

Macroeconomic and financial market developments

July 2016

Background material to the abridged minutes of the Monetary Council meeting of 26 July 2016



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The background material 'Macroeconomic and financial market developments' is based on information available until 22 July 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 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 background materials to the minutes are available on the MNB's website at:

http://www.mnb.hu/en/monetary-policy/the-monetary-council/minutes

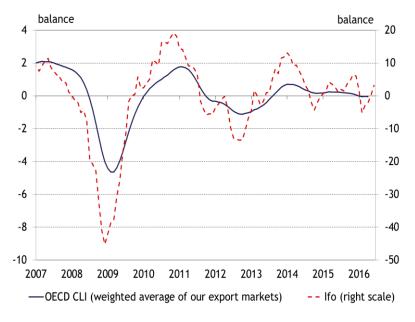
1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

The GDP figures for the first quarter showed a mixed picture. Growth in the USA and the euro area was weaker than the analysts' expectations, while that of Germany was more favourable. Year on year, Japanese growth decelerated to around zero per cent. Looking ahead, global growth is expected to decelerate further in the coming quarters. In its April report, the IMF revised its growth outlook downwards for both developed and emerging countries. Growth remains fragile, surrounded by several downside risks. Low commodity prices continue to drag on the growth of commodity exporters' economic activity, while persisting geopolitical tensions still slow growth in developed countries as well through weaker demand and economic sanctions. The consequences of the UK referendum appeared in the short run only on the money markets; however, in the medium and long run, depending on the outcome of the exit negotiations, it may also impact the Hungarian economy negatively.

The euro area economy registered a quarter-on-quarter growth rate of 0.6 per cent in the first quarter of 2016. The exit of Great Britain from the EU carries significant medium- and long-term risks. Economic growth in Germany, Hungary's most important export partner, continued in the first quarter as well, supported by increasing domestic demand. After the expansion seen early this year, German exports slightly declined in May. In parallel with this the industrial performance also slackened in May compared to the previous month. The declining trend seen since last December in expectations concerning the German economy (Ifo) has broken in March and were increasing continuously in recent months (Chart 1). The region kept up its good performance in the first quarter of 2016 as well.

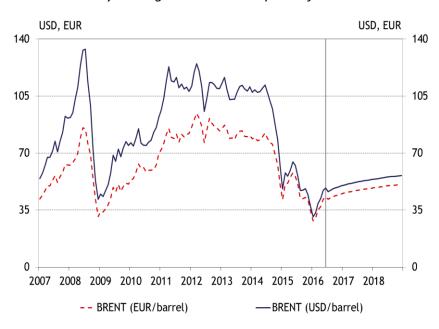
Chart 1: Business climate indices in Hungary's export markets



Source: OECD, Ifo.

Inflationary pressure from the world market remains weak, due partly to the sustained very low commodity prices, and partly to subdued demand. As a result, inflation rates remained below target in the world's major economies. In recent months, oil prices climbed over USD 50, falling at the end of the period (Chart 2; for more details see subsection 2.1).

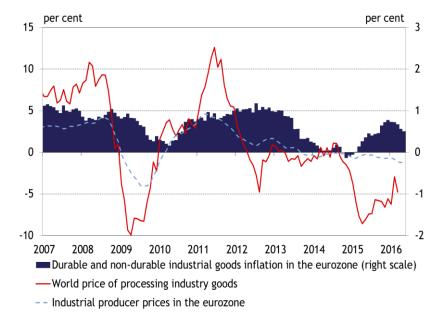
Chart 2: Monthly average world market price of the Brent crude oil



Source: Bloomberg.

The world market prices of industrial commodities and unprocessed food were moderate, while the prices of manufactured goods adjusted after a considerable fall in the first quarter of 2015 (Chart 3).

Chart 3: Industrial producer prices and tradables inflation in the euro area and world market prices of manufactured goods (y/y)



Source: Centraal Planbureau (<u>www.cpb.nl</u>), Eurostat, ECB.

1.2. Domestic real economy developments

1.2.1. Economic growth

In the first quarter of 2016, Hungary's GDP grew at a rate of 0.9 per cent year on year, while compared to the fourth quarter of 2015 it fell by 0.8 per cent due to one-off effects (Chart 4). Following the temporary subdued dynamics seen at the beginning of the year, a significant improvement in growth is expected.

On the production side, the increase in the volume of market services accelerated, while slowing industrial production and a significant fall in construction decreased the rate of economic growth in the first quarter of 2016. Based on monthly data, in the first quarter the dynamic growth of industrial output seen in previous quarters was held back by temporary factory stoppages; however, this was followed by a correction in output in recent months. The dynamic growth of industrial output seen in April slightly declined in May month-on-month, thus the year on year indices decreased compared to the previous month. The volume of construction output contracted significantly, primarily due to the phase-out of the projects financed from EU funds. By contrast, the volume of retail sales continued to increase in the first quarter of 2016.

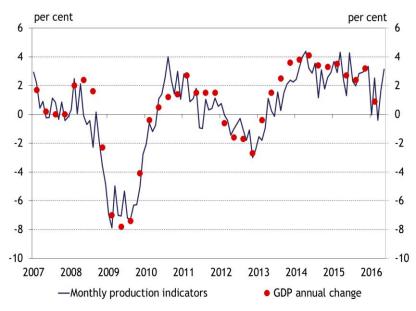


Chart 4: Monthly production indicators* and GDP growth

^{*} Weighted average of monthly production indicators (industrial output, construction output and retail sales). The weights are derived from regression explaining GDP growth. Source: MNB calculation based on HCSO data.

Household consumption continued to recover in the first quarter, supported by a dynamically increasing real wage bill resulting from improving labour market trends, high wage outflows and low inflation. There was a considerable increase in household demand for the durables and services. Whole-economy investments slowed in the first quarter, primarily due to the fall in government investments financed from EU funds at the beginning of the year. In a sectoral breakdown, government and quasi-fiscal entities, closely aligned with developments in EU funding, experienced a fall in investment activity, while corporate and household investments remained subdued. In the first quarter, the contribution of net exports to growth was negative, which is attributable to several factors. The slowdown in export dynamics is associated with disruptions to car manufacturing at the beginning of the year. The pickup in imports is primarily explained by an increase in consumption demand as imports for investment and re-export decreased. Export increased to a lesser degree compared to the previous quarters, in line with the slowdown in goods exports, while imports were up in parallel with the dynamic growth in more import-intensive items of consumption demands.

Capturing Hungary's cyclical outlook over the medium term, the HuCoin indicator has not change materially on the average of the past period, suggesting that the more subdued growth seen in the first quarter may have been temporary and growth could recover looking forward (Chart 5).

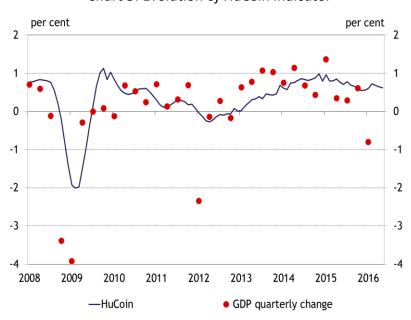
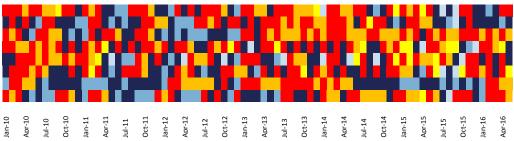


Chart 5: Evolution of HuCoin indicator

Note: Due to the revisions to GDP data, the historic values of the HuCoin indicator may have also changed. Source: HCSO, MNB calculations.

Chart 6: Growth heat map*





* The growth heat map shows the three-month moving averages of the seasonally adjusted monthly growth rates of the most important monthly indicators of activity, using the following colour code: red = grows above the five-year average, at an accelerating rate; orange = grows above the average, at a slowing rate; yellow = grows below the average, at an accelerating rate; light blue = grows below the average, at a slowing rate; blue = falls at a slowing rate; dark blue = falls at an accelerating rate. Source: MNB calculations based on HCSO data.

In May 2016 industrial output was up 9.2 per cent year on year, while on a seasonally adjusted basis it fell 0.7 per cent compared to the previous month. Industrial production fell in most of the manufacturing subsectors compared to the previous month. Output in car manufacturing, which carries the greatest weight, as well as in the light and metal industry decreased. The production of chemical industry, the second largest sector, slightly increased, accompanied by improved performance of the food industry. The forward-looking indicators reflect a mixed picture for the short-term outlook of the domestic industry. Capturing the underlying cyclical developments of the euro area, the slackening of the EuroCoin indicator stopped in June, in May Hungarian export orders slightly decreased. Expectations concerning the German industry, signalled by the Ifo indicator, improved since March.

In line with the correction in industry, the beginning of the second quarter also saw a favourable turn in foreign trade. Based on preliminary data, expressed in euro terms, in May 2016 the value of exports and imports increased by 6.3 per cent and 2.4 per cent, respectively, year on year. The balance of trade surplus was up EUR 284 million from last May.

In April 2016 the terms of trade continued to improve, with low energy prices remaining the largest contributor. Based on detailed trade data available until March, in the machinery and transport equipment product group, the subsector carrying the largest weight, both imports and exports increased year on year.

In May 2016 the volume of construction output was down by 26.6 per cent year on year, while output increased by 0.9 per cent compared to the previous month. In May, the production of both main construction groups fell year on year. The construction of buildings was down 4.4 per

cent, while as a result of the slow start-up of projects implemented using EU funds, the volume of other construction fell by 43.8 per cent. The volume of contracts picked up from its low; however, year on year it continues to decline due to the previous year's high base. According to our expectations, the performance of the sector may be moderate early this year, but it may recover in the second half of the year, which is also confirmed by the data related to the volume of contracts.

Consumption demand continued to recover in the beginning of the year, in line with the sustained increase in retail sales volume, which may be explained by the improving labour market situation, wages outstripping last year's level and the increase in real wages as a result of low inflation. Based on preliminary data, in May the volume of retail sales was up 6.8 per cent year on year and 0.1 per cent compared to the previous month. As regards the structure of sales, an increase in the volume of sales was registered for a wide range of products. The rise in fuel sales contributed to the increase in the volume of retail sales to a greater degree than before. In addition, the sales of non-food consumer durables continued to increase, and there was a material rise in food sales.

1.2.2. Employment

According to Labour Force Survey data, in May 2016 the number of employees in the national economy increased by 4 per cent year on year. Unemployment continued to decline, while labour force participation rate was similar to that measured in the previous month, thus the unemployment rate fell to 4.9 per cent for in May (Chart 7).

In the first quarter of 2016 the number of employees in the national economy increased further to a small degree. Relative to the previous quarter, the number of employees in the general government increased slightly, despite a fall in the number of public workers in the first quarter. Following the dynamic growth seen in the previous year, the number of employees in the private sector grew at a more moderate rate. Within the private sector, the slight increase in the workforce in both manufacturing and the market services sector contributed to higher employment.

thousand persons per cent 4 400 12 4 200 10 4 000 8 3 800 3 600 3 400 2 3 200 2013 2014 2008 2009 2011 2015 2016 2007 2010 2012 Employment (thousand persons) —Unemployment rate (right scale)

Chart 7: Number of persons employed and the unemployment rate

Source: HCSO.

In May 2016, according to the data provided by the National Employment Service (NES), there was no substantial change in the **number of newly announced non-subsidised jobs**, and the **end-of-month number of vacant non-subsidised jobs** reached a historical high in respect of the post-crisis period. The number of vacant jobs in the private sector, published by HCSO, was also at its historic high in the first quarter of 2016. The gradual tightening of the labour market, observed since 2013, has continued according to the tightness indicators calculated from various statistics (Chart 8).

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 —Unsubsidised available vacancies in percentage of LFS unemployed

Chart 8: Indicators of labour market tightness

The dotted line marks labour market tightness indicators adjusted for public workers. Source: National Employment Service, HCSO.

—Vacancies in the private sector in percentage of LFS unemployed (right scale)

1.3. Inflation and wages

1.3.1. Wages

In May 2016, the annual wage dynamics of the private sector accelerated after the decline in the previous month, thus wage dynamics is still stronger than that observed last year. According to the seasonally adjusted data, gross average wage in the private sector increased by 5.6 per cent year on year. Regular wages increased to larger degree on a monthly basis compared to the seasonality in May of recent years. The volume of bonuses paid within the private sector in May did not differ significantly from the level seen in previous years. Within the private sector, wage dynamics in both manufacturing and the market services sector rose compared to the previous month.

1.3.2. Inflation developments

In June 2016, inflation was -0.2 per cent, while core inflation was 1.2 per cent and core inflation excluding indirect taxes stood at 1.1 per cent (Chart 9). Inflation dropped primarily as a result of a fall in the price index of unprocessed food, characterised by volatile prices.

per cent percentage points -2 -2 Others Primary effects of government measures Food and energy -Inflation (right scale)

Chart 9: Decomposition of the consumer price index

Source: MNB calculation based on HCSO data.

Underlying inflation indicators continue to point to a moderate inflation environment, which may be also attributable to the low level of imported inflation, low commodity prices and the cyclical position of the economy (Chart 10). In May 2016, agricultural producer prices rose by 2.4 per cent in annual terms, while the domestic sales prices of the consumer goods sectors remained essentially unchanged.

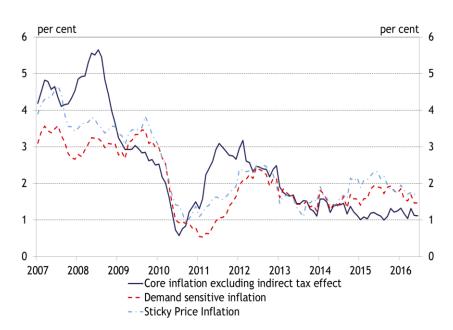


Chart 10: Measures of underlying inflation

Source: MNB calculation based on HCSO data.

The data received for June was lower than the forecast published in the June Inflation Report, which is attributable to the lower-than-expected price dynamics of unprocessed food, characterised by volatile pricing. Looking ahead, inflation may significantly fall short of the 3 per cent target and may approximate it only by the end of the forecast horizon. Inflation may be close to 0 per cent in the short run.

1.4. Fiscal developments

The deficit of the central subsystem of the general government stood at HUF 389 billion in June 2016, representing a less favourable balance relative to the same period of the previous years and it is higher by HUF 77 billion compared to that of last June. On the expenditure side the net expenditures related to the EU grants and the interest expenses, increasingly concentrated in June, explain the difference from the values of last year, which was partially offset on the revenue side by the surplus realised from value added taxes and contributions. In the first six months of the year the cumulated cash deficit of the state budget was HUF 402 billion, the lowest reading in recent years (Chart 11).

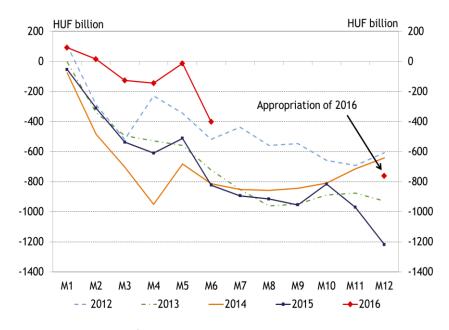


Chart 11: Intra-year cumulative cash balance of the state budget

Source: Budget Act of 2016, Hungarian State Treasury.

In June 2016 the **revenues of the central subsystem from taxes and contributions** exceeded the revenues of June 2015 by HUF 67 billion. Within this, revenues related to consumption and wages also grew dynamically year on year.

In June 2016 the **expenditures of the central subsystem** exceeded those in June 2015 by HUF 144 billion. Compared to the data for last June, the increase in the expenditures is explained by the net expenditures related to the EU grants and the interest payments.

1.5. External balance developments

According to the May data release, the seasonally unadjusted external financing capacity amounted to EUR 531 million, dominated primarily by the current account surplus of EUR 511 million, while the balance of the capital account was EUR 20 million. The decline in financing capacity can be explained by the lower goods and services balance, primarily attributable to seasonal effects, while the trade surplus outstrips the level seen in the same period of last year.

According to the financing data, the calculated financing capacity amounted to merely EUR 7 million in May, i.e. according to the financing side data there was no material outflow of fund, as the outflow of debt liabilities was offset by the inflow of non-debt liabilities. Within the nondebt liabilities the net amount of working capital inflow exceeding EUR 0.5 billion is primarily attributable to the rise in the intercompany loans of non-resident companies operating in Hungary, while net portfolio investments declined, primarily as a result of the rise in foreign assets of the domestic actors. The fall in net external debt continued in excess of EUR 400 million, primarily due to the increase in the banking system's foreign assets. The decline in net external debt of the banking system in the amount of EUR 1.4 billion was curbed by the increase in the other sectors' net external debt in May. The EUR 800 million increase in the net external debt of the consolidated general government was primarily caused by the maturity of a Premium Euro Hungarian Government Bond in May, the redemption of which entailed a decrease in foreign exchange reserves; however – as this portfolio was held mostly by domestic agents – the gross external debt did not decrease in parallel with the redemption. The rise of almost EUR 200 million in the net external debt of corporations was accompanied by an increase in the assets placed abroad.

2. FINANCIAL MARKETS

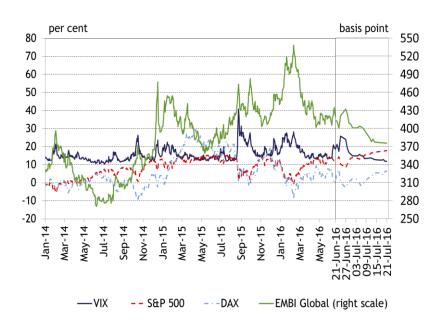
2.1. International financial markets

In the period since the previous interest rate decision market sentiment was generally favourable, but the UK referendum and the resulting developments had substantial bearing on financial market sentiment. The "black Friday" that followed the referendum significantly shook the developed, particularly the European, markets, but it was followed by an adjustment in the weeks after, and on the whole the financial markets were characterised by increasing risk appetite.

As regards the stock market indices, the German and Japanese index fell in the first half of the period, while after the adjustment the developed stock price indices were able to rise on the whole. US indices rose by more than four per cent, while the European stock exchanges – affected to a much larger degree by the reactions to Brexit – adjusted roughly to their level seen one month before. In emerging equity markets, the MSCI composite index increased 5-6 per cent overall despite the fall at the start of the period, possibly linked to decreasing US rate hike expectations.

In the first part of the period risk indices rose as a result of the UK referendum, while in the entire period on the whole they fell below the level seen at the previous interest rate decision (Chart 12). The VIX index adjusted after its initial soar of almost 9 per cent, and closed with a decrease of 7 percentage points. The emerging bond market EMBI Global premium rose by 12 basis points in the first half of the period, and from there, with a continuous decrease, it fell on the whole by almost 40 basis points during the month. There was no lasting increase in the indices reflecting the risk of the developed and emerging countries as a result of the terrorist attack in France and the attempted coup in Turkey.

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



Source: Bloomberg.

Overall, throughout the period, the yields of long-term bonds of the developed markets, regarded as safe-haven assets, materially declined, particularly during the post-Brexit period. The 10-year EUR, USD and GDP yields were down by 5, 11 and 45 basis points, respectively, marking a low in decades in UK yields, and reaching a level below zero in the case of the EUR yield.

The **price of oil** did not change materially in the first half of the period; it fluctuated around USD 50-51, followed by a drop of roughly USD 3 per barrel at the end of the period. The fall may be attributable to the concerns about the growth of European countries, the news on sustained oversupply and the appreciation of the dollar.

Of the main currencies, the dollar appreciated, while the British pound – as a result of the UK referendum – depreciated during the period. British pound depreciated against the euro and dollar by 7-9 per cent as a result of the uncertainties that followed the UK referendum, and the market participant anticipated further depreciation of the pound in the near future as well. Japanese yen first appreciated, followed by a slight depreciation against the dollar on the whole, as a result of the improving risk appetite, and strengthening expectations related to further

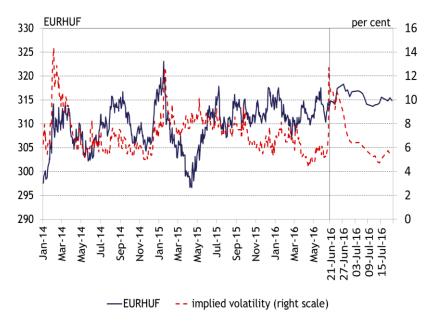
easing by the central bank and in the fiscal policy. The euro and the Swiss franc depreciated against the dollar by roughly 2 per cent.

According to the decision makers' communications and market expectations the probability of the Fed's rate hike this year has slightly decreased, due to the Brexit. While earlier the possibility of rate hike as early as in the summer also arose, based on the pricing the probability of Fed's maintaining the current base rate this year slightly increased further. While at the time of the previous interest rate decision the probability of this year's rate hike was 43 per cent, by the end of the period this fell to 41 per cent. In the euro area inflation expectations decreased in the middle of the period, which adjusted at the end of the period. At its June meeting the ECB maintained the level of interest rates, but a number of analysts anticipate easing by the ECB in the near future as a result of the UK developments.

2.2. Developments in domestic financial market indicators

In the past month the domestic asset prices were mostly driven by international factors. During the period, the EUR/HUF rate moved between the levels of 313 and 319, and by the end of the period the forint exchange rate against the euro returned to the level seen on the day of the June interest rate decision (Chart 13). The forint depreciated by more than 1 per cent compared to the previous interest rate decision amidst the international sentiment soured over the result of the UK referendum held on 23 June, then – in parallel with the improving global risk appetite – it adjusted close to its level seen in the beginning of the period. The forint and the Polish zloty mostly moved along during the month, while in most of the period the fluctuations in the global investor sentiment typically had lesser effect on the forint exchange rate than on that of the Polish currency. The Czech koruna fluctuated to a lesser degree than the other currencies of the region, while the Romanian leu - moving against the trends of the region - appreciated roughly 1.5 per cent against the euro. On the whole, as a result of the country-specific adjustment at the end of the period, the Polish zloty appreciated by 0.5 per cent against the euro. The incoming domestic data typically had no material impact on the exchange rate, and despite the credit rating upgrade from Moody's - which had been awaited by some of the analysts - did not take place, the forint exchange rate appreciated in the second half of the period in line with the international trends. The HUF and CZK depreciated by roughly by 2 per cent, the PLN almost by 1.6 per cent and the RON by 0.5 per cent against the USD.

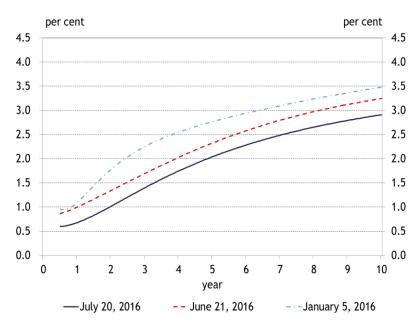
Chart 13: EUR/HUF exchange rate and the implied volatility of exchange rate expectations



Source: Bloomberg.

The yield curve of the government securities market declined during the period, with the yield considerably falling on its entire section (Chart 14). Short-term benchmark yields in the government securities market, with maturity less than 1 year, dropped by 20-30 basis points. The medium, 3 to 5-year section of the yield curve decreased by 30-40 basis points, while the longer-term yields dropped by 40-50 points.

Chart 14: Shifts in the spot government bond yield curve



Source: MNB, Reuters.

Demand at the bond auctions of the period was typically strong, enabling the Government Debt Management Agency to issue government bonds in excess of the quantity announced in almost every case. Sales of 3-month treasury bills were also strong, attracting demand 2 to 3 times the amounts announced, causing average yields to fall at the auctions. Demand for the long-term fixed-rated government securities was ordinary at the first auction of the period, while there was a strong, 4 to 5.5-time oversubscription at the auction of 7 July for the 3-, 5- and 10-year bonds. At the last government bond auction of the period demand for the 3- and 5-year bonds was ordinary, while it was weak for the 10-year bonds. On the whole, the government bond yields at auction dropped; the largest fall was seen at the 3- and 10-year maturities, where the average yields at auction fell by 32-33 basis points compared to the last auction of the previous period.

The government securities holdings of the non-resident sector have slightly decreased since the previous interest rate decision, with their portfolio dropping from HUF 3,632 billion to HUF 3,592 billion during the period. In the first week of the period the non-resident sector's government bond holding was characterised by a decrease of HUF 80 billion, while as a result of the increase during the rest of the period, the total decline in the portfolio decreased close to 40 billion. The share of the non-residents within the forint government securities portfolio dropped close to 25.5 per cent. Amidst the negative international sentiments that characterised the start of the period, the Hungarian 5-year CDS premium temporarily rose above 185 basis points, then dropped close to 142 basis points due an adjustment, which on the whole represents a decrease of 18 basis points compared to the start of the period.

3. TRENDS IN LENDING

In May, as a result of transactions, the **outstanding loans of credit institutions to the corporate sector** declined by a total of HUF 85 billion, equivalent to a decrease of HUF 102 billion on a seasonally adjusted basis (Chart 15). In terms of denomination, forint loans and foreign currency loans decreased by HUF 15 billion and by HUF 70 billion, respectively, over the period. The annual rate of the change in the volume of lending was -3.4 per cent, which still includes the one-off impact of the portfolio separation of a large bank and the debt consolidation of a large corporate.

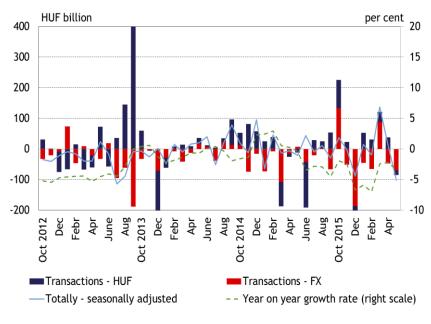
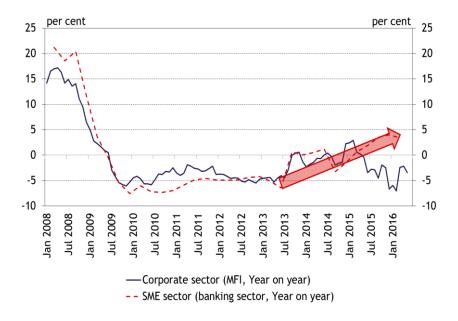


Chart 15: Net borrowing by non-financial corporations

Source: MNB.

Loans to the SME segment showed an annual increase of 3.4 per cent in the first quarter (Chart 16). In May, the loan agreements made under Pillar 3 of the Funding for Growth Scheme increased the outstanding forint and foreign currency loan portfolio by HUF 12 billion and HUF 4 billion, respectively. The loans contracted under Pillar 2 of the Scheme and under FGS+ were net repaying loans, reducing the outstanding loans to the corporate sector by HUF 6 billion as a result of transactions.

Chart 16: Growth rate of loans outstanding of the whole corporate sector and the SME sector



Source: MNB.

In May, in the case of **newly granted corporate loans**, the average annualised interest rate on small-value forint loans decreased by -0.32 percentage points to 4.62 per cent from April, while the average interest rate on higher-value forint loans, net of money market transactions, decreased by -0.13 percentage points to 3.41 per cent.

In May the amount of **households' outstanding forint and foreign currency loans** remained unchanged on transaction basis, while the annual decrease in the outstanding loans was 4.6 per cent (Chart 17). The total value of new loans concluded by the households was HUF 78 billion, thus the average annual growth in new volumes is 34 per cent. The 12-month cumulated value of new contracts increased in all loan segments, i.e. by 46 per cent in the case of housing loans and by 42 per cent in the case of personal loans.

HUF billion 50 10 2757 HUF Bn 83 HUF Bn 25 5 0 0 -5 -25 -50 -10 -75 -15 -3438 HUF Bn -124 HUF Bn -100 -20 Oct 2012 Oct oct Transactions - FX Transactions - HUF

Chart 17: Net borrowing by households

Source: MNB.

—Totally - seasonally adjusted

In April, interest rates on **new household loans** moved in different directions. The annual percentage rate of charge on forint housing loans dropped by 0.11 percentage point to 5.69 per cent, while that on home equity forint loans fell by 1.67 percentage points to 4.98 per cent.

-- Year on year growth rate (right scale)