

## Methodological notes to the press release

Beginning with the press release on the preliminary statistical balance sheet of the MNB for January 2014, the Bank has introduced a methodological change. Consistent with the accounting balance sheet of the MNB, the balance sheet item of equalisation reserves is recorded under 'capital and reserves' in the statistical balance sheet. The stock of equalisation reserves is also shown separately in the Internet time series. This methodological change has been backdated to 2003 in the time series, which affects changes in the items of 'capital and reserves' and 'other liabilities' in Table 1.a.2 of the time series. A methodological change has also been introduced in the case of transaction data, where 'capital and reserves' and 'other liabilities' transactions are aggregated in Table 1.a.4 of the time series, which has been backdated to 2005.

It is important to note, however, that equity (and, within that, balance sheet profit/loss) in the statistical balance sheet still does not equal to equity in the accounting balance sheet. The difference arises from the fact that while financial derivatives are recorded at market value in the statistical balance sheet, in the accounting balance sheet they are recorded at a value required by Government Decree 221/2000 on the special reporting and accounting requirements applicable to the Magyar Nemzeti Bank.

The main aim of the MNB's statistical balance sheet containing average stocks (Table 1 of the press release) is to show credit institutions' (forint) liquidity position in a given month (see, for example, Chart 8 of the chart-pack). For this purpose, the balance sheet records foreign exchange swaps as a combination of deposit and loan transactions (i.e. as assets and liabilities arising from swaps), instead of recording them as derivatives at market prices, consistent with statistical concepts and standards, as is the case with the statistical balance sheet compiled from end-of-month stocks (see Table 2 of the press release). The average balance sheet records the nominal values of liabilities and claims arising from swaps. Consequently, the amounts shown on the assets and liabilities sides are identical. The reason for this is that the average balance sheet is compiled from daily data, and data on swaps are only available at nominal value at such frequency.

The table below shows the differences between the contents of other assets and other liabilities in the balance sheet containing average stocks and in the balance sheet compiled from end-of-month stocks (Tables 1 and 2 of the press release).

Balance sheet containing monthly average data	Balance sheet containing end-of-month data
<p><i>Other assets</i></p> <ul style="list-style-type: none"> <li>• Loans of domestic credit institutions, except two-week, six-month and two-year loans</li> <li>• Loans of other residents</li> <li>• Debt securities issued by residents</li> <li>• Shares and other equity issued by residents</li> <li>• Fixed assets</li> <li>• Other</li> </ul>	<p><i>Other assets</i></p> <ul style="list-style-type: none"> <li>• Loans of domestic credit institutions</li> <li>• Loans of other residents</li> <li>• Debt securities issued by residents</li> <li>• Shares and other equity issued by residents</li> <li>• Fixed assets</li> <li>• Other</li> </ul>
<p><i>Other liabilities</i></p> <ul style="list-style-type: none"> <li>• Other domestic deposits</li> <li>• Capital and reserves</li> <li>• Other</li> </ul>	<p><i>Other liabilities</i></p> <ul style="list-style-type: none"> <li>• Other domestic deposits</li> <li>• Foreign currency bonds issued by the MNB, held by residents</li> <li>• Capital and reserves</li> <li>• Other</li> </ul>

In addition to the above, there are other relationships and differences between Tables 1 and 2 of the press release:

- On the liabilities side of Table 2, the contents of the item 'Deposits of credit institutions' are equal to the combined amount of the items 'Current account balances of other MFIs', 'Overnight deposits of other MFIs' and 'Other deposits of other MFIs'.

- For the period up to December 2010, total holdings of two-week MNB bills are not split by holding sector on the liabilities side of Table 1. On the liabilities side of Table 2, however, only bills held by residents are shown. Non-resident holdings of MNB bills are included in foreign liabilities.
- From 1 January 2011, total holdings of two-week MNB bills on the liabilities side of the average balance sheet in Table 1 are split into two – ‘Two-week MNB bills held by residents’ and ‘Two-week MNB bills held by non-residents’. Consistent with this, MNB bill holdings on the liabilities side of Table 2 are shown in a similar breakdown from January 2011. The total stock of foreign liabilities – including non-resident holdings of two-week MNB bills – is shown in the chart-pack.
- In the average balance sheet (Table 1), liabilities/claims arising from swaps with credit institutions at nominal value are shown in a separate row, while in the balance sheet containing end-of-month stocks (Table 2) such liabilities/claims at market prices are displayed in the ‘Other’ row.
- From January 2010, the liabilities side of Table 1 also present Foreign liabilities, in order to make it comparable with Table 2.

From February 2011, the following time series breakdowns are shown backdated to the start of the series, consistent with the press release:

- in addition to total holdings of two-week MNB bills, breakdown into ‘two-week MNB bills held by residents’ and ‘two-week MNB bills held by non-residents’ are also included in the balance sheet time series of average stocks,
- in addition to the total stock of foreign liabilities, two-week MNB bills held by non-residents are shown separately in the time series of end-of-month stocks.

Chart 8 of the chart-pack shows recourse to the various central bank instruments, among others, holdings of two-week forint-denominated MNB bills. The MNB has been issuing two-week bills since 9 January 2007, replacing the two-week central bank deposit as a key policy instrument, in order to facilitate credit institutions’ efficient liquidity management and the development of financial markets.

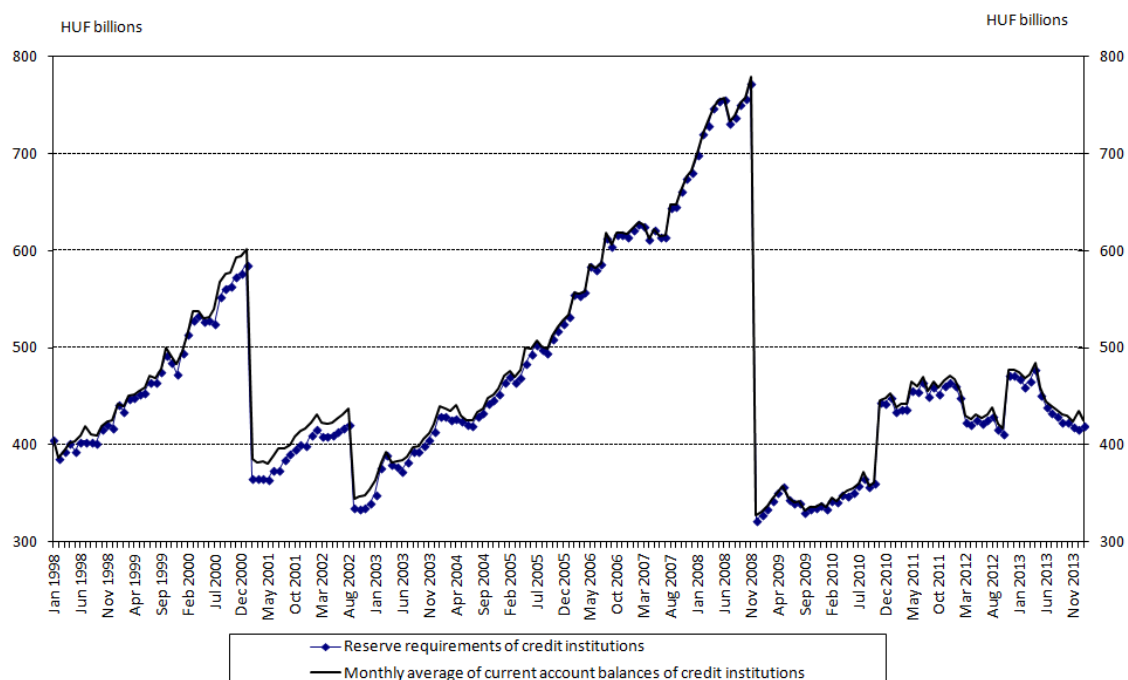
The two-week MNB bills are negotiable instruments, i.e. credit institutions may sell them both to other residents and non-residents prior to maturity.

Differences in stock data are calculated from data before rounding. Consequently, the values derived using this method may be different from those calculated from rounded data.

In order to ensure comparability between data, the time series published by the Bank and the Charts of the chart-pack also show the time series for the monetary base and its components after adjusting for seasonal effects. Trend data are obtained from the seasonally adjusted series by eliminating outliers relating to deterministic effects identified in the seasonal adjustment process and irregular components not explained by the model. In addition to changes in conditions in the money market and other economic effects, the prevailing level of the reserve ratio also significantly influences developments in the monetary base and current account balances. The reserve ratio is set by the Bank. It has been reduced by the MNB several times; it currently stands at 2%, down from 12% in 1999 and from 5% over the period from 1 August 2002 to 30 November 2008.

Decree No 13/2010. (IX.6.) of the Magyar Nemzeti Bank has been in effect since 1 October 2010. This allows credit institutions subject to reserve requirements to choose one of the following reserve ratios with a frequency of up to twice a year: 2%, 3%, 4% or 5%. In the absence of such a choice, the lowest ratio of 2% applies to required reserves, as specified in the Decree.

**Chart 1 Reserve requirements of credit institutions**



In order to better capture the effects of the financial crisis, the trend of the monetary base plotted in Chart 4 of the chart-pack displays the sharp rise in the monetary base in October 2008, triggered by an increase in the average stock of currency in circulation and the significant increase in credit institutions' overnight deposits in response to the financial crisis. The trend also presents the liquidity-enhancing effect of the reduction in the reserve ratio in December 2008, i.e. the significant fall in the monetary base in January 2009. In December 2008, the fall in current account balances was offset by an increase in overnight deposits (see Charts 3, 4 and 6 of the chart-pack).

End-of-month data on the MNB's derivative transactions for 2008 Q4 and 2009 in the press release on credit institutions' aggregated balance sheet published at the end of September 2010 have been recalculated, consistent with the methodology applied since January 2010.

In calculating the forint values of derivative transactions, actual exchange rates were used in contrast with average exchange rates used previously. This approach was made necessary by the fact that the volatility of the exchange rate caused a significant deviation of the actual exchange rate from the average in the wake of the financial crisis. All this has caused a change in the Other assets and Other liabilities columns in the transaction tables (Tables 1.a.4 and 1.a.5) in the statistical balance sheet of the MNB (S.121).

With the entry into force of Act CXXI of 2011, the MNB conducted its first euro sale tender related to final repayments of foreign currency loans by households on 3 October 2011. The aim of the FX swap tender is to provide credit institutions with euro liquidity to cover foreign currency needs related to final repayments of loans. Technically, under these swaps the MNB sells euros to credit institutions, which they are required to resell the Bank as long as they do not certify the amount of foreign currency they actually needed to cover the foreign currency needs for final repayment. Such resales are conducted under overnight swaps rolled over daily, where a credit institution sells foreign currency to the MNB in exchange for forints.

The press releases published for the period October 2011 to March 2012 (i.e. the end of the programme) show these swaps on a gross basis in a separate line item in the MNB's balance sheet containing average stocks. In the balance sheet, swap assets and liabilities are recorded at nominal transaction values. As a result, the amounts on the assets and liabilities sides match exactly.

In addition, other swap contracts of credit institutions to cover their foreign currency liquidity needs (overnight, one-week and three-month EUR/HUF swaps), under which credit institutions may obtain foreign currency from the MNB in exchange for forints, continue to be recorded on a gross basis, consistent with past practice.

As the two types of swap contracts are in opposite directions, the MNB will have a forint asset and a foreign currency liability in the case of FX swaps related to final repayments; and a foreign currency asset and a forint liability in the case of overnight, one-week and three-month FX swaps. Therefore, the two types of swap transactions are shown in two separate lines in the MNB's balance sheet containing average stocks (see Table 1 of the press release and Chart 8 of the chart-pack).

A new table has been introduced in the press releases published for the period from 2011 November to March 2012, which contains the amounts of accepted bids and the amounts allocated under the Bank's euro sale tenders related to early repayments of households' foreign currency mortgage borrowings. The monthly data show only the amounts of accepted bids and the amounts allocated during a given month, while the totals show the cumulative amounts since the inception of the programme. The forint amounts pertaining to bids accepted under euro sale tenders have been converted into forint at the EUR/HUF exchange rate offered in each individual bid. The forint equivalent of the amounts of euros allocated has been calculated chronologically, at the exchange rate used in individual tenders.

Holdings of two-week bills issued by the MNB and recorded on the liabilities side of its balance sheet are broken down into residents and non-residents on the basis of securities account holders. Accordingly, when other financial institutions enter into repo transactions in the secondary market, in which MNB bills are temporarily transferred by a domestic holder to a non-resident or by a non-resident holder to a resident, then the bills are recorded on the securities account of the party repoiing in the securities, rather than for their economic owner.

The Magyar Nemzeti Bank introduced a tender for two-year collateralised loans for credit institutions on 3 April 2012. The aim of the tender is to improve domestic credit institutions' liquidity position. The monthly average amount of bids accepted at the tender has been made available starting from the press release on the Bank's statistical balance sheet for April 2012 (see Table 1 of the press release). With the launch of the Funding for Growth Scheme announced in April 2013, the Bank's two-year collateralised loan tender, conducted at an interest rate linked to the central bank base rate, was suspended.

In the tables containing balance sheet data in the press release presenting the statistical balance sheet of the MNB, holdings of two-week bills issued by the MNB and shown on the liabilities side of its balance sheet are broken down by resident and non-resident holders on the basis of securities account holders. Accordingly, when other financial institutions enter into repo transactions in the secondary market whereby MNB bills are temporarily transferred by a resident holder to a non-resident or by a non-resident to a resident, then such securities are recorded on the securities account of the party borrowing the securities under repo, rather than for their economic owner.

Consistent with this, holdings of MNB bills are also broken down by residents and non-residents by taking into account the holders of securities accounts in the internet time series in Tables 1.a.1, 1.a.2, 1.a.3, 1.a.4, and 1.a.5.

The internet time series presenting the final statistical balance sheet of the MNB for August, published on 28 September 2012, have been expanded with new columns presenting the breakdown of securities holdings by economic owners, excluding the effects of repo transactions.

The new columns can be found in Table 1.a.2. presenting stock data and in Table 1.a.4. presenting transaction data, in the 'Memorandum items' sections, and will be updated at the end of each month, at the time the press release on credit institutions aggregated balance sheet is published. The breakdown of holdings of MNB bills by holding sector, excluding the effects of repo transactions, has been backdated in the time series published on 28 September 2012 in the 'Memorandum items' section of the table, the effect of which appears first in 2011 in the breakdown of MNB bill holdings by residents and non-residents.

In the period up to February 2013, data on debt securities held as part of foreign exchange reserves among external assets on the assets side of the MNB's balance sheet were valued at 'bid' prices (as quoted by market makers). From March 2013, i.e. from the press release of 12 April 2013, these stocks will be valued at 'mid' prices (calculated as the average of bid and offer prices quoted by market makers) in the press release presenting the preliminary statistical balance sheet of the MNB as well as the related monetary statistics on the Bank's website. The impact of the change in the valuation on changes in stocks has been recorded as a price change in the March 2013 data under 'Revaluations and other changes' in Table 2 of the press release.

Under Pillar 3 of the Funding for Growth Scheme (FGS) launched on 4 April 2013, the Magyar Nemzeti Bank introduced a new FX swap tender providing euro liquidity on 3 June 2013. In the FGS swaps entered into with counterparties, the MNB acquires an asset in foreign currency and incurs a liability in forint, which have the same direction as the Bank's other overnight, one-week, two-week and three-month FX swap transactions. FGS swap transactions are shown separately in the MNB's statistical balance sheet containing average stocks in Table 1 of the press release and in Chart 8 of the chart-pack.

Beginning with the press release on the preliminary statistical balance sheet of the MNB for August 2013, the data include preliminary estimates for realised and unrealised exchange rate gains/losses arising from exchange rate changes in the reference month on the asset and liability sides of the MNB's balance sheet. These estimates are included in the item of 'capital and reserves'. Previously, exchange rate gains/losses in the reference month were included only in the final data published at the end of the month. The methodological change has resulted in a more precise preliminary estimate of the final data. The data are included in the Internet time series accompanying the MNB's statistical balance sheet.