MACROECONOMIC AND FINANCIAL MARKET DEVELOPMENTS

BACKGROUND MATERIAL

TO THE ABRIDGED MINUTES OF THE

MONETARY COUNCIL MEETING

OF 27 MARCH 2018

MARCH

2018

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The background material 'Macroeconomic and financial market developments' is based on information available until 22 March 2018.

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

The abridged minutes and the background materials to the minutes are available on the MNB's website at:
http://www.mnb.hu/en/monetary-policy/the-monetary-council/minutes

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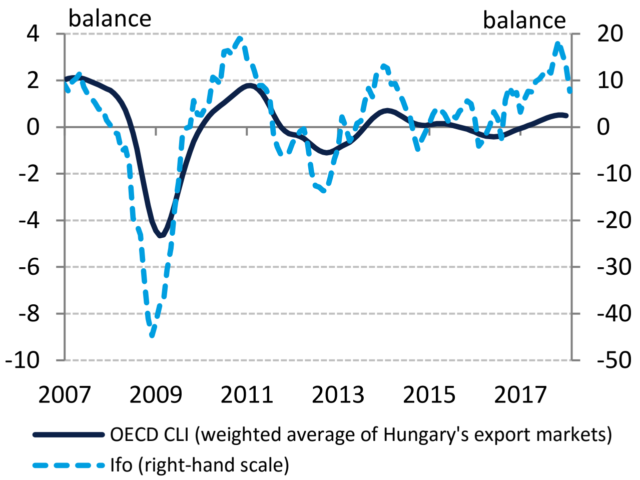
1. Macroeconomic developments

1.1. Global macroeconomic environment

In the fourth quarter of 2017 international economic activity developed favourably. In addition to the euro area, the economy of the United States also continued to expand in the past quarter. The output of Germany, Hungary's most important trading partner, grew faster than market expectations. The dynamic economic growth of the Eastern and Central European region, appearing to be the growth centre of the Europe, was primarily supported by domestic demand in the past period, also evidenced by the retail trade figures from the beginning of the year.

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



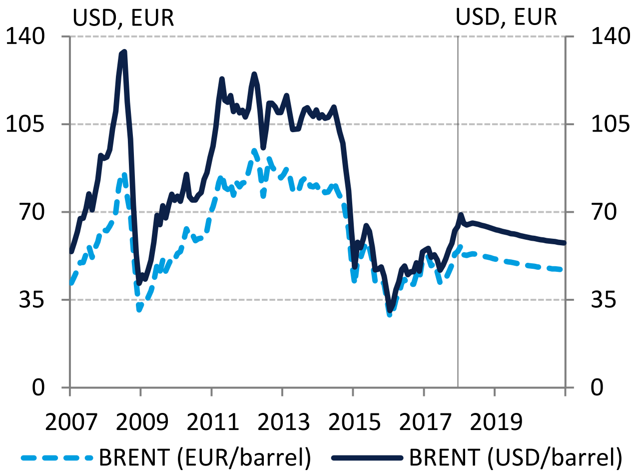
Source: OECD, Ifo

International economic activity developed positively in the fourth quarter of 2017 as well. In addition to the continued growth in the euro area, the US economy expanded in the past quarter at a rate outstripping the economists' and market expectations. According to the expectations, favourable European economic activity may continue in the coming period as well. **However, the forward-looking indicators show a mixed picture** with regard to the potential developments in global economic activity, as the business sentiment of Hungary's key trading partners moderately worsened in the past months according to the business confidence indices.

Despite the improving financial conditions and strong business confidence seen in the past year, global growth prospects are still surrounded by uncertainty. **The infrastructure investment programme of the Trump administration can be identified as an upside risk.** The approval of the development package may generate higher growth in the developed countries. In our previous forecast the outcome of the German elections represented a risk on growth, **but the successful closing of the German coalition talks has calmed down market participants.** The slowdown of the Chinese economy, and the fact that the country's growth is surrounded by macroprudential risks, may represent downside global risks. The potential spillover effects of the protectionist measures announced by the Trump administration also carry additional risks. **The exit of the United Kingdom from the EU and the uncertainty related to the Brexit talks** still carry negative risk in respect of the European growth rate.

The economy of Germany, Hungary's most important trading partner, grew materially in the fourth quarter. Steadily rising household consumption as a result of the favourable labour market processes, growing investments of the corporate sector and the improving export performance also supported the growth of the German economy. In the past period, the growth of German industrial production continued, contributed to by a wide range of subsectors. However, at the beginning of this year, the business

Chart 2: Brent crude oil world market prices



Source: Bloomberg

sentiment of Hungary's key trading partner shows a moderate deterioration, as the fall in the Ifo index, capturing the outlooks of the German industry, continued (Chart 1).

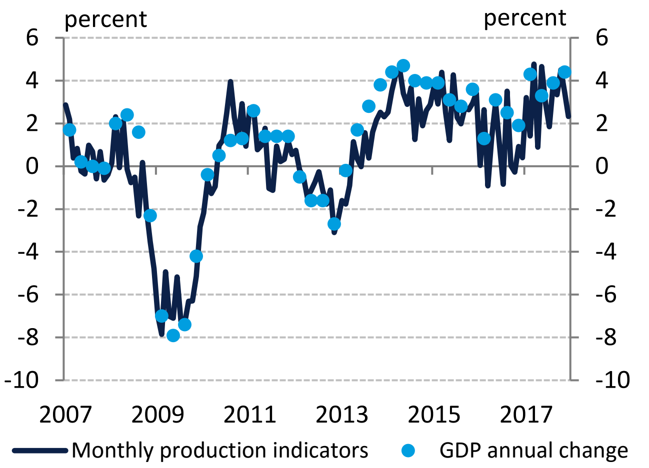
Buoyant growth in the countries of the region is still primarily supported by the dynamically increasing domestic demand. In the case of the countries of the region, the continued increase in consumption is also evidenced by the retail sales volume registered in the region, which rose by 6 percent at the beginning of the year. All countries of the region registered a material rise in consumption, supported by the improving labour market conditions, increasing real income resulting from the low inflation environment and high wage dynamics, and favourable consumer confidence. In addition, the growth in investments also continued.

No substantial change took place in the global inflationary environment; underlying inflation in the euro area continues to develop moderately. In February, euro area inflation decreased further, primarily reflecting the substantial fall in the price index of unprocessed food. The world market price of oil – under significant volatility – was around USD 65–70 in February and March (Chart 2). The rise in the volatility of world market prices of oil was primarily attributable to the statement made by the Saudi oil minister with regard to the production cut by OPEC and to the growth in US production. The price of industrial commodities essentially remained unchanged, while the world market price of unprocessed food rose in February.

1.2. Domestic real economy developments

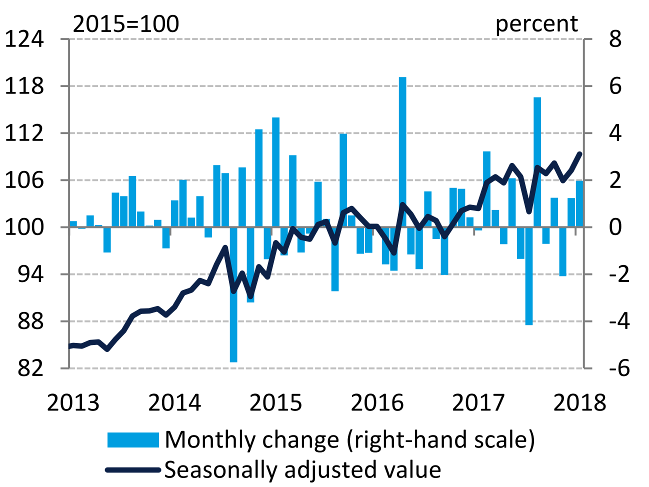
According to the HCSO's data release, in 2017 Q4 Hungary's GDP grew by 4.4 percent year on year. The buoyant economic growth is also evidenced by the available monthly production indicators. In the period of November 2017 – January 2018 the unemployment rate stood at 3.8 percent. The tightness indicators calculated from various statistics still indicate historically tight labour market environment.

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

Chart 4: Developments in industrial production



Source: MNB calculation based on HCSO data

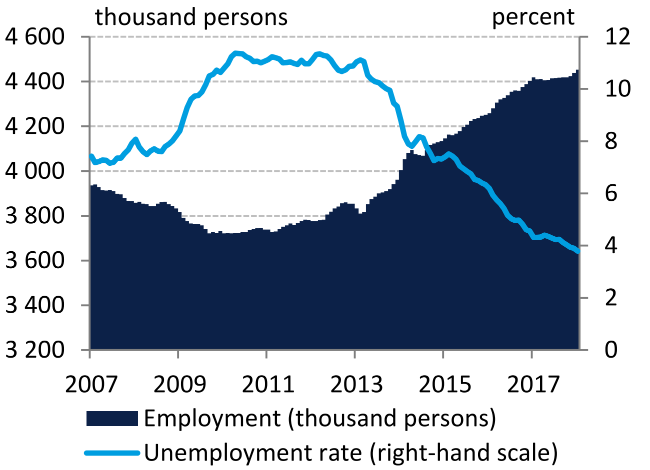
1.2.1. Economic growth

According to the HCSO's data release, in the fourth quarter of 2017 Hungary's gross domestic product grew at a rate of 4.4 percent year on year, thus the economic growth recorded for the whole year amounted to 4.0 percent. Based on the seasonally adjusted data, **Hungary's GDP rose by 1.3 percent quarter on quarter.** On the expenditure side, consumption was the primary contributor to economic growth, in addition to investments, while on the output side growth was supported by construction and the performance of the industry, in addition to services (Chart 3).

In January 2018, industrial output was up 6.9 percent year on year, while production rose by 2.0 percent compared to the previous month (Chart 4). **On the whole, the performance of the manufacturing subsectors** rose year on year. The output of vehicle manufacturing, representing a considerable weight, continued to rise, supported primarily by the manufacture of vehicle parts. The substantial growth in chemical industry was supported in January by drug, rubber and plastic manufacturing. In addition, the performance of the metal industry and other engineering subsectors also developed positively. Industrial sales – in line with the production – rose compared to the previous month. **On the whole, forward-looking indicators reflect a mixed picture with regard to the outlooks of the Hungarian industry.** According to the various business confidence indicators, the business sentiment of Hungary's key trading partners moderately worsened, while of the indicators related to the Hungarian industry, the ESI continued to rise and the manufacturing BMI also developed positively in the past period.

In line with the developments in industrial production, expressed in euro terms, **according to the preliminary data, the value of exports and imports was up 10.1 and 9.3 percent, respectively,** year on year in January 2018, thus trade surplus rose by EUR 113 million. In December 2017 the terms of trade continued to improve year on year. As regards the developments in the terms of trade, the terms of trade deteriorating effect of the change in the relative price of mineral fuels and other processed goods was offset by the relative price change of machinery, transport equipment and food.

Chart 5: Number of persons employed and the unemployment rate



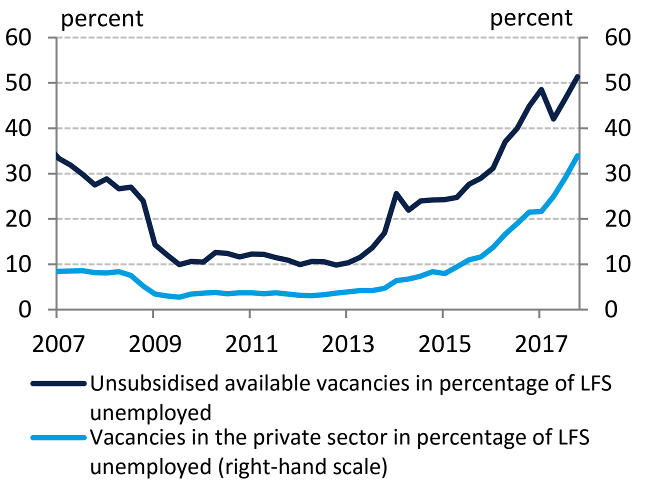
Source: HCSO

In January 2018, the volume of construction output was up 43.2 percent year on year, **while output rose by 6.4 percent compared to the previous month.** The dynamic growth of the sector **was also supported by the manufacturing capacity expansions and the construction of residential buildings, in addition to the projects implemented from EU funds. Forward-looking indicators project positive construction industry performance.** The volume of concluded new contracts increased by 5.3 percent year on year. The contracts concluded for buildings include agreements related to residential buildings, hotel constructions and industrial plants. The month-end volume of construction companies' contract portfolio increased by 108.5 percent year on year.

In January, according to the preliminary data, **retail sales volume was up 7.5 percent year on year**. In the past months turnover increased in a wide range of products. The considerable rise in the turnover of non-food consumer durables continued to be the primary contributor to the sales growth. As regards the CEE region, the growth in turnover decelerated.

1.2.2. Employment

Chart 6: Indicators of labour market tightness



Note: quarterly data

Source: National Employment Service, HCSO

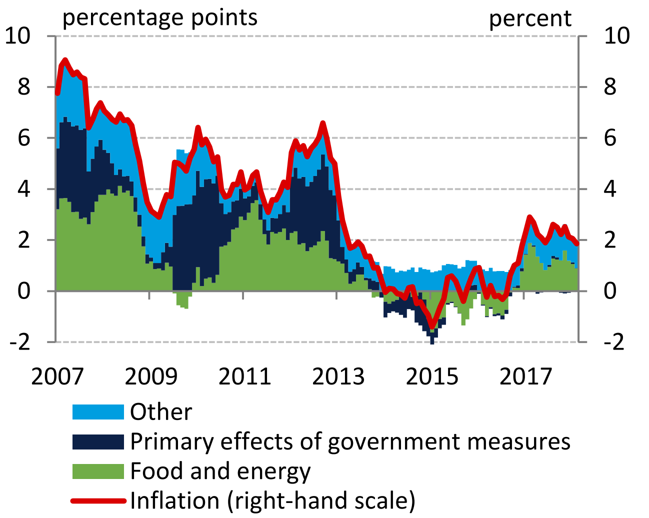
According to the Labour Force Survey data, in the period of **November 2017 – January 2018,** total employment rose under a modest increase in the labour force participation, while unemployment continued to decline. On the whole, **the unemployment rate stood at 3.8 percent** (Chart 5). In the fourth quarter of 2017, private sector employment continued to rise, while within the general government a further fall was recorded in the number of public workers.

In February 2018, according to the data released by the National Employment Service, both the number of non-subsidised vacancies, indicating corporate labour demand, and the non-subsidised vacancies, capturing the match of labour demand and supply, moderately declined quarter on quarter. In the fourth quarter of 2017, based on the HCSO data related to vacancies, corporate labour demand grew both in manufacturing and the market services sector. The tightness indicators calculated from various statistics s**till indicate historically tight labour market environment** (Chart 6).

1.3. Inflation and wages

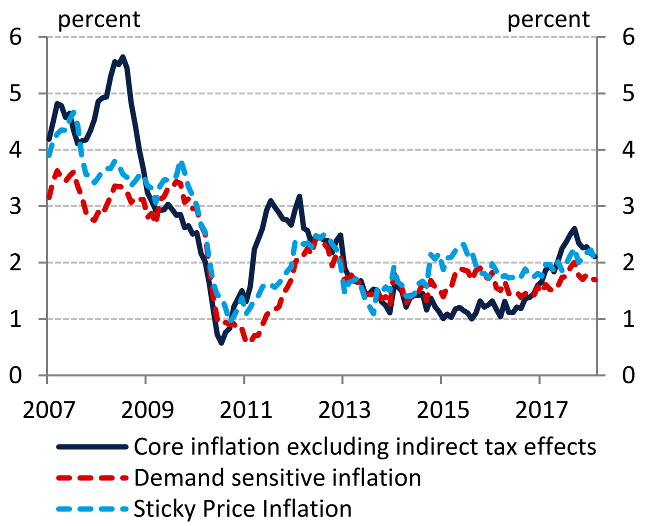
In February 2018, inflation stood at 1.9 percent, core inflation at 2.4 percent and core inflation excluding indirect taxes at 2.1 percent. Underlying inflation indicators were broadly unchanged, at around 2 percent, below the core inflation. In January 2018, gross average wage in the private sector rose by 13.2 percent year on year. The continued vigorous wage dynamics was also supported, in addition to the historically tight labour market environment, by the effect of the administrative wage increases at the beginning of the year, included in the wage agreement.

Chart 7: Decomposition of inflation



Source: MNB calculation based on HCSO data

Chart 8: Measures of underlying inflation indicators



Source: MNB calculation based on HCSO data

1.3.1. Wage setting

In January 2018, gross average wage in the private sector rose by 13.2 percent, while regular average wage **was up 12.8 percent year on year**. The annual growth rate of both the gross and regular average wages remained at a high level, similar to that observed at the end of the previous year. The regular average wage rose on a monthly basis, similarly as in January last year, while the degree of bonus payment was slightly lower. The continued vigorous wage dynamics was also supported, in addition to the **historically tight labour market environment, by the effect of the administrative wage increases at the beginning of the year, included in the wage agreement.**

1.3.2. Inflation developments

In February 2018, year-on-year inflation was 1.9 percent, while core inflation and core inflation excluding indirect taxes stood at 2.4 and 2.1 percent, respectively (Chart 7). Inflation fell by 0.2 percentage point relative to the previous month. The decline in inflation mainly reflected a drop in unprocessed food prices, and the decrease in core inflation was due mainly to the fall in the price index for tradables, as seen in January.

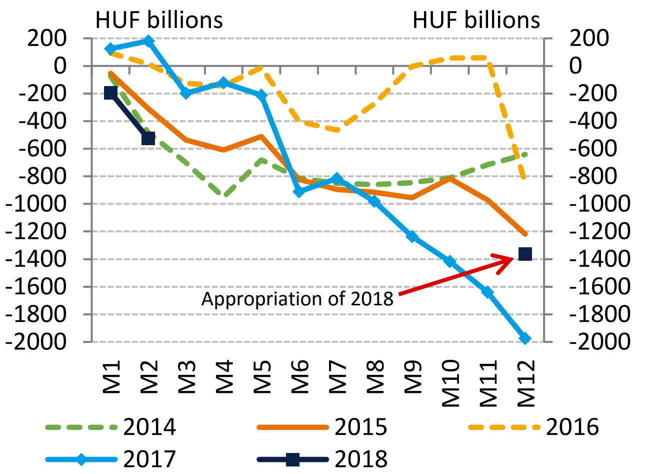
Underlying inflation indicators were broadly unchanged compared to January, still being around 2 percent, below the core inflation (Chart 8). In January 2018, agricultural producer prices rose by 2.1 percent in annual terms, while the domestic sales prices of the consumer goods sectors increased by 2.9 percent.

According to our current forecast, in the short run inflation will rise mainly driven by the base effects related to fuels, but it will remain in the band of 2.0–2.5 per cent. Inflation will reach the 3 per cent level consistent with price stability, in the middle of 2019 in a sustainable manner.

1.4. Fiscal developments

The central sub-sector of the general government closed with a deficit of HUF 334 billion in February 2018, while the cumulative balance showed a deficit of HUF 527 billion, being the highest value registered in the past years.

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



Source: Budget Act of 2018, Hungarian State Treasury

The central sub-sector of the general government closed with a deficit of HUF 334 billion in February 2018, while the cumulative balance showed a deficit of HUF 527 billion, being the highest value registered in the past years (Chart 9). The high deficit was caused, on the one hand, by the rise in VAT refunds resulting from legislative changes, and on the other hand, by the advance payments related to EU transfers and the higher expenditure of the budgetary organisations. Although the first two increase the cash-based deficit, they have no effect on the ESA deficit.

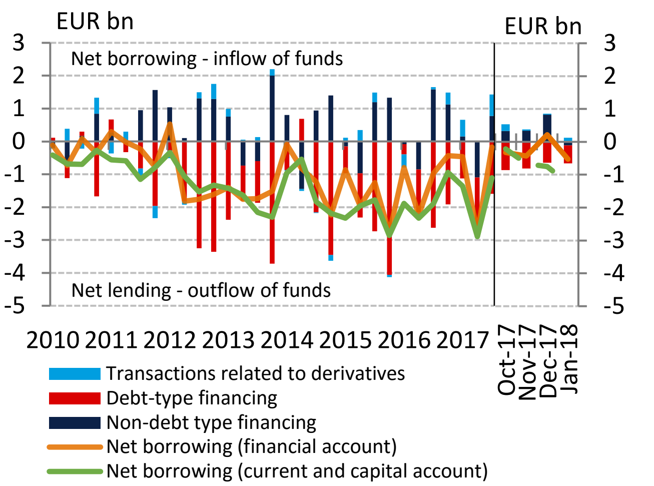
The **revenues of the central sub-sector** in February 2018 fell short of the year-on-year value by HUF 174 billion. The lower level of revenues is attributable to the decline in net VAT incomes resulting for legislative changes and the fall in corporate income tax revenues relative to the high base. All this was somewhat offset by the rise in payments made under the title of personal income tax, as well as by the higher value of the social contribution tax and individual contributions.

The expenditures of the central sub-sector were up by HUF 217 billion year on year. The rise was primarily attributable to the increase in the own expenditures of the budgetary organisations and in the expenditures related to the EU transfers, also contributed to by the growth in costs of curative and preventive care and in the disbursements by local governments.

1.5. External balance developments

In January net lending of the economy rose above EUR 1,260 million, contributed to by the growth in both the current account and the capital account. According to the data of financial account, the outflow of funds amounted to EUR 530 million, which was mostly linked with the decrease in debt liabilities.

Chart 10: Structure of net lending (unadjusted transactions)



Note: Positive values indicate borrowing requirement (inflow of funds), while negative values indicate net lending (outflow of funds).
Source: MNB

In January net lending of the economy rose to a historic high, above EUR 1,260 million, contributed to by the growth in both the current account and the capital account (Chart 10). The rise in net lending, according to the unadjusted figures, was attributable to the increase in the trade balance and the transfer balance, as well as to the usual decrease in the income balance deficit at the beginning of the year. The rise in the goods balance was caused by the growth in exports outstripping that in imports, also reflecting the impact of the pick-up in industrial production.

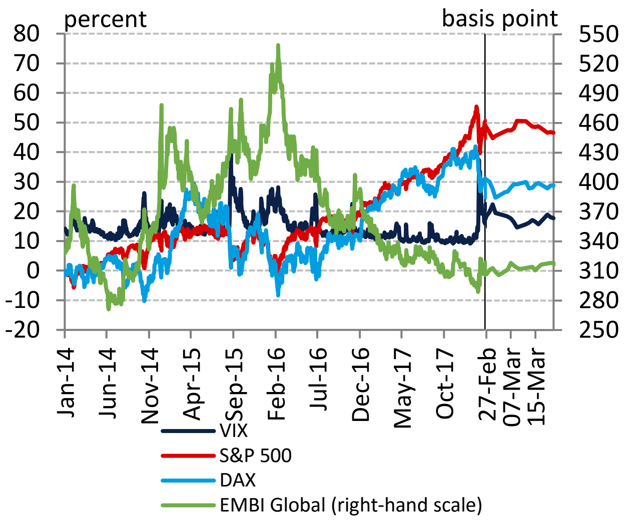
According to the data of the financial account, the outflow of funds amounted to EUR 530 million, which was mostly linked with the decrease in debt liabilities. In January, foreign direct investments also declined moderately, contributed to by the acquisition of a public utility company, formerly owned by non-residents, by the general government. As a result of transactions, net external debt of Hungary declined by EUR 540 million owing to the debt outflow of the general government, which was partially offset by the rise in the net external debt of the banking and corporate sectors. The decrease in the general government's net external debt was also attributable to the decline in the government securities holding of non-residents, the major absorption of EU transfers and the rise in foreign exchange reserves. The growth in the banking sector's net external debt developed under rising external liabilities, while in the case of companies the decline in external assets outstripped that in liabilities.

2. Financial markets

2.1. International financial markets

Global investor sentiment in the period following the previous interest rate decision moderately deteriorated, mostly contributed to by the fears from the strengthening of the protectionist economic policy and the expectations preceding the decisions of major central banks. Developed and emerging market stock exchanges dropped on the whole by about 1-2 percent, and in parallel with this the VIX index, measuring stock exchange volatility – after a decline in the middle of the period – bounced back to 18 percent. Of the developed market government securities yields, the US ones stagnated, while the long-term yields in the euro area declined. Emerging market long-term yields showed a mixed picture, but the 10 basis point rise in the EMBI Global bond spread implied more negative perception of the emerging markets. In the foreign exchange markets the dollar/euro exchange rate continued to fluctuate around 1.23, while the world market price of oil rose by 2 percent by the end of the period.

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



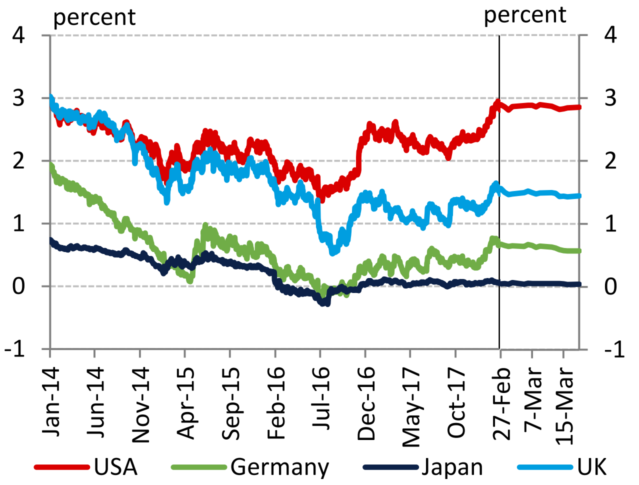
Source: Bloomberg

In the past period, global investor sentiment somewhat deteriorated, albeit there were signs of a temporary adjustment in the middle of the period. Deteriorating sentiment may have been contributed to by the introduction of import tariffs approved by the president of the United States, and the related anxieties concerning a potential global trade war. At the beginning of the period, after the new Federal Reserve Chairman's hearing at the Congress, the VIX index temporarily rose to 22 percent in parallel with the fall of the stock exchange, and then gradually declined to 15 percent as the equity market sentiment slightly improved. However, by the end of the period it once again rose to 18 percent (Chart 11).

Developed and emerging market stock exchange indices moderately decreased in the past one month. Although the decline registered at the beginning of the period was followed by a gradual rise in the equity market indices, in the second half of the period they once again dropped and compared to their start-of-period values both the MSCI developed and emerging market equity indices closed at a 1-2 percent lower level. The deteriorating sentiment may have been attributable to the uncertainty caused by the replacement of officials within the US government, the investors' fears related to the strengthening of the protectionist economic policy and the fall in oil prices generated by rising US oil reserves.

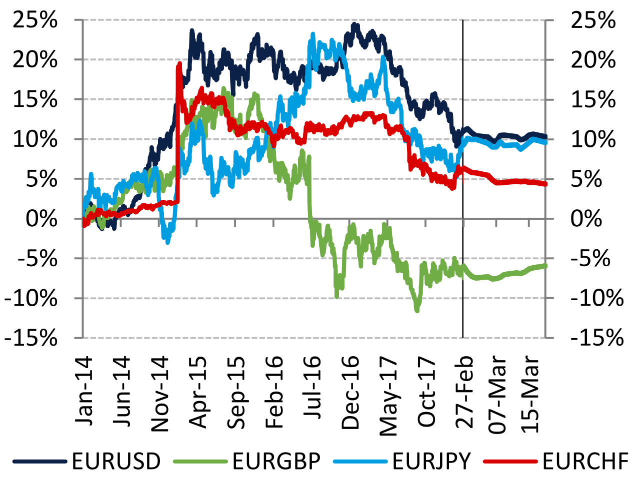
In the developed markets, contrary to the stagnation of the US yield, long-term yield in the euro area decreased, while within the emerging markets in the CCE-region ten-year yields rather tended to rise. A moderate yield decrease could be observed – in parallel with the equity market decline – in the developed markets primarily in the second half of the period (Chart 12). On the other hand, the 10-year yield in the United States all in all stagnated close to level of 2.85 percent, with no major change caused to it even by the

Chart 12: Yields on developed market long-term bonds



Source: Bloomberg

Chart 13: Developed market FX exchange rates



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

interest rate hike by Fed. No material new information came to light at the March meeting of ECB with regard to the closing of the asset purchase programme, which may have also contributed to the 8 basis point decrease in the long-term euro area yield. The emerging markets showed a mixed picture; the CEE region was characterised by rising yields. The impact of the aversion to emerging market risks was also reflected in March in the minor capital outflows and in the 10 basis point growth in the EMBI Global bond spread.

The 25 basis point interest rate hike by Fed in March caused no surprise, while the latest Fed forecast was met with great expectations. **Based on policy-makers' forecasts, published simultaneously with the March decision, the members of FOMC may deem realistic for this year even further three increases of 25 basis points each, while in December they anticipated three interest rate hikes of 25 basis points in total for this year. Also depending on this, the members anticipate two to three interest hikes in 2019.** Market participants price the next interest rate hike to June and the third one to autumn. In the case of the ECB, the market pricing projects no interest rate increase for 2018.

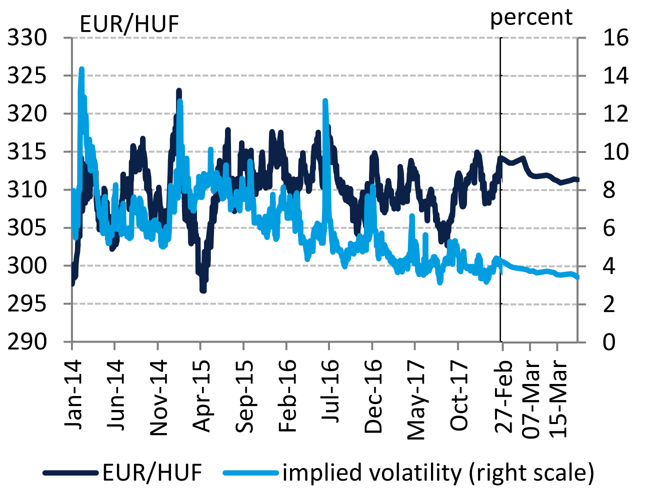
For the most part of the period the euro/dollar exchange rate fluctuated around the level of 1.23. After the Fed decision, the dollar depreciated almost one percent against the euro. **The British pound responded by a 1 percent appreciation to the agreement reached between the EU and Great Britain with regard to the eighteen-month transition period after the Brexit** (Chart 13).

The world market price of oil fluctuated in the band of USD 65-70. In the middle of the period, there was a larger decline in oil prices, contributed to by the rise in the US crude oil reserves and oil production; however, at the end of the period, oil prices started to rise once again since the US reserve data reflected a surprising decrease and the geopolitical tensions once more started to deepen between Iran and Saudi Arabia.

2.2. Developments in domestic money market indicators

Following the February interest rate decision, the forint slightly appreciated against the euro, breaking away from the currencies of the region. The 3-month BUBOR steadily stands close to zero. Non-residents' forint government securities holding rose persistently above 3,500 billion by the end of the period, while the share of their holding exceeded 21 percent. The 5-year Hungarian CDS spread rose moderately, by 2 basis points, to 82 basis points, which was in line with the regional and global trends.

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

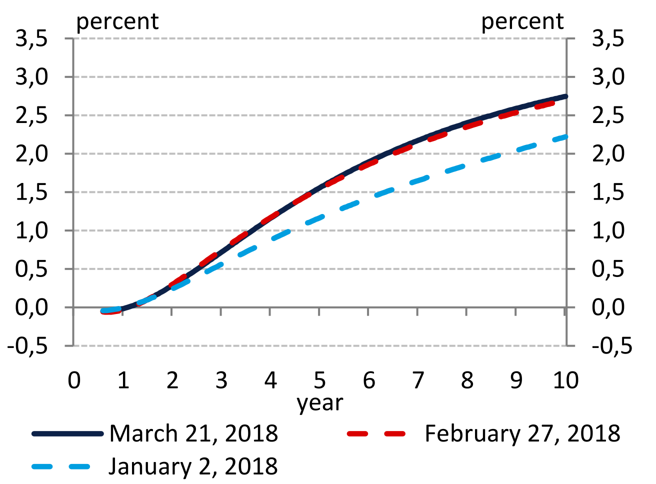


Source: Bloomberg

During the period under review, the forint, breaking away from the currencies of the region, moderately appreciated against the euro. The currencies of the region and other European currencies typically depreciated against the euro, hence the forint outperformed. From the level of close to 314, recorded at the end of February, quotes dropped close to 311, corresponding to an appreciation of almost 0.7 percent. Meanwhile, the Czech koruna and the Romanian leu did not change significantly against the euro, while the Polish zloty depreciated by roughly 1.3 percent. The euro/forint options' implied volatility indicators once again plunged close to the historic lows after a temporary rise in February (Chart 14). After a 1 basis point rise, the 3-month BUBOR, relevant for the monetary policy transmission, still stands at 0.03 percent, close to zero.

The long end of the government securities market yield curve shifted upward by 5 basis points, while no material shift could be observed up to the 5-year maturity (Chart 15). However, the spreads compared to the government securities yields in Germany and in the region, continued to rise since the previous interest rate decision. Compared to the German benchmark the gap widened by 13 basis points, while compared to the Central and Eastern European average, spreads rose by 3 basis points.

Chart 15: Shifts in the spot government yield curve



Source: MNB, Reuters

Strong demand was observed at the forint government securities auctions and after 10 years, the Hungarian state once again issued foreign currency bond in yen. The discount Treasury bill auctions were characterised by medium demand since the last interest rate decision: in the case of the 3-month Treasury bills during the auctions announced for HUF 40 billion, on one occasion the Government Debt Management Agency raised the issuance by HUF 20 billion. The average auction yield was 0 percent with the exception of the last one (0.02 percent). 12-month Treasury bills were sold on one occasion in the amount of HUF 30 billion, under an auction yield of 3 basis points. The government bond auctions were received with particularly high interest: during the period under review, the Debt Management Agency received bids in the amount of HUF 356 billion – of which it accepted HUF 167.5 billion – for the securities announced in the total value of HUF 128 billion.

This in total represents an excess issuance of almost HUF 40 billion. The average auction yield on the 3- and 5-year maturities was on both occasions 0.87 and 1.44 percent, respectively; the bids fluctuated in a narrow band. In the case of the 10-year benchmark the average auction yield rose by 3 basis points.

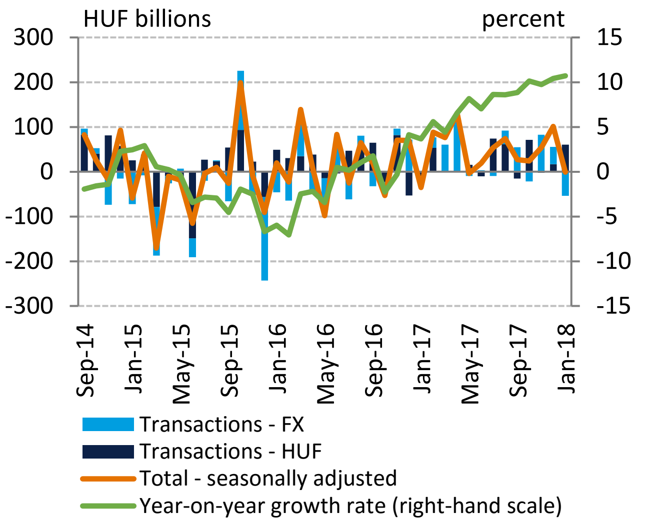
The Government Debt Management Agency announced on 14 March that it had issued 3-year samurai bonds in the total amount of JPY 30 billion. The bond spread upon issuance was 25 basis points above the yen swap curve, corresponding to a yield below 0.6 percent after the euro/yen foreign exchange swap. With this, the Hungarian state returned to the yen market after 10 years.

Non-residents’ government securities holdings rose persistently above HUF 3,500 billion by the end of the period. On the last day available, their holding amounted to HUF 3,506 billion, representing a rise of HUF 52 billion since the last interest rate decision. Their share in forint government securities rose above 21 percent. The 5-year Hungarian CDS spread rose moderately, by 2 basis points, to 82 basis points, which was in line with the regional and global trends.

3. Trends in lending

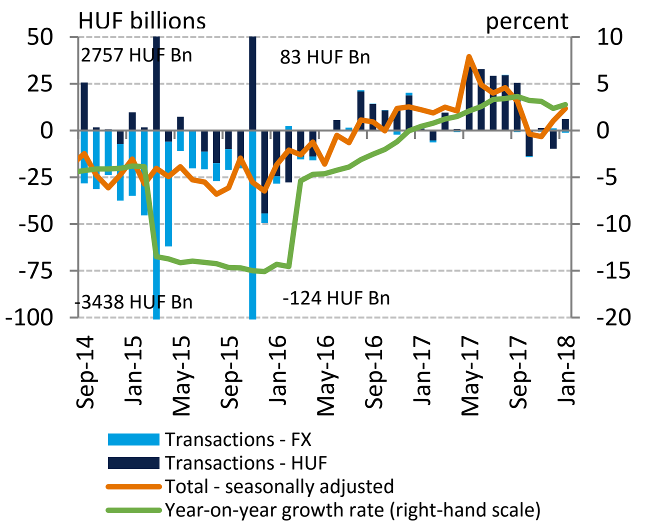
In January, outstanding corporate loans of credit institutions rose by HUF 6 billion due to transactions, which is equivalent to a decrease of HUF 1 billion on a seasonally adjusted basis. The outstanding loans of credit institutions to households was up by HUF 5 billion as a result of transactions, corresponding to a rise of HUF 12 billion on a seasonally adjusted basis, thus the annual growth in outstanding lending amounted to 2.8 percent in January 2018. The smoothed interest rate spread of forint corporate loans dropped by 13 basis points to 1.5 percentage points in January.

Chart 16: Net borrowing by non-financial corporations



Source: MNB

Chart 17: Net borrowing by households

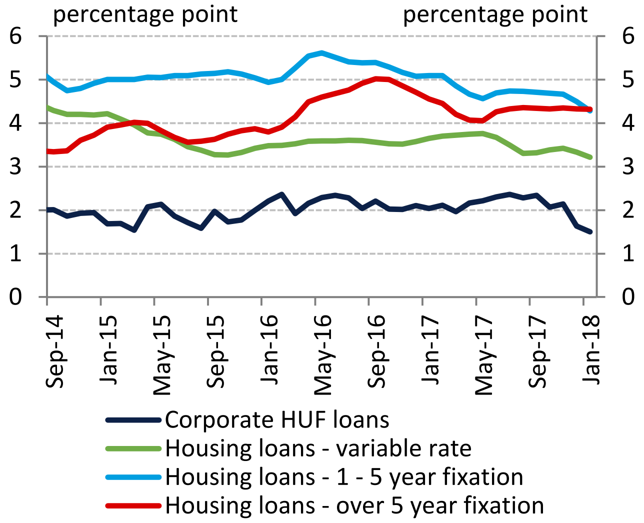


Source: MNB

In January, outstanding corporate loans of credit institutions rose by HUF 6 billion due to transactions, which is equivalent to a decrease of HUF 1 billion on a seasonally adjusted basis (Chart 16). In a breakdown by currency, forint loans increased by HUF 60 billion, while foreign currency loans decreased by HUF 54 billion. In January 2018, corporate lending rose by 10.7 percent in annual terms. Excluding money market transactions, the volume of new loans amounted to HUF 142 billion during the month; the value of the money market transactions was HUF 145 billion, thus the gross amount of new loans rose in January by 40 percent in annual terms.

Outstanding loans of credit institutions to households was up by HUF 5 billion as a result of transactions, corresponding to a rise of HUF 12 billion on a seasonally adjusted basis, thus the annual growth in outstanding lending amounted to 2.8 percent in January 2018 (Chart 17). The value of new contracts concluded during the month was HUF 100 billion, thus in annual terms it registered a growth of 39 percent. As regards the individual sub-segments, the volume of new housing loans and personal loans rose by 37 and 49 percent, respectively. During the months Certified Consumer-friendly Housing Loans were disbursed in the amount of HUF 11 billion, while the total value of contracts concluded since September amounts to HUF 36 billion.

Chart 18: Development of corporate and household credit spreads



Note: In the case of corporate forint loans, the spread over the 3-month BUBOR. In the case of housing loans with variable interest or interest fixed for 1 year at the most, the 3-month BUBOR, while in the case of housing loans fixed for over one year, the APR-based margin above the relevant IRS.
Source: MNB

The smoothed interest rate spread of forint corporate loans dropped by 13 basis points to 1.5 percentage points in January (Chart 18). However, the spread on small-amount market loans – typically taken by SMEs – exceeds the average of the other Visegrád countries by 85 basis points.

The average smoothed interest rate spread on housing loans calculated on the basis of the annual percentage rate (APR) dropped by 10 basis points compared to September 2017, to 3.2 percentage points. In the case of loans, the interest rate of which is fixed for 5 years at the most this value dropped by 43 basis points to 4.3 percentage points, while there was no change in the case of loans fixed for more than 5 years, its value standing at 4.3 percentage points. The problem of high spreads affects primarily the market of long-term fixed-rate transactions.