# Monetary developments

## Money market management and central bank money requirements

The Bundesbank continued its "steady-asshe-goes" interest rate policy during the autumn months and thus initially left its interest rates unchanged. At the beginning of December it then lowered the fixed rate for the repurchase agreements that were still outstanding in that month from 3.3 % to 3.0 %. The Bundesbank left the discount rate at  $2\frac{1}{2}$ % and the lombard rate at  $4\frac{1}{2}$ %. The interest rate cut was carried out in coordination with the other central banks in the future European monetary union. They reduced their interest rates simultaneously. The move came after central bank interest rates in the future EMU countries had already achieved a large degree of convergence at the lower end of the range. This posed the guestion of the appropriate interest rate level for the launch of European monetary union. A comprehensive assessment of the situation and outlook in the EMU led to the conclusion that a further, coordinated reduction in interest rates was called for (see page 12 ff.).

market, which had fallen continuously during the summer, stabilised in the period under review, and in some cases increased. At the shorter end this reflects "end-of-year premia". The price for one-year funds, which — in line with developments in the capital market — had reached a new all-year low at the beginning of October, rose slightly in Novem-

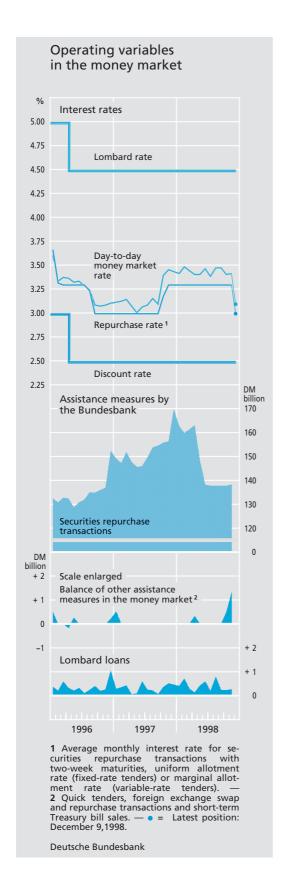
ber. Following the Bundesbank's interest rate decision, time deposit rates fell by around

Time deposit rates in the German money

interest rate cut in December

Coordinated

Money market rates



20 basis points. The money market yield curve remained very flat.

The Bundesbank's ongoing money market management was largely free of tension during the autumn months. The day-to-day money market rate was mostly kept within a short spread of around ten basis points over the repurchase rate. In order to achieve this, the Bundesbank endeavoured to keep the fluctuations in credit institutions' daily central bank balances within a narrow range around the level of required reserves and thus to enable banks to satisfy the reserve requirements evenly. On the one hand, the liquidity provision by the Bundesbank was geared to the seasonal changes in currency in circulation. On the other hand, the Bundesbank had to take due account of fluctuations in its external position and sporadic expansionary swings in cash items in the process of settlement in the Bundesbank system. Added to this was a downward trend in bill-based lending. The Bundesbank was able to largely smooth out the liquidity effects associated with these market influences through its regular weekly securities repurchase agreements running for two weeks.

sion of liquidity to banks was fairly tight following the announcement of unexpectedly high required reserves for each of those months, the Bundesbank countered the emerging shortage in the day-to-day money market by means of short-term liquidityboosting fine-tuning operations. In October it employed a five-day quick tender and in No-

vember it resorted to foreign exchange swap

In October and November, when the provi-

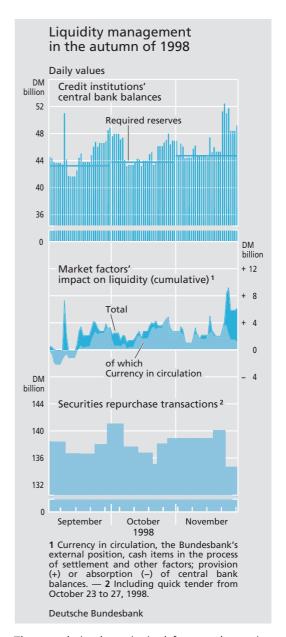
Money market management through securities repurchase agreements ...

... and fine-tuning measures transactions. Contrary to customary practice, the latter were not given a maturity up to the next regular tender date but instead were given a longer maturity up to the second next repurchase transaction at the beginning of December. This enabled the Bundesbank to equalise to some extent the volumes of the individual repurchase transactions, which were diverging markedly, and to restore a more uniform allotment profile.

Offsetting operations by banks

In the course of autumn the banks gradually reduced the level of their rediscount borrowing from the Bundesbank. One factor behind this development was that, in view of the forthcoming closure of the discount window in mid-January next year, only bills maturing at the latest on January 14, 1999 (date of the ESCB's first base tender) have been purchased since October 14 of this year. As the maturities of bills eligible for refinancing have been shortening more and more since then, it is becoming increasingly harder for banks to use up their rediscount quotas. After the end of November the Bundesbank ceased to purchase bills payable abroad. After December 23 it will discontinue its bill-purchasing operations altogether.

Credit institutions' daily recourse to the lombard facility was mostly small. At the end of the month, too, banks resorted to lombard loans on a relatively modest scale only as part of their concluding operations for the reserve period; the day-to-day money market rate remained below the lombard rate at the end of the month as well.



The trends in the principal factors determining bank liquidity for the months September to November are shown in detail in the table on page 18. Central bank money (currency in circulation held by non-banks and minimum reserves on domestic liabilities at current reserve ratios) fell by DM 2.6 billion during this period – just as it did in the same period last year. This decline was due to the weak demand for currency that has been evident

Fall in central bank money

#### Factors determining bank liquidity \*

DM billion: calculated on the basis of daily averages of the months

	1998		
Item	Sep. to Oct.	Nov. pe	Sep. to Nov. pe
I. Provision (+) or absorption (–) of central bank balances by			
<ol> <li>Change in central bank money (increase: –)</li> </ol>	+ 3.0	- 0.5	+ 2.6
Currency in circulation Minimum reserves on	(+ 3.5)	(+ 0.0)	(+ 3.5
domestic liabilities Memo item Change in seasonally adjusted central bank money	(-0.4)	(+ 0.1)	(- 0.9) (- 2.4)
<ol><li>Change in the Bundesbank's external position 1</li></ol>	+ 1.3	+ 1.5	+ 2.8
3. Other factors	- 3.1	- 1.7	- 4.9
Total	+ 1.1	- 0.7	+ 0.5
II. Lasting provision (+) or absorption (–) of funds	- 1.1	- 0.8	- 1.9
<ol> <li>Change in refinancing facilities</li> </ol>	(+ 0.0)	(- 0.0)	(- 0.0
Recourse to unused     refinancing facilities     (reduction: +)	(- 1.1)	(- 0.7)	(- 1.8
III. Change in the short-term liquidity gap (I plus II; increase: –)	+ 0.1	- 1.5	- 1.4
IV. Meeting of remaining deficit (+) or absorption of surplus (–) by			
Securities repurchase transactions	- 0.0	+ 0.6	+ 0.6
2. Quick tenders	+ 0.5	- 0.5	± 0.0
<ol> <li>Foreign exchange swap transactions</li> </ol>	_	+ 1.3	+ 1.3
4. Lombard loans	- 0.6	+ 0.0	- 0.5
Memo items <sup>2</sup> Unused refinancing facilities Securities repurchase transactions Balance of very short-term	3.6 137.7	4.4 138.3	4.4 138.3
assistance measures 3 Lombard loans	0.5 0.2	1.3 0.3	1.3 0.3

<sup>\*</sup> For longer-term trends see pages 12\*/13\* in the Statistical Section of this Report. — 1 Excluding foreign exchange swap transactions. — 2 Levels (in the current month or in the last month of the period). — 3 Ouick tenders, foreign exchange swap and repurchase transactions and sales of short-term Treasury bills.

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since the autumn of 1997. Even after eliminating seasonal influences, the amount of currency in circulation decreased markedly; sharp falls in September and October were followed by a largely stagnant trend in November. By contrast, the level of reserves required on domestic liabilities expanded quite considerably during the months under consideration. This reflects the slight acceleration of monetary growth due mainly to an increase in sight deposits (see page 19f.).

> Current transactions

Credit institutions' current transactions with the Bundesbank squeezed bank liquidity on balance in the autumn months. Sizeable resources were drained from the banks in autumn by "other factors". This was due principally to the entries in the Bundesbank's profit and loss account but also to cash items in the process of settlement in the Bundesbank system, which had a more contractionary impact in the period under review than in the preceding period. In addition, reserves required on foreign liabilities, changes in which are likewise included here in the condensed form of the liquidity account, rose sharply during the past few months. By contrast, the change in the Bundesbank's external position boosted liquidity; it increased by DM 2.8 billion between September and November on a monthly average. Factors contributing to this increase were the autonomous inflows of foreign exchange (especially dollars purchased from US troops, and interest income on the Bundesbank's external assets which have no effect on liquidity) and substantial calls by foreign monetary authorities towards the end of the period in question on their Deutsche Mark balances held at the Bundesbank.

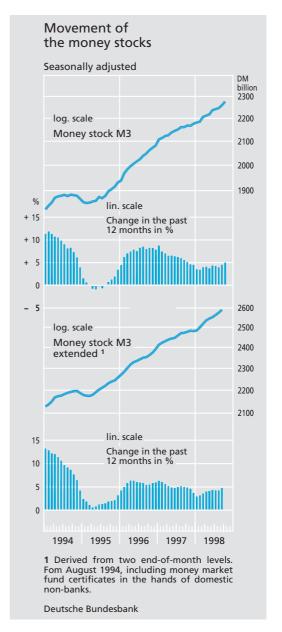
Short-term liquidity gap

At the end of the autumn, the provision of liquidity to banks had increased slightly owing to the combined effect of the change in central bank money and current transactions. This increase was partly offset by a distinctly lower utilisation of the largely unchanged rediscount quotas. On balance, therefore, the short-term liquidity gap of the banks rose by DM 1.4 billion. The Bundesbank covered part of this shortfall by raising the outstanding volume of regular securities repurchase transactions to DM 138.3 billion on average in November. Additional resources were made available at the end of the period under review by the above-mentioned foreign exchange swap transactions. On the other hand, credit institutions reduced their lombard borrowing to a monthly average of DM 0.3 billion (- DM 0.5 billion).

#### Monetary developments

Increased monetary expansion

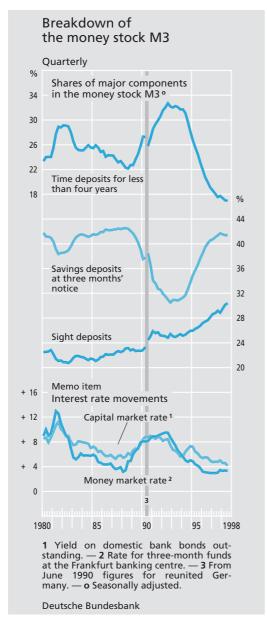
Monetary growth accelerated somewhat during the autumn. Whereas the rate of increase in the money stock had been moderate in August, it rose appreciably in September and October. It nevertheless remains within the corridor set by the Bundesbank for the current year. In October the money stock M31 exceeded its average level of the fourth quarter of 1997 by a seasonally adjusted annualised rate of 5.3%, compared with 4.9% in September and 4.7 % in August. Throughout the period under review it was therefore well within the target range defined for this year of 3% to 6%. Compared with the fourth quarter of 1996 M3 expanded up to October at a seasonally adjusted annualised rate of



5.0 %, as against 4.8 % up to September and 4.7 % up to August.

The slight acceleration in monetary growth of late was due especially to the fact that monetary capital formation came to a virtual halt Determinants of monetary growth

<sup>1</sup> Currency in circulation and the sight deposits, time deposits for less than four years and savings deposits at three months' notice held by domestic non-banks – other than the Federal Government – at domestic credit institutions; viewed as a monthly average.



in the period under review. On the other hand, substantial outflows of capital in domestic non-banks' payment transactions with non-residents once again helped to dampen monetary growth. Moreover, bank borrowing by public authorities contracted further. The third factor was that domestic non-banks purchased money market fund certificates on a somewhat greater scale than in the preceding months.

Of the individual (seasonally adjusted) components of the money stock, sight deposits expanded fastest between August and October. The pronounced preference for liquidity shown by domestic non-banks was due presumably to the currently small opportunity cost of holding cash now that virtual price stability has been achieved, to the low capital market rates and also to the major uncertainty in the financial market. As a result, investment funds, which are assigned to the corporate sector in the banking statistics, accumulated considerable liquid resources in the period under review. Savings deposits at three months' notice likewise expanded guite sharply between August and October. On balance, they were once again exclusively special savings facilities. Shorter-term time deposits grew moderately. However, their growth was attributable solely to a substantial increase in October. By contrast, currency in circulation decreased further; over the last 12 months its cumulative decline came to more than 1½%.

Domestic non-banks again increased their holdings of money market fund certificates during the period under consideration (by DM 2.7 billion). Since the beginning of the year they have purchased such paper for DM 9.7 billion (net), after having reduced their holdings of these certificates by almost DM 20 billion in the previous two years. In particular, it is the flattening of the yield curve that has probably led to the renewed attractiveness of money market fund certificates. In effect, however, this has probably tended to decrease monetary capital formation rather than slow down monetary growth.

Components of the money stock

Further purchases of money market fund certificates Sharp growth in M3 extended

Domestic non-banks likewise substantially raised their deposits in the Euro-market between July and September (no figures are available yet for October). The money stock M3 extended<sup>2</sup>, which includes such deposits as well as money market fund certificates held by domestic non-banks, therefore grew more sharply than M3 in the third quarter. Viewed over the past 12 months, however, M3 and M3 extended continued to grow almost in parallel at a rate of  $4\frac{1}{2}$ % and 5%, respectively.

Monetary capital formation virtually halted

Monetary capital formation, which has been very sluggish for some considerable time, virtually came to a halt in recent months. The low long-term interest rates, the flattening of the yield curve and the high volatility in the financial markets evidently tended to strongly dampen the propensity of domestic nonbanks to deposit funds with credit institutions for a longer period. After seasonal adjustment, monetary capital formation at banks recorded virtually no change between August and October after having expanded by 2 ½ % in the preceding three-month period. Before seasonal adjustment, monetary capital formation actually fell by DM 17.2 billion during the period under review, compared with a rise of DM 3.3 billion twelve months earlier, when monetary capital formation had likewise been weak. Specifically, domestic non-banks reduced their holdings of bank bonds by DM 19.1 billion between August and October.

### The money stock and its counterparts \*

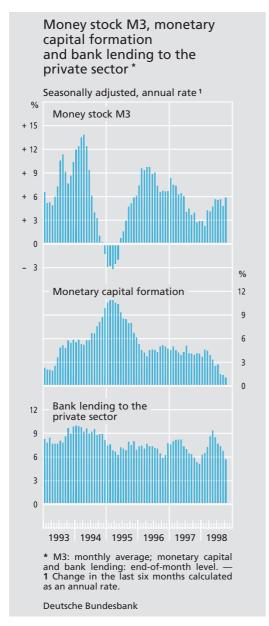
DM billion; change during period

Ite	m	Aug. to Oct. 1997	Aug. to Oct. 1998
I.	Bank lending to domestic	. 71.0	. 50.4
	non-banks, total 1	+ 71.9	+ 58.0
	to enterprises and individuals of which Short-term lending	+ 48.3	+ 58.0
	to public authorities	+ 23.6	+ 0.
II.	Net external assets of credit institutions and the Bundesbank	- 39.3	<b>– 27.</b>
III.	Monetary capital formation at credit institutions from domestic sources, total of which	+ 3.3	<b>– 17.</b> .
	Time deposits for four years and more	+ 10.9	+ 3.7
	Savings deposits at more than three months' notice	- 5.3	- 2.:
	Bank savings bonds	+ 0.8	- 3.
	Bank bonds outstanding 2	- 11.3	– 19.
IV.	Deposits of the Federal Government in the banking system <sup>3</sup>	+ 0.2	- 0.
V.	Other factors	+ 23.4	+ 11.
VI.	Money stock M3 (Balance: I plus II less III less IV less V)	+ 5.7	+ 36.
	Currency in circulation	- 2.6	- 5.
	Sight deposits	+ 5.8	+ 40.
	Time deposits for less than four years	- 2.5	- 1.
	Savings deposits at three months' notice	+ 5.1	+ 3.
M3	emo item 8 as a monthly average October 1998 compared th the 4th qtr of 1997 in % 4		+ 5.

<sup>\*</sup> The figures for the latest period are always to be regarded as provisional. — 1 Including lending against Treasury bills and against securities. — 2 Excluding banks' holdings. — 3 Sight deposits and time deposits for less than four years. — 4 Change in the money stock M3 as a monthly average derived from five bank-week return days (end-of-month levels included with a weight of 50%) compared with the average of the fourth quarter of 1997, expressed as an annual rate, seasonally adjusted.

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<sup>2</sup> Money stock M3, domestic non-banks' deposits with the foreign subsidiaries and foreign branches of German banks and the short-term bank bonds and certificates of domestic and foreign money market funds in the hands of domestic non-banks, less the bank deposits and short-term bank bonds of domestic money market funds; calculated as the average of two end-of-month levels.



Savings bonds and savings deposits at more than three months' notice likewise registered declines (– DM 3.1 billion and – DM 2.3 billion, respectively). On the other hand, long-term time deposits were increased by DM 3.7 billion. Banks' capital and reserves grew by DM 3.6 billion.

Bank lending to domestic enterprises and individuals rose slightly during the period under consideration. Lending by credit institutions to the private sector expanded by DM 58.0 billion between August and October, compared with DM 48.3 billion a year earlier. After seasonal adjustment and expressed as an annual rate, this amounts to a rate of increase of 6%, after 5½% between May and July. A major factor behind this somewhat higher level of lending was that banks purchased securities from the business sector during the period under review (to the tune of DM 0.7 billion), whereas they had sold such paper to the extent of DM 15.0 billion in the preceding three months. There was a further marked rise in longer-term lending. By contrast, short-term lending to the private sector grew a little less strongly than in the previous three-month period.

> Lending, by borrower

Lending to the

private sector

somewhat

higher

According to the quarterly borrowers statistics, which are only available up to the third quarter and do not include lending against securities, direct bank lending to domestic enterprises increased in the third quarter, whereas lending to households receded a little. The rate of increase in housing loans remained at a high level. Domestic enterprises expanded their indebtedness to banks by a seasonally adjusted annual rate of 7 1/2 % between July and September, compared with 6 ½ % in the second quarter and 4 ½ % in the first three months of the year. Notably lending to the services sector (including the professions) rose further. The main reason for this was presumably the persistently favourable business outlook in the corporate services sector. There was also a rise in borrowing by the manufacturing sector, which exclusively took the form of short-term

loans on balance. The construction sector, the wholesale and retail trade and the transport, storage and communication sector all stepped up their borrowing, too.

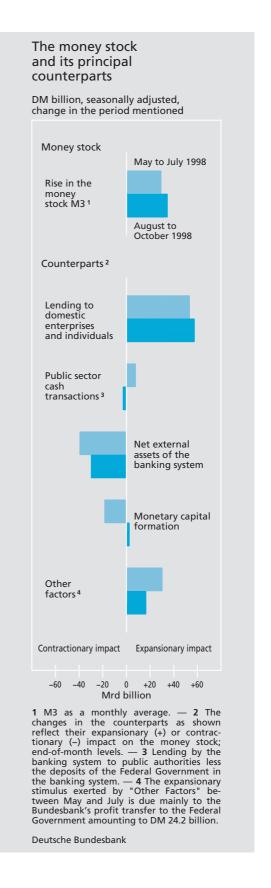
Households' propensity to contract debt lessened a little between July and September. Consumer credit rose at a seasonally adjusted annualised rate of 6%, as against 7% in the second quarter and just under 3% in the first quarter. Housing loans grew at a seasonally adjusted annual rate of 7% in the third quarter, which was similar to the pace of growth recorded in the first two quarters. It is likely that the sustained decline in long-term interest rates continued to bolster the demand for housing finance.

Increase in lending commitments

New lending commitments for medium and long-term loans remained quite high in the period under review. In this case, too, the interest rate trend probably played a major role. The volume of commitments outstanding increased significantly between August and October.

Bank lending rates

Short-term bank lending rates remained virtually unchanged in the past few months. Between 10% (for amounts below DM 200,000) and 7½% (for amounts of DM 1 million to less than DM 5 million) were charged for credit in current account on average in November. Bills were discounted at an average rate of 4¾%. The effective interest rates payable on long-term fixed-rate loans fell to new historical lows in line with capital market rates. Mortgage loans secured by residential real estate with interest rates locked in for five years cost 5% in November and



#### Movement of major lending rates

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%	n	а

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			Average interest	
Type of credit	as in		rate 1	Spread 2
Personal credit		1996	11.30	10.25-12.25
lines 3	Nov.	1998	11.23	9.75-12.25
Current account credit				
from DM 1 million to		1993	12.06	11.00-13.75
less than DM 5 million	Nov.	1998	7.57	6.00-10.50
Bills discounted	Jan.	1993	10.36	8.95-12.25
	Nov.	1998	4.88	3.25- 7.25
Mortgage loans secured by residential real estate with interest				
rates locked in	Jan.	1993	8.33	7.98- 9.28
for ten years	Nov.	1998	5.48	5.27- 6.01
Long-term fixed-rate loans to enterprises and self-employed persons (excluding housing loans)	3			
from DM 200,000 to		1996	6.85	5.70- 9.23
less than DM 1 million		1998	5.94	4.84- 7.75
from DM 1 million to		1996	6.57	5.50 - 8.30
less than DM 10 million	IVOV.	1998	5.69	4.70- 7.39

1 The average rates are calculated as unweighted arithmetic means from the interest rates reported within the spread. — 2 The spread is ascertained by eliminating the reports in the top 5% and the bottom 5% of the interest rate range. — 3 First collected for November 1996 for the purposes of the restructured interest rate statistics.

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those for ten years  $5\frac{1}{2}$ %. This was 1 percentage point and  $1\frac{1}{4}$  percentage points, respectively, lower than in December 1997. Variable-rate mortgages from banks cost just over  $5\frac{3}{4}$ % of late. The charge for long-term fixed-rate loans to enterprises and self-employed persons averaged 6% (for amounts of DM 200,000 to less than

DM 1 million) and 5½% (for amounts of DM 1 million to less than DM 10 million).

The indebtedness of the public sector to the banks decreased slightly between August and October in seasonally adjusted terms, whereas it had increased somewhat between May and July. Before seasonal adjustment it remained virtually unchanged, compared with an increase of DM 23.6 billion in the same period of last year. This was caused primarily by a fall in lending against securities (– DM 9.1 billion). The Federal Government's deposits with the banking system, which do no count towards the money stock, remained more or less unchanged.

Fall in lending to the public sector

Domestic non-banks' current and financial transactions with non-residents again generated substantial outflows between August and October. The net external assets of the banking system, a decline in which reflects such non-bank outflows statistically, fell by DM 27.2 billion in the period under consideration, compared with a decrease of DM 29.7 billion between May and July and by DM 39.3 billion twelve months earlier. Sizeable purchases of foreign securities by domestic investors contributed to these outflows.

Outflows of funds in foreign payments