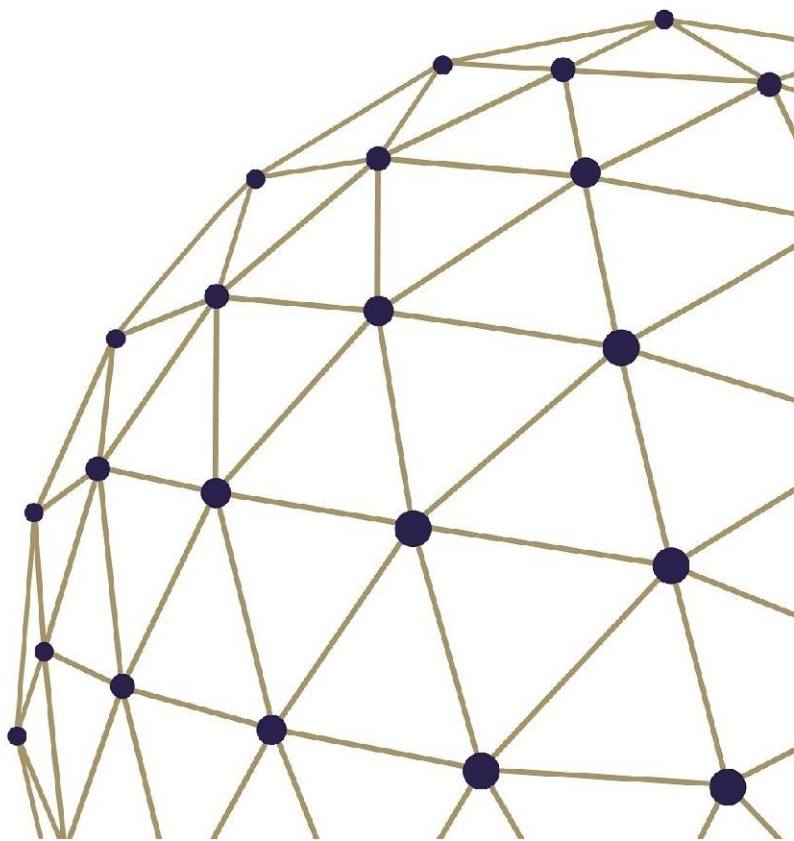




# Macroeconomic and financial market developments

April 2017

Background material  
to the abridged minutes of the  
Monetary Council meeting  
of 25 April 2017



Time of publication: 2 p.m. on 10 May 2017

*The background material ‘Macroeconomic and financial market developments’ is based on information available until 19 April 2017.*

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

The abridged minutes and 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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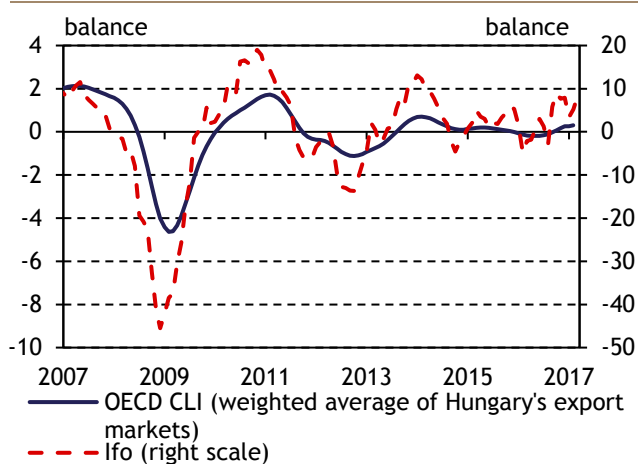
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## 1. MACROECONOMIC DEVELOPMENTS

## 1.1. Global macroeconomic environment

GDP figures for the fourth quarter showed a positive picture overall. The German economy, Hungary's most important trading partner, expanded, and growth in the US also continued. The medium-term view on the US and European economic activity has improved in recent months. Out of the main emerging countries, the Chinese economy expanded by 6.9 per cent in annual terms in the first quarter of 2017, exceeding the analysts' expectations slightly.

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



Source: OECD, Ifo

Chart 2: Brent crude oil world market prices



Source: Bloomberg

**GDP figures for the fourth quarter showed a positive picture overall. The medium-term view on the US and European economic activity has improved in recent months.** Based on the monthly production indicators, the growth of the euro area decelerated at the beginning of this year, while the Purchasing Manager Index, reflecting the short-term economic outlooks, continued to rise. **Out of the main emerging countries, the Chinese economy expanded by 6.9 per cent in annual terms in the first quarter of 2017, exceeding the analysts' expectations slightly.**

**According to market expectations, the growth rate of the euro area may be around 1.6 per cent throughout 2017.**

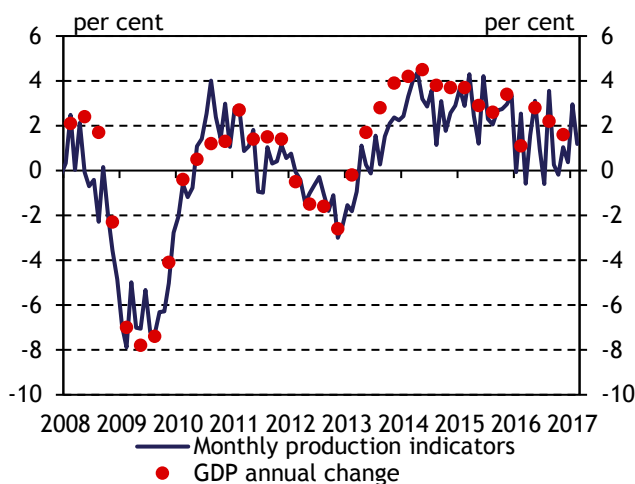
The exit of the United Kingdom from the EU carries significant medium and long-term risks. The growth of the German economy, Hungary's most important export partner, continued in the fourth quarter, supported by buoyant domestic demand through the expansion of government consumption and a sustained increase in household consumption. Besides, gross capital formation also increased significantly. German industrial production rose in annual terms in February, and the seasonally adjusted level of German new industrial orders also increased. The Ifo index, capturing the outlooks of the German industry, rose in March, reaching its outstanding level recorded at the end of last year (Chart 1).

**Inflation rates in the world's major economies rose in February, while underlying processes continued to develop moderately.** Oil prices rose close to USD 55 at the beginning of April, which is mainly explained by an OPEC agreement with respect to a new, proposed production cut (Chart 2). World market prices of industrial commodities and unprocessed food fell slightly.

## 1.2. Domestic real economy developments

According to the data release by the HCSO, Hungarian GDP increased by 2.0 per cent in 2016. Based on the available monthly production indicators, GDP-growth may accelerate in the first quarter of 2017. In February 2017, the volume of both industrial and construction output increased significantly, while retail sales expanded at a moderate pace. In February, employment in the national economy rose by 3.1 per cent year on year. The unemployment rate stood at 4.4 per cent.

Chart 1: Monthly production indicators and GDP growth



Note: Weighted average of monthly production indicators (industrial output, construction output and retail sales). The weights are derived from regression explaining GDP growth.

Source: MNB calculations based on HCSO data

### 1.2.1. Economic growth

Based on the detailed release by the HCSO, Hungary's GDP grew at a rate of 1.6 per cent year on year in the fourth quarter of 2016. **Looking ahead, a significant growth in GDP is expected.** According to our expectations, domestic demand will play an increasingly significant role in economic growth. In addition, the domestic growth will be stimulated by the demand increasing impact of the budget, and the effects of inflowing EU-funds on investment.

Based on the available **monthly production indicators, GDP-growth may accelerate in the first quarter of 2017** (Chart 3).

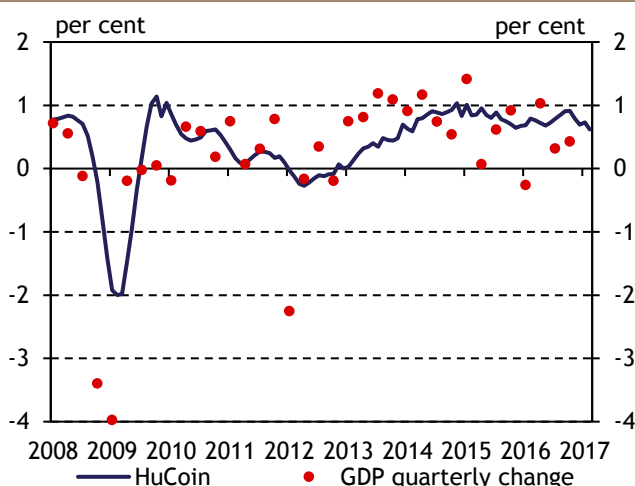
Based on the past months' average of the HuCoin indicator, which reflects the medium-term prospects of the domestic economy, **the underlying trends of economic activity were stable** (Chart 4).

**In February 2017, the volume of industrial output was up 2.7 per cent year on year**, while on a seasonally adjusted basis it rose by 3.4 per cent compared to the previous month. The dynamics was substantially decreased by the working-day effect as well. Disregarding this, industrial production expanded by 7.0 per cent year on year. With a high share in output, engineering industry output rose significantly, which was primarily attributable to **the growth in vehicle industry production**. The output of the food and chemical industries declined compared to the previous month. **On the whole, forward-looking indicators reflect a mixed picture with regard to the outlooks of the domestic industry.**

Based on preliminary data, **the value of goods exports and imports increased by 5.4 per cent and 7.1 per cent, respectively, year on year in euro terms in February 2017**, thus the trade surplus was down by EUR 57 million. In January 2017, terms of trade deteriorated again as a result of the gradually increasing commodity prices.

In February 2017, **the volume of construction output was up 15.2 per cent year on year**, while it decreased by 0.5 per cent compared to the previous month. Production of the two main construction groups developed in a similar manner in February: the construction of buildings and other construction increased by 13.5 per cent and 19.7 per

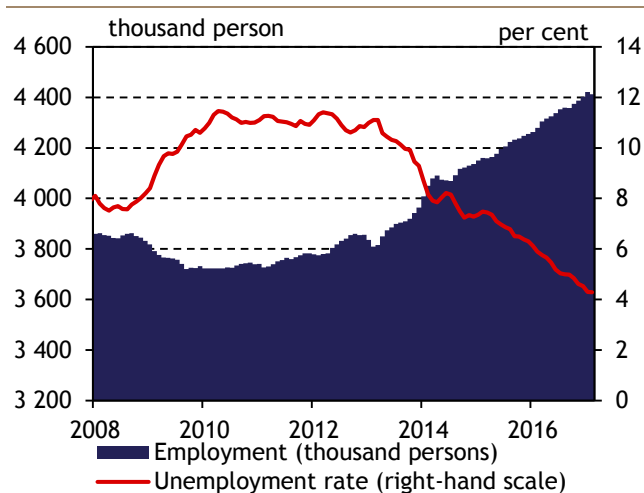
Chart 4: Evolution of the HuCoin indicator



Note: The historic values of the HuCoin indicator may have been changed by revisions to GDP data.

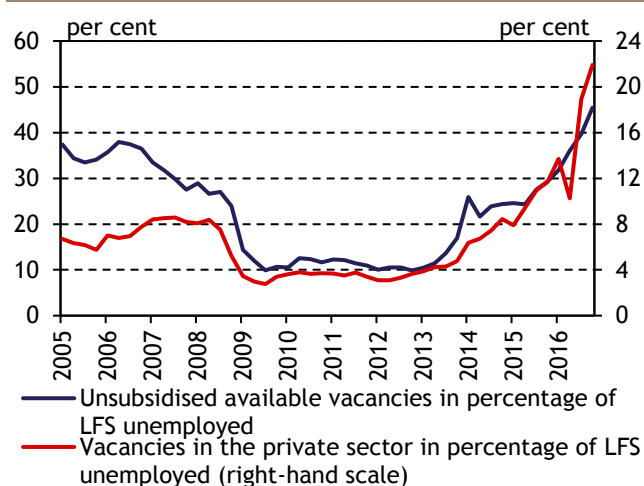
Source: MNB calculations based on HCSO data

**Chart 5: Number of persons employed and the unemployment rate**



Source: HCSO

**Chart 6: Indicators of labour market tightness**



Source: National Employment Service, HCSO

cent, respectively. The volume of new contracts increased by 43.5 per cent, while the month-end volume of construction companies' contract portfolio was up 117.2 per cent year on year.

According to the preliminary raw data, **the volume of retail sales was up 1.0 per cent** in February. Based on the data adjusted for calendar day effect, it **rose** by 1.4 per cent **year on year**, and decreased by 0.3 per cent compared to the previous month. The deceleration of growth is partly attributable to the significantly high base last February. A more significant upward drift was observable in fuel trade and non-food retail trade.

#### 1.2.2. Employment

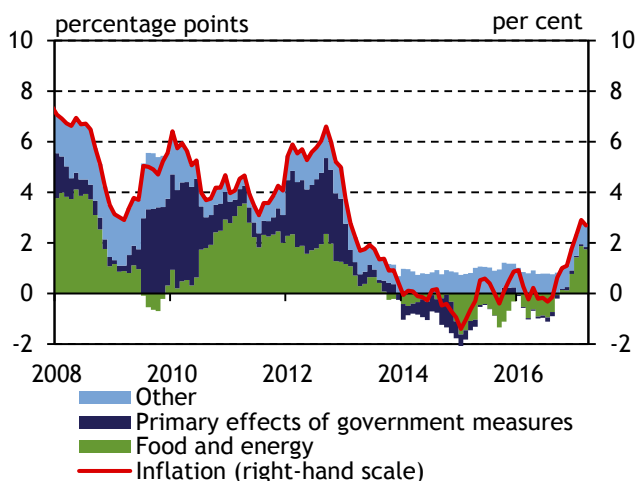
According to Labour Force Survey data, **the number of employees in the national economy increased by 3.1 per cent year on year between December 2016 and February 2017**. Labour force participation and employment (both with and without public workers) slightly declined in the period, while the unemployment rate was at 4.4 per cent (Chart 5).

According to the data released by the National Employment Service (NES), both the number of non-subsidised vacancies indicating corporate labour demand, and the end-of-quarter number of vacant non-subsidised jobs, showing the matching of structure of labour demand and supply, reached a historical high in the first quarter of 2017. Based on the indicators calculated from various statistics, the tightness of labour market continues to be historically high (Chart 6).

### 1.3. Inflation and wages

In March 2017, year-on-year inflation was 2.7 per cent, while both core inflation and core inflation excluding indirect taxes stood at 1.9 per cent. Underlying inflation indicators essentially remained unchanged compared to the previous month. In February, gross average wage in the private sector rose by 9.4 per cent year on year, which was mostly attributable to the administrative pay increases affecting the minimum wage and the minimum guaranteed wage.

Chart 7: Decomposition of inflation



Source: MNB calculations based on HCSO data

#### 1.3.1. Wage setting

In February, gross average wage and regular wages in the private sector rose by 9.4 per cent and 10 per cent year on year, respectively. In the private sector, the dynamics of both the gross average wage and regular wages accelerated relative to the previous month. On a monthly basis, regular wages decreased more moderately than usual seasonality in February would suggest, which corresponded to the process experienced during the minimum wage raise in 2012. Bonus payments in February also fell short of those recorded in previous years.

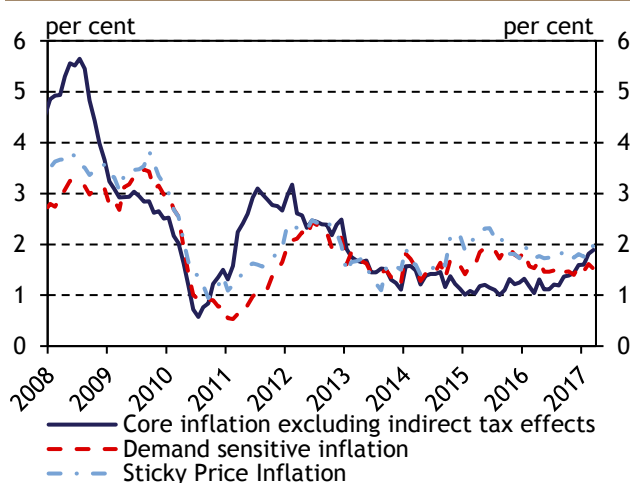
#### 1.3.2. Inflation developments

In March 2017, year-on-year inflation was 2.7 per cent, while core inflation and core inflation excluding indirect taxes both stood at 1.9 per cent (Chart 7). Relative to the previous month, inflation fell by 0.2 percentage point, while core inflation rose by 0.1 percentage point. Inflation dropped primarily as a result of the decrease in the fuel price index, which is partly attributable to base effects. With the incoming March data, quarterly inflation was 2.6 per cent, while core inflation stood at 1.8 per cent in the first quarter of this year.

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, the moderate commodity prices also contributed to this. In February 2017, agricultural producer prices fell by 2.0 per cent in annual terms, while domestic sales prices in the consumer goods sectors increased.

Considering the incoming March data, both the inflation and the core inflation fell short of the expectations in our Inflation Report published in March. The difference was attributable to the volatile price dynamics of seasonal foods, as well as the decrease in price of tobacco products despite the raise of their excise duty. According to our current forecast the inflation will continue to fall in the coming months. Starting from the first half of 2018, inflation will sustainably reach the 3 per cent inflation target.

Chart 8: Measures of underlying inflation indicators

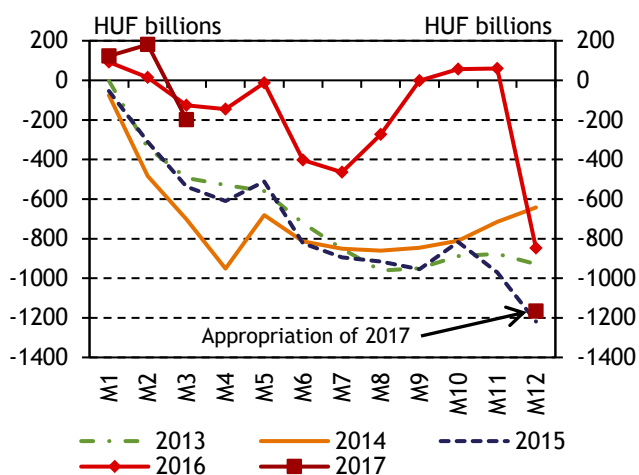


Source: MNB calculations based on HCSO data

#### 1.4. Fiscal developments

In March 2017, the central sub-system of the general government closed with a deficit of HUF 380 billion, thus the cumulative balance turned from a surplus so far into a deficit of nearly HUF 200 billion in the current year. Although the amount of the monthly deficit is significant relative to the data from the past years, overall, the cumulative balance was similar to that of last year. The high deficit in March was primarily caused by a HUF-200-billion increase in VAT refunds due to changes in legislation.

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



Source: Budget Act of 2017, Hungarian State Treasury.

**In March 2017, the central sub-system of the general government closed with a deficit of HUF 380 billion, thus the cumulative balance turned from a surplus so far into a deficit of nearly HUF 200 billion in the current year.** The amount of the monthly deficit is significant relative to the data from the past years; however, the cumulative balance was similar to that of last year, overall (Chart 9). The high deficit in March was primarily caused by a HUF-200-billion increase in VAT refunds due to changes in legislation.

**The revenues of the central sub-system** in March 2017 were down by roughly HUF 100 billion year on year. The decrease was mainly attributable to the changes in the rules of VAT refunds, and as a result, the deadline of refunds changed from 45 days to 75 days for reliable tax payers in 2017. Thus, nearly two months of VAT refund was due in March.

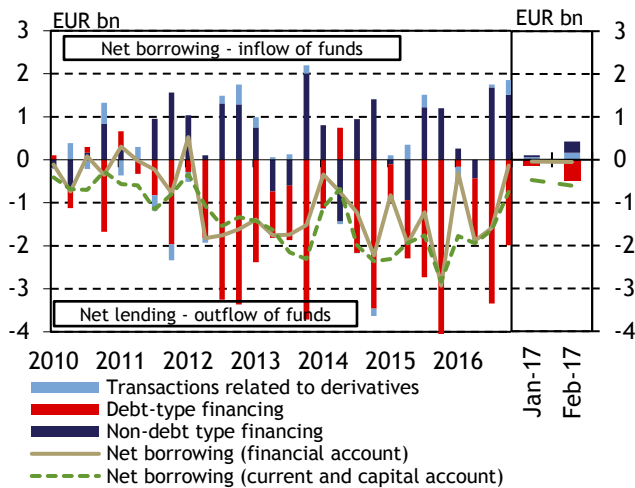
**The expenditures of the central government** in March 2017 were up by HUF 136 billion year on year. Especially expenditures related to EU subsidies rose. The growth was somewhat offset by a decrease in the expenditures of government entities.



### 1.5. External balance developments

The economy's net lending reached a high level in February again as seen in the previous month. Based on the financing side developments a slight outflow of funds materialized in February.

**Chart 10: Structure of external financing (unadjusted transactions)**



Source: MNB

**Similarly to the previous month, the economy's net lending reached a high level in February again** (Chart 10).

The high surplus in the trade balance was supported by the exports of goods rising in parallel with the growth in industrial production, which was offset by a faster import expansion in annual terms. The terms of trade - in the context of the rise in fuel prices - already reduced the trade surplus at the beginning of the year.

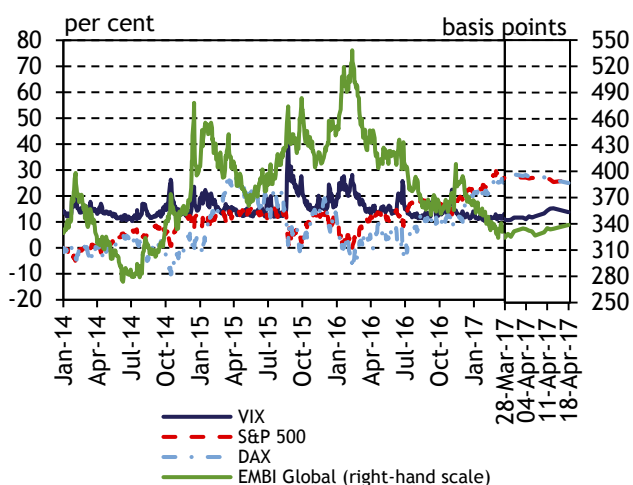
**Based on the financing side developments there was an outflow of funds in February.** The outflow of debt liabilities of nearly EUR 480 million was mostly offset by the inflow of non-debt type liabilities in parallel with foreign direct investments exceeding EUR 300 million. The significant inflow of foreign direct investment was primarily supported by the rise in reinvested earnings. The significant outflow of the government's external liabilities played a major role in the decline in the economy's net external debt. The net external debt of the consolidated general government including the MNB declined by EUR 900 million in conjunction with a considerable decrease in non-residents' government securities holdings. However, due to the decline in external assets the banking sector's net external debt increased by EUR 400 million, which restrained the fall in the economy's net external debt.

2. FINANCIAL MARKETS

2.1. International financial markets

In the second half of the period since the previous interest rate decision a slight deterioration was observable in investor sentiment, which was reflected by an elevated level of risk indicators due to geopolitical uncertainty. Investors mostly focused on the developments of the European elections, the start of the Brexit process, the publication of the minutes taken at Fed’s March meeting, as well as the abandonment of the exchange rate cap in the Czech Republic. In the second half of the period oil prices rose by as much as 10 per cent, after it came to light that Saudi Arabia would support the extension of the agreement with regards to reduction in production according to medianews. Later, however, based on data releases of increasing American production, oil quotes somewhat adjusted.

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

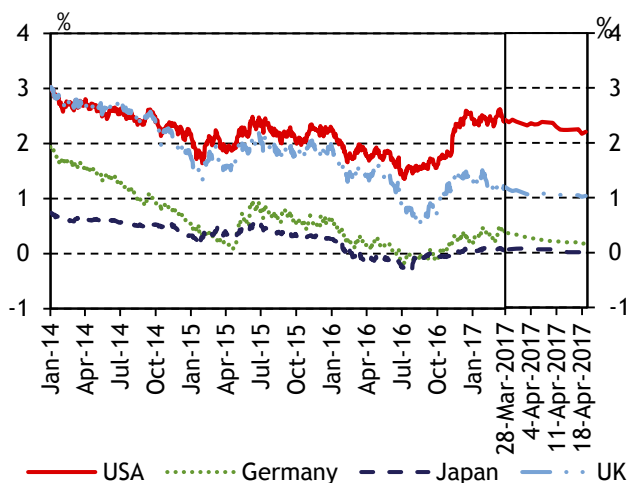


Source: Bloomberg

**Global risk aversion has risen slightly since the Council’s latest policy decision.** Over most of the period risk indicators continued to stagnate at a low level, and then they rose as a result of the increasing geopolitical risks in the second week of April. Typically, developed stock price indices declined compared to the previous month, which may partly be explained by the uncertainty about European politics, and partly by the tensions in North Korea and Syria. The Japanese yen and gold, considered as safe-haven assets, appreciated amidst risk averse sentiment, while developed market bond yields decreased in the period, possibly as a result of risk aversion and the more moderate inflation statistics data following the peaks in February.

**Typically, developed stock market indices decreased.** The European stock exchanges were down by 1.5-3 per cent, while US stock price indices fell by 1 per cent. Only the Japanese stock market showed a more significant change than this, as it declined 4 per cent due to the appreciating yen. The VIX index rose by 3 percentage points compared to the value at the beginning of the period, but it continued to remain at a historically low level. The MSCI composite stock price index of emerging markets decreased by 1.5 per cent reflecting a deterioration in investor sentiment towards risky assets.

Chart 12: Yields on developed market long-term bonds



Source: Bloomberg

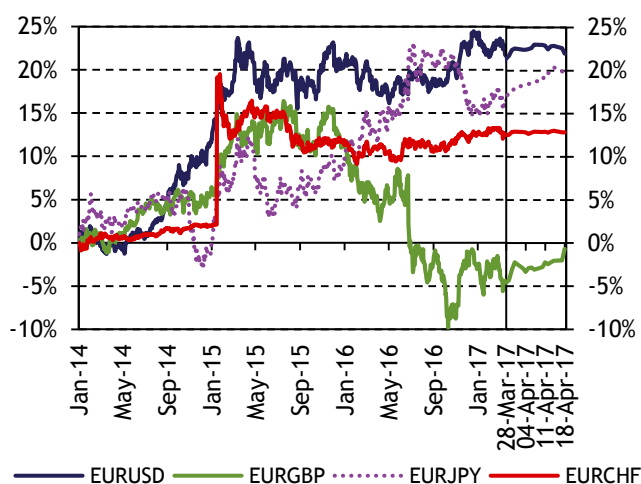
**The rise in the bond market risk indices also reflected a somewhat intensifying investors’ risk aversion.** With the increase of the MOVE index, measuring the volatility of the developed bond markets the emerging bond market EMBI Global spread also rose by 14 basis points (Chart 11).

**On the other hand, developed long-term bond yields were on the decline reflecting their characteristics as a safe-haven asset:** the German, the British and the American ten-year yields decreased roughly by 15-20 basis points, while the Japanese by 5 basis points (Chart 12). The yield decrease in the euro area may have been attributable to the fact that the inflation in the area slowed to 1.5 per cent in March following the rise to 2 per cent in February, which moderated longer-term inflation expectations. Following

the developed ones, the Central and Eastern European emerging market bond yields fell by 5-15 basis points.

**Brent and WTI oil prices rose essentially by 10 per cent in the second half of the period**, after it had been revealed in media news that Saudi Arabia supports the extension of an agreement with regards to reduction in production lasting until June. Saudi Arabia reduced its daily production below 10 million barrels again in March, thus exceeding the reduction quota relating to the country. The delays in production in Libya may also have contributed to the price increase, where the fighting and downtimes for technical reasons disrupted oil production. At the end of the period a smaller correction occurred in oil prices which was primarily attributable to the statistical data on continually increasing American production. Investors will closely monitor statements following the official OPEC meeting at the end of May, and if OPEC members and non-OPEC countries accepting the agreement also vote to extend production cut, it may result in an increase in oil prices in the second half of the year.

Chart 13: Developed market FX exchange rates



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

Source: Reuters

**In the foreign exchange markets the continuous depreciation of the euro against major currencies was observed** (Chart 13), which may be attributable to moderate inflation data and a statement from the ECB reducing market expectations. Theresa May supplied the document on the exit of the United Kingdom to the European Union at the end of March thus launching the Brexit process officially. Following a temporary moderate depreciation, the British pound appreciated against the euro in the remaining portion of the period. The sudden appreciation at the end of the period was caused by the announcement of the British Prime Minister with regards to early elections, thus the British pound appreciated by as much as 3.5 per cent in the period. Of the emerging market currencies, the 9 per cent depreciation of the South-African rand against the US dollar is to be highlighted, which is explained by the domestic political crisis and the fact that the country was downgraded to non-investment grade by two rating agencies, although the rand adjusted a part of the depreciation by mid-April. The Turkish lira reacted with relatively moderate volatility to the result of the referendum in mid-April, which is explained by the fact that according to analysts the result will mitigate the uncertainty in domestic politics over the short term, but it carries risks with respect to the economic and political situation over the medium and long term.

**The monetary policy statements of leading central banks remained in focus. As for the minutes taken at Fed's March meeting** the market was surprised to find that the

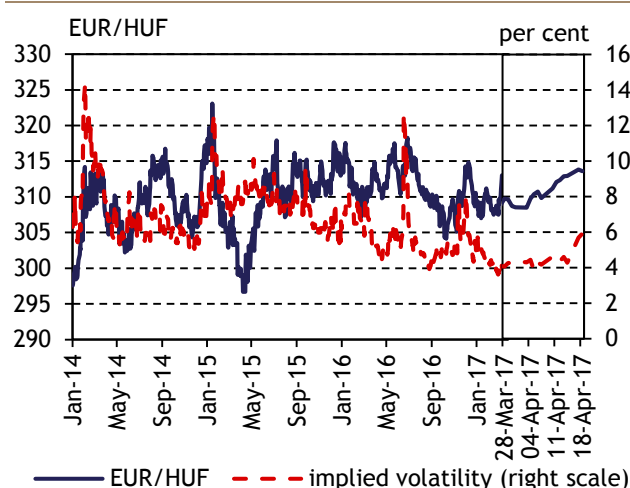
document also touched upon **the gradual reduction of reinvestments** with respect to the reduction of the central bank balance sheet. The FOMC is expected to consult with regards to the final date and the strategy of the reduction in the remaining part of the year.

**In the emerging European region, the Czech central bank's decision at the beginning of April was in the focus of the market's attention:** in line with expectations the central bank abandoned the exchange rate cap in effect since 2013. In the days following the decision the Czech koruna appreciated by nearly 2 per cent, then slightly adjusted, but overall, although its time was unknown, the announcement did not cause significant market turbulence.

## 2.2. Developments in domestic money market indicators

The forint depreciated relative to the previous period, while regional currencies slightly appreciated. The medium section of the government yield curve largely, while its short-term and long-term sections moved slightly downwards, which may be attributable to the new three-month deposit limit announced at the MNB's previous interest rate decision, as well as the extension of the toolset with the six- and twelve-month swaps. The decrease in yields occurred despite the decline in government securities holdings by non-residents. Despite the slightly deteriorating international risk-taking sentiment the Hungarian CDS spread closed with 116 basis points, which was slightly below the level at the previous interest rate decision.

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

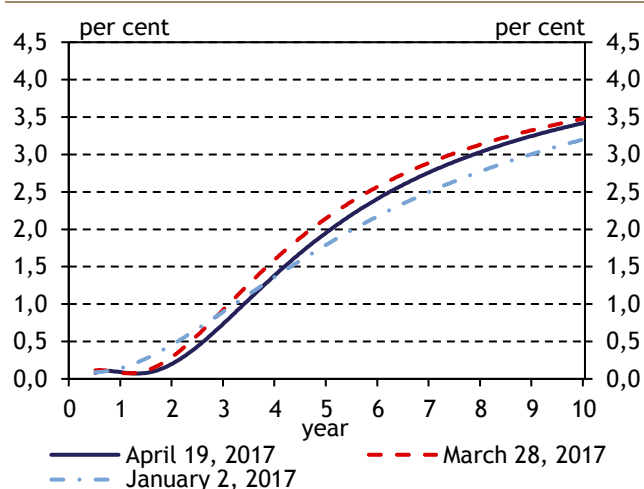


Source: Bloomberg

**The forint depreciated against the euro, while the other regional currencies slightly appreciated.** Following the publication of the press release of the previous interest rate decision the movement of the forint was temporarily detached from that of the zloty, and it depreciated against the Polish legal tender; however, the currencies moved closely together again in the middle of the period. Then the domestic currency depreciated again, while regional currencies appreciated in the second half of the period. Overall, the forint depreciated by 1 per cent in the period, from 309 to 313, while the regional currencies appreciated by 0.3-1.0 per cent (Chart 14). The strongest performance was shown by the Czech koruna resulting from the abandonment of the exchange rate cap. The domestic inflation in March was 2.7 per cent, which was below analysts' expectations (expected: 3.1 per cent), but the exchange rate of the forint showed no substantial reaction around the time of the data release.

**The government securities yield curve flattened out:** at its short-term, within 1.5-year, section there was a minimal fall in yields, while a significant decrease of 10-20 basis points was observable in the middle of the yield curve (Chart 15).

**Chart 15: Shifts in the spot government yield curve**



Source: MNB, Reuters

**During the period, the government bond auctions were typically characterised by strong demand.** In the case of the auctions of three-month Treasury bills a moderate demand was observable and the average yields continued to remain at the historically low level of 0.03-0.04 per cent in the period. However, with regards to longer-term government securities the demand was strong, with a typical coverage of 3. In the case of these maturities the Government Debt Management Agency applied a raise for the accepted volumes several times, and the average yields decreased by 30-50 basis points relative to the auctions in the previous period.

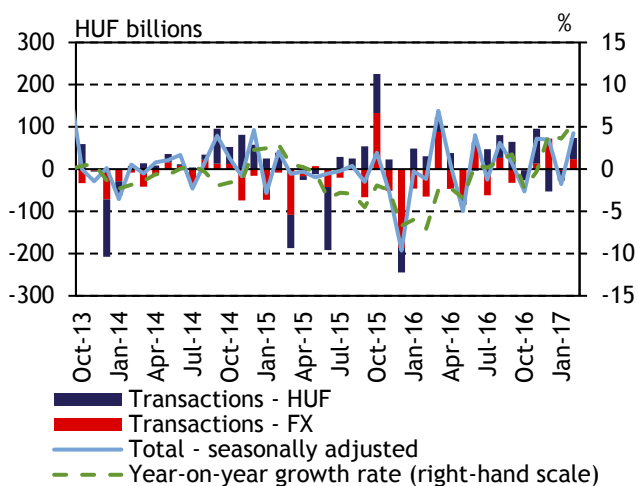
**Non-residents' holdings of government securities have decreased by HUF 84 billion during the period.** As a result, their portfolio decreased to around HUF 3,270 billion, while their share in forint government securities was down to

nearly 22.8 per cent. The Hungarian 5-year CDS spread decreased from 118 basis points to 116 basis points following the previous interest rate decision, and has fluctuated around that level ever since.

## 3. TRENDS IN LENDING

In February, the outstanding loans of credit institutions to the corporate sector rose by HUF 74 billion in total due to transactions, which is equivalent to an increase of HUF 85 billion on a seasonally adjusted basis. The contract period of the third, phase-out stage of the Funding for Growth Scheme (FGS) ended on 31 March. The Scheme made a significant contribution of 2 per cent to the economic growth between 2013 and 2016, and expanded employment with 20,000 persons. The stock of lending to households as a percentage of GDP can be considered low in a regional comparison, and no substantial change is expected in the indicator in the near future.

Chart 16: Net borrowing by non-financial corporations



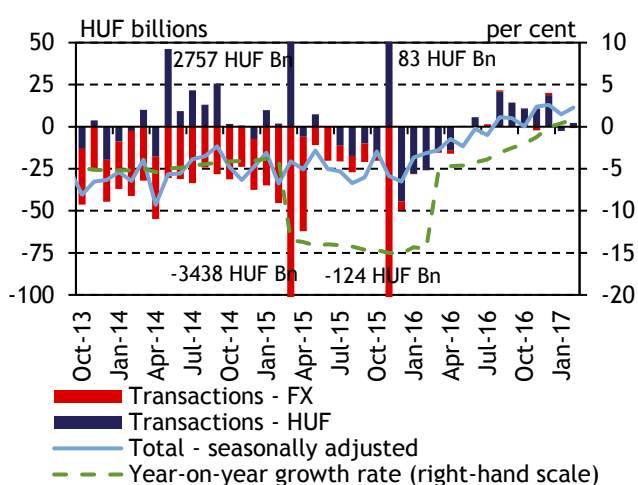
Source: MNB

**In February, the outstanding corporate loans of credit institutions rose by HUF 74 billion in total due to transactions, which is equivalent to an increase of HUF 85 billion on a seasonally adjusted basis** (Chart 16). In terms of currency denomination, forint loans rose by HUF 50 billion, while foreign currency loans increased by HUF 24 billion during the month. The volume of new loans was HUF 127 billion, within this the transactions of market forint loans were HUF 61 billion during the month. In February 2017, outstanding borrowing by corporations rose by 5.5 per cent in annual terms as a result of transactions, which is the highest value in the post-crisis period.

**The contract period of the third, phase-out stage of the Funding for Growth Scheme (FGS) ended on 31 March.**

Banks have provided funding in a total of HUF 685 billion to domestic micro, small and medium enterprises since the beginning of 2016, so 98 per cent of the overall available amount of HUF 700 billion was utilised. Thus, the FGS successfully broke the decreasing trend in SME loans experienced earlier pushing it to a growth path. The turnaround in lending was realised and the FGS made a significant contribution of 2 percentage points to economic growth between 2013 and 2016 expanding employment with as many as 20,000 persons.

Chart 17: Net borrowing by households

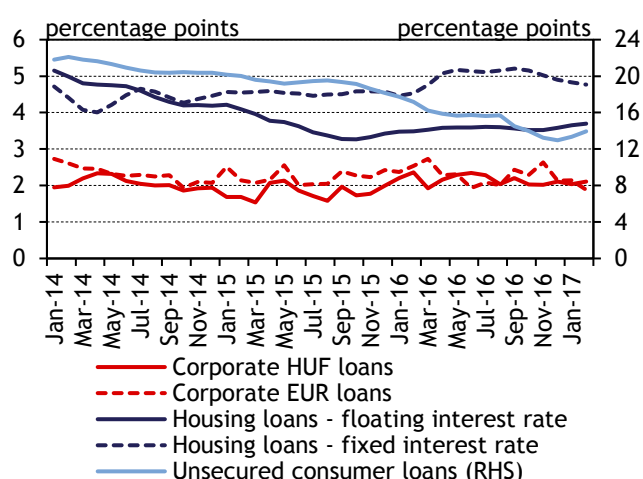


Source: MNB

**In February, outstanding loans to households including the self-employed sector, rose by HUF 1 billion as a result of loan transactions** (Chart 17). In the period under review, excluding loans from the Funding for Growth Scheme to the self-employed sector, households concluded new loan contracts in a total value of HUF 72 billion, thus the average annual growth in new business volume was 50 per cent; within that the volume of new housing loans rose by 44 per cent. However, the stock of lending to households as a percentage of GDP can be considered low in a regional comparison, and no substantial change is expected in the indicator in the near future. The trend reversal occurs in the second half of 2016 and in the first half of 2017. The convergence to the regional and pre-crisis levels may be started after this.

The **smoothed interest rate spreads of corporate loans** were 2.1 percentage points in February in terms of forint

**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 euro loans the three-month spread on the monthly EURIBOR. 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

loans, which is 0.2 percentage points above the regional average. However, small-amount market loan spreads - typically taken by SMEs - exceed the regional average by 1 percentage point (Chart 18). The average interest rate spread on **housing loans to households** calculated using the annual percentage rate stand at 5.1 percentage points compared to the 3-month interbank interest rate, meaning that it is roughly twice the spread level in both the Visegrád countries and the euro area and so, it can be considered high in international comparison. It means a 0.1-percentage-point increase relative to the value in the previous month. The spread on unsecured consumer loans to households rose by 0.6 percentage point in February, and is at a value of 13.9 per cent. Typically, banks justify the increase by becoming more open to riskier clients. The problem of high spreads is focused mainly on the market of over a year fixed-rate transactions. While the spread over the reference rate for floating rate loans approximates the value of the countries in the region, this is not the case for the fixed-rate loans over the longer term. Basing the calculation on transaction interest rates the spread does not exceed 350 basis points in nearly three-quarters of floating-rate loan agreements considering the Hungarian data; while in the case of fixed-rate loans the spreads over cost of funds corresponding to the fixation period is below 350 basis points in less than one-third of the contracts.