Box 3
Liquidity conditions and monetary policy operations in the period from 28 October 2015 to 26 January 2016

This box describes the ECB’s monetary policy operations during the seventh and eighth reserve maintenance periods in 2015, which ran from 28 October to 8 December 2015 and from 9 December 2015 to 26 January 2016 respectively. During this period the interest rates on the main refinancing operations (MROs) and the marginal lending facility were left unchanged at 0.05% and 0.30% respectively. Instead, the interest rate on the deposit facility was lowered by 10 basis points from -0.20% to -0.30% as of 9 December 2015.  

On 16 December the sixth targeted longer-term refinancing operation (TLTRO) was settled for an amount of €18.3 billion, compared with €15.5 billion in the previous TLTRO in September. This brought the total allotted amount in the first six TLTROs to €417.9 billion. In addition, the Eurosystem continued to buy public sector securities, covered bonds and asset-backed securities as part of its asset purchase programme (APP), with a targeted purchase amount of €60 billion per month. In December 2015 the Governing Council decided to extend the APP horizon: the monthly purchases are now intended to run until the end of March 2017 or until there is a sustained adjustment in the path of inflation towards the medium-term objective of inflation below, but close to, 2%. Furthermore, the Governing Council decided to reinvest for as long as is necessary the principal repayments of securities purchased within the APP.

Liquidity needs

In the period under review, the average daily liquidity needs of the banking system, defined as the sum of autonomous factors and reserve requirements, stood at €706.5 billion, an increase of €60.1 billion compared with the previous review period (i.e. the fifth and sixth maintenance periods of the year). The greater liquidity need is almost exclusively attributable to an increase in average autonomous factors, which rose by €59.9 billion to stand at €593.3 billion (see the table).

1 MROs continued to be conducted as fixed-rate tender procedures with full allotment. The same procedure remained in use for the three-month longer-term refinancing operations (LTROs). The interest rate in each LTRO was fixed at the average of the rates on the MROs over the relevant LTRO’s lifetime. LTROs continued to be conducted as fixed-rate tender procedures, with an interest rate equal to the MRO rate.

2 For information on the amounts allotted in TLTROs, see similar boxes in previous issues of the Economic Bulletin, as well as on the ECB’s website: www.ecb.europa.eu/mopo/implement/omo/html/index.en.html

3 Detailed information on the expanded APP is available on the ECB’s website: www.ecb.europa.eu/mopo/implement/omt/html/index.en.html
The increase in average autonomous factors was mainly a result of increases in average liquidity-absorbing factors – banknotes in circulation, government deposits and other autonomous factors. Other autonomous factors averaged €563 billion, up €20.5 billion from the previous review period, mainly reflecting an increase in quarterly revaluation accounts. Banknotes in circulation rose over the winter holiday period in particular, thereby following their usual seasonal pattern. Banknotes averaged €1,065.3 billion, up €11.4 billion compared with the previous review period. In addition, average government deposits also contributed to the increase in liquidity needs, increasing on average by €8.3 billion to stand at €87.6 billion. The small increase in government deposits shows that, while some treasuries are prepared to accept lower rates in the market, most continue to have few alternatives when placing cash in the market. The further reduction in the deposit facility rate to -0.30% increased treasuries’ cost of placing deposits with the Eurosystem. On the other hand, higher levels of excess liquidity tend to bring money market rates even closer to the rate of the deposit facility.

Liquidity-providing factors declined over the period on the back of lower net foreign assets and lower net assets denominated in euro. The decline in net foreign assets by €11.4 billion was chiefly a result of a quarter-end devaluation effect from the third and fourth quarters of 2015. This devaluation of net foreign assets was mainly driven by a decline in the US dollar value of gold which was only partially offset by a depreciation of the euro in the fourth quarter. In addition, net assets denominated in euro averaged €511.0 billion, down €8.3 billion from the previous review period. Net assets denominated in euro declined on account of a fall in financial assets held by the Eurosystem for purposes other than monetary policy, together with a small increase in liabilities held by foreign institutions with the national central banks. Foreign institutions increased their holdings, despite the further cut to the deposit facility rate, which increases the cost of depositing at national central banks. The increase may be due to there being fewer opportunities to find attractive alternatives in the market.

The volatility of autonomous factors remained elevated during the period under review. Such volatility primarily reflected strong fluctuations in government deposits and the quarterly revaluation of net foreign assets and net assets denominated in euro. The volatility remained broadly unchanged from the previous review period, while the level of autonomous factors continued its upward trend.

The average absolute error in weekly forecasts of autonomous factors increased by €0.8 billion to €7.2 billion in the period under review and was mainly due to forecasting errors for government deposits. With increasing levels of excess liquidity, and in the presence of increasingly negative short-term money market rates, it became more difficult to anticipate the investment activities of treasuries.

Liquidity provided through monetary policy instruments

The average amount of liquidity provided through open market operations – i.e. tender operations and outright asset purchases – increased by
€176.5 billion to stand at €1,306.9 billion (see the chart). This increase was exclusively due to the outright monetary policy purchases, mainly from the public sector purchase programme, while tender operations remained broadly unchanged during the review period.

**Average liquidity provided through tender operations declined by €0.9 billion during the period under review to stand at €532.5 billion.** An increase of average liquidity provided by the TLTROs was more than offset by a decline in regular operations. More specifically, the MROs and the three-month LTROs decreased by €2.2 billion and €18.3 billion respectively. The outstanding amount of TLTROs increased by €19.6 billion over the review period, with the largest increase taking place in the eighth maintenance period, reflecting the TLTRO allotment in December 2015.

Average liquidity provided through outright portfolios increased by €177.4 billion to stand at €774.4 billion, mainly on account of the public sector purchase programme. The average liquidity provided by the public sector purchase programme, the third covered bond purchase programme and the asset-backed securities purchase programme rose by €156.5 billion, €25.2 billion and €3.3 billion respectively. The redemption of bonds held under the securities markets programme and the previous two covered bond purchase programmes amounted to €7.8 billion.

**Excess liquidity**

As a result of the aforementioned increase in liquidity, average excess liquidity rose by €116.4 billion to stand at €600.3 billion in the period under review (see the chart). Most of the liquidity increase was recorded in the eighth maintenance period, when average excess liquidity rose by €86.5 billion on account of continuous purchases and only slightly higher autonomous factors. In the seventh maintenance period, average excess liquidity rose less sharply, increasing by €49.0 billion. This relatively small increase was mainly driven by the rise in autonomous factors, which partially absorbed the increase in the APP.

The rise in excess liquidity was mostly reflected in higher average current account holdings, which increased by €81.0 billion to stand at €527.9 billion in the period under review. This increase was less pronounced for the seventh maintenance period, with an average of €28.5 billion compared with €63.3 billion in the eighth maintenance period. Average recourse to the deposit facility also increased, albeit to a lesser extent (by €35.3 billion), to stand at €185.7 billion.
Interest rate developments

In the review period, money market rates decreased further on the back of the cut in the deposit facility rate to -0.30%. In the unsecured market, EONIA averaged -0.184%, down from an average of -0.130% in the previous review period. While EIONA was almost flat in the seventh maintenance period, the cut in the deposit facility rate of 0.10 percentage point with effect from the eighth maintenance period fed through almost one to one into EONIA, which declined by 0.091 percentage point. In the context of the continued increase in excess liquidity, the pass-through to market rates was smooth. Furthermore, secured overnight rates declined in line with the deposit facility rate to levels even closer to the deposit facility...
Average overnight repo rates in the GC Pooling market\textsuperscript{4} declined to -0.246% and -0.238% for the standard and extended collateral baskets respectively, down 0.059 percentage point and 0.055 percentage point compared with the previous review period.

\textsuperscript{4} The GC Pooling market allows repurchase agreements to be traded on the Eurex platform against standardised baskets of collateral.