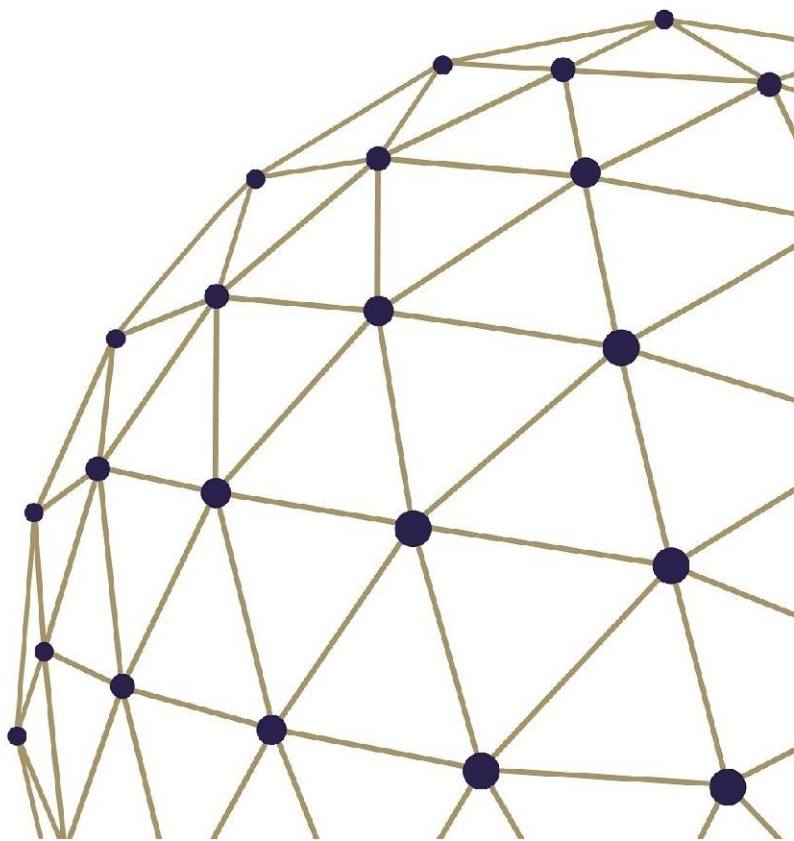




Macroeconomic and financial market developments

June 2017

Background material
to the abridged minutes of the
Monetary Council meeting
of 20 June 2017



Time of publication: 2 p.m. on 5 July 2017

The background material 'Macroeconomic and financial market developments' is based on information available until 14 June 2017.

Article 3 (1) of the MNB Act (Act CXXXIX of 2013 on the Magyar Nemzeti Bank) defines achieving and maintaining price stability as the primary objective of the Magyar Nemzeti Bank. The MNB's supreme decision-making body is the Monetary Council. The Council convenes as required by circumstances, but at least twice a month, according to a pre-announced schedule. At the second scheduled meeting each month, members consider issues relevant to decisions on interest rates. Abridged minutes of the Council's rate-setting meetings are released regularly, before the next policy meeting takes place. As a summary of the analyses prepared by staff for the Monetary Council, the background material presents economic and financial market developments, as well as new information which has become available since the previous meeting.

The abridged minutes and the background materials to the minutes are available on the MNB's website at:

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

CONTENTS

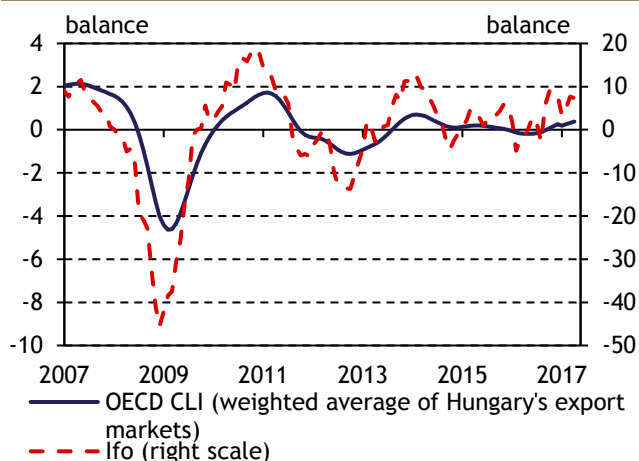
| | |
|---|----|
| Contents | 3 |
| 1. Macroeconomic developments | 4 |
| 1.1. Global macroeconomic environment..... | 4 |
| 1.2. Domestic real economy developments..... | 5 |
| 1.3. Inflation and wages | 7 |
| 1.4. Fiscal developments | 8 |
| 1.5. External balance developments | 9 |
| 2. Financial markets..... | 10 |
| 2.1. International financial markets | 10 |
| 2.2. Developments in domestic money market indicators | 13 |
| 3. Trends in lending | 15 |

1. MACROECONOMIC DEVELOPMENTS

1.1. Global macroeconomic environment

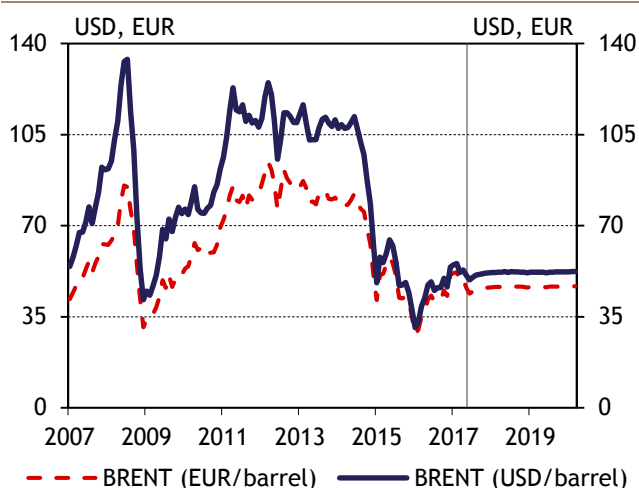
GDP figures for the first quarter of 2017 showed a positive picture overall on the developments in the global economic activity. The German economy – Hungary’s most important trading partner – expanded, and meanwhile the growth in the euro area and in the United States also continued. The medium-term view on the European economic activity has improved in recent months. The growth of the economies in the Central and Eastern European region picked up considerably. The rise in the global inflation rates has halted in the past month, and downside risks to inflation have become more pronounced.

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



Source: OECD, Ifo

Chart 2: Brent crude oil world market prices



Source: Bloomberg

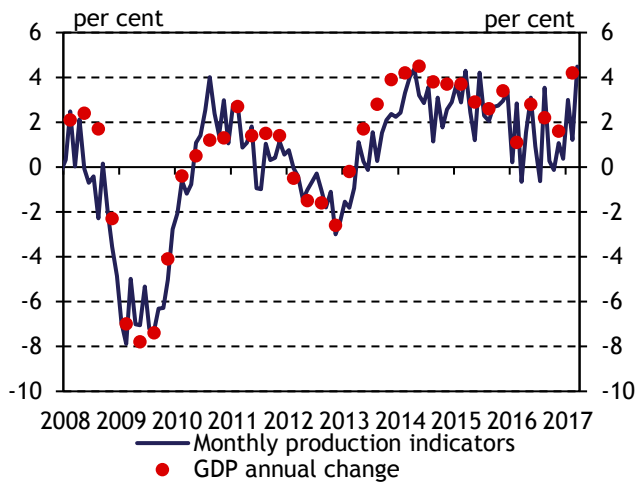
The euro area economy registered a year-on-year growth rate of 2.5 per cent in the first quarter of 2017, while in quarter-on-quarter terms it was up 0.6 per cent. In May the Purchasing Manager Index, reflecting the short-term economic outlooks, continued to rise with respect to the euro area. As a result, market expectations with respect to the economic growth of the euro area rose slightly throughout 2017 and stand around 1.7 per cent. The exit of the United Kingdom from the EU continues to carry significant medium and long-term risks, the process of which is still surrounded by uncertainty as a result of the outcome of the British elections. The **more than three-year stable growth of the German economy**, Hungary’s most important export partner, **continued in the first quarter**, supported by buoyant domestic demand through investment and a sustained increase in household consumption. In addition, the contribution of net exports to the German GDP was also positive. German industrial production and new industrial orders decreased in April in annual terms, while the Ifo index, capturing the outlooks of the German industry, rose in May, and when examining the average of the past months, it is still at a favourable level (Chart 1).

The rise in the global inflation rates has halted in the past month, and downside risks to inflation have become more pronounced. Based on the preliminary data release, in May the euro area inflation decreased following the rise in April, which was attributable to one-off effects. Underlying processes continued to develop moderately. Oil prices in May fell below USD 50, reflecting major volatility (Chart 2). World market prices of industrial commodities fell, while that of unprocessed food rose in May.

1.2. Domestic real economy developments

According to the HCSO's data release, in 2017 Q1 Hungary's GDP grew by 4.2 per cent year on year. On the expenditure side, the net exports also contributed to the growth, in addition to the investment and consumption; on the production side the performance of industry, services and construction were the key contributors to growth. Between February and April 2017, whole-economy employment rose by 2 per cent year on year. The unemployment rate stood at 4.6 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 calculation based on HCSO data

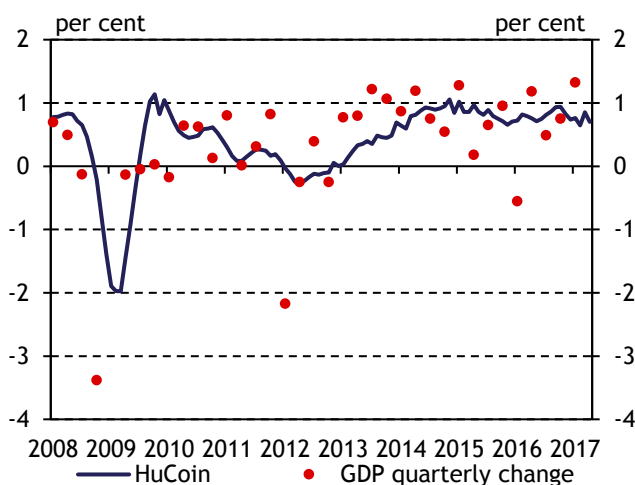
1.2.1. Economic growth

According to the HCSO's data release, in the first quarter of 2017 Hungary's gross domestic product grew at a rate of 4.2 per cent year on year and by 1.3 per cent compared to the previous quarter.

After last year's more moderate growth, the Hungarian economy grew dynamically in the first quarter, still supported on the expenditure side primarily by the buoyant domestic demand, through a considerable expansion in investment and the continued expansion of consumption. In addition, in parallel with the favourable performance of Hungary's export markets, exports also picked up, thereby net exports making a positive contribution to growth. On the production side, after the wear-off of last year's transient factors, industrial production once again supported economic performance and services also continued to expand. In addition to the public projects implemented from EU funds, the rising investment activity of the private sector also improved the performance of construction. The expansion in retail sales continued, albeit at a slower rate than seen in the past period (Chart 3).

Based on the HuCoin indicator, which reflects the medium-term prospects of the domestic economy, the underlying trends of economic activity still indicate stable growth (Chart 4).

Chart 4: Evolution of the HuCoin indicator

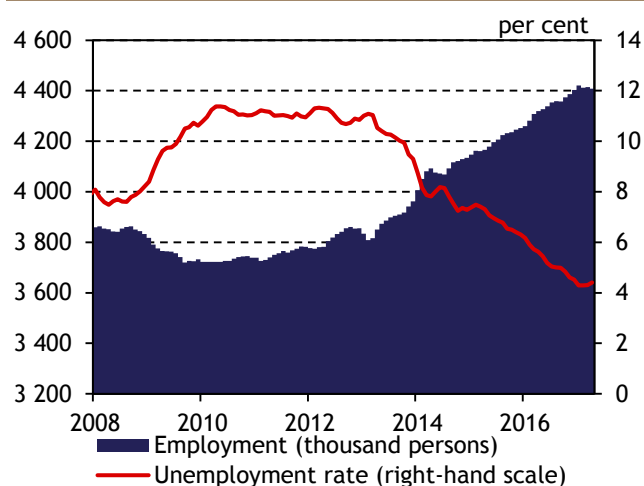


Note: The historic values of the HuCoin indicator may have been changed by revisions to GDP data. Source: MNB calculation based on HCSO data

In April 2017, the volume of industrial production was down 3.0 per cent year on year, while on a seasonally adjusted basis it fell by 0.8 per cent compared to the previous month. The production level excluding the working-day effect rose by 2.5 per cent, explained by having 3 working days fewer compared to last April. The output of vehicle manufacturing, representing the highest weight, rose, while the engineering industry and food industry production declined compared to the previous month. On the whole, forward-looking indicators reflect a positive picture with regard to the outlooks of the domestic industry.

Based on preliminary data, in April 2017, in line with the industrial production, the value of goods exports and imports decreased by 1.6 per cent and 0.4 per cent, respectively, year on year in euro terms, thus compared to

Chart 5: Number of persons employed and the unemployment rate



Source: HCSO

last April the trade surplus was down by EUR 98 million. In March 2017, the terms of trade continued to deteriorate, in which the relative price change of mineral fuels, food and processed goods played a key role.

In April 2017, **the volume of construction output was up 22.1 per cent year on year**, while output decreased by 2.6 per cent compared to the previous month. Production of the two main construction groups developed in a similar manner in April: the construction of buildings and the volume of other construction increased by 11.9 per cent and 40.2 per cent, respectively. The volume of concluded new contracts increased by 30.6 per cent, while the month-end volume of construction companies' contract portfolio was up 92.4 per cent year on year.

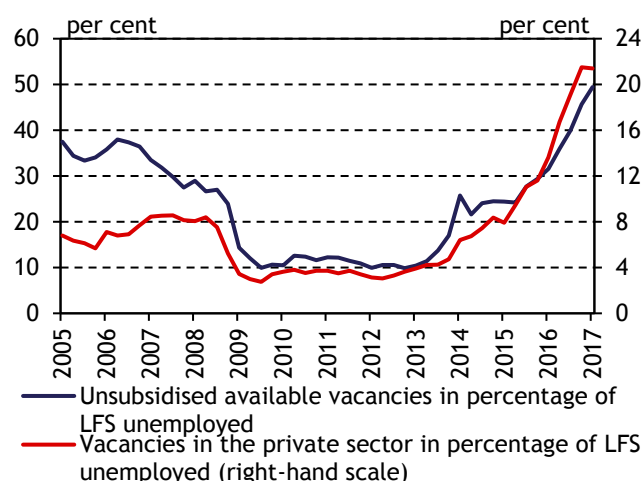
According to the preliminary unadjusted data, **the volume of retail sales was up 3.5 per cent**, in April. Based on calendar adjusted data, it **rose by 2.0 per cent year on year**, while turnover decreased by 0.2 per cent compared to the previous month. As regards the structure of sales, turnover may have increased in April in a wide range of products. The expansion in the turnover of non-food consumer durables primarily contributed to the expansion of retail sales.

1.2.2. Employment

According to Labour Force Survey data, **the number of employees in the national economy increased by 2 per cent year on year from February to April 2017**. Based on the seasonally adjusted data, labour force participation remained steady, the number of people in employment (both with and without public workers) decreased, and unemployment slightly increased. The unemployment rate was 4.6 per cent (Chart 5).

According to the data released by the National Employment Service (NES) in April 2017, the number of non-subsidised vacancies indicating corporate labour demand stood at the level of 15-20 thousand, similarly as in recent years, while the month-end number of vacant non-subsidised jobs, showing the matching of structure of labour demand and supply, remained steady. The number of vacancies in the private sector, published by the HCSO as forward-looking data, slightly decreased in the first quarter. The labour market is still historically tight according to the tightness indicators calculated from the various statistics (Chart 6).

Chart 6: Indicators of labour market tightness

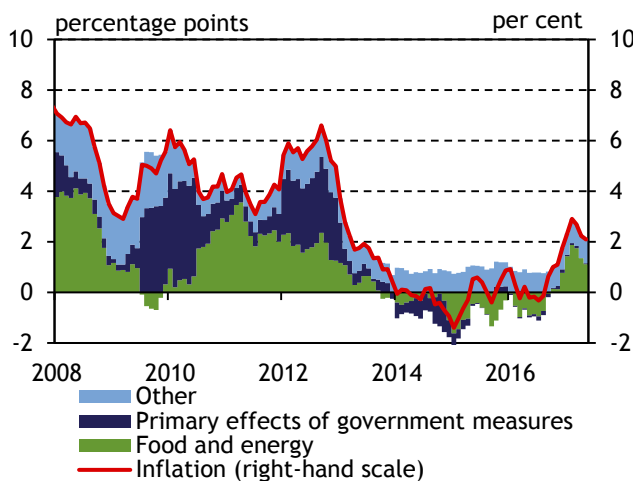


Source: National Employment Service, HCSO

1.3. Inflation and wages

In May 2017, year-on-year inflation was 2.1 per cent, while core inflation and core inflation excluding indirect taxes stood at 2.1 and 2.0 per cent, respectively. Underlying inflation indicators essentially remained unchanged compared to the previous month. In the first quarter of 2017 gross average wage in the private sector rose by 9.9 per cent year on year, which was mostly attributable to the administrative measures in the beginning of the year (raising the minimum wage and the guaranteed wage minimum and the reduction of the social contribution tax), and it can be interpreted as the effect of the wage adjustment impacting public corporations.

Chart 7: Decomposition of inflation



Source: MNB calculation based on HCSO data

1.3.1. Wage setting

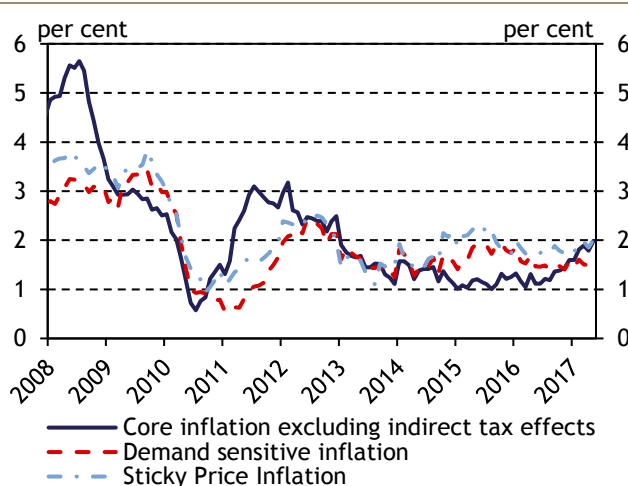
In the first quarter of 2017 gross average wage in the private sector rose by 9.9 per cent, while regular wages were up 10.5 per cent year on year. In March, the growth of gross average wages in the private sector was similar to the extent observed in February, while the annual dynamics of regular wages accelerated. **Regular wages rose more vigorously on a monthly basis than usual seasonality in March would suggest. The substantial growth may have been attributable**, in addition to the wage adjustment that affected the public companies, **to the pass-through effect exceeding that experienced in 2012 after raise of the minimum wage**, which may have been also supported, beyond the tighter labour market environment, also by the decrease in the employer's social contribution. **Bonus payments** – similarly to the months in the beginning of the year – **fell short of those recorded last year** in March as well.

1.3.2. Inflation developments

In May 2017, year-on-year inflation was 2.1 per cent, while core inflation and core inflation excluding indirect taxes stood at 2.1 and 2.0 per cent, respectively (Chart 7). Inflation fell by 0.1 percentage point while core inflation rose by 0.2 percentage point relative to the previous month. Inflation dropped primarily as a result of the decrease in the fuel price index, which was partially attributable to base effects, while the rise in core inflation was mostly caused by the rise in tobacco prices resulting from the higher excise duty.

Underlying inflation indicators essentially remained unchanged compared to the previous month, being in the range of 1.5-2.0 per cent (Chart 8). In addition to the low level of imported inflation and inflation expectations, moderate commodity prices also contribute to this. In April 2017, agricultural producer prices rose by 4.1 per cent in annual terms, while the domestic sales prices of consumer goods sectors increased moderately.

Chart 8: Measures of underlying inflation indicators

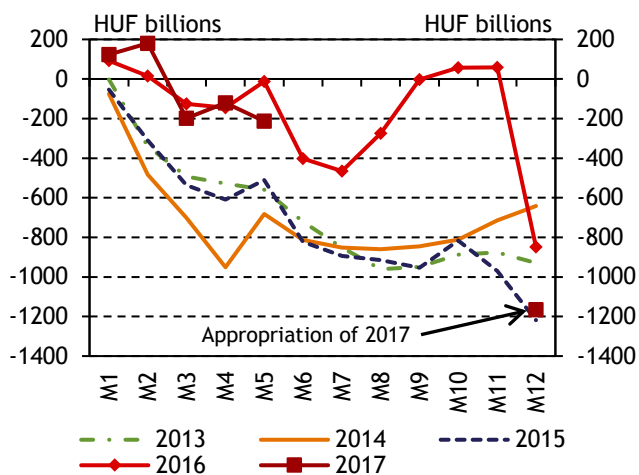


Source: MNB calculation based on HCSO data

1.4. Fiscal developments

Following the surplus in the previous month, the deficit of the central government was HUF 92 billion in May 2017, thus the cumulative balance of the current year was HUF -213 billion at the end of May.

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



Source: MNB calculation based on HCSO data

The amount of the cumulative deficit is far lower relative to the data from the past years, but it is higher than the close to zero deficit recorded in 2016 (Chart 9). The higher deficit of the current year compared to the data from last May was caused by the increase in the expenditures of budgetary institutions and the expenditures related to EU transfers, which was partly offset by the increase in the revenues from personal income tax and land sales.

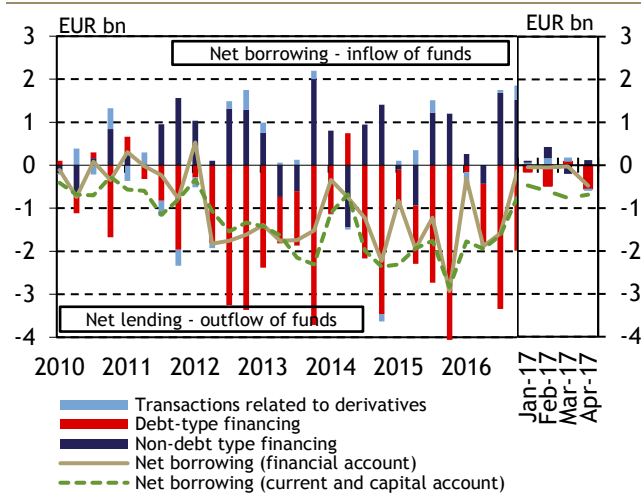
The revenues of the central government in May 2017 were up by roughly HUF 55 billion year on year. The largest part of the growth was attributable to realisation of payments related to the treasury (land sales) in a higher amount, but the rise in the personal income tax revenues is also material.

The expenditures of the central government in May 2017 were up by HUF 277 billion year on year. Mainly the expenditures of the budgetary institutions, related to the EU transfers and also their own expenses increased..

1.5. External balance developments

Net lending of the economy was at a steady high level in April. Although the external trade balance rose during the month, it falls short of the level recorded last April, which is attributable to the gradual worsening in the terms of trade and the expanding imports linked with the pick-up in consumption and investments.

Chart 10: Structure of net lending (unadjusted transactions)



Source: MNB

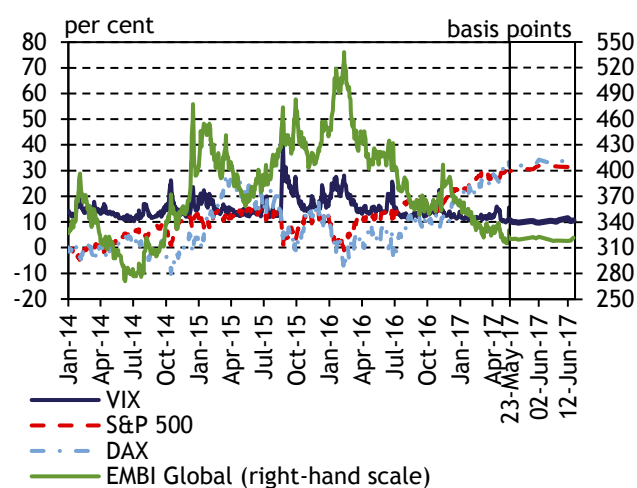
Based on the financing side developments, net external liability decreased further in April, which was achieved through a rise in non-debt liabilities and a fall in debt liabilities (Chart 10). The decrease in the net external debt was essentially linked with the banking sector and the corporations, while there was no material change in the general government's net external debt. Meanwhile, foreign direct investments substantially rose, which was attributable to the growth in intercompany loans (particularly in the commercial loans granted to the subsidiaries of foreign parent companies). The increase in the Hungarian capital outflow, related to a capital increase in a Hungarian company's foreign subsidiary, had the opposite effect. Dividend payments in April were of similar magnitude as last year, not being significant yet. The net external debt of the banking sector decreased by roughly EUR 300 million: a larger scale increase in foreign receivables continued, while foreign loans rose slightly. Corporations' net external debt also decreased by EUR 300 million, which is the result of a larger decrease in liabilities, related to the expiring bonds of a Hungarian large corporation.

2. FINANCIAL MARKETS

2.1. International financial markets

Investor sentiment in the period since the last interest rate decision was positive overall, despite the fact that the developments in the domestic politics of the US and the uncertainties around the early general elections in the UK caused smaller temporary volatility in certain sub-markets. The decisions of central banks of global importance were not followed by tangible market reaction. Most of the developed and emerging market stock market indices rose, long-term bond yields declined, while the equity market and bond market risk indicators stagnated at a low level. Of the developed currencies the largest, 2.5 per cent, depreciation was recorded by the British pound after the outcome of the British general elections. Oil prices followed a declining trend ever since the extension of the production adjustment – priced by the markets in advance – announced at the OPEC meeting, and by the end of the period it declined to the range of USD 45-47, corresponding to a fall of more than 10 per cent.

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



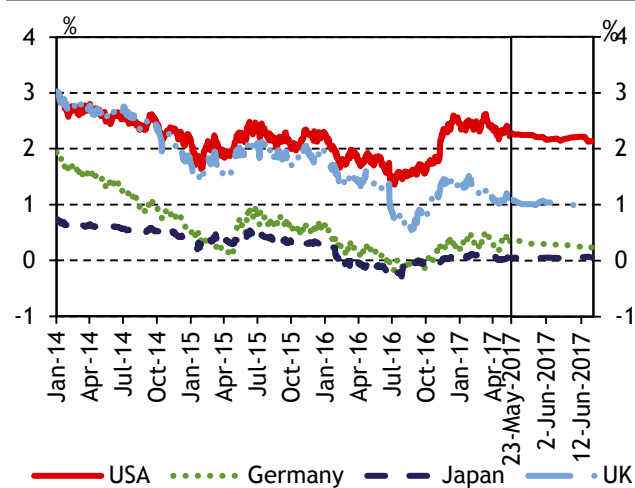
Source: Bloomberg

In the period since the previous interest rate decision, most of the stock exchange indices rose, while the risk indicators continued to stagnate at a low level. The stock exchange indices responded to the developments in US domestic politics and to the unexpected outcome of the UK elections to a lesser degree, and the non-European developed and emerging equity markets rose during a period. The risk indices essentially stagnated, which may be partly attributable to the fact that the key market moving news were primarily of political nature (news related to US domestic politics, elections in the UK and France, several Arab countries broke diplomatic ties with Qatar), while the globally important central banks' monetary policy decision had no material impact on the market developments. Japanese yen and Swiss franc, both of them considered as safe-haven assets, slightly appreciated, while the fall in the developed bond yields, observed since mid-May, continued.

The US, German and Japanese stock exchange indices rose, while the UK equity market slightly declined due to the uncertain domestic situation. The US, Japanese and German stock exchange rose on average by 1-2 per cent, while the French stock exchange declined, even despite the fact that the result of the first round of the parliamentary elections was in line with the preliminary estimates. The MSCI composite stock index of emerging markets increased by 1.5 per cent, reflecting a slight pick-up in investors' demand for risky assets over the entire period. The VIX index, in line with the rise of the stock exchanges, fluctuated around the historically low level of 10 per cent during the period (Chart 11).

The bond market risk indices were characterised by minimum volatility and stagnation at a low level. The emerging bond market EMBI Global spread fluctuated around 320 basis points during the period, while the MOVE index, measuring the volatility of the developed bond markets, was also close to its local trough. **Typically,**

Chart 12: Yields on developed market long-term bonds

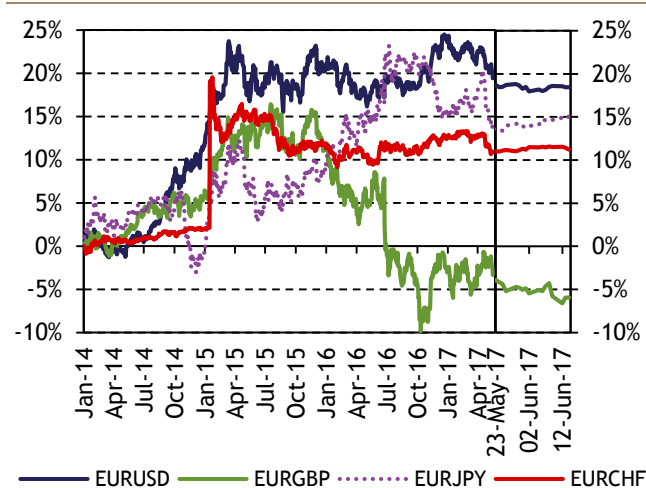


Source: Bloomberg

developed long-term bond yields declined: the US, German and British yields fell by 10-15 basis points, while the Japanese one stagnated (Chart 12). The decline may have been partly attributable to the latest inflation indicators, showing smaller than expected dynamics, and also to the still cautious monetary policy communication by the globally important central banks. The Central and Eastern European emerging market bond yields – with the exception of those in Romania – fell by 5-15 basis points.

The Brent and WTI oil price decreased materially, by more than 10 per cent, during the period. Before the end-May OPEC meeting, it pointed toward an oil price rise that part of the market participants expected the members of the oil cartel to take – beyond the extension of the agreements on the production adjustment by 9 months, which came to light already before – additional measures. However, since this did not happen and forecasts also signalled a major increase in the US shale oil extraction next year, oil prices have followed a declining trend after the OPEC meeting. The fact that Saudi Arabia and further five countries broke diplomatic ties with Qatar could not reverse this trend. The price of the Brent and WTI oil fell from USD 54 and close to USD 51, registered at the start of the period, to USD 47 and 45, respectively. At present the largest uncertainty surrounds the demand and supply trends in 2018, since it appears that the OPEC measures aimed at the stabilisation of prices and the reduction of supply are partly neutralised by the fast-growing unconventional extraction.

Chart 13: Developed market FX exchange rates



Source: Reuters

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

Political uncertainties in Europe were reduced further by the fact that in the first round of the French parliamentary elections the French president's party gained substantial advantage. **On the other hand, due to the unexpected results of the early general elections in the UK, the British pound underperformed the major currencies,** and it depreciated by roughly 2.5 per cent during the period. In the past period the political events had a larger effect on the foreign exchange markets: the developments in the domestic politics of the United States weakened the dollar, and although the dollar exchange rate stabilised during the period under review, relative to early May it depreciated by 3 per cent against the euro (Chart 13).

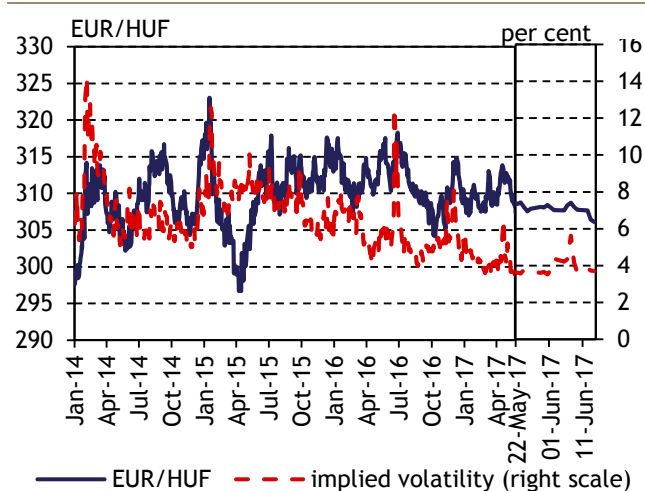
The monetary policy measures of the central banks of global importance remained in focus. **The Fed, in accordance with the expectations, raised the key policy rate by 25 basis point to the target band of 1 – 1.25 per cent at its June meeting, and disclosed additional details with regard to the balance sheet reduction, thus market responses were moderate on the whole. The ECB left its monetary policy unchanged at its June meeting and no**

new information was disclosed in respect of the asset purchase programme either; however, the forward guidance in the communication of the decision has changed. According to the new guidance, as regards the key policy rate the Governing Council expects that the key ECB interest rates will remain at the current levels persistently and much longer than the horizon of the net asset purchases. The decision, which was in line with the market expectations, had no material effect on asset prices, while the date of the first interest rate increase by ECB, expected by the market, shifted to the end of 2018.

2.2. Developments in domestic money market indicators

The forint appreciated slightly, together with the currencies of the region, but it moved in a narrow band throughout the period. The government securities market yield curve flattened out, as yields declined on long maturities to a larger degree and remained broadly unchanged on short maturities. The non-residents' forint government securities holding rose, with their share in the market's forint government securities holding being below 23 per cent. In the calm international risk-taking sentiment, the Hungarian CDS closed the period around 109 basis points after a decrease by a few basis points since the previous interest rate decision.

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

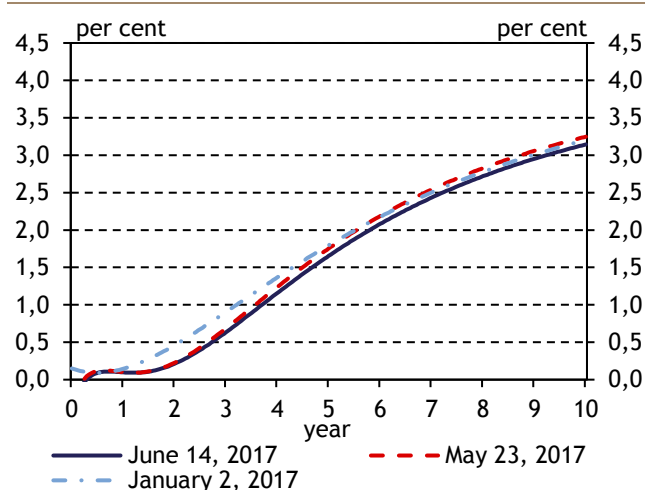


Source: Bloomberg

During the period, the forint fluctuated in a narrow band, together with the currencies of the region, and after short periods of appreciating and depreciating, it closed around 306-307 (Chart 14). On the whole, the currencies in the region appreciated moderately, thus the forint appreciated by 0.8 per cent, the Polish zloty by 0.1 per cent, while the Czech koruna, outperforming the currencies of the region, by 1 per cent against the euro. On the other hand, the Romanian leu depreciated by about half per cent during the period. The appreciation of the forint was also supported by the macroeconomic releases which exceeded the market expectations.

The government securities market yield curve flattened out: the short-term section of the yield curve decreased by a few basis points, while the curve fell by 6-7 basis points to its historical low by 6-7 basis points at both the middle and the long end. On maturities over 5 years a fall of 8-10 basis points in the yields was observed (Chart 15).

Chart 15: Shifts in the spot government yield curve



Source: MNB, Reuters

During the period, the government bond auctions were characterised by strong demand. At the auctions of the 3- and 12-month discount Treasury bills bid to cover ratio was twofold in most of the cases. Auctions of long-term securities were mostly characterised by strong demand, with 3- to 5-fold bid to cover ration. In the case of 5- and 10-year government securities there were larger issuance volumes than announced at almost all auctions held in the period in accordance with the intensive demand. No material change has been observed in the average auction yield of the 3-month discount Treasury bill, which stood at 0.03-0.05 per cent. On long maturities, the average auction yields of the 3-, 5- and 10-year government securities fell by 4-5 basis points.

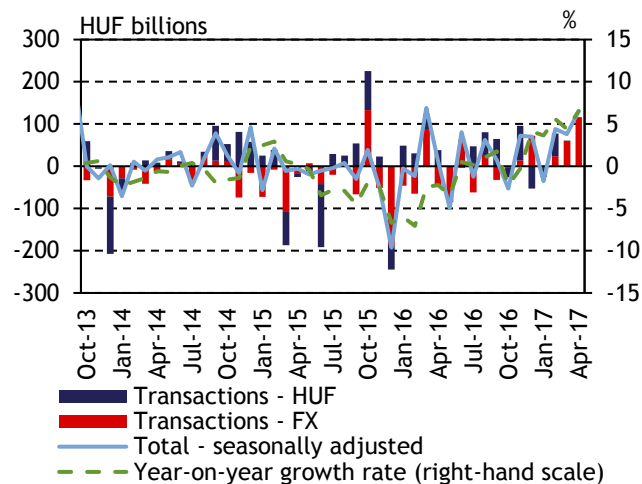
The stock of Hungarian forint-denominated government securities held by non-residents rose by roughly HUF 102 billion in the period, thus their holdings amounted to HUF 3,402 billion at the end of the period. Within the forint government securities holding of the market their share essentially has not changed and it is below 23 per cent at present. In the moderately positive international and regional market sentiment, the Hungarian 5-year CDS

spread decreased by a few basis points, at present standing at 109 basis points.

3. TRENDS IN LENDING

The stock of corporate loans increased at a faster rate, by 6.5 per cent in annual terms in April 2017 due to transactions. The outstanding loans of the credit institutions to households rose by HUF 1 billion in total as the combined balance of disbursements and repayments, thus at the end of April the annual growth in outstanding lending was 1.5 per cent. The smoothed interest rate spread of forint corporate loans rose by 0.2 percentage points to 2.2 percentage points in April.

Chart 16: Net borrowing by non-financial corporations

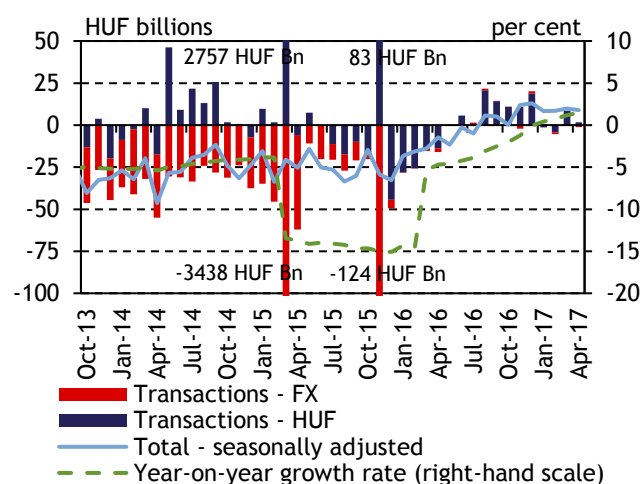


Source: MNB

In April, the outstanding corporate loans of credit institutions rose by HUF 116 billion in total due to transactions, which is equivalent to an increase of HUF 131 billion on a seasonally adjusted basis (Chart 16). The increase was fully attributable to the increase in the stock of foreign currency loans, forint loans remained unchanged. The gross amount of total new loans in April was up 30 per cent in annual terms. Excluding money market transactions, the volume of new loans amounted to HUF 191 billion during the month. **The stock of corporate loans increased at a faster rate, by 6.5 per cent in annual terms in April 2017 due to transactions.**

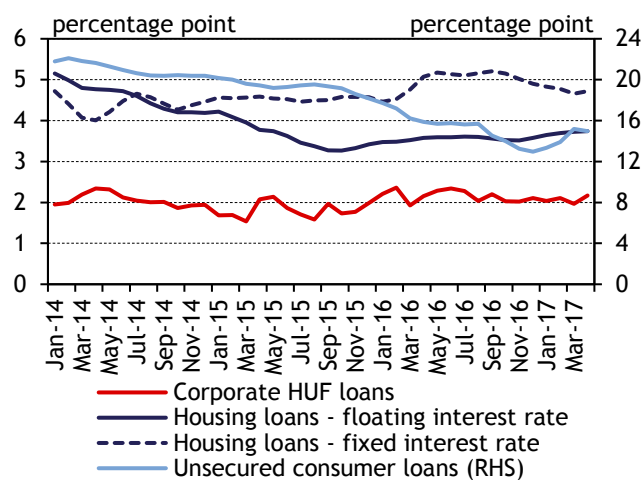
The outstanding loans of the credit institutions to households rose by HUF 1 billion in total as the combined balance of disbursements and repayments, thus at the end of April the annual growth in outstanding lending was 1.5 per cent (Chart 17). The value of new contracts concluded during the month, excluding the self-employed sector, was HUF 95 billion, thus in annual terms it registered a growth of 45 per cent. As regards the individual sub-segments, the volume of new housing loans, personal loans and car purchase loans rose by 38, 51 and 36 per cent, respectively.

Chart 17: Net borrowing by households



Source: MNB

Chart 18: Development of corporate and household credit spreads



Note: Three-month smoothed spreads on the APR. In the case of corporate forint loans the three-month BUBOR. In the case of variable-rate or for up to one year fixed-rate housing loans the three-month BUBOR, while in the case of over the year fixed-rate housing loans the corresponding spread over the IRS. Source: MNB

The smoothed interest rate spread of forint corporate loans rose by 0.2 percentage points to 2.2 percentage points in April (Chart 18). However, small-amount market loan spreads – typically taken by SMEs – exceed the average of the other Visegrád countries by 0.9 percentage point. The average interest rate spread on housing loans to households calculated using the annual percentage rate stands at 4.6 percentage points, which can be considered high in international comparison. After a fall of 24 basis points, the spread on unsecured consumer loans to households was 14.96 percentage point in April. Typically, banks justify the increase by becoming more open to riskier clients. The problem of high spreads is affects primarily the market of long-term fixed-rate transactions.