Box 4

## LIQUIDITY CONDITIONS AND MONETARY POLICY OPERATIONS FROM 9 NOVEMBER 2005 TO 7 FEBRUARY 2006

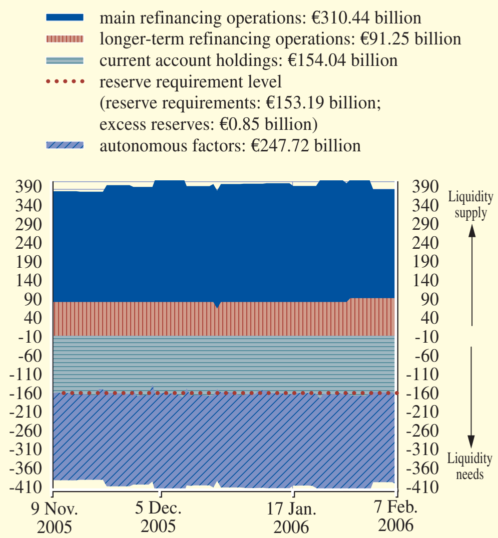
This box reviews the ECB's liquidity management during the three reserve maintenance periods ending on 5 December 2005, 17 January 2006 and 7 February 2006.

### Liquidity needs of the banking system

During the period under review banks' liquidity needs displayed a strong seasonal pattern, as observed in previous years, mainly resulting from the increase in banknotes in circulation (see Chart A). Banknotes in circulation, which represent the largest "autonomous factor" (i.e. a factor which does not stem from the use of monetary policy instruments), reached a historical high of €575.3 billion on 26 December 2005. Overall, autonomous factors contributed an average of €248 billion to the liquidity deficit of the Eurosystem in the period under review. Reserve requirements, the other major source of liquidity needs, increased to €153 billion over the same period.

**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)




Source: ECB.

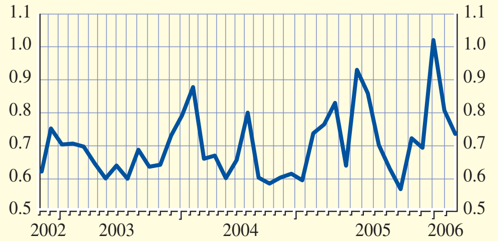
Daily average excess reserves (i.e. the daily average of current account holdings in excess of reserve requirements) contributed an average of €0.85 billion to the liquidity deficit of the Eurosystem over the period considered. Average excess reserves reached an all-time high of €1.02 billion in the reserve maintenance period ending on 5 December owing to unexpectedly high individual liquidity holdings. In the two subsequent maintenance periods, average excess reserves decreased to €0.81 billion and €0.74 billion respectively (see Chart B).

### Liquidity supply and interest rates

In parallel with the seasonal peak in demand for liquidity, the volume of open market operations increased temporarily (see Chart A). On average, the liquidity provided via main refinancing operations (MROs) amounted to €310.4 billion. The ratio between bids submitted by counterparties and satisfied bids (the bid-cover ratio) decreased during December to levels between 1.00 and 1.25, before increasing again to around 1.30. The average bid-cover ratio over the period was 1.23.

**Chart B Excess reserves[1)]**

(EUR billions; average level in each maintenance period)




Source: ECB.
1) Banks' current account holdings in excess of reserve requirements.

In line with the decision of the Governing Council to increase the allotment amount of the longer-term refinancing operations (LTROs) from €30 billion to €40 billion, the liquidity provided by LTROs increased from €90 billion to €100 billion in the period under review.

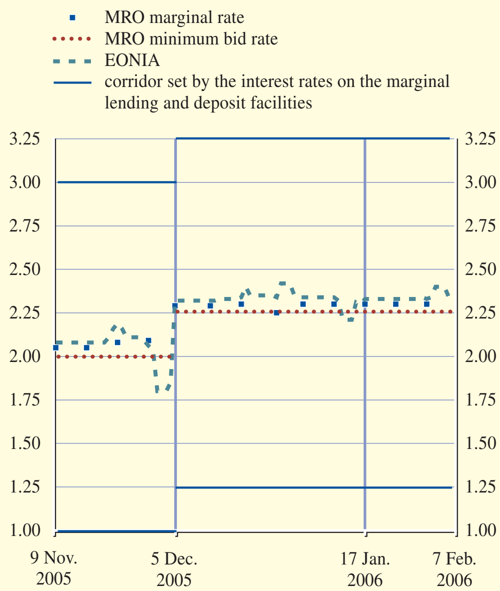
### Maintenance period ending on 5 December 2005

In October 2005 the ECB had communicated to market participants its uneasiness about the upward trend in the spread between the EONIA (euro overnight index average) and the minimum bid rate. Consequently, it had decided to allot €1 billion above the benchmark amount in all but the last MRO of a maintenance period. The use of this measure was extended for the maintenance period ending on 5 December. This period started with marginal and weighted average MRO rates of 2.05% and 2.06% respectively, while the EONIA stood at 2.08%.

Market participants' expectations of a change in the key ECB interest rates increased at the end of November. In spite of the fact that, under the new framework, a rate change becomes effective only at the start of the next maintenance period, the EONIA rose to 2.19%, while the marginal MRO rate reached 2.08%. In the light of this unexpected market reaction, the ECB also allotted €1 billion above the benchmark amount in the last MRO of that maintenance period. The marginal rate remained at 2.09%, but the EONIA subsequently eased back to 2.05%. On the last day of the maintenance period the ECB absorbed an expected liquidity surplus of €7.5 billion via a fine-tuning operation. The

**Chart C The EONIA and the ECB interest rates**

(daily interest rates in percentages)




Source: ECB.

maintenance period ended with a net recourse to the deposit facility of €0.77 billion, while the EONIA declined to 1.85%.

### Maintenance period ending on 17 January 2006

On 1 December 2005 the Governing Council of the ECB decided to increase the key ECB interest rates by 25 basis points. The change became effective at the beginning of the new maintenance period starting on 6 December. The ECB intended to continue the loose allotment approach during this maintenance period and accordingly allotted €1 billion above the benchmark amount on 5 December. However, this additional amount was gradually increased further, reaching up to €3 billion in the subsequent MROs around Christmas and the end of the year, before the benchmark amount was allotted in the last tender of the maintenance period.

In the LTRO settled on 22 December an erroneous bid prevented the ECB from allotting the intended amount of €30 billion. Only €12.5 billion could be settled. In order to counter the resulting liquidity imbalance, the ECB launched an additional LTRO for the missing amount on the following day.

During the first week of the maintenance period the EONIA stood at 2.32%, before increasing to 2.35% around Christmas. At the same time, the marginal MRO rates stood at 2.29-2.30% and the weighted average at 2.30-2.31%. The additional demand before the end of the year led to an increase in the EONIA to 2.42% on 30 December, the lowest spread above the minimum bid rate at year-end observed so far. In the first two weeks of 2006 the EONIA remained stable at 2.34%, but as a result of market expectations of loose liquidity conditions, the EONIA declined to 2.21% on 13 January. Liquidity absorbing errors in autonomous factors and excess reserves pushed the EONIA up to 2.31% the following Monday. The maintenance period ended with a net recourse to the deposit facility of €0.79 billion, while the EONIA ultimately stood at 2.30%.

### Maintenance period ending on 7 February 2006

The loose allotment approach was also followed in the next maintenance period. During the first two weeks of the period the EONIA was relatively stable at 2.33%, but it increased to 2.40% on Friday, 3 February, before declining to 2.34% for the last two days of the period. The short-lived increase in the overnight rate reflected a tightening of liquidity conditions following the allotment of the last MRO. The marginal MRO rate increased slightly from 2.30% to 2.31%, while the weighted average rate remained stable at 2.31%. On the last day of the maintenance period the ECB injected €6.5 billion via a fine tuning operation to counter a projected €6.7 billion liquidity imbalance. The maintenance period ended slightly loose with recourse to the deposit facility totalling €0.87 billion and the EONIA at 2.34%.