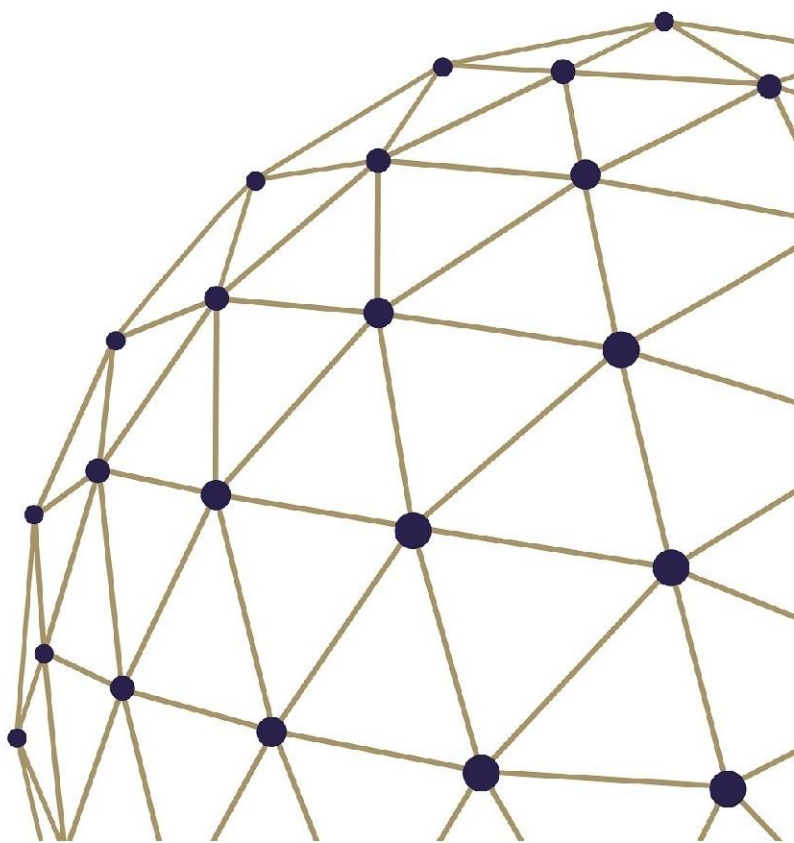




Macroeconomic and financial market developments

December 2016

Background material
to the abridged minutes of the
Monetary Council meeting
of 20 December 2016



Time of publication: 2 p.m. on 11 January 2017

The background material ‘Macroeconomic and financial market developments’ is based on information available until 14 December 2016.

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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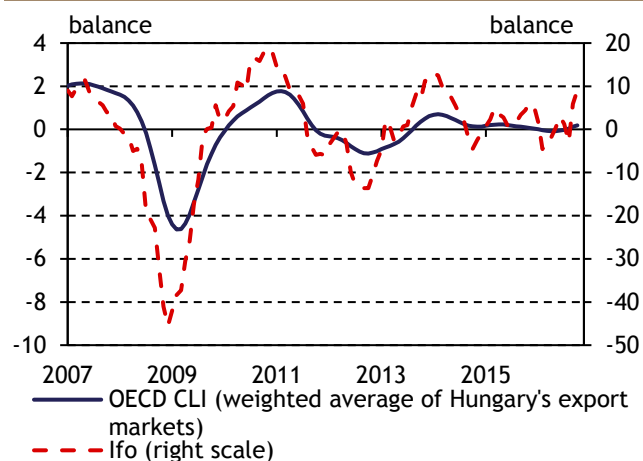
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1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

GDP figures for Q3 were in line with expectations overall. While growth remained steady in developed countries, due to the deceleration of growth in China and the risks surrounding the economy, global recovery may still be deemed fragile. In line with the subdued global demand, inflationary pressure from the world market has remained muted in recent months.

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



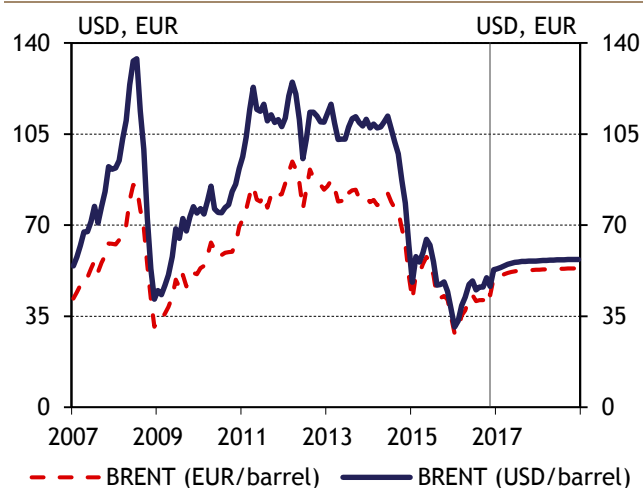
Source: OECD, Ifo

GDP figures for Q3 were in line with expectations overall. Growth remained steady in developed countries. In 2016 Q3, year-on-year economic growth was 1.7 per cent for the euro area and 1.6 for the United States. Looking ahead, due to the deceleration of growth in China and the risks surrounding the economy, global growth may still be deemed fragile. Starting to rise from low levels thanks to the OPEC agreement, commodity prices are expected to be less of a drag on commodity exporters' activity growth looking ahead, while persisting geopolitical tensions continue to restrain 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.

The euro area economy registered a quarter-on-quarter growth rate of 0.3 per cent in 2016 Q3. Supported primarily by a persisting increase in final consumption, the growth of the German economy, Hungary's most important export partner, continued in Q3. In terms of the average of recent months, an overall year-on-year increase was recorded in October in German industrial production and new orders. Expectations concerning the German economy (Ifo) considerably improved after the less favourable prospects registered in previous months (Chart 1). The exit of the United Kingdom from the EU carries significant medium- and long-term risks.

Inflationary pressure from the world market remains weak amid persisting, extremely low commodity prices and subdued demand. As a result, inflation rates remained below target in the world's major economies. In the past month, oil prices fluctuated in the range of USD 45-55 (Chart 2). World market prices of industrial commodities and unprocessed food remained moderate.

Chart 2: Brent crude oil world market prices

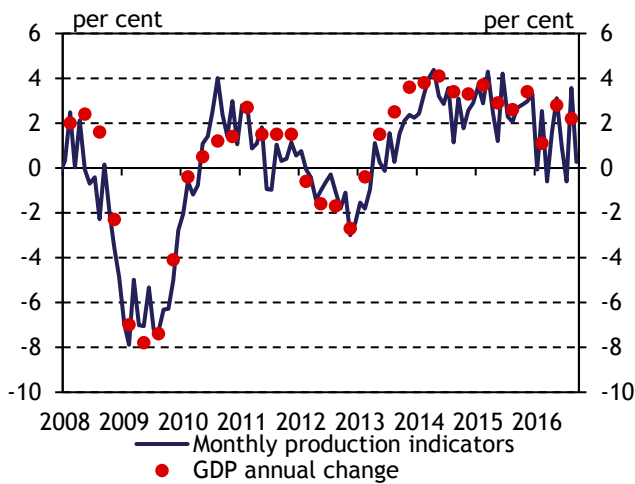


Source: Bloomberg

1.2. Domestic real economy developments

Based on the figures released by the HCSO, in 2016 Q3 Hungary's GDP grew at a rate of 2.2 per cent year on year. The moderate growth is mainly attributable to the slow pick-up in investment implemented from EU funds and the subdued performance of the vehicle industry. From August to October, whole economy employment rose by 3.2 per cent year on year. The unemployment rate stood at 4.7 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

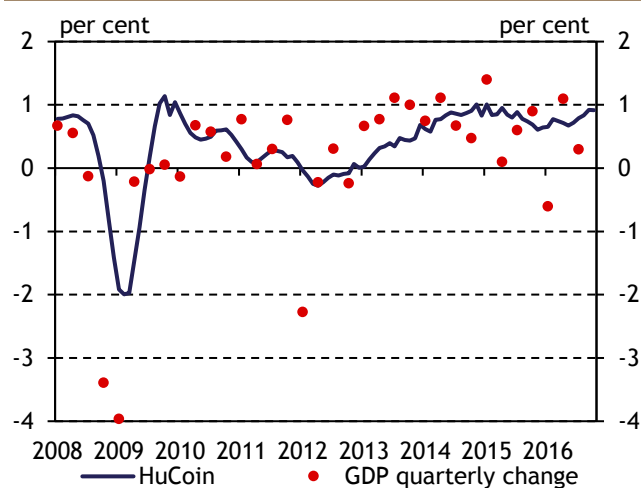
1.2.1. Economic growth

Based on the detailed figures released by the HCSO, in 2016 Q3 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. On the production side market services and agriculture made the highest contribution to growth, while on the expenditure side growth was supported by household consumption. While economic growth was supported by the pick-up in household consumption, it was restrained by the less favourable construction output attributable to the more moderate inflow of EU funds, lower industrial performance resulting from the temporary fall in the manufacturing of transport equipment, stricter fiscal policy, and the lower-than-expected drawdown of housing subsidies for families (CSOK).

In 2016 Q3, the strongest driver of growth on the output 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 seen in Q3, growth was moderately supported by the sector, while it continued to be restrained by the construction industry parallel to this year's decelerating inflow of EU funds (Chart 3).

On the expenditure side, household consumption continued to make a significant contribution to GDP growth, which is also corroborated by incoming retail sales data. Overall, investments continued to decline in Q3, 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. Parallel to a subdued industrial performance, export performance decelerated substantially in Q3, while the deceleration 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 stocks by traders, changes in the inventories of the national economy made a major contribution to growth. The lower-than-expected drawdown volume of housing subsidies for families (CSOK) and a stricter fiscal policy did not provide any meaningful economic stimulus.

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

Based on the HuCoin indicator, which reflects the medium-term prospects of the domestic economy, the underlying trends of economic activity continued to improve in the past months (Chart 4).

In October 2016 the volume of industrial output, both according to the raw data and the data adjusted for the working-day effect **fell by 2.1 per cent year on year**, while on a seasonally adjusted basis it was up 2.0 per cent compared to the previous month. With a high share of output, vehicle manufacturing, electronics and food industry increased their performance, while the output of the light industry declined compared to the previous month. **Overall, forward-looking indicators reflect an unfavourable picture for the short-term outlook of the domestic industry.**

Based on preliminary data, **expressed in euro terms, the value of goods exports and imports decreased by 1.1 per cent and 3.5 per cent, respectively, in October 2016 year on year**, generating a EUR 167 million increase in trade surplus compared to October in the previous year. Year on year, the terms of trade continued to improve in September; however, in line with rising oil prices, the contribution of energy prices has been gradually decreasing.

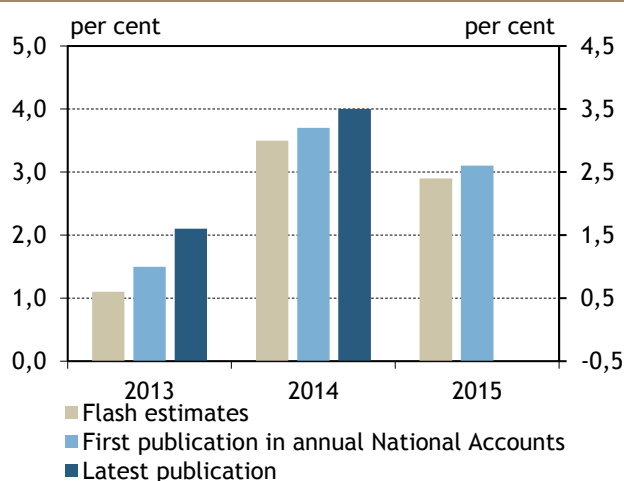
In October 2016 **the volume of construction output was down 12.8 per cent year on year**, while output fell by 3.8 per cent compared to the previous month. The volume of new contracts decreased by 11.9 per cent year on year, primarily due to a major decline in the number of contracts for the construction of buildings. The month-end volume of construction companies' contract portfolio increased by 23.9 per cent year on year, in which the most prominent contribution was a significant increase in the volume of contracts for other construction.

Based on preliminary data, in October **the volume of retail sales was up 2.6 per cent year on year** and also 2.6 per cent based on data adjusted for calendar effects, while sales dropped by 0.4 per cent compared to the previous month. Regarding the structure of sales, sales volume increases were registered across a wide range of products.

Box 1: Revisions influencing GDP growth in recent years (Inflation Report, December 2016)

When reviewing the development of GDP, **the Hungarian Central Statistical Office regularly makes revisions, which also retrospectively influence the perception of economic performance.** Revisions of the data are linked to several factors. Firstly, if newer data or more detailed and more complete databases become available, e.g. annual statistics (NAV data), the estimate can be made more precise. Secondly, the HCSO regularly makes changes for statistical reasons: it re-estimates the seasonal behaviour of the time series annually, and changes the base of the volume indexes every five years. Thirdly, from time to time methodological developments are implemented in the case of hard-to-observe data, when there is changeover to the use of a new proxy. Oddly, the future often changes the image of the past as well, as GDP figures received following a quarter under review also frequently result in revisions even in the already available values of the time series. A substantial change in methodology occurred in 2006 when illegal activities were taken into account in calculating GDP figures and HCSO moved to publish chain-linked volume indices. Furthermore, the ESA-2010 methodology was introduced in 2014 based on the regulation of Eurostat, which caused changes in national accounts data that were more significant than in course of the usual annual revision.

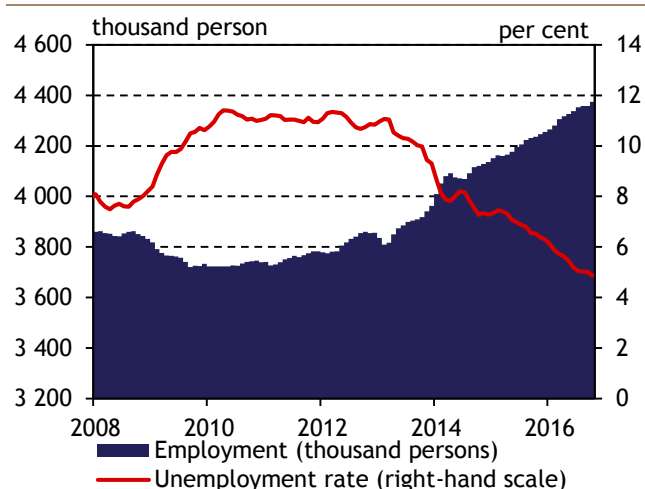
Chart 5: Revisions of GDP growth in recent years



Source: HCSO

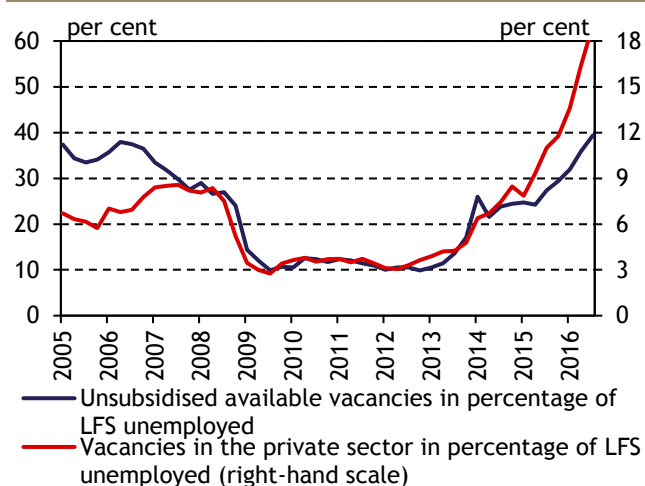
The 2015 annual national account data was published recently, in which the HCSO broadly revised upward the economic performance in recent years. In addition to corrections and routine revisions, the HCSO refined estimates of remittances and also accounted for a conversion fee in the case of credit institutions. In 2015, Hungarian GDP expanded by 3.1 percent, which is 0.2 percentage points higher than the data published previously. The numbers for the gross domestic product data can also change after the publication of the preliminary annual national accounts. The new data releases usually brought upward revisions in economic growth in the recent years (Chart 5).

Chart 6: Number of persons employed and the unemployment rate



Source: HCSO

Chart 7: Indicators of labour market tightness



Source: National Employment Service, HCSO

1.2.2. Employment

According to Labour Force Survey data, **from August to October whole economy employment increased by 3.2 per cent year on year**. Unemployment continued to decrease, while the labour force participation rate slightly increased in the period. In October the unemployment rate stood at 4.7 per cent (Chart 6).

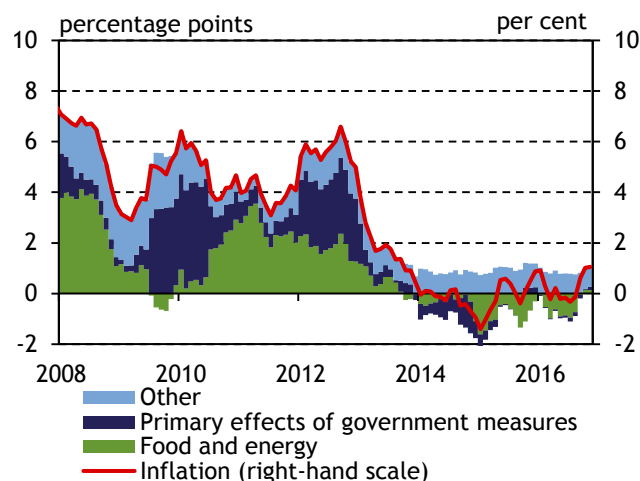
In Q3, the number of employees in general government did not change significantly, while the number of public workers was lower than in the previous quarter. Vigorous increase in employment within the private sector continued, with the manufacturing sector making the largest contribution to the dynamic increase in workforce of the private sector in Q3.

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 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 Q3 the number of vacant jobs in the private sector published by the HCSO rose to another historic high. Tightness indicators show that the labour market continued to tighten in the past two quarters (Chart 7).

1.3. Inflation and wages

In November 2016 year-on-year inflation was 1.1 per cent, while core inflation and core inflation excluding indirect taxes stood at 1.6 and 1.4 per cent, respectively. Underlying inflation indicators essentially remained unchanged and continue to point to a moderate inflation environment. In October 2016 the annual wage growth in the private sector accelerated compared to the previous month, thus wage dynamics remain stronger than in the previous year.

Chart 8: Decomposition of inflation



Source: MNB calculations based on HCSO data

1.3.1. Wages

In September, the annual growth of average gross wages accelerated relative to the previous month both in the manufacturing sector and in the market services sector. In the private sector, average gross wages were up 5.7 per cent year on year. Based on seasonally adjusted data, in the private sector the annual dynamics of gross average wages accelerated, whereas the annual dynamics of regular wages remained unchanged compared to the previous month. Within the private sector, annual wage growth accelerated relative to the previous month in both the manufacturing and the market services sectors.

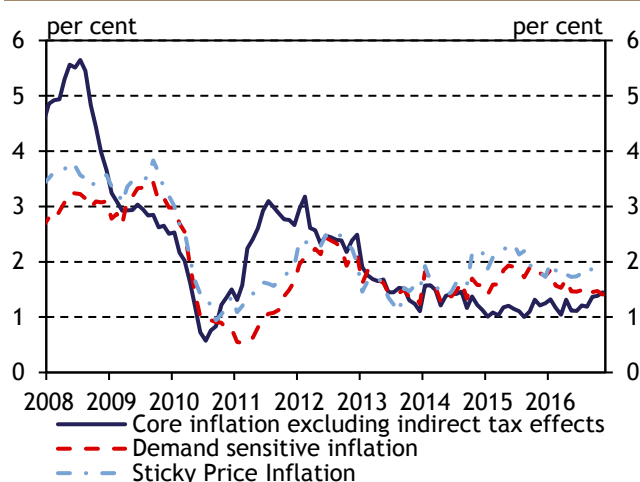
1.3.2. Inflation developments

In November 2016, inflation was 1.1 per cent, while core inflation was 1.6 per cent and core inflation excluding indirect taxes stood at 1.4 per cent (Chart 8). Inflation and core inflation both rose by 0.1 percentage point relative to the previous month. Total inflation and annual price indices in the majority of groups changed only slightly compared to October.

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 9). In October 2016 agricultural producer prices rose by 3.8 per cent in annual terms, and the domestic sales prices of consumer goods sectors rose slightly.

According to our current forecast, inflation will remain below the 3 per cent medium-term target both this year and the next, and will meet that target in 2018 H1. Looking ahead – as a result of base effects and recovering domestic demand – inflation is expected to increase gradually.

Chart 9: Measures of underlying inflation

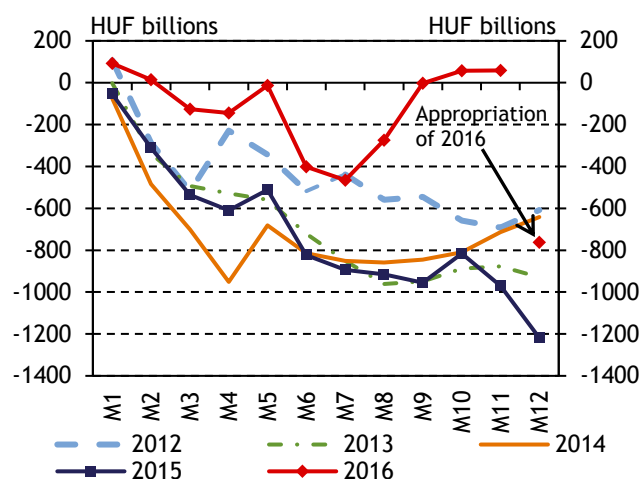


Source: MNB calculations based on HCSO data

1.4. Fiscal developments

The general government's central subsystem closed with a surplus again in November 2016, with the monthly balance showing a surplus for the fourth consecutive month since August. In the first eleven months of the year, the cumulative cash surplus of the central budget was higher than at any other time in recent years.

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



Source: MNB calculations based on HCSO data

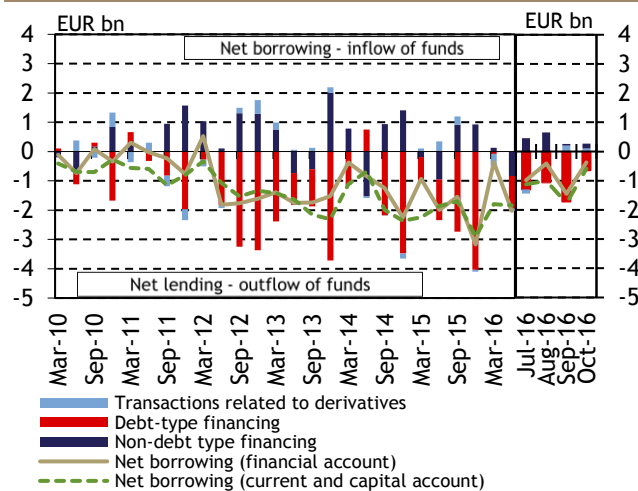
The general government's central subsystem closed with a HUF 2 billion surplus in November 2016, with the monthly balance showing a surplus for the fourth consecutive month since August. The November balance exceeded the average of the past years, and it was also HUF 156 billion higher than that of last year. The divergence from the figures for 2015 is explained by higher corporate tax revenues and lower payments related to EU assistance. **In the first eleven months of the year, the cumulative cash balance of the central budget showed a surplus of HUF 59 billion, the highest figure recorded in recent years** (Chart 10).

In November 2016, the **revenues of the central subsystem from taxes and contributions** exceeded the revenues for November 2015 by HUF 48 billion, while the **expenditures of the central subsystem** fell short of those for November 2015 by HUF 108 billion. In November, EU transfers passed the HUF 250 billion mark, representing a substantial increase relative to the previous month. Thus year to date transfers rose above HUF 1,400 billion.

1.5. External balance developments

According to the October release, seasonally unadjusted net lending decreased to EUR 586 million from the historic high recorded in September. More than one-half of the net lending was linked to the current account, and a minor part to the surplus of the capital account. The most prominent role within the reduction in the net lending was played by the significantly lower use of EU transfers compared to the September reading. The trade surplus decreased in monthly terms in line with the decline in industrial production, but increased slightly in annual terms. The average deficit of the income balance was reduced to around EUR 400 million in October.

Chart 11: Structure of external financing (unadjusted transactions)



Source: MNB

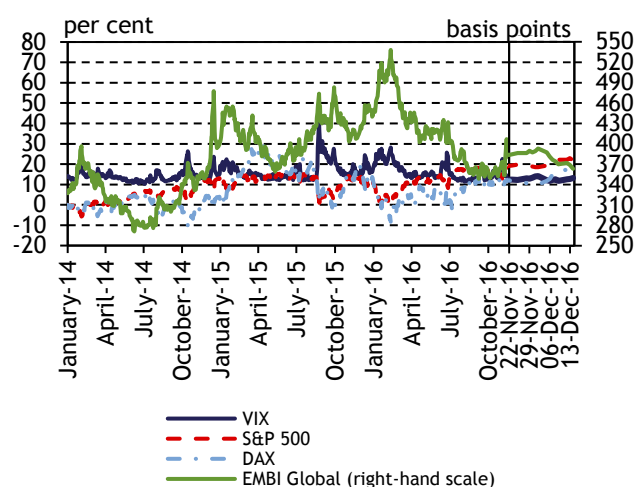
Developments on the financing side also reflect a reduction in the net lending of the economy, which amounted to EUR 372 million in October. The outflow of funds was generated in the context of a decrease in net external debt amounting to approximately EUR 640 million, and FDI inflows of about EUR 180 million (Chart 11). Growth in foreign direct investments was linked primarily to the reinvestment of income generated in Hungary. The approximately EUR 640 million reduction in net external debt is attributable to the government's debt repayment of more than EUR 500 million and that of banks in excess of EUR 400 million, the effect of which was lessened by the EUR 300 million increase in the net external debt of the corporate sector. The net outflow of debt from the general government took place in the context of a major increase in foreign exchange reserves and a minor rise in gross debt. During the month, the reserves were increased by banks' placement of EUR 1.3 billion worth of foreign exchange with the MNB through the MNB's instrument to provide forint liquidity, while they were reduced by the government's repayment of a maturing premium Euro Hungarian government bond (PEMÁK).

2. FINANCIAL MARKETS

2.1. International financial markets

Since the previous interest rate decision, risk indices have reflected a relaxed investor sentiment, accompanied by the appreciation of developed stock market indices. Investor sentiment has primarily been determined by rising oil prices, the expected developments in US economic policy in the wake of the US presidential elections, and diverging decisions by dominant central banks. The Fed raised its policy rate by the expected 25 bps, while forecasting a course of hikes that is steeper than market expectations. The ECB decided to reduce the quantity of its asset purchases while extending their duration, which was overall perceived by markets as easing. By the end of the period, in line with rising oil prices and the Fed's tightening, yields on long-term government securities had risen for the most part, accompanied by the appreciation of the US dollar.

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



Source: Bloomberg

Since the previous interest rate decision, market sentiment has been influenced by the expected developments in US economic policy in the wake of the US presidential elections, expectations over the Fed's rate increase, the ECB's monetary policy decision, macroeconomic data, news on oil prices, and developments affecting the stability of the euro area banking system. Overall, these events were perceived favourably by investors, as a result of which risk indicators have remained stable.

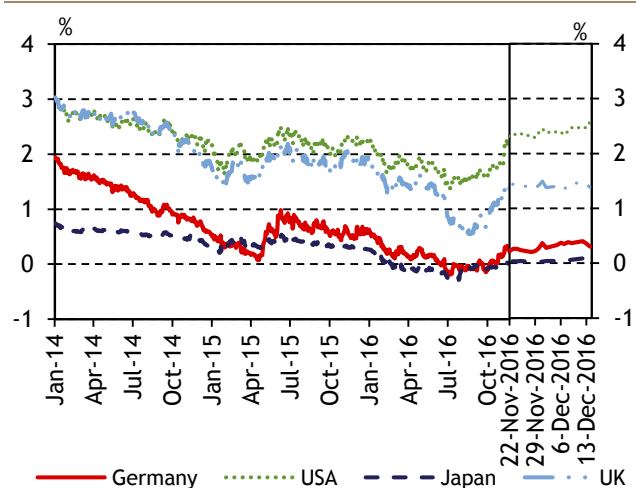
For the most part, developed stock market indices followed a rising trend in the period. Stock markets in Europe and Japan recorded an overall rise of 4 to 6 per cent, and those in the US a more moderate rise of 1 to 3 per cent. The VIX index remained low at 13.2 per cent, which also indicates the low volatility of developed stock markets. The MSCI index of emerging markets recorded an overall climb of approximately 2 per cent, which, in the context of a relaxed global sentiment, may be understood as a correction of the fall in the index in the wake of the US presidential elections.

Global bond market and emerging market risk indices also reflected a relaxed investor sentiment in the past period.

In the emerging bond market, the EMBI Global spread was down 20 basis points (Chart 12), which was accompanied by a slight decrease in the MOVE index following the previous turbulence.

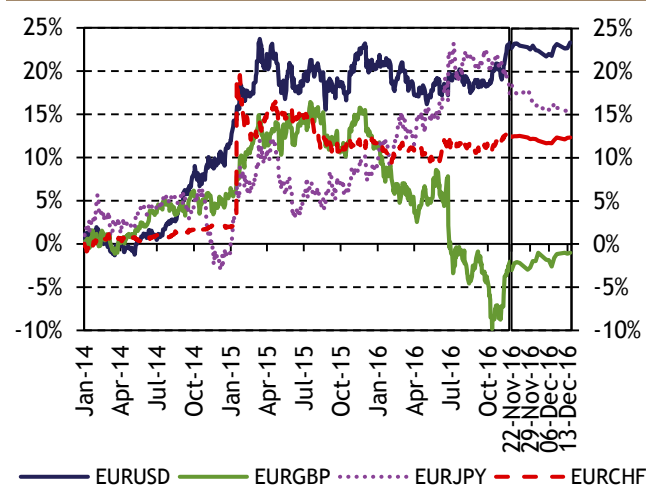
In turn, long-term bond yields continued to rise in developed markets, although at a slower rate than in the previous period (Chart 13). US, German and Japanese 10-year yields rose by 26, 8 and 3 basis points, respectively. The rise is attributable to the higher inflation expectations of market participants in the euro area, as the 5-year forward 5-year inflation expectations rose by 10 basis points for the euro. For the US dollar, inflation expectations, rising in the previous month, slightly eased on the back of the Fed's interest rate decision, while the faster than expected future rate course caused yields to increase.

Chart 13: Yields on developed market long-term bonds



Source: Bloomberg

Chart 14: Developed market FX exchange rates



Source: Reuters

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

The price of Brent rose by nearly 10 per cent and the WTI oil price by 6 per cent, fluctuating above USD 50 at the end of the period. This was primarily attributable to the Vienna agreement of OPEC countries, where they agreed to reduce production by a daily 1.2 million barrels from January onwards. The agreement was also endorsed by 11 non-OPEC oil producers as of 2017, agreeing to reduce production by 558,000 barrels a day, another contribution to the significant increase in oil prices.

Of major currencies, the **euro** gradually appreciated **against the US dollar** at the beginning of the period, then dropped by 1.5 per cent following the ECB's interest rate decision and another 1.5 per cent following the Fed's interest rate decision, as a result of which it stood at around 1.048 at the end of the period, **closing the period with a 1.5 per cent overall depreciation** (Chart 14). Emerging currencies showed mixed performances against the US dollar, with most CEE currencies depreciating.

The central banks of developed countries were also active during the month. In its December meeting, the Fed raised its policy rate by the expected 25 bps; however, in contrast with the 2 rate increases expected by the market, policy-makers' latest forecast points to 3 rate increases by the end of 2017. **Conversely, responding to market perceptions, in its December meeting the ECB slightly relaxed its asset purchase programme.** According to that decision, purchases will be reduced to a monthly rate of EUR 60 billion from the current rate of EUR 80 billion, and will continue at that rate until December 2017, or as required. The euro depreciated by 1.5 per cent following the announcement, accompanied by 1 to 1.5 per cent increases in stock market indices, whereas 10-year euro-area bond yields increased by 10 basis points directly after the announcement, and were corrected on the following day.

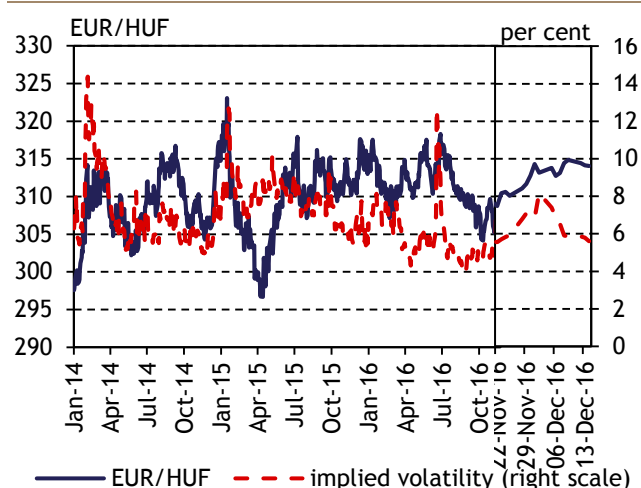
Peripheral countries were also in the investors' focus during the month. The Italian referendum on constitutional reforms resulted in a "no" vote victory; nevertheless, the impact of the result on global markets was temporary and on the whole moderate, while investors in Italian assets had already priced in the outcome before the vote. The Italian 10-year yield was reduced by 16 basis points and the Italian CDS spread by 24 basis points as uncertainty decreased. **Additionally, in recognition of the reforms accomplished, Greece was granted further relief to reduce its debt burden.** Comprising the smoothing of the maturities of previous loans and reductions to their interest rates, the measures may reduce the Greek debt rate by up to 20 percentage points over the long term. However, a few days after the decision, the debt relief measures were suspended

as the Greek government adopted measures that were inconsistent with the recommendation of international institutions.

2.2. Developments in domestic money market indicators

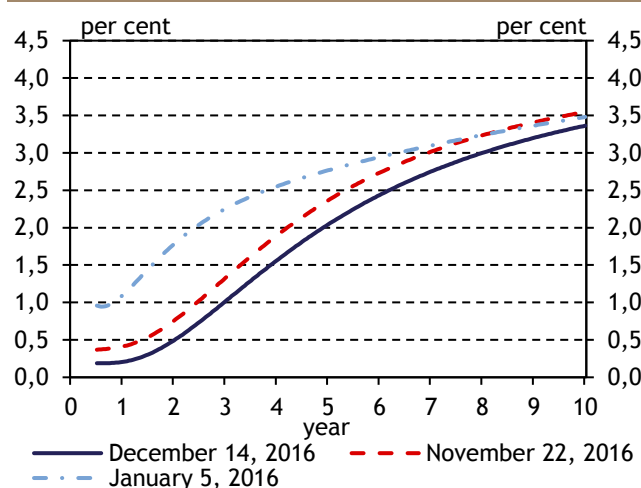
Compared to other currencies in the region, the forint depreciated to a slightly greater extent, which was accompanied by a downward shift in the yield curve of the government securities market due to the reduction of Hungarian short- and longer-term yields. Despite a decrease in the volume of forint-denominated government securities held by non-residents, Hungary's CDS spread remained stable, and then fell slightly below the level recorded in mid-November.

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



In the first half of the period, the forint depreciated against the euro, followed by fluctuations in a relatively narrow band in the second half, resulting in an overall depreciation of 1.8 per cent (Chart 15). The depreciation may partly have been attributable to domestic factors, so the yields continued to decline due to the use of non-conventional central bank instruments. On the other hand, since early November a major capital outflow has been taking place in emerging bond markets, which may also have contributed to the forint depreciation. The outcome of the Italian referendum was no particular shock to the FX markets of the region, as vote results essentially had no impact on the forint and regional currencies. The 1.8 per cent depreciation of the forint was accompanied by a more moderate 0.4 per cent depreciation of the Polish zloty for country-specific reasons, while the exchange rates of the Romanian leu and the Czech koruna essentially remained level.

Chart 16: Shifts in the spot government bond yield curve



The yield curve of the government securities market shifted downwards with a 20 basis point decrease in both 10-year and shorter-term yields (Chart 16).

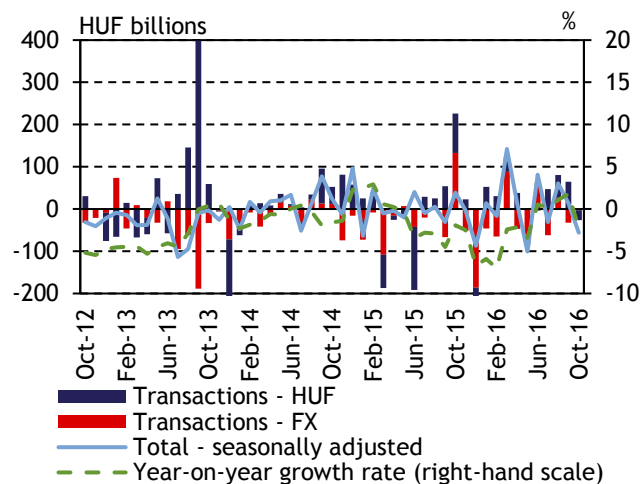
The bond auctions of the period were characterised by strong demand. Owing to heightened demand for 3- and 5-year bonds, on some occasions there was higher issuance for these maturities than originally announced. In line with high coverage, average yields fell on both auctions for discount treasury bills and longer-term bonds.

At the same time, **non-residents' holdings of government securities** decreased by HUF 141 billion during the period. As a result, their portfolio fell to approximately HUF 3,500 billion, while their share in HUF government securities dropped below 25 per cent. For most of the period, the Hungarian 5-year CDS spread remained around the level of 137 basis points recorded on the date of the interest rate decision, falling roughly by 10 basis points at the end of the period.

3. TRENDS IN LENDING

In October 2016, the volume of credit institutions' outstanding loans to enterprises decreased, while the volume of loans to the SME segment continued to increase. The volume of loans to the household segment also increased in October. Interest rates on newly granted corporate and household loans decreased, and remained historically low.

Chart 17: Net borrowing by non-financial corporations



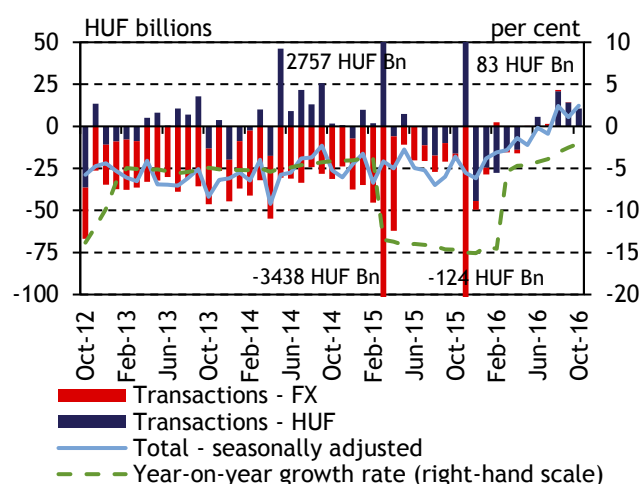
Source: MNB

As a combined result of transactions, the outstanding loans of credit institutions to the corporate sector decreased by HUF 26 billion in October, equivalent to a decline of HUF 56 billion on a seasonally adjusted basis (Chart 17). In terms of currency denomination, forint loans contracted by HUF 23 billion, and foreign exchange-based loans by HUF 3 billion during the month.

In annual terms, **outstanding corporate loans** decreased by 2.2 per cent on a transaction basis, due primarily to a base effect. At the same time, **outstanding loans to the SME segment** showed an annual growth of 7 per cent by the end of Q3, falling within the 5 to 10 per cent band deemed desirable by the MNB. Loan agreements concluded in the third phase of the Funding for Growth Scheme increased the portfolio of outstanding forint and foreign exchange-based loans by HUF 39 billion and HUF 6 billion, respectively.

In October, interest rates on **newly granted corporate loans** decreased, and remained historically low. The average annualised interest rate on small-value forint loans decreased by 0.09 percentage point to 4 per cent from the previous month, while the average interest rate on higher-value forint loans, net of money market transactions, decreased by 0.58 percentage point to 2.4 per cent.

Chart 18: Net borrowing by households



Source: MNB

In October, **outstanding loans to households** increased by HUF 11 billion as a combined result of transactions, primarily due to an increase in the portfolio of forint loans (Chart 18). During the month, the contraction in outstanding loans amounted to 2 per cent in annual terms. In the period under review, households concluded new loan contracts in a total value of HUF 96 billion, thus the average annual growth in new business volume was 43 per cent, and within that the volume of new housing loans rose by 46 per cent.

In October, the **interest rates on newly granted household loans** remained below pre-crisis levels. Compared to the previous month, the annual percentage rate of charge on forint housing loans decreased slightly by 0.09 percentage point to 5.54 per cent.