

Monetary developments

Money market management and central bank money requirements

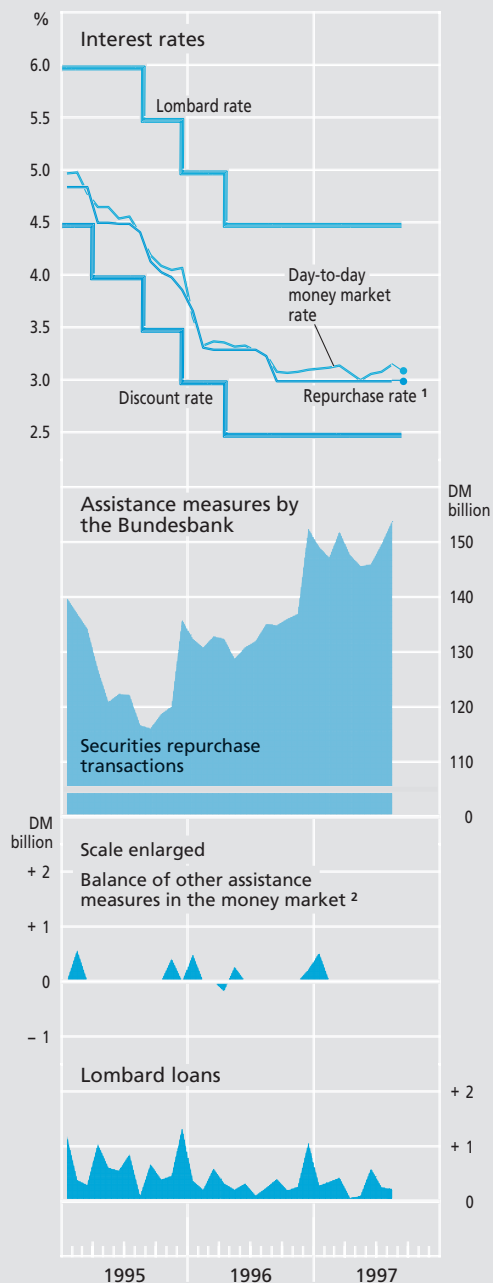
The Bundesbank again kept its interest rates unchanged recently, which therefore remained at an all-time low in some cases. The discount rate and the lombard rate have been at 2½% and 4½%, respectively, since April 1996. A rate of 3.0% has applied since August 1996 to the securities repurchase agreements, which were again issued as fixed-rate tenders in the period under review. In the summer months, the Bundesbank switched to announcing the form and terms of repo agreements only on the day of the invitation to tender and not, as previously, in advance immediately following the meetings of the Central Bank Council. It thereby returned to the procedure which had been customary up to eighteen months ago. The reason for this was the changed monetary policy setting due, in particular, to recent exchange rate trends and price movements. In that situation it seemed appropriate to retain short-term flexibility in interest-rate policy.

*Bundesbank
interest rates
unchanged*

Money market rates have tended to rise during the past few months. Day-to-day money, which had virtually been traded at the level of the repo rate in mid-year – and even slightly below it in isolated cases – was quoted around ten basis points above the tender mark throughout August. At the long end of the money market, interest rates – in a similar way to the short maturity categories in the capital market – rose fairly sharply; the yield curve in the money market has hence become much steeper. Judging by that, market

*Rise in money
market rates*

Operating variables in the money market



1 Average monthly interest rate for securities repurchase transactions with two-week maturities, uniform allotment rate (fixed-rate tenders) or marginal allotment rate (variable-rate tenders). — ● = Latest position: September 11, 1997.
2 Quick tenders, foreign exchange swap and repurchase transactions and short-term Treasury bill sales.

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expectations are geared to rising central bank rates.

Even so, Deutsche Mark money market rates remain in the lower range by international standards. Steps to ease conditions in some neighbouring countries were accompanied by a renewed tightening of interest rates in other European countries; as a result, the international interest rate range did not narrow any further in the summer months taken as a whole.

International interest rate range

Between June and August, the Bundesbank's ongoing money market management was based solely on the customary weekly conclusion of securities repurchase agreements with a maturity of two weeks. It did not employ short-term fine-tuning measures for steadying the trend in the market for day-to-day money. The Bundesbank kept the daily fluctuations in central bank balances around the level of required minimum reserves and made it easy for the banks to comply comparatively steadily with reserve requirements. In doing so, it had to take into account a number of sizeable changes in the market factors in order to set the amount of repurchase agreements in line with demand. Firstly, the volume of the tender had to be increased at the end of June in order to accommodate the rising demand for currency at the start of the summer holidays. Secondly, by varying the amounts to be purchased in the repo agreements, the Bundesbank offset major float movements with as short a time lag as possible. Finally, a fall in the Bundesbank's net external position in July and August necessi-

Money market management through repurchase agreements

tated a corresponding increase in the repo volume.

Banks' recourse to assistance measures

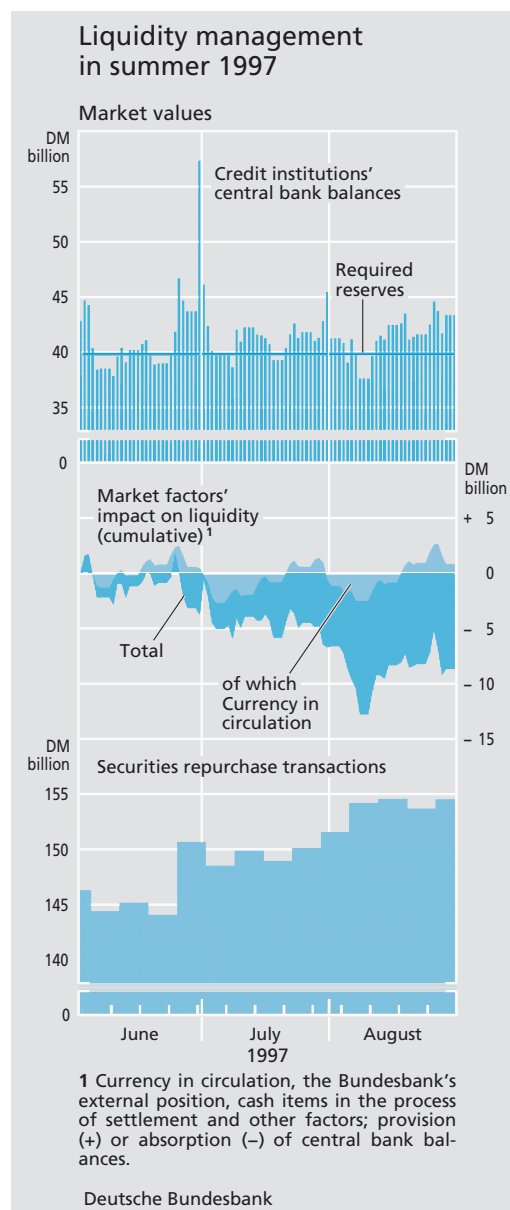
There was virtually no change in the credit institutions' rediscount borrowing during the summer months. The utilisation of the rediscount quotas persisted at just over 96 % throughout. The banks took up scarcely any lombard loans. On most days the amount taken up was below DM 100 million. It was only at the end of the month that recourse to lombard loans rose temporarily as part of the banks' concluding minimum reserve operations.

Central bank money not much higher

The trend in the principal factors determining liquidity are shown in detail in the table on page 18. As can be seen, at DM 0.2 billion between June and August, central bank money (currency in circulation held by non-banks and minimum reserves on domestic liabilities at current reserve ratios) expanded much less than is the typical seasonal pattern. Its low growth resulted from the trend in currency in circulation which dominates the entire central bank money requirement. In the current year, the rise in the demand for currency, which is usual in the holiday period, was far below the comparable figures of the past. By contrast, in line with monetary expansion, the central bank money demand for complying with minimum reserve requirements grew moderately in seasonally adjusted terms.

Current transactions

The credit institutions' current transactions with the Bundesbank were sharply contractionary in the summer months. This was true, firstly, of the sharp decline in the Bundes-



bank's net external position, which drained DM 5.9 billion from banks. This change was caused by the Bundesbank's transactions featuring sales to the market of foreign currency that had previously accrued (in particular, purchases of dollars from US military agencies and interest received on the Bundesbank's external assets). Secondly, "other factors", too, reduced bank liquidity on balance (by DM 2.1 billion). This was primarily due to the

Factors determining bank liquidity *

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

Item	1997		
	June	July to Aug. 97	June to Aug. 97
I. Provision (+) or absorption (-) of central bank balances by			
1. Change in central bank money (increase: -)	+ 0.3	- 0.6	- 0.2
Currency in circulation	(+ 0.5)	(- 0.7)	(- 0.2)
Minimum reserves on domestic liabilities	(- 0.2)	(+ 0.1)	(- 0.1)
Memo item			
Change in seasonally adjusted central bank money	(+ 1.6)	(+ 0.6)	(+ 2.2)
2. Change in the Bundesbank's external position ¹	+ 0.0	- 5.9	- 5.9
3. Other factors	- 1.1	- 1.0	- 2.1
Total	- 0.7	- 7.5	- 8.3
II. Lasting provision (+) or absorption (-) of funds	- 0.1	+ 0.0	- 0.1
1. Change in refinancing facilities	(- 0.1)	(- 0.1)	(- 0.1)
2. Recourse to unused refinancing facilities (reduction: +)	(- 0.0)	(+ 0.1)	(+ 0.1)
III. Change in the short-term liquidity deficit (I plus II; increase: -)	- 0.8	- 7.5	- 8.3
IV. Meeting of remaining deficit (+) or absorption of surplus (-) by			
1. Securities repurchase transactions	+ 0.3	+ 7.9	+ 8.2
2. Lombard loans	+ 0.5	- 0.4	+ 0.1
Memo items ²			
Unused refinancing facilities	2.4	2.3	2.3
Securities repurchase transactions	145.9	153.8	153.8
Balance of very short-term assistance measures ³	-	-	-
Lombard loans	0.6	0.2	0.2

* 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 Quick tenders, foreign exchange swap and repurchase transactions and sales of short-term Treasury bills.

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current entries to the Bundesbank's profit and loss account. Furthermore, the reserves required on foreign liabilities, changes in which are likewise included here in the condensed form of the liquidity account, rose in the period under review. Cash items in the course of settlement in the Bundesbank system, on the other hand, were slightly expansionary.

The banks recorded outflows of funds totalling DM 8.3 billion between June and August due to the change in central bank money and to current transactions. Rediscount borrowing remained nearly unchanged in the period under review, resulting in the banks' short-term liquidity gap likewise increasing on balance by DM 8.3 billion. The Bundesbank covered this shortage almost completely by increasing the volume of securities repurchase transactions to DM 153.8 on a monthly average in August. Above and beyond that, the credit institutions increased their lombard borrowing slightly to DM 0.2 billion on a monthly average.

*Short-term
liquidity gap*

Monetary developments

On the whole, the moderate growth in the money stock, which began after the sharp rise at the start of the year, persisted recently; between May and July the money stock M3¹ increased at a seasonally adjusted annual rate of just over 4%. Monetary growth remained

*Moderate mon-
etary growth*

¹ 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.

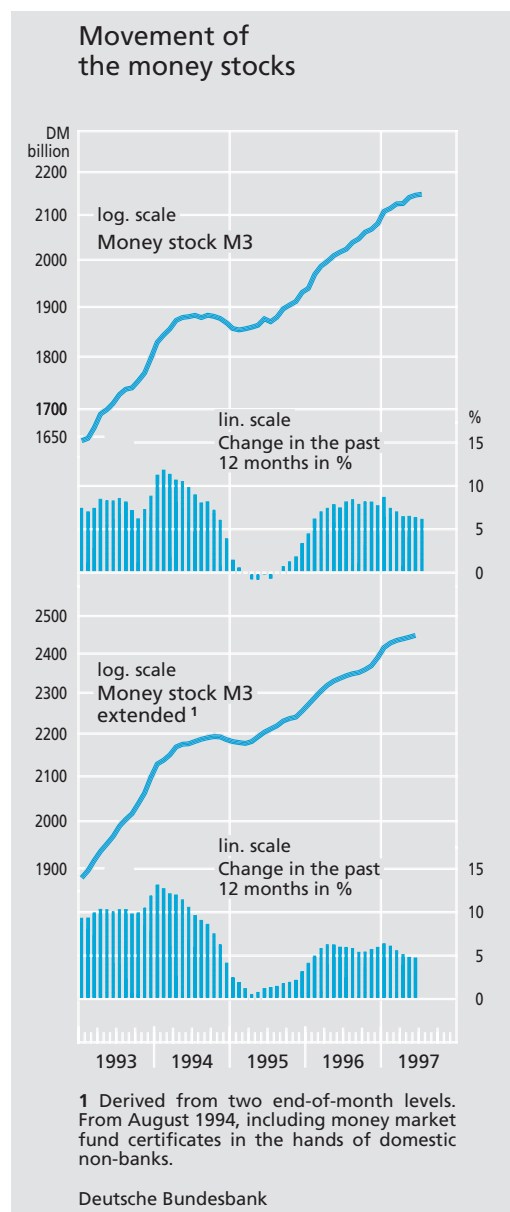
volatile from month to month, however. Thus, the money stock M3 grew sharply in May but only slightly in the following two months. In June it entered this year's target corridor of 3½% to 6½%, which it had overshot throughout the year until then. In July it moved from ceiling to the middle of the target corridor. In that month, the money stock M3 exceeded its average level of the fourth quarter of 1996 by a seasonally adjusted annual rate of 5.7%, compared with 6.4% in June and 7.0% in May. The money stock grew at annual rates of just over 6% and slightly more than 7% in the past 12 and 24 months, respectively. In view of the increased risks to stability, the Bundesbank regards a further slowdown of monetary expansion as appropriate.

*Determinants
of monetary
growth*

A decline in lending to the private and public sectors had a dampening impact on monetary growth in the period under review. Furthermore, monetary capital formation picked up somewhat. On the other hand, there was a reversal of trend from high outflows to inflows of funds in domestic non-banks' foreign payment transactions. Overall, domestic non-banks also made a further reduction in their holdings of money market fund certificates.

*Components
of the money
stock*

Of the individual (seasonally adjusted) components of the money stock, the largest increase between May and July was in sight deposits. By contrast, currency in circulation stagnated. Nevertheless, there was a sharp growth in the money stock M1 which records these two most liquid money components. At a rate of 9½%, it also grew quickly over the



past 12 months. Savings deposits at three months' notice likewise expanded rapidly between May and July, albeit much less sharply than in the two preceding years. Portfolio adjustments made by savers as a reaction to the new products that have been created in this area in the past few years have now probably lost some of their importance. There was a further decline in time deposits with shorter maturities.

The money stock and its counterparts *

DM billion; change during period

Item	May to July 1996	May to July 1997
I. Bank lending to domestic non-banks, total ¹	+ 38.4	+ 61.6
to enterprises and individuals of which	+ 37.9	+ 49.0
Short-term lending	+ 2.9	+ 4.6
to public authorities	+ 0.5	+ 12.5
II. Net external assets of credit institutions and the Bundesbank	+ 28.5	+ 8.6
III. Monetary capital formation at credit institutions from domestic sources, total	+ 31.3	+ 37.4
of which		
Time deposits for four years and more	+ 19.1	+ 7.7
Savings deposits at more than three months' notice	- 7.6	- 6.4
Bank savings bonds	+ 0.7	+ 2.0
Bank bonds outstanding ²	+ 11.5	+ 21.4
IV. Deposits of the Federal Government in the banking system ³	+ 0.2	- 0.6
V. Other factors	+ 23.3	+ 23.7
VI. Money stock M3 (Balance: I plus II less III less IV less V)	+ 12.1	+ 9.6
Currency in circulation	+ 3.1	+ 1.0
Sight deposits	+ 10.0	+ 17.5
Time deposits for less than four years	- 14.1	- 10.9
Savings deposits at three months' notice	+ 13.1	+ 2.1
Memo item M3 as a monthly average in July 1997 compared with the 4th qtr of 1996 in % ⁴	.	+ 5.7

* 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 1996, expressed as an annual rate, seasonally adjusted.

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Domestic non-banks continued to reduce their holdings of money market fund certificates in the period under review (- DM 1.1 billion); in July, however, they made net purchases of such certificates on a small scale for the first time since February 1996. On balance, transactions in these certificates have for some time been at such low levels that they generate no perceptible impact on monetary expansion.

Further resales of money market fund certificates

After sharply stepping up their cash holdings in the Euro-market at the beginning of the year, domestic non-banks cut them back again between April and June (data for July are not yet available). The money stock M3 extended², which includes such deposits as well as money market fund certificates held by domestic non-banks, therefore grew more slowly than M3 in the traditional definition. That is also true of the past 12 months. In June, M3 extended was just under 5% higher than a year ago, whereas M3 was 6½% higher.

Moderate growth in M3 extended

In the period under review, banks' lending to enterprises and individuals exerted a slightly weaker stimulus to the money creation process than in the preceding months. Overall, the credit institutions' lending to the private sector rose by DM 49.0 billion between May and July; seasonally adjusted and expanded to yield an annualised rate, this was an increase of just under 6½% compared with

Fall in lending to the private sector

² 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.

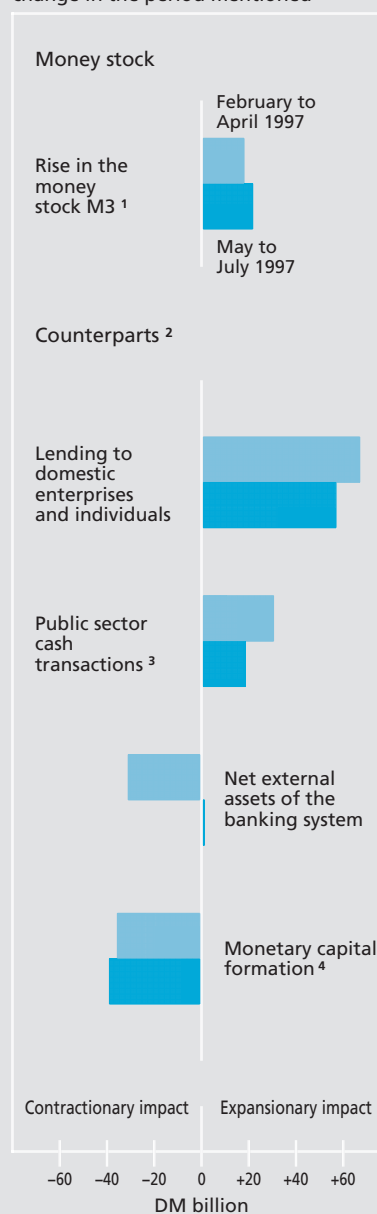
7 ½ % between February and April. The main reason for the slowdown in credit expansion was the fact that banks purchased virtually no securities from the corporate sector (equities, investment fund certificates, commercial paper, etc.) in the period under review, whereas they had invested DM 22.4 billion in such paper between February and April. Transactions of this kind are mainly conducted in the secondary market and, to that extent, do not influence the granting of new loans to the issuers. At a seasonally adjusted annual rate of 6 ½ %, longer-term direct lending also declined somewhat. Short-term lending to the private sector, which had been reduced slightly between February and April, rose again a little in the period under review; it was, however, subject to major fluctuations from month to month.

*Lending, by
borrower*

According to the quarterly borrowers statistics, which do not include either lending against securities or the (further slowdown in the) expansion of credit in July, enterprises increased their indebtedness to domestic banks by a seasonally adjusted annual rate of just over 5% in the second quarter, and therefore at a similar pace as on an average of the three preceding quarters. At the same time, they appreciably stepped up their borrowing from foreign banks. Once again, domestic credit institutions' lending to the services sector was at a high level. By contrast, the distribution and construction sectors' demand for credit was subdued, and manufacturing reduced, in particular, its short-term indebtedness to banks; the favourable cash flow trend is likely to have played a part in this. Consumer borrowing

The money stock and its principal counterparts

DM billion, seasonally adjusted, change in the period mentioned



1 M3 as a monthly average. — 2 The changes in the counterparts as shown reflect their expansionary (+) or contractionary (-) impact on the money stock; end-of-month levels. — 3 Lending by the banking system to public authorities less the deposits of the Federal Government in the banking system. — 4 Monetary capital formation by domestic non-banks at domestic credit institutions.

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grew at seasonally adjusted annual rate of 5% in the second quarter and hence a little more strongly than the trend in the last two years. The sharpest expansion continued to be in lending for residential construction (at an annual rate of 9%). Given the structural problems in this sector, housing loans no longer equalled their previous high levels; the fact that mortgage rates were at an all-time low evidently had a stabilising influence, however.

Fall in lending commitments

There has now been a return to normal in new medium and long-term lending commitments, which were very high at the end of last year and in spring owing to the anticipatory effects of tax changes and interest rate uncertainties. The amount of commitments

outstanding also fell slightly in the summer, although it remained at a fairly high level.

Short-term bank lending rates remained virtually unchanged in the past few months. In August, between 10% (for amounts of less than DM 200,000) and 7½% (for amounts of DM 1 million to less than DM 5 million) were charged on average for credit in current account. Bills were discounted at an average of just under 4¾%. In line with the trend in the capital market rates, the effective rates charged for long-term loans fell somewhat in June and July, and rose again slightly in August. Mortgage loans secured by residential real estate with interest rates locked in for five and ten years cost just over 5¾% and 6¾%, respectively, in August. Variable-rate mortgages most recently cost just under 6¼%. The charge for long-term fixed-rate loans to enterprises and self-employed persons was mostly 6⅔% (for amounts of DM 200,000 to less than DM 1 million) and just over 6½% (for amounts of DM 1 million to less than DM 10 million).

Bank lending rates

Bank lending to the public sector, which was very high in the first few months of the year, slowed down between May and July, rising in that period by DM 12.5 billion. Although this was much more than in same period last year (DM 0.5 billion), public sector borrowing from banks was unusually low at the time because of large numbers of Federal securities were placed with domestic non-banks and non-residents. Direct credit (DM 8.1 billion) accounted for the major part of lending in the period under review, whereas lending against securities grew by no more than DM

Lower lending to the public sector

4.4 billion. Seasonally adjusted and expanded to yield an annualised rate, lending by banks to the public sector rose by just under 6 ½ % between May and July, compared with 10 ½ % in the preceding three-month period. In the period under review, the demand from the public sector – in particular, the Federal Government – for bank credit was very volatile, however. The Federal Government significantly cut back its indebtedness to credit institutions in June, and expanded it very sharply in July. Its recourse to the capital market, on the other hand, ran counter to that. The Federal Government reduced its balances in the banking system which do not count towards the money stock by DM 0.6 billion between May and July.

*More buoyant
monetary capital
formation*

Recently, monetary capital formation, which had nearly come to a standstill at the beginning of the year, again formed a stronger counterweight to the expansionary impact on the money creation process generated by the banks' asset-side business. In June and July, in particular, there was a perceptible increase in domestic non-banks' propensity to invest funds with banks at longer term; that applies, above all, to the purchasing of bank bonds. Between May and July, longer-term funds to a total of DM 37.4 billion accrued from domestic sources, which was appreciably more than a year before (DM 31.3 billion), when monetary capital formation was extremely subdued. After eliminating seasonal influences, monetary capital with banks grew at an annual rate of 5 ½ % in the period under review, and was thus somewhat faster than between February and April. Specifically, the credit institutions received DM 21.4 bil-

Movement of major lending rates

% p. a.			
Type of credit	as in	Average interest rate ¹	Spread ²
Personal credit lines ³	Nov. 1996	11.30	10.25–12.25
	Aug. 1997	11.22	9.75–12.25
Current account credit			
from DM 1 million to less than DM 5 million	Jan. 1993	12.06	11.00–13.75
	Aug. 1997	7.69	6.00–10.25
Bills discounted	Jan. 1993	10.36	8.95–12.25
	Aug. 1997	4.71	3.00– 7.00
Mortgage loans secured by residential real estate with interest rates locked in for ten years			
	Jan. 1993	8.33	7.98– 9.28
	Aug. 1997	6.76	6.42– 7.23
Long-term fixed-rate loans to enterprises and self-employed persons (excluding housing loans) ³			
from DM 200,000 to less than DM 1 million	Nov. 1996	6.85	5.70– 9.23
	Aug. 1997	6.62	5.67– 8.55
from DM 1 million to less than DM 10 million	Nov. 1996	6.57	5.50– 8.30
	Aug. 1997	6.39	5.50– 8.04

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.

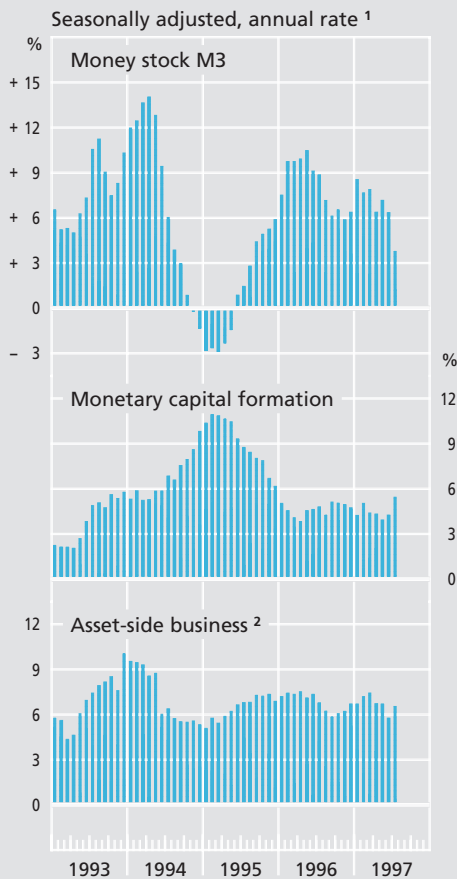
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lion from sales of bank bonds. Long-term time deposits were formed to an amount of no more than DM 7.7 billion; they are hence growing much less at present than in previous years. It is likely that the rates of interest paid on them have now become quite unattractive to the institutional investors who largely allocate these deposits. Bank savings bonds were sold for DM 2.0 billion on balance. There was a further decline in savings deposits at over three months' notice (– DM 6.4 billion). The banks' capital and reserves increased by DM 12.7 billion.

In the period under review, there was a reversal of trend in domestic non-banks' external payments. Following sizeable outflows up to and including May, there were new inflows of resources in June and July. The net external

*Inflows of
funds in foreign
payments*

Money stock M3, monetary capital formation and asset-side business of the banking system *



* M3: monthly average; monetary capital and asset-side business: end-of-month levels. — 1 Change in the last six months expressed as an annual rate. — 2 Lending to domestic non-banks and net external assets.

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assets of the banking system, an increase in which reflects such inflows statistically, went up by DM 8.6 billion between May and July, compared with a fall of DM 44.7 billion in the preceding three-month period. One of the main reasons for this recent trend is foreign investors' increased demand for German equities and bonds. At the same time, domestic non-banks' purchases of foreign securities, which to a certain extent represent monetary capital formation which has been transferred abroad, were at quite a high level. On balance, the reversal in trend in non-banks' external payments is likely to have had the effect of curbing lending to the public sector and business rather than of encouraging an expansion of the money stock. That view is supported, firstly, by the fact that non-residents acquired Federal bonds on a large scale and, secondly, by enterprises' fairly high borrowing from foreign banks.