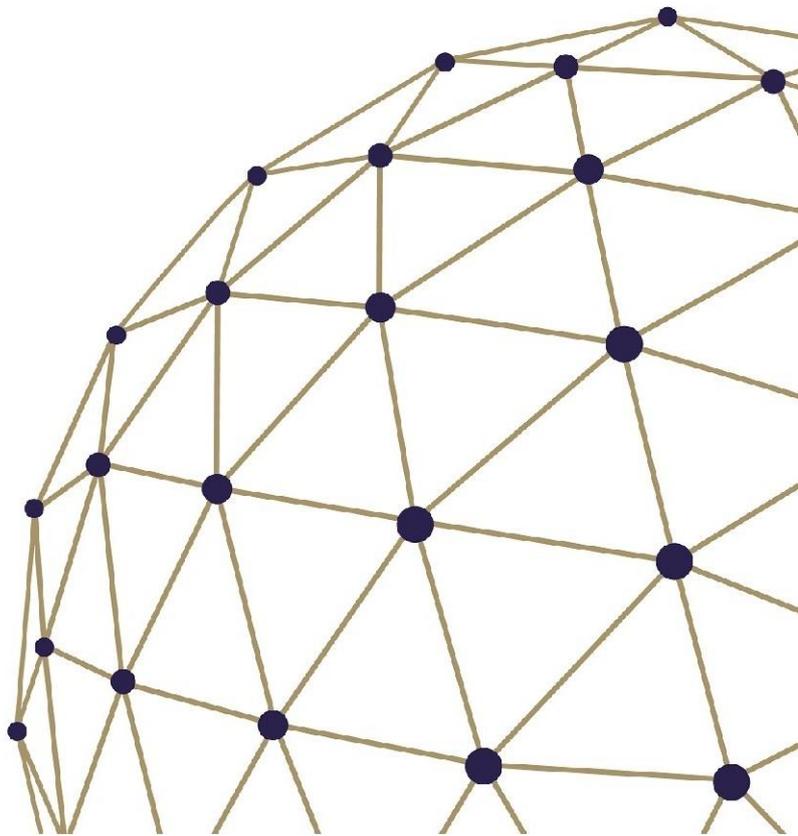




Macroeconomic and financial market developments

November 2016

Background material
to the abridged minutes of the
Monetary Council meeting
of 22 November 2016



Time of publication: 2 p.m. on 7 December 2016

The background material ‘Macroeconomic and financial market developments’ is based on information available until 16 November 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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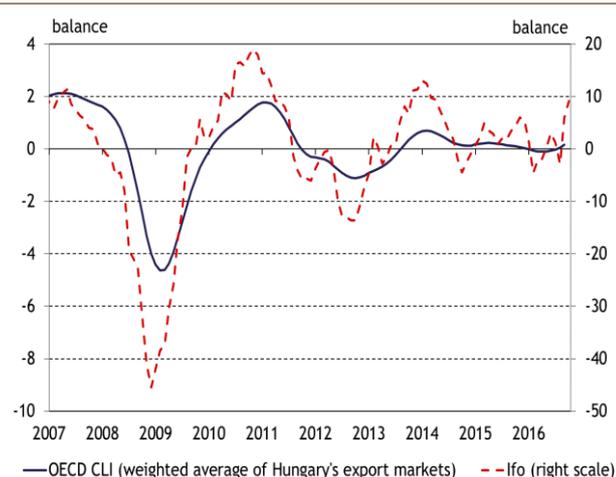
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1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

GDP figures for 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 moderate world demand, inflationary pressure from the world market has remained muted in recent months.

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



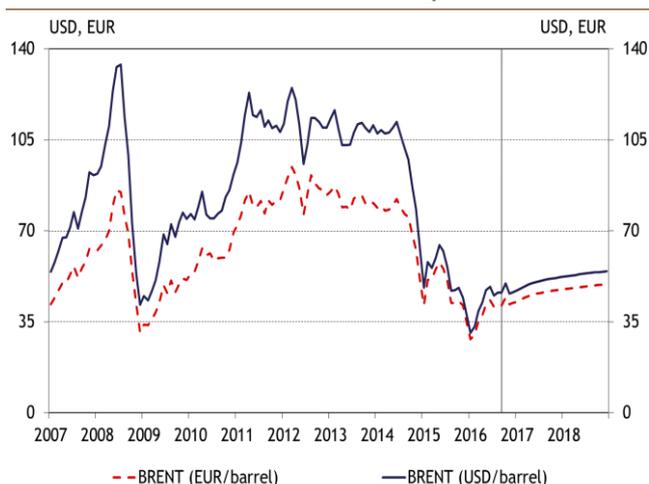
Source: OECD, Ifo

GDP figures for 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. Looking ahead, global growth may still be deemed fragile, due to the deceleration of growth in China and the risks surrounding the economy. In addition, the deceleration of growth in China and the risks surrounding the economy, both point to the fragility of global economic activity. Low commodity prices continue to drag on the commodity exporters' activity growth, while persisting geopolitical tensions 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.

The euro area economy registered a quarter-on-quarter growth rate of 0.3 per cent in the third quarter of 2016. 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. German industrial production rose at a moderate pace in September, in parallel with exports, and new orders also increased year on year. Expectations concerning the German economy (Ifo) considerably improved after the less favourable outlook registered in previous months (Chart 1).

Inflationary pressure from the world market remains weak amid still 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 44–50 (Chart 2). World market prices of industrial commodities and unprocessed food remained moderate.

Chart 2: Brent crude oil world market prices

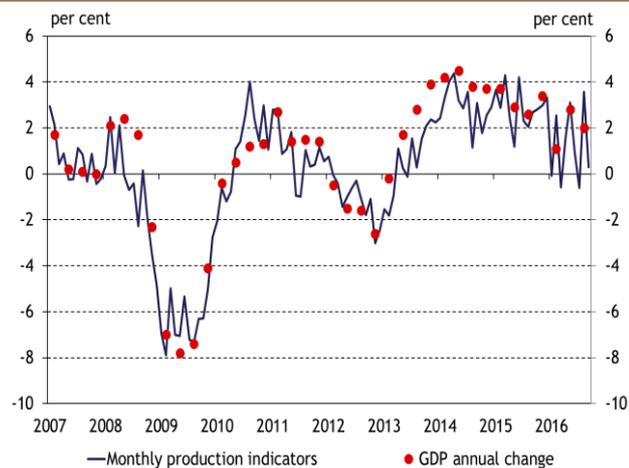


Source: Bloomberg

1.2. Domestic real economy developments

In the third quarter of 2016, Hungary's GDP expanded at a rate of 2.0 per cent year on year. While the pick-up in household consumption supported economic growth, lower construction output attributable to the more moderate inflow of EU funds, weaker industrial performance resulting from the temporary fall in the manufacture of transport equipment, and lower-than-expected drawdowns of the home purchase subsidy for families (CSOK), restrained it. In the third quarter of 2016, whole economy employment rose by 3 per cent year on year. The unemployment rate stood at 4.9 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

In the third quarter of 2016, Hungary's GDP grew at a rate of 2.0 per cent year on year and by 0.2 per cent compared to the previous quarter. On the output side it was market services and agricultural that made the highest contribution to growth, while on the expenditure side final consumption expenditure may have had a positive impact on growth.

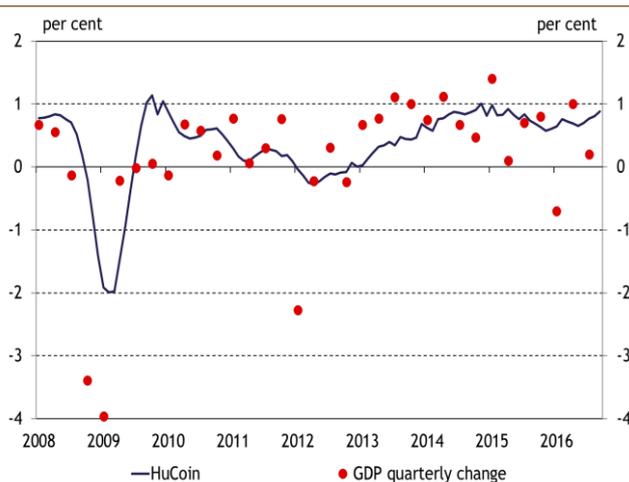
In the third quarter of 2016 market services and agriculture made the greatest contribution to growth on the output side. Industrial performance stagnated, while construction continued to curb growth. According to the monthly data, industrial production decelerated due to the temporary fall in the manufacture of transport equipment that followed the vigorous growth seen in the second quarter. Construction output still fell considerably short of the year-on-year figures, primarily due to the lower volume of projects financed from EU funds compared to 2015. In line with our expectations, the volume of retail sales continued to increase (Chart 3).

On the expenditure side, household consumption may have increased significantly in the third quarter, which is also supported by the incoming figures on retail sales volumes. Household consumption may support the recovery of growth looking ahead. Investment, on the whole, may have been moderate, as a result of the lower volume of public investment financed from EU funds compared to the previous year and the moderate investment activity of manufacturing companies. In line with the moderate performance of industry, Hungarian export dynamics may have decelerated during the third quarter.

Capturing domestic economic performance outlook over the medium term, the HuCoin indicator was generally stable considering the average of the past period (Chart 4).

In September 2016, the volume of industrial output, both according to the raw data and the data adjusted for the working-day effect, fell by 3.7 per cent year on year, while on a seasonally adjusted basis it was down 3.0 per cent compared to the previous month. On the whole, the manufacturing sub-sectors contracted compared to the

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

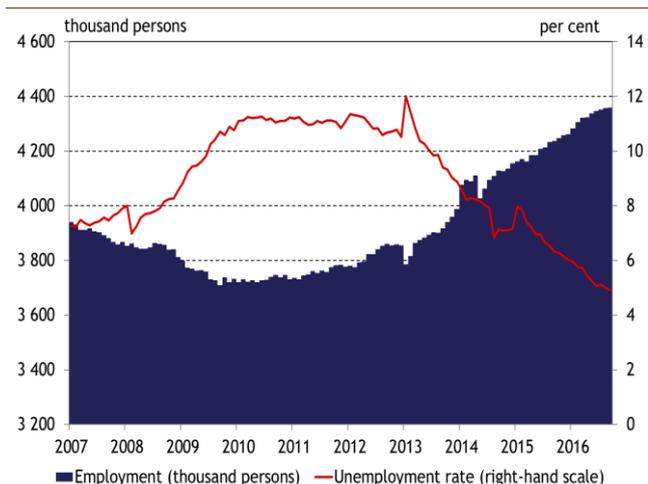
previous month. Production of the engineering sub-sectors declined, accompanied by a fall in the performance of manufacture of transport equipment and electronic sub-sectors. Output of the food and light industry moderately increased compared to the previous month. **On the whole, forward-looking indicators reflect an unfavourable picture for the short-term outlook of Hungarian industry.**

Based on preliminary data, in September 2016 the **value of exports rose by 1.9 per cent and that of imports fell by 0.2 per cent year on year in euro terms.** The trade surplus was up EUR 175 million from last September. In August 2016 the terms of trade continued to improve, albeit to a more moderate degree than before, with a decreasing contribution of the relative price change of machinery, transport equipment and processed goods, in addition to low energy prices.

In September 2016 **the volume of construction was down 13.2 per cent year on year**, while output increased by 1.7 per cent compared to the previous month. The volume of new contracts decreased by 26.5 per cent compared to the figure measured last year, contributed to by the fall in the new contracts of both main construction groups. The month-end volume of construction companies' contract portfolio increased by 20.2 per cent on an annual basis, with contribution to the increase in the volume of contracts of both construction groups.

In September, based on preliminary data – and also based on the data adjusted for calendar effects – **the volume of retail sales was up 5.1 per cent year on year**, while turnover increased by 0.6 per cent compared to the previous month. As regards the structure of sales, sales volume increases were registered across a wide range of products.

Chart 5: Number of persons employed and the unemployment rate

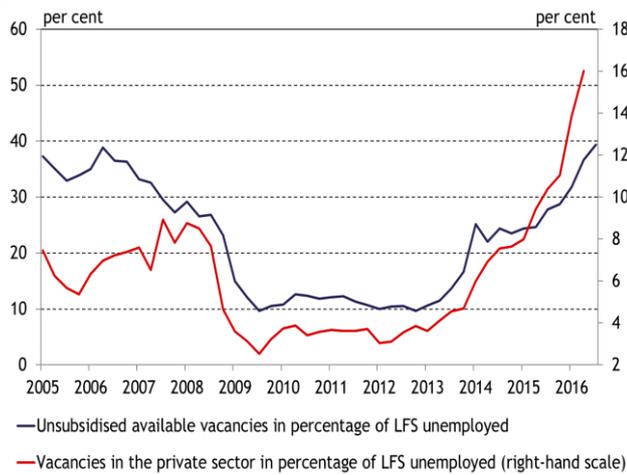


Source: HCSO

1.2.2. Employment

According to Labour Force Survey data, **in the third quarter of 2016 the number of employees in the national economy increased by 3 per cent year on year.** Unemployment continued to decrease, while the labour force participation rate increased slightly on a quarterly basis. At the end of the quarter the unemployment rate stood at 4.9 per cent (Chart 5).

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

Chart 6: Indicators of labour market tightness

Source: National Employment Service, HCSO

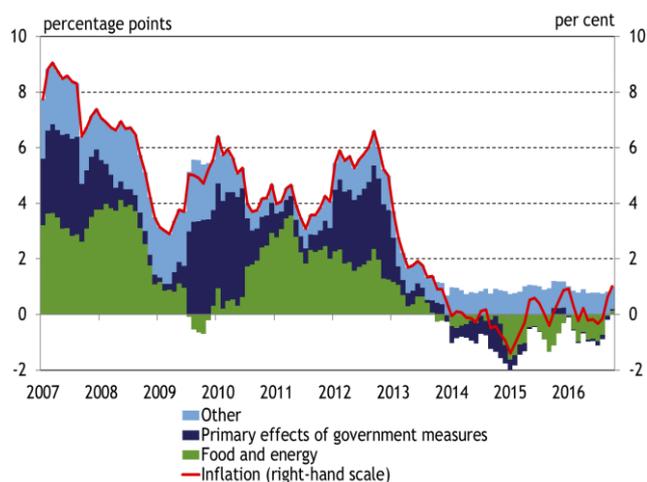
in the third quarter.

According to data released by the National Employment Service (NES), the number of registered jobseekers was 312,700 in the third quarter, which represents a year-on-year decrease of 16.5 per cent. Similarly to previous years, subsidised jobs accounted for the larger part of registered new jobs, where an overwhelming part of the newly announced subsidised jobs related to public employment. The quarterly number of non-subsidised vacancies rose quarter on quarter. Based on the tightness indicators, it can be established that the labour market continued its tightening in the last two quarters (Chart 6).

1.3. Inflation and wages

In October 2016 year-on-year inflation was 1.0 per cent, while core inflation and core inflation excluding indirect taxes stood at 1.5 and 1.4 per cent, respectively. Underlying inflation indicators essentially remained unchanged and continue to point to a moderate inflation environment. In August 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 August 2016, annual growth of gross average wages accelerated in the private sector compared to the previous month, which was mainly attributable to higher wage growth in the manufacturing sector. Gross private sector wages rose by 6.2 per cent year on year. According to seasonally adjusted data, the annual dynamics of both the gross average wages and the regular wages accelerated compared to the previous month in the private sector. Within the private sector, the annual wage growth in manufacturing substantially rose, while the market service sector's wage dynamics accelerated more modestly compared to the previous month.

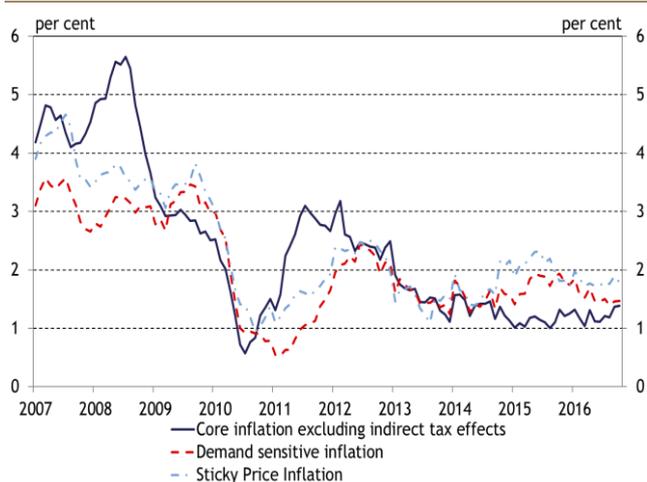
1.3.2. Inflation developments

In October 2016, inflation was 1.0 per cent, while core inflation was 1.5 per cent and core inflation excluding indirect taxes stood at 1.4 per cent (Chart 7). Inflation rose primarily as a result of the increase in fuel product prices, attributable to rising oil prices and excise duty.

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 September 2016 agricultural producer prices fell by 3.8 per cent in annual terms, while there was a minor increase in domestic sales prices of the consumer goods sectors.

As regards the incoming October inflation data, core inflation corresponded to, while inflation exceeded the projection in the September Inflation Report. According to our current forecast, inflation will remain below the 3 per cent inflation target both this year and next year, and it will only get close to the medium-term target by mid-2018. Looking ahead – as a result of base effects and the recovering domestic demand – inflation may increase gradually.

Chart 8: Measures of underlying inflation

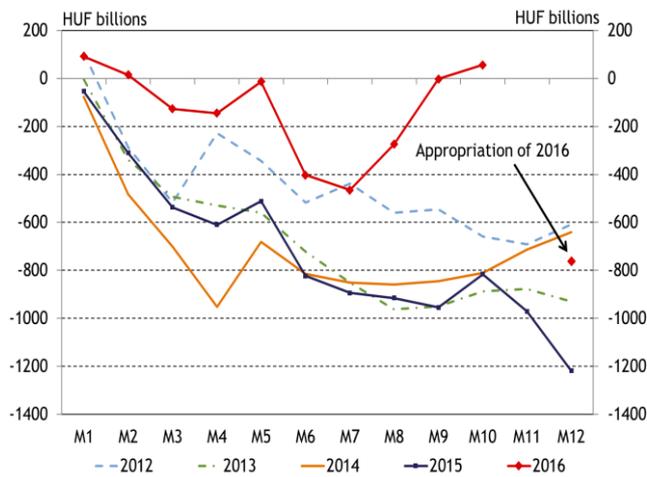


Source: MNB calculations based on HCSO data

1.4. Fiscal developments

General government's central sub-system closed with a surplus of HUF 60 billion in October 2016, thus the monthly balance has showed a surplus for the third month in sequence starting from August.

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



Source: MNB calculations based on HCSO data

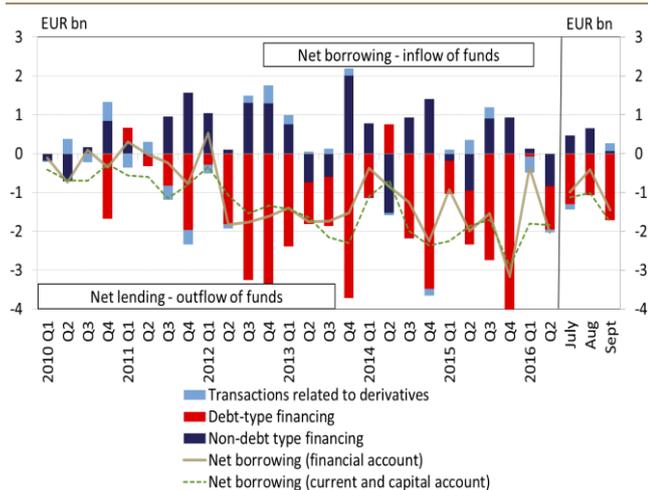
General government's central sub-system closed with a surplus of HUF 60 billion in October 2016, thus the monthly balance has showed a surplus for the third consecutive month starting from August. The October balance exceeded the average of past years, while it was lower by HUF 78 billion than that of last year. The difference compared to the 2015 figures is attributable to lower value added tax and excise duty revenues, higher interest expenses and last year's one-off corporate income tax revenues. **In the first ten months of the year, the cumulated cash balance of the central budget was HUF 57 billion, the highest figure recorded in recent years (Chart 9).**

In October 2016 **tax and contribution revenues of the central sub-system** fell short of the revenues of October 2015 by HUF 41 billion, while **expenditures of the central sub-system** exceeded those of October 2015 by HUF 35 billion. During October the EU transfers amounted to roughly HUF 110 billion, which is a material decline compared to the previous month. Thus year to date transfers rose above HUF 1,144 billion.

1.5. External balance developments

According to the September data release, seasonally unadjusted net lending amounted to EUR 1,768 million, almost two-thirds of which related to the current account and more than one-third to the capital account surplus. The rise in the net lending was attributable to the increase in the goods balance, in addition to the absorption of EU transfers, which accelerated as a result of increasing fiscal payments. The average income balance deficit remained around EUR 400 million.

Chart 10: Structure of external financing (unadjusted transactions)



Source: MNB

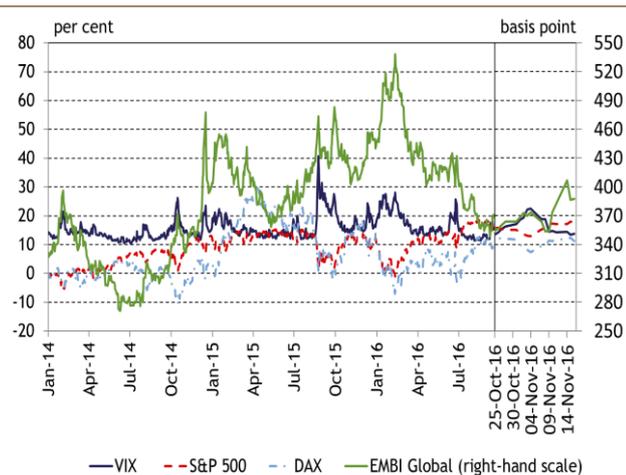
Financing side developments also reflect accelerating, over EUR 1.4 billion, decrease in external debts. The rise in net lending is the combined result of the repayment of net external debt in the amount of almost EUR 1.7 billion and a minor fall in foreign direct investments. Non-debt type liabilities increased slightly, accompanied by a EUR 40 million fall in foreign direct investments and a rise in equity investments in the amount of EUR 100 million (Chart 10). The minor fall in FDI funds was the result of a decline in foreign direct investments in Hungary, primarily attributable to the decrease in inter-company loans. The decline of EUR 1.7 billion in net external debt was primarily the result of the repayment of debt by the banking system – mostly affecting short-term debts – in the amount of EUR 1.3 billion. The corporate sector reduced its net external debt by almost EUR 0.5 billion, mostly due to a rise in foreign commercial loan receivables. Contrary to developments in the private sector, general government's net external debt slightly rose, accompanied by a decrease in gross external debt and in external assets.

2. FINANCIAL MARKETS

2.1. International financial markets

Risk aversion strengthened since the previous policy decision, accompanied by a global rise in bond yields and a depreciation of emerging market currencies. Investor sentiment was primarily influenced by expectations related to the US presidential elections and the result of the elections. By the end of the period, yields on government securities – particularly at longer maturities – rose considerably both in the developed and the emerging markets. Looking ahead, markets anticipate a change in the major central banks' monetary policy in December: they expect a tightening by the Fed and a further easing by the ECB.

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



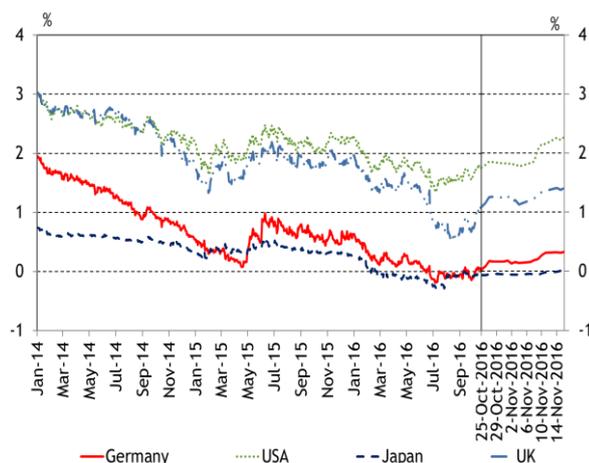
Source: Bloomberg

Since the previous policy decision, market sentiment has been dominated by the events related to the US presidential elections and the expectations concerning the Fed. In respect of the programmes of the two candidates, the preliminary analyses attached to the programme of winner Donald Trump higher political unpredictability, more isolationist foreign policy and processes that influence emerging markets negatively. Accordingly, after the result of the US presidential election, particularly bond markets and emerging foreign exchange markets were characterised by increased aversion to risk, while the developed equity market composite index hardly changed, and exchange rates of safe haven currencies adjusted after a brief period of appreciation.

Developed stock market indices showed mixed performance. The European stock exchanges, after minor fluctuations, fell by 1-4 per cent in total, while the US stock market indices on the whole rose to a similar degree. The London stock exchange fell by almost 4 per cent, which can be attributed to active external trade relations with the United States on the one hand and to the uncertainties that still surround Brexit on the other hand. On the whole, the MSCI composite stock price index of emerging markets was down 7 per cent, which was in line with the aversion to the emerging market risks.

Global bond market and emerging market risk indices deteriorated in the past period. The VIX fluctuated around 18-20 per cent in the first half of the period, followed by a fall to 12 per cent after the US elections, which suggests that the uncertainties related to the developed equity market were removed from the asset prices. On the other hand, the emerging bond market EMBI Global spread increased by 30 basis points in total during the month (Chart 11), while the MOVE index, measuring the volatility of the developed bond market, rose to its good half-year high as a result of turbulences in the government securities market. **The price of the Brent and WTI oil fell by 10 per cent, thus at the end of the period it fluctuated around USD 45-46.** This is primarily the result of uncertainty around the agreement, announced earlier, on freezing

Chart 12: Yields on developed market long-term bonds

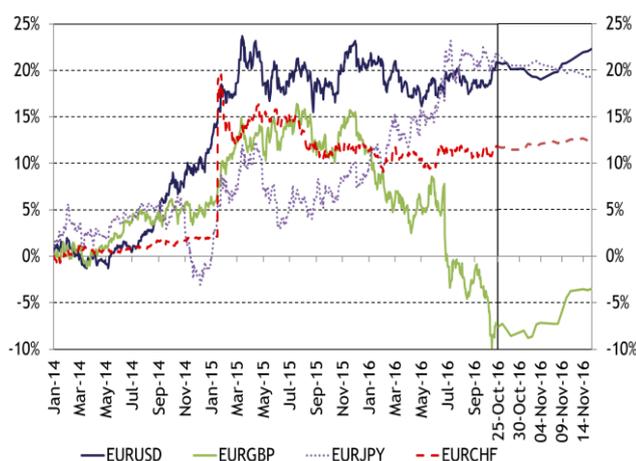


Source: Bloomberg

production: it is still questionable whether OPEC member states can agree on specific measures at their end of November meeting. Meanwhile, the International Energy Agency warned in its latest report that major surplus production may be expected next year also from non-OPEC producers (Brazil, Russia, Kazakhstan and Canada), which jeopardises the oil market balancing.

At the end of the period, both developed and emerging long-term yields, as well as long-term inflation expectations rose considerably. US, German and British 10-year yields rose by 39, 24 and 36 basis points, respectively. The rise may be attributable to the higher inflation expectations of the market participants, as 5x5-year inflation expectations rose by 22 and 7 basis points in the case of the dollar and the euro, respectively, at the end of the period. Emerging bond markets developed similarly, but the degree of the yield increase varied significantly in the individual countries (Chart 12).

Chart 13: Developed market FX exchange rates



Source: Reuters

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

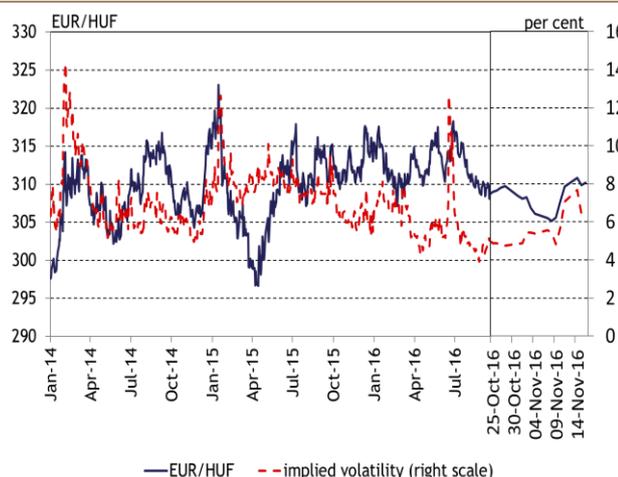
Of the major currencies the **dollar weakened against the euro** in the beginning of the period, followed by continuous **strengthening** after the election results, thus it stood around 1.07 at the end of the period, which represents an appreciation of over 1.5 per cent. Initially safe haven currencies strengthened temporarily against the dollar after the presidential elections, followed by a correction later (Chart 13).

The monetary policy measures of major central banks remained in focus. The probability of an interest rate hike by Fed in December increased further; however, until the end of 2017 the markets price a further increase of merely 25 basis points with the highest probability. **The next steps of ECB are still surrounded by great uncertainty;** although markets regard the extend of the asset purchase programme and the modification of the parameters as the most probable outcome, economists' view on the timing and quantity vary. Despite the fact that in recent weeks the pound sterling slightly appreciated, the Bank of England's room for manoeuvre in respect of further easing may be narrowed by the increasing inflation expectations resulting from the fact that this year the pound depreciated by more than 15 per cent in total.

2.2. Developments in domestic money market indicators

The forint depreciated to a lesser degree than the currencies of the region, while the government yield curve became steeper as domestic longer-term yields increased materially in response to global trends. Non-residents' forint government securities holdings decreased slightly, while the Hungarian CDS spread fluctuated mostly around its historic low, apart from a surge at the end of the period resulting from international developments.

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



Source: Bloomberg

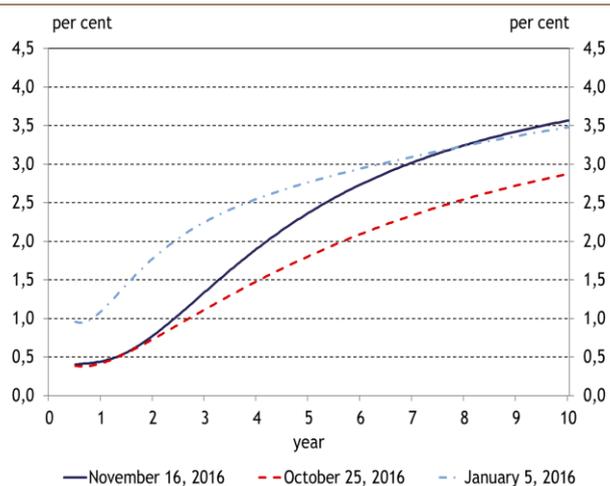
At the beginning of the period, the forint exchange rate, breaking away from regional trends, strengthened, followed by a weakening in the second half of the period (Chart 14). Expectations about the upgrading may have been the underlying cause of the strengthening: with Moody's decision in the beginning of November the Hungarian government debt was rated investment grade by all three large credit rating agencies. Following the US elections the forint first appreciated slightly, but later on it depreciated, together with other regional currencies. On the other hand, compared to the weakening of the Polish zloty and the Turkish lira by 3 and 6 per cent, respectively, the 0.7 per cent depreciation of the Hungarian at monthly level may be considered moderate overall.

The government securities market yield curve became materially steeper: while at 10-year maturity there was a rise of around 70 basis points as a result of the global yield increase, there was no material shift at the short end of the curve (Chart 15).

The bond auctions of the period were characterised by strong demand. Owing to heightened demand there was higher issuance at 3 and 5-year maturities on several occasions than originally announced. While average yields at Treasury bill auctions fell further slightly, at longer maturities yields continued to increase in the unfavourable global bond market environment despite strong demand.

Non-residents' holdings of government securities have decreased by HUF 75 billion during the period. Thus their portfolio fell slightly below HUF 3,700 billion, while their share in HUF government securities dropped below 26 per cent. In most of the period the Hungarian 5-year CDS spread was close to its eighteen-month trough, around 122 basis points; however, at the end of the period it rose roughly by 20 basis points as result of international factors.

Chart 15: Shifts in the spot government bond yield curve

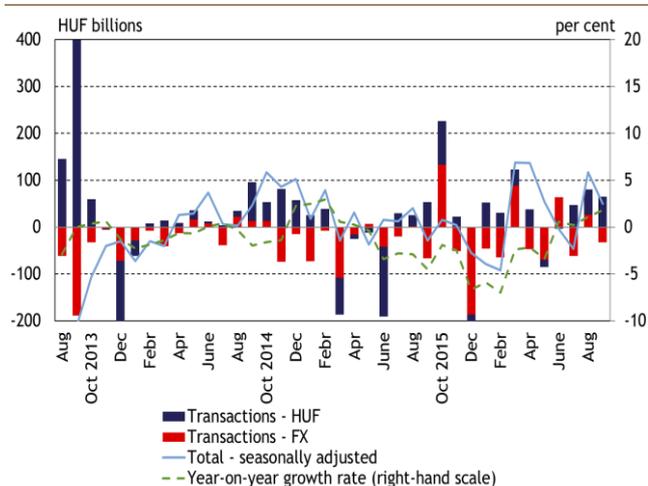


Source: MNB, Reuters

3. TRENDS IN LENDING

At the end of September the annual dynamics of total corporate lending stood at 1.8 per cent. The annual growth of outstanding borrowing by the SME segment is in the 5-10 per cent band deemed desirable by the MNB. In September, outstanding borrowing of households rose by HUF 14 billion.

Chart 16: Net borrowing by non-financial corporations

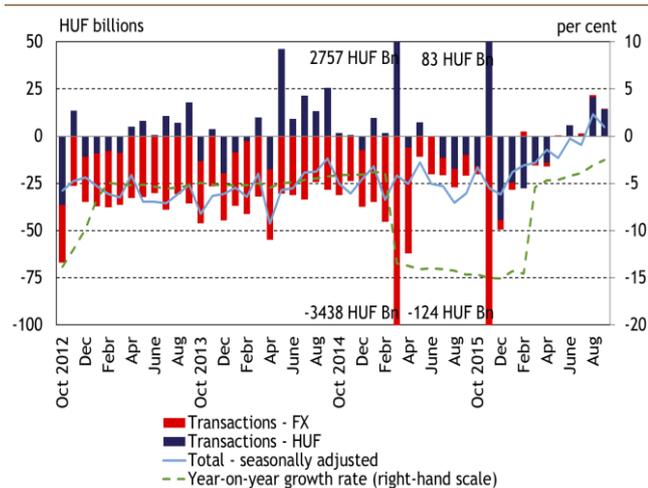


Source: MNB

As a result of transactions, **outstanding loans of credit institutions to the corporate sector increased by HUF 32 billion** in September, equivalent to an increase of HUF 16 billion in seasonally adjusted terms (Chart 16). On the other hand, the relatively high value of transactions was mainly attributable to the drawdown of the loan contracts concluded previously. In a breakdown by currency, forint loans rose by HUF 65 billion, while foreign currency loans contracted by HUF 33 billion during the month. At the end of September the annual dynamics of total corporate lending stood at 1.8 per cent. **In addition, outstanding borrowing by the SME segment grew at an annual rate of 6.4 per cent by the end of the second quarter, being in the 5-10 per cent band 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 22 billion and HUF 6 billion, respectively.

In September interest rates on new corporate loans rose, as a result of one-off, larger value transactions, from 1.85 to 2.38 per cent, but the smoothed values remained at a historic low. Within new corporate loans, the average annualised interest rate on low-value forint loans increased by 0.08 percentage points to 4.09 per cent from August, while excluding money market transactions, the average interest rate on higher-value forint loans rose by 0.59 percentage points to 2.98 per cent.

Chart 17: Net borrowing by households



Source: MNB

As a result of transactions, **outstanding borrowing of households increased by HUF 14 billion** in September, primarily as result of the increase in the forint portfolio (Chart 17). During the month, the contraction in outstanding loans amounted to 2.5 per cent in annual terms. In the period under review, households concluded new loan contracts in a total value of HUF 111 billion, thus average annual growth in new business volume was 43 per cent. Within that the volume of new housing loans rose by 48 per cent.

In September, interest rates **on new household loans** were below the pre-crisis interest rate level. The annual percentage rate of charge on forint housing loans decreased slightly, i.e. by 0.05 percentage point to 5.63 per cent, relative to previous month.