

## Box 4

**LIQUIDITY CONDITIONS AND MONETARY POLICY OPERATIONS IN THE PERIOD FROM 14 MAY TO 12 AUGUST 2014**

This box describes the ECB's monetary policy operations during the reserve maintenance periods ending on 10 June, 8 July and 12 August 2014 – i.e. the fifth, sixth and seventh maintenance periods of the year.

On 5 June the ECB lowered the interest rate on the main refinancing operations by 10 basis points, to 0.15%, starting from the operation which was settled on 11 June. At the same time, the ECB lowered the interest rate on the marginal lending facility by 35 basis points, to 0.40%, and the interest rate on the deposit facility by 10 basis points, to -0.10%, both effective from the start of the sixth maintenance period (i.e. from 11 June). In addition, the ECB decided to suspend the weekly liquidity-absorbing fine-tuning operations that had been conducted in order to sterilise the liquidity injected through the Securities Markets Programme (SMP), with the last SMP-related sterilisation operation being settled on 11 June.

During the period under review the main refinancing operations (MROs) continued to be conducted as fixed rate tender procedures with full allotment. The same procedure remained in use for the special-term refinancing operations with a maturity of one maintenance period. The fixed rate was the same as the MRO rate prevailing at the time. On 5 June the ECB announced the discontinuation of these special-term refinancing operations with effect from the seventh maintenance period – i.e. the operation which was settled on 11 June and matured on 8 July was the last special-term refinancing operation conducted.

Furthermore, the three-month longer-term refinancing operations (LTROs) were also conducted as fixed rate tender procedures with full allotment. The interest rate in each of these operations was fixed at the average of the MRO rates over the respective LTRO's lifetime.

**Liquidity needs**

In the period under review the aggregate daily liquidity needs of the banking system, defined as the sum of autonomous factors and reserve requirements, averaged €612.9 billion, €24.7 billion more than the daily average in the previous review period (i.e. the period from 12 February to 13 May 2014).<sup>1</sup> Autonomous factors increased significantly, rising by €23.5 billion to stand at an average of €508.3 billion, while reserve requirements increased marginally, rising by €1.2 billion to stand at an average of €104.5 billion (see the table).

The change in average autonomous factors was the combined effect of changes in several individual components. Among the liquidity-providing factors, net assets denominated in euro increased by €30.3 billion to stand at an average of €508.2 billion, having increased by €31 billion in the previous period. This reflected, among other things, foreign official institutions' lower

<sup>1</sup> All comparisons are relative to the previous period, unless otherwise indicated.

euro-denominated deposits with the Eurosystem. The introduction of a negative deposit facility rate has led some foreign institutions to further reduce their cash holdings with Eurosystem central banks in order to avoid negative interest rate charges.

Among the liquidity-absorbing factors, banknotes in circulation increased by €19.5 billion to stand at an average of €959.6 billion, reflecting usual seasonal developments in banknote demand over the summer. Government deposits also increased, rising by €22.1 billion to stand at an average of €103.7 billion. As the introduction of a negative deposit facility rate also affected government deposits held with the Eurosystem, national treasuries tried increasingly to invest their excess liquidity at positive nominal interest rates in the market, but they did not always achieve this goal.

The volatility of autonomous factors increased further. Weekly estimates, as published with the announcement of the main refinancing operations, ranged between €451.7 billion and €532.1 billion, compared with between €448.3 billion and €522.3 billion in the previous period. This volatility was due primarily to fluctuations in other autonomous factors and government deposits. The traditional volatility of government deposits owing to tax cycles was compounded by the aforementioned attempts by treasuries and customers of Eurosystem reserve management services to invest more of their holdings in the market.

Weekly forecasts of autonomous factors showed an average absolute error of €6.7 billion, ranging between -€19.3 billion and €5.2 billion – up from an average of €3.2 billion in the previous review period. That increase can be attributed mainly to government deposits, which exhibited an average absolute error of €5.8 billion owing to the difficulty of anticipating the investment activities of treasuries in an environment in which short-term money market rates were often negative. Other autonomous factors also contributed, recording an average absolute error of €3.8 billion.

### **Liquidity provision**

The average amount of liquidity provided through open market operations conducted as fixed rate tender procedures with full allotment increased by €30.2 billion, to €739.7 billion, after several periods of decline. This increase was a result of the combined effect of the repayment of liquidity obtained in the three-year LTROs, partially offset by an increase in other liquidity-providing tender operations and the suspension of the SMP-related weekly sterilisation operations. Liquidity provided through tender operations averaged €531.1 billion, marking an increase of €48 billion in comparison with the previous review period.

The average liquidity provided through the weekly MROs increased by €11 billion, to €121 billion, as some counterparties partially switched to the MROs in order to replace the amounts repaid on the three-year LTROs and the discontinued special-term refinancing operations with a maturity of one maintenance period. The weekly amount allotted remained volatile, fluctuating between a low of €94 billion on 9 July and a high of €149.3 billion on 4 June as banks adjusted their demand in line with developments in liquidity and money market conditions. The reduction of the MRO rate and the cut in the deposit facility rate, together with the suspension of the SMP-related sterilisation operations, may have increased excess liquidity and dampened money market rate volatility, thus contributing to the stabilisation of MRO allotment amounts observed since mid-June (with the exception of end-of-month spikes).

The three-year LTRO repayments continued at an average pace of €6.3 billion per week. By the end of the period under review, total repayments had reached €626.0 billion, corresponding to 63% of the total amount borrowed and 120% of the initial net injection of liquidity. Weekly repayments continued to fluctuate, with a peak settlement of €21.5 billion on 23 July. Idiosyncratic counterparty factors explain most of these weekly variations, although the average pace remained broadly unchanged compared with the previous period.

Prior to the decision to suspend the SMP-related weekly sterilisation operations, the bids received in the last eight operations were lower than the intended absorption amount. These episodes reflected greater tensions in very short-term money market rates as a consequence of lower excess liquidity, which was sometimes accompanied by rate spikes above the maximum bid rates in these operations.

### Excess liquidity

Excess liquidity increased by €5.5 billion, averaging €126.8 billion in the period under review, compared with €121.3 billion in the previous review period, thereby reversing the steady downward trend observed since early 2013. Daily current account holdings in excess of reserve requirements increased by €9.2 billion to average €101.4 billion, while average use of the deposit facility decreased by €4 billion, to €25.5 billion. Excess liquidity dropped to the lowest level recorded since the beginning of 2012, standing at €116.6 billion in the fifth maintenance period of 2014. Following the ECB's decisions in June 2014, excess liquidity rebounded in the sixth and seventh maintenance periods, standing at approximately €130 billion. Excess liquidity fluctuated fairly strongly in the fifth maintenance period, mainly driven by volatility in autonomous factors and the fluctuations in the amounts allotted in the MROs and the SMP-related sterilisation operations. This contributed to the heightened volatility of short-term money market rates. However, since the sixth maintenance period, as a response to the ECB measures, excess liquidity has stabilised and fluctuated within a narrower range of between €166 billion (30 June) and €104 billion (23 July), thus remaining above €100 billion.

In the fifth maintenance period counterparties continued to hold about 24% of their excess liquidity in the deposit facility, with the remaining 76% being held in the form of excess reserves, in line with the average pattern recorded in the second, third and fourth maintenance periods. In the sixth and seventh maintenance periods the proportion of excess liquidity held in the form of excess reserves increased to approximately 82%. As excess reserves (i.e. average current account holdings in excess of minimum reserve requirements) are also charged the negative rate applied to the deposit facility following the decisions announced on 5 June, counterparties should remain indifferent regarding the form in which excess liquidity is held. In this context, however, some technical and operational aspects may make holding excess reserves marginally more convenient than use of the deposit facility, which explains their higher share. At the same time, some counterparties may retain a preference for the deposit facility for operational or regulatory reasons. The pattern observed in the fourth and fifth maintenance periods – whereby use of the deposit facility increased in the last week of the maintenance period, when more counterparties had fulfilled their reserve requirements – largely disappeared in the sixth and seventh maintenance periods.

## Interest rate developments

The EONIA averaged 24 basis points in the fifth maintenance period, prior to the cut in the MRO rate on 5 June, compared with 20.7 basis points in the three preceding maintenance periods. It fluctuated between a low of 5.3 basis points on 9 June and a high of 46.9 basis points on 27 May, reflecting fluctuations in excess liquidity. Following the cut in the interest rates on the main refinancing operations, the deposit facility and the marginal lending facility, the EONIA stabilised at approximately 4 basis points in the sixth and seventh maintenance periods. Volatility was very limited: except for end-of-month spikes in June and July, the EONIA remained within a relatively narrow range, fluctuating between 6 basis points on 11 June and 0.9 basis points on 12 August.

## Eurosystem liquidity situation

	14 May to 12 Aug.	12 Feb. to 13 May	Seventh maintenance period		Sixth maintenance period		Fifth maintenance period		
<b>Liabilities – Liquidity needs (averages; EUR billions)</b>									
<b>Autonomous liquidity factors</b>	<b>1,558.2</b>	<b>(+72.8)</b>	<b>1,485.4</b>	<b>1,560.2</b>	<b>(-1.3)</b>	<b>1,561.5</b>	<b>(+9.1)</b>	<b>1,552.4</b>	<b>(+26.9)</b>
Banknotes in circulation	959.6	(+19.5)	940.1	967.6	(+9.5)	958.1	(+7.1)	951.0	(+3.1)
Government deposits	103.7	(+22.1)	81.6	92.4	(-17.5)	110.0	(-1.6)	111.5	(+23.8)
Other autonomous factors	494.9	(+31.2)	463.7	500.1	(+7)	493.4	(+3.5)	489.8	(+0)
<b>Monetary policy instruments</b>									
Current accounts	205.9	(+10.4)	195.5	210.2	(-4)	214.3	(+22)	192.3	(+1)
Minimum reserve requirements	104.5	(+1.2)	103.3	105.0	(+0.6)	104.4	(+0.5)	103.9	(+0.7)
Deposit facility	25.5	(-4)	29.5	24.6	(+0.8)	23.9	(-4.4)	28.3	(-1.4)
Liquidity-absorbing fine-tuning operations	47.1	(-119.5)	166.6	0.0	(-27.2)	27.2	(-98.8)	126.0	(-26.5)
<b>Assets – Liquidity supply (averages; EUR billions)</b>									
<b>Autonomous liquidity factors</b>	<b>1,050.2</b>	<b>(+49.2)</b>	<b>1,001.0</b>	<b>1,071.5</b>	<b>(+25.4)</b>	<b>1,046.2</b>	<b>(+18.7)</b>	<b>1,027.4</b>	<b>(+1.9)</b>
Net foreign assets	541.9	(+18.9)	523.0	547.6	(+7.6)	540.0	(+3.2)	536.8	(+0.4)
Net assets denominated in euro	508.2	(+30.3)	478.0	523.9	(+17.8)	506.2	(+15.5)	490.7	(+1.5)
<b>Monetary policy instruments</b>									
Open market operations	739.7	(+30.2)	709.5	723.6	(-30.2)	753.8	(+7.9)	745.9	(+28)
MROs	121.0	(+11)	109.9	106.6	(-5.1)	111.7	(-36.4)	148.1	(+20.1)
Special-term refinancing operations	13.0	(-2.1)	15.1	0.0	(-10)	10.0	(-22.4)	32.3	(+4.3)
Three-month LTROs	33.4	(+5.1)	28.3	32.1	(-3)	35.2	(+1.9)	33.3	(+7.6)
Three-year LTROs	410.8	(-85.6)	496.5	382.6	(-32.3)	414.9	(-27.3)	442.2	(-23.7)
Targeted LTROs	0.0	(+0)	0.0	0.0	(+0)	0.0	(+0)	0.0	(+0)
Tender operations provided	531.1	(+48)	483.2	521.3	(-23.3)	544.6	(+14.6)	530.0	(+34.7)
Outright portfolios	208.6	(-17.6)	226.3	202.3	(-6.9)	209.2	(-6.7)	215.9	(-6.8)
Covered bond purchase programme	35.0	(-3.2)	38.2	33.4	(-1.7)	35.1	(-1.9)	37.0	(-0.8)
Second covered bond purchase programme	14.1	(-0.5)	14.6	13.9	(-0.2)	14.2	(-0.1)	14.3	(-0.1)
Securities Markets Programme	159.5	(-13.9)	173.4	154.9	(-5)	159.9	(-4.7)	164.6	(-5.9)
Marginal lending facility	0.2	(-0.2)	0.4	0.3	(+0.1)	0.1	(+0.1)	0.1	(-0.1)
<b>Other liquidity-based information (averages; EUR billions)</b>									
Aggregate liquidity needs	612.9	(+24.7)	588.1	593.9	(-26.2)	620.1	(-9.2)	629.3	(+28.6)
Autonomous factors	508.3	(+23.5)	484.8	488.9	(-26.8)	515.7	(-9.7)	525.4	(+28.2)
Excess liquidity	126.8	(+5.5)	121.3	129.6	(-3.9)	133.5	(+17)	116.6	(-0.7)
Repayment of three-year LTROs	85.2	(+2.6)	82.6	35.4	(+3.9)	31.5	(+13.2)	18.3	(-13.7)
<b>Interest rate developments (percentages)</b>									
MROs	0.18	(-0.07)	0.25	0.15	(+0)	0.15	(-0.1)	0.25	(+0)
Marginal lending facility	0.52	(-0.23)	0.75	0.40	(+0)	0.40	(-0.35)	0.75	(+0)
Deposit facility	-0.07	(-0.07)	0.00	-0.10	(+0)	-0.10	(-0.1)	0.00	(+0)
EONIA average	0.108	(-0.099)	0.207	0.043	(+0.003)	0.040	(-0.2)	0.240	(+0)

Source: ECB.

Note: Since all figures in the table are rounded, in some cases the figure indicated as the change relative to the previous period does not represent the difference between the rounded figures provided for those two periods (differing by €0.1 billion).