

Box 3

EXCESS RESERVES AND THE ECB'S IMPLEMENTATION OF MONETARY POLICY

When deciding on the allotment amount in the weekly main refinancing operations and in the potential fine-tuning operation on the last day of the reserve maintenance period, the ECB takes into account three sources of liquidity needs:¹ autonomous liquidity factors, such as liquidity injections or withdrawals normally not caused by the use of monetary policy instruments; reserve requirements; and excess reserves, which are defined as current account holdings in excess of reserve requirements.² While the first two sources of liquidity needs are by far the greatest, at present accounting for around 99.8% (€380 billion) of the total, the remaining 0.2% (€0.7 billion), which consists of excess reserves, is also significant at the margin. This box recalls some of the reasons why excess reserves arise and provides some information on their recent trends and on the forecasts made by the ECB.

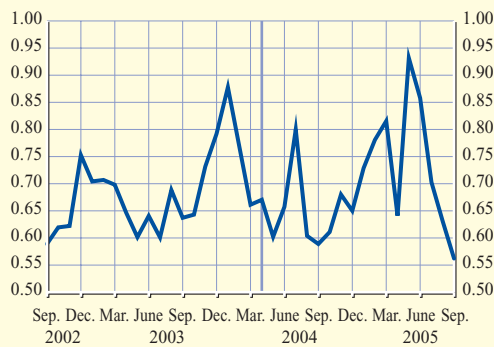
Excess reserves are not remunerated by the Eurosystem and therefore constitute a cost for credit institutions, which could, in principle, have transferred them to the remunerated deposit facility. However, this cost is counterbalanced by some benefits. For instance, the operating costs associated with “staying late in the office” in order to be able to transfer any amount of excess liquidity to the deposit facility are avoided. Such excess liquidity can be the result of unexpected payments and operational errors and, on the last day of the reserve maintenance

1 See also Box 1 entitled “Publication of the benchmark allotment in the main refinancing operations” in the April 2004 issue of the Monthly Bulletin.

2 According to this definition, excess reserves also include current account holdings of credit institutions that either have a zero reserve requirement, are not subject to minimum reserve requirements or fulfil their requirement through an intermediate credit institution.

Chart A Daily average excess reserves per maintenance period

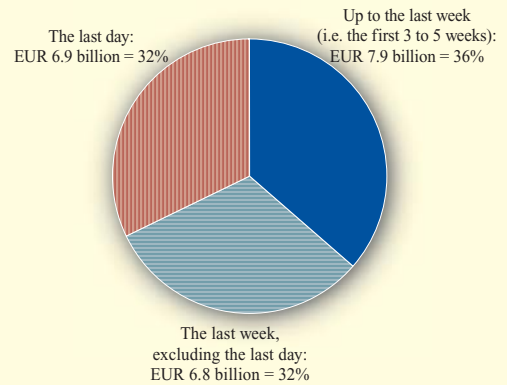
(EUR billions; x-axis refers to the last day of the relevant reserve maintenance period)



Source: ECB.
 Note: The vertical line refers to the end of the first reserve maintenance period in the amended operational framework for monetary policy.

Chart B Average distribution of excess reserve holdings over a reserve maintenance period

(September 2002 to September 2005)



Source: ECB.

period, it can also stem from a “buffer” amount held to reduce the risk of non-compliance with reserve requirements. Moreover, in some relatively rare situations, credit institutions hold excess reserves to facilitate night-time processing within some securities settlement systems. Excess reserves are therefore mainly generated through credit institutions’ idiosyncratic behaviour and random liquidity shocks. Still, when looking at excess reserves over the course of a reserve maintenance period, several regularities can be observed, allowing the ECB to forecast the daily average level.

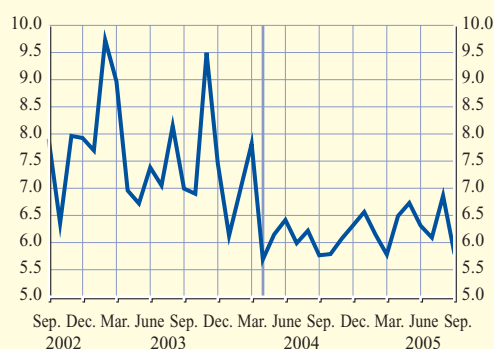
First, daily average excess reserves have, after all, been relatively stable over the last three years, fluctuating between €560 million and €930 million around a median of €660 million (see Chart A). While these maximum and minimum values have only been reached recently, in May and September 2005 respectively, there is no concrete evidence of increased volatility in daily average excess reserves.

Second, an intrinsic feature of excess reserves is that they accumulate primarily during the last few days of the reserve maintenance period (see Chart B). This is because, by this time, an increasing number of credit institutions have already fulfilled their reserve requirements. When credit institutions fulfil their reserve requirements before the end of the reserve maintenance period, they are more likely to hold excess reserves as they are no longer able to offset excess liquidity via reserve averaging (i.e. replacing higher reserve holdings on one day with lower holdings on another day). Moreover, the above-mentioned use of excess reserves as a buffer against non-compliance with reserve requirements implies that the share of total excess reserves held on the last day of the reserve maintenance period is particularly high. Consequently, at the beginning of the reserve maintenance period, when only a small amount of excess reserves has accumulated, the ECB has to base its forecast of the daily average level on information from previous reserve maintenance periods and on various seasonal factors, such as holiday effects and/or the length of the reserve maintenance period. It is only later on in the reserve maintenance period, particularly on the last day, that the ECB can refine its forecast by also taking into account the excess reserves accumulated earlier in the period.

Finally, since the introduction of the changes to the operational framework for monetary policy in March 2004, there has been a significant stabilisation of the amount of excess reserves held on the last day of the reserve maintenance period (see Chart C). This is due, among other factors, to the fact that reserve maintenance periods now always end on the same weekday (Tuesday) and that credit institutions now know exactly what their reserve requirements are at the beginning of the reserve maintenance period. Owing to this stabilisation and the fact that the ECB knows the precise amount of excess reserves that has accumulated up to the second-to-last day (i.e. about two-thirds of the total, as can be seen in Chart B), the forecasts for daily average excess reserves are relatively accurate on the last day of the reserve maintenance period. In the eight reserve maintenance periods from February to September 2005, the error in this average forecast only exceeded €10 million on three occasions and was nevertheless still below €30 million. In accumulated terms, these figures correspond, ceteris paribus, to liquidity imbalances of around €300 million and €900 million respectively at the end of the reserve maintenance period. Hence, when deciding on the need for (and, if so, the amount of) a fine-tuning operation on the last day of the reserve maintenance period, the ECB has faced only limited uncertainty about excess reserves.

Chart C Excess reserves held on the last day of the maintenance period

(EUR billions; x-axis refers to the last day of the relevant reserve maintenance period)



Source: ECB.
Note: The vertical line refers to the end of the first reserve maintenance period in the amended operational framework for monetary policy.