent**, while the British pound depreciated against the dollar to a similar degree. As regards emerging market currencies, the Turkish lira strengthened by 5.4 per cent after depreciating by 8 per cent in the previous period, but its depreciation of over 20 per cent suffered last year has not been reversed.

The monetary policy decisions by developed-country central banks remained in focus. According to **Janet Yellen's statement made at the Senate hearing**, if tightening is postponed for too long, it may necessitate fast interest rate hikes, pushing the economy into recession. Thus she deems a key policy rate hike potentially acceptable as early as at the next meetings. She emphasised that monetary policy may still change in the future depending on economic developments, i.e. it continues to be dependent on data.

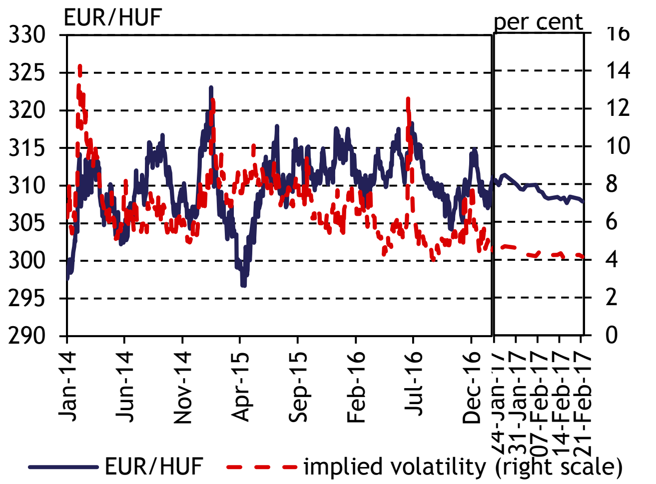
Mario Draghi, President of the ECB, made it clear that until

core inflation starts to rise steadily in the entire region, asset purchases will not be cut back. In his speech made at the European Parliament, he emphasised that **no asset price bubbles can be identified in the euro area.** The ECB published the data of its January asset purchases, conducted in accordance with the new rules, based on which a moderate decrease in average residual maturity could be observed in several countries.

2.2. Developments in domestic money market indicators

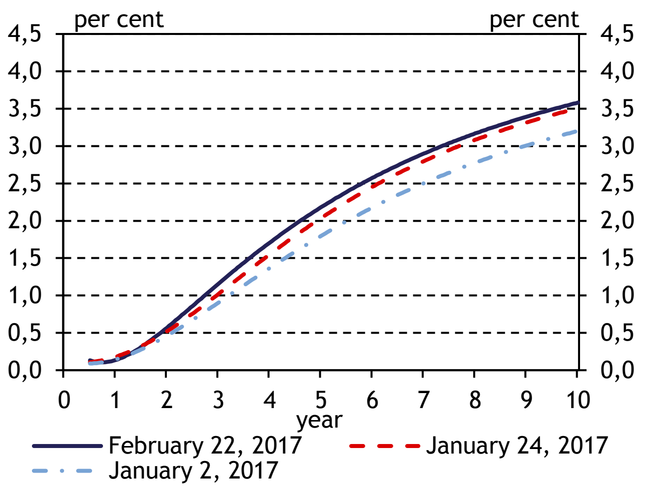
Similarly to the Polish zloty, the forint also slightly appreciated during the month. Domestic yields were on the rise in the medium and long segments, thus the government yield curve steepened, which could be also observed in the case of yields in the narrower region. The drop in non-residents' forint government securities holdings may have also pointed to a yield increase. On the other hand, in the calm international risk-taking sentiment, the domestic CDS spread remained stable and continued to fluctuate around 115 basis points.

Chart 15: EUR/HUF exchange rate and the implied volatility of exchange rate expectations



Source: Bloomberg

Chart 16: Shifts in the spot government bond yield curve



Source: MNB, Reuters

The forint strengthened by roughly 0.7 per cent in the past month against the euro (Chart 15), while the Polish zloty appreciated by 1.5 per cent; at the same time, Romanian leu depreciated by 0.5 per cent, which can be explained by the uncertainties around its domestic politics. The exchange rate of the Czech koruna was practically unchanged. The appreciation of the forint and the Polish zloty can be explained in part by the still strong international willingness to take risks and in part by the accelerating global and CEE inflation processes.

The government yield curve became steeper: there was a major, 30-70 basis points, rise in benchmark yields at 3 to 5-year maturities, which, however, was mostly attributable to developments in benchmark papers. Excluding the effect of the change, the middle of the yield curve showed a smaller, 10-15 basis points, rise. At 10-year maturity there was a rise of 8 basis points, which was in line with the regional trends, while at the short end of the yield curve there was no material change in yields. (Chart 16).

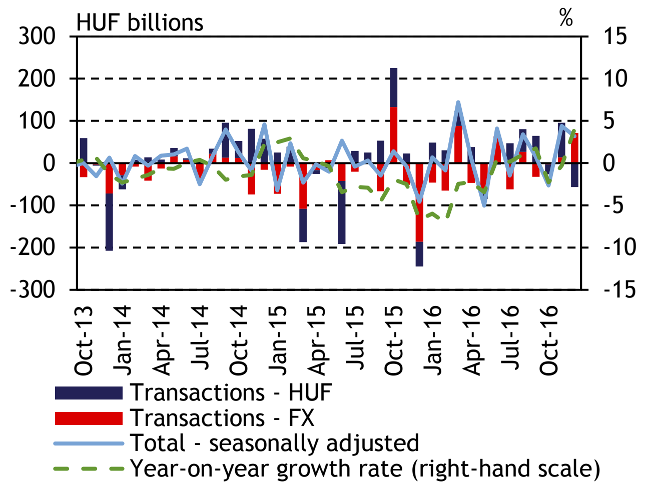
Demand at the bond auctions of the period was adequate. Demand for long-term securities, and at the last 3-month discount Treasury bill auction, was occasionally stronger, thus in these cases extra issuance also took place, while at other auctions coverage was more moderate. At long maturities, auction yields rose slightly on the whole, while the auction yield on the 3-month discount Treasury bills dropped to a record low of 0.06 per cent in February.

On the other hand, non-residents' holdings of government securities decreased by almost HUF 118 billion during the period. As a result, their portfolio fell close to HUF 3,343 billion, while their share of forint government securities dropped to around 23.4 per cent. Over most of the period, the Hungarian 5-year CDS spread fluctuated around the 115 basis points level recorded on the date of the interest rate decision. Based on our decomposition methodology, the spread was slightly increased by the domestic factor, while the international factor reduced it to the same degree.

3. TRENDS IN LENDING

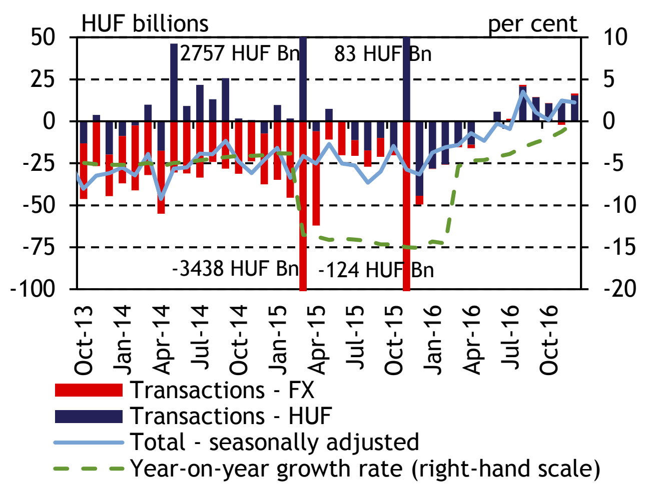
In December, the outstanding loans of credit institutions to the corporate sector increased by HUF 14 billion in total due to transactions, while in 2016 outstanding borrowing by corporations rose by 4 per cent as a result of transactions. In December, outstanding borrowing by households rose by HUF 17 billion.

Chart 17: Net borrowing by non-financial corporations



Source: MNB

Chart 18: Net borrowing by households



Source: MNB

As a result of transactions, the outstanding loans of credit institutions to the corporate sector increased by HUF 14 billion in December, equivalent to an increase of HUF 64 billion on a seasonally adjusted basis (Chart 17). In a breakdown by currency, forint loans fell by HUF 57 billion, while foreign currency loans rose by HUF 71 billion during the month. **In 2016, outstanding borrowing by corporations rose by 4 per cent as a result of transactions.** Loan agreements concluded in the third phase of the Funding for Growth Scheme boosted the outstanding forint and foreign currency loan portfolio in December by HUF 22 billion and HUF 13 billion, respectively.

In December, **interest rates on new corporate forint loans** increased by 41 basis points. The average annualised interest rate on small-value forint loans decreased by 0.43 percentage points to 3.52 per cent from the previous month, while the average interest rate on higher-value forint loans, net of money market transactions, rose by 0.64 percentage points to 2.76 per cent.

In December, **outstanding loans to households,** including self-employed sector, rose by HUF 17 billion as a combined result of disbursements and repayments (Chart 18). In the period under review, households concluded new loan contracts in a total value of HUF 113 billion, thus the average annual growth in new business volume was 50 per cent. Within that the volume of new housing loans rose by 42 per cent.

Compared to the previous month, the **annual percentage rate of charge on forint housing loans** decreased slightly, by 0.18 percentage point to 5.34 per cent. Products with initial interest rate fixation of up to and over one year both fell.