#### Box 5

# LIQUIDITY CONDITIONS AND MONETARY POLICY OPERATIONS IN THE PERIOD FROM 14 MAY 2008 TO 12 AUGUST 2008

During the three maintenance periods under review there were some signs of an easing in the tensions seen at the short end of the euro money market since August 2007. Nevertheless, the ECB's liquidity management continued to address the tensions in various ways.

First, the ECB continued to "frontload" the provision of liquidity, with the aim of facilitating the fulfilment of counterparties' reserve requirements early in the maintenance period. This is achieved by allotting more than the benchmark amount in the main refinancing operations (MROs) at the beginning of the maintenance period (the benchmark amount being the allotment amount that allows counterparties to fulfil their reserve requirements evenly in the course of a reserve maintenance period), while absorbing the resulting surplus liquidity towards the end of the maintenance period so that the average supply of liquidity in any maintenance period remains unchanged. In the maintenance periods ending on 10 June and 12 August 2008 the ECB slightly reduced the amount of frontloading on account of the easing in the tensions at the short end of the money market. However, in line with the statement published on 9 June 2008,<sup>1</sup> the ECB increased the amount of frontloading during the maintenance period that ended on 8 July 2008 in order to alleviate the tensions associated with the end-of-semester effect.

Second, as announced in March 2008, the two supplementary three-month longer-term refinancing operations (LTROs), which were first carried out in August and September 2007, were rolled over for the third time when they matured in May and June 2008, and a second supplementary LTRO with a six-month maturity was carried out in July. The Eurosystem also announced in July that it would renew the two outstanding supplementary three-month operations when they matured in August and September 2008.

Finally, over the periods under review the ECB continued providing US dollar liquidity to euro area banks in cooperation with the Federal Reserve System's Term Auction Facility. In these operations, which do not affect the supply of euro liquidity,<sup>2</sup> US dollar liquidity is provided against collateral eligible in the Eurosystem's operations.

### Liquidity needs of the banking system

In the three maintenance periods under review, banks' average liquidity needs rose by  $\notin 2.3$  billion by comparison with the preceding three periods. This can be explained by a  $\notin 4.8$  billion increase in reserve requirements, which was partially offset by a  $\notin 2.5$  billion decrease in liquidity needs resulting from autonomous factors. On average, total liquidity needs resulting from reserve requirements stood at  $\notin 211.3$  billion, and those resulting from autonomous factors averaged  $\notin 249.8$  billion (see Chart A).

The level of excess reserves (i.e. the daily average of current account holdings in excess of reserve requirements) increased slightly, by  $\notin$ 43 million, in the three periods under review, thus averaging  $\notin$ 0.75 billion (see Chart B). This is in line with the average seen since the changes to the monetary policy implementation framework in March 2004.

1 The following statement was issued: "The ECB continues to closely monitor liquidity conditions and notes some tensions in money market rates for maturities over the end-of-semester. The ECB remains ready, if needed, to smooth conditions around the end-of-semester."
2 Place refer to http://www.edu.uce.com/org/implement/employmen

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# Chart A Liquidity needs of the banking system and liquidity supply

(EUR billions; daily averages for the whole period are shown next to each item)

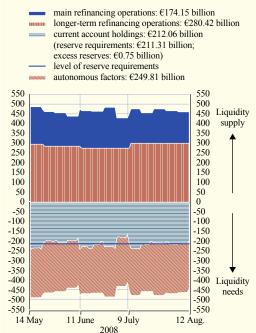
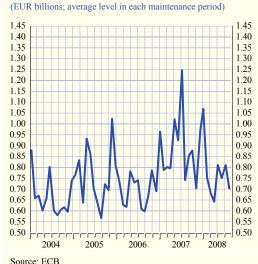




Chart B Excess reserves<sup>1</sup>





# Liquidity supply and interest rates

The total volume of outstanding open market operations (denominated in euro) rose as a result of the increase in reserve requirements. As the size of the two outstanding supplementary three-month LTROs was reduced slightly from €60 billion to €50 billion, and the second of the two six-month supplementary LTROs (€25 billion each) was only settled at the end of the period under review, the shares of LTROs and MROs in the total volume of outstanding open market operations remained broadly unchanged at an average of 60% and 40% respectively over the entire period. However, towards the end of the period, when the outstanding LTRO amount stabilised at €300 billion, the share of LTROs grew slightly to around 64%.

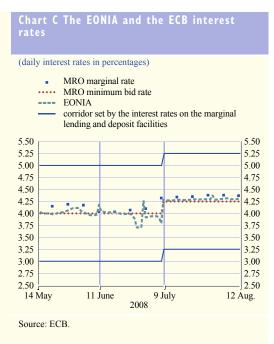
On 3 July 2008 the Governing Council of the ECB decided to increase the key ECB interest rates by 25 basis points, which meant that the minimum bid rate and the rates on the deposit and marginal lending facilities rose to 4.25%, 3.25% and 5.25% respectively. This change was effective as of 9 July 2008, the first day of the subsequent reserve maintenance period.

In connection with the Federal Reserve System's Term Auction Facility, the ECB continued to offer US dollar funding to Eurosystem counterparties during the period under review, with such funding secured using collateral eligible in the Eurosystem. In line with the ECB's announcement on 2 May 2008, these operations were conducted on a bi-weekly basis for an amount of USD 25 billion each. They did not affect the supply of euro liquidity.

On 30 July 2008 the ECB announced its intention to establish, in conjunction with the Federal Reserve System, a cycle of 84-day Term Auction Facility operations of USD 10 billion, with the first operation to be settled on 14 August 2008. It also announced

that it intended to conduct bi-weekly operations, alternating between operations of USD 20 billion with a 28-day maturity and operations of USD 10 billion with an 84-day maturity.

In the maintenance period ending on 10 June 2008 the ECB allotted  $\in 25$  billion,  $\in 18$  billion,  $\in 15$  billion and  $\in 3.5$  billion in excess of the benchmark amount in its MROs. During the first two weeks of the maintenance period the EONIA was stable around the minimum bid rate, although it exhibited some volatility around the end of May, when it temporarily drifted well above the minimum bid rate. On 30 May 2008, the last day of the month, the EONIA stood at 4.114% (see Chart C). The ECB absorbed  $\in 14$  billion in a fine-tuning operation on the last day of the maintenance period, which ended with net



recourse to the marginal lending facility of  $\in$ 161 million and the EONIA at 4.179%.

In the maintenance period ending on 8 July 2008 the ECB allotted  $\in$ 20 billion in excess of the benchmark amount in each of the first two MROs,  $\in$ 35 billion in excess of the benchmark amount in the third MRO, which covered the end of June, and  $\in$ 3 billion in excess of the benchmark amount in the final MRO. While the EONIA stood very close to the minimum bid rate in the first two weeks of the maintenance period, pronounced, but nevertheless well-contained, volatility was observed around the end of June. The EONIA fell below the minimum bid rate in the week prior to the end of June before drifting significantly above it on the last day of the month, standing at 4.265% on that day. It then returned to levels slightly below the minimum bid rate during the last few days of the maintenance period. The ECB launched a liquidity-absorbing fine-tuning operation for an amount of  $\in$ 21 billion on the last day of the maintenance period. However, counterparties only submitted bids for a total of  $\in$ 14.6 billion. As a result, the maintenance period ended with net recourse to the deposit facility of  $\in$ 4.8 billion and the EONIA at 3.792%.

In the maintenance period ending on 12 August 2008 the ECB allotted  $\in 18$  billion,  $\in 14$  billion,  $\in 10$  billion,  $\in 8$  billion and  $\in 3$  billion in excess of the benchmark amount in its MROs. The EONIA stood slightly above the minimum bid rate for the entire maintenance period and increased to 4.371% on the last day of July owing to the usual calendar effects. On the last day of the maintenance period the ECB launched a fine-tuning operation and absorbed  $\in 21.0$  billion. The maintenance period ended with limited net recourse to the deposit facility of  $\in 588$  million and the EONIA at 4.318%.

Overall, during the period under review, counterparties' bidding behaviour was less aggressive than in previous months, possibly indicating that tensions at the short end of the money market had eased somewhat. In particular, during the second maintenance period under review, the spread between the minimum bid rate and the marginal rate (i.e. the lowest rate at which



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bidders receive liquidity) narrowed to 3 basis points, a level similar to that observed before the onset of financial tensions in August 2007. This was also confirmed by the decrease in the weighted average rate for MRO allotments (i.e. the average of the bid rates weighted by the amounts of the respective bids), which reflects the decrease in the number of aggressive bidders in MRO tenders.